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Infantry Rifle Company

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Preface

ATP 3-21.10, provides doctrine for the Infantry rifle company of the Infantry battalion. This publication describes relationships, organizational roles and functions, capabilities and limitations, and responsibilities within the Infantry rifle company. *Techniques,* nonprescriptive ways or methods used to perform missions, functions, or tasks CJCSM 5120.01), are discussed in this publication and are intended to be used as a guide. They are not prescriptive. This publication supersedes FM 3-21.10.

To comprehend the doctrine contained in this publication, readers must first understand the principles of the Army profession and the Army ethic as described in ADP 1, and ADRP 1. Readers must understand the principles of war, the nature of unified land operations, and the links between the operational and tactical levels of war described in ADP 3-0, ADRP 3-0, and FM 3-0, and FM 3-96. In addition, readers should understand the fundamentals of the operations process found in ADP 5-0 and ADRP 5-0, associated with offensive and defensive tasks contained in FM 3-90-1, and reconnaissance, security, and tactical enabling tasks contained in FM 3-90-2. The reader must comprehend how stability tasks described in ADP 3-07, ADRP 3-07, and FM 3-07 carry over and affect offensive and defensive tasks and vice versa. Readers must understand how the operation process fundamentally relates to the Army's military decision-making process and troop leading procedures, and the principles of mission command as described in ADP 6-0 and ADRP 6-0, FM 6-0, ATP 6-0.5, and understand the leadership principles of ADRP 6-22, and FM 6-22. To fully comprehend how the Infantry rifle company is organized and doctrinally employed, the reader must understand ATP 3-21.20.

The principal audience for ATP 3-21.10 is the commanders, staff, officers, and noncommissioned officers within the Infantry battalion. The audience includes the United States Army Training and Doctrine Command institutions and components, and the United States Army Special Operations Command. This publication serves as an authoritative reference for personnel developing doctrine, materiel and force structure, institutional and unit training, and standard operating procedures for the Infantry rifle company.

Commanders, staffs, and subordinates ensure their decisions and actions comply with United States, international, and in some cases, host nation laws and regulations. Commanders at all levels ensure their Soldiers operate within the law of war and the rules of engagement. (Refer to FM 27.10 for additional information.)

ATP 3-21.10 uses joint terms where applicable. Selected joint and Army terms and definitions appear in both the glossary and the text. Terms and acronyms for which ATP 3-21.10 is the proponent publication (the authority) are marked with an asterisk (*) in the glossary. Definitions for which ATP 3-21.10 is the proponent publication are boldfaced in the text and the term is italicized. For other definitions shown in the text, the term is italicized and the number of the proponent publication follows the definition.

ATP 3-21.10 applies to the Active Army, the Army National Guard/the Army National Guard of the United States, and the United States Army Reserve unless otherwise stated. The proponent for ATP 3-21.10 is the United States Army Training and Doctrine Command. The preparing agency is the United States Army Maneuver Center of Excellence. Send comments and recommendations on a Department of the Army (DA) Form 2028 *(Recommended Changes to Publications and Blank Forms),* to:

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Introduction

The Army provides readily available and trained regionally aligned and globally responsive forces to prevent conflict, shape the security environment, and win wars. Army forces maintain proficiency in the fundamentals of decisive action, and possess capabilities to meet specific geographic combatant command requests. Regionally aligned forces provide combatant commanders with an Army headquarters tailored to missions from tactical level to joint task force capable. (see FM 3-94.) The Infantry rifle company of the Infantry battalion shapes the security environment and wins across the range of military operations.

ATP 3-21.10 addresses the tactical application of techniques associated with the offense, the defense, and operations focused on stability. ATP 3-21.10 does not discuss defense support of civil authorities. (refer to ADRP 3-28 and ATP 3-28.1 for information about defense support of civil authorities.) Employing the techniques addressed in ATP 3-21.10 requires using and integrating the techniques found in ATP 3-21.20 and the tactics and procedures found in FM 3-96, FM 3-90-1, and FM 3-90-2, *tactics* are the employment and ordered arrangement of forces in relation to each other (CJCSM 5120.01). *Procedures* are standard, detailed steps that prescribe how to perform specific tasks (CJCSM 5120.01).

The techniques addressed in ATP 3-21.10 includes the movement and *maneuver*—the employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy (Joint Publication [JP] 3-0)—of units in relation to each other, the terrain, and the enemy. Techniques vary with terrain and other circumstances; they change frequently as the enemy reacts and friendly forces explore new approaches. Applying techniques usually entails acting under time constraints with incomplete information. Techniques always require judgment in application; they are always descriptive, not prescriptive.

Fictional scenarios, used as discussion vehicles throughout this publication, illustrate different ways an Infantry rifle company can accomplish its mission regardless of which element of decisive action (offense, defense, or stability) currently dominates. Scenarios focus on potential challenges confronting the rifle company commander in accomplishing a mission, but are not intended to be prescriptive of how the Infantry rifle company performs any particular operation.

Note. These same scenarios drive the techniques used to develop ATP 3-21.20, and focuses on the techniques used to perform missions, functions, or tasks in support of the Infantry brigade combat team.

ATP 3-21.10 incorporates the significant changes in Army doctrinal terminology, concepts, constructs, and proven tactics developed during recent operations. It also incorporates doctrinal terms and changes based on Doctrine 2015.

The following is a brief introduction and summary of changes by chapter:

Chapter 1 – Organization

Chapter 1 provides a brief overview of the operational environment, the Army‘s operational concept of unified land operations through decisive action, and the eight elements of combat power. In addition, chapter 1—

- Discusses combined arms, hasty versus deliberate operations, close combat, and operations structure.

- Describes the mission, capabilities, limitations, and organization of the Infantry rifle company within the Infantry battalion.
- Discusses the exercise of mission command, duties, and responsibilities within the company.

Chapter 2 – Offense

Chapter 2 discusses offensive actions to destroy the enemy. It describes the four offensive tasks: movement to contact, attack, exploitation, and pursuit. It also discusses—

- The doctrinal basis for the offense.
- Offensive considerations.
- Subordinate forms of attack.
- Tactical movement.
- Tactical enabling tasks.
- Transitions.

Chapter 3 – Defense

Chapter 3 addresses the defensive tasks—area defense, mobile defense, and retrograde; and subordinate forms of the defense—defense of a linear obstacle, perimeter defense, and a reverse-slope. This chapter also describes in detail the—

- The doctrinal basis for the defense.
- Defense considerations.
- Forms of maneuver.
- Tactical enabling tasks.
- Transitions.

Chapter 4 - Stability

Chapter 4 discusses operations in support of stability-focused tasks, and various military missions, tasks, and activities conducted in support of stabilization. In addition, chapter 4 addresses—

- The foundation for operations focused stability.
- Organization of forces.
- Operational area security.
- Security force assistance.
- Transitions.

Appendixes

Nine appendixes complement the body of this publication. They include:

- Appendix A: Command Post Operations and Organizations.
- Appendix B: Planning and Preparation.
- Appendix C: Direct Fire Planning and Control.
- Appendix D: Fires.
- Appendix E: Close-Combat Missile and Acquisition System Employment.
- Appendix F: Armored, Stryker, and Mounted Employment.
- Appendix G: Combined Arms Breaching Operations.
- Appendix H: Chemical, Biological, Radiological, and Nuclear Defense and Countering Weapons of Mass Destruction.
- Appendix I: Sustainment.

Chapter 1
Organization

The Infantry rifle company as part of the Infantry battalion within the Infantry brigade combat team (IBCT) is organized to conduct *decisive action*, the continuous, simultaneous combinations of offensive, defensive, and stability or defense support of civil authorities tasks (ADRP 3-0). The primary mission of the rifle company is to close with the enemy employing fire and movement in order to; destroy, capture, or to repel his assault through fire, close combat, and counterattack. The rifle company must be aggressive, physically fit, disciplined, and well trained. The rifle company can deploy rapidly and execute missions to support entry operations throughout the range of military operations. The rifle company can conduct effective combat or other operations immediately upon arrival in an operational area. This chapter addresses briefly the key doctrinal concepts on how the Army fights, but focuses primarily on the internal operations and organization of the Infantry rifle company.

Note. ATP 3-21.10 does not discuss defense support of civil authorities. (Refer to ADRP 3-28 and ATP 3-28.1 for information about defense support of civil authorities.)

SECTION I – OPERATIONAL OVERVIEW

1-1. While an Infantry rifle company's operation predominant characteristic is offense, defense, or operations in support of stability, different units involved in that operation conduct different types and subordinate forms of operations, and often transition rapidly from one element of decisive action or subordinate task to another. This requires an understanding how the Army fights, how the unit fights, and how unit leaders lead within the operational environment. The section briefly covers key doctrinal concepts on how the Army fights. For a complete discussion, refer to ADP 3-0 and ADRP 3-0.

OPERATIONAL ENVIRONMENT

1-2. An *operational environment* is a composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. (JP 3-0). Commanders at all levels have their own operational environments (OEs) for a particular operation and the complexity is derived from many interrelated variables and sub-variables at all echelons. The OE for each mission is different and likely evolves as it progresses. The commander must understand the OE to successfully plan, prepare, execute, and assess missions.

1-3. The OE of the company includes all enemy, adversarial, friendly, and neutral systems across the range of military operations and is part of the higher commander's operational environment. The company's OE includes the physical environment, the state of governance, technology, and local resources, and the culture of the local populace. As the operational environment for each operation is different, it also evolves as the operation progresses. The company commander continually assesses and reassesses the OE to understand how changes in the nature of threats and other variables affect not only the company but other actors as well. (Refer to FM 3-96 and ATP 3-21.20 for additional information.)

OPERATIONAL AND MISSION VARIABLES

1-4. When Infantry forces are alerted for deployment, for redeployment within a theater of operations, or for a mission, their assigned operational headquarters provides an analysis of the operational environment. That analysis includes *operational variables*—a comprehensive set of information categories used to define an operational environment (ADP 1-01). Information categories are political, military, economic, social, information, infrastructure, physical environment, and time, commonly referred to as PMESII-PT.

1-5. Upon receipt of a mission, commanders and staffs at the IBCT and Infantry battalion filter information categorized by operational variables into relevant information with respect to the assigned missions of subordinate companies. Commanders and staffs use *mission variables*—categories of specific information needed to conduct operations (ADP 1-01)—to focus on specific elements of an operational environment during mission analysis. This analysis enables them to combine operational variables and tactical-level information with knowledge about local conditions relevant to their assigned mission. Mission variables are mission, enemy, terrain and weather, troops and support available, time available and civil considerations, (METT-TC). (Refer to FM 6-0 for additional information.)

THREATS AND HAZARDS

1-6. For every operation, threats and hazards are a fundamental part of the operational environment. Commanders at all levels must understand threats, criminal networks, enemies, and adversaries, to include both state and non-state actors, in the context of their operational environment. When the commander understands the threat, the commander can visualize, describe, direct, lead, and assess operations to seize, exploit, and retain the initiative. A *threat* is any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland (ADRP 3-0). Threats may include individuals, groups of individuals (organized or not organized), paramilitary or military forces, nation-states, or national alliances. When threats execute their capability to do harm to the United States, they become enemies.

1-7. In general, the various actors in any area of operation can qualify as a threat, an enemy, an adversary, a neutral, or a friend. An *enemy* is a party identified as hostile against which the use of force is authorized (ADRP 3-0). An *adversary* is a party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged (JP 3-0). A neutral is an identity applied to a track whose characteristics, behavior, origin, or nationality indicate that it is neither supporting nor opposing friendly forces. Finally, a friendly is a contact positively identified as a friend to support United States (U.S.) efforts. Land operations often prove complex because an enemy, an adversary, a neutral, or a friend intermix, often with no easy means to distinguish one from another.

1-8. A *hybrid threat* is the diverse and dynamic combination of regular forces, irregular forces, terrorist forces, or criminal elements unified to achieve mutually benefitting threat effects (ADRP 3-0). The term hybrid threat evolved to capture the seemingly increased complexity of operations, the multiplicity of actors involved, and the blurring among traditional elements of conflict. (Refer to FM 3-96 and ADRP 2-0 for more information.)

1-9. A *hazard* is a condition with the potential to cause injury, illness, or death of personnel; damage to or loss of equipment or property; or mission degradation (JP 3-33). Hazards include disease, extreme weather phenomena, solar flares, and areas contaminated by toxic materials. Hazards can damage or destroy life, vital resources, and institutions, or prevent mission accomplishment. Understanding hazards and their effects on operations allows the commander to understand better the terrain, weather, and various other factors that best support the mission. Understanding hazards also helps the commander visualize potential impacts on operations. Successful interpretation of the environment aids in correctly opposing threat courses of action within a given geographical region.

SPECIFIC OPERATIONAL ENVIRONMENTS

1-10. Specific operational environments include urban, mountain, desert, and jungle. Subsurface areas are conditions found in all four operational environments. Offensive and defensive tasks in these environments follow the same planning process as operations in any other environment, but they do impose specific techniques and methods for success. The uniqueness of each environment may affect more than their physical

aspects but also their informational systems, flow of information, and decision making. As such, mission analysis must account for the information environment and cyberspace within each specific OE. Each specific operational environment has a specific publication because of their individual characteristics.

Urban Terrain

1-11. Operations in urban terrain are Infantry-centric combined arms operations that capitalize on the adaptive and innovative leaders at the squad, platoon, and company level. Plans must be flexible to promote disciplined initiative by subordinate leaders, characterized by a simple scheme of maneuver and detailed control measures for interaction with civilian population and noncombatants. In the offense, task-organizing the company combined arms team at the right place and time is key to achieving the desired effects. In the defense, the combined arms team turns the environment's characteristics to its advantage. Urban areas are ideal for the defense because they enhance the combat power of defending units. (Refer to Army tactics, techniques, and procedures [ATTP] 3-06.11 for additional information.)

Mountainous Terrain

1-12. Operations in mountainous terrain are conducted for three primary purposes: to deny an enemy a base of operations; to isolate and defeat the enemy; and to secure lines of communication. Enemy tactics commonly involve short violent engagements followed by a hasty withdrawal through preplanned routes. The enemy often strikes quickly and fights only as long as the advantage of the initial surprise is in their favor. Attacks may include direct fires, indirect fires, or improvised explosive devices and may be against stationary or moving forces. The design of the landscape, coupled with climatic conditions, creates a unique set of mountain operations characterized by close fights with dismounted Infantry, decentralized small-unit operations, degraded mobility and increased movement times, restricted lines of communications, and operations in thinly populated areas. (Refer to ATTP 3-21.50 for additional information.)

Desert Terrain

1-13. Operations in desert terrain require adaptation to the terrain and climate. Equipment must be adapted to a dusty and rugged landscape with extremes in temperature and changes in visibility. Forces orient on the primary enemy approaches but prepare for an attack from any direction. Considerations for operations in desert terrain include lack of concealment and the criticality of mobility; use of obstacles to site a defense, which are limited; strong points to defend choke points and other key terrain; and mobility and sustainment. (Refer to FM 90-3 for additional information.)

Jungle Terrain

1-14. Operations in jungle terrain combine dispersion and concentration. For example, a force may move out in a dispersed formation to find the enemy. Once the force makes contact, its subordinate forces close on the enemy from all directions. Operations are enemy-oriented, not terrain-oriented. Forces should destroy the enemy wherever they are found. If the force allows the enemy to escape, the force will have to find them again, with all the risks involved. Jungle operations use the same defensive fundamentals as other defensive operations. Considerations for offensive and defensive tasks in a jungle environment include limited visibility and fields of fire, ability to control units, and limited and restricted maneuver. (Refer to FM 90-5 for additional information.)

Subsurface Areas

1-15. A subsurface area is a condition found in all four operational environments described above. Subsurface areas are areas below ground and water levels that may consist of underground facilities, passages, subway lines, utility corridors or tunnels, sewers and storm drains, caves, or other subterranean spaces. Additional subterranean areas include drainage systems, cellars, civil defense shelters, mines, and other various underground utility systems. In older cities, subsurface areas include ancient hand-dug tunnels and catacombs.

1-16. Subsurface areas may serve as secondary and, in fewer instances, primary avenues of approach at lower tactical levels. Subsurface areas are used for cover and concealment, troop movement, command functions,

and engagements, but their use requires intimate knowledge of the area. When thoroughly reconnoitered and controlled, subsurface areas offer excellent covered and concealed lines of communications for moving supplies and evacuating casualties. Attackers and defenders can use subsurface areas to gain surprise and maneuver against the rear and flanks of an enemy and to conduct ambushes. However, these areas are often the most restrictive and easiest to defend or block. The commander may need to consider potential avenues of approach afforded by the subsurface areas of rivers and major bodies of water that border urban areas.

1-17. Knowledge of the nature and location of these subsurface areas is of great value to both friendly and enemy forces. The effectiveness of subsurface areas depends on superior knowledge of their existence and overall design. A thorough understanding of the environment is required to exploit the advantages of subsurface areas. Maximizing the use of these areas could prove to be a decisive factor while conducting offensive and defensive tasks. (Refer to TC 2-91.4 and ATP 3-34.81 for additional information on subsurface areas.)

DECISIVE ACTION

1-18. Decisive action is the continuous, simultaneous combinations of offensive, defensive, and stability tasks (or defense support of civil authorities task [not addressed in this publication]). During decisive action, commanders seize, retain, and exploit the initiative while synchronizing their actions to achieve the best effects possible. Decisive action begins with the commander's intent and concept of operations. *Commander's intent* is a clear and concise expression of the purpose of the operation and the desired military end state that supports mission command, provides focus to the staff, and helps subordinate and supporting commanders act to achieve the commander's desired results without further orders, even when the operation does not unfold as planned (JP 3-0). *Mission command* is the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations (ADP 6-0). *Concept of operations* is a statement that directs the manner in which subordinate units cooperate to accomplish the mission and establishes the sequence of actions the force will use to achieve the end state (ADRP 5-0).

Note. *Mission* is the task, together with the purpose, that clearly indicates the action to be taken and the reason therefore (JP 3-0). *End state* is the set of required conditions that defines achievement of the commander's objectives (JP 3-0).

1-19. As a single, unifying idea, decisive action provides direction for the entire operation. Mission command requires commanders to convey a clear commander's intent and concept of operations. These become essential in operations where multiple operational and mission variables interact with the lethal application of ground combat power. Such dynamic interaction often compels subordinate commanders to make difficult decisions in unforeseen circumstances. Based on a specific idea of how to accomplish the mission, commander and staff refine the concept of operations during planning and adjust the concept of operations throughout the operation as subordinates develop the situation or conditions change. Often, subordinates acting on the higher commander's intent develop the situation in ways that exploit unforeseen opportunities. (Refer to ADRP 3-0 for additional information.)

COMBAT POWER

1-20. Commanders conceptualize capabilities in terms of combat power. *Combat power* is the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time (ADRP 3-0). The eight elements of combat power are leadership, information, mission command, movement and maneuver, intelligence, fires, sustainment, and protection. Commanders apply leadership and information throughout to multiply the effects of the other six elements of combat power. The other six elements—mission command, movement and maneuver, intelligence, fires, sustainment, and protection—are collectively known as warfighting functions. A *warfighting function* is a group of tasks and systems (people, organizations, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives (ADRP 3-0).

1-21. *Leadership* is the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization (ADP 6-22). Army professionals are expected to act and apply force ethically and in accordance with shared national values and Constitutional principles, which are reflected in the law, oaths, and the Army Ethic. (See ADRP 6-22 and ADRP 1 for more information.)

1-22. Information is the meaning that a human assigns to data by means of the known conventions used in their representation. Information enables the commander to make informed decisions on how to apply combat power. Information operations is the commander's primary means to optimize the information element of combat power and supports and enhances all other elements in order to gain an operational advantage over an enemy or adversary. *Information operations* is the integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own. (JP 3-13). See FM 6-0 and FM 3-13 for more information.

1-23. The *mission command warfighting function* is the related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions (ADRP 3-0). See ADRP 6-0 for more information.

1-24. The *movement and maneuver warfighting function* is the related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats (ADRP 3-0). See ADRP 3-90 and FM 3-96 for more information.

1-25. The *intelligence warfighting function* is the related tasks and systems that facilitate understanding the enemy, terrain, weather, civil considerations, and other significant aspects of the operations environment. (ADRP 3-0). See ADRP 2-0 and FM 2-0 for more information.

1-26. The *fires warfighting function* is the related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process (ADRP 3-0). See ADRP 3-09 and FM 3-09 for more information.

1-27. The *protection warfighting function* is the related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission (ADRP 3-0). See ADRP 3-37 for more information.

1-28. The *sustainment warfighting function* is the related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance (ADRP 3-0). See ADRP 4-0 for more information.

1-29. Commanders employ three means to organize combat power: force tailoring, task-organizing, and mutual support:

- *Force tailoring* is the process of determining the right mix of forces and the sequence of their deployment in support of a joint force commander (ADRP 3-0).
- *Task-organizing* is the act of designing a force, support staff, or sustainment package of specific size and composition to meet a unique task or mission (ADRP 3-0).
- *Mutual support* is that support which units render each other against an enemy, because of their assigned tasks, their position relative to each other and to the enemy, and their inherent capabilities (JP 3-31).

Note. *Task organization* is a temporary grouping of forces designed to accomplish a particular mission (ADRP 5-0).

1-30. Commanders consider mutual support when task-organizing forces, assigning areas of operations, and positioning units. The two aspects of mutual support are supporting range and supporting distance. *Supporting range* is the distance one unit may be geographically separated from a second unit yet remain within the maximum range of the second unit's weapons systems (ADRP 3-0). *Supporting distance* is the distance between two units that can be traveled in time for one to come to the aid of the other and prevent its defeat by an enemy or ensure it regains control of a civil situation (ADRP 3-0). (See ADRP 3-0 and FM 3-96 for more information.)

COMBINED ARMS

1-31. Applying combat power depends on combined arms to achieve its full destructive, disruptive, informational, and constructive potential. *Combined arms* is the synchronized and simultaneous application of all elements of combat power that together achieve an effect greater than if each element was used separately or sequentially (ADRP 3-0). Combined arms integrates leadership, information, and each of the warfighting functions and their supporting systems. Used destructively, combined arms integrates different capabilities so that counteracting one makes the enemy vulnerable to another. Used constructively, combined arms multiplies the effectiveness and efficiency of Army capabilities used in operations in support of stability.

1-32. Combined arms uses the capabilities of each warfighting function and information in complementary and reinforcing capabilities. Complementary capabilities protect the weaknesses of one system or organization with the capabilities of a different warfighting function. For example, commanders use artillery (fires) to suppress an enemy bunker complex pinning down an Infantry unit during tactical movement (movement). The Infantry unit then closes with (maneuver) and destroys the enemy. In this example, the fires warfighting function complements the movement and maneuver warfighting function.

Note. Avoid confusing tactical movement with maneuver. Tactical movement is movement in preparation for contact; maneuver is movement while in contact. Actions on contact is the process by which a unit transitions from tactical movement to maneuver. See chapter 2 for more information.

1-33. Reinforcing capabilities combine similar systems or capabilities within the same warfighting function to increase the function's overall capabilities. In urban operations, for example, Infantry, aviation, and Armor (movement and maneuver) often operate close to each other. This combination reinforces the protection, maneuver, and direct fire capabilities of each. The Infantry protects tanks from enemy Infantry and antitank systems; tanks provide protection and firepower for the Infantry. Army aviation attack and reconnaissance units maneuver above buildings to observe and fire from positions of advantage, while other aircraft may help sustain the ground elements. Army space-enabled capabilities and services such as communications and global positioning satellites enable communications, navigation, situational awareness, protection, and sustainment of land forces.

1-34. Joint capabilities—such as close air support (CAS) (see ATP 3-09.32) and special operations forces (see FM 6-05)—can complement or reinforce Army capabilities throughout both the generating force and the operating force. The generating force consists of those Army organizations whose primary mission is to generate and sustain the operational Army's capabilities for employment by joint force commanders. Operating forces consist of those forces whose primary missions are to participate in combat and the integral supporting elements thereof. Often, commanders in the operating force and commanders in the generating force subdivide specific responsibilities. Army generating force capabilities and organizations are linked to operating forces through co-location and reachback.

1-35. Combined arms multiplies Army forces' effectiveness in all operations. Units operating without support of other capabilities generate less combat power and may not accomplish their mission. Employing combined arms requires highly trained Soldiers, skilled leadership, effective staff work, and integrated information systems. Commanders synchronize combined arms through mission command to apply the effects of combat power to the best advantage. They conduct simultaneous combinations of offensive, defensive, and stability tasks to defeat an opponent on land and establish conditions that achieve the commander's end state.

Note. The Infantry rifle company within the IBCT may be task-organized as part of a combined arms battalion of the Armored brigade combat team (ABCT), the Stryker brigade combat team (SBCT) Infantry battalion, or the supporting battalion or brigade.

HASTY VERSUS DELIBERATE OPERATIONS

1-36. Army forces are task organized specifically for an operation to provide a fully synchronized combined arms team. That combined arms team conducts extensive rehearsals while also conducting shaping operations to set the conditions for the conduct of the force's decisive operation. Most operations lie somewhere along a continuum between two extremes—hasty operations and deliberate operations. A *hasty operation* is an operation in which a commander directs immediately available forces, using fragmentary orders, to perform activities with minimal preparation, trading planning and preparation time for speed of execution (ADRP 3-90). A *deliberate operation* is an operation in which the tactical situation allows the development and coordination of detailed plans, including multiple branches and sequels (ADRP 3-90). Determining the right choice involves balancing several competing factors.

1-37. The decision to conduct a hasty or deliberate operation is based on the commander's current knowledge of the enemy situation and assessment of whether the assets available (to include time) and the means to coordinate and synchronize those assets are adequate to accomplish the mission. If they are not, the commander takes additional time to plan and prepare for the operation or bring additional forces to bear on the problem. The commander makes that choice in an environment of uncertainty, which always entails some risk. Ongoing improvements in mission command systems continue to assist in the development of a common operational picture of friendly and enemy forces while facilitating decision making and communicating decisions to friendly forces. These improvements can help diminish the distinction between hasty and deliberate operations; they cannot make that distinction irrelevant.

1-38. As the commander may have to act based only on available *combat information*—unevaluated data, gathered by or provided directly to the tactical commander which, due to its highly perishable nature or the criticality of the situation, cannot be processed into tactical intelligence in time to satisfy the user's tactical intelligence requirements (JP 2-01)—in a time-constrained environment. The commander must understand the inherent risk of acting only on combat information, since it is vulnerable to enemy deception operations and can be misinterpreted. The commander's intelligence staff helps assign a level of confidence to combat information used in decision-making.

1-39. A successful commander must be capable of making decisions and acting under conditions of uncertainty while assessing prudent risk, being innovative, and taking advantage of opportunities. Although a commander strives to maximize knowledge of available forces, the terrain and weather, civil considerations, and the enemy, a lack of information cannot paralyze the decision making process. A commander who chooses to conduct hasty operations must first understand the higher commanders intent, must mentally synchronize the employment of available forces before issuing fragmentary orders. This includes using tangible and intangible factors, such as the degree of trust between the commander and subordinates (based upon their character, competence, and commitment), training levels and experience of subordinate elements, unit esprit de corps, the commander's own experience, the ethical application of force, perception of how the enemy will react, understanding of time-distance factors, and knowledge of the strengths of each subordinate and supporting unit to achieve the required degree of synchronization. (Refer to ADRP 3-90 and ADRP 6-0 for additional information.)

CLOSE COMBAT

1-40. Only on land do combatants routinely and in large numbers come face-to-face with one another. *Close combat* is that part of warfare carried out on land in a direct-fire fight, supported by direct and indirect fires, and other assets (ADRP 3-0). Close combat destroys or defeats enemy forces. It encompasses all actions that place friendly forces in immediate contact with the enemy where the commander uses fire and movement in combination. It can be initiated by our forces or by the enemy.

1-41. The primary mission of the Infantry rifle company is to close with the enemy by means of fire and movement to destroy, defeat, or capture the enemy, to repel their assault by fire, close combat, and counterattack, or all of these. A company in close combat may—

- Be receiving effective direct fire.
- Have no or only a limited ability to maneuver.

- Be receiving indirect fire.
- Have the entire company or one or more of its rifle platoons decisively engaged.

1-42. Close combat places a premium on leadership, positive face-to-face control, and clear and concise orders. During close combat, leaders have to think clearly, give concise orders, and lead under great stress. Key terms used within this section and throughout this publication include—

- *Defeat*—a tactical mission task that occurs when an enemy force has temporarily or permanently lost the physical means or the will to fight. The defeated force's commander is unwilling or unable to pursue that individual's adopted course of action, thereby yielding to the friendly commander's will and can no longer interfere to a significant degree with the actions of friendly forces. Defeat can result from the use of force or the threat of its use (FM 3-90-1).
- *Destroy*—a tactical mission task that physically renders an enemy force combat-ineffective until it is reconstituted. Alternatively, to destroy a combat system is to damage it so badly that it cannot perform any function or be restored to a usable condition without being entirely rebuilt (FM 3-90-1).
- *Direct fire*—fire delivered on a target using the target itself as a point of aim for either the weapon or the director (JP 3-09.3).
- *Fire and movement*—the concept of applying fires from all sources to suppress, neutralize, or destroy the enemy, and the tactical movement of combat forces in relation to the enemy (as components of maneuver, applicable at all echelons). At the squad level, it entails a team placing suppressive fire on the enemy as another team moves against or around the enemy (FM 3-96).
- *Fires*—the use of weapon systems or other actions to create specific lethal or nonlethal effects on a target (JP 3-09).
- *Indirect fire*—fire delivered at a target not visible to the firing unit. Fire delivered to a target that is not itself used as a point of aim for the weapons or the director (TC 3-09.81).
- *Neutralize*—a tactical mission task that results in rendering enemy personnel or materiel incapable of interfering with a particular operation (FM 3-90-1).
- *Suppress*—a tactical mission task that results in the temporary degradation of the performance of a force or weapon system below the level needed to accomplish its mission (FM 3-90-1).
- *Suppression*—the temporary or transient degradation by an opposing force of the performance of a weapons system below the level needed to fulfill its mission objectives (JP 3-01).

OPERATIONS STRUCTURE

1-43. The operations structure—the operations process, warfighting functions, and operational framework—is the Army's common construct for operations. It allows Army leaders to rapidly, efficiently, and effectively organize effort in a manner commonly understood across the Army. The operations process provides a broadly defined approach to developing and executing operations. The warfighting functions provide an intellectual organization for common critical functions (see paragraphs 1-23 to 1-28 on page 1-5). The operational framework provides Army leaders with basic conceptual options for visualizing and describing operations. (Refer to ADRP 3-0 for additional information.)

OPERATIONS PROCESS

1-44. The Army's framework for exercising mission command is the operations process. The *operations process* is the major mission command activities performed during operations: planning, preparing, executing, and continuously assessing the operation (ADP 5-0). The operations process is a commander-led activity. (Refer to ADRP 5-0 for additional information.)

- *Planning* is the art and science of understanding a situation, envisioning a desired future, and laying out ways of bringing that future about (ADP 5-0). Commanders and staffs employ three methodologies for planning: The Army design methodology and the military decision-making process (battalion echelon and above, see FM 3-96 and ATP 3-21.20), and troop leading procedures (company echelon and below, see appendix B) to analyze multiple courses of action to determine the right one. The criteria for the right decision and course of action is whether it is

ethical (consistent with the moral principles of the Army Ethic), effective (likely to accomplish its purpose), and efficient (makes the disciplined use of resources).

- *Preparation* is those activities performed by units and Soldiers to improve their ability to execute an operation (ADP 5-0). The military decision-making process (battalion echelon and above) and troop leading procedures (company echelon and below) drive preparation.
- *Execution* is putting a plan into action by applying combat power to accomplish the mission (ADP 5-0). Commanders at each echelon position themselves where they can best exercise command during execution.
- *Assessment* is the determination of the progress toward accomplishing a task, creating a condition, or achieving an objective (JP 3-0). Commanders establish priorities for assessment in planning guidance, commander's critical information requirements (priority intelligence requirements and friendly force information requirements), essential element of friendly information, and decision points. By prioritizing efforts, commanders avoid excessive analyses when assessing operations. Assessment by commanders is continuous; it precedes and guides every operations process activity and concludes each operation or phase of an operation.

OPERATIONAL FRAMEWORK

1-45. Commanders and staffs use an operational framework, and associated vocabulary, to help conceptualize and describe the concept of operations in time, space, purpose, and resources. An *operational framework* is a cognitive tool used to assist commanders and staffs in clearly visualizing and describing the application of combat power in time, space, purpose, and resources in the concept of operations (ADP 1-01). An operational framework establishes an area of geographic and operational responsibility for the commander and provides a way to visualize how the commander will employ forces against the enemy. To understand this framework is to understand the relationship between the area of operation and operations in *depth*—the extension of operations in time, space, or purpose to achieve definitive results (ADRP 3-0). Proper relationships allow for simultaneous operations and massing of effects against the enemy.

1-46. The operational framework has four components. First, the commander is assigned an area of operation for the conduct of operations. Second, the commander can designate a deep, close, support, and consolidation areas to describe the physical arrangement of forces in time, space, and purpose. Third, within this area, the commander conducts decisive, shaping, and sustaining operations to further articulate the operation in terms of purpose. Finally, the commander designates the main and supporting efforts to designate the shifting and prioritization of resources.

Area of Operation

1-47. An *area of operations* is an operational area defined by the joint force commander for land and maritime forces that should be large enough to accomplish their missions and protect their forces (JP 3-0). In operations, the commander uses *control measures*—a means of regulating forces or warfighting functions (ADRP 6-0)—to assign responsibilities, coordinate maneuver, and control combat operations. Within the area of operation, the commander integrates and synchronizes combat power. To facilitate this integration and synchronization, the commander designates targeting priorities, effects, and timing within the assigned area of operation. Responsibilities within an assigned area of operation include—

- Information collection, integration, and synchronization.
- Civil affairs operations.
- Movement control.
- Clearance of fires.
- Security.
- Personnel recovery.
- Airspace control of assigned airspace.
- Minimum-essential stability tasks.

1-48. The commander considers the area of influence when assigning an area of operation to subordinate commanders. An *area of influence* is a geographical area wherein a commander is directly capable of

influencing operations by maneuver or fire support systems normally under the commander's command or control (JP 3-0). Understanding the area of influence helps the commander and staff plan branches to the current operation in which the force uses capabilities outside the area of operations. An area of operation should not be substantially larger than the unit's area of influence. Ideally, the area of influence would encompass the entire area of operations. An area of operations that is too large for a unit to control can allow sanctuaries for enemy forces and may limit joint flexibility.

1-49. An *area of interest* is that area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory. (JP 3-0). This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission. An area of interest for operations in support of stability tasks (see chapter 4) may be much larger than that area associated with the offense and defense.

1-50. Areas of operations may be contiguous or noncontiguous. When they are contiguous, a boundary separates them. When areas of operations are noncontiguous, subordinate commands do not share a boundary. The higher headquarters retains responsibility for the area not assigned to subordinate units. (Refer to ADRP 3-0 for additional information.)

Deep, Close, Support, and Consolidation Areas

1-51. Commanders designate close, deep, support, and consolidation areas to describe the physical arrangement of forces in time, space, and focus. A description of each area follows—

Deep Area

1-52. A *deep area* is the portion of the commander's area of operations that is not assigned to subordinate units (ADRP 3-0). Operations in the deep area involve efforts to prevent uncommitted enemy forces from being committed in a coherent manner. The commander's deep area generally extends beyond subordinate unit boundaries out to the limits of the commander's designated area of operations. The purpose of operations in the deep area is frequently tied to other events distant in time, space, or both time and space. Operations in the deep area might disrupt the movement of reserves; cannon, rocket, or missile; and/or follow on forces. In an operational environment where the enemy recruits insurgents from a population, deep operations might focus on interfering with the recruiting process, disrupting the training of recruits, or eliminating the underlying factors that enable the enemy to recruit.

Close Area

1-53. The *close area* is the portion of a commander's area of operations assigned to subordinate maneuver forces (ADRP 3-0). Operations in the close area are operations that are within a subordinate commander's area of operations. The commander plans to conduct decisive operations using maneuver in the close area, and positions most of the maneuver force within it. Within the close area, depending on the echelon, one unit may conduct the decisive operation while others conduct shaping operations. A close operation requires speed and mobility to rapidly concentrate overwhelming combat power at the critical time and place and to exploit success.

Support Area

1-54. In operations, the commander may refer to a support area. The *support area* is the portion of the commander's area of operations that is designated to facilitate the positioning, employment, and protection of base sustainment assets required to sustain, enable, and control operations (ADRP 3-0). The commander assigns a support area as a subordinate area of operations to support functions. It is where most of the echelon's sustaining operations occur. (See appendix H for additional information on support area operations.)

Consolidation Area

1-55. 1-55.The *consolidation area* is the portion of the commander's area of operations that is designated to facilitate the security and stability tasks necessary for freedom of action in the close area and to support the continuous consolidation of gains (ADRP 3-0). Corps and division commanders may establish a

consolidation area, particularly in the offense as the friendly force gains territory, to exploit tactical success while enabling freedom of action for forces operating in the other areas. When designated, a consolidation area refers to an area of operation assigned to an organization which extends from its higher headquarters boundary to the boundary of forces in close operations where forces have established a level of control and large-scale combat operations have ceased. The consolidation area does not necessarily need to surround, nor contain, the support area base clusters, but typically it does.

1-56. The consolidation area requires a purposefully task-organized, combined arms unit to conduct area security and stability tasks (see chapter 4) and employ and clear fires (see appendix D). For a division, the brigade combat team (BCT) assigned responsibility for the consolidation area will initially focus primarily on security tasks that help maintain the tempo of operations in other areas, and it is likely to conduct offensive tasks to defeat or destroy enemy remnants in order to protect friendly forces positioned in or moving through the area. The division consolidation area grows as the BCTs in close operations advance. When division boundaries shift, as is likely during the offense, the corps consolidation area will grow, and the balance of security and stability tasks may shift towards more of a stability focus, as conditions allow. The division responsible for the corps consolidation area conducts tasks designed to set conditions for the handover of terrain to host-nation forces or legitimate civilian authorities. (Refer to FM 3-0 for additional information.)

Decisive, Shaping, and Sustaining Operations

1-57. Decisive, shaping, and sustaining operations lend themselves to a broad conceptual orientation. The *decisive operation* is the operation that directly accomplishes the mission (ADRP 3-0). The decisive operation determines the outcome of a major operation, battle, or engagement. The decisive operation is the focal point around which the commander designs an entire operation. Multiple subordinate units may be engaged in the same decisive operation. Decisive operations lead directly to the accomplishment of a commander's intent. The commander typically identifies a single decisive operation, but more than one subordinate unit may play a role in a decisive operation.

1-58. A *shaping operation* is an operation that establishes conditions for the decisive operation through effects on the enemy, other actors, and the terrain (ADRP 3-0). In combat, synchronizing the effects of aircraft, artillery fires, and obscurants to delay or disrupt repositioning forces illustrates shaping operations. Information operations, for example, may integrate Soldier and leader engagement tasks into the operation to reduce tensions between subordinate units within the battalion and different ethnic groups through direct contact between subordinate leaders and local leaders. Shaping operations may occur throughout the area of operations and involve any combination of forces and capabilities. Shaping operations set conditions for the success of the decisive operation. The commanders may designate more than one shaping operation.

1-59. A *sustaining operation* is an operation at any echelon that enables the decisive operation or shaping operations by generating and maintaining combat power (ADRP 3-0). Sustaining operations differ from decisive and shaping operations in that they focus internally (on friendly forces) rather than externally (on the enemy or environment). Sustaining operations include personnel and logistics support, support area security, movement control, terrain management, and infrastructure development. Sustaining operations occur throughout the area of operations, not just within a support area. Failure to sustain may result in mission failure. Sustaining operations determine how quickly the force can reconstitute and how far the force can exploit success.

1-60. Throughout decisive, shaping, and sustaining operations, commanders and staffs ensure that—

- Forces maintain positions of relative advantage.
- Operations are integrated with unified action partners.
- Continuity is maintained throughout operations.

Position of Relative Advantage

1-61. A *position of relative advantage* is a location or the establishment of a favorable condition within the area of operations that provides the commander with temporary freedom of action to enhance combat power over an enemy or influence the enemy to accept risk and move to a position of disadvantage (ADRP 3-0). Positions of relative advantage provide the commander with an opportunity to compel, persuade, or deter an enemy decision or action. The commander maintains the momentum through exploitation of

opportunities to consolidate gains and continually assess and reassess friendly and enemy effects for further and future opportunities.

1-62. The company commander, understanding that positions of advantage are temporary, seeks positions of relative advantage before combat begins, and exploits success throughout operations. As the commander recognizes and gains positions of relative advantage, enemy forces will attempt to gain a position of advantage over the company. As such, subordinate platoons of the company leverage terrain to their advantage and pit their strength against a critical enemy weakness. Subordinate platoons maneuver to a position that provides either positional advantage over the enemy for surveillance and targeting, or a position from which to deliver fires in support of continued movement towards an advantageous position or to break contact.

Integration in Operations

1-63. Commanders, assisted by their staffs, integrate subordinate operations within the larger effort. They integrate numerous processes and activities (see ATP 3-21.20, appendix B) within the headquarters and across the force. Integration involves efforts to operate with unified action partners and efforts to conform battalion capabilities and plans to the larger concept. The commander extends the depth of operations through joint integration and multi-domain battle.

Note. Army forces conduct multi-domain battle, as part of a joint force, to seize, retain, and exploit control over enemy forces. For example, Army forces use aviation and unmanned aircraft systems in the air domain, and protect vital communications networks in cyberspace, while retaining dominance in the land domain. (Refer to ADRP 3-0 for additional information.)

1-64. When determining the company's operation's depth, the company commander considers the battalion and its own capabilities as well as available joint capabilities and limitations. The commander sequences and synchronizes operations in time and space to achieve simultaneous effects throughout an area of operation. The commander seeks to use capabilities within the company that complement those of the battalion and of unified action partners. Effective integration requires shared understanding and purpose through collaboration with participants and partners.

Maintaining Continuity in Operations

1-65. Decision making during operations is continuous; it is not a discrete event. The commander balances priorities carefully between current and future operations. The commander seeks to accomplish the mission efficiently while conserving as many resources as possible for future operations. (Refer to ATP 3-21.20 for additional information.) To maintain continuity of operations, the commander—

- Makes the fewest changes possible.
- Facilitate future operations.

Main and Supporting Efforts

1-66. The commander designates main and supporting efforts to establish clear priorities of support and resources among subordinate units. (Refer to FM 3-96 and ADRP 3-0 for additional information.)

1-67. The *main effort* is a designated subordinate unit whose mission at a given point in time is most critical to overall mission success (ADRP 3-0). The main effort is usually weighted with the preponderance of combat power. Typically, the commander shifts the main effort one or more times during execution. Designating a main effort temporarily prioritizes resource allocation. When the commander designates a unit as the main effort, it receives priority of support and resources in order to maximize combat power. The commander establishes clear priorities of support, and shifts resources and priorities to the main effort as circumstances and the commander's intent require. The commander may designate a unit conducting a shaping operation as the main effort until the decisive operation commences. However, the unit with primary responsibility for the decisive operation then becomes the main effort upon the execution of the decisive operation.

1-68. A *supporting effort* is a designated subordinate unit with a mission that supports the success of the main effort (ADRP 3-0). The commander resources supporting efforts with the minimum assets necessary to accomplish the mission. The force often realizes success of the main effort through the success of the supporting effort(s).

KEY DOCTRINAL TERMS AND DEFINITIONS

1-69. The following key doctrinal terms and definitions are used throughout this and other chapters and appendixes. Refer to referenced publications for additional information.

- *Commander's critical information requirements*—an information requirement identified by the commander as being critical to facilitating timely decision-making. (JP 3-0).
- *Decision point*—a point in space and time when the commander or staff anticipates making a key decision concerning a specific course of action (JP 5-0).
- *Essential element of friendly information*—a critical aspect of a friendly operation that, if known by the enemy, would subsequently compromise, lead to failure, or limit success of the operation and therefore should be protected from enemy detection. (ADRP 5-0).
- *Friendly force information requirement*—information the commander and staff need to understand the status of friendly and supporting capabilities. (JP 3-0).
- *Priority intelligence requirement*—an intelligence requirement, stated as a priority for intelligence support, that the commander and staff need to understand the adversary or other aspects of the operational environment. (JP 2-01).

SECTION II – THE INFANTRY RIFLE COMPANY

1-70. The Infantry rifle company within the Infantry battalion can deploy rapidly and can be sustained by an austere support structure. It conducts operations against conventional and unconventional enemy forces in all types of terrain and climate conditions. The company's composition and training uniquely equip it to conduct its mission. In addition to its primary warfighting missions, the rifle company may be tasked to perform other types of operations semi-independently or as an integral part of a larger force. The rifle company within the Infantry battalion can be task-organized as part of an ABCT, an SBCT, a multifunctional brigade, or supporting functional brigade. This section addresses the Infantry rifle company's mission, capabilities, limitations, and organization and the exercise of mission command within the company to include duties and responsibilities. (Refer to ATP 3-21.20 and FM 3-96 for additional information.)

Note. Company-size combat units can fight en mass, as subordinate platoons, or as task-organized teams reinforced with close-combat platoons of the same or different types. A *company* is a unit consisting of two or more platoons, usually of the same type, with a headquarters and a limited capacity for self-support (ADRP 3-90). A *company team* is a combined arms organization formed by attaching one or more nonorganic armor, mechanized Infantry, Stryker, or Infantry platoons to an armor, mechanized Infantry, Stryker, or Infantry company, either in exchange for or in addition to, its organic platoons (ADRP 3-90).

MISSION

1-71. The mission of the Infantry rifle company is to close with the enemy using fire and movement to destroy or capture enemy forces, or to repel enemy attacks by fire, close combat, and counterattack to control land areas, including populations and resources. The Infantry rifle company commander exercises mission command, and directs the operation of the company and attached units while conducting decisive action throughout the depth of the company's area of operations. Company missions, although not inclusive, may include reducing fortified areas, infiltrating and seizing objectives in the enemy's rear, eliminating enemy force remnants in restricted terrain, securing key facilities and activities, and conducting operations in support of stability tasks in the wake of maneuvering forces. Reconnaissance and surveillance tasks and security operations remain a core competency of the Infantry rifle company, platoon, and squad.

CAPABILITIES

1-72. The Infantry rifle company is an expeditionary formation optimized for dismounted operations in *complex terrain*—a geographical area consisting of an urban center larger than a village and/or of two or more types of restrictive terrain or environmental conditions occupying the same space (ATP 3-34.80). The rifle company conducts entry operations by ground, airland, air assault, or amphibious assault (via surface and vertical) into austere areas of operations with little or no advanced notice. Airborne Infantry rifle companies can conduct vertical envelopment by parachute assault. The rifle company is particularly effective in urban terrain, where subordinate Infantry units can infiltrate and move rapidly to the rear of enemy positions. The commander can enhance tactical mobility using rotatory and fixed wing airlift. The Infantry rifle company's capabilities include:

- Strategic and operational deployability (may be part of the dominant arm during initial entry phase).
- Entry operations to gain the initiative early, seize and hold ground, and mass fires to stop the enemy.
- Forcible entry operations, through Airborne assault (Airborne Infantry rifle companies), air assault, and amphibious operations.
- Offensive and defensive tasks and tactical enabling tasks in all types of environments.
- Screen and guard missions against similarly equipped enemy forces.
- Dismounted operations in restrictive or severely restrictive terrain.
- Transportable by Army aviation brigades cargo helicopter CH-47 and utility helicopter UH-60.
- Enhanced situational awareness, including a common operational picture, within the company headquarters.
- Reduced logistics requirement compared to an Armor and mechanized Infantry company team and SBCT Infantry rifle company.

LIMITATIONS

1-73. While insertion means vary, all Infantry companies within the IBCT are comprised of foot-mobile Soldiers, and require organic or supporting unit vehicles for increased mobility of troops. Other limitations include:

- Vulnerable to enemy armor, artillery, and air assets when employed in open terrain.
- Limited decontamination capability.

ORGANIZATION OF THE INFANTRY RIFLE COMPANY

1-74. The Infantry rifle company of the Infantry battalion is task-organized alone or as a combined arms force based upon METT-TC. Its effectiveness increases through the synergy of combined arms including assault vehicles, tanks, Bradley fighting vehicles (BFVs) and Stryker Infantry carrier vehicles (ICVs), engineers, and other enabling elements. Effective application of the Infantry rifle company as a combined arms force can capitalize on the strengths of the team's elements while minimizing their respective limitations. The Infantry rifle company of the Infantry battalion has a headquarters section, three rifle platoons, a mortar section, and a Raven unmanned aircraft system (UAS) team. Habitual attachments to the Infantry rifle company include a fire support team and combat medics. Attachments from the Infantry battalion may include elements from the Infantry weapons company as well as other elements. Figure 1-1 shows the internal organization of the Infantry rifle company within the Infantry battalion.

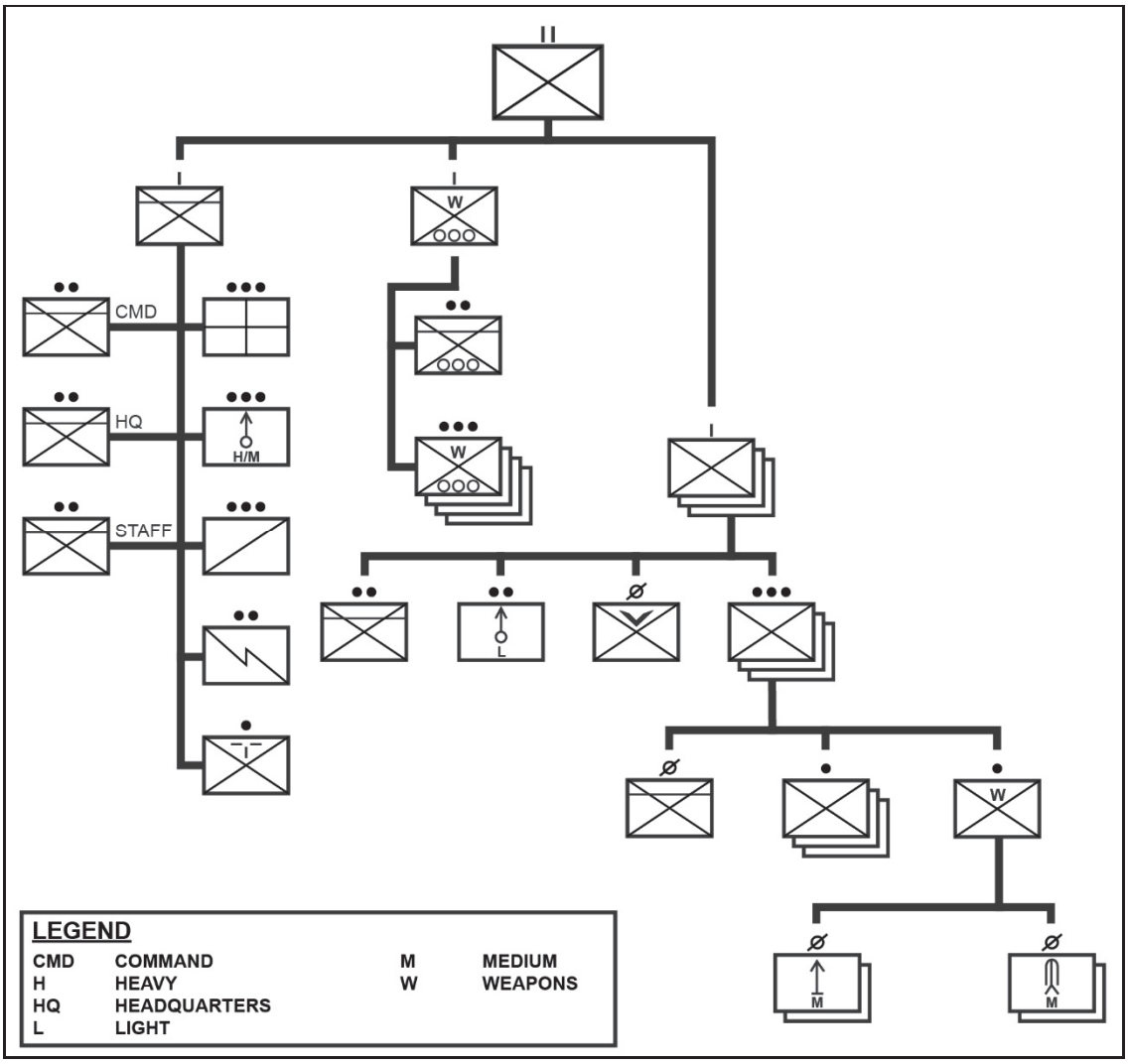

Figure 1-1. The Infantry rifle company of the Infantry battalion

HEADQUARTERS SECTION

1-75. The headquarters section provides the company with mission command, communications, sustainment, and intelligence support. It consists of the company commander, the executive officer (XO), first sergeant (1SG), the supply sergeant, the supply clerk and assistant, two radio telephone operators, and a communications noncommissioned officer (NCO).

INFANTRY RIFLE PLATOON

1-76. The composition and training of the Infantry rifle company's three Infantry rifle platoons uniquely enable it to conduct missions against conventional and unconventional enemy forces in all types of terrain and climate conditions. The three rifle platoons are the dominant movement and maneuver element within the company and provides its primary combat power. Each rifle platoon consists of three rifle squads and a weapons squad. The rifle squad consists of the squad leader and two fire teams. Each fire team has a fire team leader armed with an M4 carbine, a grenadier armed with the M320, 40-millimeter (mm) grenade launcher, an automatic rifleman armed with an M249 squad automatic weapon, and a rifleman armed with an M4 carbine. A member of the squad, usually one of the riflemen, is the squad designated marksman. The weapons squad consists of the squad leader; two machine gun teams and two anti-armor teams. Each machine gun team has a M240 machine gunner and assistant gunner. Each anti-armor team (see appendix E) has an

anti-armor team specialist and ammunition handler equipped with the Javelin medium close combat missile system. (Refer to ATP 3-21.8 for additional information.)

MORTAR SECTION

1-77. The Infantry rifle company mortar section provides the commander with responsive, mobile, and lethal indirect fire. The section is part of the company headquarters and is directly under the control of the Infantry company commander. The mortar section consists of two, three-Soldier light mortar squads. Each squad mans a single 60-mm mortar. The senior squad leader is also the section leader and acts as the fire direction center point of contact with the second squad leader also acting as the fire direction center point of contact during split missions. The gunner and ammunition bearer completes the crew. Each squad is equipped with M224 or M224A1 mortar and fire control equipment. See appendix D for information on the employment of mortars.

RAVEN UNMANNED AIRCRAFT SYSTEM TEAM

1-78. The Raven UAS team consisting of two Soldiers who remotely operate the system, a ground control unit, and equipment to review and distribute electro-optical and infrared video information. The commander uses the system to fill intelligence gaps, for example within urban or other complex terrain and around base camps and outposts. See ATP 3-04.64 for a detailed discussion of the system's characteristics and capabilities.

DUTIES AND RESPONSIBILITIES

1-79. The duties and responsibilities inherent within the Infantry rifle company enable the exercise of mission command throughout the conduct of operations. The following paragraphs address the duties and responsibilities of the key personnel, augmentation teams, and habitual attachments common to the Infantry rifle company. Duties and responsibilities of the company signal support NCO and armorer are addressed in appendix I.

Note. The exercise of mission command encompasses how a commander applies the foundational mission command philosophy together with the mission command warfighting function, guided by the principles of mission command. Refer to FM 3-96, chapter 3 and ATP 3-21.20, chapter 1 for a detail discussion of the "exercise of mission command" as it refers to the overarching idea that unifies the mission command philosophy of command and the mission command warfighting function.

COMMANDER

1-80. The company commander uses mission command, the exercise of authority and direction, to seize, retain, and exploit the initiative through mission orders. The commander leads by personal example and is responsible for everything the Infantry rifle company does, or fails to do, in executing its assigned mission. The commander's responsibilities include, but are not limited to: leadership, training, tactical employment, administration, personnel management and supply, maintenance, and sustainment of the company. These duties require the commander to understand the strengths of the company's Soldiers and equipment, and to understand how to employ them to the best tactical advantage. At the same time, the commander must be well versed in threat organizations, doctrine, and equipment.

1-81. The commander, using this understanding, prepares the unit for combat missions while exercising the art and science of mission command ethically, effectively, efficiently, and decisively. The commander, based upon sound judgment, and higher commander's intent, assesses the situation and risk, rapidly adapts, and makes timely decisions when taking corrective actions. The commander visualizes, describes, designs, and directs subordinate leaders in clear, complete mission orders. Although not inclusive the commander—

- Commands through subordinate leaders.
- Employs the company to accomplish its mission according to the battalion commander's intent and concept of operation.

- Selects the best location to maneuver rifle platoons and other elements.
- Conducts mission analysis and troop leading procedures and issues operation orders for company missions.
- Maintains and expresses situational understanding.
- Resources rifle platoons and other elements and requests battalion support when needed.
- Ensures the company command post battle tracks the current situation and status of subordinate units.
- Provides timely and accurate combat information to the battalion and subordinate units.
- Implements effective measures for protection, security, and accountability of forces and systems.
- Develops the leadership and tactical skills of platoon leaders.
- Informs and influences audiences inside and outside the company.
- Develops and maintains an ethical command climate.
- Enforces standards and maintains discipline.
- Incorporates moral-ethical reasoning in all plans and decisions.
- Ensures adherence to rules of engagement.

EXECUTIVE OFFICER

1-82. The XO is the Infantry rifle company's second-in-command and the rifle company's primary sustainment planner and coordinator. The XO and the XO's driver may serve as the company net control station for both radio and digital traffic. The XO's duties include, but are not limited to the following responsibilities:

- Ensure accurate and timely tactical reports are sent to the battalion.
- Assume command of the Infantry rifle company as required.
- Plan and supervise the Infantry rifle company sustainment effort before the mission in conjunction with the first sergeant.
- Assist in preparation of the operation order.
- Conduct tactical coordination with higher, adjacent, and supporting units.
- Assist the commander with issuing orders to the Infantry rifle company headquarters and attachments.
- Conduct additional missions as required.
- Perform as landing zone or pickup zone control officer.
- Assist the commander in preparations for follow-on missions, including rehearsal site preparation.
- Position, as required, with supporting effort or other designated location during the mission as an alternate command post to assist the commander with mission command.
- Assist the commander with intelligence preparation of the battlefield products.
- Manage the company timeline.
- Manage sustainment assets and their survivability.
- Facilitate the integration of attachments and enablers.
- Serve as officer-in-charge of the company command post when established.
- Serve as movement control officer.
- Assist the commander and supply sergeant with managing the property book and all other company hand receipts.
- Support and assess the ethical command climate that the Commander has instituted.
- Monitor the conduct of subordinates to maintain the discipline of the unit.

FIRST SERGEANT

1-83. The 1SG is the Infantry rifle company's senior NCO, and is its most experienced Soldier. The 1SG is the commander's primary tactical advisor, and an expert in individual and NCO skills. The 1SG is also the company's primary sustainment operator; the 1SG helps the commander and XO plan, coordinate, and supervise all logistic activities that support the tactical mission. The ISG operates where the commander directs or where 1SG duties are required. The 1SG's duties include, but are not limited to the following responsibilities:

- Execute and supervise routine missions.
- Supervise, inspect, and observe all matters designated by the commander.
- Plan, rehearse, and supervise key sustainment actions in support of the tactical mission.
- Assist and coordinate with the executive officer in all critical functions.
- Assist the executive officer in sustainment planning for the company.
- Serve as quartering party noncommissioned officer-in-charge, as necessary.
- Conduct training and ensure proficiency in individual and noncommissioned officer skills and small unit collective skills.
- Establish and maintain the foundation for company discipline.
- Assist the commander with maintaining accountability.
- Support and enforce the company command climate and upholds the Army Ethic in all training and operations.
- Assess and report to the commander—personnel accountability, state of health and welfare of Soldiers, and esprit de corps of the company

PLATOON LEADER

1-84. The platoon leader leads Soldiers by personal example. The platoon leader is responsible for all the platoon does or fails to do. This centralized authority enables the platoon leader to maintain unit discipline and unity and to act decisively. The demands of decisive action require the platoon leader to exercise initiative without continuous guidance from higher commands. The platoon leader must know the Soldiers within the platoon as well as how to employ the platoon, its weapons, and its systems. The platoon leader relies on the expertise of the platoon sergeant on all platoon matters. The platoon leader ensures that the company commander's ethical command climate and rule of rules of engagement (ROE) policy are strictly followed. The platoon leader ensures Soldiers understand the ROE and conduct operations while adhering to the moral principles of the Army Ethic, consistent with the commander's intent and concept of operation. See ATP 3-21.8 for more information.

PLATOON SERGEANT

1-85. The platoon sergeant (PSG) is the second-in-charge of the platoon. The PSG is accountable to the platoon leader for the leadership, discipline, training, and welfare of the platoon's Soldiers. The PSG sets the example in everything. The PSG's expertise includes tactical maneuver, employment of weapons and systems, sustainment, administration, security, accountability, protection, and Soldier care. As the second-in-charge, the PSG assumes no formal duties except those prescribed by the platoon leader. The PSG supports the platoon leader's efforts and initiatives to ensure that the platoon has an ethical command climate. The PSG is the primary individual skills training manager. The PSG ensures Soldiers understand the ROE and adhere to the moral principles of the Army ethic. See ATP 3-21.8 for more information.

SUPPLY SERGEANT

1-86. The supply sergeant requests, receives, issues, stores, maintains, and turns in supplies and equipment for the Infantry rifle company. The supply sergeant coordinates all supply requirements and actions with the XO and the ISG and the battalion logistics staff officer (S-4). Usually, the supply sergeant's duty location is with the battalion combat or field trains, company trains, or positioned to conduct movement with a march unit within the main body. (See appendix I.) The supply sergeant communicates, when possible, on the battalion administrative and logistics network. The supply sergeant—

- Controls the company cargo truck and water trailer, and supervises the supply clerk and armorer.
- Monitors company activities and the tactical situation.
- Anticipates and reports logistical requirements.
- Coordinates and monitors the status of company sustainment requests.
- Coordinates and supervises the organization of the company logistics package in the field trains.
- Assists the XO with managing the company commander's hand receipts.

SENIOR RADIOTELEPHONE OPERATOR

1-87. The senior radiotelephone operator supervises communications field operation, maintenance, and installation of organic wire, and frequency modulation communications. The senior radiotelephone operator supervises all activities in regards to the company's communications security equipment and assists the commander in planning and employment of the communications systems. The senior radiotelephone operator—

- Supervises or assists company command post operations, to include:
  - Relays information.
  - Monitors the tactical situation.
  - Establishes the command post security plan and radio watch schedule.
  - Informs the commander and subordinate units of significant events.
- Renders clear, accurate, and timely situation reports.
- Performs limited troubleshooting (forward) of organic communications equipment.
- Supervises all aspects of communications security equipment, to include requesting, securing, employing, and training for communications security equipment and related materials.
- Advises the company commander in planning and employing communications.
- Prepares, based on the commander's guidance, or helps prepare paragraph 5 of the operations order (OPORD).

RADIOTELEPHONE OPERATOR

1-88. The radiotelephone operator uses and performs maintenance on assigned radio, including preparation for special missions (cold weather, air assault, or waterborne) and construction of field-expedient antennas. The radiotelephone operator—

- Assists the senior radiotelephone operator and is prepared to assume the duties of the senior radiotelephone operator.
- Understands the company's mission and prepares to call for fire, or to request medical evacuation or resupply.
- Assists in orders preparation.

MORTAR SECTION SERGEANT

1-89. The mortar section sergeant is responsible for employing the mortar section and ensures effective mortar support for the company. (See ATTP 3-21.90 and appendix D.) Responsibilities include the following:

- Coordinate with the fire support officer (FSO) regarding the area of operation and up-to-date tactical intelligence.
- Coordinate with the FSO to receive the fire support plan, the fire support execution matrix, the company target list worksheet, and any fire support coordination measures.
- Participate in company rehearsals.
- Perform the duties, when possible, of the headquarters platoon sergeant.
- Perform the duties, when possible, of the company command post NCO in charge.

AUGMENTATION TEAMS

1-90. The company can receive augmentation teams by specialty, for example, teams may be air defense, liaison officers from joint or multinational support agencies, engineer support (mobility, countermobility, and survivability), or additional augmentation to the fire support team, which may include a naval surface fire support team, joint fires observers, and/or joint terminal attack controllers. When received the commander integrates these elements into the planning process as early as possible.

HABITUAL ATTACHMENTS

1-91. Habitual attachments for the Infantry rifle platoon normally include a company fire support team (FIST) and combat medics. These habitual attachments are normally attached whenever the company deploys.

Fire Support Team and Forward Observers

1-92. Company FIST headquarters personnel and platoon forward observers (FOs) plan and coordinate all available supporting fires, including mortars, field artillery, naval surface fire support, Army attack aviation, and Air Force CAS integration for the Infantry rifle company. Attached FIST provide precision targeting, type 2 and 3 terminal attack control, effects assessment capabilities, and the use of precision target location tools to establish accurate target location. Precision target tools include a targeting device or a precision targeting device, a forward entry device, and imagery based mensuration tools. FOs may have an optical device using a laser range finder for distance and an Azimuth Vertical Angle Module to acquire direction and vertical angle. Each FIST fire support vehicle, if provided, possesses a target acquisition and communications suite with the capability for laser range finding and designation for laser-guided munitions. See ATP 3-21.20, appendix C for more information.

1-93. FIST headquarters personnel attached to the Infantry rifle company normally include a company FSO, a staff sergeant as the fire support sergeant, a fire support specialist, and a radio telephone operator. Platoon FOs include three two-soldier teams, a FO and a radio telephone operator. FO teams can be attached to a rifle platoon or can be designated to observe a specific area. While the company commander is ultimately responsible for integrating fires in support of the scheme of maneuver; the company FSO serves as the commander principle advisor. On the basis of the company commander's guidance and an understanding of the company's scheme of maneuver, the FSO synchronizes fire support within the maneuver plan and presents the fire support plan to the commander for approval. Throughout the operations process the FSO continues to develop and refine the fire support plan based on the commander's guidance and changes to the mission. The FSO's duties include, but are not limited to the following responsibilities:

- Advise the commander on all fire support matters.
- Request, adjust, and direct all types of fire support assets.
- Train the fire support team on fire support tasks.
- Serve as the commander's primary advisor on the enemy's indirect fire capabilities.
- Assist the commander with developing the operations order to ensure full integration of fires.
- Recommend targets and fire support coordination measures.
- Determine methods of engagement and responsibility for executing planned targets.
- Determine the specific tasks and instructions required to plan and execute the fire support plan.
- Develop an observation plan with limited visibility contingencies.
- Allocate forward observers and other observers to maintain surveillance of target and named areas of interest.
- Develop the fire support plan to include the generation of non-lethal effects, such as those generated by information operations (IO), with the company commander and the battalion fire support officer.
- Prepare the fire support plan execution matrix and disseminate to key personnel.
- Assist the commander with briefing the fire support plan as part of the rifle company operations order.

- Refine and integrate the rifle company target list worksheet and submit to the battalion fire support officer.
- Assist the commander in incorporating execution of the indirect fire plan into each Infantry rifle platoon rehearsal.
- Alert the company commander when a request for fires against a target is denied.
- Monitor the location of friendly units and assist the commander with clearing fires.
- Request counterfire support in response to enemy artillery and mortar attacks.
- Provide emergency control of close air support and call for and adjust naval gunfire in the absence of qualified personnel.

Company Medical Support

1-94. The basis of allocation for company level medical support is one senior combat medic at the company and one combat medic per maneuver platoon. (Note. Basis of allocation is designed to place medical treatment assets as close to the point of injury as possible.) The company's senior combat medic generally collocates with the company trains and platoon medics generally collocate with the platoon headquarters element. The senior combat medic cares for the sick, injured, or wounded company personnel. Tactical combat casualty care performed by the senior combat medic may include opening an airway, starting intravenous fluids, controlling hemorrhage, preventing or treating for shock, splinting fractures or suspected fractures, and providing relief for pain. The senior combat medic performs tactical combat casualty care under the supervision of the battalion surgeon or physician's assistant. Under the supervision of the company 1SG, directs and supervises to ensure medical assets remain flexible and responsive to tactical missions (see appendix I). The senior combat medic is responsible for—

- Overseeing and providing guidance to each platoon medic as required.
- Company level triage oversight.
- Training personnel to evaluate ill, injured, or wounded friendly and enemy personnel for priority of treatment as they arrive at the company casualty collection point.
- Overseeing sick call screening for the company.
- Requesting and coordinating the evacuation of sick, injured, or wounded personnel under the direction of the company 1SG.
- Assisting in first aid training of the company personnel and enhanced first aid procedures of combat lifesavers.
- Recommending locations for company casualty collection points.
- Providing guidance to the company's combat lifesavers.
- Monitoring the tactical situation and anticipating and coordinating health service support requirements and Class VIII resupply as necessary.
- Advising the company commander, XO, and 1SG on mass casualty tasks.
- Advising the company commander, XO, and 1SG on unit field sanitation issues.
- Keeping the XO and 1SG informed on the status of casualties and medical resupply request.

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Chapter 2
Offense

Offensive action is the critical part of any engagement. The primary purpose of the offense for the Infantry rifle company is to decisively defeat, destroy, or neutralize the enemy force, or to seize key terrain. The commander may take offensive action to collect information, deceive the enemy, deprive the enemy of resources or decisive terrain, or fix the enemy in position. Even in the defense, offensive action normally is required to destroy an attacker and exploit success. The key to a successful offense is to identify the enemy's most vulnerable point; choose a form of maneuver that avoids the enemy's strength while exploiting enemy weakness and one that masses overwhelming combat power. This chapter discusses the doctrinal basis for the offense and introduces a fictional scenario used as a discussion vehicle for illustrating one of many ways that an Infantry rifle company conducts the offensive element of decisive action. The scenario focuses on potential challenges confronting the Infantry rifle company commander in accomplishing a mission but is not intended to be prescriptive of how the Infantry rifle company performs any particular operation.

SECTION I – DOCTRINAL BASIS FOR THE OFFENSE

2-1. Offensive techniques cannot be discussed in isolation. There must be a seamless continuity and understanding between the fundamental doctrinal principles, tactics and procedures, covered in Army doctrinal reference publications and field manuals, and the techniques covered in this Army techniques publications. This section briefly discusses offensive tasks, tactical movement, and supporting doctrinal terms. The reader should refer to ATP 3-21.20, FM 3-96, FM 3-90-1, FM 3-90-2, and ADRP 3-90 for additional information.

OFFENSIVE TASKS

2-2. *Offensive tasks* are tasks conducted to defeat and destroy enemy forces and seize terrain, resources, and population centers (ADRP 3-0). The four primary offensive tasks are movement to contact, attack, exploitation, and pursuit. See the specific following sections for tasks discussions.

CHARACTERISTICS OF OFFENSIVE TASKS

2-3. Surprise, concentration, tempo, and audacity characterize the offense. See ADRP 3-90 for a detailed discussion of each characteristic below:

- Surprise. Commanders achieve surprise by attacking the enemy at a time or place they do not expect or in a manner for which they are unprepared.
- Concentration. Concentration is the massing of overwhelming effects of combat power to achieve a single purpose.
- Tempo. At the tactical level, a faster tempo allows attackers to quickly penetrate barriers and defenses and destroy enemy forces in-depth before they can react.
- Audacity. Audacity means boldly executing a simple plan of action.

PLANNING CONSIDERATIONS

2-4. Understanding, visualizing, describing, directing, leading, and assessing are aspects of leadership common to all commanders. The commander begins with an assigned area of operation, identified mission, and available forces. The commander develops a plan based on a visualization in terms of how to accomplish the mission. The six warfighting functions are the framework for discussing planning considerations that apply to all primary and subordinate offensive tasks. See FM 3-96 and ADRP 3-90 for a detailed discussion, by warfighting function, of offensive planning considerations.

FORMS OF MANEUVER

2-5. *Forms of maneuver* are distinct tactical combinations of fire and movement with a unique set of doctrinal characteristics that differ primarily in the relationship between the maneuvering force and the enemy (ADRP 3-90). The six basic forms of maneuver during an attack are envelopment, turning movement, frontal attack, penetration, infiltration, and flank attack. When the company executes a form of maneuver, subordinate units may execute different forms of maneuver in executing the companies' concept of operation. Forms of maneuver are conducted in relation to or relative to an enemy force. The six forms of maneuver are addressed in the following paragraphs. (Refer to FM 3-90-1 for addition information.)

Note. Each form of maneuver has a virtual equivalent in the informational and cognitive dimensions of the information environment. For example, infiltration is not only possible in physical space, but also in cyberspace. Frontal and flank attacks can be both physical and psychological. Through the integration of IO and cyberspace electromagnetic activities into its operations, the company in coordination with the battalion is able to out-maneuver the enemy or adversary physically, informationally, and psychologically. (Refer to FM 3-13 for additional information).

ENVELOPMENT

2-6. *Envelopment* is a form of maneuver in which an attacking force seeks to avoid the principal enemy defenses by seizing objectives behind those defenses that allow the targeted enemy force to be destroyed in their current positions (FM 3-90-1). Envelopments focus on seizing terrain, destroying specific enemy forces, and interdicting enemy withdrawal routes. An envelopment avoids the enemy's front; where they are strongest, where the attention is focused, and where enemy fires are most easily concentrated. For example, a shaping operation can fix the defender, while the decisive operation maneuvers out of contact around the enemy's defenses to strike at assailable flanks, the rear, or both. If no assailable flank is available, the attacking force creates one through the conduct of a penetration (see paragraph 2-13 on page 2-6).

2-7. Envelopments may be conducted against a stationary or moving enemy force. Sometime the enemy exposes a flank by their own forward movement, unaware of their opponent's location. In noncontiguous areas of operation, the combination of air and ground fires may isolate the enemy on unfavorable terrain and establish conditions for maneuver against an assailable flank or rear. Attacking forces need to be agile enough to concentrate and mass combat power before the enemy can reorient defenses. Fixing forces must have sufficient combat power to keep the enemy engaged, while the enveloping force maneuvers to close with the enemy. The Infantry rifle company would likely be involved in an envelopment as part of a larger attacking force. The four varieties of envelopment (see figure 2-1) are listed and defined below:

- A *single envelopment* is a form of maneuver that results from maneuvering around one assailable flank of a designated enemy force (FM 3-90-1). For information on a single envelopment, see FM 3-90-1 and FM 3-96.
- A *double envelopment* results from simultaneously maneuvering around both flanks of a designated enemy force (FM 3-90-1). For information on a double envelopment, see FM 3-90-1 and FM 3-96.
- *Encirclement operations* are operations where one force loses its freedom of maneuver because an opposing force is able to isolate it by controlling all ground lines of communication and

reinforcement (ADRP 3-90). For a discussion of offensive encirclement operations, see FM 3-90-2 and FM 3-96.

- Vertical envelopment is a tactical maneuver in which troops, either air-dropped or air-landed, attack the rear and flanks of a force, in effect cutting off or encircling the force. For a discussion of Airborne and air assault operations, see FM 3-99.

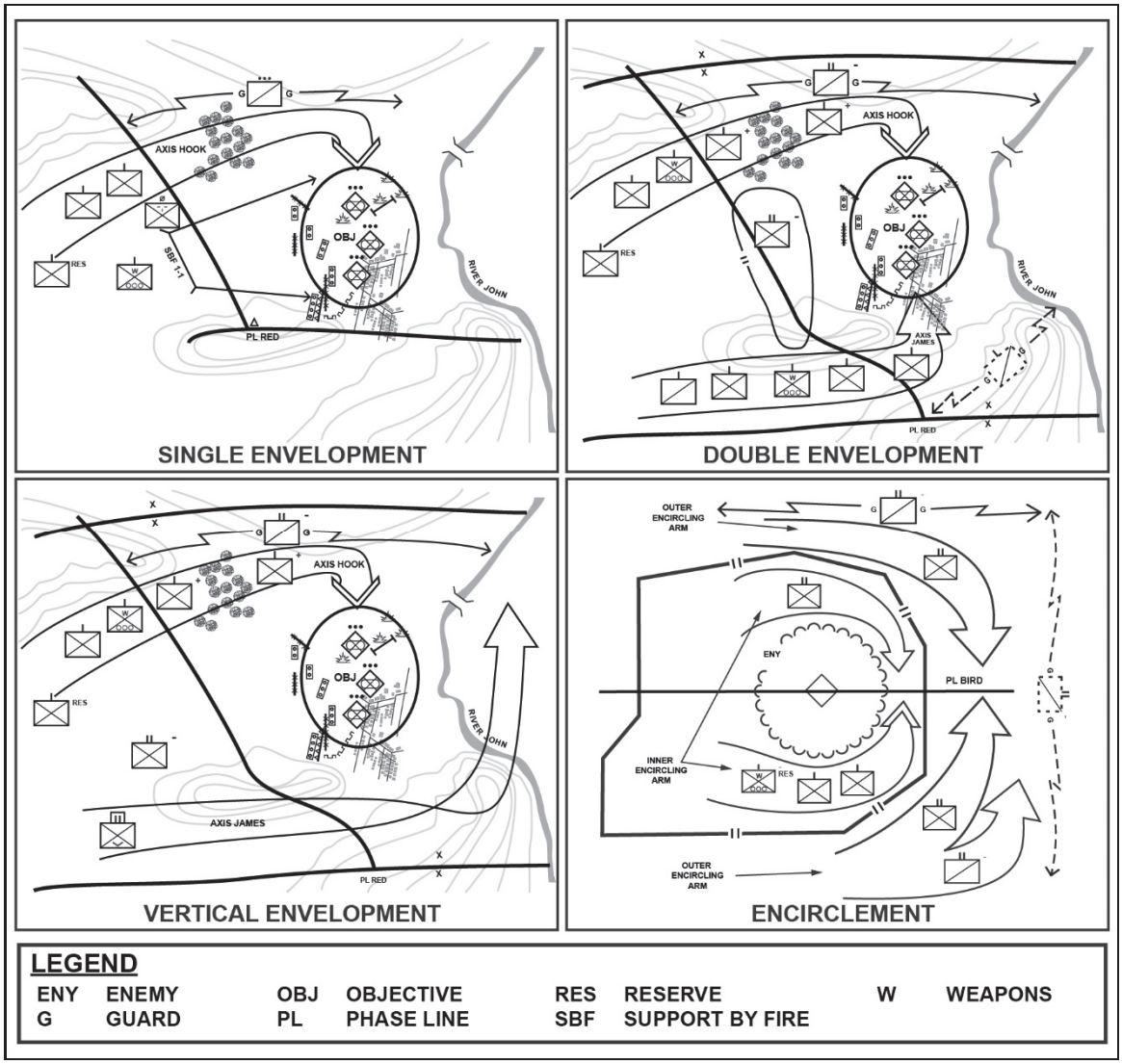


Figure 2-1. Envelopments

Note. A unit can conduct offensive encirclement operations designed to isolate an enemy force (addressed above) or conduct defensive encirclement operations (addressed in chapter 3) because of the unit's isolation by the actions of an enemy force. (Refer to FM 3-90-2 for additional information.) See paragraph 3-82 on page 3-24 for information on linkup during offensive and defensive encirclement operations.

TURNING MOVEMENT

2-8. A *turning movement* is a form of maneuver in which the attacking force seeks to avoid the enemy's principle defensive positions by seizing objectives behind the enemy's current positions, thereby causing the

enemy force to move out of its current positions or divert major forces to meet the threat (FM 3-90-1). The objective of the turning movement is to make contact with the enemy, but at a location of the commander conducting the turning movement's advantage and out of the enemy established kill zones. A turning movement differs from envelopment because the force conducting a turning movement seeks to make the enemy forces displace from their current locations, whereas an enveloping force seeks to engage the enemy forces in their current locations from an unexpected direction. The commander directing the turning movement can employ a vertical envelopment using Airborne or air assault forces (see FM 3-99) to effect a turning movement.

2-9. The commander directing a turning movement task organizes available resources to conduct three main tasks: conduct a turning movement, conduct shaping operations, and conduct reserve operations. (See figure 2-2.) Normally, the force conducting the turning movement conducts the echelon's decisive operation given the appropriate mission variables of METT-TC. It is not until a commander has access to the resources of these echelons that the commander normally has the combat power to resource a turning force that can operate outside supporting range of the main body to allow the turning force-to-force enemy units out of their current positions. The commander bases the task organization of these forces on the mission variables of METT-TC and the concept of operations for the turning movement. A commander frequently transition this form of offensive maneuver from the attack into an exploitation or pursuit.

Note. A turning movement is particularly suited for division-sized or larger forces possessing a high degree of tactical mobility. The Infantry rifle company conducts a turning movement as part of that larger force, most likely as a shaping operation or fixing force as opposed to the decisive operation involving the turning force.

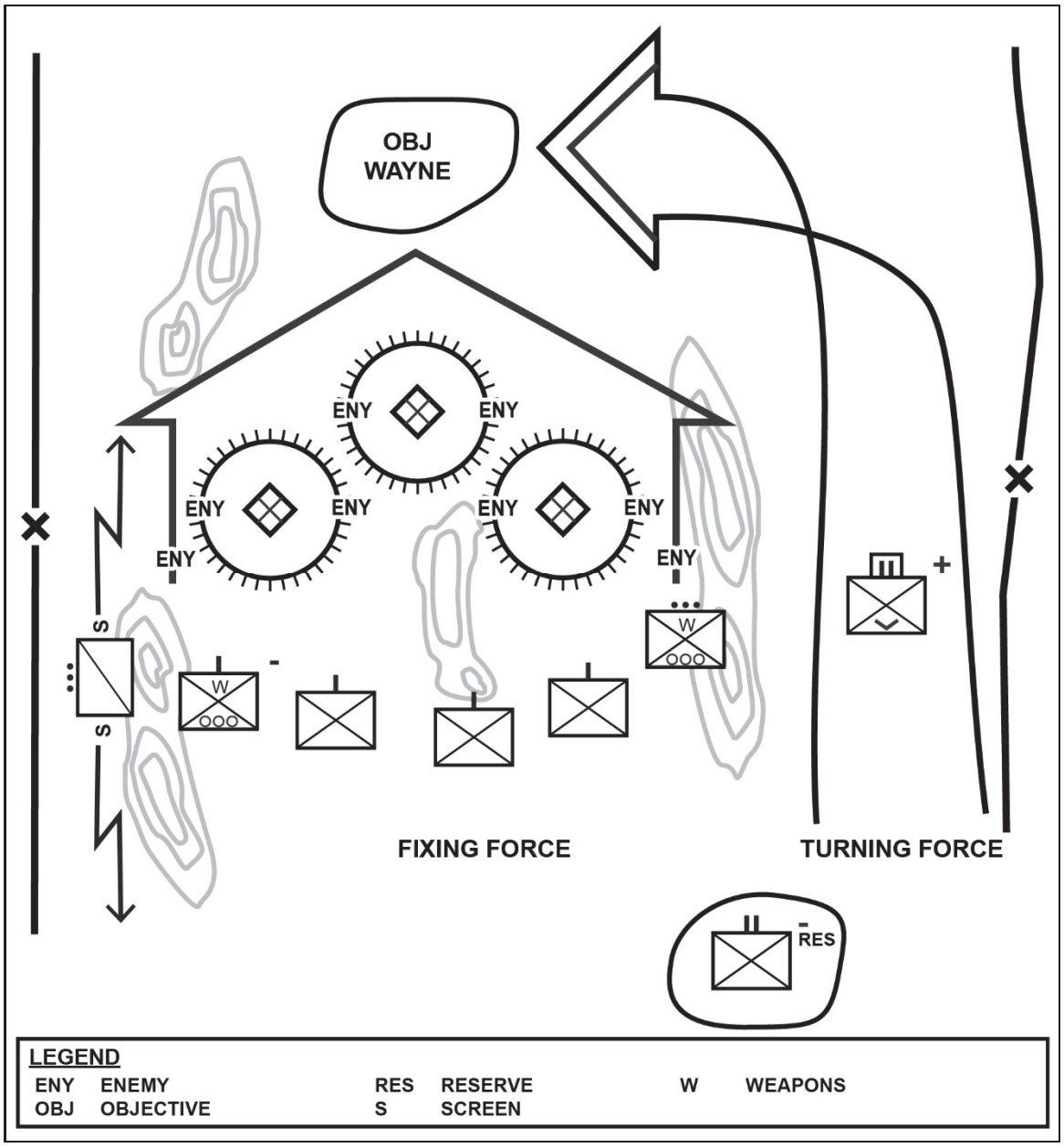


Figure 2-2. Turning movement

FRONTAL ATTACK

2-10. A *frontal attack* is a form of maneuver in which an attacking force seeks to destroy a weaker enemy force or fix a larger enemy force in place over a broad front (FM 3-90-1). The frontal attack is usually the least desirable form of maneuver because it exposes the majority of the offensive force to the concentrated fires of the defenders. The company normally conducts a frontal attack as part of a larger operation against a stationary or moving enemy force. (See figure 2-3 on page 2-6.) Unless frontal attacks are executed with overwhelming and well synchronized speed and strength against a weaker enemy, they are seldom decisive. The company attacks the enemy across a wide front and along the most direct approaches. It uses a frontal attack to overrun and destroy a weakened enemy force or to fix an enemy force. Frontal attacks are used when the commander possesses overwhelming combat power and the enemy is at a clear disadvantage or when fixing the enemy over a wide front is the desired effect and a decisive defeat in that area is not expected.

The frontal attack may be appropriate in an attack or meeting engagement where speed and simplicity are paramount to maintain *tempo*—the relative speed and rhythm of military operations over time with respect to the enemy (ADRP 3-0)—and, ultimately, the initiative; or in a shaping attack to fix an enemy force.

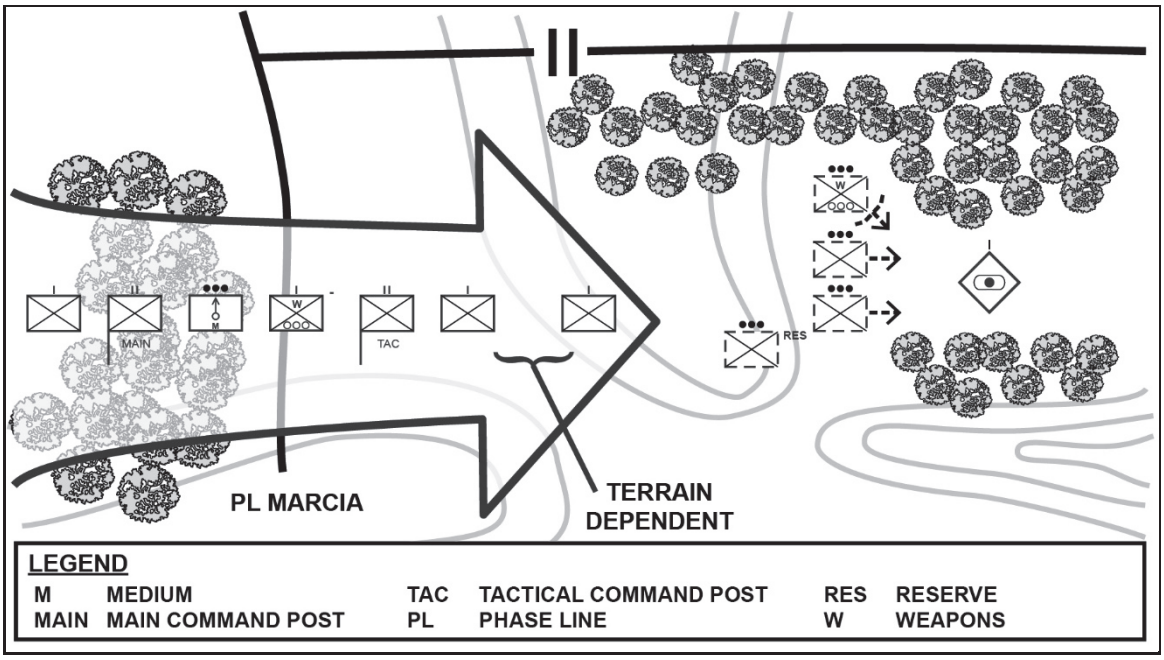


Figure 2-3. Frontal attack

PENETRATION

2-11. A *penetration* is a form of maneuver in which an attacking force seeks to rupture enemy defenses on a narrow front to disrupt the defensive system (FM 3-90-1). In a penetration, the commander concentrates forces to strike at an enemy's weakest point, rupture the defense, and break up its continuity to create an assailable flank. (See figure 2-4.) Penetration of an enemy position requires a concentration of combat power to permit continued momentum of the attack. The commander uses the breach created to pass forces through to defeat the enemy through attacks into the enemy's flank and rear. The attack should move rapidly to destroy the continuity of the defense since, if it is slowed or delayed, the enemy is afforded time to react.

2-12. A successful penetration depends on the attacking force's ability to suppress enemy weapons systems, to concentrate forces to overwhelm the enemy defender at the point of attack, and to pass sufficient forces through the gap to defeat the enemy quickly. If the attacker does not make the penetration sharply and secure objectives promptly, the penetration is likely to resemble a frontal attack. This may result in high casualties and permit the enemy to fall back intact, thus avoiding destruction.

2-13. A penetration is normally tried when enemy flanks are unassailable or when conditions permit neither envelopment nor a turning movement such as an attack against the enemy's main defensive belt. To allow a penetration, the terrain must facilitate the maneuver of the penetrating force. The concentration of the penetrating force is planned to penetrate the defense where the continuity of the enemy's defense has been interrupted such as gaps in obstacles and minefields or areas not covered by fire. Multiple penetrations are normally only conducted at echelons above battalion level. When essential to the accomplishment of the mission, intermediate objectives should be planned for the attack. Usually, when the penetration is successfully completed, companies within the battalion transition to another form of maneuver.

2-14. After the initial breach of the enemy's main line of resistance, the sequence of the remaining two phases is determined by the situation. If the enemy is in a weak position, it may be possible for the lead attacking force to seize the penetration's final objective while simultaneously widening the initial breach. Example - penetration at battalion level.

- Phase 1. Breaching the enemy's main defensive positions. A reinforced platoon can execute the initial penetration. The weapons company has the potential to augment organic forces to play a significant role in this initial breach.
- Phase 2. Widening the breach to secure flanks. The company seizes enemy positions behind the obstacles and widens the shoulders of the penetration to allow assaulting forces room to attack deep objectives.
- Phase 3. Seizing the objective and subsequent exploitation. Exploitation of the penetration is made as platoons complete the destruction of the enemy and attack to secure deeper objectives. Objectives for the assaulting force are deep enough to allow an envelopment of the rest of the enemy position and should facilitate attack by fire against second echelon enemy positions and enemy counterattack routes.

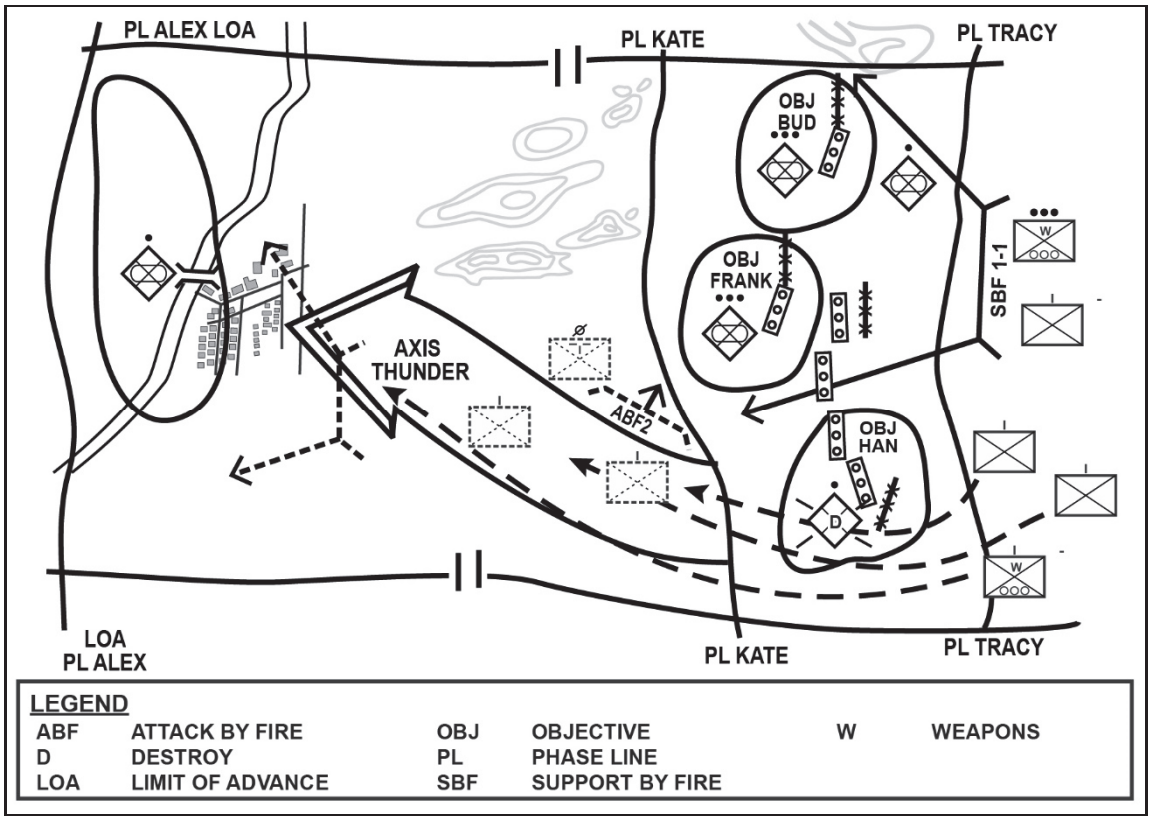


Figure 2-4. Penetration

INFILTRATION

2-15. An *infiltration* is a form of maneuver in which an attacking force conducts undetected movement through or into an area occupied by enemy forces to occupy a position of advantage behind those enemy positions while exposing only small elements to enemy defensive fires (FM 3-90-1). The commander uses infiltration to—

- Attack lightly defended positions or stronger positions from the flank and rear.
- Secure key terrain in support of the decisive operation.
- Disrupt or harass enemy defensive preparations/operations.
- Relocate the company by moving to battle positions around an engagement area.
- Reposition to attack vital facilities or enemy forces from the flank or rear.

2-16. The commander can impose measures to control the infiltration including checkpoints, linkup point, phase lines, and assault positions on the flank or rear of enemy positions. If it is not necessary for the entire

infiltrating unit to reassemble to accomplish its mission, the *objective area*—a geographical area, defined by competent authority, within which is located an objective to be captured or reached by the military forces (JP 3-06)—may be broken into smaller objectives or positions. Each infiltrating element would then move directly to its objective or position to conduct operations. (See figure 2-5.) A *checkpoint*—is a predetermined point on the ground used to control movement, tactical maneuver, and orientation. (ATP 3-21.20). The commander designates checkpoints along the route to assist marching units in complying with the timetable. A *linkup point*—is where two infiltrating elements in the same or different infiltration lanes are scheduled to meet to consolidate before proceeding on with their missions (FM 3-90-1). A linkup point should be an easily identifiable point on the ground, large enough for all infiltrating elements to assemble, and offer cover and concealment. Additional control measures for an infiltration may include—

- An area of operation for the infiltrating unit.
- One or more infiltration lanes.
- A line of departure or point of departure.
- Movement routes with their associated start points and release points, or a direction or axis of attack.
- Linkup or rally points, including objective rally points.
- Support by fire, attack by fire, or assault positions.
- A limit of advance.

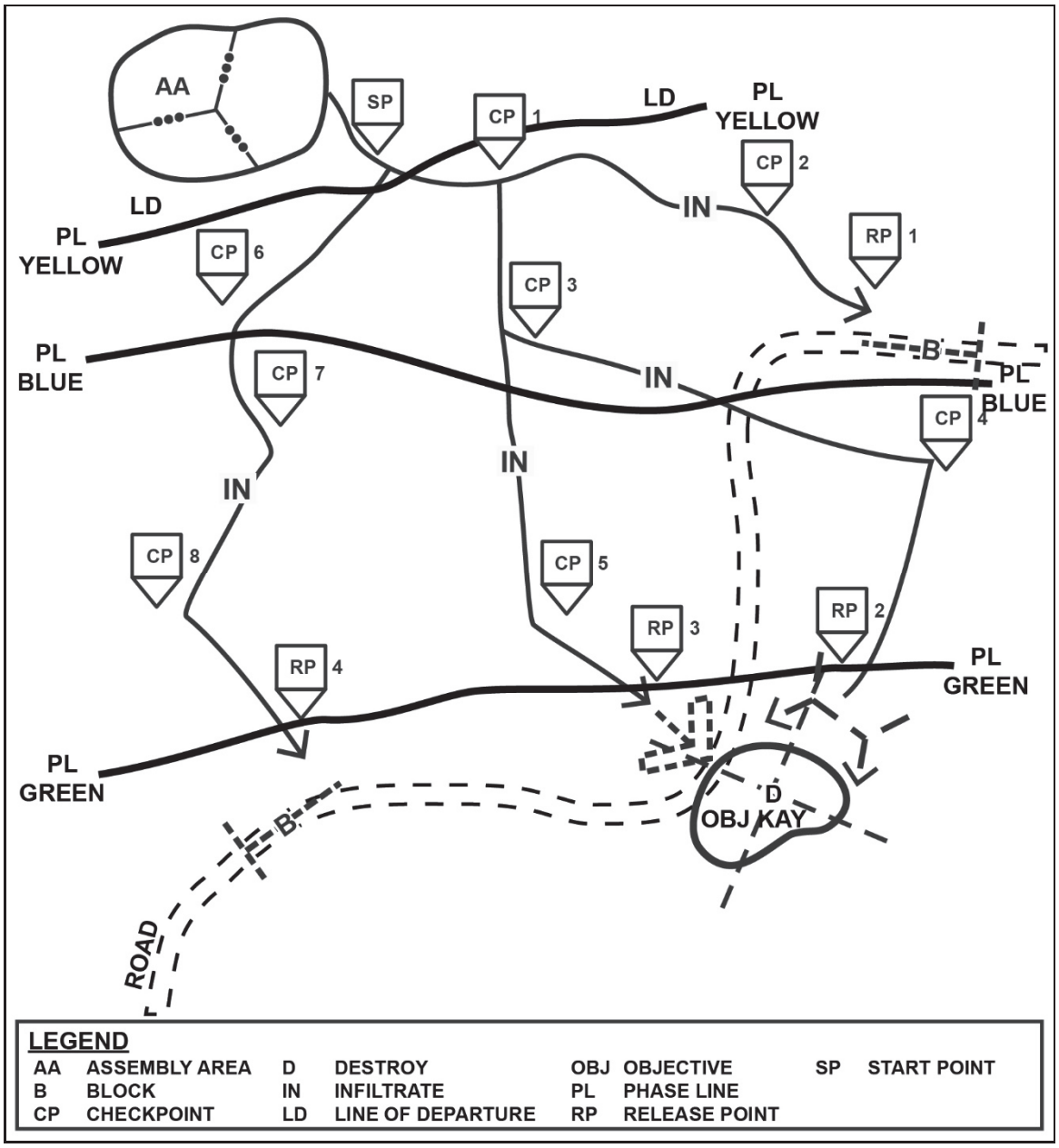


Figure 2-5. Infiltration route

2-17. Mission analysis will dictate the location of infiltration routes, the number of infiltration lanes, the size of the infiltration lane(s), the anticipated speed of movement, and the time of departure. An infiltration should be planned during limited visibility through areas the enemy does not occupy or cover by surveillance and fire. Planning should incorporate infiltration lanes, rally points along the route or axis, and contact points. Companies and platoons usually conduct infiltrations, but it is possible to execute at a battalion or squad level also. Careful planning considerations for the integration of the augmented assets must identified to increase effectiveness, and identify potential of detection.

2-18. An *infiltration lane* is a control measure that coordinates forward and lateral movement of infiltrating units and fixes fire planning responsibilities (FM 3-90-1). Single or multiple infiltration lanes can be planned. Using a single infiltration lane facilitates navigation, control, and reassembly, reduces susceptibility to detection, reduces the area requiring detailed intelligence, and increases the time required to move the force

through enemy positions. Using multiple infiltration lanes reduces the possibility of compromise, allows more rapid movement, and makes control more challenging. (See figure 2-6.)

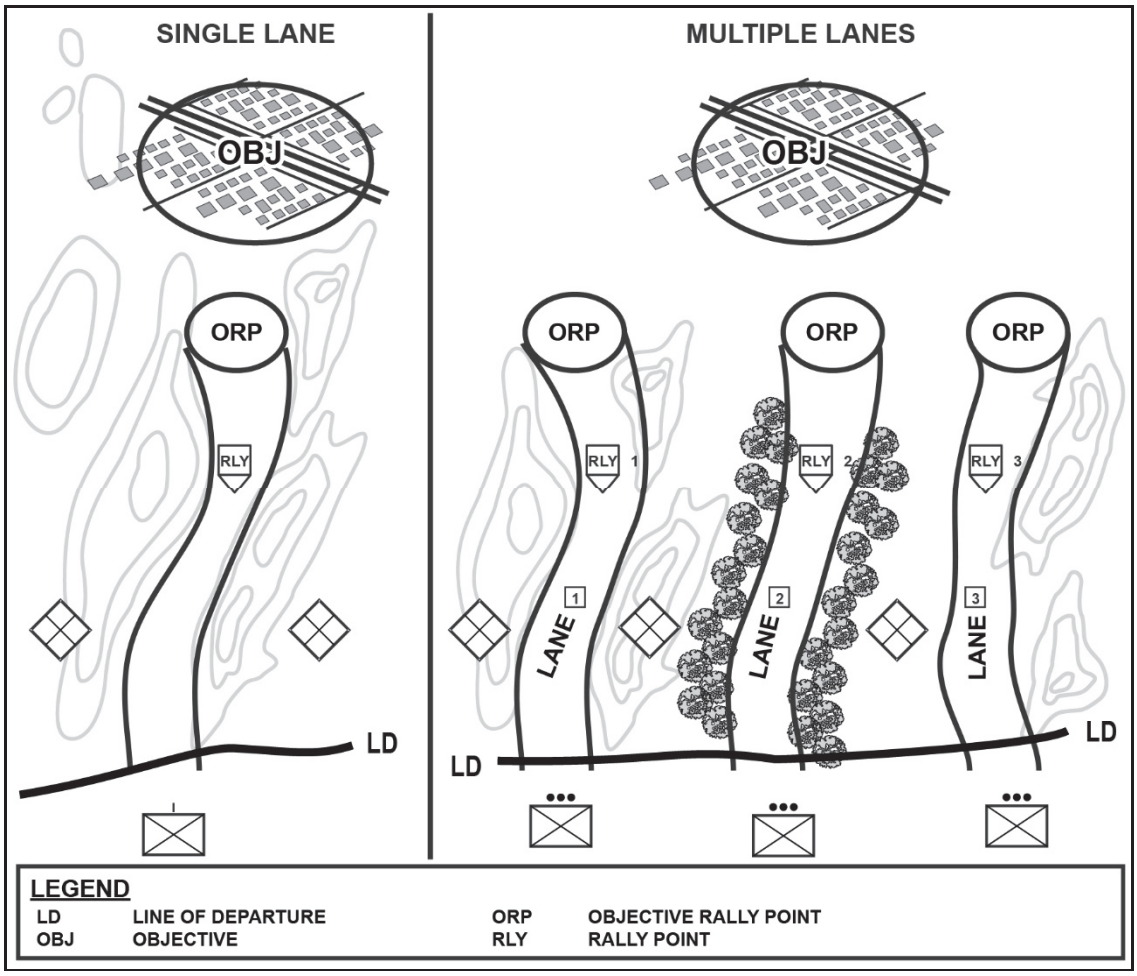


Figure 2-6. Infiltration lane

2-19. Infantry forces conducting an infiltration or a patrol commonly use a rally point as a control measure. A *rally point* is an easily identifiable point on the ground at which units can reassemble and reorganize if they become dispersed. (ATP 3-21.20). An *objective rally point* is a rally point established on an easily identifiable point on the ground where all elements of the infiltrating unit assemble and prepare to attack the objective (ADRP 3-90). This rally point is typically near the infiltrating unit's objective; however, there is no standard distance from the objective to the objective rally point. It should be far enough away from the objective so that the enemy will not detect the infiltrating unit's attack preparations.

Flank Attack

2-20. A *flank attack* is a form of offensive maneuver directed at the flank of an enemy (FM 3-90-1). The primary difference between a flank attack and an envelopment is one of depth. A flank attack is an envelopment delivered squarely on the enemy's flank and is usually tenable at company, and platoon echelons. Conversely, an envelopment is an attack delivered beyond the enemy's flank and into the enemy's support areas, but short of the depth associated with a turning movement. It is designed to defeat the enemy force while minimizing the effect of the enemy's frontally-oriented combat power. Flanking attacks are normally conducted with the main effort directed at the flank of the enemy. Usually, a supporting effort engages the enemy's front by fire while the main effort maneuvers to attack the enemy's flank. This supporting effort diverts the enemy's attention from the threatened flank. It is often used for a hasty attack or

meeting engagement where speed and simplicity are paramount to maintaining battle tempo and, ultimately, the initiative. (See figure 2-7.)

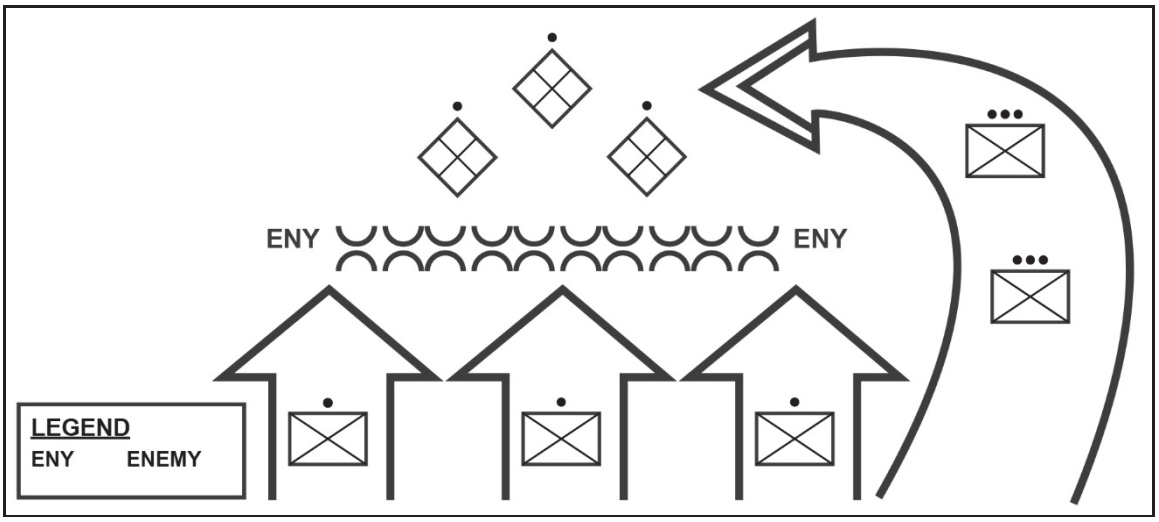


Figure 2-7. Flank attack

COMBAT FORMATIONS

2-21. A *combat formation* is an ordered arrangement of forces for a specific purpose and describes the general configuration of a unit on the ground (ADRP 3-90). Terrain characteristics and visibility determine the actual arrangement and location of the unit's personnel and vehicles within a given formation. There are seven different combat formations: column, line, echelon (left or right), box, diamond, wedge, and vee. The Infantry rifle company general moves in any one of the following five combat formations on the battlefield—column, line, wedge, vee, or echelon. (See FM 3-90-1 for information on the box and diamond combat formation.) The commander may direct subordinate maneuver platoons to move in a certain formation or allow them to determine the formation to use. Maneuver platoons may move in different formations at any one time.

2-22. The company commander may use more than one formation in a given movement, especially if the terrain changes during the movement. For example, the commander may elect to use the column formation during a passage of lines and then change to another formation such as a wedge. Platoons within a company formation may conduct movement using formations different from that of the company. Although the company may be moving in a wedge formation, one platoon may be in a wedge, another in an echelon right, and yet another in a column/file. Other factors, such as the distance of the move or the enemy dispositions, may also prompt the commander to use more than one formation. Distances between units depend on the mission variable of METT TC.

2-23. When moving in a formation, the company normally guides on the base platoon to ease control. This should be the lead platoon. In the line or the vee formation, the company commander must specify which platoon, is the base platoon. The other platoons key their speed and direction on the base platoon. This permits quick changes and lets the commander control the movement of the entire company by controlling only the base platoon. Terrain features might be designated for the base platoon to guide on by using the control techniques described in this section. The five combat formations general used by the Infantry rifle company are discussed below.

COLUMN FORMATION

2-24. The rifle company moves in column formation when early contact is not expected and the objective is far away. (See figure 2-8 on page 2-12.) The company's lead element normally uses traveling overwatch while the following units use traveling. The column formation—

- Speeds movement, eases control, and increases usefulness in close terrain.

- Allows quick transition to other formations.
- Requires flank security.
- Places most of the firepower on the flanks.

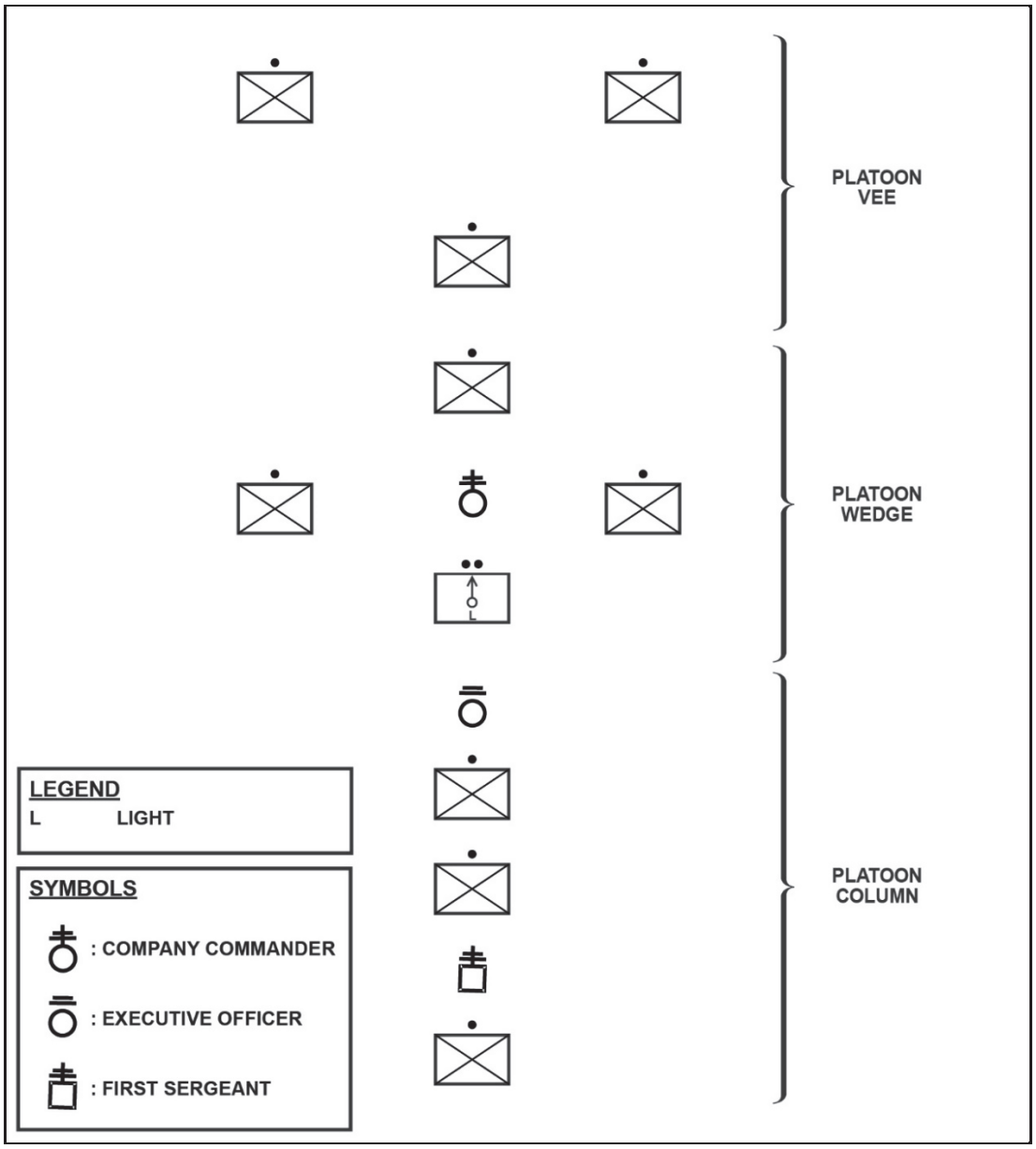


Figure 2-8. Company in platoon column, example

LINE FORMATION

2-25. The line formation postures the company with platoons on line and abreast of one another. Because it does not dispose platoons in-depth, the line formation provides less flexibility of maneuver than other formations. The company uses the line when it requires continuous movement with maximum firepower to the front in an assault. The company commander designates a base platoon, normally the center one for the other two to guide on. Flank and rear security is generally poor but is improved when the flank platoons use echelon formations (see figure 2 9).

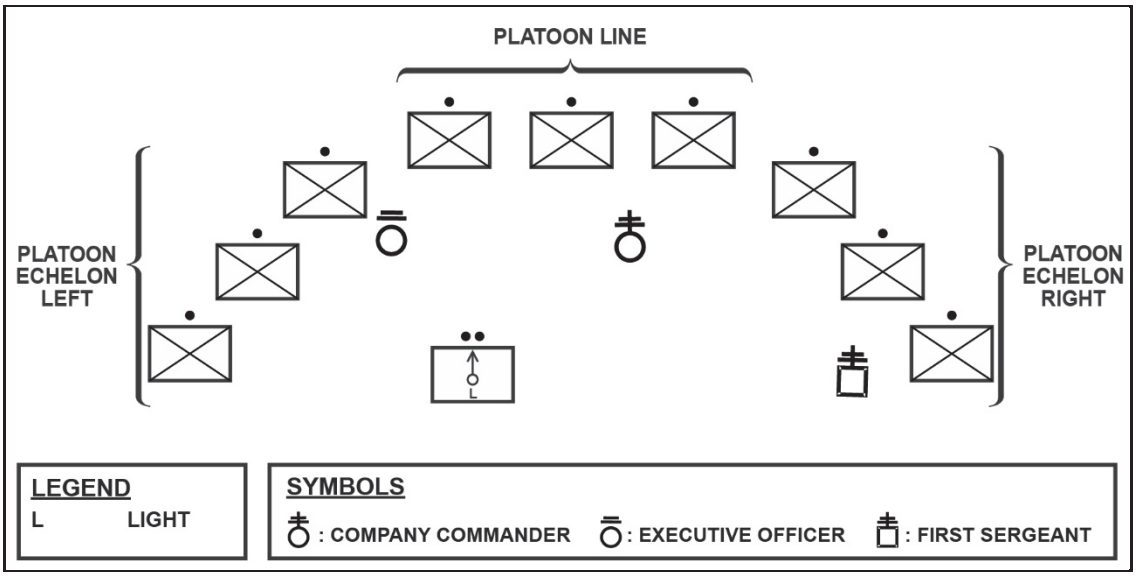


Figure 2-9. Company in platoon line, example

WEDGE FORMATION

2-26. The wedge formation postures the company for enemy contact on its front and flanks (see figure 2-10). The force uses the wedge when enemy contact is possible or expected but the location and disposition of the enemy is vague. When not expecting enemy contact, it may use the wedge to cross open terrain rapidly. The wedge formation—

- Facilitates control and transition to the assault.
- Provides for maximum firepower forward and good firepower to the flanks.
- Requires sufficient space to disperse laterally and in-depth.

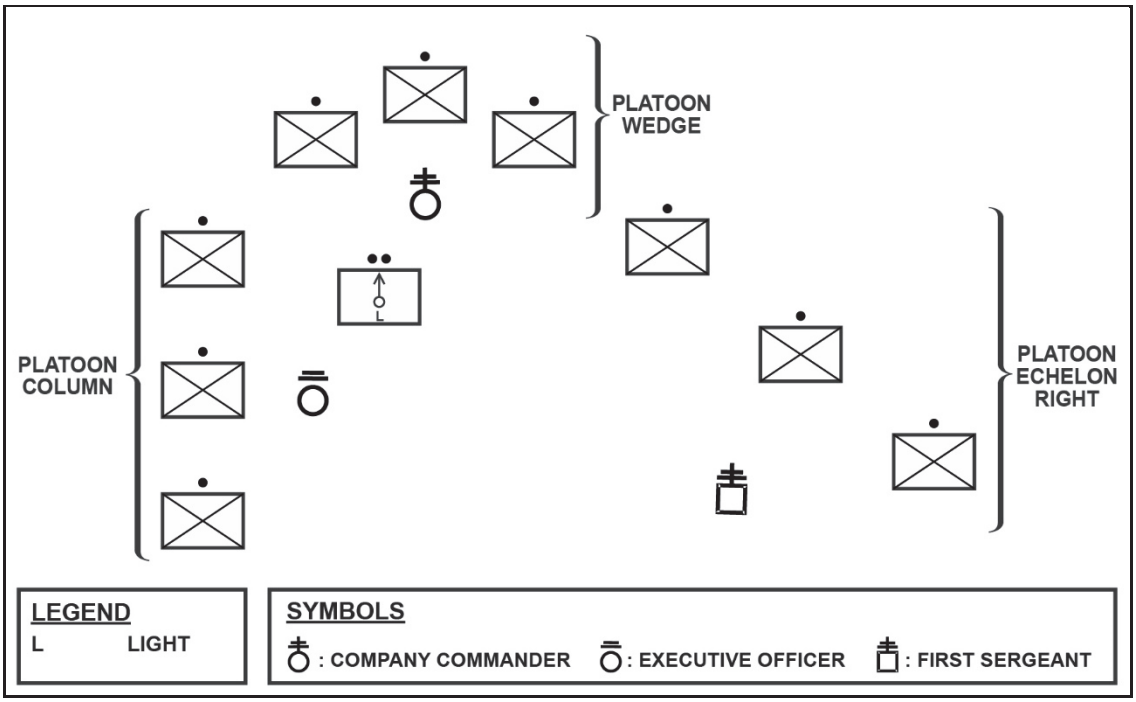


Figure 2-10. Company in wedge formation, example

VEE FORMATION

2-27. The vee formation postures the company with two platoons abreast and one trailing (see figure 2-11). This arrangement is most suitable to advance against an enemy known to be to the front of the company. The company may use the vee when enemy contact is expected and the location and disposition of the enemy is known. The following planning considerations apply:

- Formation is hard to orient and control is more difficult in close or wooded terrain.
- Formation provides for good firepower forward and to the flanks.

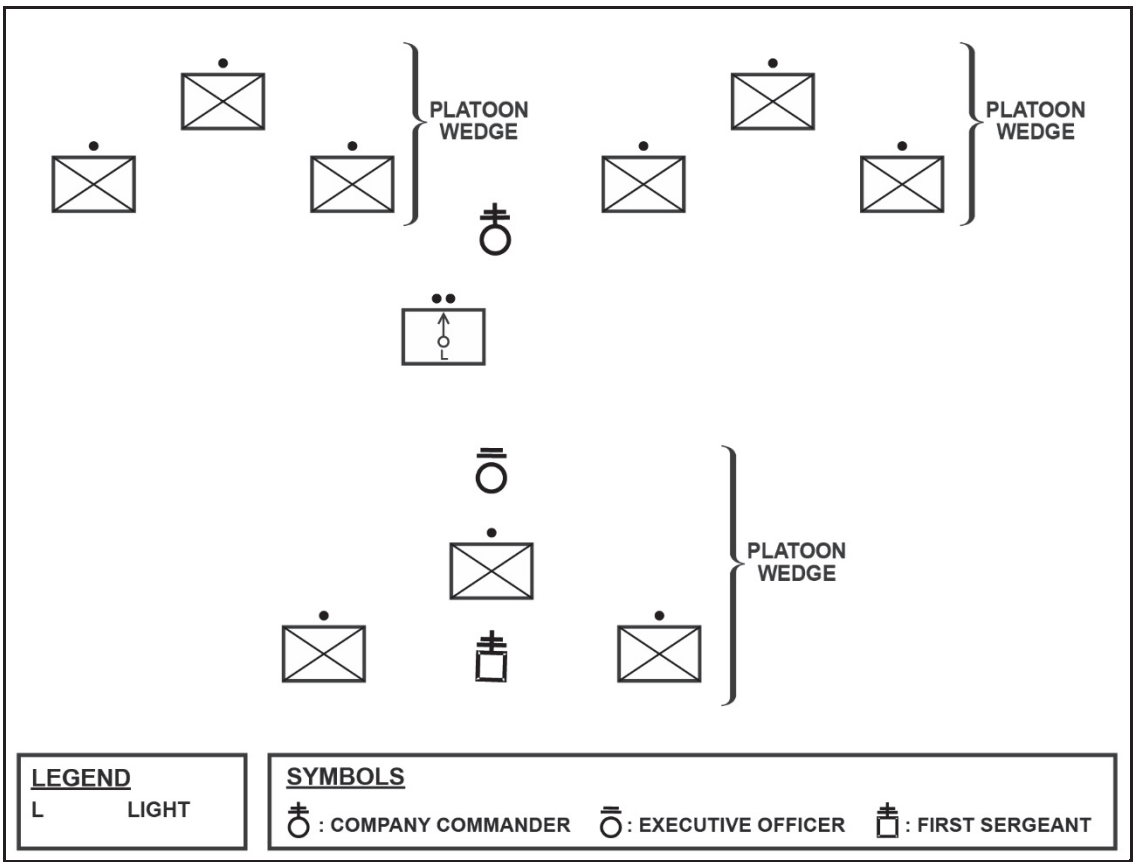


Figure 2-11. Company in vee formation, example

ECHELON FORMATION

2-28. The echelon formation arranges the company with the platoons in column formation in the direction of the echelon (right or left). (See figure 2-12.) The company commonly uses the echelon when providing security to a larger moving force. The echelon formation—

- Provides for firepower forward and in the direction of echelon.
- Facilitates control in open areas but makes it more difficult in heavily wooded areas.

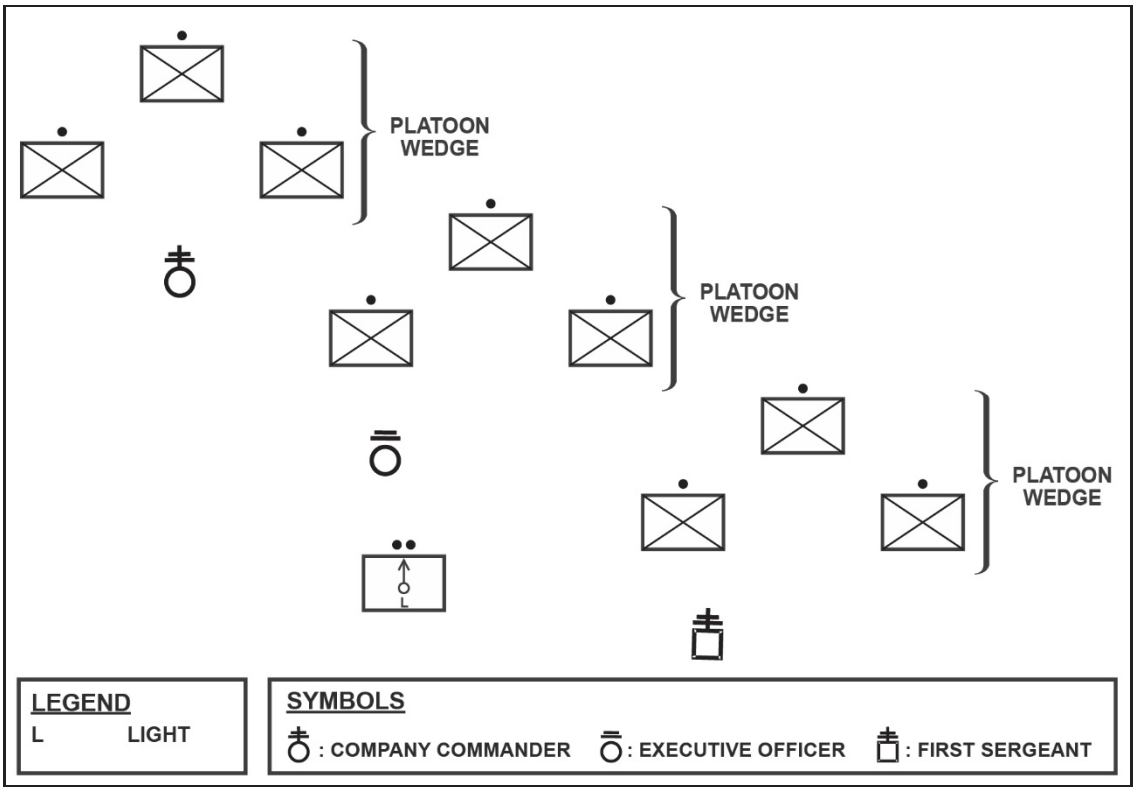


Figure 2-12. Company in echelon right, example

FORMATION SELECTION

2-29. The company commander selects the formation that provides the proper security, direct fires, control, and speed for the operation. The commander's use of combat formations allows the unit to rapidly shift from one formation to another, giving additional flexibility when adjusting to changes in the mission variables of METT-TC. (Note. This results from the commander mandating subordinates rehearse so that they can change formations using standard responses to changing situations, such as actions on contact.) By designating the combat formation planned for use, the commander—

- Establishes the geographic relationship between units.
- Indicates probable reactions once the enemy makes contact with the formation.
- Indicates the level of security desired.
- Establishes the preponderant orientation of subordinate weapon systems.
- Postures friendly forces for the attack.

2-30. Table 2-1 compares the five combat formations generally used by the Infantry rifle company.

Table 2-1. Comparison of combat formations

FORMATION	*SECURITY*	*DIRECT FIRES*	*CONTROL*	*SPEED*
Column	Good dispersion. Good all-around security	Good to the front and rear. Excellent to the flanks.	Easy to control. Flexible formation.	Fast.
Line	Excellent to the front. Poor to the flank and rear.	Excellent to the front. Poor to the flank and rear.	Difficult to control. Inflexible formation.	Slow.

Table 2-1. Comparison of combat formations (continued)

FORMATION	SECURITY	DIRECT FIRES	CONTROL	SPEED
Wedge	Good all-around security.	Good to the front and flanks.	Less difficult to control than the line. Flexible formation.	Faster than the line.
Vee	Better to the front.	Very good to the front.	Very difficult to control.	Slow.
Echelon	Good to the echeloned flank and front.	Good to the echeloned flank and front.	Difficult to control.	Slow.

MOVEMENT TECHNIQUES

2-31. The Infantry rifle company uses the combat formations described above in conjunction with three movement techniques: traveling, traveling overwatch, and bounding overwatch (See figure. 2-13). Based on the chance of enemy contact, the commander select the appropriate movement technique to limit the unit's exposure to enemy fire and to position the unit in a good formation to react to enemy contact. Contact with the enemy is made with the smallest force possible to allow the majority of the company freedom to maneuver against the enemy. For example, the lead platoon in a company column may be conducting bounding overwatch with the following platoons in travelling. There also may be situations where the lead platoon is conducting platoon bounding overwatch with the lead squad itself conducting bounding overwatch. This is secure but also slow, but may be required in certain situations.

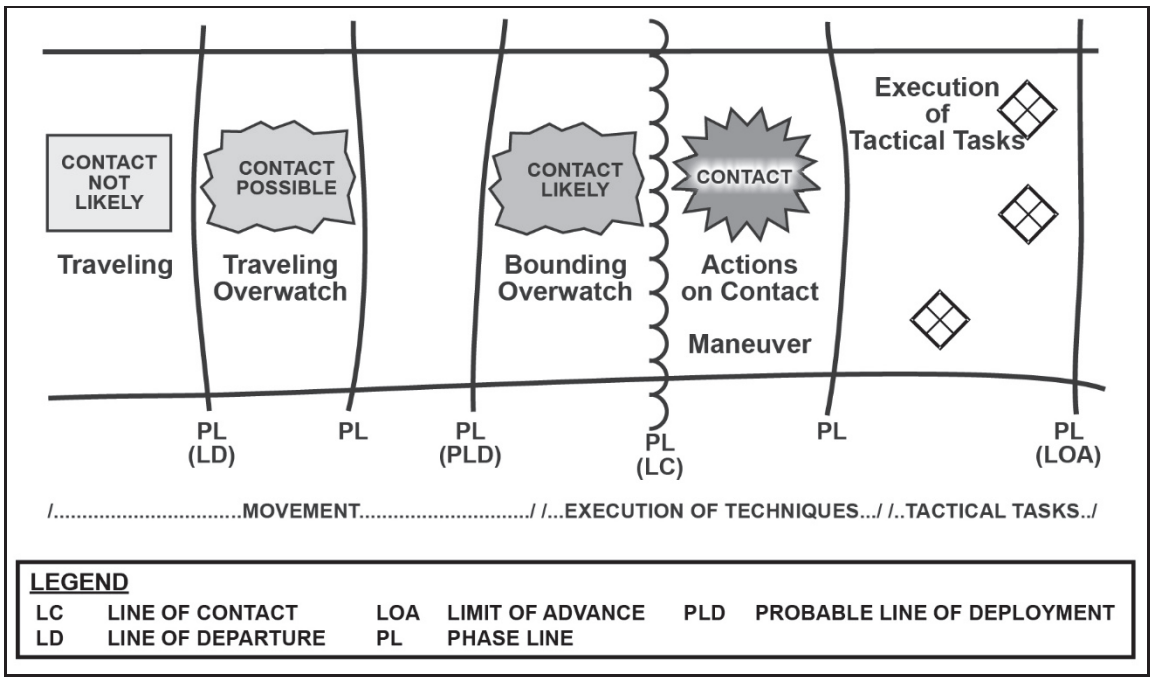


Figure 2-13. Transition from movement techniques to maneuver

TRAVELING

2-32. *Traveling* is a movement technique used when speed is necessary and contact with enemy forces is not likely. All elements of the unit move simultaneously. The commander or small-unit leader locates where best to control the situation. Trailing elements may move in parallel columns to shorten the column and

reaction time (ATP 3-21.20). Interval between units is based on visibility, terrain, and weapon ranges. (See figure 2-14.)

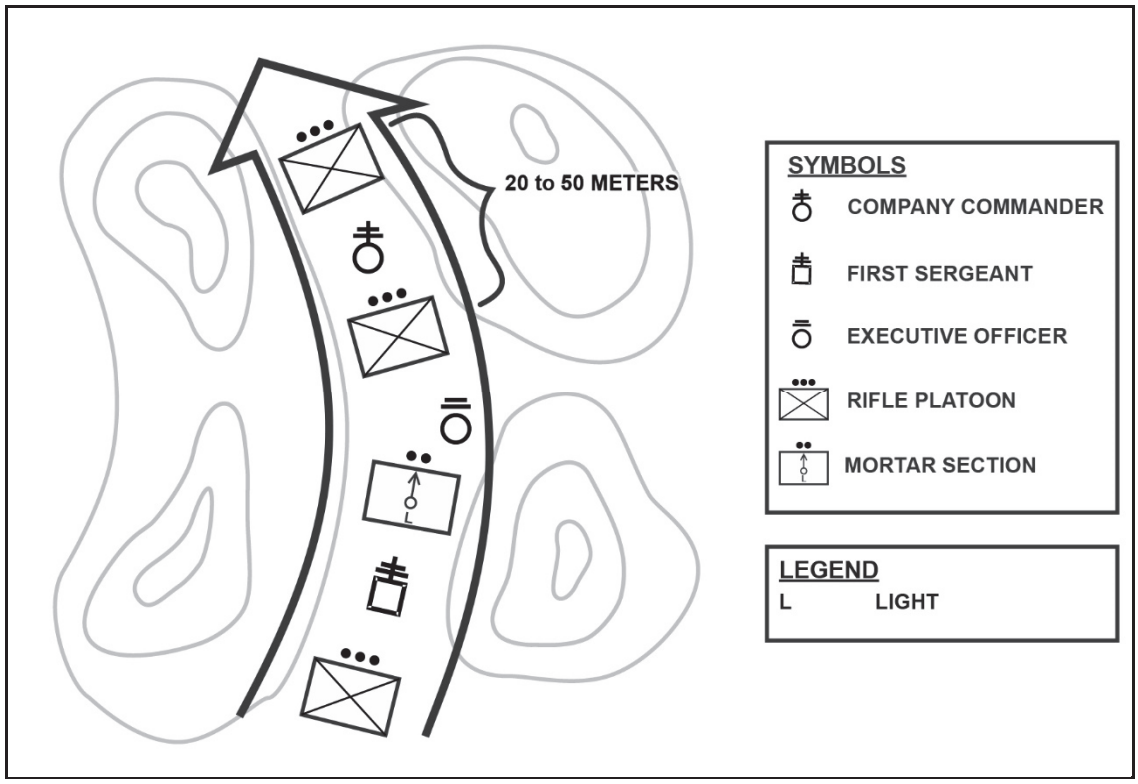


Figure 2-14. Traveling, example

TRAVELING OVERWATCH

2-33. *Traveling overwatch* is a movement technique used when contact with enemy forces is possible. The lead element and trailing element are separated by a short distance which varies with the terrain. The trailing element moves at variable speeds and may pause for short periods to overwatch the lead element. It keys its movement to terrain and the lead element. The trailing element overwatches at such a distance that, should the enemy engage the lead element, it will not prevent the trailing element from firing or moving to support the lead element (FM 3-90-2). The overwatch unit displaces as necessary, moving at a variable speed. (See figure 2-15 on page 2-18.)

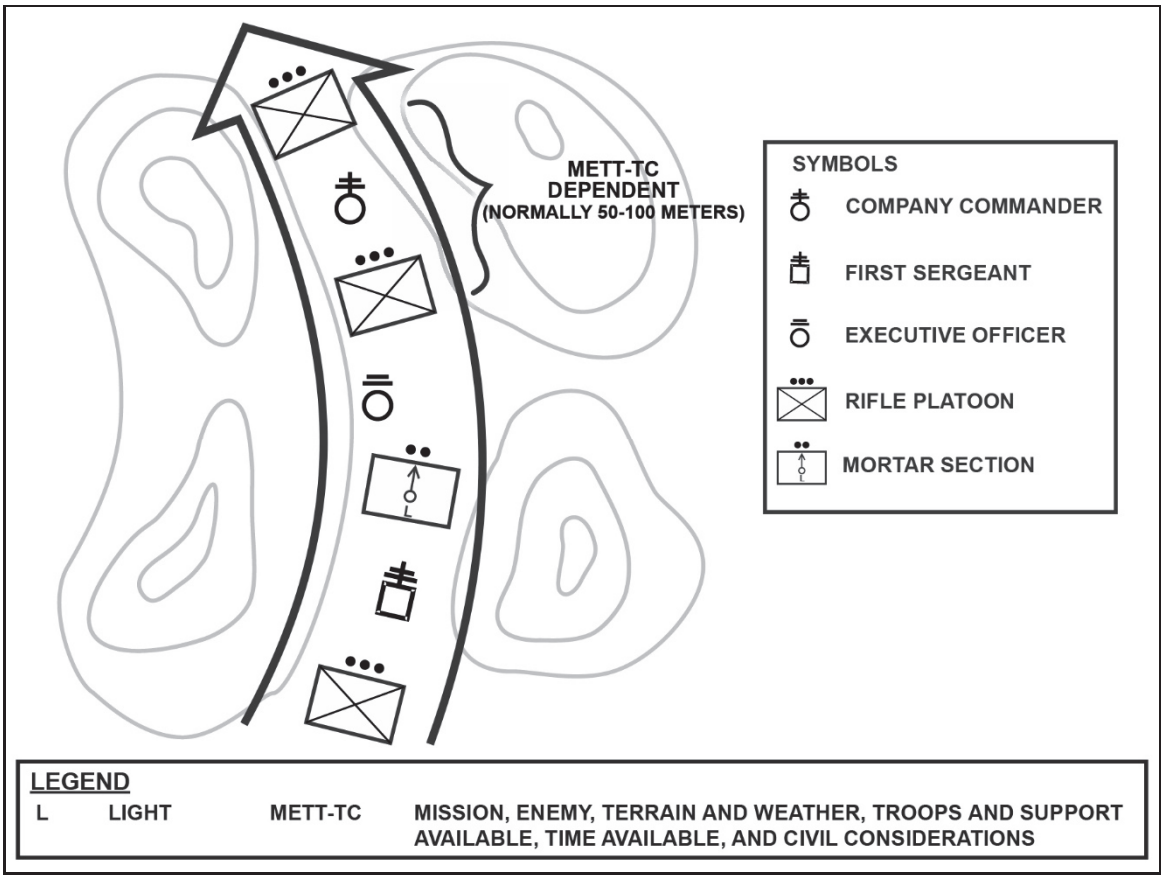


Figure 2-15. Traveling overwatch, example

BOUNDING OVERWATCH

2-34. *Bounding overwatch* is a movement technique used when contact with enemy forces is expected. The unit moves by bounds. One element is always halted in position to overwatch another element while it moves. The overwatching element is positioned to support the moving unit by fire or fire and movement (FM 3-90-2). Bounding overwatch is the most secure, but slowest, movement technique. The purpose of bounding overwatch is to deploy prior to contact, giving the unit the ability to protect a bounding element by immediately suppressing an enemy force. The overwatch element is assigned sectors to scan while the bounding element uses terrain to achieve cover and concealment. The bounding element avoids masking the fires of the overwatch element and never bounds beyond the range at which the overwatch element can effectively suppress likely or suspected enemy positions. (See figure 2-16.)

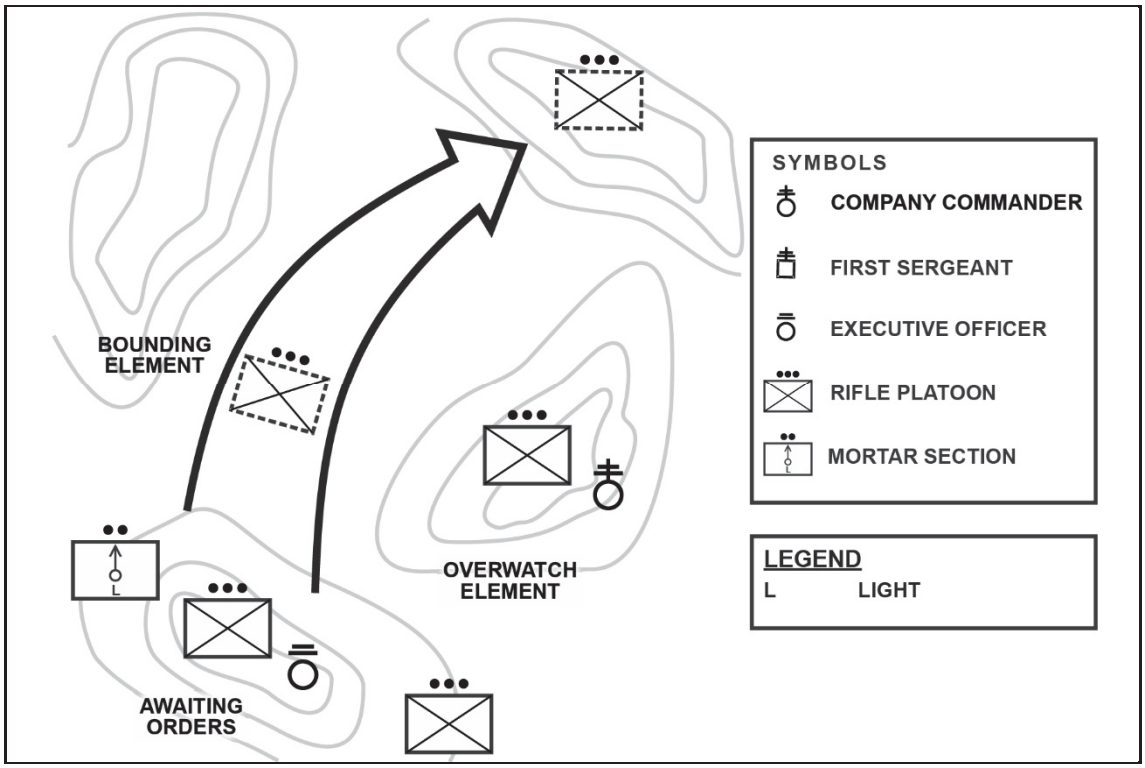


Figure 2-16. Bounding overwatch, example

2-35. During bounding overwatch, the company can employ either of two variations of this this technique: alternate bounds and successive bounds (see figure 2-17). In the alternate and successive bound techniques, the overwatching elements cover the bounding elements from covered, concealed positions with good observation and fields of fire against possible enemy positions. Overwatching elements can immediately support the bounding elements with fires, if the bounding elements make contact. Unless they make contact en route, the bounding elements move via covered and concealed routes into the next set of support-by-fire positions. The length of the bound is based on the terrain and the range of overwatching weapons.

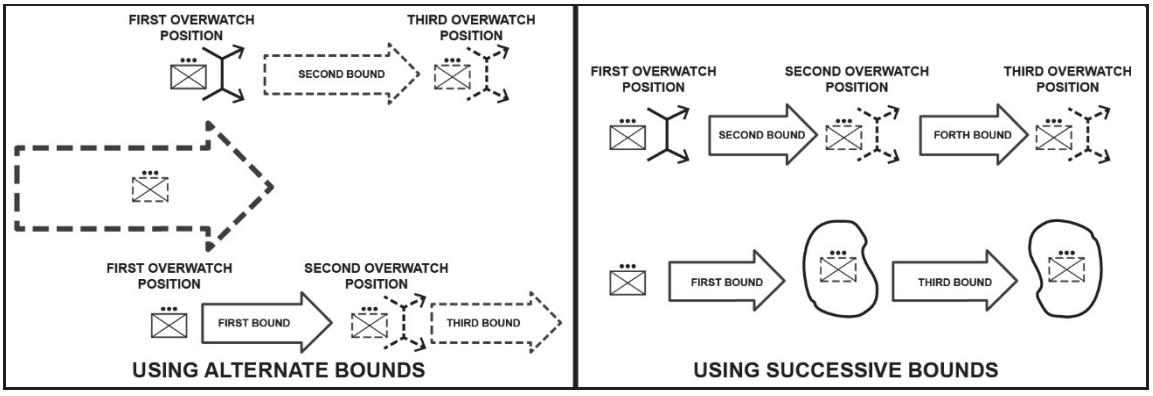


Figure 2-17. Alternative and successive bounds

Alternative Bounds

2-36. Covered by the rear element, the lead element moves forward, halts, and assumes overwatch positions. The rear element advances past the lead element and takes up overwatch positions. This sequence continues as necessary with only one element moving at a time. This method is usually more rapid than successive bounds.

Successive Bounds

2-37. In the successive bounding method the lead element, covered by the rear element, advances and takes up overwatch positions. The rear element then advances to an overwatch position roughly abreast of the lead element and halts and takes up overwatch. The lead element then moves to the next position, and so on. Only one element moves at a time, and the rear element avoids advancing beyond the lead element. This method is easier to control and more secure than the alternate bounding method, but it is slower.

TROOP MOVEMENT

2-38. *Troop movement* is the movement of troops from one place to another by any available means (ADRP 3-90). Troop movement can be administrative or tactical. Successful movement places troops and equipment at their destination at the proper time and ready for combat. Troop movements are made by different methods, such as dismounted and mounted marches using organic combat and tactical vehicles and motor transport air, rail, and water means in various combinations. (See FM 3-90-2.) The method employed depends on the situation, the availability of transport, the size and composition of the moving unit, the distance the unit must cover, the urgency of execution, and the condition of the troops. The three types of troop movement are administrative movement, tactical road march, and approach march.

ADMINISTRATIVE MOVEMENT

2-39. An *administrative movement* is a movement in which troops and vehicles are arranged to expedite their movement and conserve time and energy when no enemy interference is anticipated (FM 3-90-2). The commander conducts administrative movements only in secure areas. Normally once units deploy into a theater of war, administrative movement is not employed. When conducting administrative movement in secure areas, units should maintain integrity practicing security techniques pertaining to tactical marches.

TACTICAL MOVEMENT

2-40. The company conducts tactical movement when contact with the enemy is possible or anticipated. The company maintains integrity throughout the movement and plans for enemy interference en route to or shortly after arrival at its destination. During a tactical road march (see paragraph 2-66 on page 2-25) or an approach march (see paragraph 2-293 on page 2-81), the company uses combat formations and movement techniques consistent with the mission variables of METT-TC. During tactical movements, the commander must be prepared to maneuver against an enemy force. Once deployed in its assigned area of operations, the company moves using proper techniques for assigned missions. When contact is made fire and movement is executed. The following paragraphs address tactical movement fundamentals and control methods:

Fundamentals

2-41. The company commander's mission analysis helps to facilitate the decision on how to move most effectively. When planning company movements, the commander ensures the unit is moving in a way that supports a rapid transition to maneuver. Company movement should be as rapid as the terrain, mobility of the force, and enemy situation permit. The ability to gain and maintain the initiative often depends on movement being undetected by the enemy. The company depends heavily upon the terrain for protection from enemy fire. Once contact with the enemy is made, squads and platoons execute the appropriate actions on contact, and leaders begin to maneuver their units. The following movement fundamentals provide guidance for planning effective company movements:

Reconnoiter

2-42. All echelons reconnoiter. The enemy situation and the available planning time may limit the unit's reconnaissance, but leaders at every level seek information about the terrain and enemy. If sufficient information is still lacking, an effective technique is to send a reconnaissance element forward of the lead platoon. Even if this unit is only 15 minutes ahead of the company, it can still provide valuable information and reaction time for the company commander.

Use Terrain and Weather Effectively

2-43. One of the strengths of the Infantry rifle company is its ability to move across almost any terrain and in almost any weather conditions. The company moves on covered and concealed routes. Moving in limited visibility may provide better concealment, and the enemy might be less alert during these periods. Plan to avoid identified danger areas.

Move as squads and Platoons

2-44. The advantages to moving the company by squads and platoons include:

- Faster movement. Reduces the reaction time of the enemy.
- Better security. A small unit is less likely to be detected because it requires less cover and concealment.
- More dispersion. The dispersion gained by moving the company by squads and platoons makes it more difficult for the enemy to concentrate fires against the company, especially indirect fires, air attacks, and chemical, biological, radiological, and nuclear (CBRN) hazards. Subordinate units also gain room to maneuver.
- Better operations security. It is harder for the enemy to determine what the friendly force is doing with only isolated squad size spot reports.

2-45. Although the advantages of moving in squad and platoon size elements normally outweighs the disadvantages, when planning decentralized movements the commander should consider the following disadvantages—

- Generally requires numerous linkups to regroup the company.
- May take longer to mass combat power to support a hasty attack or disengage in the event of enemy contact.

Maintain Security During Movement

2-46. Security is critical during movement since the company is extremely vulnerable to enemy direct and indirect fires. In addition to the fundamentals listed earlier, the company commander achieves security for the company by applying the following:

- Use the appropriate movement formation and technique for the conditions.
- Move as fast as the situation allows. This may degrade the enemy's ability to detect the unit and the effectiveness of their fires once detected.
- Ensure subordinate units correctly position security elements to the flanks, front, and rear at a distance that prevents enemy direct fire on the main body. (Normally, the company formation and movement technique provides greater security to the front; the flanks and rear must be secured by security elements. The company standard operating procedures (SOP) should state who is responsible for providing security elements.)
- Enforce noise and light discipline.
- Enforce camouflage discipline (Soldiers and their equipment).
- When the situation is not clear, make contact with the smallest element possible. By making contact with a small element, the company commander maintains the ability to maneuver with the majority of forces. The Soldiers who first receive enemy fires are most likely to become casualties. They are also most likely to be suppressed and fixed by the enemy.
- When the situation is clear, the company commander must quickly mass the effects of combat power to overwhelm the enemy.

Locations of Key Leaders, Organizations, and Weapons

2-47. The locations of key leaders, organizations, and weapons depend on the situation, movement formation and technique, and the organization of the Infantry rifle company. General guidance on positioning key leaders, organizations, and weapons is address in the following paragraphs.

2-48. Company commander. The company commander locates where best control the company. Normally, the commander positions with the headquarters command post (CP), but at times, the commander may move separate from the CP, for example, when the commander goes on a reduced force leader's reconnaissance. The commander might only take the company net radio operator and travel with one of the subordinate platoons. This allows the commander to move with a platoon without disrupting their formation. Generally, the company commander and CP position immediately behind the lead platoon.

2-49. Company CPs, primary and alternate (when established). Normally, the company CP consists of the company commander, radio operators, the headquarters FIST, and the CBRN sergeant (when attached to the company) along with possibly other personnel and attachments (for example, the executive officer (XO), first sergeant (1SG), or a security element). The company CP locates where it best supports the company commander and maintains communications with higher and subordinate units. To maintain communications, an alternate CP may need to locate away from the commander. In this case, the XO (for example) controls the alternate CP and maintains communications with higher and/or adjacent units and the primary CP while the commander positions the primary CP where best to control the company. Although a CP can move independently, normally a CP collocates where it is secured by a subordinate element within the company formation.

2-50. Company fire support team. The FSO typically moves with the company commander and locates remaining FIST members according to the mission variables of METT TC. At times the FSO, and members of the FIST may locate elsewhere to control fires or relay calls for fire from the platoons.

2-51. Company mortars. The company mortars locate where they can provide responsive fires in case of enemy contact. Although the mortar section can move independently (and independently by split section), normally mortars collocate with a subordinate element within the company formation for security. Mortars are normally not last in the company formation, because they have limited capability to provide security, and because their loads often make them the slowest element in the company.

2-52. Other attachments. The locations of other attachments depend on METT TC, for example, engineers are positioned where they can best support the company's mission. Engineers may follow the lead platoon where they can be more responsive. Bradley Fighting Vehicles, tanks, Stryker's, ambulances, assault platoon vehicles (from the weapons company), trucks (attached for movement), or resupply vehicles present advantages and disadvantages for the company. Vehicular support can greatly enhances the company's mobility, though woodland and/or mountainous terrain may not support vehicular movement as well as in urban terrain. Several options are available to the commander for vehicle disposition:

- Employ the vehicles in conjunction with the rifle platoons so that each compliments the other.
- Employ them to support the rifle platoons.
- Employ them to provide heavy weapons or anti-armor direct fires.
- Leave in hide position(s).
- Displace them to a secure location.

Control Methods

2-53. Though using the proper combat formation and movement technique helps the company commander control the company, additional controls are often required. Control methods to enable company movement include:

Graphics

2-54. Normally, the battalion assigns graphic control measures to synchronize the Infantry rifle company's movement into the battalion's movement or scheme of maneuver. The company commander may need to establish additional control measures to control subordinate units. These may include boundaries, routes, CPs, release points (RPs), and target reference points (TRPs) on known or likely enemy positions to control direct and indirect fires. The company commander ensures each graphic control measure is updated as needed and is easy to locate on the terrain. Updated and accurate control measures are imperative when the company is moving as two or more separate elements.

Reconnaissance

2-55. Prior reconnaissance aids control during movement. It provides the commander with a better idea of where movement is more difficult and where graphic control measures are needed. Elements from the company may perform reconnaissance, or the battalion scout platoon may conduct the reconnaissance, and provide the information to the company. During a company march the commander may designate a rifle squad to conduct reconnaissance.

Guides

2-56. Guides who have already seen the terrain are the best way to provide control. When guides are not available for the entire movement, they should reconnoiter the difficult areas and guide the company through those.

Navigational Aides

2-57. Even with the availability of a Global Positioning System, every leader should use a compass and a pace count for all moves. If possible, select routes that allow leaders to use prominent terrain to stay oriented.

Limited Visibility Movements

2-58. The measures already listed are the best ways to provide control for moving in limited visibility. Additional measures when moving in limited visibility include:

Use Night Vision Devices

2-59. Effective limited visibility movement is possible even if there is not a sufficient quantity of night vision devices (NVDs) for every Soldier. If the Soldiers providing front, flank, and rear security use them, the entire unit can move faster. Soldiers should rotate to maintain effectiveness. Key leaders throughout the formation must also use NVDs.

Reduce Interval between Soldiers and Units

2-60. Closing up the formation allows the use of arm and hand signals and reduces the chance of breaks in contact. However, leaders maintain the most dispersion possible at all times. Well trained units can operate at night as they do during the day.

Use Other Measures

2-61. Other measures include using luminous or infrared tape on the back of helmets, slowing the speed of movement, using landlines to communicate or to guide units, and moving leaders closer to the front.

RECONNAISSANCE AND SURVEILLANCE

2-62. *Reconnaissance* is 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 meteorological, hydrographic, or geographic characteristics of a particular area. (JP 2-0). *Surveillance* is the systematic observation of aerospace, surface, or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means (JP 3-0). Reconnaissance (specific to zone, area, and route reconnaissance) and surveillance missions, enable the commander to maneuver the company, concentrate combat power, and prevent surprise by providing current and continuous combat information. Reconnaissance and surveillance (R&S) missions are addressed in detail throughout this publication.

SECURITY OPERATIONS

2-63. *Security operations* are those operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force (ADRP 3-90). By performing security operations (specific to screen and guard missions)

subordinate elements of the company protect the company from surprise and reduce the unknowns in any situation. A *screen* is a security task that primarily provides early warning to the protected force (ADRP 3-90). A *guard* is a security task to protect the main force by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. Units conducting a guard mission cannot operate independently because they rely upon fires and functional and multifunctional support assets of the main body (ADRP 3-90). As a shaping operation, economy of force is often a condition of tactical security operations. Security operations (to include local security and area security) are addressed in detail throughout this publication.

Note. Security operations, and R&S tasks remain a core competency of the Infantry rifle company, platoon, and squad. The main difference between the conduct of security operations, and R&S tasks, is that the conduct of security orients on the force or facility being protected, while R&S are enemy and terrain oriented. Security operations, and R&S tasks techniques are addressed throughout this publication. Refer to FM 3-96, chapter 4 section III for a detailed discussion of security operations, to include the five fundamentals of security operations and the five security operations tasks. Refer to FM 3-96, chapter 4 section II for a detailed discussion of R&S missions, to include reconnaissance fundamentals and the five forms of reconnaissance.

KEY DOCTRINAL TERMS AND DEFINITIONS

2-64. The following key doctrinal terms and definitions are used throughout this and other chapters and appendixes. Refer to referenced publications for additional information.

- *Assault position* is a covered and concealed position short of the objective, from which final preparations are made to assault the objective (ADRP 3-90).
- *Assured mobility* is a framework—of processes, actions, and capabilities—that assures the ability of a force to deploy, move, and maneuver where and when desired, to achieve the commander's intent (ATP 3-90.4).
- *Attack by fire* is a tactical mission task in which a commander uses direct fires, supported by indirect fires, to engage an enemy force without closing with the enemy to destroy, suppress, fix, or deceive that enemy (FM 3-90-1).
- *Attack position* is the last position an attacking force occupies or passes through before crossing the line of departure (ADRP 3-90).
- *Countermobility operations* are those combined arms activities that use or enhance the effects of natural and manmade obstacles to deny an enemy freedom of movement and maneuver (ATP 3-90.8).
- *Fire superiority* is that degree of dominance in the fires of one force over another that permits that force to conduct maneuver at a given time and place without prohibitive interference by the enemy (FM 3-90-1).
- *Follow and assume* is a tactical mission task in which a second committed force follows a force conducting an offensive task and is prepared to continue the mission if the lead force is fixed, attrited, or unable to continue (FM 3-90-1).
- *Follow and support* is a tactical mission task in which a committed force follows and supports a lead force conducting an offensive task (FM 3-90-1).
- *Interdiction* is an action to divert, disrupt, delay, or destroy the enemy's military surface capability before it can be used effectively against friendly forces, or to achieve enemy objectives (JP 3-03).
- *Local security* is a security task that includes low-level security activities conducted near a unit to prevent surprise by the enemy (ADRP 3-90).
- *Mobility* is a quality or capability of military forces which permits them to move from place to place while retaining the ability to fulfill their primary mission (JP 3-17).
- *Named area of interest* is a geospatial area or systems node or link against which information that will satisfy a specific information requirement can be collected, usually to capture indications of adversary courses of action. (JP 2-01.3).

- *Observation post* is a position from which military observations are made, or fire directed and adjusted, and which possesses appropriate communications. While aerial observers and sensor systems are extremely useful, those systems do not constitute aerial observation posts (FM 3-90-2).
- *Reconstitution* is the actions that commanders plan and implement to restore units to a desired level of combat effectiveness commensurate with mission requirements and available resources (ATP 3-21.20).
- *Support by fire* is a tactical mission task in which a maneuver force moves to a position where it can engage the enemy by direct fire in support of another maneuvering force (FM 3-90-1).

SECTION II – MOVEMENT TO CONTACT

2-65. *Movement to contact* is an offensive task designed to develop the situation and establish or regain contact (ADRP 3-90). A movement to contact creates favorable conditions for subsequent tactical actions. The commander conducts a movement to contact when the enemy situation is vague or not specific enough to conduct an attack. This section discusses the doctrinal basis for the conduct of a movement to contact and introduces a fictional scenario illustrating one of many ways that an Infantry rifle company might conduct a movement to contact as part of an Infantry battalion. The scenario includes tasks that the company may conduct prior to the start of a movement to contact or as a follow on task. This section concludes with a discussion of the cordon and search, and search and attack techniques. Both techniques are subordinate tasks to a movement to contact. When involved in operations in support of stability tasks, unit offensive actions normally are closely related to these subordinate tasks of movement to contact.

Note. Tasks illustrated within the movement to contact scenario include—conduct a tactical road march, occupy an assembly area, conduct a passage of lines, conduct battle handover, and conduct an approach march.

CONDUCT A TACTICAL ROAD MARCH

2-66. The movement of troops from one location to another is inherent in any phase of a military operation. Mission accomplishment relates directly to the ability to arrive at the proper place, at the proper time, in effective condition, and in the formation best suited for the assigned mission. Units conducting road marches may or may not be organized into a combined arms formation.

DOCTRINAL BASIS

2-67. A *tactical road march* is a rapid movement used to relocate units within an area of operations to prepare for combat operations (ADRP 3-90). Though the primary consideration of the tactical road march is rapid movement, the moving force maintains *security*—measures taken by a military unit, activity, or installation to protect itself against all acts designed to, or which may, impair its effectiveness (JP 3-10). Even when contact with enemy ground forces is not expected the moving force is prepared to act upon enemy contact. When contact is expected, the commander uses a mix of combat formations and movement techniques discussed earlier in section I of this chapter.

2-68. The complexity of operational environments means that tactical road marches will often occur in and through population centers. As such, commanders must proactively shape or influence interactions with indigenous peoples through the effective conduct of IO. Integrating and synchronizing information-related capabilities such as presence, posture, and profile; operations security; public affairs; and operations security will significantly improve cooperation and security, among other outcomes.

Tactical March Techniques

2-69. When conducting a tactical road march the Infantry rifle company employs three tactical march techniques—open column, close column, and infiltration. The mission variables of METT-TC require

adjustments in the standard distances between dismounted Soldiers and/or vehicles during the conduct of a tactical road march.

Open Column

2-70. In an open column, the commander increases the distance between dismounted Soldiers and vehicles for greater dispersion. The distance between dismounted Soldiers varies from two to five meters to allow for dispersion. Any distance that exceeds five meters between dismounted Soldiers increases the length of the column and hinders control. The *vehicle distance*—the clearance between vehicles in a column which is measured from the rear of one vehicle to the front of the following vehicle (ATP 3-21.20)—varies from 50 to 100 meters, and may be greater if required. The open column technique is normally used during daylight. It may also be used at night with infrared lights, blackout lights, or passive night-vision equipment. Using an open column roughly doubles the column's length and thereby doubles the time it takes to clear a point when compared to a close column moving at the same speed. The open column is the most common movement technique because it offers the most security while still providing the commander with a reasonable degree of control. In an open column, a single Infantry company, with intervals between its platoons, occupies roughly a kilometer of road or trail with vehicle density varying from 15 to 20 vehicles per kilometer.

Close Column

2-71. In a close column, the dismounted equivalent is a limited visibility march. The distance between individual Soldiers is reduced to one to three meters to help maintain contact and facilitate control. Limited visibility marches are characterized by close formations, reconnaissance, a slow rate of march, and good concealment from enemy observation and air attack. When mounted in a close column, the commander spaces vehicles about 20 to 25 meters apart. At night, vehicles are spaced so each driver can see the two lights in the blackout marker of the vehicle ahead. The commander normally employs a close column for marches during darkness under blackout driving conditions or for marches in restricted terrain. This method of marching takes maximum advantage of the traffic capacity of a route but provides little dispersion. Normally, vehicle density is from 40 to 50 vehicles per kilometer along the route in a close column.

Infiltration

2-72. During troop movement by infiltration, the commander dispatches Soldiers and/or vehicles in small groups, or at irregular intervals, at a rate that keeps the traffic density down and prevents undue massing of vehicles during a move by infiltration. Infiltration provides the best possible passive defense against enemy observation and attack. It is suited to tactical road marches when there is enough time and road space and when the commander desires the maximum security, military deception, and dispersion. The disadvantages of an infiltration are that more time is required to complete the move, column control is nearly impossible, and recovery of broken-down vehicles by the trail party is more protracted when compared to vehicle recovery in close and open columns. Additionally, unit integrity is not restored until the last group of Soldiers and/or vehicles arrive at the destination, thus complicating the unit's onward deployment to some degree.

Note. Infiltration during troop movement should not be confused with infiltration as a form of maneuver—in which an attacking force conducts undetected movement through or into an area occupied by enemy forces—as discussed in section I of this chapter.

Extended Tactical Road March

2-73. During an extended tactical road march, halts are necessary to rest Soldiers, service vehicles, and adjust movement schedules. The march order or unit SOPs regulate when to take halts. When halted units establish security and take other measures to protect the force. Once a unit stops moving, there is a natural tendency for Soldiers to let their guard down and relax their vigilance. The commander addresses this by defining in SOPs unit actions for various types of halts, such as maintenance halts, security halts, and unexpected halts. Unit leaders promptly notify commanders of the time and approximate length of unscheduled halts. In mounted movement, the commander schedules short halts for every two to three hours of movement and halts may last up to an hour. Long halts occur on marches that exceed 24 hours and last no more than 2 hours.

Long halts are not scheduled at night, which allows maximum time for night movement. During halts, each unit normally clears the march route and moves to a previously selected assembly areas to prevent route congestion and avoid being a lucrative target.

Organization for a Tactical Road March

2-74. The organization for a tactical road march is the march column. A *march column* consists of all elements using the same route for a single movement under control of a single commander (FM 3-90-2). The commander organizes a march column into four elements: reconnaissance, quartering party, main body, and trail party. (See figure 2-18.) Although hostile contact is not anticipated, the unit maintains security measures and is prepared to act upon enemy contact. Commanders conducting a tactical road march can organize their columns for administrative convenience by similar type, speed, and cross-country capabilities.

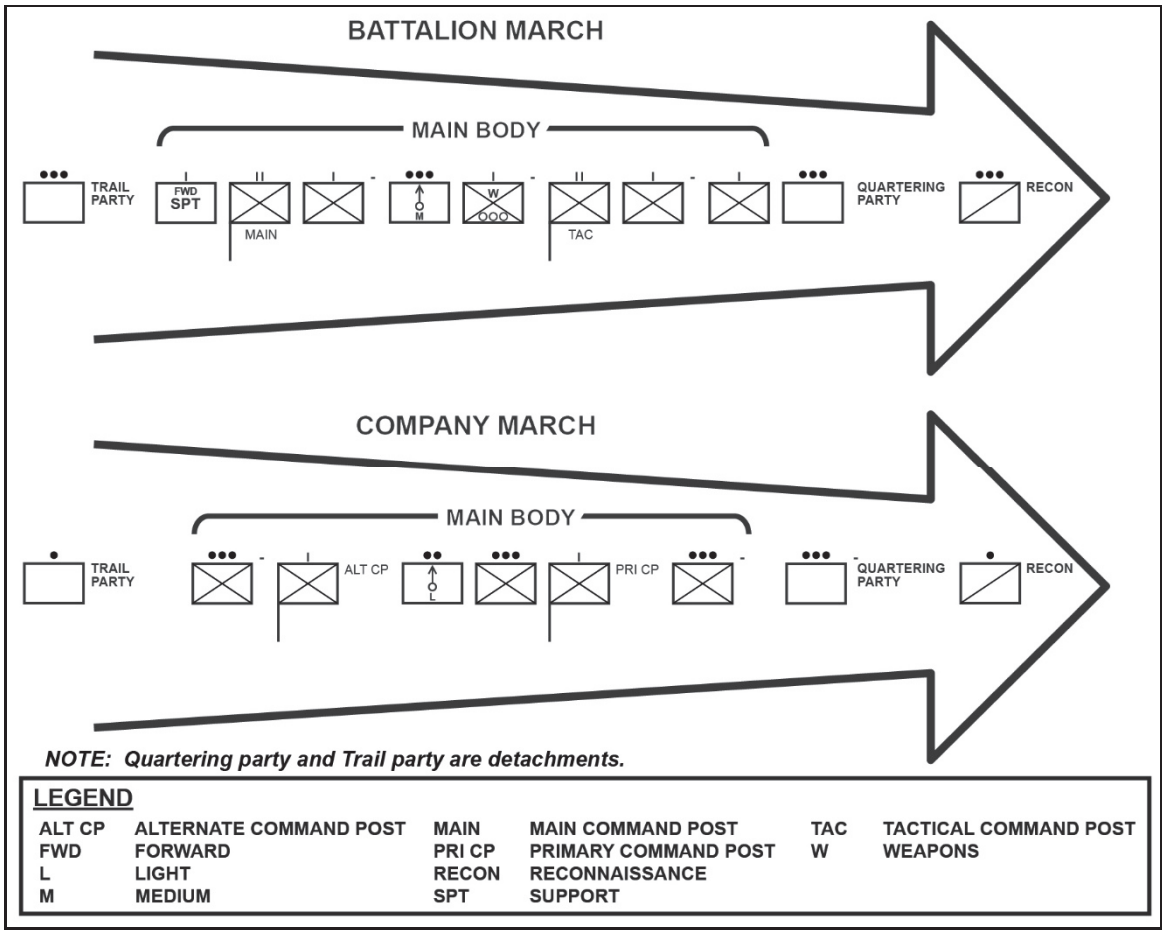


Figure 2-18. Organization of a tactical road march, example

2-75. A march column provides excellent speed, control, and flexibility, but sacrifices flank security. The commander uses a march column when speed is essential and enemy contact is unlikely. The commander organizes a march column into four elements: reconnaissance, quartering party, main body, and trail party. A company may be tasked with any of these responsibilities. March columns are organized to maintain unit integrity and to maintain a task organization consistent with mission requirement. All march units provide their own security. The four elements of a march column are discussed in the following paragraphs. (Refer to ATP 3-21.18 and FM 3-90-2 for additional information.)

Reconnaissance Element

2-76. Each march plan is based on a thorough ground reconnaissance if time permits. Map reconnaissance and aerial reconnaissance help formulate a plan but are not substitutes for ground reconnaissance. A reconnaissance element performs route reconnaissance and usually consists of a reconnaissance element, an engineer element (if available) from an attached or supporting engineer unit, and a traffic control element. When the situation dictates, CBRN survey teams may be included in the reconnaissance element. The battalion and company tactical SOPs generally establish the reconnaissance element's composition, which can be modified to meet the specific march requirements.

Quartering Party

2-77. A *quartering party* is a group of unit representatives dispatched to a probable new site of operations in advance of the main body to secure, reconnoiter, and organize an area before the main body's arrival and occupation (FM 3-90-2). Before the company departs an assembly area, the commander should send a quartering party to the new assembly area. The company XO or 1SG leads the quartering party, which may consist of the platoon sergeants, squad representatives, and the required headquarters personnel. This party provides its own security, and it follows the same route of march to the new assembly area as did the reconnaissance element. At the assembly area, the quartering party:

- Reconnoiters the area.
- Locates and marks or removes obstacles and mines.
- Marks platoon and squad sectors.
- Selects a position for the mortar section.
- Selects a command post location.
- Selects a company trains location.
- Provides guides for the incoming unit(s).

2-78. Based upon the order of march, a plan is prepared to guide each unit over a designated route. This route begins at the release point and extends to the unit's new site of operations. Guides must understand and rehearse the plan. This prevents congestion or delays near release points. The actual dispatch of the quartering party can follow the issuance of the movement order.

Main Body

2-79. The main body includes the march commander and majority of Soldiers and march vehicles. The march commander positions within this section for effective mission command. Battalion/company march units of the main body consist of individual maneuver units with their mortars, trains, command posts, and attachments.

Trail Party

2-80. The *trail party* is the last march unit in a march column and normally consists of primarily maintenance elements in a mounted march (FM 3-90-2). As an example using a battalion-size unit, the trail party is usually led by the assistant march commander or the battalion motor officer when vehicles are included in the march and may consist of elements of the maintenance and medical sections. During a company march the commander may designate a rifle squad to perform the role of the trail party.

Control and Scheduling Within a March Column

2-81. To facilitate control and scheduling within a march column units are organized into subordinate elements, a march serial and a march unit, and are given an order of march. (See figure 2-21 on page 2-37.) A *march serial* is a major subdivision of a march column that is organized under one commander who plans, regulates, and controls the serial (FM 3-90-2). An example is a battalion serial formed from a brigade-sized march column. A *march unit* is a subdivision of a march serial. It moves and halts under the control of a single commander who uses voice and visual signals (FM 3-90-2). An example of a march unit is a company from a battalion-sized march serial. (Refer to ATP 3-21.18 and FM 3-90-2 for additional information.)

March Planning

2-82. Tactical road marches require extensive planning and coordination, especially when multiple units are using the same route. Commanders and staff determine how best to execute a move from one point to another. Refer to ATP 3-21.18 and FM 3-90-2 for a detailed discussion of movement planning considerations, terms, and movement time computation. When the company conducts a road march as part of the battalion, the battalion staff plans the march. When the company conducts a road march alone, the company commander plans the march.

Key March Considerations

2-83. Key march considerations include:

- Requirements for the movement. (Refueling time, the distance between march units factoring in the time required at the refuel site, and time to clear choke points.)
- Organic and nonorganic movement capabilities; determine external movement requirements.
- Unit movement priorities.
- Enemy situation and capabilities, terrain and weather, and civil considerations.
- Actions on contact and likely engagements.
- Positioning recovery vehicles throughout the march unit's flow to provide flexibility and timely push or pull recovery to close all vehicles on the destination.
- Ensuring all march units have security and firepower.
- Security measures before and during the movement and at the destination.
- Assembly of the march units.
- Fire support coverage during movement and at the destination.
- Communications; particularly units without Blue Force Tracking.
- Movement of civilians along the same or intersecting routes.
- Actions at the destination.

March Security

2-84. The commander plans for the security of the company during the march to include security against air and ground threats. The commander assigns each platoon the responsibility for a security sector. For example, the commander may assign the platoon the front, the middle platoon the flanks, and the trail platoon the rear. The platoon sectors must overlap to provide all-around security (see paragraph 2-107 on page 2-33). The commander plans fires (see appendix D) to support the march, plans targets along the route, and designates warning signals and battle drills against air and ground threats.

2-85. A stinger section may support the company from positions along the route or by moving within the company column. Each Stinger team that is on the early warning net can warn the company of an air attack. For that reason, each team should be within voice distance of someone who has a radio on the company command net (see ATP 3-01.8).

2-86. The mortar section must be ready to go into action and fire quickly. The FO teams should be in continuous contact with the mortar and artillery fire-direction centers. The lead FO should keep the fire direction center (FDC) informed of the lead elements location (see appendix D).

Sequence of March Planning

2-87. When preparing for a tactical road march, the commander uses the following sequence of march planning as time permits:

- Prepare and issue a warning order as early as possible to allow subordinates time to prepare for the march.
- Analyze routes designated by higher headquarters and specify organization of the march serial.
- Prepare and issue the march order.

- Prepare a detailed movement plan and site destination plan (for example, assembly area plan).
- Organize and dispatch reconnaissance and quartering parties as required.

Dismounted March

2-88. *Dismounted march* is the movement of troops and equipment, mainly by foot, with limited support by vehicles. (FM 3-90-2). The company moves prepared to fight at all times. It is normally organized into platoon-size march units for control and unit integrity. The typical march formation is the column; however, the commander may decide to use another formation based on the mission variables of METT TC.

2-89. When moving along a road, the company normally moves with one file on each side of the road. Do not split squads by placing a fire team in each file, because if there is contact, these teams will have a danger area between them. When moving cross country, the company normally moves with two files 5 meters apart. There should be 2 to 5 meters between Soldiers and 50 meters between platoons. The normal rate of march for an 8 hour march is 4 mph. The interval and rate of a march depends on the length of the march, time allowed, likelihood of enemy contact (ground, air, or artillery), terrain and weather, condition of the Soldiers, and the weight of the Soldiers' loads.

2-90. If the company is marching to a secure area, the company vehicles (if applicable) may precede the company as a separate march unit. This permits those elements to be operational when the company arrives. If vehicles move with the company, the last vehicle should have a radio so the commander can be contacted in emergencies. (Refer to ATP 3-21.18 for additional information.)

Mounted March

2-91. *Mounted march* is the movement of troops and equipment by combat and tactical vehicles (FM 3-90-2). The headquarters and headquarters company, weapons company, and assigned forward support company elements can move all their Soldiers with organic vehicles while the Infantry rifle companies are primarily foot-mobile. This can become more complicated if elements of the weapons company are attached to the rifle companies. To compensate for the lack of resources within the rifle company, the battalion may do one or a combination of the following:

2-92. Request vehicles to move the company’s dismounted Infantry. This permits the march to move much faster and, more importantly, keeps Soldiers rested and better prepared for combat.

2-93. Move the mounted and dismounted elements as separate march columns. Depending on the separation, this may reduce the Infantry weapons company and mortar platoon ability to support forward elements of the march.

2-94. Use the weapons company to establish overwatch positions along the route of march. Have the mortars displace by sections to ensure immediate fires.

2-95. Move the mounted element as a separate march column while using available vehicles to shuttle the Infantry companies forward. Vehicles may include those from the forward support company that have off-loaded their normal loads and returned to provide transport. The rifle company may move dismounted and be picked up en route or remain in the previous assembly area to wait for vehicles.

2-96. As previously stated, the rifle company must be given additional vehicles to conduct mounted march. Normally, this will come from the battalion or forward support company; however, the company commander is responsible for and must plan the air and ground security. The commander must also ensure that drivers know the contingency plan if attacked during assembly, loading, movement, and arrival.

2-97. The commander normally organizes platoons into march units. When moving as part of the battalion, the company is normally a serial. To provide all round security, the commander assigns security tasks to each march serial. Some tasks might be assigned by SOP; for example, every vehicle will have an air guard with a sector of observation. When supported with vehicles armed with MK 19s or M2 machine guns, the commander positions these vehicles to provide fire support during the movement.

Movement Order and Movement Table

2-98. The movement order and movement table provide clear and concise information and instructions to subordinates to accomplish movement within the framework of the commander's intent. The movement order clearly states all required information for units to perform their assigned tasks. Tasks must be understood for a movement order since it may be preceded by a tactical operation or follow after an operation or mission. The movement table, as an attachment to the movement order, is a convenient means of transmitting time schedules and other essential march details to subordinate units. (Refer to ATP 3-21.18, appendix B for additional information.)

Control Measures

2-99. The commander uses control measures to assist in controlling the battalion/company during the tactical road march to include speed and rate of march. The commander directing a tactical road march often uses a strip map (see figure 2-19 on page 2-32) or overlay (see figure 2-21 on page 2-37) to graphically depict critical information about the route to subordinates. Common march control measures include route of march, start point, release point, checkpoints, critical points (such as bridges, major cities and towns), and traffic control posts. Unless the commander directs them not to do so for security reasons, march units report when they have crossed each control point. Other control measures and information may include assembly areas, scheduled halts, distance between checkpoints (strip map), and north orientation (strip map). (Refer to FM 3-90-2 for additional information.)

Note. Additional control measures, commonly established above battalion echelon, may include a light line (during periods of limited visibility, designated line requiring the use of blackout lights) and movement corridor (designated area established to set the conditions to protect and enable movement of traffic along a designated surface route). Refer to FM 3-90-2 and ATP 3-91, respectively, for additional information.

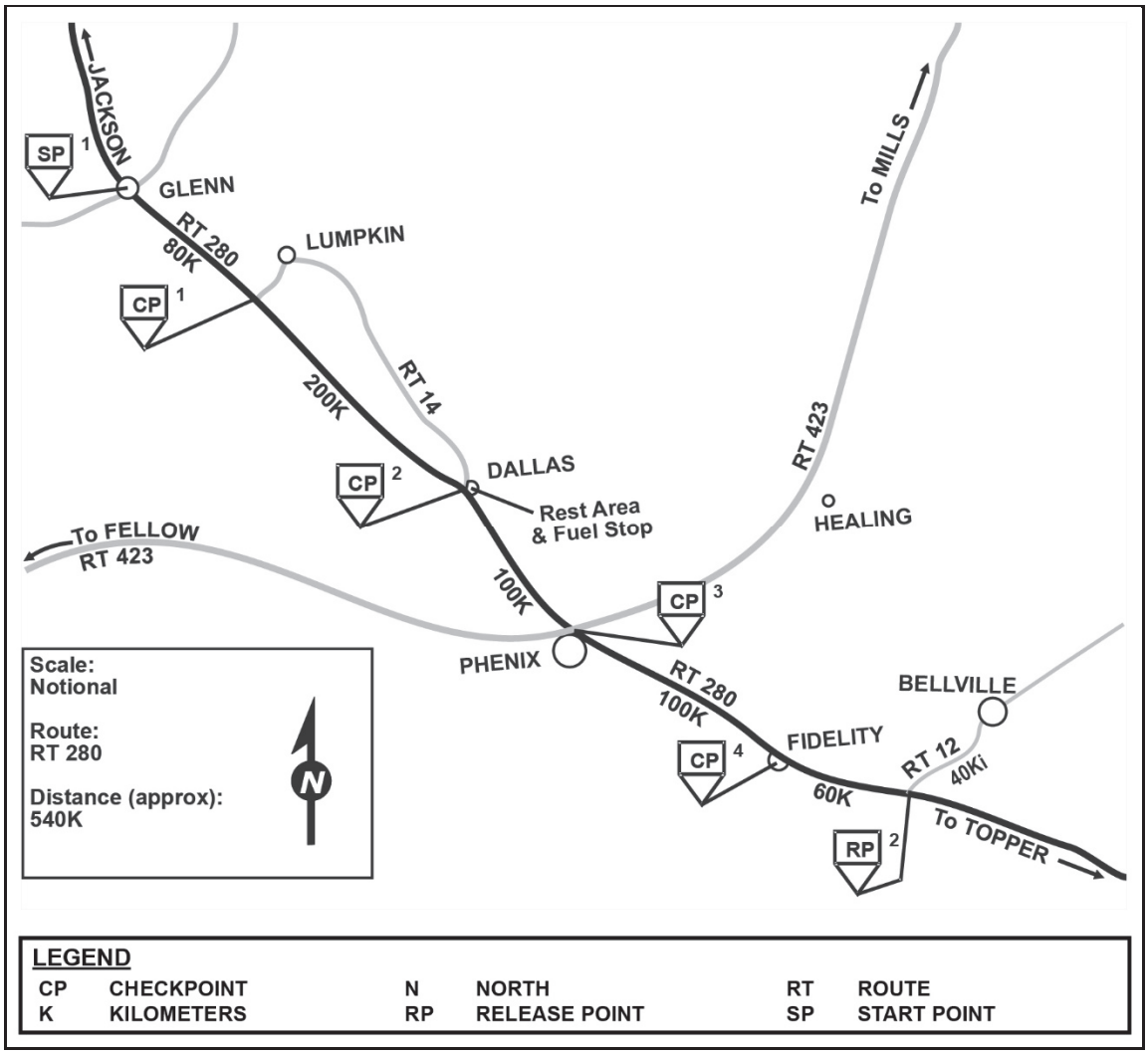


Figure 2-19. Strip map, tactical road march (mounted march)

Start Point

2-100. The *start point* is a location on a route where the marching elements fall under the control of a designated march commander (FM 3-90-2). At this point the column is formed by the successive passing, at an appointed time, of each of the elements comprising the column. The start point should be an easily recognizable point on the map and on the ground. It should be far enough from the assembly area to allow units to be organized and moving at the prescribed interval and rate when the start point is reached.

Release Point

2-101. A *release point* is a location on a route where marching elements are released from centralized control (FM 3-90-2). At the release point, each element continues its movement toward its own destination. Multiple movement routes from the release point enable units to disperse rapidly and navigate to their assembly areas or area of operation.

Scheduled Halts

2-102. Scheduled halts are used to control and sustain the march. Scheduled halts are preplanned along the march route for maintenance and rest, or to follow higher echelon movement orders. They should be located on defensible, covered, and concealed terrain. During scheduled halts, vehicles and Soldiers pull to the side

of the road while maintaining march dispersion. Local security, including at least one observation post for each platoon, is established immediately, and drivers perform during operation maintenance checks. Observation posts should not be established outside small arms range and should be readily retrievable so the unit is ready to move at a moment's notice. Unit leaders promptly notify the march commander of the time and approximate length of unscheduled halts.

Critical Points and Checkpoints

2-103. Critical points and checkpoints on a route are places used for information references, places where obstructions or interference with movement might occur, or places where timing may be a critical factor. The commander positions traffic control posts along the route to prevent congestion and confusion at these critical points. Distance between checkpoints can be used to control speed or rate of march, to enable sustainment, and to ensure situational understanding throughout the movement. Guides or signs may be used at designated critical points and checkpoints to enable the flow of movement. (See paragraph 2-16 on page 2-7 for more information on checkpoints.)

Communications

2-104. The ability to communicate during march operations is essential. Radio nets must be established to link the march commander with higher headquarters, fire support, element commanders, reconnaissance force, weapons trucks, medics, and the quartering and trail party. Within the column, each march element may have its own control net with the march element commander and quartering and trail party. Other communications techniques such as signals must be established and rehearsed.

2-105. March units must be prepared to operate with degraded communications and digital networks. Messengers and visual signals are also excellent means of communication during marches. The company generally moves under radio silence and uses radio only in emergencies or when it can use no other means of communication. The company also can use road guides to pass messages from one march unit to a following march unit. Road guides are also important in controlling march units and the interval between them.

Traffic Control

2-106. The headquarters controlling the march may post road guides and traffic signs at designated traffic control posts. A *traffic control post* is a manned post that is used to preclude the interruption of traffic flow or movement along a designated route (FM 3-39). At critical points, guides assist in creating a smooth flow of traffic along the march route. Attached military police (if available) or designated elements from the quartering party may serve as guides. They should have equipment or markers that will allow march elements to identify them in darkness or other limited visibility conditions.

Security

2-107. During the movement, march units maintain security through observation, weapons orientation, dispersion, and concealment. Commanders assign sectors of observation to their personnel to maintain 360-degree observation. Main weapons are oriented on specific sectors throughout the column. The lead elements cover the front, following elements cover alternate flanks, and the trail element covers the rear. Air guards also are designated if there is an air threat.

2-108. During company movement, each platoon is responsible for a sector, depending on its position in the formation. Each fire team and squad within the platoons has a sector, so the company has all round security during movement. (See figure 2-20 on page 2-34.)

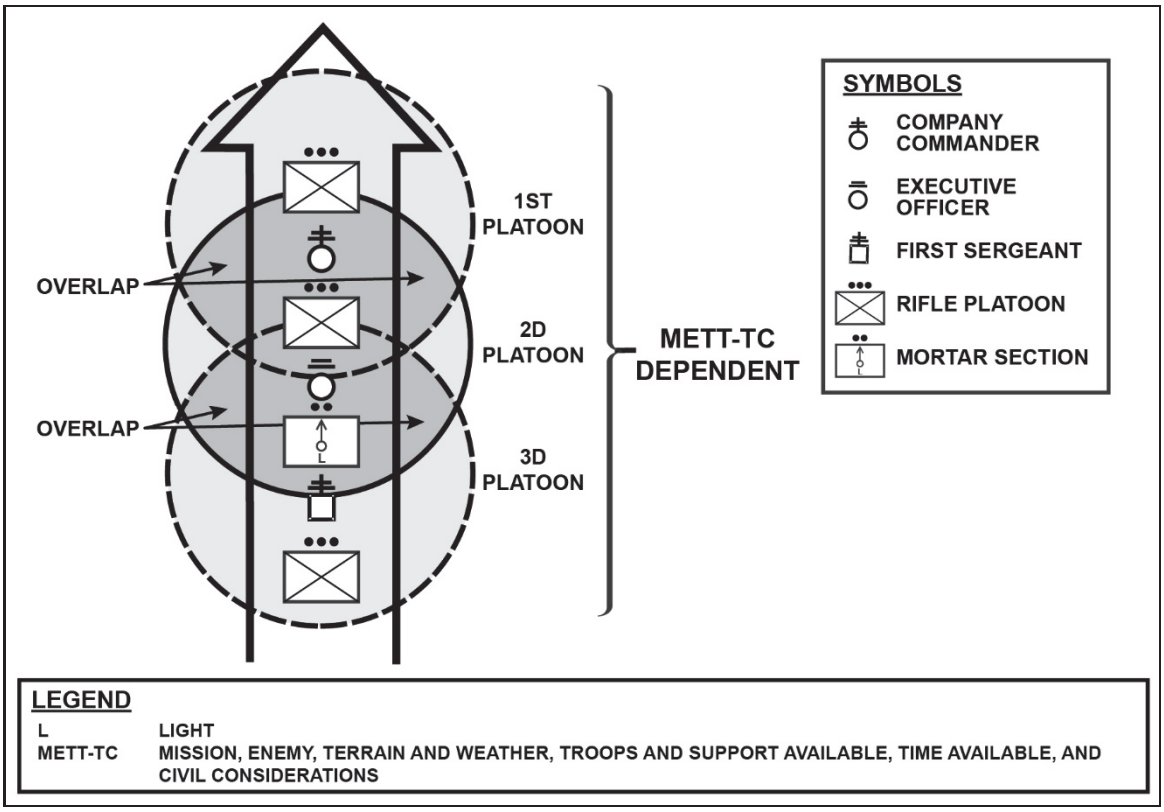


Figure 2-20. All-around security

2-109. During short halts, Soldiers spread out and assume prone positions behind cover. They observe the same sectors they did while moving. Leaders orient machine guns and anti-armor weapons on likely enemy avenues of approach into the position. Soldiers remain alert and keep movement to a minimum. They speak quietly and only when necessary. Soldiers with night vision devices scan areas where the enemy might be concealed in limited visibility.

2-110. During long halts, the Infantry rifle company sets up a perimeter defense (see chapter 3). The company commander chooses the most defensible terrain, which must have good cover and concealment. The company tactical SOP addresses the actions required during long halts.

2-111. For additional security, small ambush teams might be concealed and remain in position after a short halt. Ideally, the center platoon provides these teams, which remain in position to ambush any enemy following the company. The linkup of these teams must be coordinated and understood by all.

2-112. Before occupying a static position (objective rally point, patrol base, or perimeter defense), the commander ensures the enemy is unaware of the company's location. In addition to using the ambush teams, the commander may also conceal security teams in or near the tentative static position as the company passes it. The company continues movement, preferably until darkness, and then circles back to linkup with the security teams, who have reconnoitered the position and guide the company into it.

Halts

2-113. While taking part in a tactical road march, the march elements must be prepared to conduct both scheduled and unscheduled halts. In either case, Soldiers and vehicles should move to the side of the road while maintaining vehicle dispersion. Security at halts is always a priority.

Air Defense

2-114. Planning for air defense and implementing all forms of air defense security measures are imperative to minimize the battalion's vulnerability to enemy air attack. The battalion commander must integrate fire support plan effectively with any attached or supporting air defense assets. Furthermore, the commander must ensure the battalion plans and uses passive and active air defense measures.

2-115. Should hostile aircraft attack the battalion during the march, the march unit under attack moves off the road into a defensive posture and immediately engages the aircraft with all available automatic weapons. The rest of the battalion moves to covered and concealed areas until the engagement ends.

Chemical, Biological, Radiological, and Nuclear

2-116. If a CBRN threat exists, units should conduct monitoring activities during movement. This may include having mounted elements checking upwind of the march columns during the march. A CBRN reconnaissance should be conducted prior to the movement of the main body and areas of contamination marked. Units will move around CBRN-contaminated areas along designated routes.

Obstacles

2-117. The battalion should bypass reported obstacles, if possible. If it cannot bypass obstacles, the lead march unit establishes a hasty defense, provides overwatch, then breaches the obstacle, working with engineers, if available. As the lead march unit breaches the obstacles, the other march units move at a decreased speed or move off the road and monitor the battalion command net. The location of the obstacle should be posted and communicated as soon as possible.

Enemy Indirect Fire

2-118. Should the battalion come under attack by enemy indirect fire during the march, the unit in contact continues to move. The remainder of the battalion tries to bypass the impact area.

Restrictions

2-119. Restrictions are points along the route of march where movement may be hindered or obstructed. The march planner should stagger start times or adjust speeds to compensate for restrictions, or should plan to halt the column en route until the restriction ends.

Limited Visibility

2-120. Units must be able to operate routinely under limited visibility conditions caused by darkness, smoke, dust, fog, heavy rain, or heavy snow. Limited visibility decreases the speed of movement and increases the difficulty in navigating, recognizing checkpoints, and maintaining proper interval between units. To overcome control problems caused by limited visibility, commanders may position themselves just behind lead elements. More restrictive control measures, such as additional checkpoints, phase lines, and use of a single route, may become necessary. By adjusting formations you can allow for greater effectiveness of hand and arm signals, and reducing the chance of breaks in contact. However, leaders maintain the most dispersion possible at all times. Well-trained units can operate at night as they do during the day. Additionally, SOP refinement that reflects a unit’s movement during periods of limited visibility can increase a unit’s effectiveness.

March Preperation

2-121. Before starting a march, march units (for example rifle companies) of a serial reconnoiter and rehearse the route to the start point and determines the exact time to reach it. The movement order (see ATP 3-21.18, appendix B) states the unit’s arrival and clearance times at the start point. The serial commander then determines and announces the times for march units to arrive at and clear the start point. Arrival time at the start point is critical. March units must arrive at and clear the start point on time; otherwise, movement of other elements may be delayed. March units, and the serial as a whole, rehearse actions along

the entire road march route, specifically actions on contact with the enemy. (Refer to ATP 3-21.18 for additional information.)

2-122. A strip map should accompany the order (figure 2-19 on page 2-32). The strip map shows the assembly areas, start points, route, checkpoints, and release points. The march unit commander (rifle company commander) may identify critical points on the route and position guides at those points to help control movement and to provide security. The commander can then issue the unit an alert status for movement. One technique used to alert units for movement or for units to report their readiness to move is an alert status. With this technique, use a readiness condition (commonly referred to as REDCON system) to reflect the amount of time a unit will have before it must move.

- Readiness condition 1: Be prepared to move immediately.
- Readiness condition 2: Be prepared to move in 15 minutes.
- Readiness condition 3: Be prepared to move in 1 hour.
- Readiness condition 4: Be prepared to move in 2 hours.

2-123. March units must anticipate and rehearse possible interactions with indigenous populations and plan for acceptable (culturally-attuned) and unacceptable (insensitive) actions upon encountering them. Consideration should be given to having interpreters in the formation. (See FM 3-13, chapter 9, for further information.)

March Execution

2-124. March execution depends upon organizations, tasks organized to accomplishment critical tasks and that are flexible enough to adjust to changing conditions to ensure mission success. During movement, march units (rifle companies) move at the constant speed designated in the order, maintaining proper interval and column gap. Elements in a column of any length may simultaneously encounter many different types of routes and obstacles, resulting in different parts of the column moving at different speeds at the same time. This can produce an undesirable accordion-like action. March units report crossing each control point as directed by the march order and maintain air and ground security during the move. (Refer to ATP 3-21.18 for additional information.) When contact is made with indigenous populations, the serial commander executes planned IO activities. (See FM 3-13.)

2-125. When moving as part of the battalion, upon crossing the start point and other control points, platoons report crossing each point to the company. The company commander, in turn, reports to the battalion commander when the company crosses and clears these points.

Note. The following illustration introduces a fictional scenario as a discussion vehicle for illustrating one of many ways that an Infantry rifle company within the Infantry battalion can conduct a tactical road march. Prior to the tactical movement below, elements of the IBCT occupied assembly areas to the rear of the division's deployed forces. The IBCT conducts troop movement to stage units forward from the division's rear boundary along Route Bear (Infantry battalion 2) and Route Lion (Infantry battalion 1) to Assembly Area Eagle and Assemble Area Falcon, respectively, to prepare for future combat operations (IBCT movement to contact). Discussion within the illustration focuses on the Infantry rifle companies within Infantry battalion 2.

ILLUSTRATION OF A TACTICAL ROAD MARCH

2-126. In this scenario, Infantry battalion 2 conducts a tactical road march (mounted march) along Route Bear to Assembly Area Eagle. After initial occupation of the assembly area, the battalion continues to prepare for offensive action (battalion movement to contact). On order, the battalion conducts a second tactical road march (dismounted) along Route Fox to Release Point 4 located north of Attack Position 2. (See figure 2-21.)

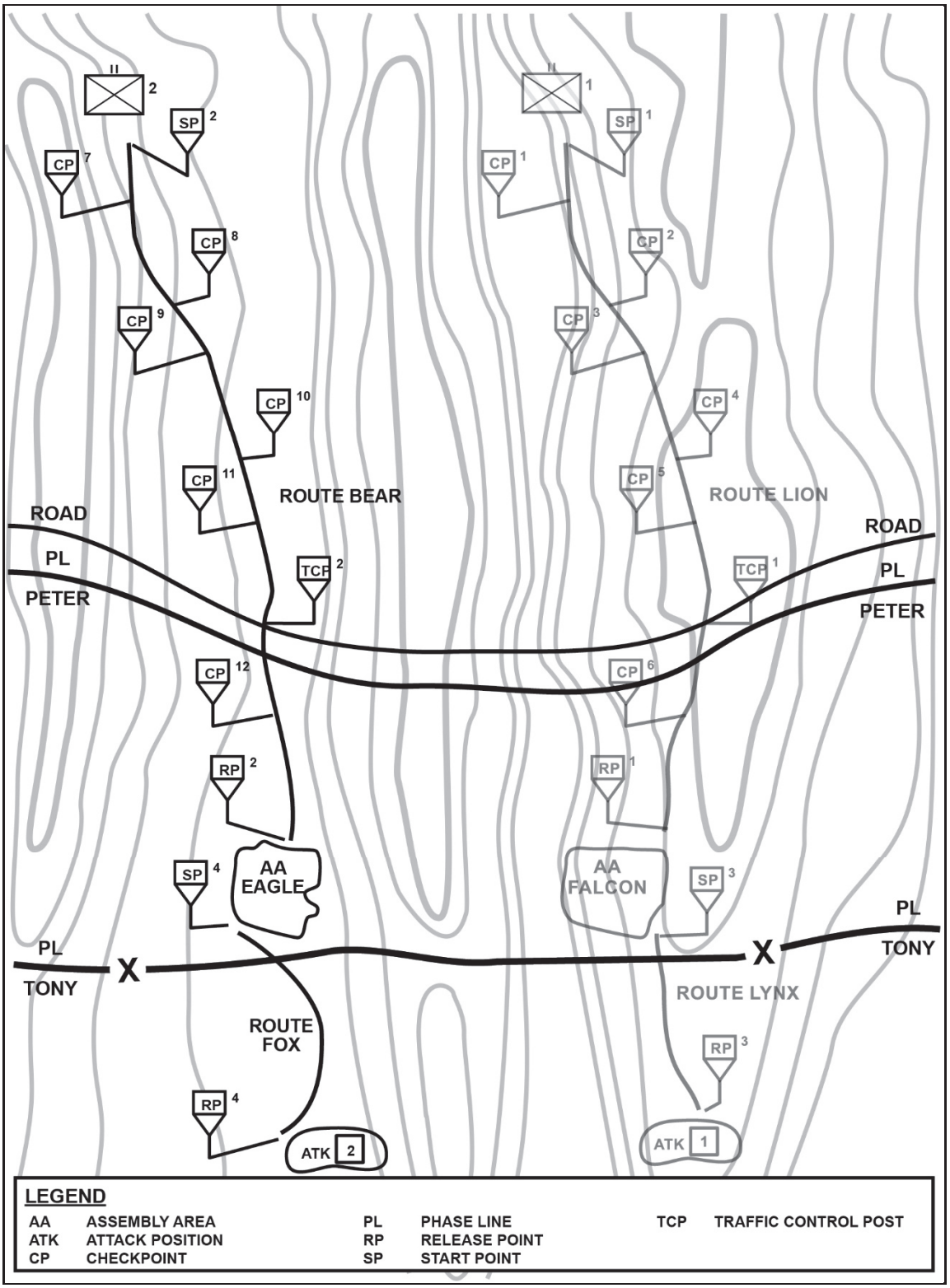


Figure 2-21 Overlay with route control measures, example

Company A Within Infantry Battalion 2 March Serial

2-127. When relocating in an area of operation to prepare for combat operations, Company A of Infantry battalion 2 conducts tactical movement by mounted march to the rear of an established area defense immediately following the quartering party. Speed is vital, and security requirements are minimal. March elements within this mounted march serial include reconnaissance, quartering party, main body, and trail party. During this tactical movement, march elements must be prepared to maneuver against an enemy force. Although the company has been augmented with vehicles to support the company's movement it is the company commander's responsibility to plan the air and ground security of the element. The commander must also provide subordinates with the plan that ensures that they are able to instruct the drivers on where to go and what action to take if the element makes contact during movement. (See figure 2-22.)

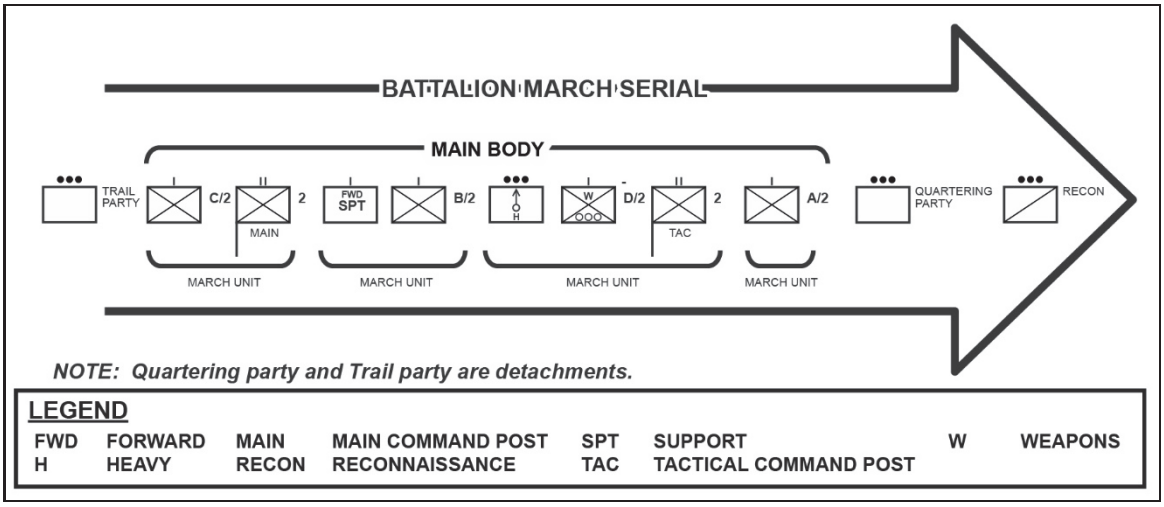


Figure 2-22. Battalion march serial and company march units (mounted march)

Note. March serials and units are organized to maintain unit integrity and task-organized as determine by the mission variables of METT-TC.

Reconnaissance

2-128. The reconnaissance element (scout platoon) conducts a route reconnaissance moving ahead of the quartering party. The reconnaissance element does not have attached engineer support; the scout platoon enables information requirements regarding technical reconnaissance–route classification, as required. The reconnaissance element does not have attached CBRN reconnaissance support; the scout platoon monitors its chemical and radiological detectors, as required.

2-129. Prior to the march the commander normally generates, or provides a battalion generated strip map that provide information gained by reconnaissance forces that depict assembly areas, start point, route, and release point. The company commander may identify critical points along the route that will require guides to be posted during the movement that will help to control movement, and provide security. Considerations should be made on how guides will be emplaced, and extracted once the company's main body has passed through critical points during the movement.

2-130. Upon arrival Release Point 2, reconnaissance element makes contact with responsible unit(s) at Release Point 2 in preparation for quartering party's arrival then confirms their linkup and arrival at Assembly Area Eagle with the main body and the quartering party.

Quartering Party

2-131. Since it is a battalion movement the battalion coordinates the movement of the reconnaissance element, quartering party and the main body with the IBCT and the unit or units responsible for the area of

operation where the assembly area is located. Prior to the tactical movement, the quartering party leader and reconnaissance leader, meet and are briefed by the unit leader regarding the route, release point, and occupation of the assembly area. The battalion's quartering party (detachment) is led by the headquarters and headquarters company commander and consists of—

- An assault platoon.
- One mortar squad with a fire direction center element led by the mortar squad leader.
- Company's send the company XO or 1SG, one representative from each of its platoons (may be platoon sergeants or squad representatives), and a representative from the headquarters section. Company A elements within the quartering party are responsible for their own security.
- Representatives from the battalion tactical and main command posts, battalion trains, and communications section.

2-132. The quartering party takes the same route as the battalion, Route Bear. Led by the scout platoon conducting a route reconnaissance, the quartering party moves to Assembly Area Eagle. The assault platoon is the primary security element for the quartering party.

2-133. The quartering party elements separate at Release Point 2 and move to their designated areas. They identify and mark the exact positions of their units and ensure they are tied into the units to their flanks. Other actions include reconnoitering the area as follows:

- Locates and marks or removes obstacles and mines.
- Marks platoon and squad sectors.
- Selects a position for the mortar section.
- Selects a company command post location.
- Selects a company trains location.
- Provides guides for the incoming unit(s).

2-134. The main body of the battalion conducted the march while the quartering party established the assembly area. Unit guides from the quartering party are sent to Release Point 2 to meet their units and, without stopping the units, lead them into their positions. Release points for subordinate units are established and used.

Company A Moving as the Lead Element Within the Main Body

2-135. The Infantry battalion main body conducts mounted march, Company A minus the detachment of soldiers within the quartering party leads the battalion main body along Route Bear to Assembly Area Eagle.

2-136. The company is normally organized into platoon march units. And when moving as part of the battalion the company is normally a serial. To provide all-around security, the commander assigns security tasks to each march unit. Some tasks may be assigned by SOP; for example, every vehicle will have an air guard with a sector of observation. When supported with vehicles armed with MK19s or M2 machine guns, the commander positions these vehicles to provide rapid direct fire support.

2-137. The formations used in mounted march are close column, open column, and infiltration (see paragraphs 2-70 thru 2-72 on page 2-26 for more information).

2-138. Prior to movement, the commander designates the appropriate maximum catch up speed (greater than the prescribed march rate) for vehicles regaining lost distance. To control the column, the commander selects guides or escorts (for example leaders from each march element), and route markers in the form of identifiable terrain or physical markers left in place by reconnaissance elements.

2-139. As each company and platoon crosses the start point at the correct time that is reported to the commander, and when the entirety of the company has passed the start point the commander reports to the battalion commander. The main body of the battalion includes rifle companies, weapons company, battalion command posts, battalion mortar platoon, and battalion unit and company trains. The battalion conducts the move under radio-listening silence. Each vehicle commander has a route overlay or strip map of Route Bear. The following is the order of march by march unit:

- Company A with its company trains, below is the company order of movement--
- First Platoon with mortar team, and command post.

- Second Platoon with mortar team, alternate command post, and company trains.
- Third Platoon.
- Weapons company (-), battalion mortar platoon, and tactical command post.
- Company B with its company trains and the battalion unit trains.
- Company C with its company trains and main command post.

2-140. During the movement, platoon leaders ensure adherence to the company march security plan that enables overlapping security efforts and all-around security discussed earlier in this chapter.

Trail Party

2-141. Trail party with one assault platoon, one ambulance squad, one field maintenance team, and recovery vehicles.

March Units

2-142. March units conduct mounted march in accordance with the movement order and the battalion's tactical SOPs. The reconnaissance element crosses the start point 90 minutes prior to the main body. The quartering party crosses the start point 60 minutes prior to the main body. The trail party crosses the start point 30 minutes after the last element of the main body crosses the start point. Mounted march procedures include the following:

- Move in an open column at the designated speed.
- Under radio silence, march unit leaders monitor the battalion command net.
- Orient vehicle weapons systems outward, mounted Infantry face outward.
- Post air guards.
- March unit leaders report passing checkpoints through the digital system.
- Monitor and be prepared for situational updates reported by the reconnaissance element (to include obstacle markings, changes to route, and other factors).
- Vehicle break down procedures: Move to the side, provide local security, and wait for the trail party to be repaired or recovered.
- Infantry on vehicles that break down: Leave a fire-team sized element to help secure the vehicle and cross-load remaining Infantry to other vehicles within the march unit.
- During scheduled or unscheduled halts, march units move off the road and assume a herringbone formation. (See ATP 3-21.8.) Drivers and crew conduct maintenance. Infantry dismount to provide local security.

March Unit Release Point

2-143. When the company arrives at the release point, the platoon guides linkup with their respective platoons and sections to lead them to their positions. The company headquarters guide links up with the headquarters personnel and leads them to their positions within Assembly Area Eagle. The movement from the release point the positions should be continuous, March units do not stop at the release point. Units within each march unit are organized to ease its movement into area of operations within the assembly area.

Note. Within this scenario, Company A, as part of Infantry Battalion 2, moves to Assembly Area Eagle to make final preparations for a forward passage of lines and battalion movement to contact.

OCCUPY AN ASSEMBLY AREA

2-144. An assembly area is a location where a unit prepares or regroups for future action. Units move with as much secrecy as possible, normally at night and along routes that prevent or degrade the enemy's capabilities to observe or detect during the occupation of an assembly area. Units receive and issues order, service and repair vehicles and equipment, receive and issue supplies, and feed and rest Soldiers in the assembly area. Units avoid congesting in assembly areas and occupy them for the minimum possible time.

While in the assembly area, each unit is responsible for its own protection activities, such as local security. Designation and occupation of an assembly area may be directed by a higher headquarters or by the unit commander during relief or withdrawal operations or unit movements.

DOCTRINAL BASIS

2-145. An *assembly area* is an area a unit occupies to prepare for an operation (FM 3-90-1). Assembly areas are areas occupied by forces where enemy contact is likely and commitment of the unit directly from the assembly area to combat is possible or anticipated. Units likely to occupy assembly areas include units designated as tactical reserves, units completing a rearward passage of lines, units preparing to move forward to execute a forward passage of lines, units performing tactical movements, and units conducting reconstitution. An assembly area should provide—

- Concealment from air and ground observation.
- Adequate entrances, exits, and internal routes.
- Space for dispersion; with enough distance from other assembly areas to preclude mutual interference.
- Cover from direct fire.
- Good drainage and soil conditions that can sustain unit vehicles and individual Soldier movements.
- Terrain masking of electromagnetic signatures.
- Terrain allowing observation of ground and air avenues into the assembly area.
- Beyond the range of enemy medium-range artillery fires.
- Sufficient space for sustainment operations.

Organization

2-146. Assembly areas may be organized using one of three methods. As part of a larger unit's assembly area, occupy an assembly area on its own, or assign subordinate units their separate assembly areas. Both battalion and company are similar in how they organize assembly areas, although a platoon being assigned there own assembly area is typically referred to as a patrol base (see ATP 3-21.8).

Occupy a Portion of an Assembly Area

2-147. The Infantry rifle company may occupy a portion of the perimeter of an assembly area as part of a larger force (generally the battalion). The company occupies its area of operation assigned by the battalion commander and by arraying its platoons generally on a line oriented on avenues of approach into the assembly area. Leftmost and rightmost units tie in their fires and areas of observation with adjacent units. Depending on the tactical situation and width of the area assigned to it, the battalion may maintain a reserve. Battalion trains are located to the rear of the companies. Centrally located in the assembly area; the battalion main CP provides mission command and the battalion mortar platoon provide fire support. The battalion scout platoon screens and establishes observation post along the most likely or most dangerous avenues of approach into the assembly area.

Occupy a Separate Assembly Area

2-148. When the company occupies a separate assembly area, the company commander plans for an assembly area in the same way the commander plans for the perimeter defense (see chapter 3). The commander organizes the assembly area into a perimeter and assigns each platoon a sector of that perimeter. The commander also assigns positions to the attachments and the mortar section, and selects the company command post location, which is typically located near the center of the assembly area. The commander and the FSO plan indirect fire in and around the assembly area. Once in position, the platoons establish observation posts and conduct patrols to secure the area. The platoon leaders then plan the defense for their area of the perimeter. Machine gunners, antiterrorism section, and attachments such as tube-launched, optically tracked, wire-guided/wireless guided (TOW) missile crews prepare range cards. Fighting positions are prepared according to available time. Other defensive measures are taken as appropriate (see chapter 3).

Platoons Assigned to Separate Assembly Areas

2-149. The company may assign separate individual assembly areas to subordinate platoons, which establish their own perimeter defense. Areas between platoons are secured through surveillance and patrolling and is usually under the control of the company. Company command post, company trains, and mortar section generally establish their positions with one of the rifle platoons. When they locate central to outlying platoons, their position will likely require a security element to be attached.

Note. When assign separate assemble areas, platoons normally establish a perimeter defense in the form of a patrol base. See ATP 3-21.8 for information on patrol bases.

Quartering Party

2-150. A quartering party is a group of unit representatives dispatched to a new site of operations to secure, reconnoiter, and organize an area before the main body's arrival and occupation. The battalion and company tactical SOPs establish the general composition of the quartering party and its transportation, security, communications equipment, and specific duties. Quartering parties typically reconnoiter, to include CBRN reconnaissance, and confirm the route and tentative locations previously selected from map reconnaissance. Quartering parties also serve as a liaison between their parent headquarters and the quartering party of their higher headquarters to change unit locations in the assembly area based on their reconnaissance.

2-151. The quartering party may move with another unit’s quartering party, depending on the likelihood of enemy contact. Ideally, the quartering party moves over the routes to be used by the battalion and/or subordinate company and executes a route reconnaissance and time distance check. During a battalion led movement, the quartering party typically includes an officer in charge or noncommissioned officer in charge and representatives from the battalion main command post, battalion trains, and the battalion's subordinate units.

2-152. A company quartering party composition is usually determined by the company commander but may be specified by the battalion commander. The company quartering party whether part of a battalion quartering party or the company is made up of company representatives selected by the commander, and normally under the control of the company XO. The company quartering party is responsible for its own security. When the company’s quartering party reaches the next position, its members reconnoiter and, as appropriate, pick positions, areas, routes, CPs and observation posts for the company. When the company arrives, the guides sent forward will meet with their respective platoon, section, or squad to guide the unit into position.

2-153. The quartering party leader briefs the quartering party after the plan is completed. The briefing follows the standard five-paragraph field order format. In it, the quartering party leader emphasizes actions at halts and critical areas, actions of the quartering party in the assembly area, contingency plans, and procedures to request and receive fire support, protection, and sustainment. The leader covers in detail medical evacuation procedures, actions on contact, and actions to take if separated from the quartering party. Rehearsal and back-briefs times are scheduled.

2-154. Prior to and after rehearsals and during final preparations the commander ensures the quartering party leader is aware of any changes to the current enemy situation, probable enemy courses of action, the weather forecast, and the terrain and vegetation likely en route to and in the assembly area. The quartering party leader coordinates with the commander to determine any mission changes, for example, whether or not the quartering party is to remain in the assembly area and await the remainder of the company, or a change to the route and movement restrictions to be used by the quartering party.

2-155. During rehearsals the quartering party leader ensures subordinate unit quartering parties know where and when the company quartering party will be located in the assembly area. The commander determines whether it is required to send engineer personnel, if available, with the quartering party after final reconnaissance and evaluations of routes, bridges, and cross-country mobility.

2-156. Air defense units, when available, may move with the quartering party en route to and within the new tactical assembly area. If air defense assets move with the quartering party, the air defense unit leader

ensures both the current and projected weapons control status and air defense warning are known. (See ATP 3-01.8.) If a CBRN threat is present, CBRN reconnaissance is conducted in conjunction with the route reconnaissance. The route is adjusted around any CBRN contamination sites and guides may be required to re-direct the main column onto the adjusted route.

2-157. The quartering party navigates to the assembly area, generally along one route. If the quartering party moves along a route to be used by the main body and the main body has not yet sent a reconnaissance element forward, the quartering party conducts a route reconnaissance during its movement. The quartering party also may execute a time distance check of the designated route. The quartering party reports these times and distances to the main command post after moving through the release point.

2-158. Upon arrival in the assembly area, the quartering party moves to its assigned positions and executes the required reconnaissance. The quartering party also has the following responsibilities at the assembly area:

- Determines locations for units.
- Identifies unit left and right limits of fire, records this information, and sends updates to the unit's commander.
- Determines the location for the CP. This may include establishing communications equipment, laying wires, and so forth.
- Verifies subordinate unit locations and sectors of fire to ensure there are no gaps in coverage.
- Transmits changes or updates to the main command post to alert the main body to changes in the route and assembly area.

2-159. If the proposed location for the assembly area is unsuitable, the quartering party leader attempts to adjust the assigned areas. If adjustment is not possible, the leader immediately notifies the commander. If air defense assets have accompanied the quartering party, they occupy firing positions oriented on air avenues of approach. Representatives organize their respective areas by selecting and marking positions for vehicles (when required) and support facilities.

2-160. If the quartering party is not going to remain in the assembly area, it does not depart the assembly area until all units are quartered. The quartering party provides the results of their reconnaissance and identify requested changes to their tentative locations. Guides move to the release point(s) to meet and guide their units. Guides are especially needed during periods of limited visibility. Sustainment assets may accompany the quartering party. Sustainment elements generally conduct resupply operations for the quartering party at scheduled halts or in the new assembly area.

Note. The following illustration introduces a fictional scenario as a discussion vehicle for illustrating one of many ways that an Infantry rifle company can occupy an assembly area.

ILLUSTRATION OF AN ASSEMBLY AREA

2-161. The following scenario illustrates an Infantry rifle company occupying a portion of a battalion assembly area. This illustration is a continuation of the scenario started earlier in this chapter. In this scenario, Company A completes a tactical road march (mounted) along Route Bear and occupies Assembly Area Eagle. During the battalion's main body movement to the assembly area the quartering party with members of company A secured, reconnoitered, and organized the assembly area. Company A quartering party elements identified and marked exact positions for units and ensured positions within the assembly area provide mutual support between platoons. In this scenario the company XO is the Company A quartering party officer in charge, and links in with the quartering party officer in charge, and the other subordinate unit representative's to ensure mutual support is achieved on the flanks of the company's portion of the assembly area. Additionally, Company A quartering party identified and marked its CP location, firing positions, and company train locations. The guides from the quartering party went to release point 2, meet their units, and without stopping the units, lead them to their areas within the assembly area. Subordinate unit release points were established to ease congestion. Figure 2-23 on page 2-44 illustrates the occupation of Assembly Area Eagle.

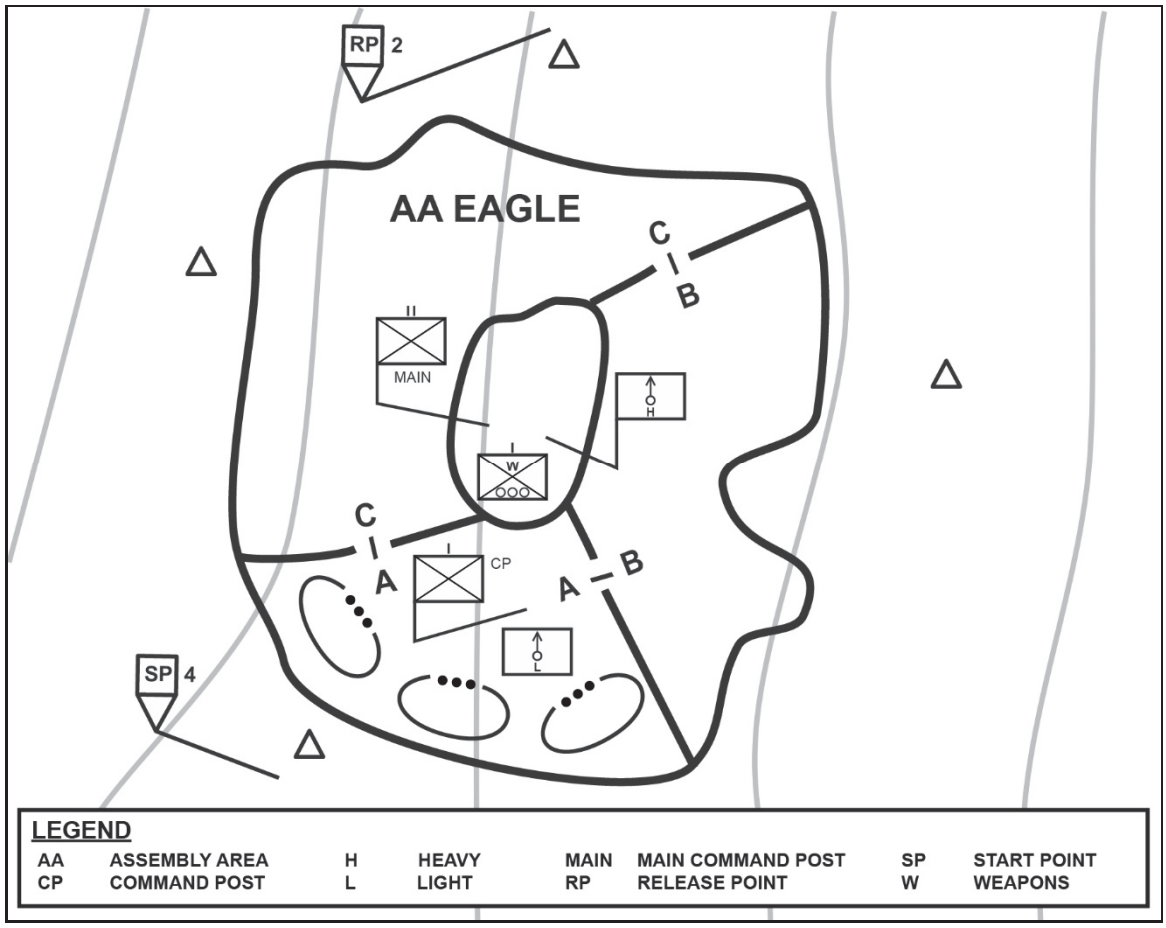


Figure 2-23. Occupy an assembly area, example

Occupation of the Assembly Area

2-162. Once clear of the release point 2, march units follow guides into assigned areas within the assembly area. For example Company A, the lead serial of the main body, has an assigned area on the south side of the assembly area. Each march unit moves to its area of operation, dismounts Soldiers, forms its portion of the perimeter, and immediately establishes local security. The guide shows the commander and subordinate leaders their initial areas of operation. The commander makes changes as required as units move into position. The company establishes communications with higher headquarters and adjacent units. Crew-served weapons, heavy weapons (when equipped), and mortars are positioned. Depending on the priorities work, fighting positions are built.

Actions at the Assembly Area

2-163. In the assembly area, units prepare for the forward passage of lines and movement to contact. This includes:

- Receive required supplies.
- Conduct rehearsals.
- Conduct inspections.
- Maintain weapon, vehicles, and other equipment.
- Check communications.
- Receive orders.

Departure From Assembly Area

2-164. Planning considerations for occupying the assembly area are based largely on the anticipated future missions of units. Units are positioned in the assembly area so they can depart the assembly area en route to their assigned tactical missions without countermarching or moving through another unit.

Start Point

2-165. Units departing the assembly area must reach the start point at the correct interval and time. The start point is located from the assembly area to allow units to maneuver out of their positions and configure for the tactical road march before reaching the start point. The start point for the battalion's tactical movement is located an adequate distance from the assembly area to permit the march units (companies) to attain proper speed and intervals before crossing it. Units do not halt at the start point rather they have measured the travel time between their positions within the assembly area to the start point and start their movements accordingly.

2-166. In a scenario where the company occupies a separate assembly area, the company would establish a start point for the company's tactical movement in the same way as the battalion. That start point would be located an adequate distance from the assembly area to permit platoons to attain proper speed and intervals before crossing it to prevent unnecessary bunching up.

Contact With the Next Line

2-167. When units are dispersed or terrain in the assembly area prohibits visual contact, subordinate units maintain contact with the unit they will follow in the march to ensure their movement is coordinated and do not bunch up or become intermingled. March units must make their start point time but also need to know and compensate for any changes to the march order.

Note. Within this scenario, Company A of Infantry Battalion 2 occupied Assembly Area Eagle, to make final preparation for a forward passage of lines and movement to contact.

PASSAGE OF LINES, LINKUP, AND BATTLE HANDOVER

2-168. A passage of lines is the coordinated movement of one or more units through another unit. A linkup is an operation that entails the meeting of friendly ground forces (or their leaders or designated representatives). Battle handover is a coordinated operation executed to sustain continuity of the combined arms fight and to protect the combat potential of both forces involved. A passage of lines and battle handover often are conducted sequentially. The moving unit passes through a stationary unit to either initiate or relinquish contact with the enemy.

DOCTRINAL BASIS FOR A PASSAGE OF LINES

2-169. A *passage of lines* is an operation in which a force moves forward or rearward through another force's combat positions with the intention of moving into or out of contact with the enemy (JP 3-18). The primary purpose of a passage of lines is to transfer responsibility for an area from one unit to another. A commander conducts a passage of lines to continue an attack or conduct a counterattack, pass through security or main battle forces, and anytime one unit cannot bypass another unit's position. The company or its subordinate units may execute a forward or rearward passage of lines. A passage of lines may involve engagement with the enemy shortly before or after the completion of the task, and usually involves a battle handover.

Planning Considerations

2-170. A passage of lines is a complex operation requiring close supervision and detailed planning, coordination, and synchronization between the commander of the unit conducting the passage and the unit being passed. The headquarters ordering the passage of lines is responsible for planning and coordination; however; specific coordination tasks are normally delegated to subordinate commanders. Terrain management is critical to successful completion of a passage of lines. At least two units are occupying and

concentrated on the same terrain. The commander and subordinate leaders at all levels have to understand their respective commander's plan and be flexible in its execution. Terrain is controlled through the sharing of a common operational picture and overlays that contain—

- Primary and alternate routes.
- Checkpoint data.
- Friendly and enemy unit locations and status.
- Passage points and lanes.
- Fire support coordination measures.
- Friendly and enemy obstacle types and locations.
- Sustainment locations and descriptions.
- Contact points.

2-171. A passage of lines may require either the reduction of some obstacles or the opening and closing of lanes through friendly obstacles. The passing commander should task the attached engineer officer if available to coordinate with the stationary unit engineer or stationary commander. At a minimum, this coordination must address the following:

- Location and status of friendly and enemy tactical obstacles.
- Routes and locations of lanes and bypasses through friendly and enemy obstacles.
- Transfer of obstacle and passage lane responsibilities.

2-172. The company FSO reviews the fire support plan (see appendix D) of the stationary unit and conducts direct coordination when possible to ensure that a clear understanding exists between the passed and passing units on the established fire support coordination measures. In some situations the company FSO will require assistance from the Battalion FSO to attain such information. When possible the FSO does so through the transfer of digital fire support overlays between the two FISTs via the Advanced Field Artillery Tactical Data System. Procedures to establish fire support battle handover or transfer of control also are identified and approved by the passing and passed commanders. Terrain and route management for fire support assets and their support assets are especially important due to potential terrain limitations. Sufficient fire support assets must be positioned to support the passage if enemy contact is possible during the operation.

2-173. During the conduct of a passage of lines, units participating in the operation present a lucrative target for air attack. The passing commander coordinates air defense protection with the stationary force commander during the passage of lines. This method allows the passing force supporting air defense assets to conduct a move at the same time. If the passing force requires static air defense, then it coordinates the terrain with the stationary commander.

Rehearsal

2-174. During rehearsals for a passage of lines, the commander ensures that subordinate elements know when and where to move as well as how to execute the required coordination. Rehearsal items include—

- Fire support observation plan, target execution, communication linkages, and mutual support.
- Confirm fire support coordination measures.
- Review routes and positioning.
- Locations and descriptions of obstacles, lanes, bypasses, and markings.
- Locations of any stockpiles, especially engineer stockpiles.
- Responsibility for closing passage lanes after the passage of lines is complete.
- Air defense weapons locations, early warning communications, air threat, and weapons control status.
- Passage point recognition procedures.
- Route management, contact points, checkpoints, and use of guides.
- Locations for and movement of sustainment units.
- Locations of aid stations, ambulance exchange points, and casualty evacuation procedures.

Forward Passage of Lines

2-175. In a forward passage of lines, conducted as part of an attack, both the stationary and passing commanders must be aware of the passing company's objective. This awareness is especially important if the stationary battalion must provide supporting fires.

2-176. On receipt of an order, the passing company commander begins preparing the passage of lines plan by conducting a reconnaissance while concurrently updating the information received from the stationary unit. For example, the passing company receives information from the stationary unit that delineates routes to the contact points as well as the location of the actual linkup site.

2-177. Detailed reconnaissance and coordination are critical in a passage of lines, both in its complex planning factors and to ensure that the passage goes quickly and smoothly. Normally, the company commander reconnoiters and coordinates the passage. At times, the company commander may designate the XO, 1SG, or a platoon leader to coordinate the following:

- Unit designation and composition.
- Type and number of personnel.
- Passing unit's arrival time(s).
- Location(s) of attack positions or assembly areas.
- Current enemy situation.
- Stationary unit's mission and plan to include observation posts, patrol, and obstacle locations.
- Locations of routes, contact points, passage points, and passage lanes.
- Guide requirements.
- Order of march.
- Anticipated actions on enemy contact.
- Requirements for supporting direct and indirect fires, with location of restrictive fire line.
- Chemical, biological, radiological, or nuclear conditions.
- Available combat support assets and their locations.
- Communications information, to include frequencies and near and far recognition signals.
- Criteria for battle handover and location of the battle handover line (BHL).
- Additional procedures for the passage.

2-178. In a forward passage (figure 2-24 on page 2-48), the passing unit first moves to an assembly area or attack position to the rear of the stationary unit. Designated personnel move forward to link up with guides and confirm coordination information with the stationary unit. Guides then lead the passing elements through the passage lane. The company conducts a forward passage by employing tactical movement. It moves quickly, using appropriate dispersal and formations whenever possible, and keeping radio traffic to a minimum.

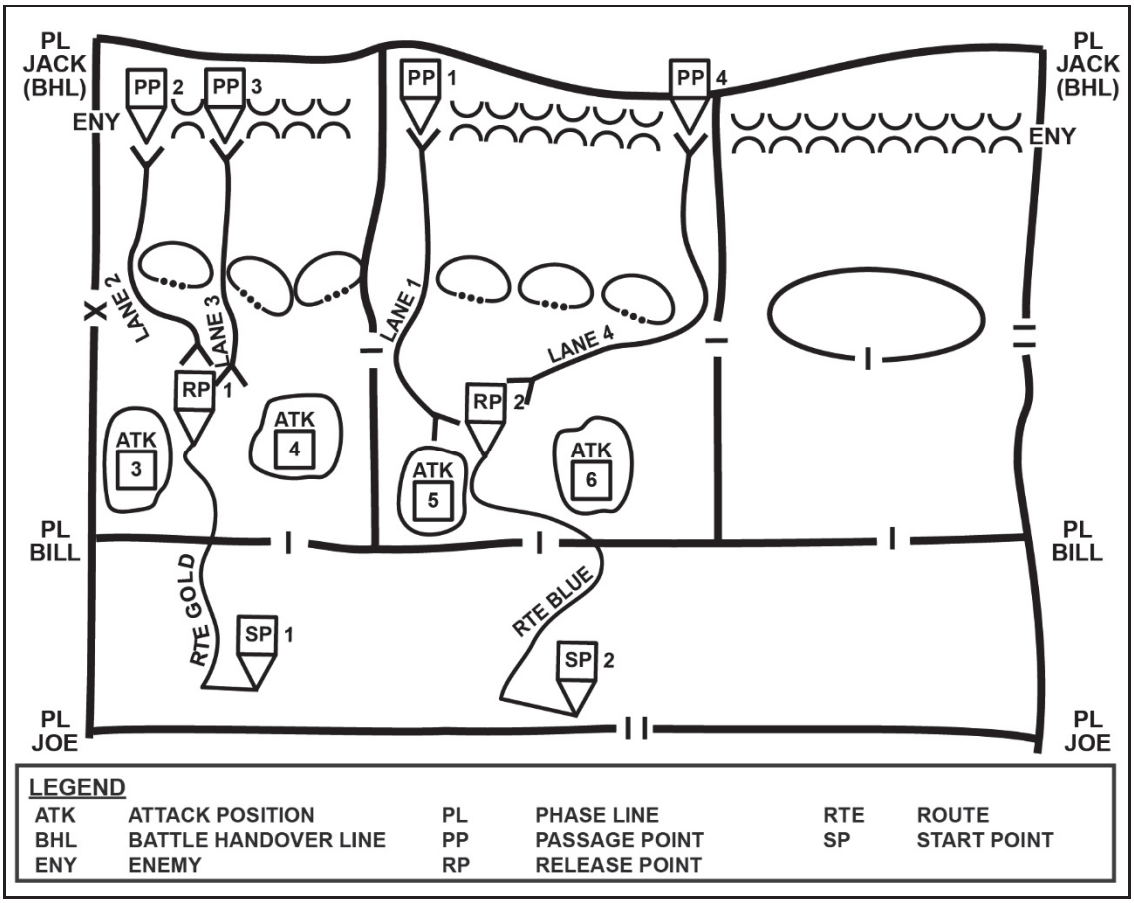


Figure 2-24. Control measures, forward passage of lines

Rearward Passage of Lines

2-179. Typically, a rearward passage of lines occurs within a defensive framework in which elements of the security force operate forward of the main battle area. The main battle area forces are the stationary unit in a rearward passage of lines. Security forces withdraw through main battle area forces handing off control of the fight at the BHL.

2-180. To facilitate a rearward passage of lines, the stationary force commander designates—

- The BHL.
- Contact points forward of the BHL.
- Passage points along the forward edge of the battle area.
- Lanes through the main battle area.

2-181. Once the overlay is prepared, the stationary commander provides it and any amplifying information to the passing force commander. The stationary and passing commanders determine the best method of exercising mission command to avoid slowing the tempo of the operation and fratricide.

2-182. Due to the increased chance of fratricide during a rearward passage, coordination of recognition signals and fire control measures are critical. While it is still beyond direct fire range, the passing unit contacts the stationary unit, and then coordinates as previously discussed. Coordination emphasizes near recognition signals and location of the BHL. Additional fire control measures, such as restrictive fire lines, might be used to reduce the risk of fratricide. After coordination, the passing unit continues tactical movement toward the passage lane. The passing unit is responsible for its own security until it passes the BHL. If the stationary unit provides guides, the guide meets the lead element of the passing unit and, without stopping, guides the

unit to a designated location behind the stationary unit. If a guide is not provided, the passing unit moves on its own to a designated area without stopping. (See figure 2-25.)

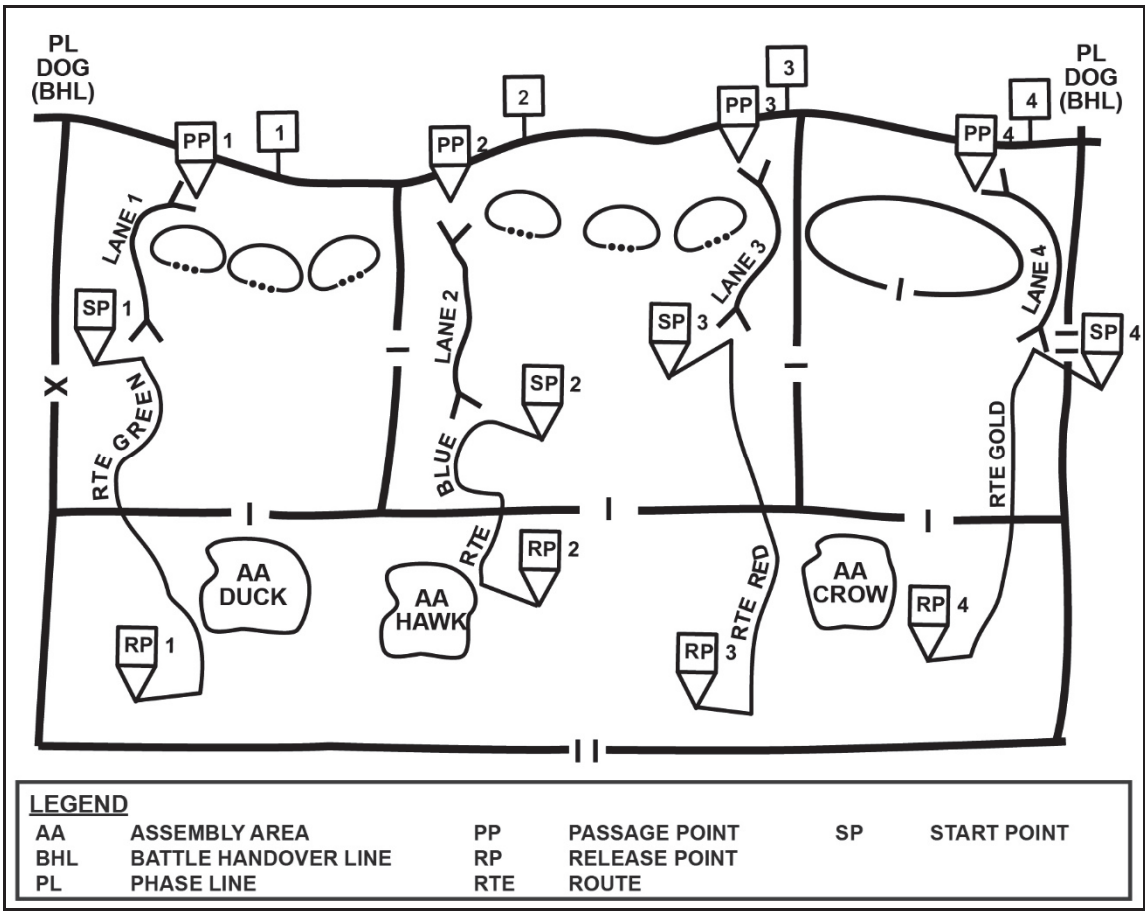


Figure 2-25. Control measures, rearward passage of lines

DOCTRINAL BASIS FOR LINKUP

2-183. A *linkup* is a meeting of friendly ground forces, which occurs in a variety of circumstances (ADRP 3-90). The company conducts linkup activities independently or as part of a larger force. Within a larger unit, the company may lead the linkup force.

2-184. Linkup 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 coordinating a relief in place.
- Cross attached units moving to join their new organization.
- A unit moving forward with a fixing force during a follow and support mission.
- A unit moving to assist an encircled force, or when a unit exfiltrates towards.
- Units converging on the same objective during the attack.
- Units conducting both rearward and forward passage of lines.

2-185. When selecting a linkup site the commander selects a primary and an alternate site. These sites should be easy to find at night, have cover and concealment, and avoid the natural lines of drift. They must also be easy to defend for a short time, and must offer access and escape routes.

2-186. Far and near recognition signals help keep friendly units from firing on each other. Although units linking up exchange radio frequencies and call signs, they should avoid radio communications for short range recognition due to possible compromise. Instead, they plan visual and voice recognition signals. They might use a sign and countersign such as a challenge and password or a number combination. Signaling means can include flashlights, chemical lights, infrared lights, or VS 17 panels. The Tactical SOP can define near and far recognition signals. When linking up with a unit that might not operate of the same Tactical SOP the recognition signals are deconflicted during the reconnaissance and disseminated to subordinates in order to prevent fratricide.

2-187. Indirect fires are always planned, but not necessarily executed, for linkup operations. They support the movement by masking noise, deceiving the enemy of friendly intent, and distracting the enemy. Indirect fires are planned along the infiltration lanes and at the linkup sites to support in case of enemy contact.

2-188. Direct fire planning must include fratricide prevention. Restrictive fire lines (RFLs) control fires around the linkup site. Phase lines may serve as RFLs, which are adjusted as two forces approach each other.

2-189. The linkup plan must cover—

- Enemy contact before, during, and after linkup.
- Length of time to wait at the linkup site.
- Actions in case some elements fail to linkup.
- Alternate linkup points and rally points.

2-190. The linkup procedure begins as the unit moves to the linkup point. If using the radio, the unit reports its location using phase lines, checkpoints, or other control measures. Each unit sends a small contact team or element to the linkup point; the remainder of the unit stays in the linkup rally point. In a linkup, one unit occupies the linkup point as the stationary unit, while the other moves to the linkup point. The leader assigns specific duties of the contact elements and coordinates procedures for integrating the linkup units into a single linkup rally point. Full rehearsals are conducted if time permits. During the linkup an element will infiltrate early, conducted the reconnaissance of the objective, and established the objective rally point. The rest of the company, also shown, infiltrated later. The company stops and sets up a linkup rally point about 300 meters from the linkup point. A contact team is sent to the linkup point; it locates the point and observes the area. If the unit is the first at the site, it clears the immediate area and marks the linkup point, using the agreed upon recognition signal. It then takes up a covered and concealed position to watch the linkup point. The next unit approaching the site repeats these actions. When its contact team arrives at the site and spots the recognition signal, they initiate the far recognition signal. The first element answers and the two elements exchange near recognition signals. The contact teams coordinate the actions required to linkup the units, such as to move one unit to the other unit's rally point, or to continue the mission.

2-191. Before initiating movement to the linkup point, the forces exchange necessary tactical information including—

- The known enemy situation.
- Number and types of friendly units or personnel.
- Disposition of stationary forces, if either unit is stationary.
- Routes to the linkup and rally points, if used.
- Fire control measures.
- Near recognition signal(s).
- Communications information.
- Combat support coverage.
- Sustainment responsibilities and procedures.
- Final location of the linkup point and rally point, if used.
- Any special coordination such as maneuver instructions or requests for medical support.

2-192. All units or elements involved in the linkup must enforce strict fire control measures to prevent fratricide. Linkup points and RFLs must be easily recognizable by moving and converging forces. Linkup elements—

- Conduct far recognition by voice or digital.
- Conduct short range (near) recognition using visual or voice signal.
- Complete movement to the linkup point.
- Establish local security at the linkup point.
- Conduct additional coordination and linkup activities as necessary.

DOCTRINAL BASIS FOR BATTLE HANDOVER

2-193. Battle handover is the act of transitioning responsibility from the stationary force to a moving force and vice versa and is designated by a line. A *battle handover line* is a designated phase line on the ground where responsibility transitions from the stationary force to the moving force and vice versa (ADRP 3-90). The common higher commander of the two forces establishes the BHL after consulting both commanders. The stationary commander determines the exact location of the line.

2-194. The BHL is forward of the forward edge of the forward edge of the battle area in the defense or the forward line of troops in the offense. The commander draws it where elements of the passing unit can be supported effectively by the direct fires of the forward combat elements of the stationary unit until passage of lines is complete. The area between the BHL and the stationary force belongs to the stationary force commander. The stationary force commander may employ security forces, obstacles, and fires in the area.

2-195. During the defense, the battle handover is normally planned and coordinated in advance to facilitate execution and usually involves a rearward passage of lines. Battle handover during the offense can also be planned, such as when a unit seizes an objective and follow-on forces pass through to continue the attack. Battle handover during the offense can also be situational dependent and initiated by an operations order or fragmentary order.

2-196. Physical handover normally occurs at the BHL. Events may dictate that a force break contact forward of or behind the BHL such as when a gap exists between echelons of the attacking enemy force. Close coordination, physical or by FM voice, between the units involved in the handover allows them to coordinate and execute this process at the small unit level.

2-197. Battle handover begins on order of the higher headquarters commander from either unit, or when a given set of conditions occurs. Defensive handover normally is complete when the passing unit is completely clear and the stationary unit is ready to engage the enemy. These actions may occur at the same time. Offensive handover normally is complete when the passing unit combat elements completely cross the BHL. The BHL may be considered the line of departure for an attacking unit. Until the handover is complete and acknowledged by the commanders, the company commander in contact is responsible for the fight.

2-198. Coordination for battle handover flows from the commander out of contact to the commander in contact. The coordination for a battle handover overlaps with the coordination for a passage of lines; the coordination for both is accomplished at the same time. Standard operating procedures within an organization should outline these coordination requirements to facilitate rapid accomplishment.

2-199. Each unit transmits or delivers a complete copy of their operations order or fragmentary order and overlays. Any changes made after initial distribution are updated immediately. The coordination effected between the two commanders includes—

- Establishing frequency modulation voice and digital communications.
- Providing updates of both friendly and enemy situations (voice and graphic).
- Coordinating passage points and routes and ensuring these are displayed on operational overlays.
- Collocating mission command and exchanging liaison personnel (if required).
- Coordinating fires, direct, and fire support coordination measures, and ensuring these are displayed on operational overlays and the common operational picture.
- Determining the need for and dispatching contact point representatives.
- Establishing and coordinating recognition signals.

- Exchanging locations of obstacles and related covering fires.
- Exchanging route information to include waypoints.
- Determining fire support, protection, and sustainment requirements.

Note. The following illustration introduces a fictional scenario as a discussion vehicle for illustrating one of many ways that an Infantry rifle company can conduct a passage of lines, lineup, and battle handover.

ILLUSTRATION OF A PASSAGE OF LINES, LINKUP, AND BATTLE HANDOVER

2-200. The following scenario illustrates Company A within an Infantry battalion conducting a forward passage of lines, linkup, and battle handover with a defending force. This illustration is a continuation of the scenario started earlier in this chapter. In this scenario, Company A conducts a second tactical movement (dismounted march) from Assembly Area Eagle along Route Fox to the area of operation where the passage of lines is being conducted. (See figure 2-26.)

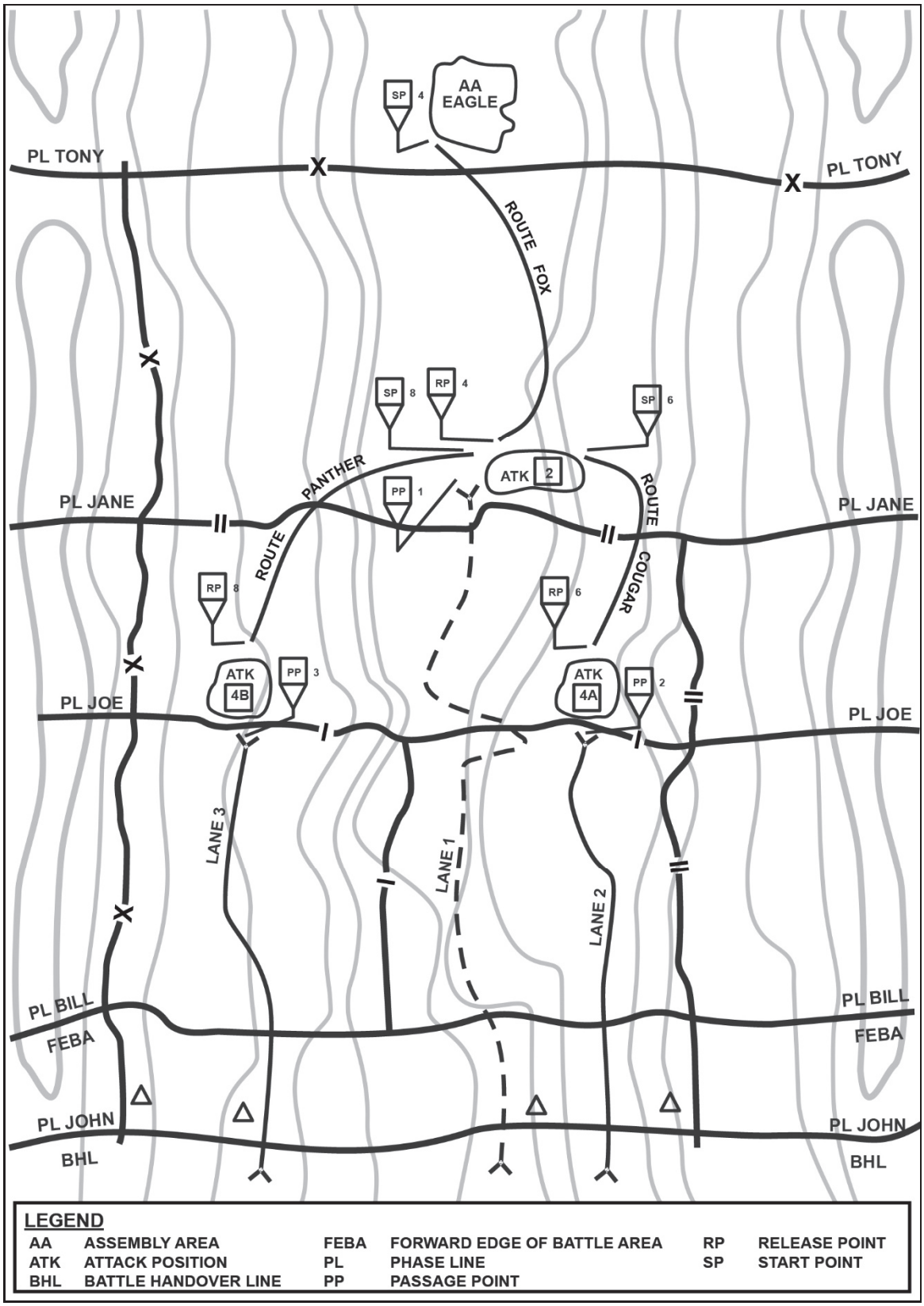


Figure 2-26. Overlay with route control measures, example

Passage of Lines, Linkup, and Battle Handover

2-201. After the company receives the order from the battalion, the company commander develops the company plan in the time available. The commander allows subordinate platoons as much time as possible to develop their own plans through the utilization of troop leading procedures (See appendix B for information on planning and troop leading procedures) to prepare for the passage of lines, linkup, battle handover, the follow-on mission, and movement to contact along the axis of Advance Red. The commander uses warning orders (WARNORDs) to enhance subordinate ability to plan in parallel with the company.

2-202. Prior to the company's movement as part of the battalion from Assembly Area Eagle, the battalion commander, battalion operations staff officer (S-3), rifle company commanders, weapons company commander, scout platoon leader, and an assault platoon move forward to make direct coordination for the passage of lines, linkup, and battle handover with the defending battalion. Upon completion of coordination, the company commander updates subordinate leadership regarding what coordination's made. The commander then finalizes the plan and rehearsals are conducted to identify any gaps in planning and understanding.

Note. When the company conducts its own direct coordination, the company commander designates subordinate leaders to conduct coordination's with the stationary unit prior to departure from the assembly area.

Enemy Information Along the Axis of Advance Red

2-203. During direct coordination as stated in the prior paragraph, the defending battalion commander and staff provide Infantry battalion 2 with all available information on the area of operation, specifically enemy information along Axis of Advance Red, the proposed battalion route for the movement to contact. The defending battalion commander states that—

- The immediate enemy force is located just to the south of the BHL (Objective Kiwi).
- The enemy force is an Infantry (dismounted) platoon size element defending in position, occupying prepared individual fighting positions.
- Anti-personnel mines are located just to the north of the defending enemy force (not illustrated).
- Small enemy forces move along Axis Red, but no known enemy defensive positions exist south of Objective Kiwi.
- The defending battalion conducts daily ground and aerial R&S missions along the forward edge of the battle area and within the battalion's forward security area.

Battalion Dismounted March

2-204. During occupation of Assembly Area Eagle, Infantry battalion 2 task organizes for tactical movement to Release Point 4 located north of Attack Position 2 within the brigade support area of the defending IBCT. On order, Infantry battalion 2 conducts a tactical movement (dismounted march) and moves in march units from Assembly Area Eagle (figure 2-27). The movement starts at 2000 hours, two days prior to the movement to contact, with all units closed into attack positions no later than 0430 hours the following day. Sequence and actions of the movement are—

- Battalion scout platoon, with attached sniper squad, moves in advance of the march serial main body. The scout platoon moves along Route Fox to Release Point 4, establishes linkup with defending forces (within the brigade support area) at Release Point 4.
- Company A moves (main body movement starts at 2130 hours) along Route Fox to Release Point 4.
- Company D (weapons company-minus), with battalion tactical command post and attached mortar section, moves along Route Fox to Release Point 4.
- Company B, with attached engineer platoon and assault platoon, moves along Route Fox through Release Point 4 (guided by the defending force) into Attack Position 2.

- Company C, with battalion main command post and attached mortar section, moves along Route Fox through Release Point 4 (guided by the defending force) into Attack Position 2.
- Unit trains remain in Assembly Area Eagle until Infantry battalion 2 passes March Objective Snake, then on order, displaces forward to vicinity March Objective Snake. (Not illustrated.)

Company A Dismounted March

2-205. During occupation of Assembly Area Eagle, Company A is task organized for movement from Assembly Area Eagle at 2130, along Route Fox to Release Point 4 accompanied by guides from the defending unit, and continues movement onto Attack Position 2.

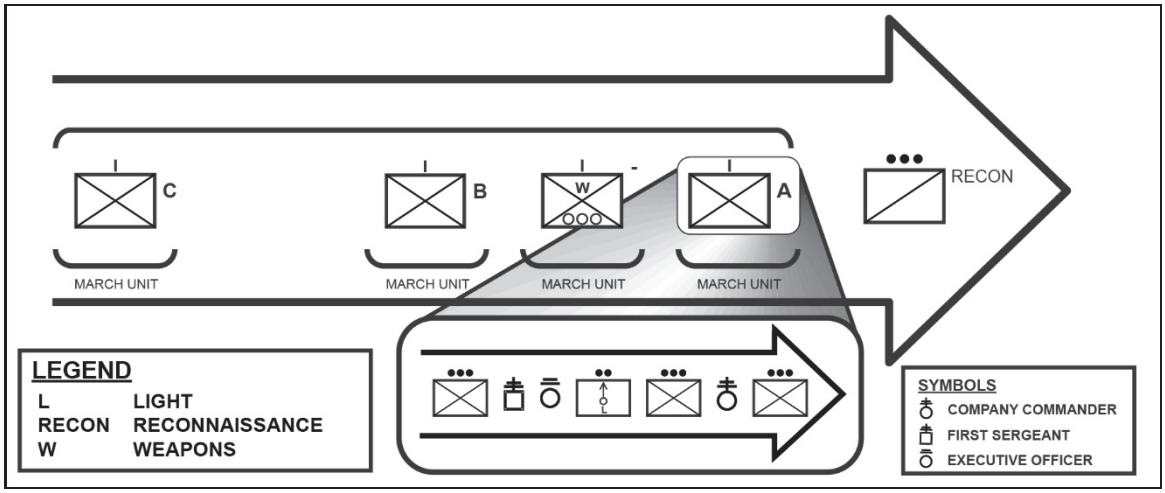


Figure 2-27. Company march unit as part of the battalion march serial (dismounted), example

Occupation of Forward Attack Positions and Support-by-Fire Positions

2-206. Once linkup established at Release Point 4, the battalion scout platoon moves (with guides from defending battalion) along Route Panther to Attack Position 4b (figure 2-28 on page 2-56). The scout platoon quarters Attack Position 4b, leaving one scout squad to conduct linkup and occupation of Attack Position 4b with Company D. The scout platoon leader, with two scout squads, conducts passage of lines (Lane 3), then reconnoiters (previously reconnoitered the by defending battalion) Support-by-Fire Positions 1 and 2 and the battalion mortar section firing position. Prior to the establishment of support by fire positions and mortar firing position, the scout platoon leader reconnoiters Objective Kiwi and inserts a surveillance team to observe the objective.

2-207. The battalion sniper squad moves (with guides from defending battalion) along Route Cougar to Attack Position 4a (figure 2-28 on page 2-56). The sniper squad quarters Attack Position 4a, leaving one sniper team to conduct linkup and occupation of Attack Position 4a with Company A. The sniper squad leader, with two sniper teams, conducts passage of lines (Lane 2) to conduct reconnaissance of previously reconnoitered (by defending battalion) route to the planned probable line of deployment for the Company A limited visibility attack.

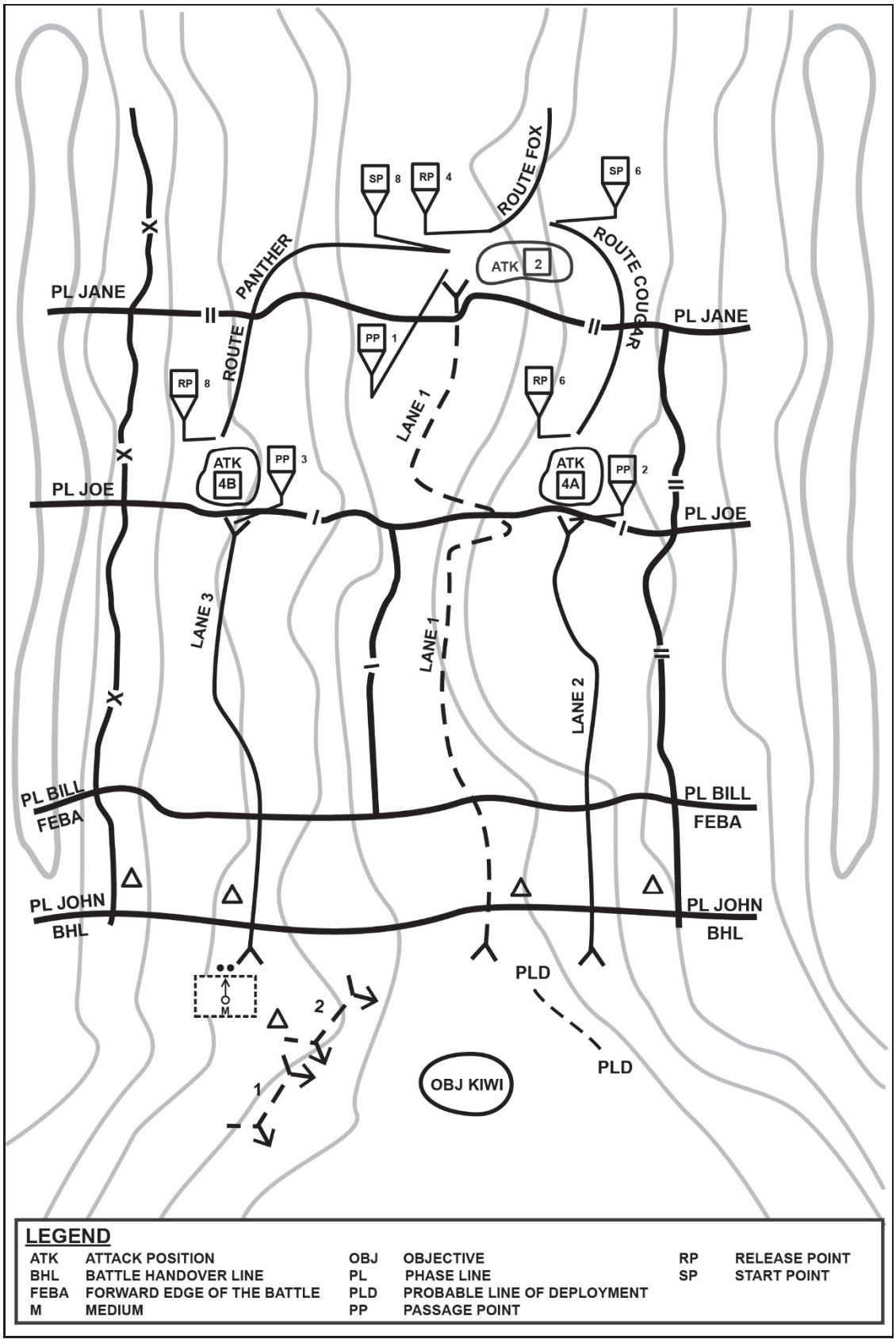


Figure 2-28. Attack positions and support by fire positions (occupation), example

2-208. Company D, with the battalion tactical command post and attached battalion mortar section, conducts linkup with guides from the defending battalion at Release Point 4 (figure 2-28). Company D moves forward along Route Panther to Attack Position 4b to the rear of the defending company of the defending battalion. Company D then conducts linkup with the scout squad to occupy Attack Position 4b. On order, Company D with the battalion tactical command post and attached mortar section conducts passage of lines (Lane 3) to previously reconnoitered Support by Fire Positions 1 and 2 and mortar firing position forward of the defending company. Company D in coordination with the defending battalion, prepares to support the seizure of Objective Kiwi and the battalion main body passage of lines by—

- Dismounting a mix of MK19 and M2 machine guns.
- Moving dismounted systems and ammunition forward into support by fire positions.
- Camouflaging positions.
- Identifying targets during daylight and make range cards.
- Laying in on designated targets.

2-209. Company A conducts linkup with guides from the defending battalion at Release Point 4 (see figure 2-28). Company A moves forward along Route Cougar, conducts linkup with scout squad and establishes Attack Position 4a to the rear of the defending company of the defending battalion. During occupation, Company A uses Attack Position 4a to facilitate deployment and last-minute coordination for the passage of lines and the limited visibility attack on Objective Kiwi.

Note. Whenever possible, units move through the attack position without stopping. An attacking unit occupies an attack position for a variety of reasons, including, for example, when the unit is waiting for specific results from preparation fires or when it is necessary to conduct additional coordination, such as a forward passage of lines. If the attacking unit occupies the attack position, it stays there for the shortest amount of time possible to avoid offering the enemy a lucrative target.

Limited Visibility Attack—Seize Objective K

2-210. Infantry Battalion 2 conducts a limited visibility attack with Company A attacking from the northeast, while avoiding anti-personnel mines to the front of the objective (figure 2-29 on page 2-58). Company D and attached battalion mortar section support the attack from Support by Fire Positions 1 and 2 and a battalion mortar firing position to the northwest of the objective. Company A moves forward from the northeast side of the objective in company column to the probably line of departure (Phase Line Sue), then attacks with two rifle platoons on line. Each rifle platoon has a designated breaching team. The third rifle platoon, in reserve, follows behind the two assaulting rifle platoons. Company mortars move with the reserve, on order establish firing position(s) to support the attack and follow-on mission. Company A commander designates Assault Positions 1 and 2, prior the Phase Line Sue, from which final preparations are made (if required) to assault the objective. These final preparations can involve tactical considerations, such as a short halt to coordinate the final assault, reorganize to adjust to combat losses, make final breach preparations, or make necessary adjustments in the attacking force’s dispositions.

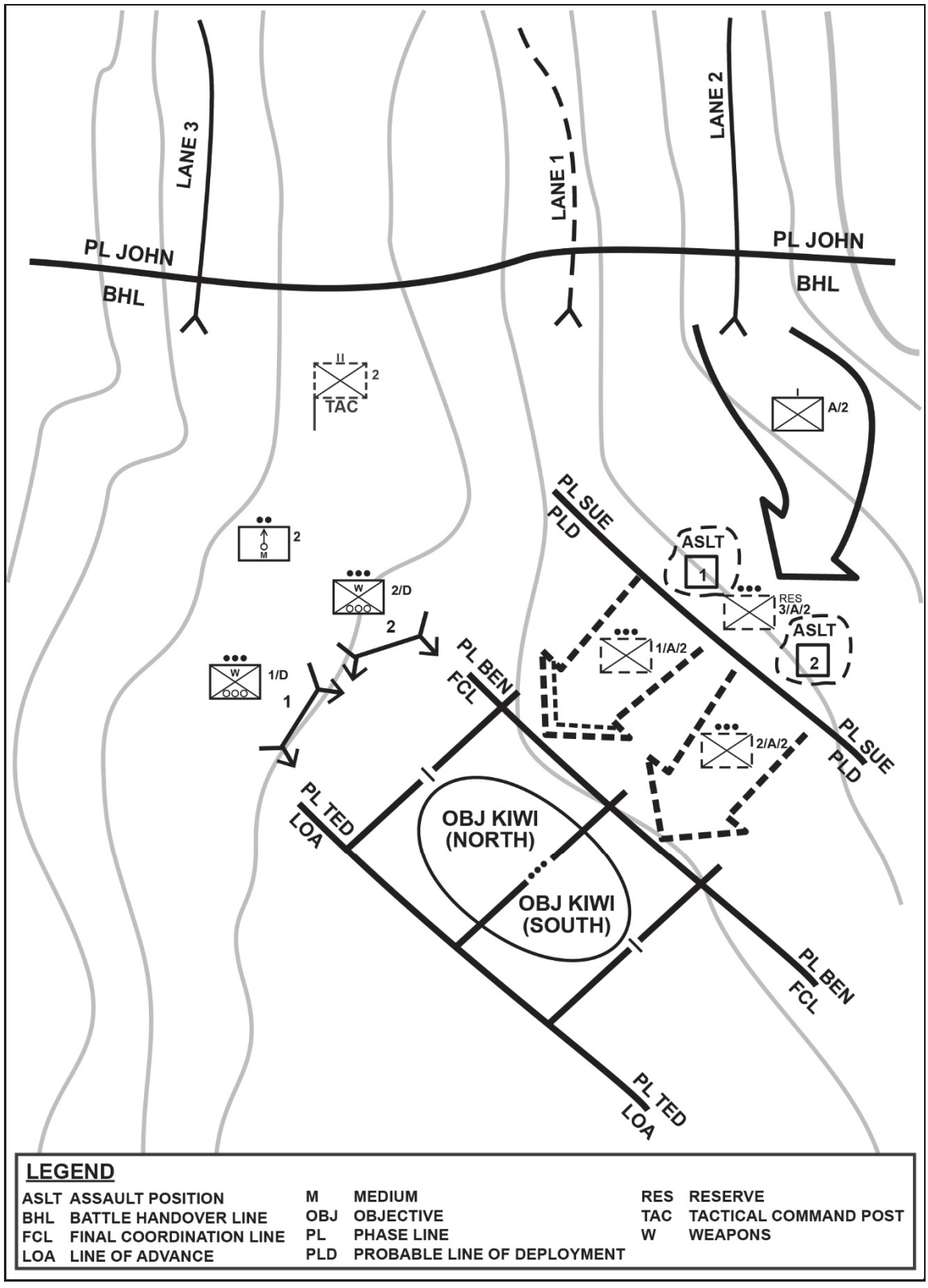


Figure 2-29. Limited visibility attack (maneuver), example

2-211. Prior to the attack and the establishment of support positions, the scout platoon leader returned to make contact with the battalion commander, vicinity Attack Position 4b, to update the commander on the current enemy situation. Once updated, the commander (with key personnel from the battalion tactical command post) and scout platoon leader conduct a passage of lines, Lane 3, guided by the defending force. The scout platoon leader then guides the commander on the leader's reconnaissance of the objective. During the leader's reconnaissance the battalion commander confirms the plan and establishes a forward position (vicinity, Support by Fire Position 2), to control the attack and follow-on mission. Scout squads provided overwatch and security throughout the commander's movement.

Note. Optimally, the commander conducts a leader's reconnaissance with key personnel to confirm or modify the plan. Depending on the enemy situation and battalion scheme of maneuver, the leader's reconnaissance may just involve the commander (with a security team). After the leader's reconnaissance, the commander modifies the plan and disseminates those changes to subordinate leaders and other affected organizations. Under the least favorable condition, the commander may not be able to conduct a leader's reconnaissance. In this case, the commander may utilize other available assets (to include IBCT or higher-level asset) to confirm or modify the plan. When these assets are unavailable and when known conditions are unchanged, the commander executes the mission according to plan.

2-212. During the battalion commander's conduct of the leader's reconnaissance, Company D begins final coordination for the movement and on order conducts a passage of lines, Lane 3, guided by the defending force. Shortly after Company D beings its passage of lines, Company A beings final coordination for movement and on order conducts a passage of lines, Lane 2, guided by the defending force. Once Company D passage of lines complete, assault platoons and attached mortar section, on order maneuver into and establish support positions, guided by the scout platoon.

2-213. As support forces maneuver into position, the sniper squad leader makes contact with the Company A commander at the passage point to update the commander on the current enemy situation. The sniper squad leader then leads the company along the previously reconnoitered route to Phase Line Sue, the probable line of deployment. Sniper teams provide overwatch and security during Company A's maneuver to and through the probable line of deployment. As Company A approaches Phase Line Sue, assault platoons in Support by Fire Positions 1 and 2 prepare to suppress the enemy, vicinity Objective Kiwi. On order, the mortar section from the battalion mortar platoon (attached to Company D) provides preparatory fires on Objective Kiwi. The battalion plans targets on the objective and on routes into and out of the objective area. As the attack progresses, the defending battalion mortars and IBCT indirect fire support assets, and Army aviation will conduct observed fires (joint fires observers) to the south of Objective Kiwi to isolate the objective.

2-214. At 0300 hours, on the day of the movement to contact, lead elements of Company A pass Phase Line Sue, the probable line of deployment. The probable line of deployment is located on the reverse slope of a ridgeline, overwatched and secured by battalion sniper teams. The probable line of deployment, where the two lead platoons deploy on line, is marked by infrared (or thermal) signal, away from enemy view. On order from the company commander, preparatory fires begin and platoons assault forward while guiding on the company's main effort (First Platoon-base platoon during movement) on the right side of the assault. The assaulting rifle platoons pass through Phase Line Ben (final coordination line) and sweep through the objective, while supporting fires shift to the front of advancing assault forces. The assault force stops at the Phase Line Ted, the limit of advance. (See figure 2-30 on page 2-60.) Designated parties move back across the objective, seize prisoners and ensure the objective is secure. Company A commander informs the battalion commander that Objective Kiwi is secure.

Note. Upon the established support by fire positions 1 and 2, and coordinated signal, Company D assault platoons suppress enemy, vicinity Objective K. In coordination with Company A commander, Company D commander shifts fires across the objective in front of the assault force using previously coordinated TRPs and phase lines tied to terrain.

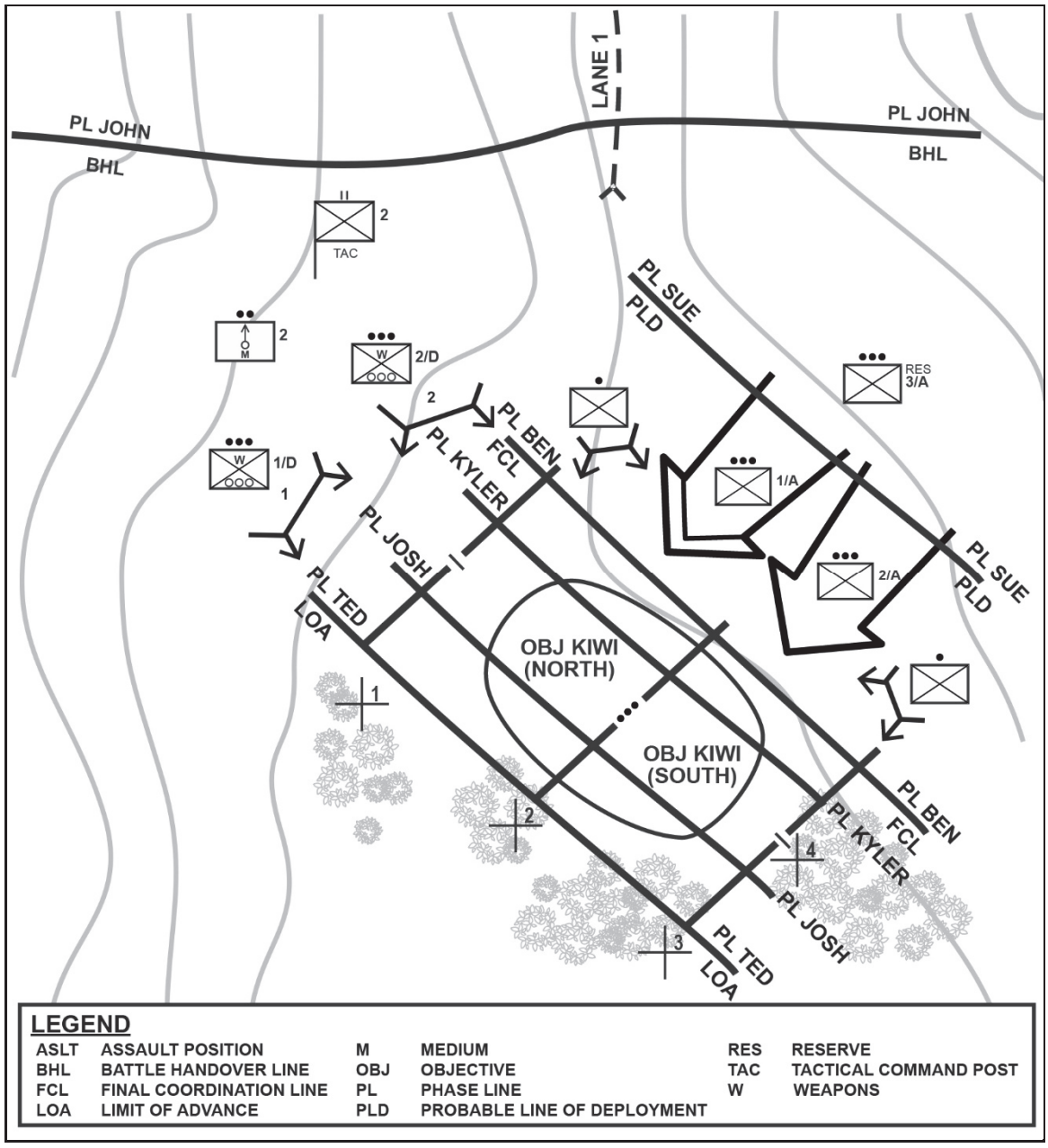


Figure 2-30. Limited visibility attack (company assault), example

Conduct of the Passage of Lines

2-215. Once Objective Kiwi is secure, Company A establishes a blocking position to the south of Objective Kiwi. The scout platoon conducts screen to the west of Company D. The sniper squad occupies observation posts to the east of Objective Kiwi. At 0300 hours, Infantry battalion 2 initiated tactical movement to conduct passage of lines (Line 1) by march unit from Attack Position 2 (figure 2-31). Company B, (lead element) with attached engineer platoon, moved from Attack Position 2 through Lane 1 to breach obstacle north of Objective Kiwi. Battalion (-) and Company C moved on order to reduce congestion and maintain operational tempo. While elements of Company B provided overwatch, engineer platoon cleared a single lane to allow lead elements of Company B to pass. One engineer squad moved with the lead elements of Company B. Engineer platoon (-) then immediately started to clear and mark a vehicles lane. Once vehicle lane cleared and marked, engineer platoon ( ) attaches to Company C, in order of movement.

Note. Breaching activities require the precise synchronization of breaching fundamentals and the critical events of a breaching activity. Refer to ATP 3-90.4 for a detailed discussion of the breaching fundamentals and critical events of a breaching activity.

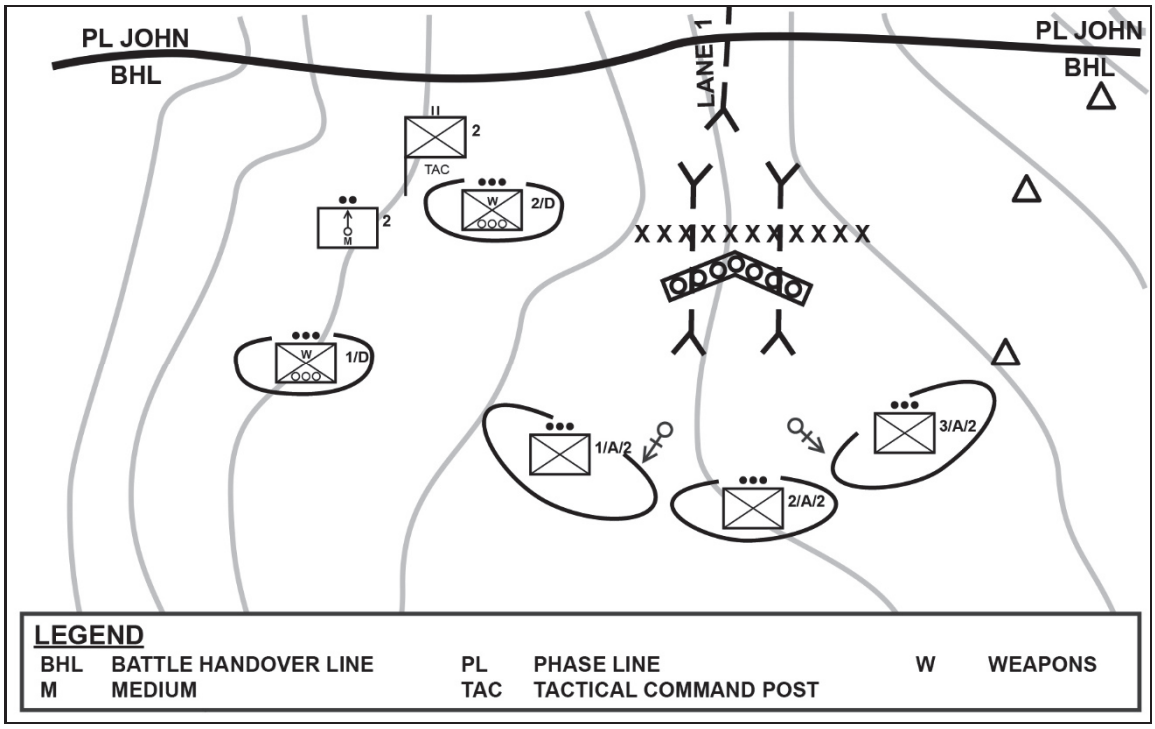


Figure 2-31. Passage of follow-on forces (breach lanes north of Objective Kiwi), example

Conduct Battle Handover

2-216. Battle handover occurs along a line (battle handover line) forward of the defending force where elements of Infantry battalion 2 (Company D) can effectively overwatch by direct fires and\or indirect fires until battle handover is complete. Once the battalion main command post clears the Passage Lane 1 (see figure 2-31 above), the battalion tactical command post affects battle handover. Infantry battalion 2 now controls its area of operation forward of the BHL and the fires within its area of operation. While within range, the defending battalion may provide fire support if requested. Infantry battalion 2 mortars begin to displace by section to provide continuous fire support.

Note. Within this scenario, Company A conducted a limited visibility attack, seized Objective Kiwi then established blocking position south of Objective Kiwi. As Objective Kiwi seized, Infantry battalion 2 (-) conducted passage of lines (Lane 1) and battle handover with defending battalion, then initiated movement to contact along Axis of Advance Red. Infantry battalion 2 movement to contact order of movement—battalion scout platoon with attached sniper squad, Company B, Company C, Company D, and Company A.

DOCTRINAL BASIS FOR A MOVEMENT TO CONTACT

2-217. Commanders conduct a movement to contact to create favorable conditions for subsequent tactical tasks. A commander conducts a movement to contact when the tactical situation is not clear, or when the enemy has broken contact. A properly executed movement to contact develops the combat situation and maintains the commander's freedom of action after contact.

FUNDAMENTALS OF A MOVEMENT TO CONTACT

2-218. A movement to contact employs purposeful and aggressive movement, decentralized control, and the hasty deployment of combined arms formations from the march to conduct offensive and defensive tasks or operations in support of stability tasks. The fundamentals of a movement to contact are—

- Focus all efforts on finding the enemy.
- Make initial contact with the smallest force possible, consistent with protecting the force.
- Make initial contact with small, mobile, self-contained forces to avoid decisive engagement of the main body on ground chosen by the enemy. (This allows the commander maximum flexibility to develop the situation.)
- Task organize the force and use movement formations to deploy and attack rapidly in any direction.
- Keep subordinate forces within supporting distances to facilitate a flexible response.
- Maintain contact regardless of the course of action adopted.

2-219. Whether an Infantry company is conducting a movement to contact independently or is moving along a separate axis, it organizes its forces with a security force and a main body. If the company is moving as part of a higher unit, such as the battalion, then it will either be the advance guard, with the requisite attachments, or be part of the main body.

2-220. Considerations for conducting a movement to contact along a single versus multiple axes include—

- Control. A single column is easier to control.
- Speed. The speed of the column or columns depends more on METT-TC than whether the unit travels in single or multiple columns.
- Length of column. Multiple columns reduce the length of the column. If the battalion is reinforced with other elements, it may become necessary to move on multiple columns.
- Enemy situation. A situation where the enemy is known to be deliberately defending favors moving with depth and minimum forces forward, that is, in a single column. If the mission requires finding all enemy in zone, multiple columns may be required.
- Width of zone. A wide zone favors multiple columns particularly if the zone must be cleared.
- Routes. In order to advance on multiple columns, adequate forward and lateral routes should exist. Routes not only impact on the speed and security of forward movement, but also on reaction time and mutual support between units.
- Moving as part of the battalion. If the company is moving as part of a battalion column or in one of its multiple columns, the basic organization does not change. Depending on the battalion's location in the column, however, certain security responsibilities may be increased, decreased, or eliminated.

ORGANIZATION OF FORCES FOR A MOVEMENT TO CONTACT

2-221. A movement to contact organizes (at a minimum) with a forward security force, either a covering force (division or corps level), an advance guard, and a main body. Based on the mission variables of METT-TC, the commander may increase the unit’s security by resourcing additional forward security forces and assets, as well as establishing flank and rear security (normally a screen or guard). The main body consist of forces not detailed to security duties and is normally the element that will conduct the decisive operation within the conduct of the movement to contact. The main body may be composed with a portion of the commander’s sustaining base. (Refer to FM 3-90-1 for additional information.)

THE INFANTRY RIFLE COMPANY AS PART OF A LARGER UNIT’S MOVEMENT TO CONTACT

2-222. The IBCT commander determines whether the Infantry battalion is part of the security force, such as the advance guard, and part of the main body. If time and conditions allow, the commander may consider infiltrating Infantry forces to positions of advantage to the suspected enemy’s rear. The force may report and bypass enemy positions, such as roadblocks, to maintain its momentum. The weapons company; may be used to support forward movement of the Infantry rifle companies or given a more open area as its area of

operation. The mortar platoon may displace by sections to ensure continuous coverage and immediate fire support when needed. Army aviation, if available, can conduct R&S, can occupy attack by fire positions, conduct aerial insertion, medical evacuation and class VIII resupply, conduct air assault to engage and destroy enemy forces or to seize and hold key terrain, and all other resupply operations (see FM 3-04).

2-223. An advance guard is a task-organized combined arms unit that precedes the main body to protect it from ground observation or surprise by the enemy. The IBCT typically organizes an advance guard to lead the brigade with or without a covering force from a higher echelon. The advance guard composition is METT-TC dependent. Within the IBCT however, only Infantry battalions, their companies, or the cavalry squadron with or without augmentation from one of the Infantry rifle companies have sufficient combat power to serve as an advance guard. Generally, the advance guard requires fire support, anti-armor, and engineer support. The advance guard should remain within range of the main body's indirect fire weapons systems.

2-224. The main body consists of forces not detailed to security missions. The combat elements of the main body prepare to respond to enemy contact with the maneuver unit's security forces. Fire support teams may displace forward to be immediately responsive to calls for fire. The main body follows the advance guard and keeps enough distance between itself and the advance guard to maintain flexibility. The IBCT commander may designate a portion of the main body as the reserve. The combat formation the battalion uses as part of the main body is METT-TC dependent. The commander however, must be responsive to the actions of the advance guard. (Refer to FM 3-96 for additional information.)

Infantry Company Conducting a Movement to Contact

2-225. The Infantry rifle company normally conducts movement to contact as part of a battalion or larger element; however based on the mission variables of METT-TC it can conduct the operation independently. As an example, the company may conduct a movement to contact prior to occupation of a screen line. Because the enemy situation is not clear the company moves in a way that provides security and supports a rapid buildup of combat power against enemy units once they are identified. If no contact occurs, the company might be directed to conduct consolidation on the objective. The Infantry company commander analyzes the situation and selects the proper tactics to conduct the mission. The commander reports all information rapidly and accurately and strives to gain and maintain contact with the enemy. The commander retains freedom of maneuver by moving the company in a manner that—

- Ensures adequate force protection measures are always in effect.
- Makes enemy contact (ideally visual contact) with the smallest element possible (ideally, a reconnaissance and surveillance element). The commander plans for any forms of contact to identify enemy locations.
- Rapidly develops combat power upon enemy contact.
- Provides all round security for the unit.
- Supports the battalion commander's concept of operation.

2-226. When the Infantry company conducts a movement to contact as part of the Infantry battalions independent movement to contact, the battalion normally organizes (as a minimum) with its companies and platoons allocated within the forward security force and a main body. The forward security force generally comprises an R&S force (can be detailed from both the maneuver companies and the scout platoon), an advance guard, and flank and rear security. The main body consists of forces not detailed to security duties. Combat elements of the main body prepare to respond to enemy contact with security forces. Fire support teams may displace forward so they can respond to calls for fire immediately. The main body follows the advance guard and keeps enough distance between itself and the advance guard to maintain flexibility. The Infantry battalion commander may designate a portion of the main body as the reserve. (See figure 2-32 on page 2-64.)

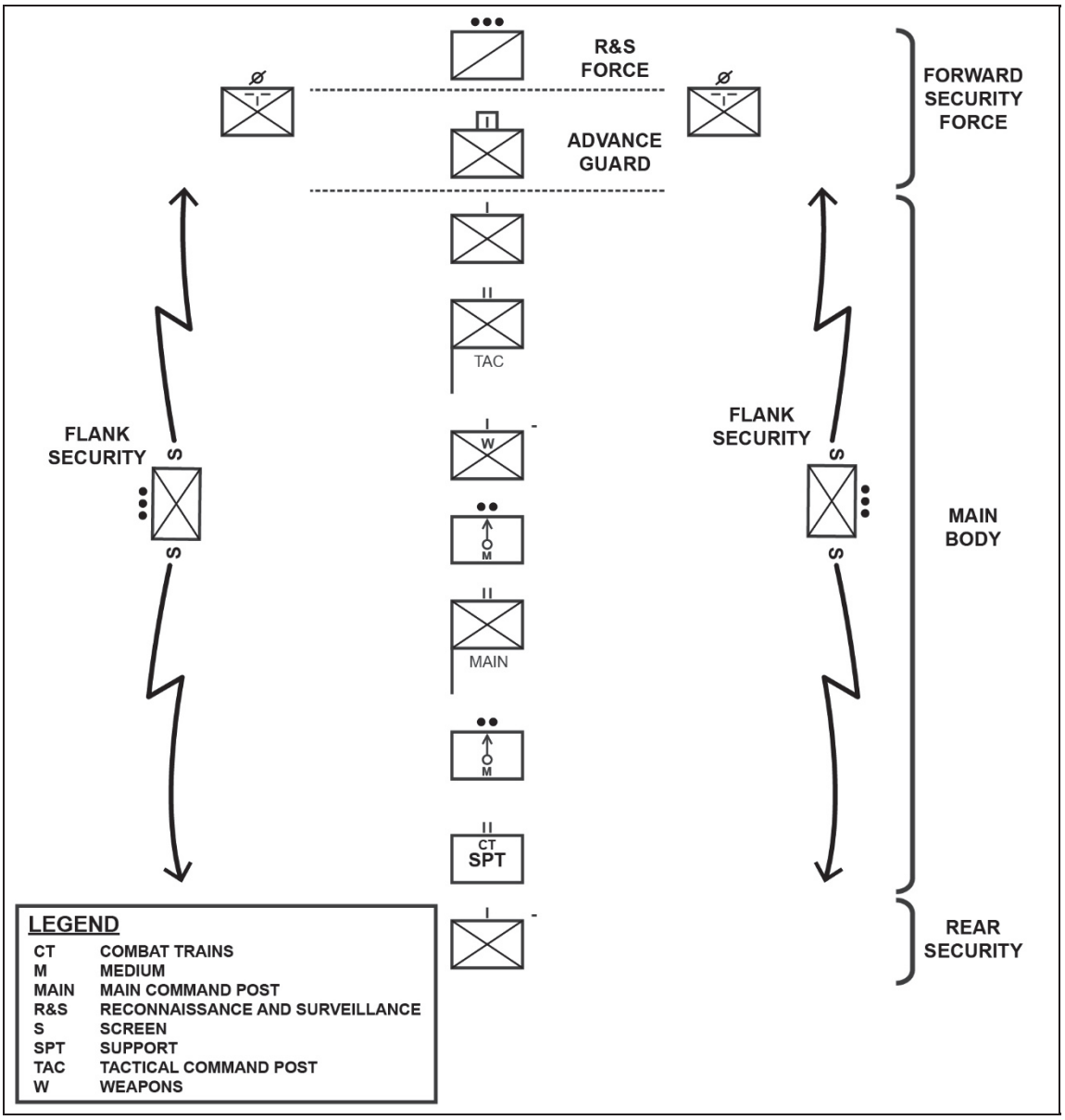


Figure 2-32. Battalion movement to contact (organization of forces), example

Reconnaissance and Surveillance Forces

2-227. The commander executes the reconnaissance missions and surveillance tasks to determine the enemy's location and intent while conducting security to protect the main body. The R&S force for the battalion is normally the scout platoon; additional augmentation may include Army aviation attack and reconnaissance units, battalion snipers, Infantry weapons company assault platoons, Infantry rifle company elements, engineer assets, and FOs (to include joint terminal attack controllers) to develop the situation before committing the advance guard or main body. The commander tasks R&S forces with conducting route reconnaissance of route(s) the main body will traverse. That route may be a cross-country mobility corridor. *Route reconnaissance* is a directed effort to obtain detailed information of a specified route and all terrain from which the enemy could influence movement along that route (ADRP 3-90).

2-228. Throughout the forward security R&S effort, the force provides new or updated information on route conditions, such as obstacles and bridge classifications, and enemy and civilian activity along the route. Specifically, the R&S force must answer the priority intelligence requirements established by the

commander. Other tasks similar to an *area reconnaissance*, a form of reconnaissance that focuses on obtaining detailed information about the terrain or enemy activity within a prescribed area (ADRP 3-90) and a *zone reconnaissance,* which 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 (ADRP 3-90), normally include—

- Reconnaissance of routes, bridges, and roads.
- Reconnaissance of obstacles and restrictive terrain.
- Surveillance of critical areas, danger areas, or key terrain.

2-229. The R&S force covers the frontage of the battalion axis of advance. The force avoids decisive engagement, but once found it must keep the enemy under surveillance and report the enemy's activity. The R&S force normally remains within supporting range of the battalion's indirect fires and initially has priority of fires for those systems. Aviation maneuver and fires external to the battalion, when available, provide the force with the capability to delay, disengage, or destroy an enemy force.

2-230. The R&S force is far enough ahead of the advance guard to provide adequate warning, a detailed picture of the enemy force (size, activity, location, and depth of the enemy force), and sufficient space for the advance guard to maneuver. However, the force must not be so far ahead that the advance guard cannot rapidly assist it in disengaging from the enemy, should that become necessary. The advance guard keys its movement on the movement of the R&S force.

2-231. The R&S force must be able to receive (and provide) the latest information available from the battalion intelligence staff officer (S-2), as well as information available from adjacent units, other battlefield surveillance assets, and the cavalry squadron when influence by its employment. With this information, the force can confirm information provided by these assets to reduce the risks and unknowns normally associated with a movement to contact. This information is made available to other subordinate elements of the battalion.

Advance Guard

2-232. The advance guard for the Infantry battalion is usually a company or company team. Its composition depends on the mission variables of METT-TC. Engineers, if available, follow or are attached to the lead elements to ensure mobility and provide route/bridge classification expertise. Assault platoons may be attachment from the weapons company. The two lead companies or company teams are task-organized accordingly when a battalion moves in parallel columns.

2-233. The advance guard operates forward of the main body to provide security for the main body and ensure its uninterrupted advance. The advance guard protects the main body from surprise attacks and develops the situation to allow time and space for the deployment of the main body when it is committed to action. The advance guard accomplishes this by destroying or suppressing enemy reconnaissance or ambushes, delaying enemy forces, and marking bypasses for or reducing obstacles. A company or company team tasked as the advance guard—

- Remains oriented on the main body.
- Reports enemy contact to the battalion commander.
- Collects and reports all information about the enemy.
- Selects tentative fighting positions for following battalion units.
- Tries to penetrate enemy security elements and reach or identify the enemy main force.
- Destroys or repels enemy reconnaissance forces.
- Prevents enemy ground forces from engaging the main body with direct fires.
- Locates, bypasses, or breaches obstacles along the main body's axis of advance.
- Executes tactical tasks such as fix, contain, or block, against enemy forces to develop the situation for the main body.
- May conduct a passage of lines with the main body.

2-234. Until the main body is committed, the company responsible for the advance guard is the battalion commander's initial main effort. Priority of fires shifts to the main body once it is committed. In planning the movement to contact, each contingency operation should revolve around the actions of the advance guard.

The lead platoons and squads within the company must be well trained on battle drills, especially those involving obstacle reduction and actions on contact. Full force rehearsals prior to execution that incorporate both local security and obstacle reduction teams enhance the advanced guard capability. Obstacle reduction by maneuver and engineer units reduce or negate the effects of existing or reinforcing obstacles with the objective is to maintain freedom of movement for maneuver units, weapon systems, and critical supplies. (See ATP 3-90.4.)

2-235. The enemy situation becomes clearer as forward security elements conduct actions on contact to rapidly develop the situation in accordance with the commander's plan and intent. By determining the strength, location, and disposition of enemy forces, these security elements allow the commander to focus the effects of the main body's combat power against the enemy main body. The overall force must remain flexible to exploit both intelligence and combat information. The forward security force should not allow the enemy force to break contact unless it receives an order from the commander. *Actions on contact* are a series of combat actions often conducted nearly simultaneously taken on contact with the enemy to develop the situation (ADRP 3-90). Actions on contact are—

- Deploy and report.
- Evaluate and develop the situation.
- Choose a course of action.
- Execute selected course of action.
- Recommend a course of action to the higher commander.

Note. In both the offense and defense, contact occurs when a unit encounters any situation that requires an active or passive response to a threat or potential threat. The eight forms of contact are visual; direct; indirect; non-hostile; obstacles; aircraft; chemical, biological, radiological, and nuclear (see appendix H) and electronic warfare (see appendix B). The conduct of tactical offensive and defensive tasks most often involves conduct using the visual, direct, and indirect forms.

2-236. When contact is made, the advance guard forces the enemy to withdraw or destroys small enemy groups before they can disrupt the advance of the main body. When the advance guard encounters large enemy forces or heavily defended areas, it takes prompt and aggressive action to develop the situation and, within its capability, defeat the enemy. The commander reports the location, strength, disposition, and composition of the enemy and tries to find the enemy's flanks and gaps or other weaknesses in the enemy's position. The main body then may join the attack. The battalion commander usually specifies how far in front of the main body the advance guard is to operate and reduces those distances in complex terrain and under low-visibility conditions.

2-237. Leaders at echelons, from platoon through battalion, conduct actions on contact when they or a subordinate element, recognize one of the forms of contact or receive a report of enemy contact. The company may conduct actions on contact in response to a variety of circumstances, including:

- Subordinate platoon(s) conducting actions on contact.
- Reports from the battalion or another higher unit.
- Reports from or actions of an adjacent unit.

2-238. The development of course of actions (COAs) are the foundation for the company's scheme of maneuver and actions on contact. To identify likely contact situations that may occur during an operation, the commander and subordinate platoon leaders analyze the situation throughout troop leading procedure. The commander plans for each of the forms of contact throughout the operation. Through planning and rehearsing, they develop and refine COAs to deal with probable enemy actions. During the troop leading procedures, the commander evaluates a number of factors to determine their impact on the unit's actions on contact. For example, the commander considers how the likelihood of contact affects the choice of movement techniques and formations to outline procedures for the transition to more secure movement techniques before a contact situation.

2-239. The commander understands that properly executed actions on contact (for any of the forms of contact) require time at both platoon and company levels. To develop the situation fully, a platoon

might have to execute extensive lateral movement, conduct reconnaissance by fire, or call for and adjust indirect fires. Each of these activities requires time. The commander must balance the time required for subordinate elements to conduct actions on contact with the need of the company or battalion to maintain tempo and momentum.

2-240. The company executes combat actions during actions on contact, as applicable, for each form of contact using a logical, well-organized process of decision making and action, which entails the separate actions as discussed above (deploy and report, evaluate and develop the situation, choose a course of action (COA), execute the selected COA, and recommend a COA to the higher commander). These can be done out of sequence. In fact, some are more likely to be done at the same time. These actions provide an orderly framework that enables the company and its platoons to respond to initial contact and make right decisions and rapidly take the right actions. Ideally, the company will acquire the enemy before being sighted by the enemy; the company can then initiate physical contact on its own terms by executing the designated COA. The combat actions during actions on contact are discussed in detail in the following paragraphs.

2-241. Deploy and report. Events that occur during initial contact depend in great measure on whether the contact is expected or unexpected. Regardless of whether contact is expected or unexpected, actions on contact concludes with the unit deployed (into base of fire and maneuver forces), the enemy suppressed or destroyed (if applicable), and the commander sending a contact report to battalion headquarters. The following examine some variables the company commander faces in expected and unexpected contact situations. The roles of platoon battle drills, SOPs, and reports are also detailed.

- Expected contact. If the commander expects contact, the commander will have already deployed the company by transitioning to the bounding overwatch movement technique. If the company is alert to the likely presence of the enemy, it has a better chance of establishing visual contact and then physical contact, on its own terms before being detected by the enemy. An overwatching or bounding platoon usually makes visual or physical contact that initiates the company's actions on contact. In a worst case scenario, the platoon might be engaged by a previously undetected (but expected) enemy element. In this event, the platoon conducts a battle drill for its own survival and then initiates actions on contact.
- Unexpected contact. In some cases, the company may make unexpected contact with the enemy while using traveling or traveling overwatch. The element in contact or, if necessary, the entire company might have to deploy using battle drills to survive the initial contact.
- Battle drills. Battle drills provide automatic responses to contact situations where immediate, often violent execution is critical, both to initial survival and to ultimate success in combat. Rather than being a substitute for carefully planned COAs, drills buy time for the unit in contact, and frame the development of the situation. When enemy contact occurs, the company's platoons deploy immediately, executing the appropriate battle drills under the direction of the commander. (For additional information on dismounted platoon battle drills, see ATP 3-21.8).
- SOPs that are effectively written, and well-rehearsed helps to ensure quick, predictable actions by all members of the company. The SOP, unlike platoon battle drills, allows leaders to take into account the friendly task organization, a specific enemy, and a specific type of terrain. Therefore, the SOP can assist the company in conducting actions on contact and maintaining the initiative in a number of battlefield situations.
- Reports that are timely, accurate, and complete are essential throughout actions on contact. As part of deploy and report, the company commander must send a contact report to the battalion as soon as possible after contact occurs. The commander provides subsequent reports to update the situation as necessary.

2-242. Evaluate and develop the situation. While the company deploys, the commander evaluates and develops the situation. The goal of these actions is to create conditions, which provide for the successful execution of the decisive action. The commander gathers as much information as possible, either visually or, more often, through reports from the platoon(s) in contact. The commander analyzes the information to determine critical operational considerations, including these factors:

- Size of the enemy element.
- Location, composition, activity, orientation, and capabilities of the enemy force.
- Effects of obstacles and terrain.

- Probable enemy intentions.
- How to gain positional advantage over the enemy.
- Friendly situation (location, strength, and capabilities).
- Possible friendly COAs to achieve the specified end state.

2-243. After evaluating the situation, the commander may discover that the company does not have enough information to identify the necessary considerations. To make this determination, the commander must further develop the situation in accordance with the battalion commander's intent, possibly using one or a combination of the following techniques.

- Squads conducting surveillance (using binoculars and other optical aids).
- Lateral maneuver to gain additional information by viewing the enemy from another perspective.
- Indirect fire.
- Reconnaissance by fire.

2-244. Once the commander has determined the size of the enemy force the company has encountered, the commander then sends a report to the battalion.

2-245. Choose a COA. After developing the situation and determining that the commander has enough information to make a decision, the company commander selects a COA that meets the requirements of the battalion commander's intent, achieves the company's purpose, maximizes the effects of terrain, minimizes casualties, and is within the company's capabilities. The nature of the contact (expected or unexpected) may have a significant impact on how long it takes a commander to develop and select a COA. For example, in preparing to conduct an attack, the company commander determines that the company will encounter an enemy security observation post along its axis of advance. During troop leading procedures, the commander develops a scheme of maneuver to defeat the outpost. When the company's lead platoon makes contact with the enemy, the commander can quickly assess that this is the anticipated contact and direct the company to execute the plan. On the other hand, unexpected contact with a well-concealed enemy force may require time for development of the situation at the platoon level. As the unit fights for critical information that will eventually allow the commander to make the right decision, the company might have to employ several of the techniques for developing the situation.

2-246. The company commander has several options in selecting a COA. Below are procedures for selecting a COA:

- First the COA needs to be feasible. The COA can accomplish the mission within the established time, space, and resource limitations. It must balance cost and risk with the advantage gained. The COA has to be suitable meaning that it can accomplish the mission within the commander’s intent and planning guidance and distinguishable in that it differ significantly from the others (such as scheme of maneuver, lines of effort, phasing, use of the reserve, and task organization).
- If the development of the situation reveals no need for change, the company commander directs the company to execute the original plan.
- If the analysis shows that the original plan is still valid but that some refinement is necessary, the company commander informs the battalion commander (prior to execution, if possible) and issues a fragmentary order to refine the plan.
- If the analysis shows that the original plan needs to be changed but the selected COA will still comply with the battalion commander's intent, the company commander informs the battalion commander (prior to execution, if possible) and issues a fragmentary order to retask subordinate elements.
- If the analysis shows that the original plan deviates from the battalion commander's intent and needs to be changed, the company commander must report the situation and, based on known information in response to an unforeseen enemy or battlefield situation, recommend an alternative COA to the battalion commander.
- If the battlefield picture is still vague, the company commander must direct the company or a platoon to continue to develop the situation. This will allow the commander to gather the information needed to clarify a vague battlefield picture. The commander then uses one of the first four options to report the situation, choose a COA, and direct further action.

2-247. Execute selected COA. In executing a COA, the company transitions to maneuver. It then continues to maneuver throughout execution (either as part of a tactical task or as an advance while in contact) to reach the point on the battlefield where it executes its tactical task. The company can employ a number of tactical tasks as COAs, any of which might be preceded and followed by additional maneuver. As execution continues, more information becomes available to the company commander. Based on the emerging details of the enemy situation, the commander might have to alter the COA during execution.

2-248. Recommend a COA to the higher commander. Once the commander selects a COA, keeping in mind the higher commander's intent, the commander reports it to the higher commander, who has the option of disapproving it based on its impact on the overall mission. To avoid delay, battalion and company SOPs may provide automatic approval of certain actions. If the higher commander assumes responsibility for continuing to develop the situation, as ordered the company or subordinate platoon or element leader executes those actions. The higher commander must be careful to avoid becoming overly focused on initial security engagements to the determent of operations directed against the enemy main body.

Flank and Rear Security

2-249. When adjacent units are not protecting the battalion's flanks or rear, the battalion internally provides flank and rear security. Flank and rear security missions may be given to one company or to a platoon-size element from one of the companies within the main body to conduct security missions under organic company control or battalion control. These security elements remain at a distance from the main body to allow the battalion time and space to maneuver to either the flanks or the rear. Flank and rear security elements also operate far enough out to prevent the enemy from placing direct or observed indirect fires on the main body. Indirect fires are planned on major flank and rear approaches to enable security. Because of its observation capabilities, firepower, and mobility, the weapons company may conduct security missions. The battalion may use elements of the scout platoon for flank and rear security, or may require main body forces to provide flank and rear security. The company commander considers the array of subordinate platoons, formations, and movement technique that provides speed and security, and how the platoons will provide support to one another if contact is made. Consideration for how the battalion mortar platoon and company mortar section is employed if contact is made is critical to providing security to the flanks, and rear of the battalion.

2-250. During movement, for example, one company might be assigned the mission to provide forces for security of the flanks or rear of the battalion column. Normally this is the trail company of the battalion, which provides for centralized control and tactical integrity. Typically, the battalion commander specifies one platoon for each flank and one for the rear. METT-TC may call for reinforcement of certain elements as well. The company headquarters and remaining platoons will likely march with the main column.

2-251. The flank guard force protects the main body from ground observation and surprise ground attack from the flank, Should the enemy initiate an attack, the flank guard may counterattack, defend, or delay to allow the main body to pass from the area, deploy, or maneuver. The following applies:

- Responsibility might be assigned to the flank guard using a series of terrain features that block enemy likely avenues of approach; these positions must be coordinated with the protected main body unit(s).
- Movement of the guard force is tied to movement of the protected unit(s) and may employ successive or alternate bounds to blocking positions.
- The flank guard must maintain close liaison with the protected unit(s) by all available means such as radio, patrols, or helicopters.
- Distances to the flank must assure mission accomplishment while trying to stay within range of the battalion mortars; normally about one terrain feature is tactically sound.

2-252. The rear guard force prevents enemy interference with the main body by stopping or delaying an attack to the rear; and prevents enemy direct fire or ground observed indirect fire from harassing the main body. The following applies:

- During halts, the rear guard occupies positions that enable it to protect the rear of the main body.
- The rear guard normally moves in column formation except where expected enemy action causes the need to deploy in width.

Main Body

2-253. The main body consist of forces not detailed to the security of the Infantry battalion and is normally the force that conducts the decisive operation or the force resourced as the main effort within the conduct of the movement to contact. The main body contains most of the battalion's combat elements and is arrayed to achieve all-around security throughout the movement. Companies and platoons within the main body are prepared to deploy and attack, giving them the flexibility to maneuver to a decisive point on the battlefield to destroy the enemy. The commander and platoon leaders anticipate changes within the plan in order to remain flexible and adaptive. The battalion commander designates a portion of the main body for use as the reserve. The size of the reserve is based upon the mission variables of METT-TC and the amount of uncertainty concerning the enemy.

2-254. The main body's rate of movement is dictated by the advance guard. The main body maintains situational awareness of the advance guard's progress and current enemy situation and provides responsive support when the advance guard is committed. The use of standard formations and battle drills allows the battalion commander, based on the information available, to shift combat power rapidly on the battlefield. Companies employ the appropriate formations and movement techniques within the battalion formation. Company commanders, based on their knowledge of the battalion's situation, anticipate the battalion commander's decisions for commitment of the main body and plan accordingly. During the movement the company commander within the main body visualizes how the company will be employed into the larger fight, and informs subordinate leaders of potential contingencies throughout.

2-255. A company not in the lead uses traveling or traveling overwatch. It must be ready to maneuver in support of the lead company, or in another direction, or to assume the lead company's mission.

PLANNING

2-256. As in any type of operation, the commander plans to focus operations on finding the enemy and then delaying, disrupting, and destroying each enemy force as much as possible before direct-fire range. The commander analyzes the terrain to include enemy air avenues of approach and the enemy's most dangerous course of action as determined in the war gaming portion of the troop leading procedures (TLPs). (See appendix B for a detailed discussion on TLPs.) Due to the uncertainty of the enemy's precise location, the analysis during TLPs may consist of multiple contingencies and branch plans. Because of the company's vulnerability, by the nature of a movement to contact, the enemy must not be underestimated.

2-257. The plan for the movement to contact addresses not only actions anticipated by the commander based on available intelligence information, but also the conduct of meeting engagements at anticipated times and locations where they might occur. Company security is enhanced through a thorough analysis of the enemy by the company commander as part of Step 3 of TLP, make a tentative plan. The interpretation of the intelligence preparation of the battlefield (IPB) products provided by the battalion, and on-going understanding of the battalion commander's visualization of the enemy and indicating danger areas where platoons are most likely to make contact shapes the outcome of the enemy analysis. In analyzing the enemy, the company commander must understand the IPB. Although the commander does prepare IPB products for use in preparation of analysis, and orders, the commander does not prepare individual products for subordinates. The commander must be able to use the products of the battalion's IPB effectively, in the analysis and be able to inform subordinates based on the compilation of company and higher IPB products.

2-258. Battalion IPB products necessary to support company planning and operations include—

- Enemy situation overlays with associated course of action statements and high-value target lists.
- Event templates and associated event matrices.
- Modified combined obstacle overlays, terrain effects matrices, and terrain assessments.
- Weather forecast charts, weather effects matrices, light and illumination tables, and weather estimates.
- Civil considerations overlays and assessments.

Note. The IPB process consists of the following four steps: define the operational environment; describe environmental effects on operations; evaluate the threat; and determine threat course of actions. A threat is any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland. An enemy is a party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged.

2-259. During the mission analysis conducted during Step 3 of TLPs, consideration of terrain and weather help to identify potential danger areas that are likely enemy defensive locations, engagement areas, observation posts, and obstacles. The utilization of military aspects of terrain; obstacles, avenues of approach, key terrain, observation and fields of fire, and cover and concealment (often expressed in the Army memory aid OAKOC), are used to analyze the ground. The leader determines the effects of each aspect of terrain on both friendly and enemy forces. These effects translate directly into conclusions that can apply to friendly or enemy COAs. Even if time is tight, the leader should allocate as much time as possible to these military aspects, starting at the objective area, and then analyzing other aspects of key terrain. Conclusions include at least the following:

- Effective templating of enemy forces and key weapon systems.
- Effective positioning of own assets.
- Understanding of time and space relationships of events, leading to a thorough contingency plans.
- Effective echeloning and identifying of enemy observation and indirect fires.
- Effective selecting of movement techniques and formations, to include when to transition to tactical maneuver.

2-260. Fire support plans target potential danger areas, identified during the mission analysis, and they become on-order priority targets placed into effect and cancelled as the lead element can confirm or deny enemy presence. The company movement to contact order must address coverage of these danger areas not only based on actions anticipated but also on available intelligence information. If determined during war gaming that security forces will most likely not be able to clear these areas, more deliberate movement techniques are planned. (See appendix D for a detailed discussion on fire support planning and targeting)

2-261. During a movement to contact, the commander seeks to gain contact with the enemy using the smallest elements possible. Within the Infantry battalion, normally this element is the battalion scout platoon or an Infantry rifle platoon performing R&S. Within the rifle platoon, it is likely that lead squads will make contact and be required to react to contact. These units must begin rehearsals and preparation as soon as possible to ensure success. Thusly, leaders initiate necessary movement, Step 4 (initiate movement) in TLPs, to continue mission preparations or to posture the unit for the start of the mission. Step 4 can be executed at any time throughout the sequence of the troop leading procedure. Step 4 can include movement to an assembly area, battle position or new area of operation, or the movement of guides to quartering parties. As elements plan in parallel echelons within the company and with the battalion, the company can continue preparations and rehearsals. Army aviation attack and reconnaissance units or other R&S assets task organized to forward security forces provide additional combat power, increasing their abilities to develop the situation and provide an ongoing update to intelligence gaps.

2-262. During Step 5 (conduct reconnaissance) in TLPs, leaders weigh the advantages of reconnoitering personally against the combat multiplier to exploit the principles of speed and surprise. The commander reconnoiters visually to verify higher headquarters intelligence if time permits. The commander seeks to confirm priority intelligence requirements that support tentative plans. Usually, these priority intelligence requirements consist of assumptions or critical facts about the enemy. This can include strength and location especially at template positions. In addition to the enemy, priority intelligence requirements can include information about the terrain. If possible, the commander includes subordinate leaders in their reconnaissance efforts. The main body's planned movement formation should contribute to the goal of making initial contact with the smallest force possible. As intelligence is collected, the company commander begins to complete the plan (Step 6 in TLPs), including expanding selected or refined courses of action into the OPORDs. The commander prepares overlays, refines the target list worksheet, completes sustainment and mission command

requirements, and of course, updates the tentative plan based on the latest reconnaissance and surveillance information.

2-263. Both the R&S force and advance guard should have sufficient uncommitted forces to develop the situation without requiring the deployment of the main body in most cases. The commander can rely on fire support assets to weight lead element combat power, but still provides lead elements with the combat multipliers they need to accomplish their mission. The frontage assigned by the battalion to the company, and delegated to the platoons in a movement to contact must allow them to apply sufficient combat power to maintain the momentum of the operation. The frontage should also provide for efficient movement of the force. Air-ground operations enable fire superiority when organized correctly to fire immediate suppression missions to help maneuver forces get within direct-fire range of the enemy.

2-264. Within a movement to contact the commander can opt not to designate a main effort until forces make contact with the enemy, unless there is a specific reason to designate it. In this case, the commander retains resources under direct control to reinforce the main effort. The commander may designate the decisive operation during the initial stages of a movement to contact because of the presence of a key piece of terrain or an avenue of approach. The commander may designate *bypass criteria*, which is measures during the conduct of an offensive operation established by higher headquarters that specify the conditions and size under which enemy units and contact may be avoided (ADRP 3-90). Bypass criteria is clearly stated by the commander, and dependent on the mission variables of METT-TC. Criteria may also include maneuver around an obstacle or position to maintain the momentum of the operation.

2-265. The commander uses the minimal number and type of control measures possible in a movement to contact because of the uncertain enemy situation. These measures include designation of an area of operation with left, right, front, and rear boundaries, or a separate area of operation bounded by a continuous boundary (noncontiguous operations). The commander uses these control measures along with mission orders, coupled with battle drills and formation discipline, to synchronize the movement to contact. Company and company teams are not normally assigned their own areas of operations during the conduct of a movement to contact.

2-266. A movement to contact usually starts from a line of departure at the time specified in the operation order or fragmentary order. The commander controls the movement to contact by using phase lines, contact points, and checkpoints as required and controls the depth of the movement to contact by using a limit of advance or a forward boundary. March objectives (one or more) may be used to limit the extent of the movement to contact and orient the force. This movement is often terrain-oriented and used only to guide the force. Although a movement to contact may result in taking a terrain objective, the primary focus should be on the enemy force. When the commander has enough information to locate significant enemy forces, the commander should plan another type of offensive action. (Refer to ATP 3-21.20 and FM 3-96 for additional information.)

PREPARATION

2-267. During preparation, the company commander and subordinate leaders must receive the most current information from organic and higher echelon information collection assets. The battalion staff must ensure that fragmentary orders are published and that plans are updated to reflect any changes to the company's mission. The company commander must ensure subordinates understand the battalion commander's intent and concept of operation and the company's concept of operation and commander's intent, in addition to their individual missions even as new information becomes available. The commander uses confirmation briefs, backbriefs, and rehearsals to ensure missions are understood and all actions are integrated and synchronized. Simple plans that are flexible and rehearsed repetitively against various enemy conditions and that rely on established tactical SOPs are essential to success.

2-268. Subordinate unit preparations are reviewed to ensure they are consistent with the commander's intent and concept of operation. Subordinate rehearsals should emphasize movement through danger areas, actions on contact, passage of lines, and transitions. The commander and subordinate leaders ensure subordinate units (to include attachments) understand assigned missions during movement and maneuver options during execution. Plans are war gamed and rehearsed against enemy course of actions that would cause the battalion and/or company to execute various maneuver options at different times and locations. The goal is to rehearse

subordinates on potential situations that may arise during execution to promote flexibility while reinforcing the commander's intent.

2-269. The commander seeks to rehearse the operation from initiation to occupation of the final objective or limit of advance. Rehearsals include decision points and actions taken upon each decision. Often, the commander prioritizes maneuver options and enemy course of actions to be rehearsed based on the time available. The rehearsal focuses on locating the enemy, developing the situation, executing a maneuver option, exercising direct and indirect fire control measures, and exploiting success. The rehearsal must consider the potential of encountering stationary or moving enemy forces. (See appendix B for more information on preparation activities.) Other actions to consider during rehearsals include—

- Forward security force actions on contact.
- Actions to cross danger areas.
- Advance guard making contact with a small enemy force.
- Advance guard making contact with a large force beyond its capabilities to defeat.
- Advance guard making contact with an obstacle the reconnaissance and surveillance force has not identified and reported.
- Flank/rear security force making contact with a small force.
- Flank/rear security force making contact with a large force beyond its capability to defeat.
- Actions to report and bypass of an enemy force (based on bypass criteria).
- Transitions and maneuver option.

EXECUTION

2-270. During execution, the company moves rapidly to maintain the advantage of a rapid tempo. However, the commander must balance the need for speed with the requirement for security. The commander bases the decision on the effectiveness of the R&S efforts, friendly mobility assets, effects of terrain, and the enemy's capabilities. The company must closely track the movement and location of subordinate platoons, attachments, and adjacent units. This ensures that battalion and/or company security forces provide adequate security for the main body and that they remain within supporting range of the main body, mortars, and field artillery. The movement of fire support, protection, and sustainment units is controlled by the Infantry battalion, their parent organizations, or the IBCT (depending on command and support relationships), which adjust their movements to meet support requirements, avoid congestion of routes, and ensure responsiveness.

2-271. Obstacles pose a significant threat to the rifle company's momentum due in great part to the limited breaching capability within the company. Collaborating with engineers can provide valuable information on terrain mobility, where the enemy is likely to emplace obstacles, and where the enemy could employ engineer assets. Once a company element detects an obstacle, it immediately reports the location and description throughout the company updating all elements and to its higher headquarters. The battalion seeks a secure and favorable bypass. If a bypass is available, and the battalion commander chooses to bypass the obstacle then the unit in contact with the obstacle exploits, marks, and reports the bypass. Enemy forces normally overwatch obstacles. Units should approach all obstacles and restricted terrain with the same diligence with which they approach a known enemy position. (See appendix G.)

2-272. When the company must conduct a breach it applies the breaching fundamentals commonly referred to as suppress, obscure, secure, reduce, and assault (SOSRA). The breaching element maneuvers to suppress; employing direct or indirect fires on enemy personnel, weapons, or equipment to prevent or degrade enemy fires and observation of friendly forces. Obscure any enemy forces overwatching the obstacle, it then secures the reduction to prevent the enemy from interfering with obstacle reduction and passage of the assault force. It then reduces the obstacle to support its movement. (See appendix G.)

2-273. The analysis of the terrain on the battlefield and commonly generated battalion products during planning, include terrain overlays, and the modified combined obstacle overlays, (commonly referred to as MCOOs). These products are terrain effects matrices, and terrain assessments that are critical to making changes to task organization (if necessary), and during company commander and subordinate leader planning. Engineer assets from the brigade engineer battalion (when attached) support the breach effort by creating lanes, marking lanes, and guiding the main body through the obstacle. R&S forces, for example the

battalion sniper squad, can provide long-range observation and fires on enemy units overwatching the obstacle. (See ATP 3-21.20 for more information.)

2-274. The rifle company, when part of the battalion's main body, destroys enemy forces with a combination of fire and movement. Depending on the battalion commanders bypass criteria and the composition of the advance guard, the advance guard may fix company or smaller size enemy forces identified by the R&S force. Once committed as the fixing force, the advance guard fixes the enemy until the main body can destroy it. The advance guard must provide the location of such a fixed enemy force to the battalion, who then disseminates the information to all units in the battalion. The communication between main body and fixing force commanders is critical to coordinate actions and avoid fratricide. The fixing force directs or guides the finishing force to the best location to attack the enemy. Once the enemy force is destroy, all forces continue the advance.

2-275. When the rifle company conducts a movement to contact as the advance guard for the battalion, the battalion commander establishes bypass criteria (for example, a specific type or size) that allows the company to report and bypass enemy forces lees than a specific type or size. When an enemy force meets the criteria, the company fixes the enemy force and leaves a small force to maintain contact while the remainder of the company continues the advance. Once bypassed, the destruction of the enemy force becomes the responsibility of the main body or a follow-on force of the battalion. Bypassed forces present a serious threat to forces that follow the maneuver elements, especially sustainment elements. As they move around these threats, it is imperative the bypassed enemy forces' locations and strengths are disseminated throughout the battalion to enable following units to properly orient their security forces. (See ATP 3-21.20 for more information.)

2-276. A *meeting engagement* is a combat action that occurs when a moving force, incompletely deployed for battle, engages an enemy at an unexpected time and place (FM 3-90-1). The enemy force may be moving or stationary. A meeting engagement is most likely during a movement to contact. Once in contact, the company's goal is to maneuver and overwhelm the enemy with combat power before they can react. This requires the commander to keep forces in a posture ready to act immediately to contact and develop the situation. Subordinate platoons must act on contact, develop the situation, report, and gain a position of advantage over the enemy to give the company time to act quickly and appropriately. The company's success depends on its subordinate leaders' ability to develop the situation.

2-277. Usually in a battalion movement to contact, R&S forces makes initial contact. The force determines the size and activity of the enemy force and avoids being fixed or destroyed. If possible, the R&S force avoids detection. When the enemy is moving, the R&S force determines the direction of movement and the size and composition of the force. The R&S force's observers can disrupt lead enemy forces by placing indirect fires on them. Speed of decision and execution is critical when the enemy is moving. When the enemy is stationary, the R&S force determines if the enemy is occupying prepared positions and is reinforced by obstacles and minefields. The R&S force tries to identify any crew-served weapon or antitank weapon positions, the enemy's flanks, and gaps in positions. The R&S force passes this combat information to the battalion headquarters and the advance guard for the battalion.

2-278. When the rifle company is committed as the advance guard, the company maneuvers to overpower and destroy platoon-size and smaller security forces. Commitment against a larger force or an enemy strong point, normally requires the deployment of the battalion's main body. The advance guard protects the main body by fixing enemy forces, which allows the battalion main body to retain its freedom to maneuver. In developing the situation, the advance guard commander maintains pressure on the enemy by fire and movement. The advance guard probes and conducts a vigorous reconnaissance of the enemy's flanks to determine the enemy's exact location, composition, and disposition. Once contact is made with an enemy force, there are one of five planned options—attack, defend, bypass, delay, or withdraw.

2-279. During planning, the five options are war gamed at the battalion and company level generating branch plans and decision points based on the current situation. The lead element within the company, most likely the lead squad of the lead platoon, conducting the advanced guard develops the situation and reports, thus generating a decision by the battalion commander. The decision points determined during war gaming define the conditions in terms of the enemy and friendly strengths and dispositions that are likely to trigger the execution of each option. Likely locations of enemy engagements are based on known or suspected enemy locations. The battalion commander states the bypass criteria for the advance guard

recognizing the loss of tempo that is created by the lead element fighting every small enemy force it encounters. Normally, the battalion commander makes the final decision for execution of an option based on the progress of the initial engagement of the advance guard. The movement to contact generally ends with the commitment of the main body.

Note. The following illustration introduces a fictional scenario as a discussion vehicle for illustrating one of many ways that an Infantry rifle company can conduct a movement to contact. This illustration is a continuation of the scenario started earlier in this chapter focusing on Company B as part of Infantry Battalion 2's movement to contact.

ILLUSTRATION OF A MOVEMENT TO CONTACT

2-280. Within this scenario, an IBCT conducts a movement to contact. The IBCT moves along two axes of advance with Infantry battalion 1, main effort moving along Axis of Advance Blue (Axis Blue) to the east and Infantry Battalion 2, supporting effort moving along Axis of Advance Red (Axis Red) to the west. The cavalry squadron conducts a guard mission to the front of the brigade main effort along Axis Blue. Remaining elements of the IBCT move, on order, behind Infantry Battalion 1 along Axis Blue (see figure 2-33 on page 2-76). See ATP 3-21.20 for additional information on the scenario regarding the IBCT and subordinate unit missions for the movement to contact.

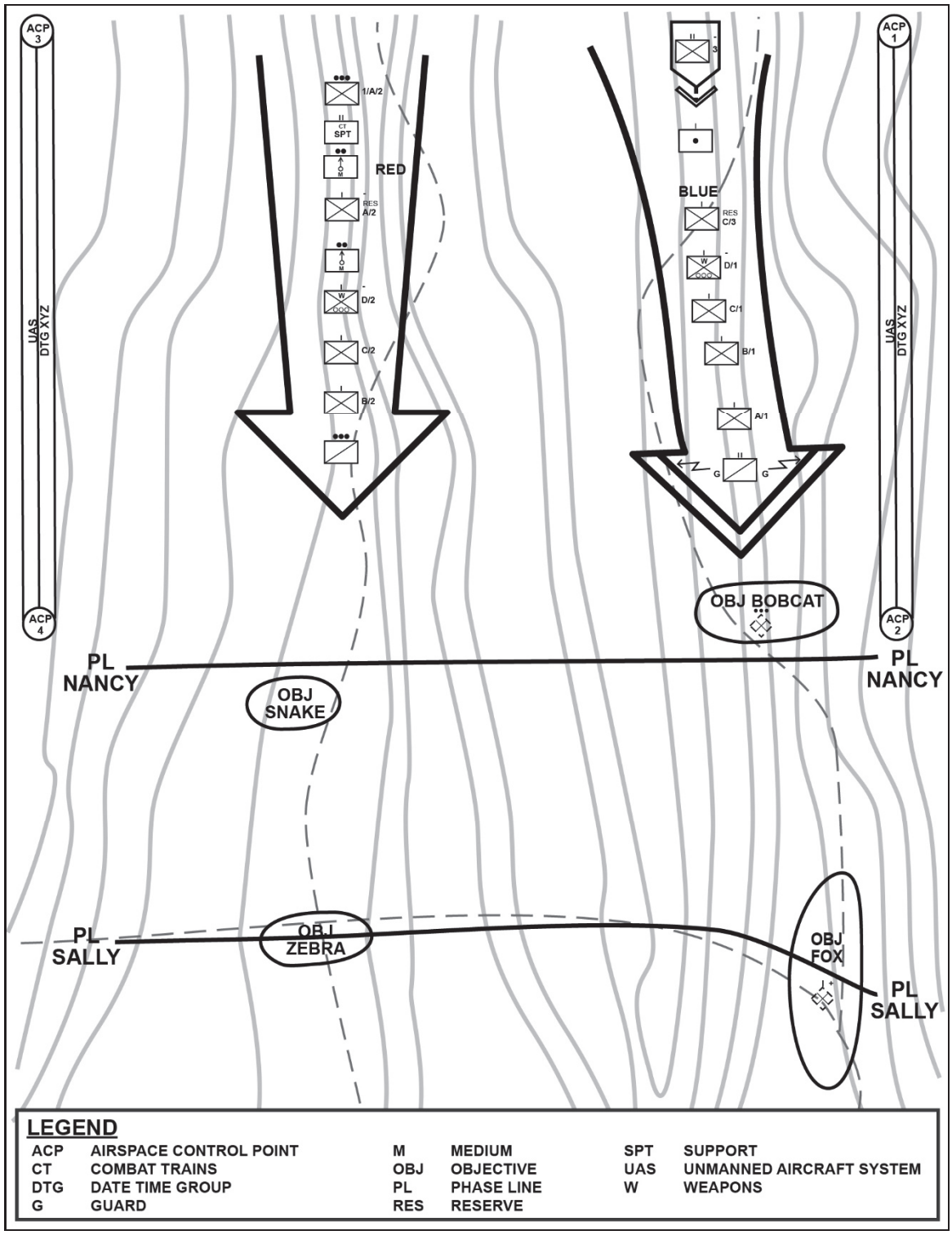


Figure 2-33. Movement to contact (axis of advance), example

INFANTRY BATTALION 2, SUBORDINATE UNIT TASK AND ORDER OF MOVEMENT

2-281. Infantry Battalion 2 conducts movement to contact along Axis Red, seizes March Objective Snake, on-order continues movement to contact to seize March Objective Zebra. The Infantry battalion is organized

with a forward security force— R&S force and advance guard—and a main body (see figure 2-34 on page 2-78). The limit of advance for the movement to contact is Phase Line Rita (not illustrated). Battalion unit trains, organize to establish echelon trains—battalion field trains and battalion combat trains—to support the battalion's movement to contact. Battalion subordinate unit task and order of movement are as follows:

- Battalion scout platoon (R&S force), with attached sniper squad, conducts route reconnaissance forward of Company B along Axis Red.
- Company B (advance guard), with attached engineer squad and assault platoon, conducts movement to contact forward of the main body.
- Company C (main body lead element), with attached engineer platoon (-), conducts movement to contact, battalion tactical command post moves with company.
- Company D (main body), with three assault platoons, follows Company C.
- Battalion mortar platoon (main body) moves by split section along Axis Red. Displaces by section to provide continuous fire support, priority of fires initially to forward security forces.
- Company A, battalion reserve, moves ahead of battalion combat trains. Attaches one Infantry rifle platoon to battalion control. Battalion main command post moves with Company A.
- Battalion combat trains (main body) follows Company A along Axis Red with priority of support to the main effort, initially forward security forces. This echelon support includes maintenance support and treatment team alpha (clinically staffed with the battalion surgeon), and carries mostly Class I, V, and limit Class III.
- Third Platoon Company A, under battalion control, is the rear security for the main body.
- Battalion field trains initially occupies position to the rear of defending battalion, vicinity Assembly Area Eagle. This echelon support includes all battalion sustainment not located with the combat trains, includes treatment team bravo (clinically staffed with the physician assistant). On order, conducts passage of lines and moves along Axis Red (not illustrated).

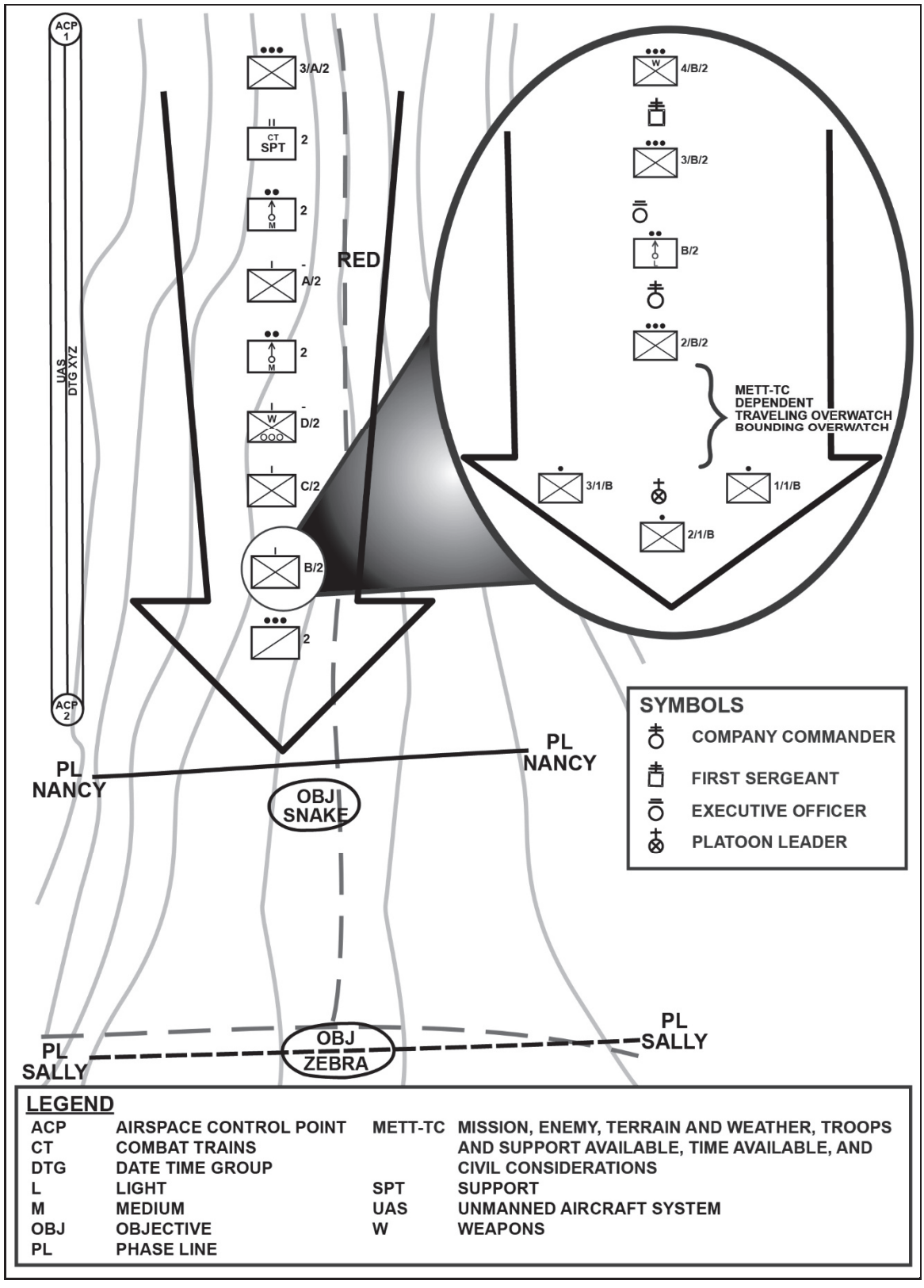


Figure 2-34. Movement to contact (Infantry Battalion 2 organization of forces), example

GAIN AND MAINTAIN CONTACT

2-282. Within the scenario, Infantry Battalion 2 forward security forces (R&S forces and the advance guard) did not have enemy contact along Axis Red through March Objective Snake. As Company B (advance guard) crossed Objective Snake, the scout platoon, with attached sniper squad, (R&S force) continued movement to March Objective Zebra. During the movement to Objective Zebra, the scout platoon (forward of Company B) identified an enemy platoon size Infantry force (dismounted) establishing hasty defensive positions, 1 kilometer north of Phase Line Sally along Axis Red. The scout platoon passed this information to the battalion's tactical command post and Company B commander.

2-283. As the scout platoon leader developed the situation, the platoon moved to covered and concealed positions to maintain visual contact and observe further enemy activities. The sniper squad, under the control of the scout platoon leader moved to and established positions that provide for observation and precision fires. Company B continued movement while maintaining contact with the scout platoon to coordinate combat actions and exchange information prior to the meeting engagement. The scout platoon continued to maintain visual contact with the enemy and update the tactical command post and Company B maneuver forces. Regardless of the technique, actions between forward security forces are closely coordinated before engagement to prevent fratricide and confusion.

Note. No matter how the force makes contact, seizing the initiative is the overriding imperative. Prompt execution of battle drills at platoon level and below, and standard actions on contact for larger units, can give that initiative to the friendly force.

DISRUPT AND FIX THE ENEMY

2-284. The battalion's fire support plan includes allocating support for meeting engagements or hasty attacks that occur during the movement to contact. The FSO plans targets on and beyond the projected locations (enemy positions and march objectives). The Infantry battalion commander relies primarily on fire support assets to weight security forces during movement. The fires system helps develop fire superiority when organized correctly to fire immediate suppression missions to help maneuver forces get within direct-fire range of the enemy.

2-285. Fire support systems available to the battalion should tend to focus on suppression missions to disrupt enemy forces as they are encountered and obscuration missions to obscure or screen exposed friendly forces when conducting movement. The battalion commander synchronizes battalion fire support systems with the movement and coverage of higher echelon fire support assets. This scenario includes the friendly defending force to the rear of Infantry Battalion 2 while still in range. The commander synchronizes the employment of Army aviation attack and reconnaissance units and CAS to prevent the enemy from regaining balance while ground fire support assets are repositioning.

2-286. Prior to the meeting engagement, the scout platoon provides overwatch and concentrates fires (direct and indirect) to suppress enemy weapons, and obscure enemy observation. During Company B's approach, the company commander chooses a movement technique (traveling overwatch and bounding overwatch), based on the mission variables of METT-TC, to make contact with the smallest possible force while providing flexibility for maneuver. Whatever combat formation the commander chooses, the unit must be able to deploy once the enemy's location is determined to ensure the axis of advance traveled by the main body is free of enemy forces.

MANEUVER

2-287. Within the scenario, Infantry Battalion 2 forward security forces conducted a meeting engagement prior to March Objective Zebra along Axis Red. The scout platoon with attached snipers (R&S force) suppress the enemy in position with indirect and precision fires. The lead platoon (First Platoon) of Company B was able to assault through the enemy positon. First Platoon established limit of advance just south of the enemy position. Once limit of advance established, Second Platoon bounded right and Third Platoon followed by attached assault platoon bounded left around the enemy position to establish local

security south of the First Platoon's consolidation and reorganization line (see paragraph 2-593 on page 2-147) limit of advance. Company mortar section then moved forward to establish firing position to the rear of 1st platoon's consolidation line. (See figure 2-35.)

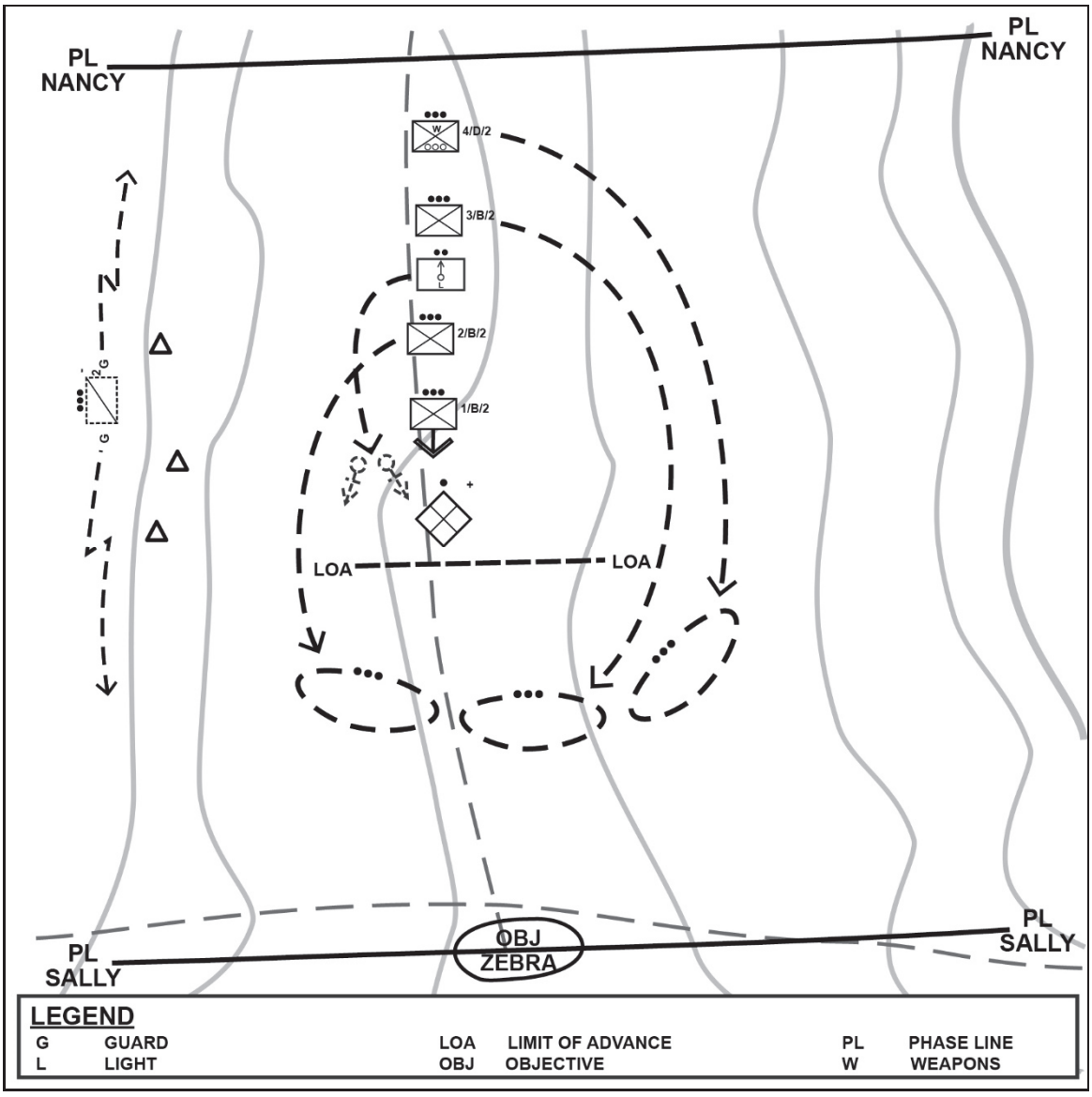


Figure 2-35. Movement to contact (meeting engagement), example

Battalion Main Body Deployment

2-288. During deployment, the battalion main body keeps enough distance between itself and its forward security forces to maintain flexibility for maneuver. This distance varies with the level of command, the unit, the terrain, and the availability of information about the enemy. The main body may advance over multiple parallel routes with numerous lateral branches to remain flexible and reduce the time needed to initiate maneuver. While it is preferred for the battalion to use multiple routes, the battalion and smaller units can move on just one route.

2-289. The main body's disposition between units allows for maximum flexibility for maneuvering during deployment and when establishing contact with the enemy force. The main body may move continuously (using traveling and traveling overwatch) or by bounds (using bounding overwatch). It moves by bounds

when contact with the enemy is imminent and the terrain is favorable. Command posts and trains may travel along high mobility routes along the axis of advance (or area of operation) and occupy hasty positions as necessary. Indirect fire assets, both organic and external to the battalion, move and position to support the movement to contact. The priority target list is continually updated throughout the movement.

Company Meeting Engagement

2-290. During a meeting engagement the company's lead platoon gains and maintains contact with the enemy. When the enemy is unaware of the contact, the platoon making contact reports and deploys to prevent detection. The platoon maneuvers to a position of advantage to maintain the element of surprise until the company completes preparation for the hasty attack. If detected, or once the company commander decides to initiate the hasty attack, the lead platoon leader attempts to fight through, destroying the enemy with the resources that are immediately available. The platoon FO, if required, calls for fire to suppress or destroy the enemy. The platoon leader reports to the company commander and continues to develop the situation. Overwatching elements, if established, immediately fire at the enemy position(s) while trailing rifle squads of the platoon that are not able to fire take cover and wait for orders.

2-291. A platoon or squad in contact with overwhelming combat power can initiate a frontal attack with the intent to use aggressive small unit actions to seize the initiative rapidly and at the lowest echelon possible. Though normally the unit in contact tries to achieve fire superiority to fix or suppress the enemy with the resources that are immediately available to conduct a platoon or squad assault (see ATP 3-21.8). The platoon or squad executes a flank attack directed against an identified enemy weakness. If this is not possible, the platoon leader develops the situation further to identify the enemy's flanks, any covered and concealed routes around the enemy position, possible supporting positions (both friendly and enemy), and any protective obstacles that the enemy has constructed. The leader then reports this information to the company commander. Upon receipt of this information, the company commander determines the proper action to take.

Follow Through

2-292. Once consolidation and reorganization (see paragraph 2-593 on page 2-147) complete, Infantry Battalion 2 continues the movement to contact as rapidly as possible to maintain the initiative. The scout platoon and sniper squad moved from their overwatch positions to continue the R&S force mission for the movement to contact along Axis Red. Company C moves around Company B and assumes the advance guard mission for the battalion. Once consolidation and reorganization complete, Company B, the lead element now for the battalion's main body continues movement along Axis Red.

Note. This scenario for discussion purposes continues later in the chapter for the approach march. (See paragraph 2-303 on page 2-86.)

APPROACH MARCH

2-293. The commander employs tactical movement, by means of a tactical road march (see paragraph 2-66 on page 2-25) or approach march, when contact with the enemy is possible or anticipated. Successful tactical movement depends upon the establishment of combined arms organizations and contingencies for actions on contact. The execution of the march must be flexible to changing conditions and responsive to the commander. The commander conducts tactical movement using combat formations (described in paragraph 2-40 on page 2-20) in conjunction with movement techniques (described in paragraph 2-31 on page 2-16). The following paragraphs provide the doctrinal basis for an approach march for the Infantry battalion.

Doctrinal Basis

2-294. An *approach march* is the advance of a combat unit when direct contact with the enemy is intended (ADRP 3-90). The commander employs an approach march when the enemy's approximate location is known, emphasizing speed over tactical deployment, and less physical security or dispersion. When the Infantry battalion conducts an approach march it uses formations and movement techniques consistent with the mission variables of METT-TC. An approach march terminates in a march objective, such as an assembly

area, attack position, or assault position, or it can be used to transition to an attack. Follow-and-assume, follow-and-support, and reserve forces may also conduct an approach march forward of a line of departure. (Refer to ATP 3-21.20, ATP 3-21.18, and FM 3-90-2 for additional information.)

Combined Arms Organizations

2-295. The commander arranges units conducting an approach march into combined arms organizations, task-organized before the march begins to allow for transition to an on-order or a be-prepared mission without making major organizational adjustment. The commander assigns an area of operation or an axis of advance, in combination with routes to a force conducting an approach march, based on the mission variables of METT-TC. (See figure 2-36.) Area of operations, axes of advance, or routes should facilitate the force's movement and maximize its use of concealment. Within the approach march, the commander assigns the force conducting the decisive operation or main effort and forces conducting each shaping operation or supporting effort respectively, area of operations, axes of advance, and separate routes unless an individual sub-unit has the task of either follow and-assume or follow-and-support.

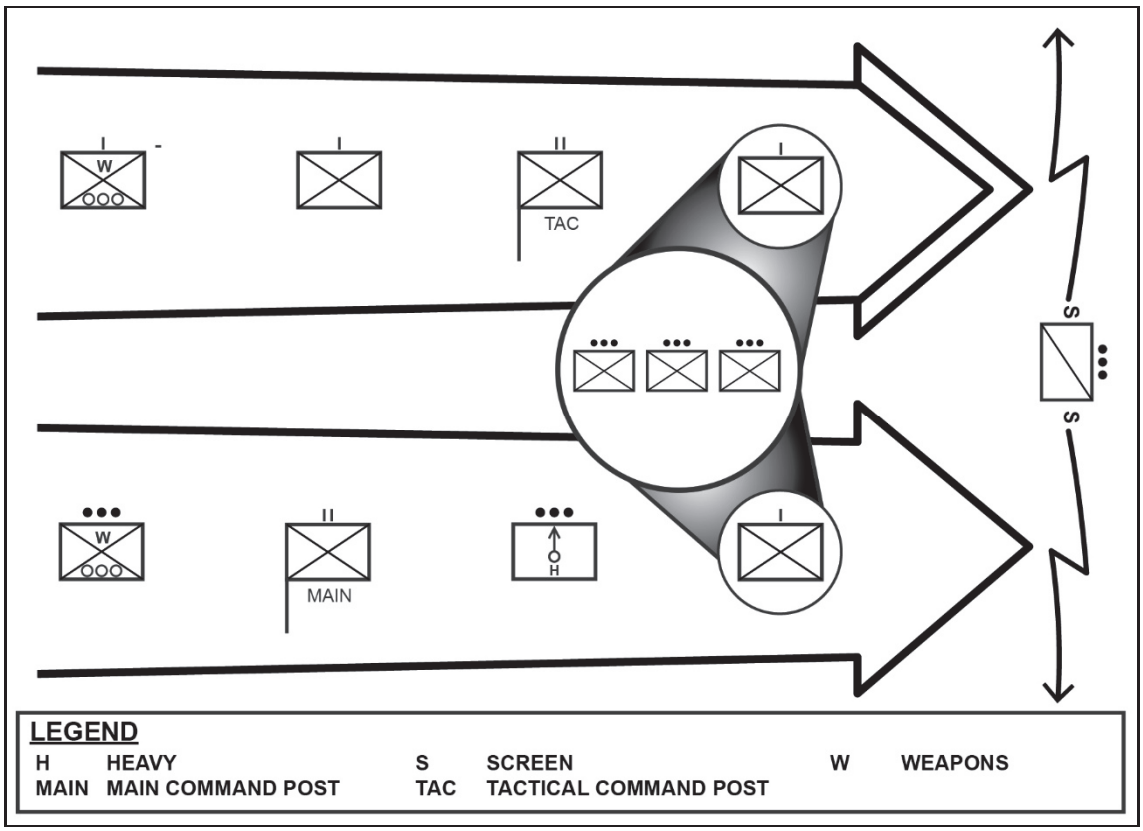


Figure 2-36. Approach march, axes of advance

2-296. As the approach march nears areas of likely enemy interference, the commander may divide the battalion main body into smaller, less vulnerable columns that move on additional multiple routes or cross-country while continuing to employ security forces (figure 2-37). The commander employs forward and flank security forces to increase the distance traveled before the main body transitions to a tactical formation. Forward and flank security forces remain within supporting distance of the main body, which stays in these smaller columns to facilitate rapid movement.

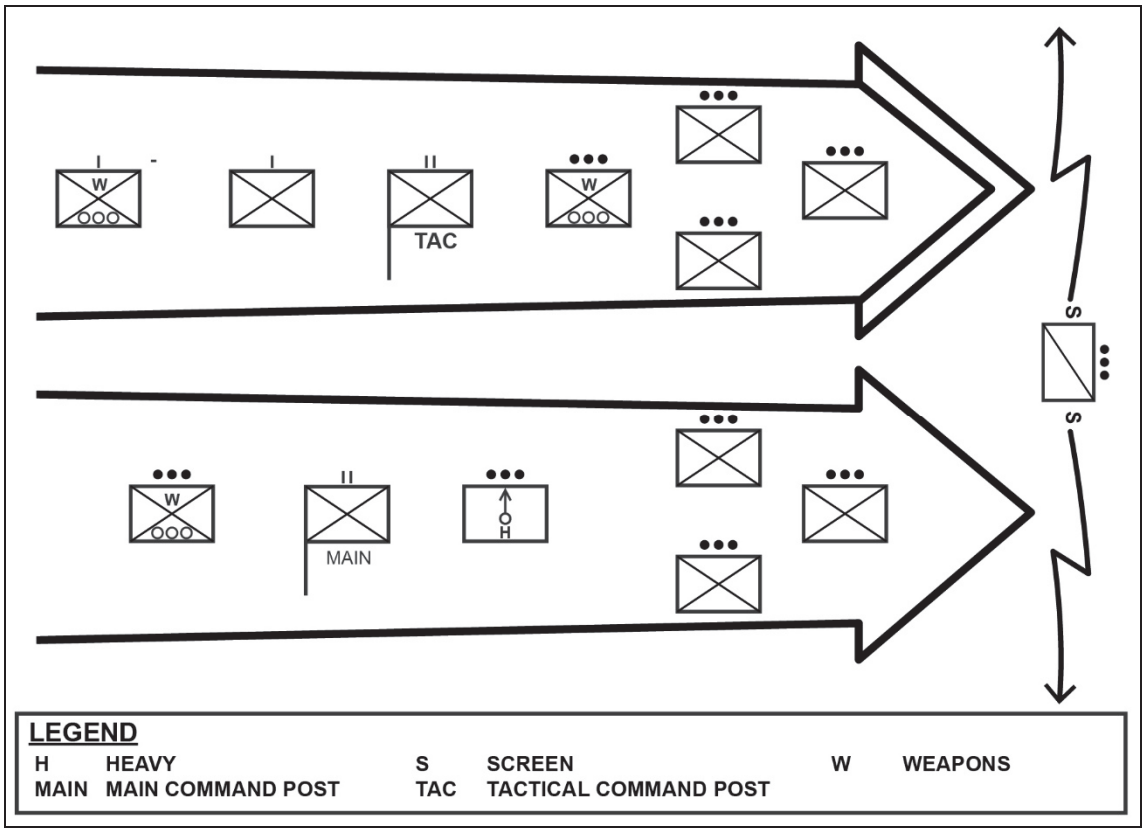


Figure 2-37. Approach march, less vulnerable columns

2-297. An approach march facilitates the commander's decision making by allowing freedom of action and movement of the main body. The commander can choose to have all or part of the force conduct an approach march as part of the movement to contact; for example, the main body may conduct movement to contact while forward security forces conduct an approach march or vice versa. The commander may execute an approach march for all or part of the tactical movement to efficiently use the available road network or reduce the time needed to move from one location to another.

Actions on Contact

2-298. Forward security forces focus on determining the enemy's composition, dispositions, and intent, and on providing the commander with relevant combat information to ensure commitment of the main body under optimal conditions. During movement, the enemy situation becomes clearer as forward security forces conduct actions on contact (see paragraph 2-235 on page 2-66) to develop the situation in accordance with the commander's plan and intent. In determining the strength, location, and disposition of enemy forces, security forces allow the commander to focus the effects of the main body's combat power against an enemy position or the enemy's main body. As the overall force must remain flexible to exploit both combat information and intelligence, forward security forces must maintain contact with the enemy unless ordered to break contact by the commander.

2-299. When encountering an enemy force or an obstacle, forward security forces must quickly determine the threat it faces. For an enemy force, it must determine the enemy's composition, dispositions, activities, and movements and assess the implications of that information. For an obstacle, it must determine the type and extent of the obstacle and whether it is covered by fire. Obstacles can provide the attacker with information concerning the location of enemy forces, weapon capabilities, and organization of fires. Forward security forces will often use manned and unmanned aircraft systems to locate and target possible enemy units surrounding or overwatching the engagement; for example, enemy reaction or

counterattack forces. When in advance of the battalion's main body, forward security forces may seize terrain that offers essential observation.

Note. The following illustration introduces a fictional scenario as a discussion vehicle for illustrating one of many ways that an Infantry rifle company within the Infantry battalion can conduct an approach march. This illustration is a continuation of the scenario started earlier in this chapter focusing on the subordinate units within Infantry Battalion 2.

ILLUSTRATION OF AN APPROACH MARCH

2-300. The following scenario illustrates an approach march conducted by Infantry Battalion 2. In this scenario, started earlier in this chapter, an IBCT continues a movement to contact along two axes of advance. Infantry Battalion 1, main effort moves along Axis of Advance Blue (Axis Blue) to the east. Infantry Battalion 2, supporting effort moves along Axis of Advance Red (Axis Red) to the west (see figure 2-33 on page 2-76). During the movement to contact, Infantry Battalion 1 cleared enemy resistance north of Objective Fox but encountered stiff resistance along Axis Blue from platoon size enemy elements. Because of the unrestricted terrain and the enemy's clear fields of fires from Objective Fox to the north along Axis Blue, Infantry Battalion 1 was unable to maneuver to generate sufficient combat power to seize Objective Fox. During the movement to contact, Infantry Battalion 2, forward security forces conducted a successful meeting engagement (see paragraph 2-276 on page 2-74) prior to March Objective Zebra along Axis Red (see figure 2-35 on page 2-80). See ATP 3-21.20 for additional information on the scenario regarding the IBCT and subordinate unit missions for the approach march.

Infantry Brigade Combat Team, Scheme of Maneuver abd Subordinate Unit Tas

2-301. Within the scenario, Infantry Battalion 2 monitored the progress of the brigade's main effort along Axis Blue. The battalion commander, per the IBCT commander's guidance, begins to visualize how Infantry Battalion 2 might move to assist the brigade in regaining the initiative along Axis Blue. The battalion commander and staff began preliminary planning and WARNORD development to conduct an approach march to Objective Fox. As Infantry Battalion 2 continued its movement to contact, and as forward security forces of the battalion seized Objective Zebra (unopposed), the battalion received a change of mission from the IBCT commander (figure 2-38 on page 2-86). The IBCT commander directed—

- Infantry Battalion 2, now the main effort, conduct approach march to Assault Positions 3 and 4. On order conduct an attack, seize Objective Fox.
- Infantry Battalion 1, now a supporting effort, establish support by fire and attack by fire positions north of Objective Fox.
- Cavalry squadron, conduct guard mission to the east of Infantry Battalion 1.
- Infantry Battalion 3 continues follow and assume tactical mission task. Company C continues under IBCT control.
- Company C continues as an IBCT reserve positioned to the rear of Infantry Battalion 1 along Axis Blue.

Infantry Battalion 2, Scheme of Maneuver and Subordinate Unit Task

2-302. Infantry Battalion 2 received change of mission to conduct an approach march to Assault Positions 3 and 4, west of Objective Fox. On order conduct an attack, seize Objective Fox. Not to slow the tactical movement to the assault positions, the battalion commander initially maintained the same combined arms organizations and order of movement task-organized for the movement to contact. The commander assigned an axis of advance and established a probable line of deployment (Phase Line Joe) for the approach march, based on the mission variables of METT-TC and the position of the assault positions (figure 2-38 on page 2-86). During the approach march, the commander assigned tasks to the force conducting the main effort and forces conducting supporting efforts along with area of operations, axes of advance, phase lines, and separate routes to support the battalion scheme of maneuver for the attack. Battalion subordinate unit task is as follows:

- Battalion scout platoon (R&S force), with attached sniper squad, conduct route reconnaissance forward of Company C along Axis Red-Alpha.
- Company C (advance guard), with attached engineer platoon (-), conduct approach march along Axis Red-Alpha forward of the main body.
- Company B (main body lead element) with attached engineer squad and assault platoon, conduct approach march along Axis Red-Alpha, battalion tactical command post moves with company.
- Company D (main body), with three assault platoons, follows Company B in main body.
- Battalion mortar platoon (main body) moves by split section along Axis Red-Alpha. Displaces by section to provide continuous fire support, priority of fires initially to forward security forces.
- Company A, battalion reserve, follows Company D in main body. Attaches one Infantry rifle platoon to battalion control. Battalion main command post moves with Company A.
- Third Platoon Company A, under battalion control, is the rear security for the main body.
- Battalion combat trains, occupy support area vicinity Objective Snake (not illustrated), with priority of support to the main effort, initially forward security forces. This echelon support includes maintenance support and treatment team alpha (clinically staffed with the battalion surgeon), and carries mostly Class I, V, and limit Class III.
- Battalion field trains, moves along Axis Red and occupies support area, vicinity Objective Kiwi (not illustrated). This echelon support includes all battalion sustainment not located with the combat trains, includes treatment team bravo (clinically staffed with the physician assistant).

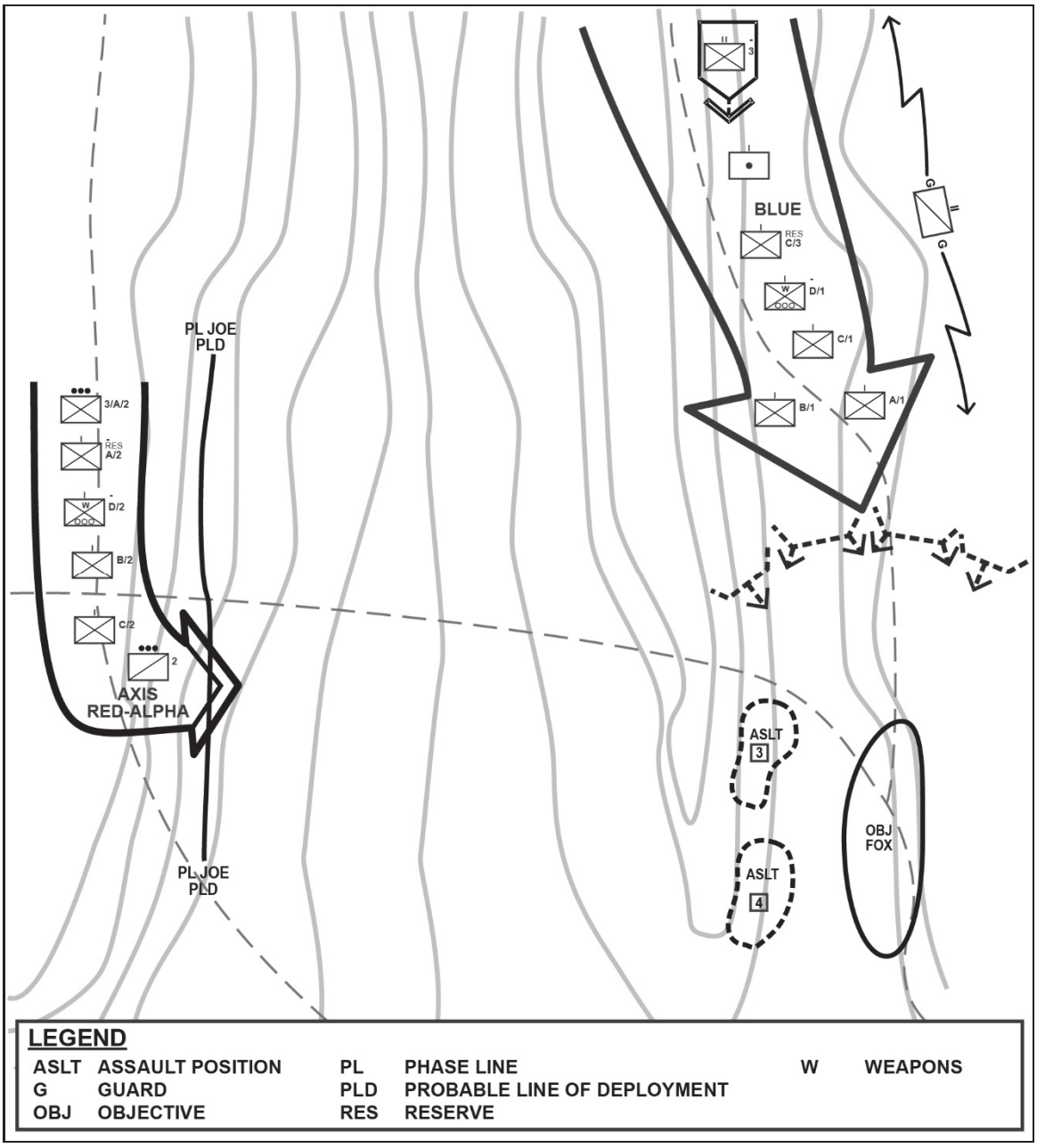


Figure 2-38. Approach march (initial axis of advance), example

2-303. As the battalion approach march neared areas of likely enemy interference from Objective Fox, vicinity Phase Line Joe (probable line of deployment), the battalion commander divided the battalion axis of advance into two company columns, Axis Green and Axis Yellow. Lead companies moved on multiple routes or cross-country while employing security forces (platoon size element) forward of the column's main body. Trail elements of each column provide rear security. Company D attaches one assault platoon to the main effort, Company C. The scout platoon moved from its security force position forward of the battalion to a position south of Axis Yellow to conduct a guard mission on battalion's southern flank. Battalion sniper squad moved from its security force location forward of the battalion to a position north of Axis Green to conduct linkup with Company D on the northern flank of the battalion. Forward and flank security forces remain within supporting distance of the battalion main body (figure 2-39 on page 2-88). Battalion subordinate unit task and order of movement is as follows:

- Company C (attack-main effort), with attached engineer platoon (-) and assault platoon, conducts approach march along Axis Green to Assault Position 3.
- Company B (attack-supporting effort), with attached engineer squad and assault platoon, conducts approach march along Axis Yellow to Assault Position 4.
- Company D (attack-supporting effort), with two assault platoons, conducts approach march following Company C along Axis Green. Battalion tactical command post follows main effort (Company C), moves with Company D.
- Company A (battalion reserve) follows Company B along Axis Yellow. The rifle platoon detached to battalion control returns to Company A control. Battalion main command post follows Company B, moves with Company A.
- Battalion mortar platoon (supporting fires) moves by split section (Section A moves with Company D and Section B moves with Company A). Priority of fires to Company C.
- Battalion scout platoon conducts guard mission south of Company B along Axis Yellow.
- Battalion sniper squad conducts movement to a position north of Axis Green to conduct linkup with Company D on the northern flank of the battalion.

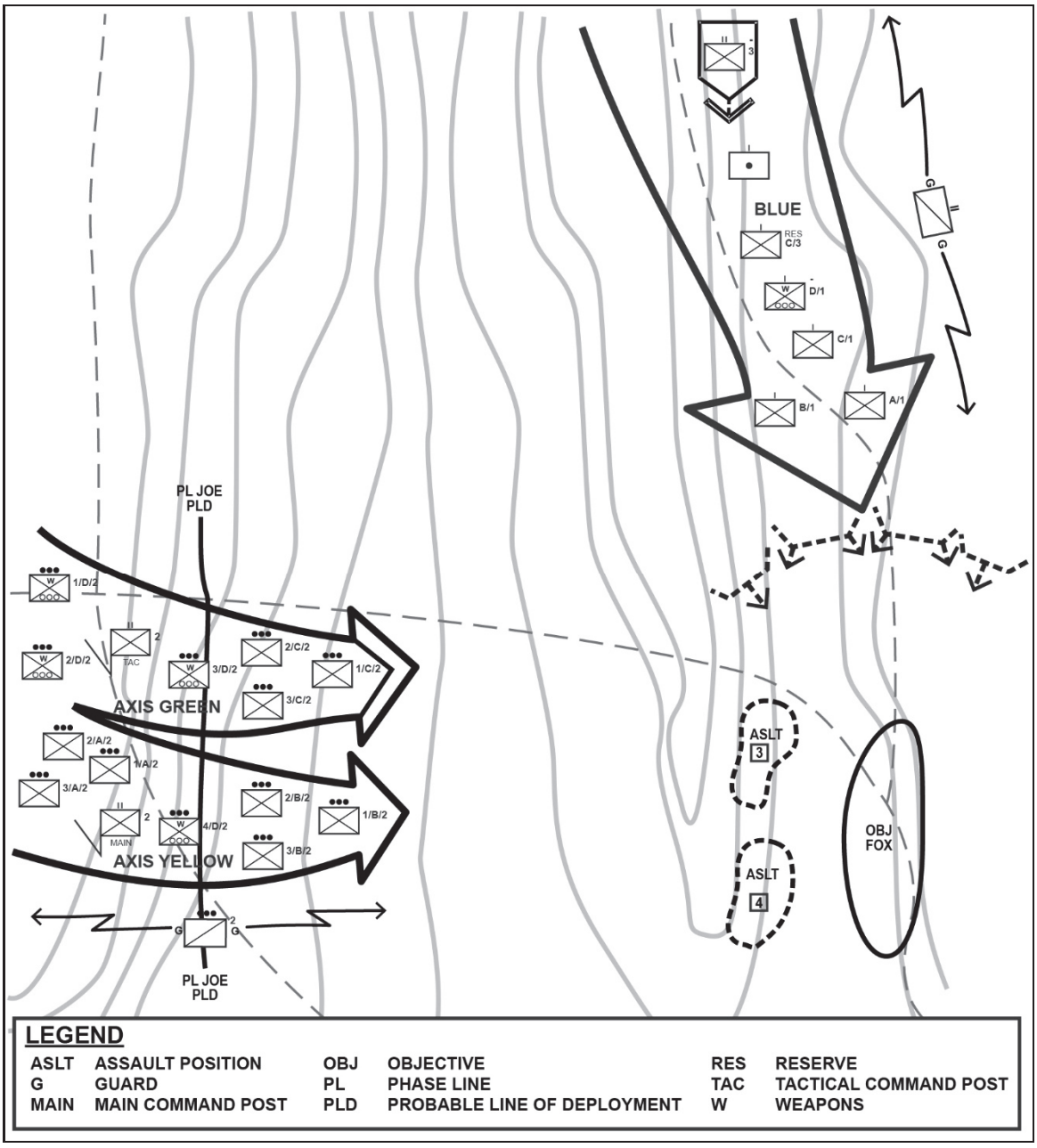


Figure 2-39. Approach march (advance in company columns), example

Note. This scenario for discussion purposes continues later in the chapter for the attack. See paragraph 2-595 on page 2-148.

SUBORDINATE TASKS OF MOVEMENT TO CONTACT

2-304. When the Infantry rifle company is involved in operations, such as peace operations, irregular warfare, and military engagement, unit offensive actions normally are closely related to the movement to contact tasks of cordon and search or search and attack. The conduct of offensive tasks in these operations will normally employ restrictive rules of engagement throughout the mission regardless of the element of

decisive action (offense, defense, and stability) dominant at any specific moment. In the conduct of these operations, the emphasis on the stability element is much more dominant than the defensive element.

CORDON AND SEARCH

2-305. *Cordon and search* is a technique of conducting a movement to contact that involves isolating a target area and searching suspected locations within that target area to capture or destroy possible enemy forces and contraband (FM 3-90-1). A cordon and search may be thought of as a movement to contact, clear (tactical mission task), or area reconnaissance based on the availability or fidelity of intelligence.

Note. ATP 3-06.20 establishes multi-service tactics, techniques, and procedures for cordon and search operations. Target area is the geographical space, containing one or more targets that must be controlled to permit the search to occur—is defined for the purposes of ATP 3-06.20.

2-306. While the primary purpose of a cordon and search is to find enemy or material, often parallel, is the search for and exploitation of material of evidentiary or intelligence value to use in the execution of future operations and criminal prosecutions. *Site exploitation* is a series of activities to recognize, collect, process, preserve, and analyze information, personnel, and/or materiel found during the conduct of operations. (DOD) (JP 3-31). *Site exploitation* is the synchronized and integrated application of scientific and technological capabilities and enablers to answer information requirements, facilitate subsequent operations, and support host-nation rule of law (Army) (ATP 3-90.15). Additional individuals with the requisite technical expertise or equipment may be provided to the unit conducting the cordon and search. Information gained from site exploitation provides the commander with additional information to identify and target enemy personnel and materials. (See ATP 3-90.15 for more information on site exploitation.) The following paragraphs provide the doctrinal basis for cordon and search operations conducted by the Infantry rifle company.

Principles of Cordon and Search

2-307. The principles of cordon and search are comprehensive and fundamental rules guiding the cordon and search force commander on the conduct of cordon and search. The principles are not a checklist. While the commander considers these principles, they do not apply in the same way to every situation, rather, they summarize characteristics of successful cordon and search operations. The value in these principles lie in assisting the commander in analyzing a pending operation while synchronizing efforts and determining if or when to deviate from the principles based on the current situation. The nine principles of cordon and search are—

2-308. Speed. Cordons and movement to a target area should occur rapidly to maintain initiative and momentum. The commander must carefully consider time and speed factors, especially as they relate to enemy reactions. When the target of the cordon and search force is personnel or sensitive material, the force must achieve greater relative tempo than the threat to preclude the enemy's escape or the destruction of material. Good reconnaissance, complete with guides, can greatly ease the cordon and search force's maneuver burdens and increase the speed of relative movement.

2-309. Surprise. Through tempo and deception, all efforts must be made to deny the enemy the opportunity to react. Foot movement may be combined with vehicular movement to increase speed and stealth. By itself, or with other types of movement, air mobility can provide the cordon and search force with considerable speed, some elements of surprise, and the ability to move in or remove additional resources, detainees, and caches. While waterborne movement can canalize the cordon and search force to certain, specific avenues of approach, it can also provide relative speed, surprise, and the ability to deliver additional resources and remove detainees, and caches. Special operations forces capabilities significantly enhance the speed and surprise of mission execution, decreasing the probability of compromise and enabling operational tempo.

2-310. Isolation. The target and target area must be sealed off to defeat enemy reactions and free the cordon and search force to conduct actions on the objective. When possible, the force should isolate the objective using stealth and rapid movement in order to surprise the enemy to ensure complete control of the area before starting contact with the enemy. When isolating, the commander considers three-dimensional and in-depth isolation of the objective (front, flanks, rear, upper stories, basements, and rooftops). The commander

employs all available direct and indirect fire weapons consistent with the rules of engagement. Isolating the objective is a key factor in facilitating the assault and preventing casualties.

2-311. Proper target identification. Cordon and search forces must be properly tasked and trained to identify, capture, and exploit targeted enemy personnel and material. During the execution of a cordon and search operation, specially trained special operation forces can facilitate sensitive site exploitation of an objective. Sensitive site exploitation may also provide further intelligence required for follow-on operations. Informants can provide positive identification of locations and personnel identified as high-payoff targets. Special aircraft systems are used to enable friendly-centric fire support, which is the continuous monitoring of friendly ground forces while simultaneously sweeping the inner and outer perimeters for threats to the operation and identification of hiding and fleeing personnel

2-312. Timeliness. Time is a driving force in cordon and search operations. The commander must strike a balance between actionable information, target activities, desired end state, and execution of the cordon and search to gain the initiative and deny the enemy the ability to reposition or escape. While sudden opportunities may arise with little planning time, the nature of a search and what it may uncover can result in significant amounts of time spent in the objective area. Commanders must be prepared to execute cordon and searches with very little notice while simultaneously being prepared to spend many hours, even days, conducting the operation. The size of the objective area most directly affects the size of the security element, and the time necessary to emplace inner and outer cordons.

2-313. Accountability. Accountability is critical throughout, and until completion of the operation as cordon and search elements and sub-elements often operate dispersed. In addition to all actions associated with the target(s) and the target area, search and site exploitation, detainee handling, casualty evacuation, and interaction with the local population, actions on the objective will include internal accountability from arrival to withdrawal. Cordon and search forces reinforce accountability procedures to mitigate possible risks associated with multidirectional egress.

2-314. Minimization of collateral damage. *Collateral damage*—unintentional or incidental injury or damage to persons or objects that would not be lawful military targets in the circumstances ruling at the time (JP 3-60). While cordon and search operations focus on eliminating threats or potential threats, excessive collateral damage may constitute violations under both the law of war and the Uniform Code of Military Justice. Such violations create resentment within the local populace, embolden our enemy's, and cause damage to our credibility and good standing with the local populace. A key consideration when executing a non-permissive cordon and search is the collateral damage to property in the vicinity of the target and the target area. Proportionality will require the anticipated loss of life and damage to property incidental to attacks must not be excessive in relation to the concrete and direct military advantage expected to be gained.

2-315. Detailed search. Target areas must be searched to ensure all enemy assets are captured. This requires proper training, coordination, marking, and adherence to tactical SOPs with all members of the cordon and search force understanding that clearing and searching are not the same thing. Clear is a tactical mission task that requires the commander to remove all enemy forces and eliminate organized resistance within an assigned area (FM 3-90-1) while *search* is a systematic reconnaissance of a defined area, so that all parts of the area have passed within visibility (JP 3-50). When time is a limitation, the detail and quality of the search process is retained by narrowing the scope of the search and increasing the manpower devoted to the search.

2-316. Legitimacy. Cordon and search operations are always conducted within the laws of armed conflict and according to the rules of law. Regardless of who is in charge and where a cordon and search is conducted, United States forces execute and participate in the operation in such a way as to underscore the appropriateness of the operation, and the legitimacy of the security and governmental forces associated with it. When possible, the presence of trusted local police or the approval by respected local officials of a cordon and search lend it legitimacy and further the rule of law.

Task Organization

2-317. The cordon and search force includes a command element, a security element, a search element, and a support element, each with a clear task and purpose. Within the Army's operational framework, the search element is normally the decisive operation or main effort of the operation. The size and composition of the cordon and search force is based on the size of the area to be cordoned, the size of the area to be searched, and the suspected enemy situation. Host-nation security forces that are dependable and competent, especially police forces, are extremely valuable during search operations in urban terrain. Assets employed during the cordon and search may include—

- Interpreters.
- Host nation or multinational forces.
- Human intelligence collection teams.
- Law enforcement professionals.
- Technical intelligence teams.
- Special advisors.
- Attack reconnaissance aviation.
- Signals intelligence enablers.
- Measurement and signature intelligence enablers.
- Military working dog teams.
- Biometrics collection efforts.
- Tactical psychological operations teams.
- Civil affair teams.

2-318. The company often receives additional assets to assist in a cordon and search based on availability and the mission variables of METT-TC. Assets may be included as teams in the security element or the search element, or they may remain independent and on call. Assets may be internal or external to the battalion and company and can include military police, engineers, civil affairs, psychological operations, military intelligence, or artillery that form—

- Mine detection teams.
- Demolition teams.
- Interrogation teams.
- Documentation or biometric teams (uses a recorder with a camera).
- Scout dog teams.
- Fire support teams.
- Tactical air control parties.
- Military information support operations and civil affairs augmentation teams.
- Civil affairs augmentation teams.
- Detainee and enemy prisoner of war teams.
- Tunnel reconnaissance teams.
- Crowd control teams.
- Female search teams.
- Escort parties.
- Transportation teams.

Command Element

2-319. The command element services as the headquarters of the cordon and search force. The commander applies the same planning and decision making (troop leading procedures) used in other operations. While sudden opportunities may arise with little planning time, the nature of a search and what it may uncover can result in significant amounts of time spent in the objective area. The commander must be prepared to execute cordon and searches with very little notice while simultaneously being prepared to spend many hours, even days, conducting the operation.

2-320. The command element considers numerous mission variables when planning and preparing for a cordon and search operation. The commander identifies elements and assigns units to them along with a clear task and purpose. Ideally, existing base units (platoons and squads) within the rifle company are task organized into a security element, a search element, and support elements for the cordon and search. These elements organize sub-elements as necessary to accomplish the mission. The command element (company primary CP, and when established an alternate CP) normally nests within one of the other elements, rather than travel as its own entity.

Security Element

2-321. The security element is responsible for sealing off the objective through emplacement of an outer and inner cordon. The security element limits or prevents enemy or civilian influence in the objective area and prevents targets from escaping the cordon. The security element may receive the bulk of the available combat power due to multiple avenues of approach and requirements to disperse widely across the objective area to accomplish its mission. It may have to establish multiple blocking positions, observation posts, and conduct patrols in order to seal off the target area. Whether the cordon and search force travels as a single force (single point ingress) or moves in multiple elements on multiple routes (multidirectional ingress, see ATP 3-21.20), the security element normally leads movement. It must have the inner and outer cordons in place, or nearly in place, prior to actions by other elements.

2-322. As security elements deploy to set-up the outer and inner cordons, the actions of both reinforce each other, creating an environment in which unwanted influences and actions, from both outside the objective area and from within the target area, are prevented from interfering with the success of the mission. Cordon elements (outer and inner) focus both inward and outward for security purposes. As security elements deploy, actions are dictated by the requirements of the cordons, methods by which the security element moves into the objective area, and manner in which it chooses to occupy the positions that will make up both cordons. The security element leader uses information collection assets internal and external to the Infantry battalion and its companies to observe the target area before the approach of security elements. The establishment of the cordon starts when the first security element reaches its release point position or similar control measure, and ends as the security element has sealed off the objective area.

2-323. Establishment of the outer cordon, (see figure 2-40) during the cordon phase (see paragraph 2-367 on page 2-102 for a detailed discussion) requires detailed planning, coordination, and meticulous integration and synchronization to achieve the required effects. The outer cordon prevents anyone from entering the objective area and assists the inner cordon in preventing the enemy from escaping from the objective area. The element leader of the outer cordon maintains situational awareness, and within the commanders abilities situational understanding to facilitate the progress of the operation, specifically the inner cordon and search efforts. Tactical tasks associated with the outer cordon security element include the following:

- *Block*—a tactical mission task that denies the enemy access to an area or prevents the enemy's advance in a direction or along an avenue of approach (FM 3-90-1). See paragraph 3-93 on page 3-26 for the definition of the term, block, when used as an obstacle effect.
- *Deny*—a task to hinder or prevent the enemy from using terrain, space, personnel, supplies, or facilities (ATP 3-21.20).
- *Interdict*—a tactical mission task where the commander prevents, disrupts, or delays the enemy's use of an area or route (FM 3-90-1).

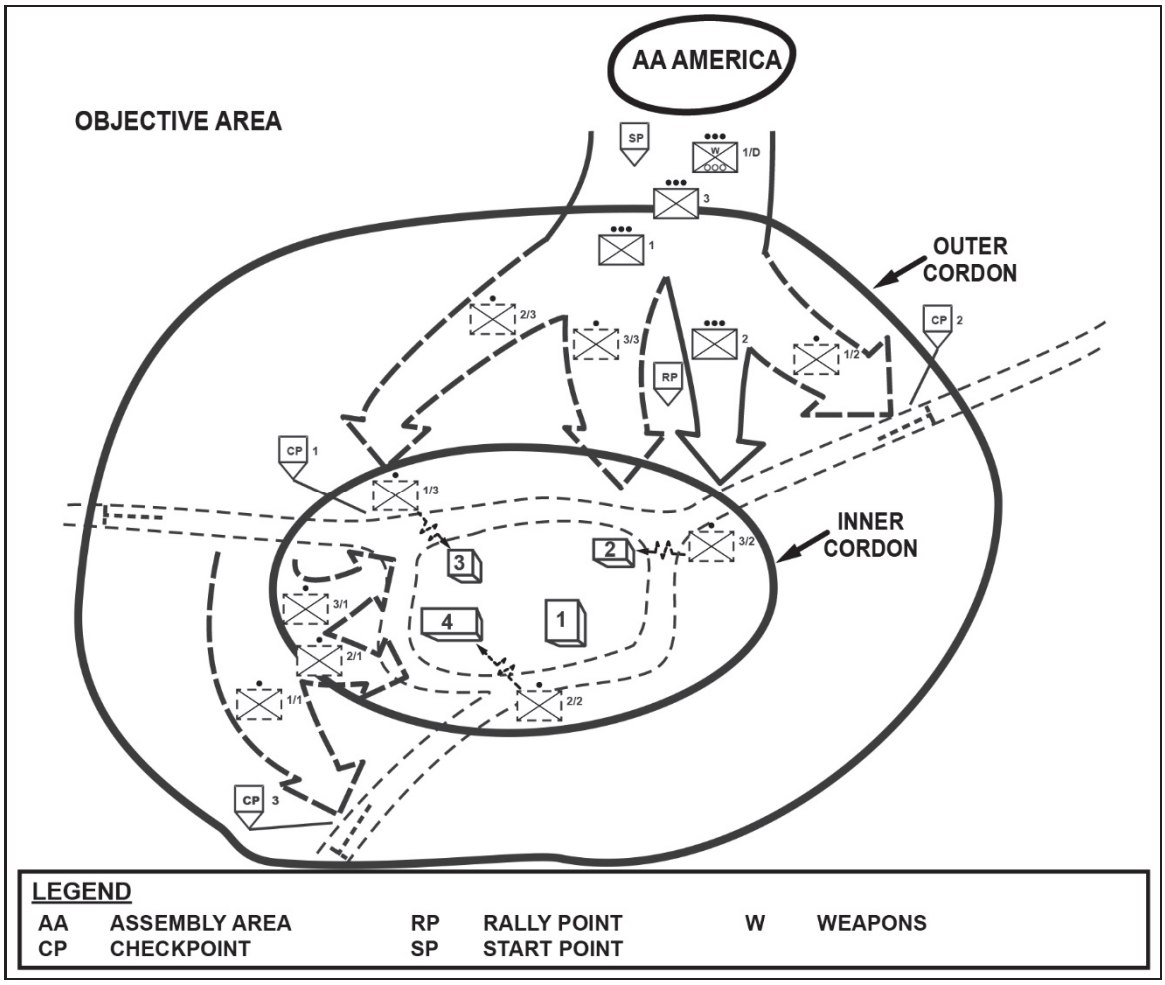


Figure 2-40. Cordon and search (inner and outer cordon)

2-324. Establishment of the inner cordon requires the same level of planning, coordination, and integration and synchronization to achieve desired effects as did the outer cordon. The inner cordon seals off the target area to protect the search element from enemy activity. (See figure 2-41 on page 2-95.) It prevents enemy movement within the target area and prevents enemy entry or exit. The security element is properly armed and equipped to control the ground and mitigate the most likely issues they are to face as determined in the planning and reconnaissance phase (see paragraph 2-340 on page 2-97 for a detailed discussion). The cordon's primary orientation is inward toward the target area. However, the inner cordon performs a secondary function of controlling movement into the objective area as well. Tactical tasks associated with the inner cordon security element include—

- *Contain*–a tactical mission task that requires the commander to stop, hold, or surround enemy forces or to cause them to center their activity on a given front and prevent them from withdrawing any part of their forces for use elsewhere (FM 3-90-1).
- *Fix*–a tactical mission task where a commander prevents the enemy force from moving any part of that force from a specific location for a specific period. Fix is also an obstacle effect that focuses fire planning and obstacle effort to slow an attacker's movement within a specified area, normally an engagement area (FM 3-90-1). See paragraph 3-93 on page 3-26 for the definition of the term fix, when used as an obstacle effect.
- ***Overwatch*–a task that positions an element to support the movement of another element with immediate fire.**
- *Suppress*–a tactical mission task that results in temporary degradation of the performance of a force or weapons system below the level needed to accomplish the mission (FM 3-90-1).

2-325. During the actions on the objective phase (see paragraph 2-376 on page 2-103 for a detailed discussion), the security element maintains the inner and outer cordons. The inner cordon overwatches actions on the objective, prevents egress from the target area, and coordinates actions with the outer cordon. The outer cordon prevents external influences from entering the objective area, prevents or controls movement in and out of the objective area, and coordinates with the inner cordon.

2-326. Whether the cordon and search force withdraws as a single force or moves in multiple elements on multiple routes, the security element normally is the last to depart. The inner and outer cordons and their controls on the objective and target areas provide overwatch for the search and support elements. Should the withdrawal be cancelled by design or by enemy action, the cordon remains in place. Once the other cordon and search force elements have committed to withdrawal, and are safely away from the target area, the security element first collapses the inner, then the outer cordon.

Search Element

2-327. The search element's mission is to clear, search, and conduct site exploitation on the objective in order to locate and seize contraband material; and identify, search, or detain suspected insurgents. The search element moves as either the second or the third element of movement, in the order of march. When resistance is not expected, or when speed and surprise are paramount, the commander places the search element as the second march element so it can move immediately and directly into the target area. When resistance is expected or when ensuring the target area is sealed off, the search element will travel behind the security and support elements.

2-328. The search element normally divides into three types of teams: search teams, security teams, and support teams (figure 2-41). As these teams are most often in direct contact with the local populous and potential threats, these teams train and enable accordingly. Teams within the search element initiate actions once the outer and inner cordons are in place. The following three paragraphs address the actions of each team.

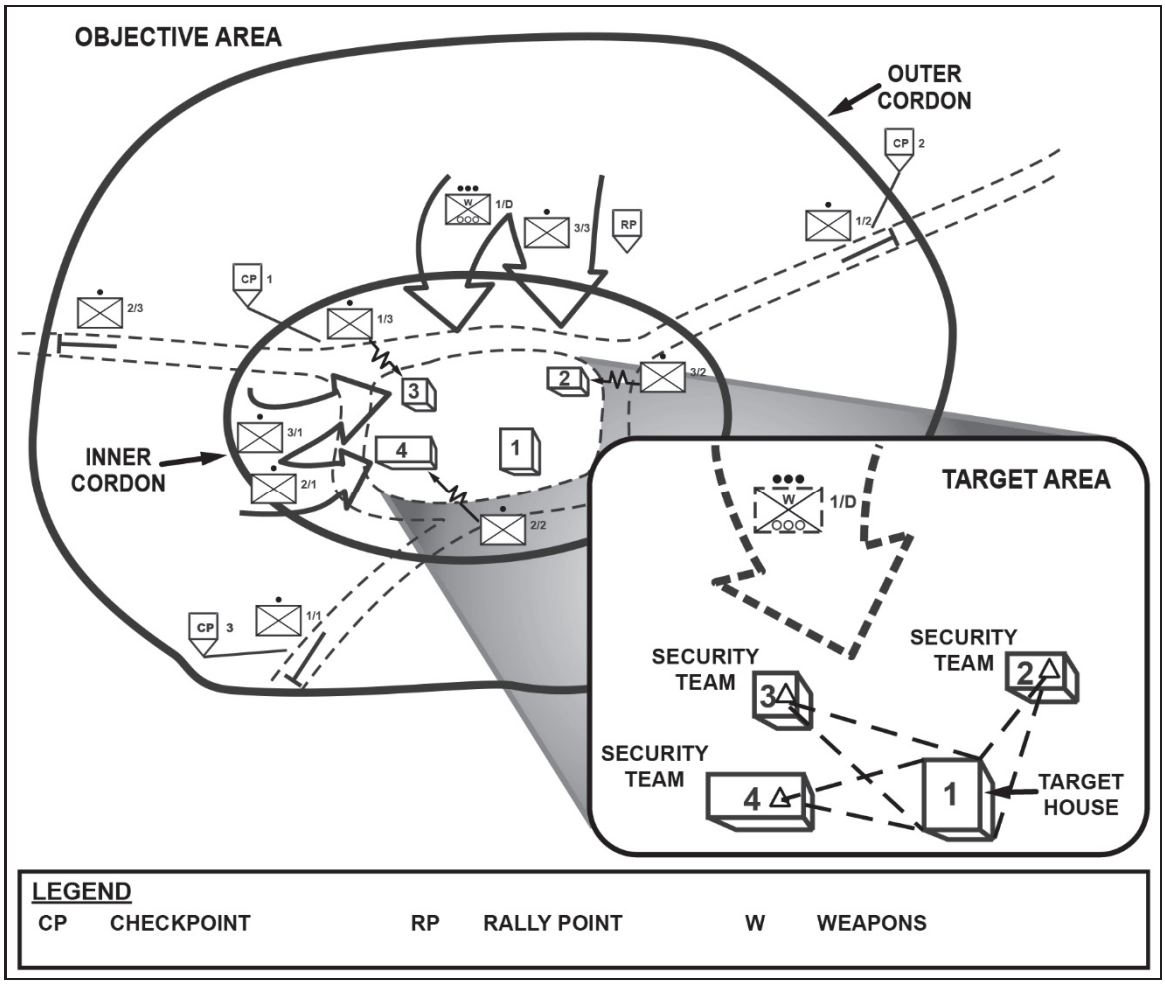


Figure 2-41. Cordon and search (target area)

2-329. Search teams focus on the actual conduct of the search and the processes of site exploitation. The search team is not normally part of the security of the target area, but can be, if required. The team relies on the support team for secondary tasks such as evidence and detainee handling.

2-330. Security teams are responsible for gaining access, clearing, and maintaining security of the immediate objective. Security functions include providing immediate security, protection, overwatch, and supervising movement in and out of the objective. The security team should not be tasks with actions that detract from security. In most cases, the existence of inner and outer cordons does not constitute local security for the search element.

2-331. Support teams are responsible for providing organized manpower to conduct continuing actions in the objective area and for providing direct assistance to the search team and security team, if required. Such actions might consist of, but are not limited to, detainee handling, evidence collection and handling, and casualty evacuation.

2-332. During the establishment of the cordon (see paragraph 2-322 on page 2-92 for a detailed discussion), the search element prepares to execute movement to the target and target area. Such movement may be immediate if executing arrival at the target and target area is planned to coincide with the placement of the inner and outer cordons. Conversely, the search element executes a short security halt at a designated position while it awaits deployment of the security element. Depending on the method of ingress (single or multidirectional), this may or may not be in conjunction with the support element.

2-333. During actions on the objective (see paragraph 2-376 on page 2-103 for a detailed discussion), the search element moves into the target area, and conducts actions necessary to clear and search the target area. The search element clears the target area and sets up a permissive environment for a systematic search. The search may be targeted (i.e., specific people, rooms, or buildings) or it may be comprehensive (everything in the target area). Tactical tasks that may be associated with the search element include the following:

- *Breach*—a tactical mission task in which the unit employs all available means to break through or establish a passage through an enemy defense, obstacle, minefield, or fortification (FM 3-90-1).
- *Clear*—a tactical mission task that requires the commander to remove all enemy forces and eliminate organized resistance within an assigned area (FM 3-90-1).
- *Defeat*—a tactical mission task that occurs when an enemy force has temporarily or permanently lost the physical means or the will to fight. The defeated force's commander is unwilling or unable to pursue that individual's adopted course of action, thereby yielding to the friendly commander's will and can no longer interfere to a significant degree with the actions of friendly forces. Defeat can result from the use of force or the threat of its use (FM 3-90-1).
- *Destroy*—a tactical mission task that physically renders an enemy force combat-ineffective until it is reconstituted. Alternatively, to destroy a combat system is to damage it so badly that it cannot perform any function or be restored to a usable condition without being entirely rebuilt (FM 3-90-1).
- *Neutralize*—a tactical mission task that results in rendering enemy personnel or materiel incapable of interfering with a particular operation (FM 3-90-1).
- *Seize*—a tactical mission task that involves taking possession of a designated area by using overwhelming force (FM 3-90-1).
- *Support by fire*—a tactical mission task in which a maneuver force moves to a position where it can engage the enemy by direct fire in support of another maneuvering force (FM 3-90-1).

2-334. The search element departs the target area under the overwatch of the security element and support element and generally serves as the lead element in the withdrawal order of movement. The search element normally retains that position throughout the rest of the withdrawal to enable mission command through ease of withdrawal.

Support Element

2-335. Support elements are designed to act as a force multiplier during a cordon and search operation and should be positioned where they can best accomplish assigned tasks. Support elements may assist the cordon and search force by serving as a designated reserve, providing additional enabling teams to support all elements of the force, and conducting continuing actions such as establishing a temporary defensive position, conducting vehicle recovery, casualty evacuation, and resupply.

2-336. The support element moves as either the second or the third element of movement in the order of march. When resistance is not expected, or when speed and surprise are paramount, the support element moves as the trail element so it does not interfere with the security and search elements' movement, but is still positioned to support, begin and continue actions in support of actions on the objective. When resistance is expected or when ensuring the target area is sealed off, the support element travels as the second element, allowing it to move into positions of support and security around the target area before the search element is committed.

2-337. As actions on the objective occur, the support element executes its assigned tasks for the cordon and search force. The support element establishes secure positions in or near the target area in which detainees, evidence, and casualties can be safely secured. These positions are established where they are readily assessable to cordon and search force, and if necessary defendable against attack. The support element may provide extra detainee and evidence handling teams to the search element, conduct casualty evacuation and provide internal resupply, vehicle recovery and hasty repair capabilities. Often the support element controls various enablers attached to the search element until they are needed. Tactical mission tasks associated with the support element include follow and assume and follow and support, which are defined below:

- Follow and assume. A tactical mission task in which a second committed force follows a force conducting an offensive task and is prepared to continue the mission if the lead force is fixed, attrited, or unable to continue.
- Follow and support. A tactical mission task in which a committed force follows and supports a lead force conducting an offensive task.

2-338. The support element, normally with the command element nested, follows in trace of the search element and is the last of the cordon and search force to depart the target area overwatched by the security element. During the withdrawal, depending on tasking, the support element may transport multiple detainees or large amounts of captured material and tow downed vehicles.

Phases of a Cordon and Search

2-339. A *phase* is a planning and execution tool used to divide an operation in duration or activity (ADRP 3-0). Phasing is typically used to distinguish when the decisive operation or main effort changed the tactical or operational focus. The phasing of a cordon and search describe how the battalion commander envisions the overall operation unfolding. The six phases to a cordon and search are planning and reconnaissance, movement to the objective, cordon, actions on the objective, and retrograde.

Planning and Reconnaissance

2-340. During the planning (includes preparation) and reconnaissance phase, the mission is received or initiated, the planning process begins, and initial actions are taken to develop the task and purpose, IPB (identification of target and target areas), and tentative scheme of maneuver. Support forces external the Infantry rifle company and Infantry battalion are task organized and WARNORDs are issued. As planning serves to focus the information collection effort by identifying, what to look for and where to look for it, reconnaissance helps to refine the planning process by answering through collection, information requirements and priority intelligence requirements. Although the plan is continually updated, and R&S continuous throughout the operation, this phase ends with issuing the completed order, conducting final rehearsals and inspections, and crossing the line of departure.

2-341. During planning and reconnaissance for the cordon and search the company receives its mission, it then immediately begins to analyze it, and begin troop leading procedures. The commander will identify what needs to be done, where activities must be done, the nature of the threat, the nature of the area in which they will work and how the mission variables of METT-TC affect the cordon and search operation.

2-342. As the company plans, the commander assesses which of the two basic methods of executing a cordon and search, cordon and knock/ask method or cordon and kick method to use. The two methods reflect variances of aggressiveness towards the occupants of the target location. Based on the enemy situation template and identified risk, actual cordon and search operations lie somewhere between these two variances.

2-343. Table 2-2 shows sample variances to cordon and search operations based on level of entry. In both methods, units establish the cordon with as much speed and surprise as possible to isolate the objective. What differs is the aggressiveness of the cordon personnel and the actions of the search personnel. Regardless of the method selected, the potential for combat still exists, and all units should be prepared to react to contact or a changing situation in accordance with the rules of engagement.

Table 2-2. Sample variances of cordon and search methods

CORDON AND KNOCK/ASK (PERMISSIVE)				***CORDON AND KNOCK (NON-PERMISSIVE)***			
Invited In	Ask	Dictate	Demand	Just Enter	Kick In	Shoot-In	Explode-In
ESCALATING LEVEL OF VIOLENCE							

2-344. The cordon and search method (permissive [cordon and knock] or non-permissive [cordon and enter]) chosen is dictated by the nature of the threat, the amount of force that may be necessary to enable the search to occur, and the size of the target and target area. Permissive searches are conducted whereby the force is prepared to use force, but plans to use other techniques such as requesting or dictating entry to enable the search to occur. Key considerations for permissive searches are; methods of approaching and

communicating, contingency plans if entry is denied or resistance is encountered, and search element training. Non-permissive searches are conducted with a force that is prepared to use force to clear the target area and enable the search to occur. The commander should consider the impact to innocent occupants, neighbors, or bystanders, the overall risk to friendly forces, level of training within the search element, collateral damage concerns, perception of the local population, and the impacts on follow on missions. Changes to the method throughout planning my happen due to intelligence gained during planning. Contingency planning in imperative in order to streamline execution if changes arise.

2-345. When a cordon and search is conducted, it is in efforts to search for a *target*, an entity or object that performs a function for the adversary considered for possible engagement or other action (JP 3-60). The nature of the target will dictate the resources necessary, and the logistical requirements to meet an intended end state. As an example the search required to find a person in a single family home will require a smaller search team than that of a search encompassing a block of houses. Similarly, the logistical resources required to evacuate three detainees from a target area is different than that of a large ordinance cache. Key considerations the company commander examines regarding the nature of the target are—

- Is the target a person? More than one person? A thing? Multiple things? Is it both?
- Where is the target?
- Is the target to be detained, evacuated, seized, or destroyed?

2-346. The size and nature of the target area depend on the nature of the target as well. The presence of multiple targets in an area, the geographical relationship of multiple targets, and the surrounding environment are consideration regarding the employment of the inner cordon, and search elements that must be analyzed during planning and reconnaissance. Regardless of the target area and its composition, the cordon and search force must establish dominance and control to enable a successful search.

2-347. The size and nature of the objective area is derivative of the nature of the target, and target area as well. The objective area contains both the target area, and the target and it can vary in size dependent upon the environment in which your cordon and search is taking place. The objective area in a densely populated urban area may be only slightly larger than the target area, may differ from the objective area in a sprawling country side where a few buildings are being searched. The commander needs to consider the terrain in which the cordon search is conducted, and with analysis focusing on observation and fields of fire, avenues of approach, key terrain, obstacles, and cover and concealment (see appendix B). While considering terrain, the commander must also assess impact of weather on the operation and how it may degrade or provide opportunity during the cordon and search. (See ATP 2-01.3 for more information.)

2-348. During the development of the plan, the company commander analyzes the anticipated threat and threat actions in and around the objective and how the enemy will react upon the arrival of the cordon and search force. Key considerations surrounding enemy activity include—

- What is the enemy likely to do as a cordon search force arrives?
- What may the enemy do upon the approach?
- While the cordon and search is ongoing?
- What may they do when they leave?

2-349. The commander will not only focus on the physical resistance, but must take into account all types of reactions such as fleeing, destruction and hiding incriminating items, and the interest of the local populace.

2-350. Cordon and searches are susceptible to being impacted by time. Planning time may be short due to the urgency of conducting the operation to exploit a fleeting opportunity. The time on the objective may be considerably longer than what was planned.

2-351. The commander develops a plan and fleshes out the scheme of maneuver. The scheme of maneuver is the plan that translates commander's decisions regarding the target, target area, and objective area into action by determining how available forces will accomplish the method of cordon decided upon (who goes where and when). The commander determines the initial scheme of maneuver, and then refines the plan throughout the planning and reconnaissance phase as additional information becomes available. The commander must determine the following:

- Order, route, and method of delivery to and from the objective (to include landing zones, insertion and extraction sites).

- Timing and phasing.
- Location of the target and target area and how the search element will arrive there.
- Where and how the security element will deploy inner and outer cordons.
- Where the support element will locate and criteria regarding its reserve functions.
- Where the commander will emplace the conduct of mission command.
- Battlespace geometry or where elements are located in relationship to each other, civilians, and sensitive sites; and the effects of their fires and the risk estimate and collateral damage estimate.

2-352. Through the development of the scheme of maneuver the commander also identifies the contingency plans that may need to be considered to ensure that the company is prepared for potential changes to the plan involving; resupply, assault (in the case of planned permissive operations), communications problems, alternate routes, alternated delivery options, actionable combat information requiring immediate follow-on operations, transitions from offense to defensive operations, and minimum force necessary for go/no-go criteria, and bump plans.

2-353. As information becomes available during planning and reconnaissance, it may become evident that additional enablers are required to effectively and efficiently execute cordon and search operations. Because some resources may require a request process and significant lead time such as manned or unmanned aviation, civil affairs teams, public affairs, human intelligence collection teams it is important that critical enablers are identified early in the planning process to incorporate into the company formation to maximize efficiency. Specific enablers that may require linkup procedures such as explosive ordinance disposal or quick reaction force may require coordination's before beginning the operation. The members of these teams are subject matter experts, and the commander should consult them directly regarding their methods of employment, strengths and weaknesses, and requirements (some military working dogs require climate control for best employment).

2-354. A cordon and search may use any manner of movement, and may blend types of movement to deliver soldiers onto the objective. For example, the security element may deploy in wheeled vehicles, while the search element conducts an air assault into the target area. The terrain and environment, and capabilities of the threat may also dictate methods of movement. As an example, an enemy that poses significant air defense assets may force the delivery to be on foot. Methods of movement to a cordon and search include vehicle, foot, air, and waterborne.

2-355. When host-nation security forces are integrated into the cordon and search mission, it is necessary for the commander to identify their capabilities with regards to communication, weapons system combat power, training, and rehearsals required to integrate. Tactically, the breakdown of trust, communication, and cooperation between host nation and the cordon and search force can affect military capability.

Note. Non-traditional threats, such as the insider threat, can undermine cordon and search (and search and attack discussed later in this chapter) activities as well as the cohesion of cordon of search force. See chapter 4 for a detailed discussion on insider threats.

2-356. During this phase, the command element begins gathering information and coordination. The commander identifies elements and assigns units to them. Tasks and priorities are assigned to the support element. Weapons, personnel, and equipment preparation, and contingency plans are identified. Rehearsals of all aspects of the cordon and search are conducted, but the focal point of the rehearsals should be actions on the objective, mission command and communications contingencies, and reporting.

2-357. Normally, the commander considers how to effectively employ enablers that typically support cordon and search missions. Enablers could include but are not limited to information collection assets, aviation, military working dogs, public affairs, and snipers. The commander is able to leverage these enablers by effectively task organizing them within the formation. The commander should consider direct fire control measures and indirect fire coordination measures and how they will affect supporting enabler such as aviation support. During rehearsals, if possible, all enablers should be in attendance to deconflict and ensure intent is understood surrounding search techniques, information operation messaging, and the communications plan,

2-358. During planning efforts the commander considers the products necessary to effectively plan, prepare, and execute the mission. Prior to mission execution, producing products, such as a graphic operating system and a grid reference graphic, enable mission command and mitigate potential fratricide. The graphic operation system is a technique used to provide a numbering system for an urban area. This is commonly generated through the usage of satellite imagery. Typically, the objective building is numbered One and shown with a highlighted box (see figure 2-42).

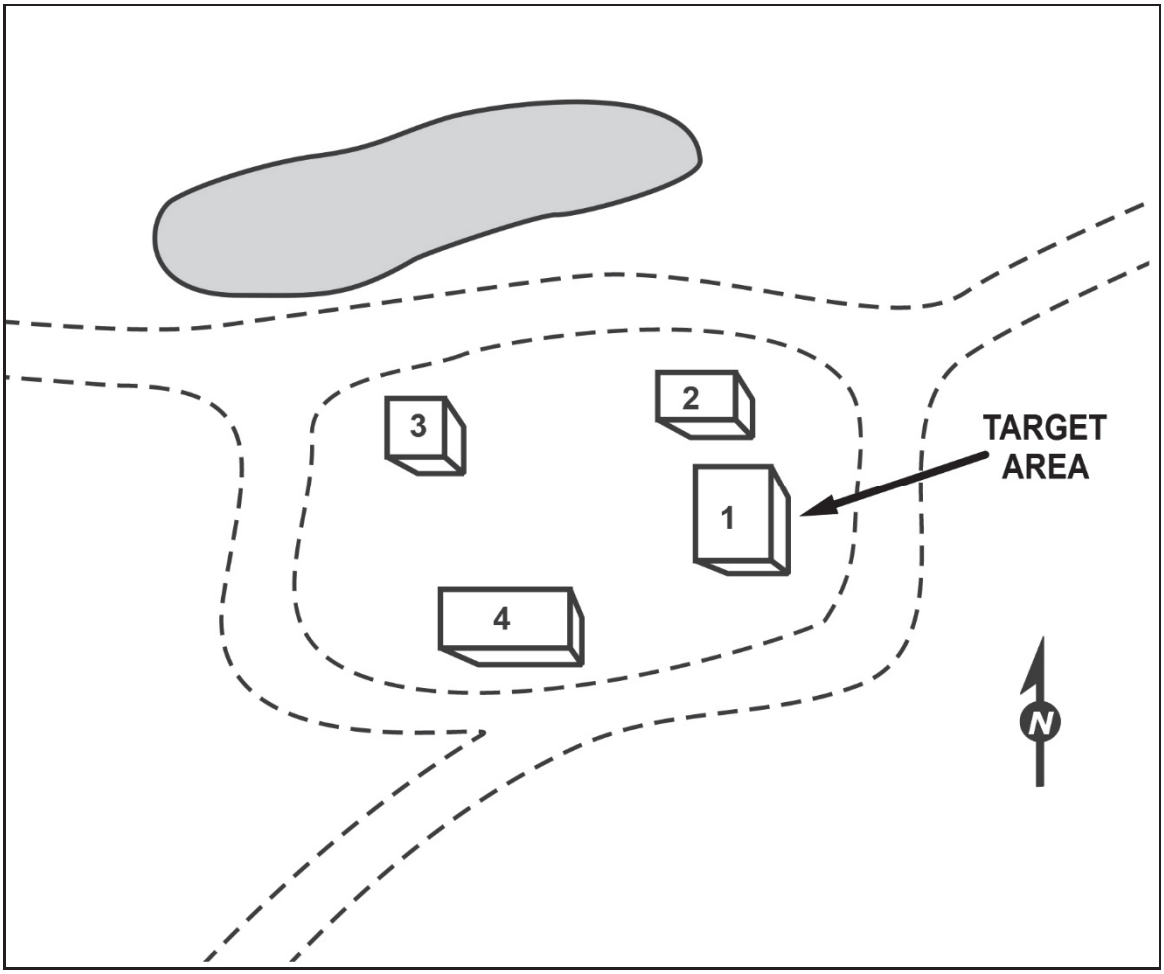


Figure 2-42. Graphic operating system

2-359. A grid reference graphic is another technique for effective communications and control of subordinate elements during a cordon and search. The grid reference graphic overlays a simple grid system over a map, but provides fidelity and a common operating picture necessary when conducting operations in urban terrain. By using the numerical grid identifiers along the top, side one is able to provide common understanding when referencing locations during an operation. In this example (see figure 2-43), arrows and circles are used so that the reader can identify a building. In this example Building 2 is mostly located in grid 4G.

Note. A combination of both the grid reference graphic and graphic operating system are commonly used techniques that help to mitigate confusion between all elements. When possible, all supporting enablers and supporting echelons provide the latest and most current version of all products prior to mission execution.

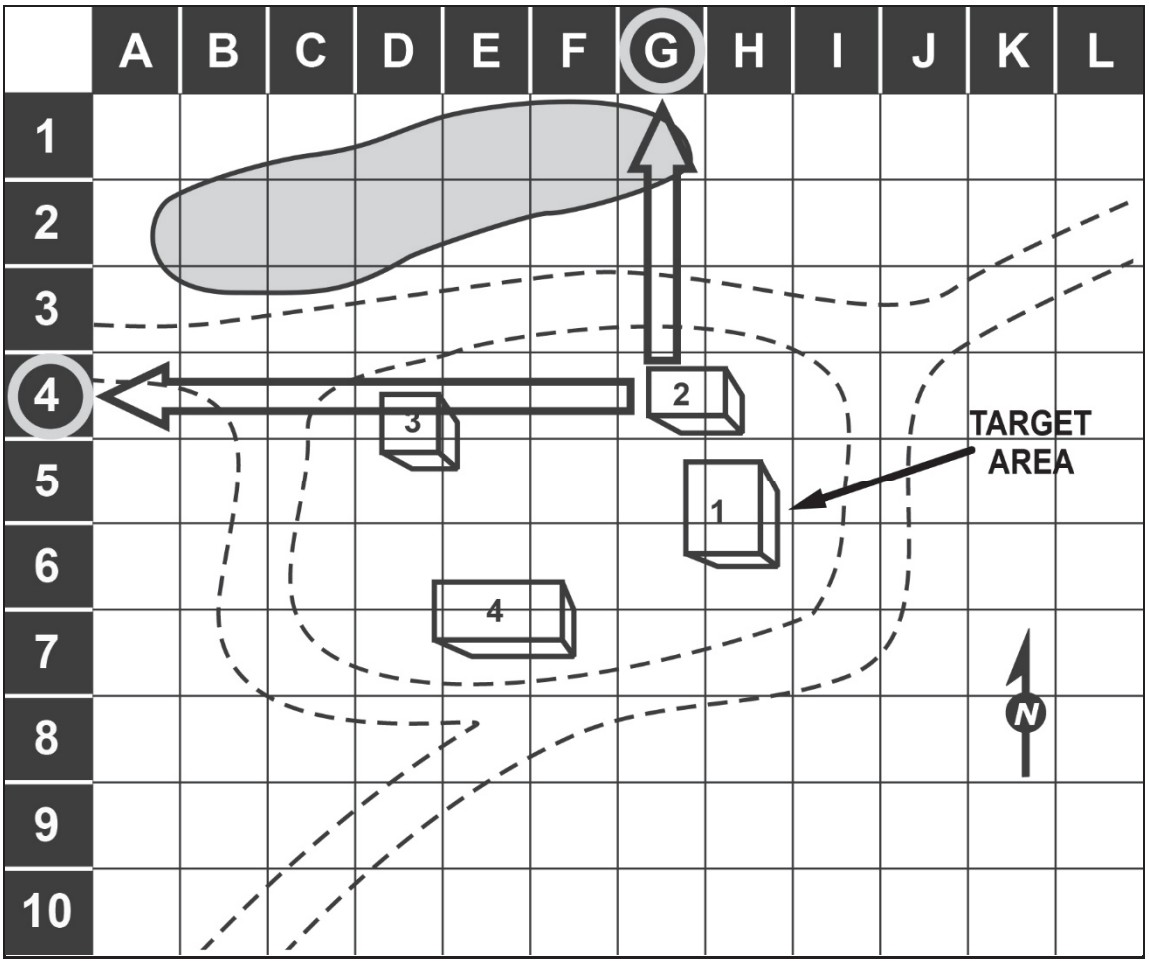


Figure 2-43. Grid reference graphic

2-360. Although the plan is continually updated, and R&S continuous throughout the operation, this phase ends with issuing the completed order, conducting final rehearsals and inspections, and crossing the line of departure.

> ***Note***. The commander continuously assesses (throughout all phases) the situation to better understand current conditions and determine how the operation is progressing. Continuous assessment helps the commander anticipate and adapt the force to changing circumstances.

Movement to the Objective

2-361. Movement to the objective begins with the physical movement of the cordon and search force to the target and objective area. Methods of movement, timing, and scheme of maneuver depend on the mission variables of METT-TC. Movement by the cordon and search force may be as a single element on one route (single points of ingress or egress) or by a number of different elements across different routes (multidirectional points of ingress or egress) at different times. (See ATP 3-21.20 and ATP 3-06.20 for additional information on the methods of ingress and egress.) As discussed in planning and reconnaissance, the method, order, and synchronization of movement are crafted during the planning and reconnaissance phase. A cordon and search may use any manner of ground tactical movement (dismounted and mounted march), air movement, or amphibious movement, and may blend types of movement. For example, the security element may deploy in wheeled vehicles while the search element conducts an air assault into the target area. Forces delivered to the objective area by air or amphibious means will still use various combat

formations and movement techniques to relocate from the point of insertion to their assigned positions dependent on composition of the force, tactical situation, means of movement, and the commander's vision. Ultimately, the focus of the movement phase is simple, get the cordon and search forces from their starting point to the positions designated for the outer cordon, inner cordon, and target area without compromising the operation. The nature of the terrain and environment, and the capabilities of the threat may also dictate methods of movement. An area inaccessible to vehicles and an enemy threat possessing significant air defense capabilities might require foot movement. The movement phase consists of—

- Organizing forces in order of march and departure from the assembly area.
- Movement to the objective area.
- Elements moving along routes to designated release points as the plan requires.

2-362. When organizing the order of march during movement the commander assesses where the mission command element will best be positioned to control the movement. The command element normally nests within one of the platoons. Considerations regarding positioning of the command element is weighing the ability to exercise mission command, while mitigating risk to the formation.

2-363. The security element normally leads the movement regardless if it is moving as a single force or in multiple elements on multiple routes. The inner cordons and outer cordons must be in place or nearly in place prior to actions by remaining forces.

2-364. Typically the search element moves as either the second or the third element of movement, in the order of march. When the commander needs to expeditiously deliver the search element to the target to ensure speed and surprise are achieved, the commander should select to posture them as the second element so that they are able to move immediately and directly into the target area. When it is paramount to ensure the target area is completely isolated, the search team will move behind the support element.

2-365. The support element moves as either the second or the third element of movement in the order of march when resistance is not expected or when speed and surprise are paramount, the commander places the support element as the trail element so it does not interfere with the security and search elements movement, but is still positioned to support, begin and continue actions in support of actions on the objective. When resistance is expected or when ensuring the target area is sealed off, the support element travels as the second element, allowing it to move into positions of support and security around the target area before the search element is committed.

2-366. As previously explained in planning and reconnaissance, a commander will develop the scheme of maneuver which translates commander's decisions regarding the target, target area, and objective area into action. In developing the concept the commander utilizes control measures essential to mission command. The control measures allow for coordination, and execution of the commander's plan. Control measures normally used to ensure the plan is understood are—assembly areas, assault positions, checkpoints, rally points, and phase lines. The movement phase normally ends when the security element reaches its release point, assault position, or similar control measure.

Cordon

2-367. A cordon seals off the objective area by containing the enemy in the objective area and interdicting external attempts to influence events. A cordon consists of an outer and inner cordon, emplaced simultaneously or sequentially. Simultaneous or nearly simultaneous occupation of the inner and outer cordons can be achieved regardless of the means of movement. Multidirectional ingress lends itself to simultaneous action whereby the force moves to its position presenting a lower signature, and is able to move into position simultaneously, or near simultaneously. Sequential occupation of the inner and outer cordon positions allows for ease of control and simplicity of maneuver while accepting some risk that an alert threat in the target area may have extra time to react. A single ingress lends itself to sequential actions. The single ingress is conducted when the force moves as a column along the same avenue of approach to a release point. (See ATP 3-21.20 and ATP 3-06.20 for additional information on simultaneous and sequential occupation of the inner and outer cordon.)

2-368. An example cordon phase follows:

- Inner and outer cordon sub-elements of the security element move to their cordon positions and establish positive control of movement in and out of the objective area.
- Security and search and command and support elements either hold at a predetermined position until the cordons are established or they can move directly behind the cordon sub-elements to a release point and from there they move, on-order or other predetermined initiation method, into the target area.

Note. The commander considers utilizing a synchronization matrix to ensure isolation is achieved and conditions are established prior to movement into the target area.

2-369. Normally, the company headquarters element is nested within one of the platoons or amongst multiple platoons if necessary during the cordon phase. For example, the XO may be with the support element while the commander is within the security forces to best coordinate efforts across platoons.

2-370. The search element conducts its movement to the target area either simultaneous to the cordon being established or will conduct a short halt while the cordon is established. The nature of the target, target location, and method of ingress (single point or multidirectional) may determine whether the search element moves simultaneously or sequential. The method of ingress may be single or multidirectional.

2-371. The support element will conduct its movement to the target area either simultaneous or sequentially to the cordon. The nature of the target, target location, and method of ingress (single or multidirectional) may determine whether the search element moves simultaneously or sequential.

2-372. The security element deploys the inner and outer cordon teams to set up their cordons. The actions of both reinforce each other, creating an environment free of unwanted influences and actions, from both the outside attempting to move toward the target, and from within the target attempting to flee the area. As the security element deploys, its actions are dictated by the requirement of the cordons, methods by which the security element moves into the objective area, and manner in which it chooses to occupy the positions that make up the inner and outer cordon. The security element may use static positions, patrols, or both to achieve the effects required.

2-373. The outer cordon seals off the objective and prevents enemy or civilian influence. The outer cordon element primary orientation is outward from the target area, however the outer cordon is also performs a secondary function of controlling movement from the objective area as well.

2-374. The inner cordon seals off the target to protect the search element from threat activity and prevent escape from the target area. It is conducted by the inner cordon team from the security element properly armed and equipped to control the ground. The inner cordon's primary orientation is inward toward the target area. However, the inner cordon performs a secondary function of controlling movement into the objective are as well.

2-375. The cordon phase ends when the cordons are in place and the security element has sealed off the objective area. Actions on the objective begin immediately after the cordon is established.

Actions on the Objective

2-376. Actions on the objective includes all actions associated with the target(s) and the target area from arrival to withdrawal, from search and site exploitation to detainee handling, casualty evacuation, and interaction with the local population. The nature of the target dictates both operational and logistical considerations: operational in the sense of determining the resources needed to find the target, and logistical in the sense of determining the resources needed to meet the required end state regarding the target. Key considerations when examining the nature of a target include is the target a person(s), thing(s), or are both included, where is the target, is the target to be detained, evacuated, seized, or destroyed. The size and nature of the target area depend on the nature of the target, number of targets in that area, geographical relationship of multiple targets, and environment that makes up the area.

2-377. The key actions that are conducted during this phase include the search element entering the target site, the support element moving to supporting positions, as directed and executing support/reserve functions, and the commander moving to where they are able to best influence the operation. The target area consists of that area in which the cordon and search force must establish dominance and control to enable an effective search.

2-378. During actions on the objective the security element continues to maintain inner and outer cordons ensuring that the target is isolated by providing overwatch of friendly forces. The security team also provides immediate security of detainees, and noncombatants.

2-379. As the actions on the objective are ongoing the support element executes its assigned task as reserve for the cordon and search force, and support for the search element. It establishes a secure position in or near the target area in which detainees, evidence, and casualties can be safely secured. This is also a position where the cordon and search force can rally if necessary, and from which the cordon and search force can defend itself if attacked by an overwhelming threat. The support element also provides detainee and evidence handling teams for the search element, conducts casualty evacuation and provides internal resupply to those elements requiring it. Often this team has additional enablers attached, for example additional medics and communications assets.

2-380. The search element moves to the target area and sets up a permissive environment for a systematic search. The search may be targeted (specific people, rooms, or buildings) or it may be comprehensive and search everything within the given area. Search teams are responsible for entering, clearing, and searching buildings in order to capture or destroy enemy forces or equipment. The search team conducts the initial entry into the target and, if necessary, uses speed and violence of action to move through the target to completely clear and seize control of it. The requirement to create a permissive environment for the search normally requires that the target is cleared of enemy forces, noncombatants, and/or booby traps before the search begins.

2-381. The techniques, as discussed earlier, used to secure the target are dependent upon the nature of the environment (permissive or non-permissive). Example securing techniques can include:

- Permissive (cordon and knock). This is less intrusive than cordon and search. It is used when the populace is seen as friendly or neutral, when no resistance is expected and when the goal is to disrupt and inconvenience the occupants as little as possible. One way to do this is to conduct a tactical callout whereby ground forces conduct an initial clear of structures or compounds from a stand-off distance by first containing and isolating the structure(s), then directing its occupant(s) to exit. Once the occupant(s) vacate the structure(s), ground forces then conduct a final clear before continuing with other actions on the objective.
- Permissive (cordon and ask). A second way of conducting a permissive search is through a cordon and ask. This is a method in which the occupants or host-nation authorities are asked for permission to search a particular location. If permission is denied, no entry occurs; however, the cordon and knock and the cordon and ask require some degree of integration with host-nation forces to obtain agreement from the occupants who are the target of the search.
- Non-permissive (cordon and enter). This approach is intrusive. The intent is to rapidly breach barriers to gain entry into the search area, typically using speed and surprise to allow the unit to quickly gain control. This action allows units to maintain the initiative over potentially unknown threats. Intrusive entry ranges from a Soldier simply opening a door without occupant permission, to mechanical, ballistic, or explosive breaching. In addition, if mounted assets are present they can be utilized to conduct a vehicular breach.

2-382. Once the search element has isolated and secured the target the search element can begin conducting their search. The search can orient on people, material, buildings, or terrain. The commander must decide whether the unit will conduct a detailed search or a hasty search depending upon the intelligence available or reason for the search. The object of a search is to determine the presence of any targeted individuals and groups, and to look for items of evidentiary or intelligence value. This phase ends with issuing the retrograde order.

Retrograde

2-383. Retrograde is the movement of the cordon and search force, regardless of the type of retrograde, method of movement, timing, and phasing from the objective area. Similar to a raid, the search element must depart prior to the security element displacing. The retrograde phase begins with the order to retrograde. In a manner similar to the movement and cordon phases, the cordon and search force may execute a single or multidirectional method of withdrawal, departing the target and objective areas via one or more routes. It may also include using stay behind force. The retrograde must receive proper attention during the planning and reconnaissance phase as the cordon and search force is most vulnerable to enemy action, accountability missteps, risk of complacency, and other threats upon the retrograde. The withdrawal phase consists of the following activities:

- The commander verifies that actions on the objective are complete and orders the retrograde.
- The search element departs the target area under the overwatch of the support element and generally serves as the lead element in the withdrawal order of movement.
- The support element, with the command element nested, follows in trace of the search element and is the last of the cordon and search force to depart the target area.
- The security element collapses inner then the outer security cordons and moves to a preliminary release point from which it may linkup with the rest of the cordon and search force or continue the retrograde on its own.
- The cordon and search force, if traveling as one element conducts a brief accountability and security halt at a designated release point near the edge of the objective area.
- Following the designated route and in the proper order of movement, the cordon and search force departs the objective area to the predetermined assembly area. The exfiltration route should be different from the infiltration route.

2-384. Egress techniques are the reverse of the movement to the objective, establishment of the cordons, and movement to the target area. It may be executed as a reciprocal of the methods used to move into the area, or may be entirely different. Consideration for extraction of enablers such as snipers, and R&S forces are essential in the planning and reconnaissance phase to ensure proper accountability and effective overwatch. Egress techniques typically selected by the commander are:

- Simultaneous egress. Emphasizes speed to rapidly move from the area but sacrifices security to some degree. The simultaneous collapse of both inner and outer cordons can lead to unexpected consequences as well as the degradation of overwatch.
- Sequential Egress. While slower, sequential egress maintains a safer environment for departure of all of the cordon and search force elements. Elements egress sequentially from the target and target area first, while under the overwatch of the inner cordon. Once this is complete the inner cordon will collapse under the overwatch of the outer cordon, then the outer cordon itself breaks down last.
- Single point egress. The cordon and search force executes a single point egress to a predesignated release point due to canalization or to simplify movement. Individual elements move to the predesignated release point, which may create some obstacles such as moving the cordon itself to reach the egress route.
- Multidirectional egress. The cordon and search force accepts the need for greater coordination and control to gain the flexibility, security, and speed associated with multidirectional egress. The cordon and search force ensures accountability, communications, and potential reinforcement plans are developed to mitigate possible risk associated with multidirectional egress.

2-385. The retrograde phase ends when all elements of the cordon and search force (to include stay-behind R&S elements) return to the designated assembly area(s).

SEARCH AND ATTACK

2-386. *Search and attack* is a technique for conducting a movement to contact that shares many of the characteristics of an area security mission (FM 3-90-1). This form of a movement to contact is conducted when the enemy operates as small, dispersed elements whose locations cannot be determined to targetable accuracy by methods other than a physical search or when the task is to deny the enemy the ability to move

within a given area. Normally, a search and attack is conducted by mounted or dismounted Infantry forces often supported by Stryker and armored equipped forces. However, this technique may also be necessary during major operations when the enemy establishes smaller noncontiguous defenses. These type search and attack operations are normally characterized by robust R&S, and rapidly concentrated combat power to fix and defeat or destroy the enemy once located. (Refer to ATP 3-21.20 and FM 3-90-1 for additional information.)

Organization of Forces

2-387. The Infantry rifle company normally conducts search and attack as part of a battalion or larger element; however based on the mission variables of METT-TC it can conduct the operation independently. When conducting a search and attack independently, the company organizes (as would the Infantry battalion) with a reconnaissance force, a fixing force, and a finishing force, each with a specific purpose and task to accomplish and the appropriate level of support in terms of fire support, sustainment, and other combat enablers. Ideally, as with a cordon and search, the commander uses existing base units (platoons and squads) to organize search and attack forces.

Reconnaissance Force

2-388. The company, as part of the battalion search and attack operation, uses information from reconnaissance forces and surveillance assets within and external to the battalion, to include scouts, snipers, unmanned aircraft systems, and electronic warfare assets to find and potentially fix a dispersed enemy. The size of the reconnaissance force is based on the available intelligence about the size of enemy forces in the area of operation and the size of the area of operation in terms of both the geographical size and the size of the civilian population contained in that area of operation. The less known about the situation, the larger the reconnaissance force. Once the enemy is found, the reconnaissance force must determine if it has the combat power to fix the threat or if the battalion must fix the enemy with its fixing force.

Fixing Force

2-389. The fixing force (usually a company-size force when conducted as part of the battalion, and a platoon when conducting search and attack at the company level) prevents the enemy from moving to or from a specific location until the enemy is engaged and destroyed. The fixing force must have enough combat power to isolate the enemy forces once the enemy is located. Ideally, the fixing force positions prior to initiating the search and attack. Initial fixing positions are determined based on the enemy situation and, more appropriately, pre-positioned in areas where fixing forces could most likely support the finishing force. When contact is made in other areas, fixing forces must have procedures in place to facilitate moving to where it can influence the fight. Once the threat is fixed, the fixing force determines if it is able to conduct the attack the finishing force normally would execute. If not, another unit designated as the finishing force executes the assault.

Finishing Force

2-390. A finishing force engages and destroys the enemy force and is normally the decisive operation or main effort of the search and attack. Finishing forces must have enough combat power to defeat those enemy forces expected to be located within the area of operation. Finishing forces must be responsive and require synchronization with all support forces to accomplish the desired end state. Procedures must be in place to facilitate quick movement of the finishing force. Otherwise, the enemy will rapidly attrit the fixing force, and immediately break contact before engagement by the finishing force. These procedures include, but are not limited to, good graphic control measures, responsive means of transportation if required, and effective communications with the force in contact.

Planning and Preparation

2-391. A search and attack is a decentralized movement to contact against an enemy operating in dispersed elements requiring multiple, coordinated patrols at company level and below. The battalion may conduct a search and attack as a coordinated battalion level operation or decentralized to independent company level operations. Whether conducting a consolidated or decentralized operation, the battalion or company must

designate a decisive operation or main effort and shaping operations or supporting efforts that enable it to maintain the amount of flexibility the situation dictates.

2-392. During planning and preparation, commanders consider numerous mission variables (METT-TC) that influence a search and attack mission. The military decision-making process at battalion level, and troop leading procedures at company level provide commanders with the framework for planning population-centric distributed operations. With receipt or in anticipation of the search and attack mission commanders initiate the process alerting all participants of pending planning requirements. This in turn enables participants to determine the amount of time available for planning and preparation and how to abbreviate the military decision-making process or troop leading procedures, if required. (Refer to ATP 3-21.20 and FM 6-0 for additional information.) This process organizes the battalion and subordinate units in purpose as well as space and helps to focus the search and attack for one or more of the following purposes:

- Destroy the enemy: Render enemy units in the area of operation combat-ineffective.
- Deny the area: Prevent the enemy from operating unhindered in a given area; for example, in any area the enemy is using for a base camp or for logistics support.
- Protect the force: Prevent the enemy from massing to disrupt and destroy friendly military or civilian operations, equipment, and property such as key facilities, headquarters, or polling places.
- Collect information: Gain information about the enemy and the terrain to confirm the enemy course of action predicted as a result of the IPB process.

2-393. A commanders' situational understanding and knowledge of the higher echelon's concept of operation enables planning and the development of a clear task and purpose for each subordinate force. As planning and preparation continues, commanders establishes control measures that allow for decentralized actions and small-unit initiative to the greatest extent possible. Minimum control measures for a search and attack are an area of operation, target reference points, objectives, checkpoints, and contact points. The use of target reference points facilitates responsive fire support once the reconnaissance force makes contact with the enemy. Commanders use objectives and checkpoints to guide the movement of subordinate elements. Contact points indicate a specific location and time for coordinating fires and movement between adjacent units. Commanders use other control measures, such as phase lines and named areas of interest, as necessary.

2-394. Planning for the search and attack, based on the IPB, combines the battalion S-2's pattern and predictive analysis with available higher echelon information collection to determine likely enemy locations, capabilities, patterns, and actions. As developed this information is passed to subordinate units in the form of intelligence products. The scheme of maneuver for the search and attack is developed to capitalize on this information along with the integration of internal and external fire support assets available to the battalion and as required down to the company and platoon. Fire support plans provide flexible and rapidly delivered fires to achieve the commander's desired effects throughout the area of operation. Commanders position fire support assets to support subordinate elements throughout the area of operation and establishes procedures for rapidly clearing fires. To clear fires rapidly, command posts and subordinate commanders track and report the locations of all subordinate elements. Because of the uncertain enemy situation, commanders assign clear fire-support relationships.

2-395. Synchronization of movement and maneuver, fire support, protection, and sustainment is difficult to achieve in this type-decentralized movement to contact. Distances between units, the terrain, and a vague enemy situation contribute to this difficulty. For these reasons, commanders position themselves where best to receive information and transmit orders, and shift and commit forces during search and attack. Command posts are positioned to best influence the battle and to allow commanders the best vantage point to see the battlefield. This may not necessarily be with the decisive operation or main effort. When attached in a direct support role, air defense assets can increase protection for command posts. In addition, air defense assets may provide security to maneuver and sustainment units and positioned to overwatch key air and ground routes or avenues of approach.

2-396. Fire support officers prepare the fire support plan for each phase of the search and attack and contingencies. Fire support officers recommend the positioning of attached joint fires observers to support the operation, and assists in deconflicting company and higher echelon airspace. Tactical air control parties are positioned well forward (within reconnaissance, fixing, and finishing forces) to increase the timeliness and accuracy of close air support. Key to air-ground integration during search and attack is the means to develop *combat identification*, which is the process of attaining an accurate characterization of detected

objects in the operational environment sufficient to support an engagement decision. (JP 3-09). Priority of fires for the battalion mortars during the search and attack is normally to the decisive operation or main effort of the battalion. Company mortars employ organic fires to support the attack of the finishing force or to block ingress and egress routes, and prevent repositioning of the enemy in support of the fixing force. Finding the enemy may have both echelons initially providing priority of fires to the reconnaissance force.

2-397. The battalion engineer staff officer provides expertise to help identify breach points in enemy defenses and assure mobility for the battalion and its subordinate units. When engineer asset from the brigade engineer battalion are available, engineers can augment the company to increase combat power and facilitate freedom of action. Engineers can also conduct route reconnaissance, determine bridge classifications, and find or make bypass routes where necessary. The route clearance platoon provides the detection and neutralization of explosive hazards and reduces obstacles along routes that enable force mobility within search and attack areas of operation. When required, a breach squad from the Brigade Engineer Battalion can be task organized to the route clearance platoon with mine-clearing line charges. The breach section of the IBCT and Infantry (Airborne) BCT provides mine clearing line charges.

2-398. The essential nature of communication to a battalion search and attack, characterized by dispersed decentralized independent company-level operations, alludes to an additional planning problem for this type operation—communications. The limited range of communications within the type complex terrain most associated with search and attack missions requires detailed planning and rehearsal to insure that possible terrain masking effects and distances are resolved. Relays or retransmission stations may be required, and as with the combat multipliers discussed above, additional planning becomes essential. All of these considerations add up to a detailed preparation for combat that are fleshed out during troop leading procedures and pushed to higher in the form of requests for information, or requests for enablers.

2-399. Assault platoons from the Infantry weapons company can augment the rifle company. When assault platoons (heave weapons) are attached, the rifle company commander and the heavy weapons commander coordinate the best usage of heavy weapons assets. If the Infantry weapons company is operating organically, then coordination with the battalion S-3 is conducted to select Javelin medium close combat missile system positions and TOW missile positions to provide long-range direct fire support. Based on the commander's analysis, the commander can use the MK 19 or the .50-caliber machine gun in place of or in combination with the TOW missile system. The weapons company can provide mobility and additional firepower for security missions and the reserve, also. During limited visibility, the weapons company with advanced optics can augment security forces at key locations, monitoring areas where the enemy is expected to travel at night.

Execution

2-400. During execution commanders focus efforts on translating decisions determined during planning and preparation into actions. A commanders' application of the required combat power, at the correct time and location, to gain and maintain a position of relative advantage is essential to the accomplishment of the search and attack mission. To seize, retain, and exploit the initiative, commanders ensure the synchronization of decentralized operations by specifying where each subordinate unit will operate, establishing measures to consolidate units before attacks, and establishing fire control measures for each subordinate unit. Commanders seek the most likely enemy locations, designating the forces most likely to make contact as the decisive operation or main effort and prepares to shift the decisive operation or main effort, if necessary. Search and attack forces, at battalion or company echelon, may enter the area of operation by infiltrating as an entire unit or by infiltrating as smaller units via ground, air, or water. Finally, battalion and company operations do not end at the destruction of the enemy. Units immediately conduct consolidation and reorganization and prepare for follow on offensive or defensive missions.

Search and Attack—Separate Company Areas of Operation

2-401. When Infantry rifle companies operate in separate company areas of operation (see figure 2-44), a technique is to organize to find (reconnaissance), fix, and finish (destroy) the enemy within its capability. The battalion commander can direct each company to retain a reserve, or retain a battalion reserve. The battalion's indirect fire support is position to respond to all companies, as needed. The commander uses the reserve, priority of fire, and other available assets to weight the decisive operation or main effort. Once the

company reconnaissance force finds the enemy, the company commander concentrates combat power to quickly fix and finish the enemy.

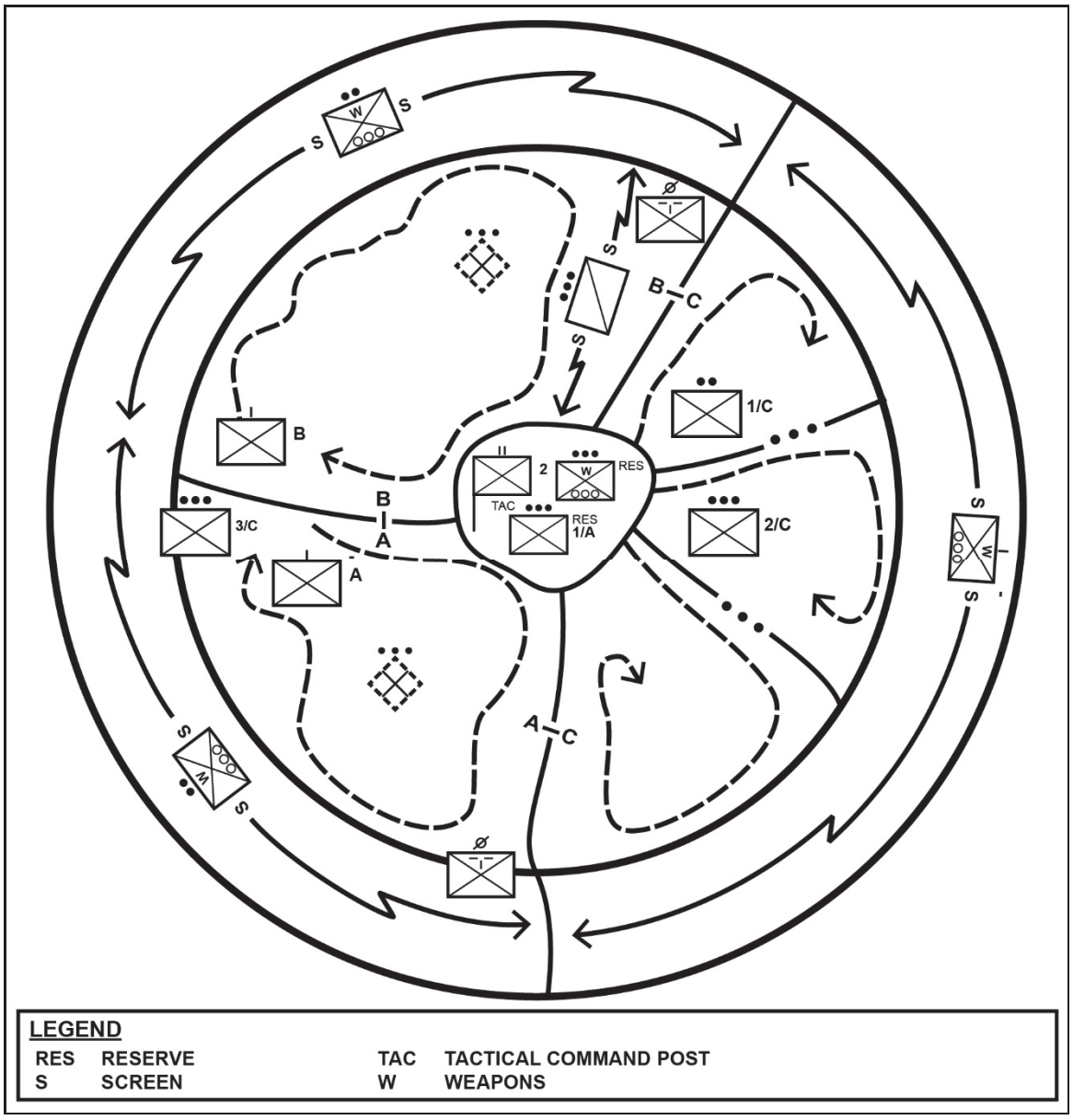


Figure 2-44. Search and attack (company areas of operation)

2-402. If the subordinate platoon is unable to destroy the detected enemy, the commander considers means to fix or contain the enemy. The commander may divert another platoon to the task, or the battalion commander could redirect another company or utilize the battalion reserve or fires to contain and destroy the enemy. The commander redirects and repositions R&S assets to support any change to the plan, but also to identify enemy counterattack forces entering the area of operations. As plans change, the battalion commander provides control but allows for decentralized actions and small-unit initiative.

Search and Attack—Battalion Area of Operation

2-403. When the Infantry battalion operates in an area of operation, the commander can task organize subordinate units to find (reconnaissance), fix, and finish (destroy) the enemy, each with a specific purpose and task to accomplish. Alternatively, the battalion commander can—

- Task units with the reconnaissance effort in assigned areas of operation with individual subordinate elements tasked to perform the fixing and finishing functions based on the specifics of the situation.
- Direct subordinate companies to conduct reconnaissance and fixing in assigned areas of operation with the commander retaining direct control of the finishing force.
- Rotate subordinate elements through the reconnaissance, fixing, and finishing roles. However, rotating roles may require a change in task organization and additional time for rehearsal.

2-404. During execution, the battalion commander ensures that fire support and protection assets support the decisive operation while remaining responsive to the rest of the battalion. When the mortar platoon cannot support the entire battalion area of operation, the commander may consider splitting the platoon into sections. The commander must consider the size of the area to conduct the search and attack, the number of available forces and the time available. As the battalion staff conducts analysis to establish the duration of the mission, the staff needs to assess the battalion's ability to conduct continuous operations in order to develop and resource a plan to maintain the battalion's combat effectiveness. Subordinate company and platoon unit tasks or actions, performed during search and attack, may include the following actions:

- Locate enemy positions or routes normally traveled by the enemy.
- Destroy enemy forces within its capability.
- Fix or block the enemy until reinforcements arrive.
- Maintain surveillance of a larger enemy force through stealth until reinforcements arrive.
- Establish ambushes.
- Search towns or villages.
- Secure military or civilian property or installations.
- Act as a reserve.
- Develop the situation in a given area.

Find the Enemy

2-405. Ample time should be dedicated to determine the pattern of enemy operations. The commander is most effective once the pattern has been identified; however, it may take more time than is available to accurately establish an enemy pattern. When conducting a search and attack, reconnaissance forces can expect to spend significant time reconnoitering in an area of operations. The commander may consider using one of several techniques to find the enemy. The commander may subdivide an area of operation into smaller ones. The scout platoon reconnoiter forward of the remainder of the battalion. The rifle company and scout platoon may be reinforced for this operation with snipers and unmanned aircraft systems. The commander develops a contingency plan in the event that the reconnaissance force is compromised and how the company is postured to support.

2-406. A search and attack with the scouts platoon (or other security element) forward is one technique the Infantry battalion can use to find the enemy as illustrated in figure 2-45. This method is initiated by the scout platoon conducting zone reconnaissance in Area of Operation Green, while the remainder of the battalion conducts search and attack operations in Area of Operation Blue. Serving as part of the reconnaissance force, the scout platoon attempts to locate and gain information about the enemy, initially in Area of Operation Green, then Area of operation Red.

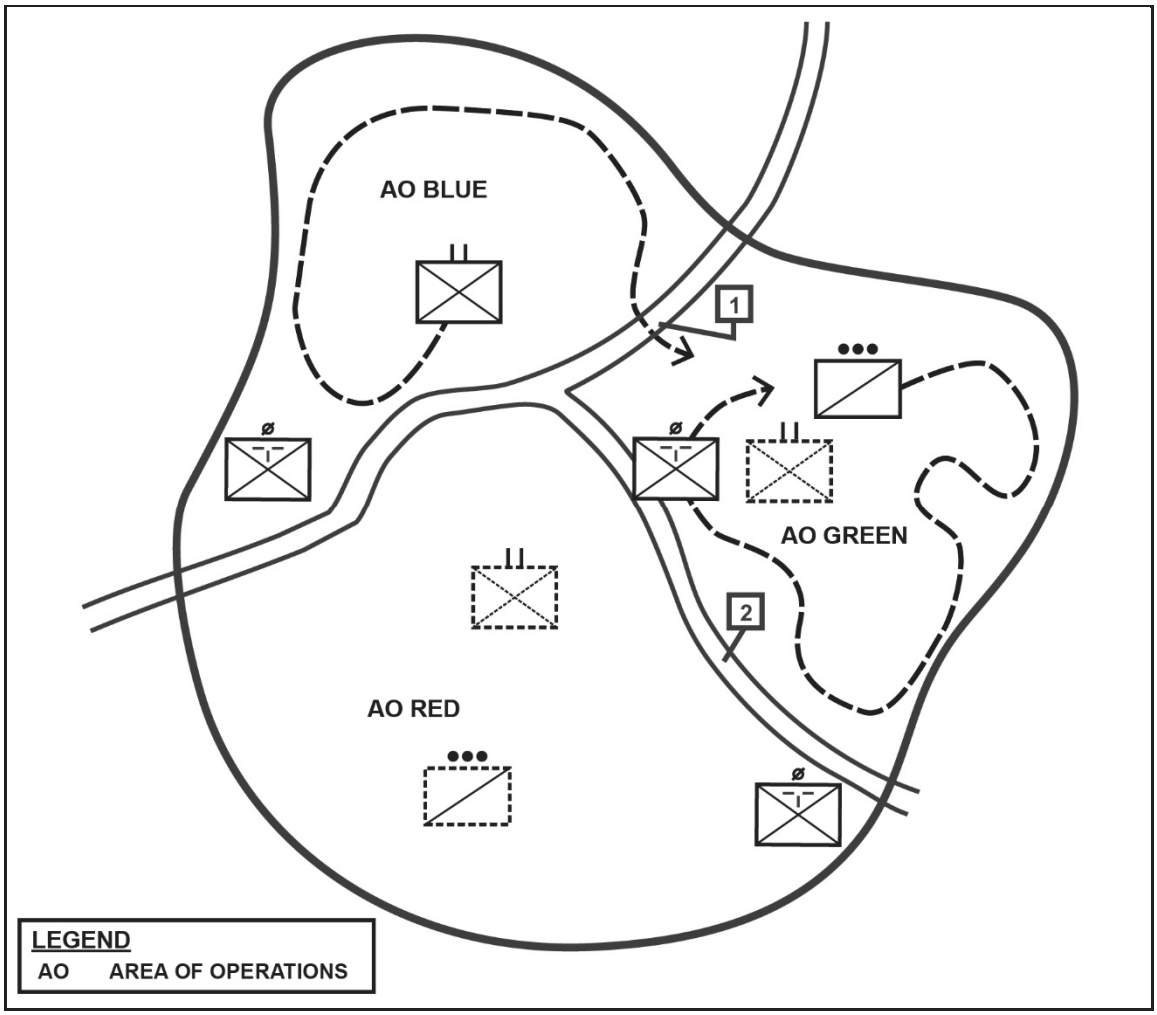


Figure 2-45. Search and attack (method with scout platoon forward)

2-407. At a designated time, the battalion commander may direct the battalion to link up with the scout platoon at contact point 1 to exchange information. If necessary, the scout platoon guides the battalion to sites of suspected or confirmed enemy activity. If the scout platoon is successful in locating the enemy, the task force then postures itself to attack. If the enemy has not been located, the battalion then occupies Area of Operation Green and continues to search for the enemy. The scout platoon can then move on to reconnoiter Area of Operation Red.

2-408. The process is continued until the enemy force is located and destroyed, or the battalion area of operations is determined to be free of enemy activity or until the commander terminates it. If the area is determined to be free of activity, another area of operations is designated, and the process begins again. The commander may decide to emplace sensors, when available, along the border from Area of Operation Red to Area of Operation Blue to identify enemy tries to evade the battalion. An Infantry squad and a sniper team is tasked to emplace and monitor the sensors.

2-409. The successive method of reconnaissance, in which the scout platoon reaches the area of operations before the remainder of the battalion, allows the scout platoon more opportunities to gain information on enemy activity in the area. It also helps the battalion commander focus the search and attack operation when the battalion moves to the new area. Cache or airdrop most often provides logistical support for the scout platoon.

Note. The Infantry battalion rarely designates the scout platoon as the finding force or as a potential fixing force. The scout platoon is organized to find information and the enemy, not to become decisively engaged with the threat. Rifle companies are typically called on as the finding and fixing forces.

2-410. Enemy operations over a very large area, and in a decentralized manner, force the battalion to disperse to locate and then mass to destroy the enemy. The battalion commander can enhance (although not always possible) the ability to mass combat power by keeping the search areas relatively small, minimizing the distance required to move the fixing and finishing force once contact with the enemy is made. Figure 2-46 provides an illustration of a company dispersed in a decentralized manner to conduct a search.

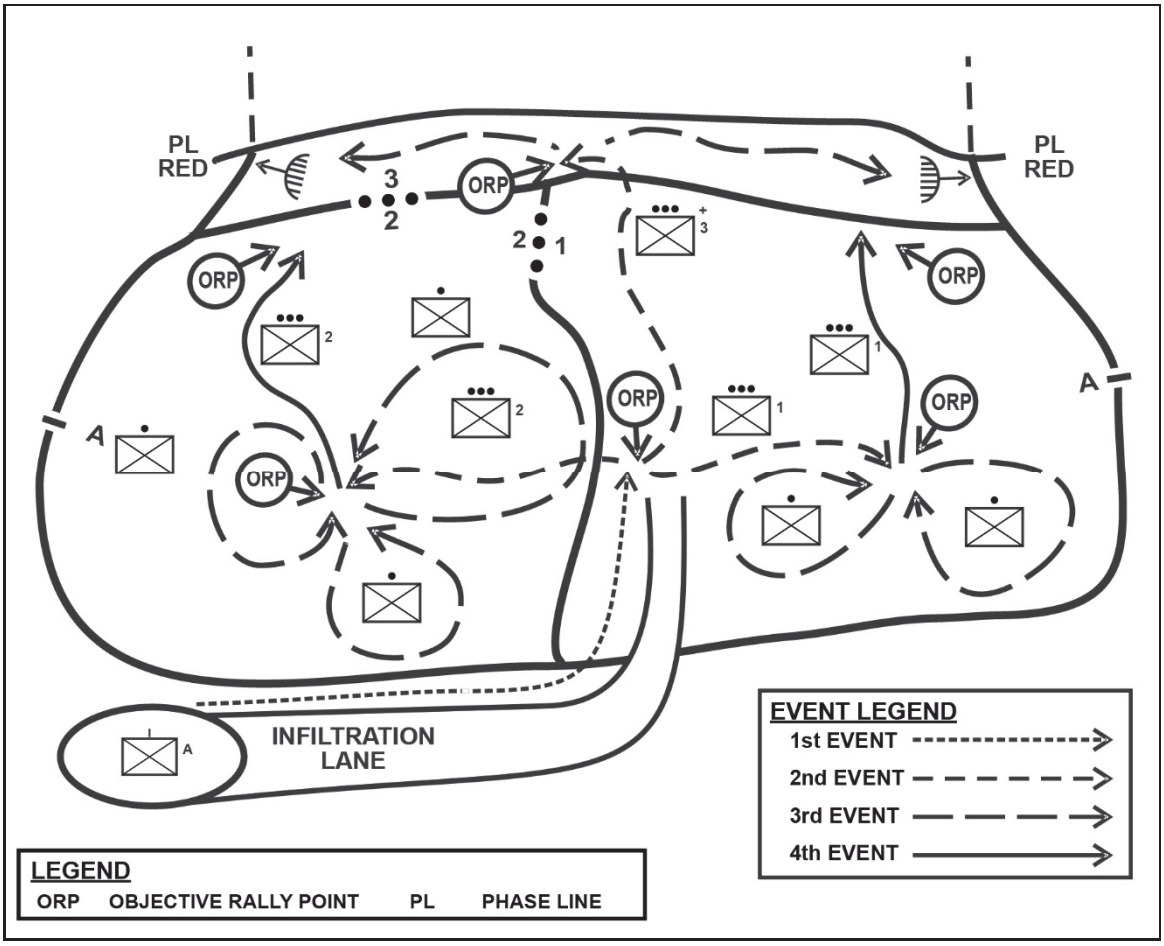


Figure 2-46. Company conducting a search and attack (dispersed platoon method)

Fix the Enemy

2-411. Once the reconnaissance force finds the enemy force, the fixing force develops the situation and executes one of two options based on the commander's guidance and the mission variables of METT-TC. The first option is to block identified enemy escape and reinforcement routes. The second option is to conduct an attack to fix the enemy in its current positions until the finishing force arrives.

2-412. Block enemy escape and reinforcement routes. The fixing force maintains contact and positions its forces to isolate and prevent the enemy from moving to a position of advantage and prevent the interdiction of reinforcements. This facilitates the conduct of attack by the finishing force. Control measures and communications must be established between closing units to prevent fratricide. Unmanned aircraft systems

can assist in preventing fratricide by observing forward of the moving units and identifying friendly and enemy units as they approach.

2-413. Conduct an attack. The fixing force conducts an attack to fix the enemy in its current positions until the finishing force arrives. Sniper fires can be used to disrupt the enemy and contain movement as the finishing force approaches. The fixing force can conduct the finishing attack when it is consistent with the commander's intent with respect to tempo, and if the available forces can generate the required combat power. Depending on the enemy's mobility and the likelihood of the reconnaissance force being compromised, the commander may need to position the fixing force before the reconnaissance force enters the area of operation.

Note. If conditions are not right to use the finishing force to attack the detected enemy, the fixing force and the reconnaissance force can continue to conduct R&S activities to develop the situation further. The fixing force continues to avoid detection, reports enemy order of battle and activities. The force uses stealth in this effort, is careful to avoid an enemy ambush, and must always retain the ability to fix the enemy.

Finish the Enemy

2-414. Ultimately, the purpose of the search and attack is to destroy the enemy. Reconnaissance forces find the enemy; fixing forces rapidly fix the enemy, as finishing forces mass combat power to facilitate the enemy's destruction. Massing combat power must incorporate combined arms. To decisively apply combat power ethically, effectively and efficiently the commander makes timely decisions, issues mission type orders, and communicates with subordinate leaders to gather and disseminate information. The commander must be able to communicate effectively with subordinate units to gather and disseminate information. During the execution of the search and attack, the commander locates where best able to obtain information and react to subordinate unit contacts with appropriate force.

2-415. During a movement to contact, there is expected to be a roughly linear arrangement between moving and stationary forces, that is to say in one general direction. This may, or may not be the case for search and attack. When a search and attack is conducted out of a centrally located command post or base, the commander's control becomes more complex during execution. The commander may remain centrally located with the reserve and mortars so to insure immediate, responsive fire support to any subordinate unit who makes contact with the enemy. Additionally, rather than moving with the decisive operation or main effort, the central position may enable a more rapid response to the decisive point where contact is made. Otherwise, the commander may not be in contact with or in communication with a shaping operation or supporting effort in contact. As these forces could quickly become the decisive operation or main effort if their "search" finds the enemy.

2-416. As the situation develops, decentralized operations can require the establishment additional fire support positions to provide responsive fires to subordinate units conducting search and attack. Fire support units would provide fire support coverage within a complete 360-degree circle. This situation would require significantly different control measures and greater planning detail because of the wide variety in observer target/ gun-target angles, which would be encountered. Decentralized operation could drive situations where finishing forces conduct point or area ambushes and use fires to drive the enemy into the ambushes. Such fires would require establishment of restrictive fire areas, coordinated fire lines, or no-fire areas around or between positions of adjacent "ambush" units within the area of operation.

2-417. The commander may move the finishing force behind the reconnaissance and fixing forces, or may locate the finishing force at a pickup zone (PZ) to conduct an air assault into a landing zone (LZ) near the enemy, once the enemy is located. The finishing force must be responsive enough to engage the enemy before the enemy can break contact with the reconnaissance force or the fixing force. The battalion intelligence officer provides the commander with an estimate of the time it will take the enemy to displace from its detected locations. The commander provides additional mobility assets, so the finishing force can respond within that timeframe. When established, the decisive operation or main effort is weighted by the commander using priority of fires and assigning priorities of support to available combat multipliers, such as engineer

elements and helicopter lift support. The commander establishes control measures as necessary to consolidate units and concentrate the combat power of the force before the attack.

2-418. The commander uses the finishing force to destroy the enemy by conducting a hasty or deliberate attack, maneuvering to block enemy escape routes while another unit conducts the attack, or employing indirect fire or CAS to destroy the enemy. (See figure 2-47.) The commander may have part of the fixing force establish an area ambush and use the reconnaissance and remaining fixing forces to drive the enemy into the ambush, establish a reserve, and screen the objective area.

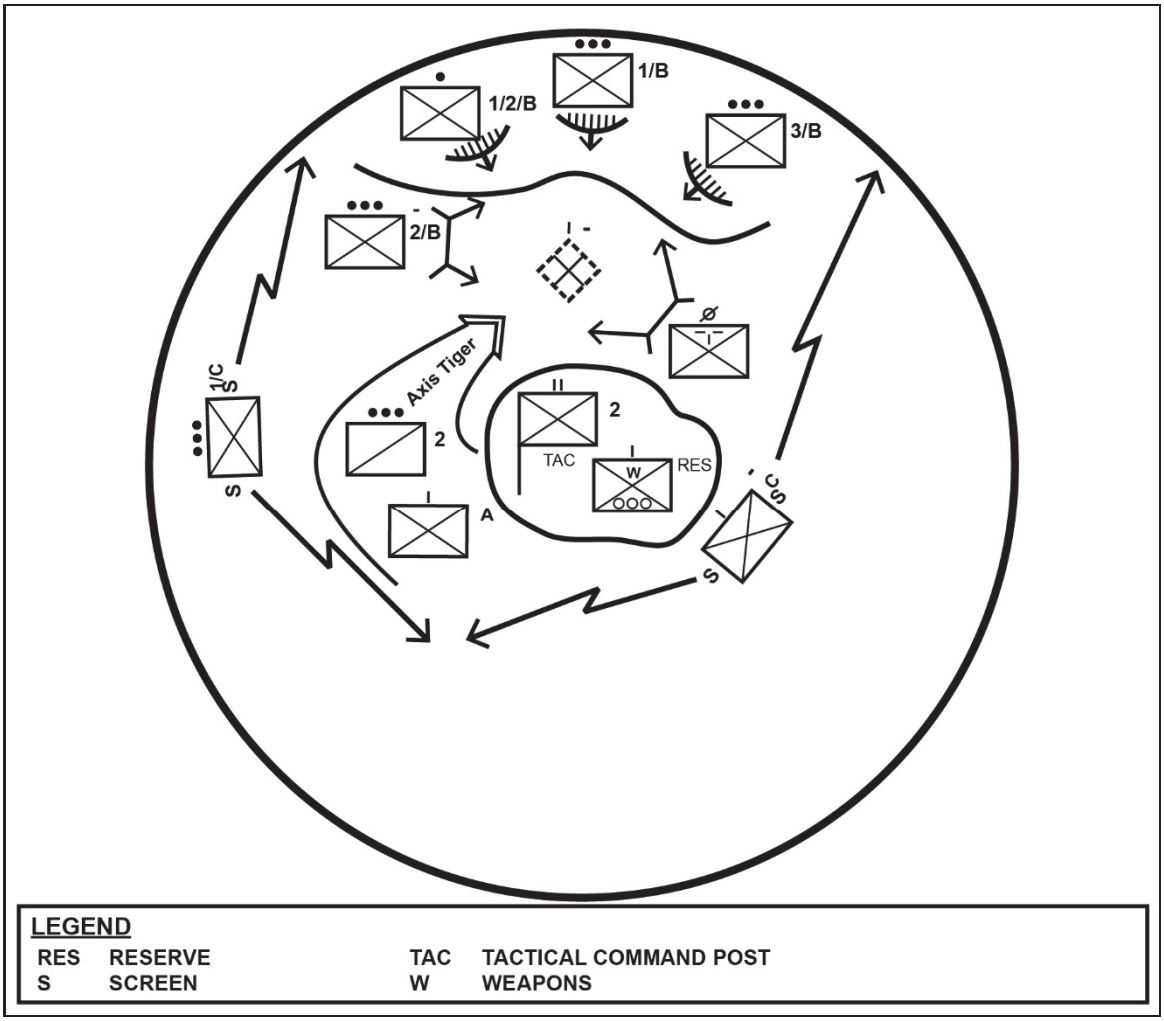


Figure 2-47. Search and attack (unit massing to attack)

SECTION III – ATTACK

2-419. An *attack* is an offensive task that destroys or defeats enemy forces, seizes and secures terrain, or both (ADRP 3-90). Attacks take place along a continuum defined at one end by fragmentary orders that direct the execution of rapidly executed battle drills by forces immediately available. For example, the Infantry battalion discovers the general enemy situation through a movement to contact and conducts an attack as a continuation of the meeting engagement to exploit a temporary advantage in relative combat power and to preempt enemy actions. The other end of the continuum includes published, detailed orders with multiple branches and sequels, detailed knowledge of all aspects of enemy dispositions, a force that has been task organized specifically for the operation, and the conduct of extensive rehearsals. Most attacks fall between the ends of the continuum as opposed to either extreme. (Refer to ADRP 3-90 for additional information.)

ORGANIZATION OF FORCES FOR AN ATTACK

2-420. Once the commander determines the scheme of maneuver for the attack, the commander task organizes the company to accomplish the mission. Normally, the attack is organized into a main body and a reserve, security forces may be utilized, all of which are supported by a sustainment organization. The commander completes any changes in task organization in a timely manner so units can conduct rehearsals with their attached and supporting elements.

2-421. The commander organizes the main body into combined arms formations to conduct the decisive operation or main effort and necessary shaping operations or supporting efforts. The commander aims the decisive operation or main effort toward the decisive point, which can consist of the immediate and decisive destruction of the enemy force, its will to resist, seizure of a terrain objective, or the defeat of the enemy's plan.

2-422. The commander uses the reserve to exploit success, defeat enemy counterattacks, or restore momentum to a stalled attack. Once committed, the reserve's actions normally become or reinforce the echelon's decisive operation or main effort, and the commander makes every effort to reconstitute another reserve from units made available by the revised situation. Often the commander's most difficult and important decision concerns the time, place, and circumstances for committing the reserve. The reserve is not a committed force; it is not used as a follow and support force or a follow and assume force.

2-423. Security forces, under normal circumstances during an attack, are only resourced if the attack will uncover one or more flanks or the rear of the attacking force as it advances. In this case, the commander designates a flank or rear security force and assigns it a screen or guard mission depending on the mission variables of METT-TC. Normally, an attacking unit does not need extensive forward security forces. Most attacks are launched from positions in contact with the enemy, which reduces the usefulness of a separate forward security force. An exception occurs when the attacking unit is transitioning from the defense to an attack and had previously established a security area as part of the defense. (Refer to ATP 3-21.20 and FM 3-90-1 for additional information.)

DOCTRINAL BASIS FOR FORCE AND TERRAIN ORIENTED ATTACKS

2-424. An attack at the company level is normally conducted as part of a larger force and is an offensive action characterized by close combat. When the commander decides to attack, the commander masses the effects of overwhelming combat power against a portion (or portions) of the enemy force with a tempo and intensity that the enemy cannot match. A force-oriented objective requires the attacker to focus its efforts on a designated enemy force. The enemy force may be stationary or moving. A terrain-oriented objective (at company level) requires the company to seize, secure, or retain a designated geographical area. All attacks depend on the synchronization and integration of combat power for success. They require planning, coordination, and time (although time may be limited) to prepare.

2-425. When attacking against a moving enemy force the commander often desires to stop the enemy's advance. In doing so, the commander makes the attack an attack against a stationary force. In this situation, during a force-oriented attack the commander can attack the enemy and force them to stop. During a terrain-oriented battalion attack, the company can seize key terrain and force the enemy to attempt to retake it, in effect conducting a turning movement.

2-426. Limited visibility attacks are the norm for the Infantry rifle company. Limited visibility attacks are conducted the same as daylight attacks. This section addresses techniques for conducting—

- A force-oriented attack against a stationary enemy force.
- A force-oriented attack against a moving enemy force.
- A terrain-oriented attack.
- A limited visibility attack.

FORCE-ORIENTED ATTACK AGAINST A STATIONARY ENEMY FORCE

2-427. Normally, the company conducts a force-oriented attack against a stationary enemy force as part of a larger element. The company may attack a stationary enemy force as part of a counterattack, spoiling attack, or as an initial attack against an enemy defense. The company also may attack a stationary force as part of a movement to contact or exploitation.

Planning

2-428. The focus of planning is to develop a fully synchronized plan that masses all available combat power against the enemy. A critical aspect to the commander's plan is to generate and concentrate combat power. The commander avoids using resources and incurring needless casualties by attacking piecemeal. If an objective is small enough to be taken by a platoon attack (dependent upon the overall mission) then the commander provides the necessary support to the attacking platoon. However, if the task requires it, the commander commits the entire company and all other available resources to quickly, and violently destroy the enemy.

Mission Command

2-429. The commander refines the plan based on continuous updates to the situation. (See Appendix B.) While the battalion staff develops and updates their running estimates as information changes, the company commander is prepared to make adjustments to the company plan as the situation changes throughout the operation. These updates to the situation can include updates to intelligence, sustainment capabilities, and enabling operations. Subordinates conduct parallel planning as well as start their preparations for the attack immediately after the issuance of a warning order, operations order or fragmentary order. As the situation is updated, the commander revises orders and distributes order as quickly as possible to give subordinates more time to prepare for the attack. The commander's plan is as detailed as the time available allows.

2-430. The commander assigns areas of operation to subordinate forces and normally designates (as a minimum, regardless of whether the attack takes place in a contiguous or noncontiguous area of operation): a phase line as the line of departure (which may also be the line of contact) and point of departure; the time to initiate the operation; and the objective. The commander may designate checkpoints, additional phase lines, and a probable lines of deployment and final coordination line, assault positions, direct fire control measures, and fire support coordination measures; and can use either an axis of advance or a direction of attack to further control maneuver forces. Between the probable line of deployment and the objective, a commander can use a final coordination line, assault positions, support by fire position, and attack by fire positions to control the final stage of the attack. Beyond the objective, the commander can impose a *limit of advance*, a phase line used to control forward progress of the attack. The attacking unit does not advance any of its elements or assets beyond the limit of advance, but the attacking unit can push its security forces to that limit (ADRP 3-90) if there is no follow-on mission.

2-431. The commander uses the reverse planning process to develop a timely and complete plan. By starting with actions on the objective and working back to the line of departure or point of departure, the company commander takes into consideration the most effective allocation of combat power, mobility assets, and indirect fires including suppression and obscuration based upon the higher headquarters allocation to the company. When possible, the commander plans avenues of approach that avoid strong enemy defensive positions, take advantage of all available cover and concealment, and place subordinate units to the flanks and rear of the defending enemy. Where cover and concealment are not available, the commander plans obscurants to conceal movement. Any delays in establishing obscuration and suppressive fires before crossing the probable line of deployment may require the commander to establish assault positions. (Refer to ATP 3-21.20 and FM 3-90-1 for additional information.)

Movement and Maneuver

2-432. The commander directs the decisive operation or main effort against an objective, ideally an identified enemy weakness, which will cause the collapse of the enemy defense. The commander seeks to attack the enemy's flanks, rear, or supporting formations causing disintegration or dislocation. By so doing,

the enemy loses control of its systems and the enemy commander's options are reduced. Concurrently, the company retains the initiative and reduces its own vulnerabilities.

2-433. The commander seeks to identify an unobserved or covered and concealed avenue of approach to the objective. The commander attempts to attack a small unit lacking mutual support within the enemy defense or a weak flank that they can exploit to gain a tactical advantage. When attacking a well-prepared enemy defense, the commander normally plans to isolate and then destroy small vulnerable portions of the enemy defense in sequence. The commander incorporates plans for exploiting success and opportunities that may develop during execution. The plan emphasizes synchronization of movement, precise direct and indirect fires, and support throughout the attack.

2-434. In coordination with the battalion S-3 and FSO, the company commander and FSO integrate and synchronize Army and U.S. Air Force aviation assets and field artillery with the company's ground scheme of maneuver. Aviation assets and artillery, in close coordination through the battalion, attack to destroy, defeat, disrupt, divert, or delay enemy forces to enable the company to seize, retain, or exploit the initiative. Attacks can be either hasty or deliberate. The commanders and FSOs at the appropriate echelon control the distribution and de-confliction of aviation maneuver and artillery fires through airspace coordination with the appropriate airspace control authority. (Refer to FM 3-04 and ATP 3-09.42 for additional information.)

2-435. Assured mobility during the attack is critical. Although Infantry rifle companies can cross almost any terrain, supporting and sustaining forces cannot. Considerations to aid movement and maneuver include the following:

- Always search for a bypass to an obstacle.
- Maintain direct observation of the obstacle throughout the breaching operation.
- Plan for adjustment of the breach location based on the latest obstacle intelligence.
- Ensure information on obstacles receives immediate company-wide dissemination, including fire support, protection, and sustainment platforms and units.
- Ensure adequate mobility support is task organized well forward during the approach to the objective to support breaching requirements.
- Retain the ability to mass engineers or organic breaching force to support breaching operations.
- Support assaulting forces with engineers when available to breach enemy protective obstacles.
- Ensure adequate guides, traffic control, and lane improvements to support movement of follow-on forces and sustainment vehicle traffic.
- Use situational obstacles for flank security.

2-436. When the company is unable to bypass an obstacle, the commander considers the enemy's strengths and obstacles to determine when and where to conduct a breach. The size of the enemy force overwatching the obstacle drives the type of breach to be conducted. The commander considers the enemy's ability to mass combat power, reposition forces, or commit the reserve. The commander then develops a scheme of maneuver to mass sufficient combat power at an enemy weakness. The scheme of maneuver identifies the focus of the decisive operation or main effort. The location selected for breaching and penetration depends largely on a weakness in the enemy's defense where its covering fires are limited.

Intelligence

2-437. To employ the proper capabilities and tactics, the commander must have detailed knowledge of the enemy's organization, equipment, and tactics. The commander must understand the enemy's strengths and weaknesses. Ideally, this knowledge is available during the battalion's military decision-making process. The battalion commander and staff develop enemy situational and weapons templates based on analysis of all available combat information and intelligence data. This information is then presented to subordinate companies to begin their own enemy analysis. The company commander utilizes the staff IPB products to properly conduct an analysis of the enemy at their own echelon that allows for the commander to plan the attack.

2-438. The commander uses the enemy situation template, probable COA, dangerous COA, and other products of the IPB process (see appendix B) to identify aspects within the area of operation, area of interest, and area of influence that can affect how the friendly force accomplishes the mission. An area of interest is

that area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory. This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission.

2-439. By studying the terrain, the commander determines the principal Infantry and armored avenues of approach to the objective. The commander determines the most advantageous area for the enemy's main defense to occupy, routes that the enemy may use to conduct counterattacks, and other factors, such as observation and fields of fire, avenues of approach, key terrain, obstacles, and cover and concealment. Information collection is continuously updated during planning to gain an increased understanding of the enemy's intentions, actions, and relative combat power. The outcome of this analysis should replicate how the commander would fight given their own insight if they were in the enemy's position.

Reconnaissance and Surveillance

2-440. The R&S effort at battalion and company level is performed before, during, and after operations to provide information used in the IPB process, as well as by commanders in order to formulate, confirm, or modify a COA. Before conducting an attack, commanders through R&S identifies terrain characteristics, enemy and friendly obstacles to movement, and the disposition of enemy forces and civilian population, so commanders can maneuver their forces freely and rapidly. During hasty operations the entire intelligence collection, analysis, and dissemination process must respond rapidly to a commander's critical information requirements.

2-441. When preparing for a deliberate operation, the company commander, in coordination with the battalion commander and staff, participates in the development of the information collection plan. A well-resourced and coordinated information collection effort paints a detailed picture of the enemy situation before an attack, and provides the company commander and subordinate leaders a critical insight into how to prepare for the attack. The reconnaissance effort includes redundant information gathering systems to ensure continuous flow of information to the battalion and correspondingly from the battalion to the companies. The commander uses this intelligence to decide on a COA and make refinements to the plan. The information collection effort provides the commander with continuous updates during the attack to adjust execution of the operation based on the enemy's reactions.

Note. The commander will rarely have complete information. The commander must balance the advantages of gathering more information with the advantages gained by an attack conducted with incomplete information but rapidly executed and with all available combat power. The commander that requires more complete information on the enemy may miss opportunities and allow the enemy to more thoroughly prepare their defenses.

Enemy's Current Array of Forces

2-442. The first priority is to confirm information available on the enemy's strength, composition, and disposition. The next priorities are the effects of weather and terrain, and how the enemy is likely to fight. During the IPB the battalion S 2 identifies what the enemy will do and what information the battalion needs to confirm the enemy's action for the company commander's IPB. Utilizing information gained from the S-2 the company commander is able to refine the potential enemy array of forces at the company's level identifying the enemies strength, composition, disposition, and how the enemy is likely to fight. The company's information collection effort focuses on identifying indicators for confirming the enemy's actual COA within the company's area of operation. This information is vital in answering the commander's information and intelligence requirements and helps the commander in developing and refining plans. Ideally, the commander does not make final decisions on how to execute the attack until the current array of enemy forces is identified. Key areas to identify for a defending enemy force include—

- Composition, disposition, and strength of enemy forces along a flank or at an area selected for attack.
- Composition, strength, and disposition of security and disruption forces.
- Location, orientation, type, depth, and composition of obstacles.
- Locations of secure bypasses around obstacles.

- Composition, strength, and disposition of defending combat formations within the enemy's main battle area.
- Composition, strength, and location of reserves.
- Location of routes the enemy may use to counterattack or reinforce defenses.
- Type of enemy fortifications and survivability effort.

2-443. In addition to the battalion's R&S effort, reconnaissance patrols and surveillance activities within the company (as time permits) observe the enemy's defense from covered and concealed positions and observation posts to locate gaps in the enemy's defense, identify weapons systems and fighting positions, view rehearsals and positioning, and determine the enemy's security activities and times of decreased readiness. With the information provided by the S-2 and gathered by the company, the commander discerns any enemy deception efforts such as dummy obstacles and emplacements designed to confuse an attacker. During the commander's leaders reconnaissance of the objective prior to the attack this information is updated and provided to the battalion and to subordinate elements of the company. This information updates the common operational picture throughout the battalion and its subordinate elements. If possible, the commander positions an observation post(s) to observe the objective throughout the attack. These observation posts can be manned by the battalion (for example, scouts and sniper teams), or manned internally by the company to report on current enemy activity, conduct battle damage assessment, and call for fires, if required. These observation posts provide the capability for the most updated information. With the updated information the commander is able update the plan accordingly.

Enemy Engagement Areas

2-444. The commander seeks to define the limits of the enemy engagement areas. This includes where the enemy can mass fires, weapon ranges, direct fire integration with obstacles, ability to shift fires, and mutual support between positions. This analysis requires efficient, and effective terrain analysis, confirmed locations of enemy weapons systems, and a good understanding of the enemy's weapons capabilities and tactics. Reconnaissance forces and surveillance assets report locations, orientation, and composition of defending weapons systems and obstacles. The analysis of the enemy's direct and indirect fire plan assists the commander in developing the scheme of maneuver by—

- Determining the location of the probable line of contact.
- Identifying when the company must transition to maneuver.
- The targets and positioning of heavy direct fire weapons.
- Identifying targets for indirect fires.

Enemy Capabilities and Vulnerabilities

2-445. To understand enemy capabilities and vulnerabilities, the commander requires detailed, timely, and accurate intelligence produced as a result of the battalion's IPB. A study of dispositions and an analysis of the terrain aid the development of conclusions concerning enemy vulnerabilities. Disrupting the enemy enables the commander to seize, retain, and exploit the initiative, maintain freedom of action, impose the commander's will on the enemy, set the terms, and select the place for battle. That disruption allows the commander to exploit enemy vulnerabilities and react to changing situations and unexpected developments more rapidly than the enemy.

2-446. The battalion S-2 focuses information collection plans on answering the commander's critical information requirements and other requirements, and enables the battalion to quickly re-task reconnaissance units (for example the scout platoon) and surveillance assets as the situation changes. Planning requirements and assessing collection (see ATP 2-01) includes continually identifying intelligence gaps. Through the receipt and processing of incoming reports and messages, the S-2 determines the significance and reliability of incoming information and integrates incoming information with current intelligence holdings. Through analysis and evaluation the S-2 is able to provide necessary information for the company commander to conduct an accurate analysis that helps to determine threat capabilities and probable COAs and seeks to identify enemy vulnerabilities that may include—

- Gaps in the enemy's defense.
- Exposed or weak flanks.
- Enemy units that lack mutual support.

- Unobserved or weakly defended avenues of approach to the enemy's flank or rear.
- Covered and concealed routes that allow the battalion to close on the enemy.
- Weak or poorly positioned obstacles or fortifications in an enemy defense, especially along a flank.

2-447. Once the company commander has updated and refined the IPB products, based upon the battalion's intelligence, the commander is able to formulate and adjust the company's plan to fit within the anticipated enemy courses of action. The company's plan that includes all changes to the initial plan, such as the scheme of maneuver and fires, must then be provided to the higher headquarters normally in the form of a backbrief, or during the battalion combined arms rehearsal, commonly referred to as a rehearsal of concept drill (ROC drill). The company commander ensures that the company scheme of maneuver, and subordinate locations provides a better understanding of the overall battalion common operating picture.

Fires

2-448. Throughout the attack, Infantry rifle companies are usually supported by battalion mortars, the battalion commander positions the battalion mortar platoon to provide continuous indirect fires to subordinate companies. Rifle companies often have their mortars follow behind the forward platoons so they are prepared to provide immediate indirect fires. Army attack reconnaissance units and CAS may be available to destroy defensive positions and interdict enemy counterattack forces. During the attack, using preparation fires, counterfire, suppression fires, and electronic warfare assets provides commanders with numerous options for gaining and maintaining fire superiority. The IBCT commander uses long range artillery systems (cannon and rocket) and air support (rotary and fixed wing) to engage the enemy throughout the depth of the enemy's defensive positions. Additional fire support considerations include the following:

- Use massed fires, especially time on target fires.
- Position fire support assets to support the reconnaissance effort.
- Plan suppressive and obscuration fires at the point of penetration.
- Plan fires on enemy positions supporting and overwatching the objective.
- Plan suppressive and obscuration fires to support breaching operations.
- Plan fires in support of the approach to the objective. These fires engage enemy security forces, destroy bypassed enemy forces, and screen friendly movement.
- Plan preparation fires on the objective to suppress, neutralize, or destroy critical enemy forces that can most affect the battalion's closure on the objective.
- Plan fires beyond the objective to support an attack or defense, or to isolate the objective to prevent the egress or ingress of threat forces.
- Use indirect fires and close air support to delay or neutralize repositioning enemy forces and reserves.
- Plan locations of critical friendly zones to protect critical actions such as support-by fire positions, breaching efforts, and mortar assets.
- Use risk estimate distances to determine triggers to initiate, shift, and cease loading of rounds.
- Use echelon fires to maintain continuous suppression of enemy forces throughout the movement to and actions on the objective.

Sustainment

2-449. The company commander with the XO's assistance plans for increased sustainment demands during the offense. Sustainment planners, at battalion and IBCT level, synchronize and coordinate to determine the scope of the operation. Sustainment planners develop and continually refine the sustainment concept of support. Coordination's between the battalion staff planners and subordinate company XOs must be continuous to maintain momentum and freedom of action. The company commander anticipates where the greatest need may occur to develop a sustainment plan that meets the battalion commander's intent.

2-450. The primary sustainment units for the Infantry rifle company are elements from the forward support company assigned to the Infantry battalion. The objective of sustainment during the offense is to assist the tactical commander to maintain momentum using the correct amount and type of sustainment support. The

commander wants to be prepared for opportunities and be able to launch the offense with minimum advance warning time; therefore, operators and logistics and personnel planners anticipate these events and maintain the flexibility to support the offensive plan accordingly. Sustainment commanders anticipate, rather than react, to support requirements. Habitual support relationships facilitate the ability to anticipate. During the attack the burden on medical resources tends to intensify due to the increased distances over which support is required as the company advances throughout the attack.

2-451. The commander considers alternative methods for delivering sustainment during emergencies. (See appendix I for more information.) The following are considerations for the sustainment plan:

- Synchronize the movement and positioning of sustainment assets with the scheme of maneuver to ensure immediate support of anticipated requirements. This synchronized plan covers movement from the start point to the objective.
- Ensure adequate sustainment support to the reconnaissance and surveillance effort.
- Plan immediate support to high-risk operations such as breaching or assaults through the forward positioning of support assets. Plan for reorganization on or near the objective once the company secures the objective. Articulate clear priorities of support during reorganization.

Protection

2-452. In the offense, survivability operations enhance the ability to avoid or withstand hostile actions by altering the physical environment. Conduct of survivability operations in the offense (fighting and protective position development) is minimal for tactical vehicles and weapons systems. The emphasis lies on force mobility. Camouflage and concealment typically play a greater role in survivability during offensive tasks than the other survivability operations. Protective positions for indirect fire and logistics positions, however, still may be required in the offense. The use of terrain provides a measure of protection during halts in the advance, but subordinate companies of the battalion still should develop as many protective positions as necessary for key weapons systems, command posts, and critical supplies based on the threat level and unit vulnerabilities. During the early planning stages, geospatial engineer teams form the IBCT can provide information on soil conditions, vegetative concealment, and terrain masking along routes to facilitate the company's survivability. (Refer to ATP 3-37.34 for additional information.)

2-453. Depending on the threat, primary protection concerns of the commander may be enemy air and CBRN threats. If these threats exist, the commander prepares the unit and adjust the scheme of maneuver accordingly. In the face of an enemy air threat, the company usually has only passive and active (with its organic weapons) air defenses. Air defense units are usually not assigned below BCT level. However, air defense assets may be located near the company and may provide coverage. If air defense elements are assigned, the commander with the advisement of the air defense leader determines likely enemy air avenues of approach, and plans positions accordingly. The commander establishes priorities for protection that may include company CP, firing positions, and logistics assets. During the attack, the commander integrates and synchronizes the use of obscuration to support critical actions such as breaching or assaults.

2-454. The commander integrates CBRN defense considerations into mission planning depending on the CBRN threat. This includes CBRN passive defense principles, such as contamination avoidance, individual and collective protection, and decontamination. CBRN protective measures may slow the tempo, degrade combat power, and increase logistics requirements. CBRN R&S consumes resources, especially time. Personnel wearing individual protective equipment find it difficult to work or fight for an extended period. (See appendix H.) CBRN considerations include the following:

- Employment of organic CBRN detecting kits to maximize protection across the company.
- Disseminate information regarding any detected CBRN threats or hazards throughout the company immediately.
- Develop decontamination plans based on the commander's priorities and vulnerability assessment.
- Disseminate information regarding planned and active decontamination sites.
- The scout platoon within the battalion is normally prepared to conduct CBRN reconnaissance tasks but rifle platoons could be called upon to assist in CBRN reconnaissance efforts.

Preparation

2-455. The company utilizes the time available before the attack to conduct extensive R&S and rehearsals while concealing attack preparations from the enemy and making refinements to the plan. The commander also will use this preparation time to conduct confirmation briefs and backbriefs with subordinate platoon leaders to ensure they understand their task and purpose, and plan and execute within the commander's intent. (See appendix B.) Usually during the preparation phase, reconnaissance forces conduct information collection to answer the commander's critical information requirements and to confirm or deny the situation template. This allows the commander time to incorporate any changes to the original COA before executing it. The movement from the assembly area to the line of departure that precedes many attacks is troop movement. Additional preparation activities, although not inclusive, include sustainment preparations, finalizing the task organization, and performing pre-operations checks and inspections. (Refer to ATP 3-21.20 and FM 3-96 for additional information.)

Reconnaissance and Surveillance

2-456. The commander normally reconnoiters the objective when possible, but if constrained may have someone execute the recon on the commander's behalf. The reconnaissance element should identify enemy positions (especially crew-served weapons, command and control locations, and vehicles), levels of preparation, gaps in the defense, and other potential strengths or weaknesses.

2-457. The reconnaissance of the objective might be done in many different ways. An effective technique is to task-organize a reconnaissance patrol with leaders from the assault, support, and breach elements. There should be sufficient personnel to establish surveillance on the objective and to secure the objective rally point, but the party must be small enough to move undetected. The reconnaissance patrol either returns to the company's location or meets the company at a designated linkup point and guides it into the objective rally point. The objective rally point then becomes the company's assault position. At times, the scout platoon or other battalion assets might be tasked to conduct reconnaissance in support of the company's mission. The commander may also consider leaving an R&S team, such as a scout squad/team or a sniper squad/team (from battalion) or Infantry rifle squad/fire team, to directly observe the objective before, during, and after the attack.

Rehearsals

2-458. The company usually conducts rehearsals (see appendix B), but the type and technique may vary based on time available and the security that is required. In addition to participating in the combined arms rehearsal when part of a battalion attack, the company internally conducts rehearsals to further emphasize (at the company level) enemy positioning and repositioning, employment of fires, and commitment of reserves. As with all rehearsals, the primary focus of the rehearsal is actions on the objective. Each subordinate leader addresses the conduct of the mission as the rehearsal progresses. The rehearsal places special emphasis on triggers and the coordinated maneuver of forces. All subordinate leaders must accurately portray how long it takes to complete assigned tasks and how much space is required by their force. Direct and indirect fire plans are covered in detail, to include the massing, distribution, shifting, and control of fires. The commander ensures subordinate plans are coordinated and consistent with the commander's intent. (Refer to ATP 3-21.20 and FM 3-96 for additional information.) Additional areas to rehearse include—

- Plans to execute follow on missions or exploit success.
- Likely times and locations where a reserve is needed and its commitment criteria.
- Execution of the fire support plan, to include shifting of fires, employment of combat air support and Army attack aviation, adjusting of fire support coordination measures, and positioning of observers.
- Breaching operations.
- Passage of lines.
- Contingency plans for actions against enemy counterattacks, repositioning, commitment of reserves, or use of CBRN capabilities.
- Consolidation and reorganization.
- Execution of branches or sequels.

- Execution of the sustainment plan.
- Casualty evacuation, location, and movement.
- Activities of echeloned trains, support area movement and activities, and resupply.
- Integration of key enablers (for example CBRN R&S elements).

Attack Position and Movement to the Line of Departure

2-459. The company may move directly from its assembly area to the line of departure. If the distance from the assembly area to the line of departure is lengthy however, the commander may designate an attack position closer to the line of departure. An *attack position* is the last position an attacking force occupies or passes through before crossing the line of departure (ADRP 3-90). The company conducts any final preparation and coordination in the attack position or may pass through it and proceed to the line of departure. The *line of departure* is a phase line crossed at a prescribed time by troops initiating an offensive operation (ADRP 3-90). Attacking on foot using infiltration and stealth, the commander may designate a point of departure for the attacking force instead of a line of departure. A *point of departure* is the point where the unit crosses the line of departure and begins moving along a direction of attack (ADRP 3-90). A point of departure often is used during limited visibility attacks.

Note. Armored and Stryker-equipped units normally use gaps or lanes through the friendly positions to allow them to deploy into combat formations before they cross the line of departure.

Execution

2-460. The company commander normally positions available reconnaissance forces and surveillance assets such as battalion scouts in support of the company or an R&S team organic to the company to overwatch an objective or to maintain observation of enemy reactions to the company's maneuver to, and on the objective. Reconnaissance forces and surveillance assets focus on areas that the enemy is likely to use to reposition forces, commit reserves, and counterattack. As the engagement on the objective develops, reconnaissance forces report enemy reactions, repositioning, reinforcements, and battle damage assessment. Reconnaissance forces identify targets to engage with indirect fires, enemy repositioning forces, reserves, counterattacking forces, and other high-payoff targets. Early identification of enemy reactions is essential to maintain the tempo and initiative during the attack. (Refer to ATP 3-21.20 and FM 3-96 for additional information.)

Approach to the Probable Line of Deployment

2-461. Once passed the line of departure, the attacking force conducts tactical movement to the probable line of deployment. A *probable line of deployment* is a phase line that designates the location where the commander intends to deploy the unit into assault formation before beginning the assault (ADRP 3-90). The attacking force moves aggressively and as quickly as the terrain and enemy situation allows. The force is prepared to destroy enemy forces during tactical movement with maneuver. A reconnaissance element may lead the attacking forces if the distance from the line of departure to the probable line of deployment is long, or it may have another mission if the distance is relatively short and there is a chance that it may get in the way of the assaulting force.

2-462. During planning, the commander task organizes the unit into a breach element, a support element, an assault element, and possibly a reserve element. The reserve is under the commander's control and is positioned where it can best exploit the success of the attack. The reserve should not be so close that it loses flexibility during the assault. The reserve leader typically learns where to locate throughout the attack during the leaders recon.

2-463. The breach force is formed around an Infantry unit. Engineers, if available, are also part of the breaching element. Any mechanical or explosive breaching assets are attached to this element. The breach force makes the initial breach and passes the assault element through. The breach force organizes its own assault element (to secure the breach), its own support element (to provide close-in suppression), and its own breach element (to actually breach the obstacles).

2-464. The support element is organized to provide supporting (indirect or direct) fires to the breach element (when established) initially, then to the assault element. The support-by-fire force should be positioned to enfilade the objective. Ideally, it is positioned at right angles to the planned assault so that its fires are not masked until the assaulting force is physically on the objective. The support-by-fire force has the preponderance of combat power. It contains a mix of point and area fire weapons. Point weapons include Javelins, AT4s, snipers, and any attached armored vehicles. Area weapons include mortars, medium and heavy machine guns, MK 19 40-mm machine guns, and an Infantry squad(s), the Infantry can participate in the support-by-fire mission, though when required provides local security to the support element. The support element's primary responsibilities are to isolate the breach point and suppress enemy forces to protect the assault force.

2-465. The commander plans to support the assault force with a base of fire, at times the battalion may augment rifle companies with weapons company support providing additional assets enabling a more robust base of fire. If the distance from the probable line of deployment to the objective is short, support by fire elements are in position prior to the assault force crossing the probable line of deployment. If the distance from the probable line of deployment to the objective is long, then the commander should consider having two support by fire positions: one to cover the movement to the probable line of deployment, and another to cover the assault on the objective. The latter support by fire element may lead the assault force and establish its position prior to the assault.

2-466. An adequate support-by-fire position has the following characteristics:

- Sectors of fire at right angles to the assault force direction of movement.
- Can observe entire objective.
- Sufficient space to position forces.
- Provides communications retransmissions operations (known as RETRANS), when required, to the battalion.

2-467. The support-by-fire leader is responsible for the following:

- Identifying all positions.
- Assigning sectors of fire to cover objective.
- Assigning primary and alternate precision weapon to destroy identified enemy positions.
- Ensuring forward observer understands the scheme of fires.

2-468. The assault element is one or more Infantry platoons, depending on the enemy situation (number of personnel, level of preparation, and complexity of fortifications) and the size and composition of the breach and support elements. A small assault element supported by a large volume of accurate suppressive fires is most effective in clearing the objective. The assault element may also need to breach enemy protective obstacles on the objective.

2-469. The assault force should—

- Be large enough to seize the entire objective.
- Provide breach teams.
- Provide its own fire and movement.
- Have its own direct fire capability, such as AT4s.
- Have the minimum amount of equipment and ammunition to accomplish the mission.

2-470. An adequate assault position has the following characteristics:

- On flank or rear of objective.
- Cover and concealment.
- Sufficient area to organize force.
- Direct route onto the objective.
- Adequate maneuver space.
- Adequate breaching site.

2-471. As the assaulting force is committed, the commander ensures the following information is current and available to echelons above and below:

- Locations and type of enemy contact on the objective.
- Locations of R&S forces.
- Locations of lanes and obstacles, to include lane markings.
- Recognition signals and guides.
- Specific routes for the approach.
- Locations and orientation of fires from friendly forces.
- Additions or modifications of graphic control measures.

Approach to Objective

2-472. The company approaches the objective prior to the assault (see figure 2-48). The company may cross the line of departure (or depart the perimeter defense) supported by heavy suppressive direct and indirect fires, or wait until the appropriate time to initiate fires. The commander considers the time of the movement and the ammunition available. The commander also considers the effect of fires on the ability to achieve surprise. The commander decides if the element of surprise is lost and whether to initiate fires on the objective if unexpected contact is made prior to the objective. If so employed, these fires may continue until the company reaches its assault position or probable line of deployment; then they shift to allow the assault on the objective. The commander can initiate indirect fires based on the COA.

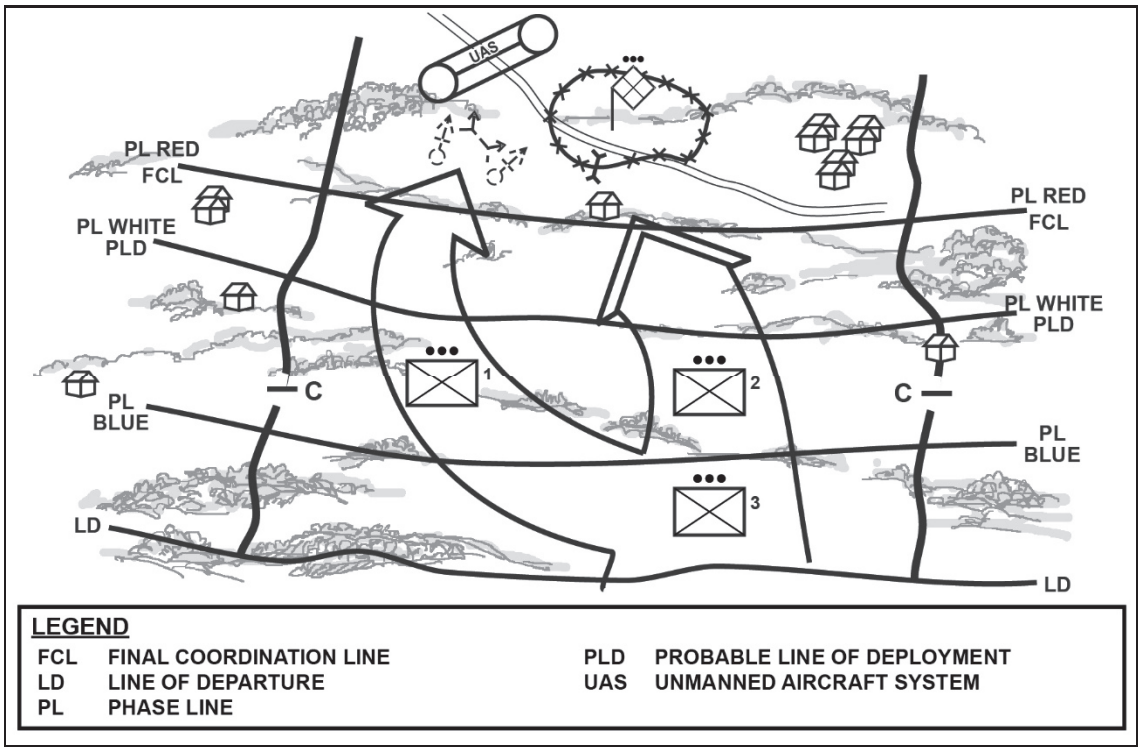


Figure 2-48. Approach to objective

2-473. The following fundamentals should be part of the movement to the objective:

- Movement from the assembly area to the line of departure is timed so that movement to and across the line of departure is continuous.
- Support element may precede the assault and breach elements to the line of departure.
- Commander avoids stopping in the attack position (when established).
- Company makes the best use of cover, concealment, obscuration, and supporting fire during movement from the line of departure to the probable line of deployment.

- Company moves quickly out of the impact area if engaged by indirect fire en route.
- Company commander and the platoon leader in contact must take prompt and aggressive action if the company cannot bypass an enemy position.
- Company either bypasses, preferably, or breaches obstacles along the route.
- Support force (if any) should be in position before the company's assault force reaches the assault position.

2-474. Upon reaching the probable line of deployment or before, the commander divides the company into assault and support forces. Supporting forces should be set in support by fire positions before the assault force crosses the probable line of deployment. The commander synchronizes the occupation of support by fire positions with the maneuver of the supported attacking units to limit the vulnerability of the forces occupying these positions. The commander uses unit tactical SOPs, battle drills, prearranged signals, engagement areas, and target reference points to control the direct fires from these supporting positions. The commander normally employs restrictive fire lines between converging forces.

2-475. To further control the final stages of the attack, assault position(s) can collocate in the vicinity of the probable line of deployment. The commander ensures that the final preparations of the assault force and breach force (if required) in an assault position does not delay maneuver to the objective or breach point as soon as the conditions are set. Whenever possible, the assault force rapidly passes through the assault position. The assault force may have to halt in assault position while fires are lifted and shifted. In this case, if the enemy anticipates the assault, the assault force deploys into covered positions, screens its positions with obscuration, and waits for the order to assault. As long as the assault force remains in the assault position, support forces continue their suppressive fires on the objective.

2-476. The *final coordination line* is a phase line close to the enemy position used to coordinate the lifting or shifting of supporting fires with the final deployment of maneuver elements (ADRP 3-90). Final adjustments to supporting fires necessary to reflect the actual versus the planned tactical situation take place prior to crossing this line. The final coordination line should be easily recognizable on the ground and may be located near the assault position or the probable line of deployment. The final coordination line is not a fire support coordination measure.

2-477. Once the support force sets the conditions, the breach force (if required) reduces, proofs, and marks the required number of lanes through the enemy’s tactical obstacles to support the maneuver of the assault force. (See appendix G.) To avoid confusion, the commander clearly identifies the conditions that allow the breach force to proceed. From the probable line of deployment, the assault force maneuvers against or around the enemy to take advantage of the support force’s efforts to suppress the targeted enemy positions. The support force employs direct and indirect fires against the selected enemy positions to destroy, suppress, obscure, or neutralize enemy weapons and cover the assault force’s movement. The assault force must closely follow these supporting fires to gain ground that offers positional advantage. During the approach, the company is prepared to—

- Bypass or breach obstacles.
- React to all eight forms of contact.
- Transition to different formations and techniques based on the terrain and enemy situation.
- Employ forces to screen or guard flanks that may become exposed or threatened during the approach.
- Avoid terrain features that are likely enemy artillery reference points, locations for CBRN attacks, or locations for situational obstacles.
- Destroy or force the withdrawal of opposing enemy security and disruption forces.
- Minimize the effects of enemy deception.

2-478. A defending enemy generally establishes a security area around their forces to provide early warning of an attack, deny friendly reconnaissance, and disrupt the friendly force’s attack. The strength of the enemy’s security area depends on the time available, forces available, and the enemy’s doctrine or pattern of operations. The company counters the effects of enemy security forces to ensure an unimpeded and concealed approach. This starts before the attack when reconnaissance forces seek to locate enemy security forces. Once located, the commander has the following options available:

- Destroy them immediately with indirect fires, attack reconnaissance helicopters, and close air support, which is the preferred option.
- Destroy them with indirect fires and CAS during the approach to the objective.
- Conduct limited objective attacks before execution of the main attack.
- Force the withdrawal of enemy security forces during the approach to the objective.
- Support by fire with sniper fire to reduce their effectiveness.

2-479. The company must maintain a steady, controlled movement. Speed and dispersion, facilitated by situational awareness and understanding, are the norm with massing of weapons effects to destroy the enemy's defense.

Actions on the Objective

2-480. As the commander concentrates available combat power on the point of attack. Before the attack initiates, the objective is isolated to prevent the ingress or egress of enemy forces. The commander must set favorable conditions before committing forces. The commander uses (when available) artillery, close air support, Army attack aviation, and organic mortars, a shaping operation from another maneuver company, and other joint, interorganizational, multinational or special operations forces assets to set conditions. The commander then maneuvers combat forces and employs direct and indirect fires, situational obstacles, and obscuration to execute decisive maneuver against the enemy. The commander commits maneuver forces and fires to isolate and then rupture a small vulnerable portion of the enemy's defense to gain a flank or create a penetration.

Note. The key to a successful attack is isolation and suppression. Isolation prevents the enemy from reinforcing the objective area. Suppression of fires from the objective and from enemy locations supporting the objective allows the attacking force to maneuver and seize the objective.

2-481. When planning actions on the objective, attacking from an unexpected direction and time can limit or even change the enemy course of action. The effects of this action are fleeting and must be exploited rapidly before the enemy can recover. If the company is successful in locating and attacking a position that is unexpected, the enemy defense may become untenable. The company uses precision attacks (when the capabilities are available) that target key enemy command and control systems, indirect fires or reserve forces. Effective destruction of these key systems reduces the enemy control and causes enemy organizational collapse.

Set Conditions

2-482. The company commander employs fires to weaken the enemy's position and set the conditions for success before closing within direct fire range of the enemy. Initially, preparation fire focuses on the destruction of key enemy forces that can most affect the scheme of maneuver. For example, during an attack to penetrate an enemy defense, the initial focus of preparation fire is to destroy the enemy positions at the selected point of penetration. Preparation fire may also—

- Suppress or neutralize enemy reserves. Emplace artillery delivered situational obstacles to block enemy reserve routes into the objective.
- Deceive the enemy as to the company's actual intentions.
- Destroy enemy security and disruption forces.
- Obscure friendly movements and deployment.
- Destroy or neutralize the enemy's local command and control system.

2-483. The synchronization between indirect fires and maneuvering forces is critical. As maneuver forces approach the enemy defense, the commander uses triggers to shift fires and obscuration to maintain continuous suppression and obscuration of the enemy. Proper timing, adjustment of fires, and detailed triggers dictated by risk estimate distances enable a relatively secure closure by the maneuver force on the enemy's position(s). The commander must monitor the success of the preparation fire to determine whether adequate conditions exist for commitment of the force. Organic or attached R&S teams provide battle damage

assessment to the commander to assist decision making. The commander may need to adjust the tempo of the company's approach to the objective based on the battle damage assessment.

2-484. Prior to the assault, the company commander destroys the enemy or makes it ineffective through the employment of direct and indirect fires. The commander fixes the enemy in place and limits the enemy's options. One of the commander's objectives is to limit or change the options available to the enemy and to increase the enemy's uncertainty. A primary goal at the point of attack is to isolate (see figure 2-49) the enemy targeted for destruction by preventing the enemy from repositioning and preventing another element from reinforcing it.

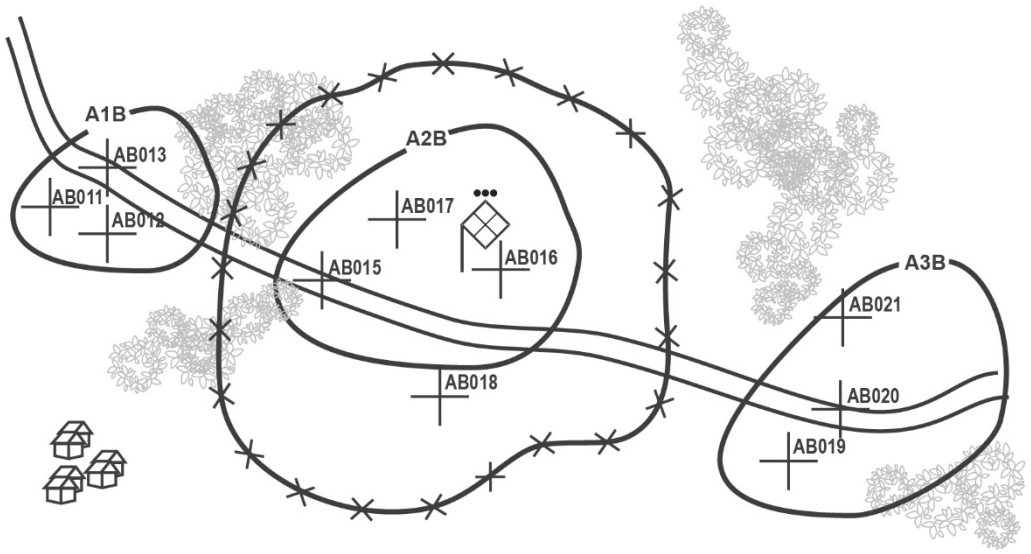


Figure 2-49. Isolate the objective

2-485. The company commander may begin isolating the objective during the leader's reconnaissance by positioning security or sniper elements to prevent enemy movement into or out of the objective area. The commander must ensure that these units understand what actions to take in the event of enemy contact. Initially, they only observe and report until the company deploys for the assault. At a designated time or signal, they begin active measures to isolate the objective.

2-486. The company may fix the enemy force by attacking an objective that isolates a portion of the enemy's defense. In open terrain, this shaping operation or supporting effort fixes the enemy with direct and indirect fire. In complex terrain, a shaping operation or supporting effort may seize terrain or destroy key enemy forces in limited objective attacks to pass the decisive operation or main effort to their objective. This ensures that the decisive operation or main effort does not have to fight its way and lose combat power en route to its objective. Demonstrations and feints may be used to fix the enemy; although, shaping operations or supporting efforts should exercise economy of force as they can take combat power from the decisive operation or main effort. The integration of indirect fires, close air support, and Army attack aviation is vital in attacking enemy forces and reserves in-depth to reduce the enemy's combat effectiveness or prevent their commitment against the company.

2-487. Once the objective area is isolated, the commander then focuses on isolation at the point of attack or breach point (if the company must breach). The commander always seeks an attack on the enemy's flank or rear, and avoids a frontal attack into enemy obstacles (this is most likely the enemy's strength). This isolation helps prevent enemy reinforcement or repositioning at the point of attack (or point of breach). It also helps to suppress enemy weapons and positions that have observation and fire on the point of attack (or point of breach). If the precise locations of enemy weapons have not been determined, but the commander has still

decided to breach, the support force concentrates on the terrain that dominates the obstacle and the point of breach. When required, the support force is assigned the main responsibility for this isolation. Figure 2-50 on page 2-130 shows the planned general area to establish a breach. The commander masses the majority of available combat power effects at the initial point of penetration or point of breach. The commander uses indirect fires to suppress or obscure adjacent enemy positions.

2-488. The coordination between the assaulting force and the supporting force is critical. The commander shifts supporting direct and indirect fires only when the assaulting force is as close to the enemy positions as possible. The assault force then can generate sufficient fire to maneuver and destroy the enemy. Within the support force, medium machine guns are positioned to destroy and fix the enemy. When used in the isolation role, the support force or company, as a whole, prevents the withdrawal of the enemy off the objective or prevents reinforcements from counterattacking.

2-489. The initial penetration (or breach if necessary) of the enemy position is normally the Infantry company's initial focus. The initial assault force (or breach force) bypasses or penetrates the enemy's protective obstacles to gain a foothold and create a gap large enough for the assault element to pass through. SOSRA is a memory aid for the breaching fundamentals that must be applied to ensure success when breaching against a defending enemy. These fundamentals always apply, but they may vary based on METT-TC. These fundamentals, and the applicable task organization, should be planned for even if a breach is not necessary or conducted. If the breach force can bypass obstacles and still seize the initial foothold then it does so. The following five paragraphs discuss the breaching fundamentals commonly referred to as SOSRA.

2-490. Suppression is a critical task performed during any breaching operation. Suppressive fires prevent the enemy from emplacing effective fire on the point of breach, specifically the forces reducing and maneuvering through an obstacle. Successful suppression generally triggers the rest of the actions at the obstacle. Fire control measures ensure that all fires are synchronized with other actions at the obstacle. Although suppressing the enemy overwatching the obstacle is the mission of the support force, the breach force should be able to provide additional suppression against an enemy that the support force cannot suppress.

2-491. Obscuration must be employed to protect forces conducting obstacle reduction and the passage of assault forces. Obscuration degrades enemy observation and target acquisition and conceals friendly activities and movement. Obscuration smoke deployed on or near the enemy's position minimizes its vision. Screening obscuration employed between the reduction area and the enemy conceals movement and reduction activities. It also degrades enemy ground and aerial observations. Obscuration must be carefully planned to provide maximum degradation of enemy observation and fires without significantly degrading friendly fires and control.

2-492. The company secures the reduction area so the enemy cannot interfere with obstacle reduction and the passage of the assault force through the lanes that reduction created. Security must be effective against outposts and fighting positions near the obstacle and against overwatching units, as necessary. Fires must secure the far side of the obstacle, or the terrain dominating the breach area must be occupied before trying any effort to reduce the obstacle. Generally the battalion and/or IBCT has the responsibility to isolate the breach area for the company by fixing adjacent units, attacking enemy reserves in-depth, and providing counterfires support. Identifying the extent of the enemy's defenses is critical before selecting the appropriate technique to secure the point of breach. If the enemy controls the point of breach and cannot be adequately suppressed, the force must secure the point of breach before it can reduce the obstacle. The breach force must be resourced with enough maneuver assets to provide local security against the enemy forces that the support force cannot sufficiently engage. Elements within the breach force that secure the reduction area may also be used to suppress the enemy once reduction is complete.

2-493. *Reduction* is the creation of lanes through a minefield or obstacle to allow passage of the attacking ground force (JP 3-15). The number and width of lanes created 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 through the obstacle unimpeded. The breach force reduces, proofs (if required), marks, and reports lane locations and the lane-marking methods to the battalion. When available, follow-on forces 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. The breach is not

complete until friendly forces have secured a foothold and destroyed the enemy on the far side of the obstacle, and complete battle handover with the assault force/assault force. (See figure 2-50.)

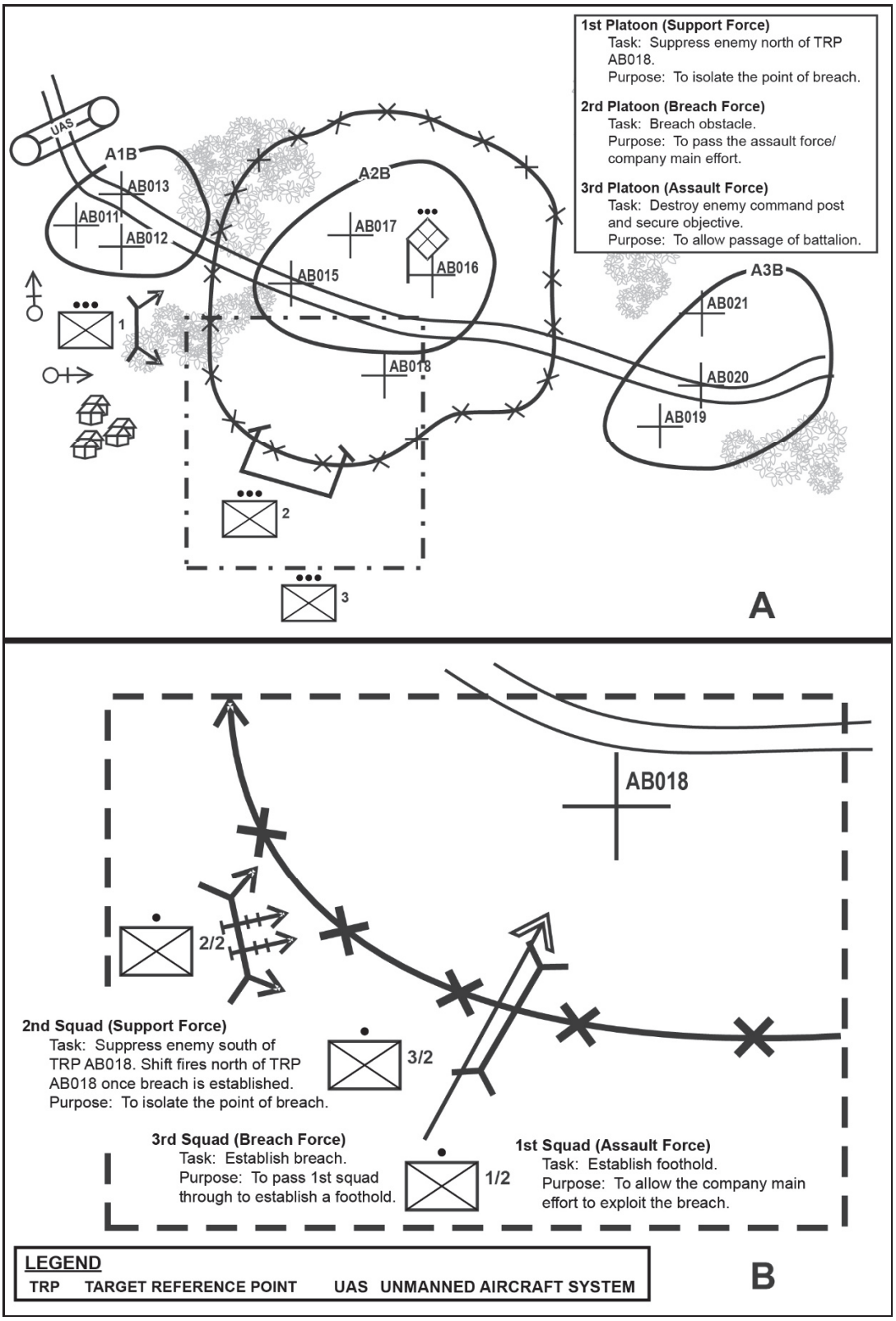


Figure 2-50. Establish breach and secure a foothold

Decisive Maneuver

2-494. After the successful breach, the assault force conducts the main attack. (See figure 2-51.) The assault force passes through the breach supported by the fires of the support force and the breach force.

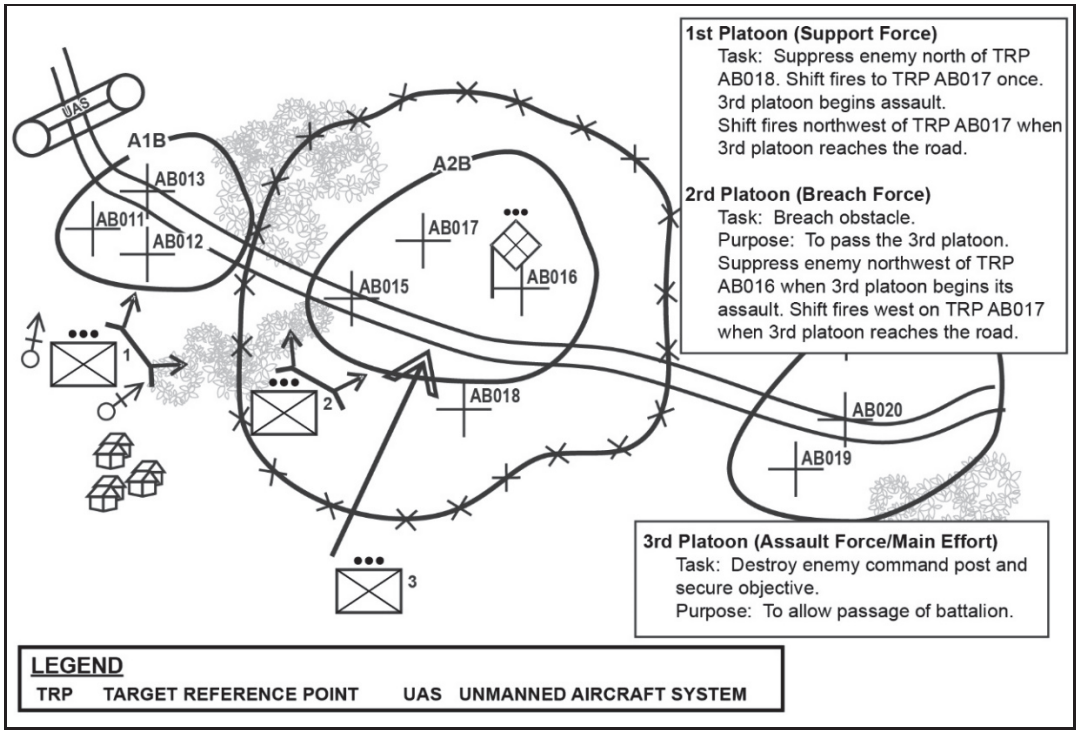


Figure 2-51. Exploitation of the penetration

2-495. The destruction of a defending enemy force normally dictates an assault of the objective. During the assault the commander concentrates and masses combat power through decisive maneuver. As the assault progresses, shaping operations or supporting efforts shift direct and indirect fires and repositions as required to support the decisive operation or main effort's maneuver of assaulting forces.

2-496. As the assault force (Third Platoon) passed the probable line of deployment, the previously dispersed assaulting force moved into its final combat formation and maneuvered to destroy enemy forces and secure the assigned objective. The assaulting force moved along covered and concealed route to a created penetration. (Other options could have been an exposed enemy flank or other position of advantage in a different situation.) Obscuration assisted with concealing the movement of the assaulting force. The assault included destruction of defending forces and clearance of trenches and fortifications at the point of attack.

2-497. The commander focuses on maintaining the momentum and security of the assaulting force. The R&S effort continues to report enemy repositioning, battle damage assessment, and enemy counteractions to the assault. Fires reduce the ability of the enemy to reposition and mass forces. Once the assault force has seized the objective, follow-on forces may pass through to continue the attack. The commander and subordinate leaders throughout the company ensure that units remain disbursed and check to ensure all the enemy on the objective are destroyed or captured. Assault forces on the objective reorganize and prepare positions for an enemy counterattack.

2-498. The assault force clears the enemy position as quickly as possible. If the assault force can capture or destroy the enemy's command and control facilities or other key positions and weapons, the enemy may surrender or abandon the position. This might be the decisive point for the assault force if there is key terrain that allows control of the objective. Normally, the assault force moves within the enemy's trenches to avoid exposure to enemy fire.

2-499. The assault force organizes into support, assault, and breach elements. As it may encounter subsequent positions or bunkers, it might have to repeat the breaching operations. As in the initial breach,

the breach element establishes a support-by-fire position and conducts the same sequence of breaching and assaulting to reduce the position.

2-500. The commander, when possible, can retain flexibility during an attack with a designated reserve force. When established, the commander should be prepared to commit the reserve to exploit success and to continue the attack. The reserve may also repulse counterattacks during consolidation and reorganization.

2-501. Throughout the attack the company maneuvers aggressively so the enemy has no time to react once an attack starts. The commander monitors the situation and adjusts the plan to exploit any weakness found during the attack. If a situation develops that is beyond the capability of the company, the company commander notifies the battalion commander. The commander might have to retain the company's position until other companies can maneuver to support the company.

2-502. Platoon elements advance in the formation suitable to the terrain and situation when moving from their positions. When the assault element must move through a narrow lane in the obstacles, it maintains dispersion and assaults through the lane by fire commands; signals should be coordinated to support this. The commander moves where best able to control platoons and supporting fire. The support force's indirect and direct fires shift when they endanger the advancing Soldiers.

2-503. The assaulting Soldiers clear enemy positions, secure and search prisoners, and move quickly across the objective. When they reach the far side, they take up hasty fighting positions and continue to fire at the withdrawing enemy. Teams may be assigned to sweep back across the objective to ensure all the enemy is either dead or captured. When the objective is seized and secured, the supporting elements and company trains are called forward to a logistics release point(s).

2-504. The company consolidates once it seizes the objective. Reorganization, if required, is normally conducted concurrently with consolidation and consists of follow-on mission preparations. As with consolidation, the Infantry company commander must plan and prepare for reorganization during the conduct of troop leading procedures (see appendix B for more information). The commander ensures that the company is prepared to take the following actions:

- 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.

FORCE-ORIENTED ATTACK AGAINST A MOVING ENEMY FORCE

2-505. The company normally participates in an attack on a moving enemy force as part of a larger attacking force, this is usually conducted during a counterattack, spoiling attack, exploitation, or after a movement to contact. Most of the techniques described above for the force-oriented attack against a stationary enemy equally apply to attacking a moving enemy.

Planning

2-506. The Infantry company in a force-oriented attack against a moving enemy force will organize in the same manner as a movement to contact and can be envisioned much like an ambush. The company participating in this type of attack could be called on by the battalion to organize, move, and operate in different capacities as previously discussed within the movement to contact portion. Key planning considerations for a force-oriented attack against a moving enemy force as part of the battalion include the following.

Mission Command

2-507. The decision on where to fight the enemy requires the commander to have information dominance over the enemy. The commander bases the decision on a clear understanding of the effects of the terrain, the enemy situation, and what the enemy is expected to do. The commander selects the most advantageous location to fight the engagement and then determine other possible locations where the engagement may

occur based on a slower- or faster-than-expected enemy advance or the enemy's use of an unlikely avenue of approach. (See figure 2-52.) The commander identifies these areas as objectives, intermediate objectives, or engagement areas. Example engagement area options include:

- Option engagement area (EA) Rain. Enemy lead elements cross phase line (PL) Nita, Infantry battalion engages enemy in EA Rain (lead battalion elements vicinity PL Sally).
- Option EA Hail. Enemy lead elements move east through named area of interest (NAI) 3, Infantry battalion engages enemy in EA Hail (lead battalion elements vicinity PL Tracy).
- Option EA Snow. Enemy lead elements move east through NAI 4, Infantry battalion engages enemy in EA Snow (lead battalion elements vicinity PL Tracy).
- Option EA Sleet. Enemy lead elements cross PL Sue, Infantry battalion engages enemy in EA Sleet (lead battalion elements vicinity PL Nita).

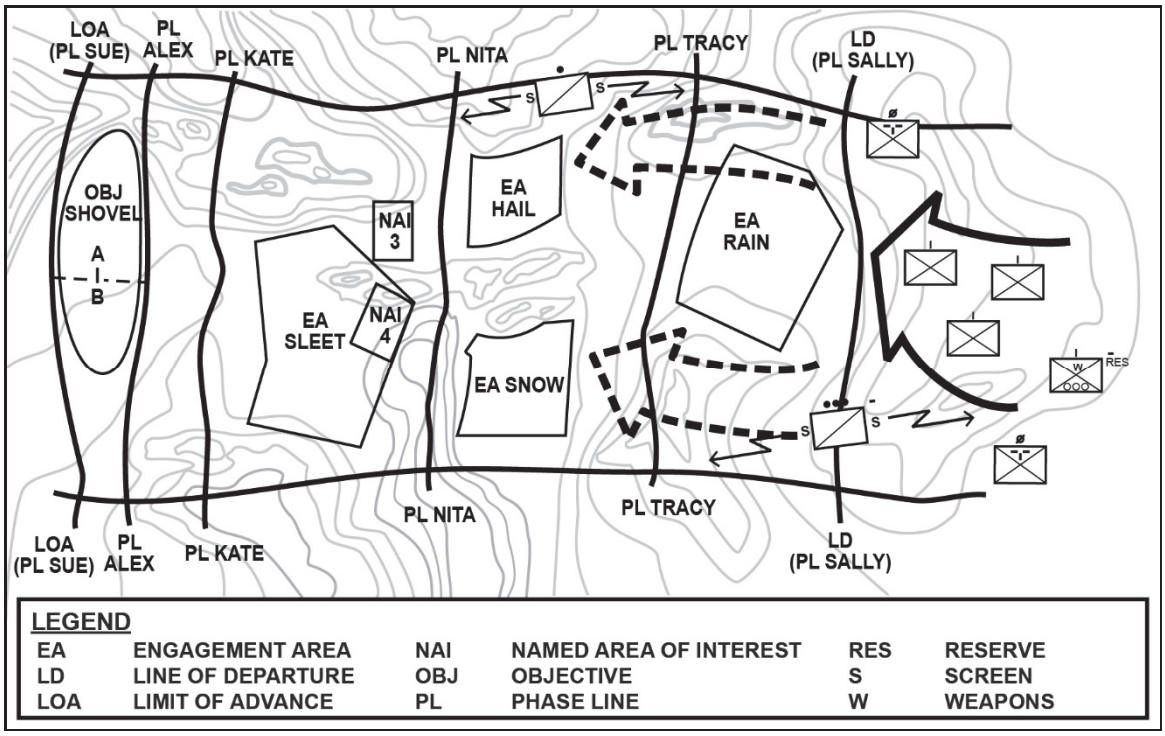


Figure 2-52. Planning options (attack against a moving enemy)

2-508. The commander develops control measures to help coordinate actions throughout the area of operation. The commander, develops decision points for the commitment of the attacking force to each location based on relative locations and rates of movement of the attacker and the enemy. Named areas of interest are selected to identify the enemy's rate and direction of movement to support the commander's decision of where to fight the engagement.

Movement and Maneuver

2-509. When operating separately the company may provide its own R&S or be augmented by battalion scouts, and snipers that the company commander employs during a company attack. When part of a battalion attack, the company can establish or augment the R&S forces for the battalion. As with a movement to contact R&S forces move well forward of the attacking force. They reconnoiter obstacles and areas that may slow the attacker's movement and disrupt the timing and planned location of the attack. Reconnaissance forces seek to detect obstacles, contaminated areas, enemy security forces, and suitable routes for the battalion's use. Once contact is established, the reconnaissance force may receive a change of mission to secure an uncovered flank or the rear of the attacking force as it advances. This security force mission will involve a screen or guard task, with a possible task organization change.

Mobility

2-510. In some instances the weapons company may provide support to rifle companies when directed by the battalion commander. The mobility of the Infantry weapons company, with its heavy weapons and long range close combat missile fires, makes it well suited for a force-oriented attack against a moving enemy force. When employed in a support by fire role, to suppress, fix, or destroy enemy at long ranges, mass and depth are key consideration to allow Infantry units or combined arms teams to maneuver. The weapons company platoons provide the rifle companies with a highly mobile, multifunctional assault force when task organized assault platoons augment Infantry company(s). When assault platoons augment rifle companies it creates a combined arms team that can execute a variety of missions during an attack on a moving enemy.

2-511. Engineers in support of the company focus on enabling movement and maneuver throughout the attack. Force-oriented attacks will tend to concentrate on assured mobility to attack the enemy's ability to disrupt the company's actions, mobility, and momentum during the attack. The battalion engineer staff officer's running estimate provides the framework to synchronize and integrate engineer support into the mission. Conducting parallel planning is vital in allowing engineer units to position critical assets (when available), establish linkup, and task-organize to their supported units. Early linkup with supported maneuver units provides critical time for combined arms planning and rehearsal.

2-512. Key considerations for the scheme of engineer operations include the following:

- Task organize engineer forces well forward to support breaching.
- Assign normal priority of support to the lead elements.
- Prepare to bypass or breach enemy situational obstacles.
- Integrate situational obstacles with fires and triggers to affect the movement of the enemy and support flank security in support of the commander's intent.
- To support flank security, plan obstacle belts and measures, and plan situational obstacles.
- Develop and adjust obstacles and triggers for execution based on the company's movement and the enemy situation.

Terrain Advantages

2-513. The commander uses the terrain to maximize freedom of maneuver while limiting the freedom of maneuver available to the enemy. The commander plans avenues of approach that allow the company to strike the enemy from a flank or the rear. During a company attack flank attack against a moving enemy, for example, a rifle platoon establishes a blocking position along the enemy's advance while two rifle platoons conduct an attack into the enemy's flank. The commander selected terrain that prevented the enemy from moving away from the main attack while protecting the company flank from an enemy attack. Figure 2-53 illustrates the same technique utilized at battalion level. In this illustration, *situational obstacles*—an obstacle that a unit plans and possibly prepares prior to starting an operation, but does not execute unless specific criteria are met (ATP 3-90.8)—are employed as part of a target area of interest, providing the battalion commander with flexibility for emplacing tactical obstacles based on battlefield development.

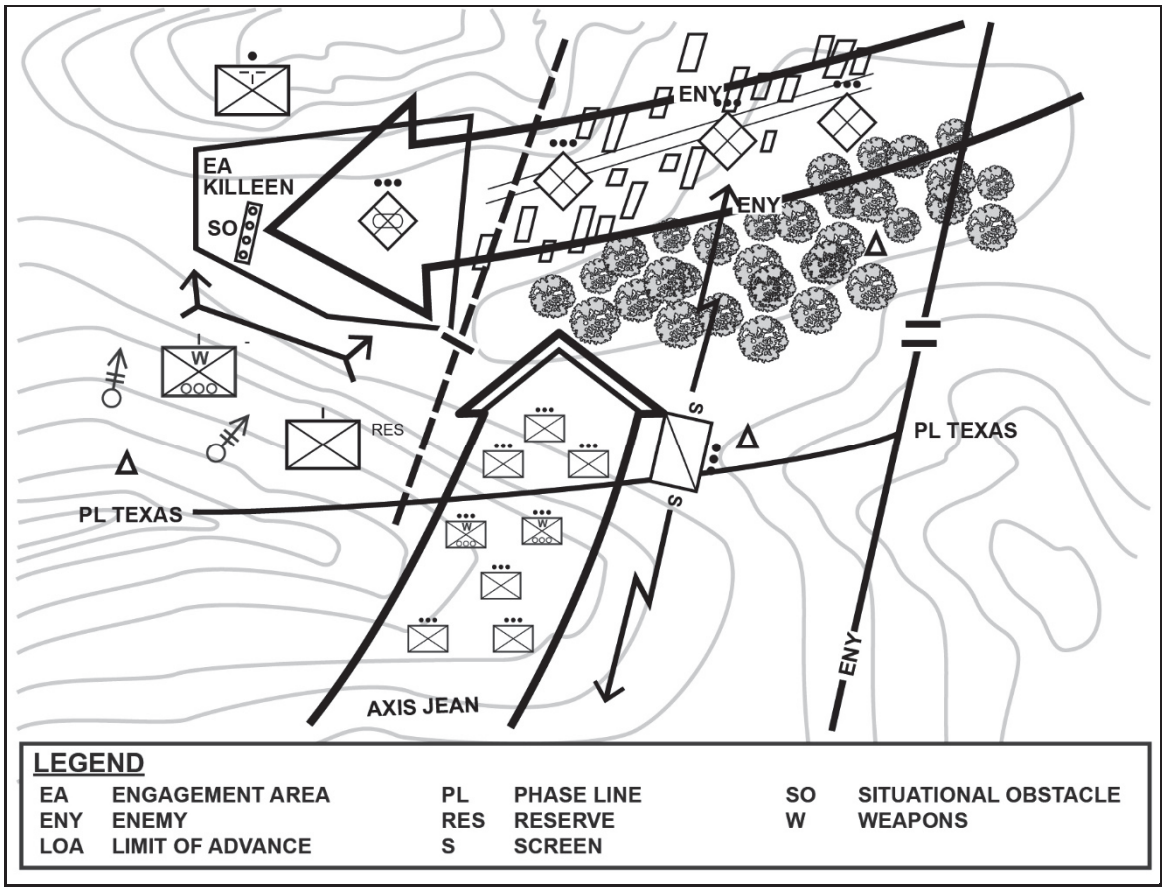


Figure 2-53. Flank attack against a moving enemy

2-514. Although the commander develops the plan to fight the enemy at the most advantageous location, the commander retains enough flexibility to attack the enemy effectively regardless of where the engagement develops. The scheme of maneuver includes provisions to fight the enemy at other possible locations. For simplicity, the commander seeks to keep the scheme of maneuver in each location as similar as possible.

2-515. In some situations, such as a movement to contact, the commander may have constraints in the time or ability to select when and where to fight a moving enemy force. If so, the commander issues a fragmentary order for an attack based on the commander's physical view and knowledge of the battlefield. As collection assets, and intelligence is gathered, the commander quickly deploys and maneuvers to develop the situation and defeat the enemy.

Intelligence

2-516. The enemy's tactical deployment is the relative position of units with respect to one another or to the terrain. Enemy tactical formations are designed for executing the various tactical maneuvers. If this deployment can be predetermined, it leads to an accurate appraisal of intentions. The knowledge of how enemy units are echeloned may indicate (if the enemy assumes the offense) which units will be used in the main attack and which units will be used in supporting reserve roles.

2-517. Tactical deployment with respect to terrain is also important. A study of dispositions and an analysis of the terrain aid the development of conclusions concerning enemy capabilities, vulnerabilities, and intentions. Key terrain features are usually forward of friendly dispositions and are often assigned as objectives. Adjacent terrain features may be key terrain if their control is necessary for the continuation of the attack or the accomplishment of the mission.

2-518. The identification of avenues of approach is important because all COAs that involve maneuver depend on available avenues of approach. During an attack, the evaluation of avenues of approach leads to a recommendation on the best avenues of approach to the objective and identification of avenues available to the enemy for counterattack, withdrawal, or the movement of reinforcements or reserves. Additional considerations for attacking a moving enemy force include the following.

Reconnaissance and Surveillance

2-519. The R&S effort focuses on answering the commander's critical information requirements to support the commander's decisions on when and where to initiate fires, where to fight the enemy, and how best to maneuver against the enemy. NAIs are developed to identify enemy actions and decisions that indicate the enemy selected COA. The commander utilizes the S-2 analysis to conducts the company analysis of how the enemy will fight on the assigned objective.

Anticipate Enemy Courses of Action

2-520. The IPB (see appendix B) details how the enemy is likely to move and fight. The IPB states the enemy likely formations and routes, and how the enemy will try to fight the ensuing meeting engagement. The analysis shows the enemy expected rate of movement and how the enemy force is likely to be arrayed. This information is based on a detailed terrain and time-distance analysis. The enemy normally has four general courses of action—

- Defend before or after initial contact to retain control of defensible terrain.
- Defend to limit the attacking force's advantage.
- Attack to defeat or penetrate the attacking force.
- Delay or bypass the attacking force.

2-521. Based upon the analysis the company commander determines those enemy actions that may indicate the enemy's selection of a COA and ensures observers are positioned to detect and report these indicators. The commander always must portray the enemy's flexibility, likely actions, and available maneuver options. The goal is to identify the enemy's most likely COA and have the company anticipate and prepare for it.

Establish Contact

2-522. Preferably, the company establishes contact with the enemy using through support from battalion digital sensor platforms before it makes physical contact. The battalion, with support from the BCT, receives information from battlefield surveillance systems. Intelligence produced from the information gathered by these sensors helps the battalion direct ground reconnaissance forces to advantageous positions to physically observe and report information on the enemy. Once contact is made, the company and battalion maintains contact.

2-523. The information gained from sensors as well as ground reconnaissance forces must be shared with all elements of the attacking force and with higher as quickly as possible. Normally, information requirements include—

- The enemy's rate and direction of movement.
- The enemy's formation, strength, and composition to include locations of security forces, main body, reserves, and artillery formations.
- Enemy actions and decisions that indicate a future enemy action or intention.
- Location of enemy high-payoff targets.
- Enemy vulnerabilities such as exposed flanks or force concentrations at obstacles.

Fires

2-524. Successful maneuver requires close coordination and effective employment of available fire support assets. The commander emphasizes the development of a clear, concise, and rapidly integrated fire support plan (see appendix D) to ensure responsive fires are available when needed. Fires are planned to quickly attack enemy forces on key terrain, flanks, and in dead space to enable the commander to economize and concentrate to exploit advantages that arise. In order to be within fire support range of the company, including

distributed subordinate units within its area of operation, the commander with the assistance of the company FSO fully integrates all allocated, and organic fire support assets available, into the commander's scheme of maneuver for the attack. The FSO ensures that synchronization is conducted with both higher echelons. The commander positions company mortars forward within the attacking formation to facilitate continuous and effective fires to the company.

2-525. The commander employs fires to support reconnaissance forces and during preparation fires, using precision and other munitions to destroy enemy reconnaissance, security forces, and identified high-payoff targets, and to disrupt enemy maneuver. Planned precision-guided munitions to limit collateral damage permit successful engagement of point targets. For example, precision-guided munitions can be used to destroy a high-payoff target during an attack on an urban objective. Prior to and during the attack, target acquisition assets of the IBCT's field artillery battalion focus on identifying enemy systems that can interdict maneuver companies as they move towards the objective. Radars and observers linked to fire support systems enable this effort. Additional considerations include the following:

- Use fires to affect the enemy's maneuver well forward of the attacking force to disrupt the enemy's formations and timetable.
- Plan triggers, observer locations, and targets to maintain flexibility and ensure achievement of required effects before contact with the enemy.
- Coordinate and synchronize with brigade the movement and positioning of artillery to support fire support tasks within each engagement location and to engage high-payoff targets before the enemy enters the selected area.
- Retain flexibility to mass fires at the decisive point in any location where the engagement may occur.
- Plan triggers to put targets into effect and cancel them based on the battalion's movement and the commander's decision of where to fight the enemy.
- Coordinate terrain requirements.

Sustainment

2-526. Sustainment planners within the battalion (Battalion XO, support company commander, company XO, medical platoon leader, and supply sergeant), led by the battalion S-4, synchronize and coordinate the concept of support in support of the battalion's attack. Sustainment planners continually refine and coordinate the concept of support to maintain momentum and freedom of action. Sustainment planners may consider positioning sustainment units in close proximity to operations to reduce critical support response times. Establishment of a forward logistics release points provides the ability to weight the effort for the operation by drawing on all sustainment assets. Sustainment planners, and commanders consider alternative methods for delivering sustainment during emergencies and as the situation changes. (See appendix I for additional information.) Key considerations for the sustainment plan include the following:

- Plan support from initiation of the operation to the final objective or limit of advance and, as required, a follow-on mission.
- Ensure the sustainment plan is responsive and flexible enough to support all maneuver options and continuously updated as the situation may change.
- Integrate resupply operations with the scheme of maneuver.
- Weigh the risk the extended distances create for security of main supply routes and sustainment assets based on the potential of undetected or bypassed enemy forces.
- Use all available assets to develop and maintain an accurate enemy picture behind the lead maneuver elements.
- Develop and rehearse plans for enemy contact.
- Plan and coordinate the locations, displacements, and routes of sustainment assets to maintain responsive support.
- Develop triggers based on the battalion scheme of maneuver to activate or deactivate collection points and logistics release points.
- Plan casualty evacuation, resupply, and equipment recovery for engagements in each potential location.

Protection

2-527. If allocated, the air defense artillery supporting the IBCT operates in direct support to the battalions with the normal priority of protection to the decisive operation. The air defense artillery assets shift locations on the battlefield as required by the phase of the operation to maintain adequate air defense coverage of critical forces and events. Air defense coverage increases in areas and activities most vulnerable to air attack such as breaching operations or movements through restricted terrain. A stinger section may support subordinate companies of the battalion from positions along attack routes. Stinger teams on the early warning net can warn the company of an air attack. (See ATP 3-01.8.)

2-528. CBRN assets support protection of units during decisive action through reconnaissance and decontamination. (See appendix H for more information.)

Preparation

2-529. Preparation for an attack against a moving enemy force is limited because the opportunity to attack the enemy at the appropriate time and place depends on the enemy's movement. This forces the attacking force to focus the preparation on executing fires and maneuver actions within each location. The commander prioritizes each area to ensure the company prepares for the most likely engagements first. The commander ensures all subordinate elements and supporting forces understand their role in each area and the decision point for execution at each area. Subordinate leaders rehearse actions in each area against various enemy conditions to promote flexibility and initiative consistent with the commander's intent. Repetitive rehearsals against likely enemy actions are essential for success at all levels.

Execution

2-530. Because of the vulnerability, by the nature of an attack against a moving enemy force, the enemy must not be underestimated. Only a determined attack, conducted at a high tempo and having an information dominance over the enemy, attains the enemy's total destruction. When executed correctly the company's principal advantage is possession of the initiative. The commander plans for, and concentrates the effects of subordinate forces and sets conditions to maintain the initiative. The company, in coordination with higher echelon fires, strikes the enemy in unexpected ways at unexpected times and places. The commander focuses on attacking the right combination of targets. Force-oriented attacks against a moving enemy force, once conditions are set, are rapidly and violently executed, and unpredictable in nature to disorient the enemy.

Approach to Objective

2-531. As part of a battalion attack against a moving enemy formation subordinate companies move in dispersed formations, masking their movement using covered and concealed routes to maintain surprise. By gaining contact with the enemy force through R&S, the battalion can use long-range artillery fires, close air support, and attack reconnaissance helicopters to destroy and disrupt the enemy throughout the formation. Security forces (if employed), can detect and destroy enemy reconnaissance and security elements.

2-532. The battalion creates favorable conditions for the attack by weakening and disrupting the enemy's formation, destroying security forces, and fixing the enemy's main body. The battalion employs fires reinforced with situational obstacles to set the conditions for the engagement area or objective fight, disrupting and weakening the enemy before they get to the area. Preparation fires should provide time for companies to deploy before contact. Normally, R&S elements control these initial fires.

2-533. Subordinate companies of the battalion deploy, attack from unexpected and multiple directions, mass effects, and destroy the remaining enemy force before the enemy can adequately react. Company commanders adjust the speed of their companies to ensure that fires have set the appropriate conditions and that companies arrive at their designated location at the proper time in relation to the enemy. Accurate reporting and analysis of the enemy's rate and direction of movement through R&S are critical to the timing of the attack.

Defeat Enemy Security Forces

2-534. Normally, the enemy employs security forces to protect its main body. The enemy's ability to seize the initiative often depends on security forces. Attacking forces must avoid, destroy, or fight through enemy security forces to gain contact with the bulk of the enemy force. Commanders employ fires in conjunction with the lead maneuver forces to defeat enemy security forces. Ideally, battalion lead forces (normally a rifle company) attack enemy forward and flank security forces to develop the situation. The commander initiates maneuver to destroy enemy security forces, and gain contact with the enemy's main body before the enemy can react.

Fix Enemy Main Body

2-535. A rifle company for the battalion normally fixes the enemy's main body to create the conditions for the decisive operation or main effort. The company executes this task once opposing enemy security forces are bypassed, fixed, or destroyed. Fires against lead enemy forces allow the battalion to deploy and gain contact with the enemy main body. Reconnaissance forces and available surveillance assets are positioned to keep the company commander informed of the enemy's strength and actions throughout the attack. It is paramount that the commander receives accurate and timely reports and information on the enemy's situation. Commander critical information requirements, enemy main body's strength, disposition, and reactions, enable the battalion commander to make final adjustments to the main body's attack.

Maneuver Main Body

2-536. As reconnaissance forces (and security forces if established, see paragraph 2-288 on page 2-80) develop the situation, the commander begins to maneuver the remaining main body (combined arms formations) to favorable positions for commitment. The commander positions the battalion to attack the enemy formation from an assailable flank where the battalion's total combat power can be massed against an enemy weakness to reach a quick decision. Rapid movement and massed fires characterize the attack.

2-537. The battalion commander establishes support by fire positions (shaping operation or support effort) and uses indirect fires to suppress the enemy force that directly opposes the battalion's decisive operation or main effort. The battalion strikes the enemy force with overwhelming strength and speed. As the battalion maneuvers against the enemy, the battalion FSO monitors and adjusts, as required, coordination measures (see ATP 3-21.20 appendix B) to provide continuous support and prevent fratricide.

2-538. If the commander determines the enemy force is trying to bypass or avoid contact, the commander then directs fires to delay and disrupt the enemy's movement away from the battalion. The commander maneuvers forces to destroy or penetrate any enemy forces trying to fix or delay the battalion and strikes the bulk of the evading enemy force from the flank or rear.

TERRAIN-ORIENTED ATTACKS

2-539. The Infantry rifle company normally conducts a terrain-oriented attack as part of a battalion or larger force; however based on the mission variables of METT-TC it can conduct the operation independently. A terrain-oriented attack requires an attacking force to seize and retain control of a designated area to support future operations. When part of a battalion operation the company attacks to seize terrain for many reasons. For example—

- To seize key terrain or structures such as bridges, airfields, or public services to support follow-on operations or as part of a turning movement form of maneuver.
- To seize terrain such as a chokepoint or route to block enemy withdrawals or reinforcements.
- To block movements against a higher echelon's decisive operation.
- To facilitate friendly force passage.
- To secure an area, such as a lodgment area (see FM 3-99), for future operations.

2-540. When conducting a terrain-oriented attack independently, the company organizes (as would the Infantry battalion) with a support force, a breach force, and an assault force, each with a specific purpose and task to accomplish and the appropriate level of support in terms of fire support, sustainment, and other combat enablers. The company plans, prepares, and executes terrain-oriented attacks in the same manner as attacks

against an enemy stationary force. The major distinction in a terrain-oriented attack is that the company focuses its efforts on the seizure and control of terrain instead of effects on the enemy. (See figure 2-54.) The commander plans and directs the attack to gain control of the terrain as quickly as possible and only conducts necessary actions against the enemy. Success of the mission normally does not entail action against all enemy forces within the company's area of operation.

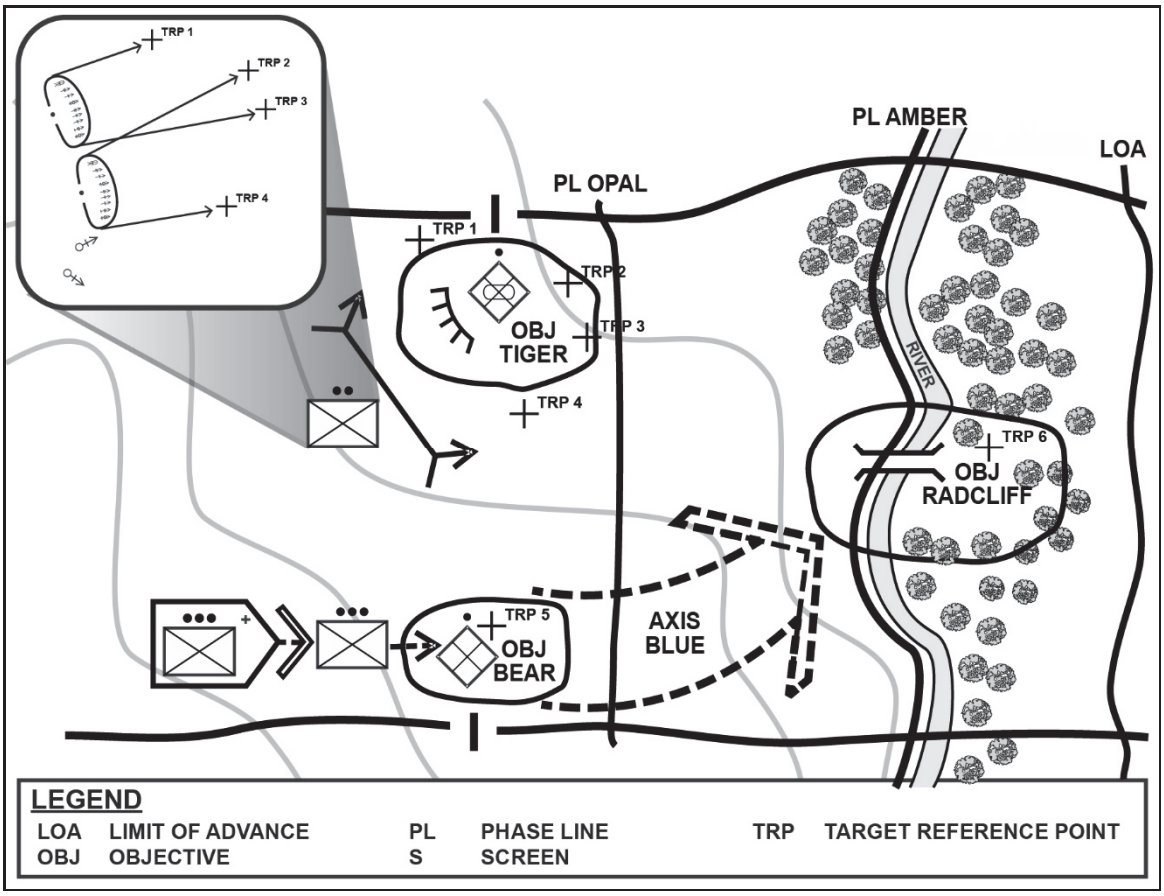


Figure 2-54. Company terrain-oriented attack

2-541. The rifle company attacks only the enemy who directly affects the seizure of the objective or who might affect future operations. The commander understands that seizure of terrain-oriented objectives and likely key terrain probably will dislocate the enemy force. The commander also understands, after seizure, the enemy may counterattack to dislodge and defeat friendly forces occupying the objective. Other key considerations that differ from force-oriented attacks are addressed in the following paragraphs.

Reconnaissance and Surveillance

2-542. The commander consider enemy forces within the company's area of operation and area of interest for both force and terrain oriented attacks. Though, terrain oriented attacks will normally require the commander to place greater emphasis on the company's area of interest, specifically enemy outside the company's area of operation that may react to the company's seizure of the terrain oriented objective. Generally the battalion is responsible for the area outside the company's area of operation.

2-543. Once enemy forces are located, reconnaissance forces and surveillance assets will try to determine the enemy's strength and disposition as well as possible enemy weaknesses and bypasses the company could exploit. This helps the commander with analysis from the battalion S-2 develop enemy courses of action and identify indicators of the enemy's commitment to a future action. Normally considerations of enemy actions are to defend in place; reinforce threatened enemy units; counterattack; delay; or possibly withdraw.

2-544. The surveillance effort, as in other attacks, capitalizes on all the battlefield surveillance assets (battalion and above) available to the company, as well as those belonging to the company, to identify the enemy situation on the objective and any sizable enemy forces within the battalion area of operation and area of interest. Ground reconnaissance forces and surveillance assets, external to the company, can occupy positions to gain observation and report information on enemy activities within the company area of interest.

Level of Risk

2-545. The company commander must determine the level of risk by leaving or bypassing enemy forces in both a terrain oriented attack and an enemy oriented attack. The company commander bases this decision on the battalion commander's intent and established bypass criteria, the enemy's capabilities, and the commander's assessment of the situation. The commander must recognize the potential effects that bypassed enemy forces may have on sustainment and future operations. The commander normally employs economy of force missions to contain, destroy, or fix bypassed enemy forces. The risk imposed by these bypassed forces is to the elements moving behind the maneuver forces in the area of operation. Once the company secures the objective, other forces or fires can destroy bypassed enemy forces or force their surrender.

Seizure of the Objective

2-546. Once the company seizes the objective, the company immediately establishes local security, prepares hasty defensive positions, and prepares for an enemy attack to retake the objective. The commander positions forces in a manner that best defends the objective while allowing a rapid transition to follow-on operations. At battalion level, security forces may establish a screening force forward of the secured objective to provide security and early warning to the company to prevent a surprise attack by the enemy. Attached or organic to the company R&S forces may establish observation positions and surveillance assets may be deployed to provide early warning and detail information on the enemy situation forward of the company's limit of advance. Engineers may provide countermobility and survivability support as time and resources allow. Fires assets reposition to support follow-on operations or the defense (if established) and the extended target coverage in the security area beyond the main battle area.

ATTACK DURING LIMITED VISIBILITY

2-547. Limited visibility attacks are the norm for the Infantry rifle company. They accentuate the company's strengths while minimizing its limitations. Successful attacks in limited visibility depend on leadership, reconnaissance, training, planning, and surprise. Darkness, fog, heavy rain, and falling snow limit visibility, smoke and dust from high-explosive fires also limit visibility, but their effects do not last as long. The rifle company attacks in limited visibility to—

- Achieve surprise.
- Avoid heavy losses.
- Cause panic in a weak or disorganized enemy.
- Exploit success and maintain momentum.
- Keep pressure on the enemy.

Fundamentals

2-548. The fundamentals for a daylight attack, discussed earlier in this chapter, still apply for night attacks. Conducting limited visibility attacks requires enough natural light to employ the unit's night vision devices. It is essential that the company is well trained in its execution conducting limited visibility attacks and very familiar with the unit SOP. The commander's plan needs to be innovative, a straightforward concept that is easy to express as the commander's intent and for subordinates to understand. It should take advantage of night vision and navigational technology, the element of surprise and the anticipated enemy's confusion, using only essential control measures, and be fully executable. The attack plan must be ethical, and to the extent possible, effective and efficient. It should also be flexible so that leaders can rapidly assess changes in the situation and make adjustments under mission command philosophy. Once the concept is generated, it can only be improved and updated with successful reconnaissance of the

objective area. When planning attacks during limited visibility, the Infantry commander must consider the increased difficulty of—

- Controlling units, Soldiers, and fires.
- Identifying and engaging targets.
- Navigation and movement.
- Distinguishing friendly and enemy Soldiers.
- Locating, treating, and evacuating casualties.
- Locating and bypassing or breaching enemy obstacles.

Developing the Concept

2-549. A simple concept, particularly for the actions on the objective, supports control during the assault. Platoon and squad objectives should be small and easily identified if possible.

2-550. The commander must avoid developing a concept that requires the company to fight for each enemy fighting position. As in a daylight attack, the company identifies a decisive point and focuses combat power at the location. Once the decisive action is accomplished, the plan must also address any remaining enemy. If required by the higher commander's concept or for an effective consolidation, the company might have to clear all enemy forces from the objective area.

2-551. A smaller assault force maneuvering on the objective is easier to control and less likely to suffer casualties from enemy or friendly fires. The assault force must have clear signals to ensure control of all supporting fires, both direct and indirect.

2-552. A non-illuminated attack should be flexible in case a daylight attack is required due to enemy detection or the use of illumination by an adjacent unit. A contingency plan that reorients for illumination should be prepared and issued, and every Soldier should know under what conditions to execute this plan. In some cases, such as when the unit is already deployed through the probable line of deployment and advancing on the enemy, the company might have to continue the attack as planned.

Control Techniques

2-553. The company conducts a limited visibility attack the same way it conducts a daylight attack. The night vision devices for individual Soldiers and crew-served weapons normally allow sufficient control by leaders. Whenever possible, a support-by-fire position is established to provide suppressive fires on the objective. Fires, to include fires from the company’s light mortars, suppress and isolate the objective.

2-554. Leaders and Soldiers compensate for some of the limitations of night vision devices. These limitations include limited peripheral vision and range. Commanders and leaders compensate by—

- Making a simple plan with limited maneuver.
- Having fewer units maneuver independently of the main body.
- Thoroughly explaining to all participants and rehearsing the plan.
- Maintaining positive control of all elements.

2-555. Weather, the lack of a sufficient number of night vision devices, and enemy countermeasures may prevent the commander from conducting a limited visibility attack like a daylight attack. If the company is unable to plan and conduct a limited visibility attack like a daylight attack, the commander can choose from several simplified techniques. The modified linear assault is a technique for conducting a nonilluminated attack. This technique is effective in controlling assault force fires by maintaining a linear formation. Each Soldier assaults using individual movement techniques while remaining “on line” with the Soldier on both the right and left. Each Soldier can engage or suppress targets to their front with fewer restrictions because there is less chance of fratricide. The line must also be oriented correctly to overlap the enemy position. This technique provides extremely poor security and firepower to the flanks and poor flexibility once the assault is initiated.

2-556. Rehearsals are essential to achieving effective fire control in limited visibility attacks. Examples of fire-control techniques are discussed in the following three paragraphs.

2-557. Leaders in the assault force fire may be loaded with all tracers; while their men fire where the leader's tracers impact. The support force positions an automatic weapon on a tripod on the flank nearest the assault element. This weapon fires a burst of tracers every 15 seconds to indicate the near limit of the supporting fires. All other weapons in the support force keep their fires on the side of this tracer away from the assault force. The assault force signals to shift fires to the next position or to a set distance. If required, these rounds can be adjusted well over the head of the assault force to preclude casualties.

2-558. Assault personnel can be marked to prevent fratricide and to prevent enemy detection. Luminous tape can be put on the back of the helmet or small infrared chemical lights can be used (if the enemy has no night vision devices). The support force should know where the lead assault force is. If individual Soldier markings do not suffice, use large chemical lights (infrared or visible). The chemical lights are placed on the ground or thrown in front of the assault force. When clearing a trench line, put the lights on a stick and move them with the lead element.

2-559. Ordering changes in weapons control statuses may be assigned to reduce the risk to the assault force. For example the assault platoon on a flank might be given weapons free to that flank, while another assault force might be restricted to no automatic weapons fire on the objective. Additional techniques for increasing control during the limited visibility attack include but are not limited to:

- Flares, grenades, or smoke on the objective is not used.
- Personnel with night vision devices engage targets on the objective.
- A magnetic azimuth is used for maintaining direction.
- A mortar or artillery round is used to orient attacking units.
- Guides are used.
- Reducing intervals between Soldiers and units.
- Intervals between Soldiers and units is reduced.
- Identifying targets with laser.

Illumination and Indirect Fire

2-560. Two basic decisions must be made for conducting limited visibility attacks: illumination on the objective and indirect fire support for the attack. Illumination for all night attacks should be planned and readily available in case the enemy detects the attack and uses illumination, or if the enemy possesses night vision devices. Illumination may also be necessary to support reorganization and consolidation after the objective is secure, particularly for casualty evacuation.

2-561. Illuminated night attacks are most effective when speed is essential, when there is limited time for reconnaissance, or when the enemy is weak or disorganized. When conducting these types of attacks, the attacking unit still tries to use stealth and the concealment of limited visibility to gain surprise. They then initiate fires and illumination to support the assault. Illumination is available from artillery, mortars, M320s, and hand-fired and aircraft flares. Permission to fire illumination is often retained by battalion because the light may affect adjacent unit missions.

2-562. A night attack with mortar, artillery, and anti-armor fires is planned much like a daylight attack. However, Soldiers may not fire unless the company is detected or until the company is ready to assault (based on METT-TC and the commander's scheme of maneuver). Some weapons may be fired before the attack to maintain a pattern to deceive the enemy, aid in navigation, or to cover noise made by the company's movement. Weapons firing before the attack is avoided if it discloses the attack.

2-563. Indirect fire is difficult to adjust when visibility is poor. If doubt exists as to exact friendly locations, indirect fire is directed first at enemy positions beyond the objective and then walked onto the objective. Infrared illumination enhances the effectiveness of night vision devices. The illumination rounds might be fired to impact on the ground, providing both light and markings on the objective. They may also be placed behind the objective and in the air, causing the enemy to be silhouetted. Once illumination begins, it should continue until the objective is secure. Sufficient ammunition must be available.

2-564. Obscuration is planned to further reduce the enemy's visibility, particularly if the enemy has night vision devices. The obscurant is laid close to or on enemy positions to avoid restricting friendly movement or hindering the breaching of obstacles. Employing obscurants on the objective during the assault may make

it hard for assaulting Soldiers to find enemy fighting positions, but if sufficient thermal sights are available, using obscurants on the objective may provide a decisive advantage for a well-trained unit.

2-565. Illumination is always planned for attacks to be conducted in limited visibility. This gives the company commander the option of calling for it and ensuring it is coordinated. The battalion commander normally controls illumination but may authorize the company commander to call for it when needed. If the company commander decides to use illumination, then the commander should not call for it until the assault is initiated or the attack is detected. The illumination should be placed on several locations over a wide area to confuse the enemy as to the exact location of the attack. It should also be placed beyond the objective to help assaulting Soldiers see and fire at withdrawing or counterattacking enemy Soldiers.

2-566. Illumination may also be required if the enemy uses illumination to disrupt the effectiveness of the company's night vision devices. Once used, illumination must be continuous because attacking Soldiers temporarily lose their normal night vision. Any break in illumination reduces the effectiveness of suppressive fire when the attackers need it most. Care must be taken to ensure that the squad and platoon leaders do not use hand flares before the commander has decided to illuminate the objective.

2-567. Illumination rounds for heavy mortars are about four times as bright and hang for about twice as long as those for light mortars. All U.S. mortars have both illumination and infrared illumination rounds.

2-568. The thermal sights of weapons such as the Integrated Target Acquisition System (ITAS) and Javelin might be employed strictly for observation, if there are no targets for these weapons to engage. The thermal sights can provide critical current information when positioned outside the objective area. They can also assist the support force with controlling their fires or provide the assault force with reports of enemy movements on the objective.

2-569. Limited night vision devices must be prioritized and employed at the most critical locations. Priorities to consider include key Soldiers in the breach force, key leaders in the assault force, other members in the assault force, and key leaders and weapons in the support force.

Consolidation and Reorganization

2-570. The company consolidates and reorganizes when it has seized the objective. Consolidation and reorganization of a night attack is the same as for a daylight attack with the following exceptions:

- Guides lead sustainment and support elements forward to their positions.
- Consolidation plans should be as simple as possible.
- Locating and evacuating casualties and enemy prisoners of war takes longer.
- Platoon positions are closer together to ease control and improve mutual support.

ATTACK SEQUENCE OF EVENTS, EXAMPLE

2-571. Most attacks will following a sequence of events similar to the example sequence addressed below. This sequence of events is used for discussion purposes and is not the only way of conducting an attack. The commander uses this or a similar sequence to plan events necessary to accomplish the mission. The commander understands events will vary depending on the mission variables of METT-TC and to some degree, events will overlap.

ASSEMBLY AREA

2-572. The commander organizes the company for the attack, directs and supervises mission preparations in the assembly area. Assembly area activities include coordination, pre-combat checks and inspections, rehearsals, and sustainment preparations. (See paragraph 2-144 on page 2-40 for information on occupying an assembly area.)

Note. The commander may decide that rapid action is essential to retain a tactical advantage and may decide not to use an assembly area. Detailed advance planning—combined with digital communications, SOPs, and battle drills—may reduce negative impacts of such a decision.

RECONNAISSANCE AND SURVEILLANCE

2-573. R&S provides the commander with the information needed to plan, prepare, execute, and assess the operation. The commander aggressively seeks information about the terrain and enemy before, during, and after the attack. The situation and available time may limit the R&S prior to crossing the line of departure. The commander understands the balance between the benefits of having reconnaissance forces on the ground providing combat information with the level of risk involved.

2-574. The R&S collection effort reports on enemy activity in the area of operation, this includes occupation of an assembly area, tactical movement, and establishment of attack position(s), line and point of departure, axis of advance, line of probable deployment, assault position(s), and the objective. R&S assets from higher echelons enable the company's collection effort.

2-575. The commander may employ attached scout elements if available, unmanned aircraft systems, rifle platoon or squad to enable collection. Reconnaissance patrols may move forward to identify enemy positions, mark and report on planned routes. The battalion commander may call on the company to deploy (dependent on available time and enemy situation) in support of smaller elements, such as a scout and sniper team, to infiltrate to a position with direct observation of the objective, any obstacle, possible route for enemy reinforcement, or other critical area. These named areas of interest and observation positions are designated as a no fire areas.

MOVEMENT TO THE LINE OF DEPARTURE

2-576. When attacking from positions not in contact, the Infantry often stages in rear assembly areas or moves to an attack position behind friendly units in contact with the enemy, then conducts passage of lines (see paragraph 2-168 on page 2-45) to begin the attack. Lead elements of the attacking force cross the line of departure at the time specified in the operations order or fragmentary order. Before movement, a patrol can be tasked to reconnoiter and mark the route and check the time it takes to move to the line of departure. When attacking from a position in direct contact, the line of departure may also be the *line of contact*, a general trace delineating the locations where friendly and enemy forces are engaged (FM 3-90-1). In certain circumstances, there may not be a line of departure, for example an operation in a noncontiguous area of operation.

2-577. Support by fire force(s) may move into position prior to assault forces moving from the assembly area or may be in the lead in order to occupy an overwatch position to support the assault force as it crosses the line of departure. The commander should consider the risk of losing the element of surprise when moving vehicles close to the line of departure. Mortars move forward to a firing position near the line of departure to allow maximum coverage of the movement. The commander avoids stopping in the attack position prior to the line of departure. However, if units are ahead of schedule, are told to hold, or have to make final preparations for the attack, elements occupy the attack position, post security, and wait until time to move.

2-578. The company FSO prepares to execute preplanned fires during tactical movement to the probable line of deployment and preparation fires on the objective (depending on the distance to the objective) prior to crossing the probable line of deployment. The FSO prepares for call for fire missions on enemy positions identified during movement and obscuration to cover the company's movement when required. During movement, any element with direct observation of the enemy may request or adjust fires.

2-579. Assault forces cross the line of departure in a manner that supports its deployment prior to the assault. Units guide on the designated element, usually the force conducting the main attack. Company units may cross the line of departure supported by suppressive direct and indirect fires, or wait until the appropriate time to initiate fires. The commander must consider the time of the movement and the ammunition available. The commander should consider the effect of fires on the ability to achieve surprise. If so employed, these fires may continue until the assault force reaches the assault position(s) or final coordination line, fires then shift, as required, to allow the assault on the objective. The commander initiates indirect fires based on the company scheme of maneuver.

2-580. Company, and battalion mortars may be the most responsive to on-call missions but may be limited in range and ammunition. Mortars move forward to a firing position(s) near the line of departure to provide support during movement and, depending on the distance, to the objective. Mortars may displace by split

section to provide support at the objective. The displacement provides continuous indirect fire support throughout the operation. Company mortars usually are in direct support of their company.

MOVEMENT TO THE PROBABLE LINE OF DEPLOYMENT

2-581. During movement from the line of departure to the probable line of deployment, the company makes the best use of cover, concealment, and supporting fires. The attacking force usually avoids known enemy positions. During movement if an element is engaged by indirect fire, the element moves quickly out of the impact area. Reaction to unexpected enemy contact, actions on contact should be in accordance with the operations order or fragmentary order. Depending on the battalion plan and the location and type of resistance, enemy position may be bypassed.

2-582. When the enemy cannot be bypassed, the maneuver force in contact must take prompt and aggressive action. The commander quickly conducts an estimate of the situation and issues guidance as needed to coordinate actions and fires to attack the enemy. The commander maneuvers the force, to assault the flank or rear of the enemy position. When the enemy is destroyed, the force continues movement. When the enemy is suppressed, follow-on forces pass around the enemy to continue the mission. Throughout the movement, the commander continues to focus on the primary objective and continues the advance to that objective.

2-583. Maneuver forces bypass obstacles when possible and when the terrain allows, but will breach when required. During the attack, a maneuver force may conduct the breach with organic equipment and personnel or with attached engineer or other combat enabler. The company commander informs the battalion commander of obstacles that may affect following units. Engineers (when available) are position to provide a rapid assessment of the obstacle throughout the movement.

ACTIONS ON THE OBJECTIVE

2-584. As the company maintains the pace of its advance as it approaches the probable line of deployment. The company deploys into one or more assault and support forces either before or upon reaching the probable line of deployment. The commander synchronizes the occupation of support and attack by fire positions with the maneuver of the assault force to limit the vulnerability of the forces occupying these positions. All means are employed to suppress and destroy the enemy to sustain the momentum of the attack.

2-585. The commander synchronizes the effects of indirect-fire systems, and available attack reconnaissance helicopters and close air support as assault forces close on the objective. Fires are planned in series or groups to support maneuver against enemy forces on or near the objective. Support forces maintain suppressive fires to isolate the objective and prevent the enemy from reinforcing or counterattacking.

2-586. Once assault forces reach the far side of the objective, selected elements clear remaining pockets of resistance while the bulk of the assault force prepares for possible enemy counterattack. When assault forces reach the limit of advance, or on-order, support forces reposition support and attack by fire positions to counter possible enemy counterattacks and to support follow-on missions.

Support by Fire

2-587. Company support forces occupy support by fire positions that, ideally, afford unobstructed observation, clear fields of fire, and cover and concealment. Selection of support by fire positions are based on a study of the terrain, knowledge of enemy locations, or likely enemy locations. When the enemy situation is vague or unknown, positions are selected to place effective fire on terrain that dominates the area the assault force will traverse and seize. Once in position, support forces are responsible for both suppressing known enemy forces and for scanning assigned sectors of observation to identify previously unknown enemy elements to suppress them. The protection provided by support forces allow the assault force to continue movement and to retain the initiative even when under enemy observation or within range of enemy weapons.

2-588. Support by fire (direct fire) and attack by fire (direct fire, support by indirect fire) positions and other supporting fires may destroy designated targets prior to the assault force crossing the probable line of deployment. At the planned time or, preferably, when the lead elements of the assault force cross a designated line, supporting fires begin suppressive fires. Supporting fires cease or shift fires when assault forces reach a designated point or when directed. Best case, supporting fires suppress the target with indirect and then direct

fires until the assault force is as close to the objective as possible and then shift to other targets. Supporting fires suppress directly in front of the assault force (when conditions allow) as it moves through the objective.

Assault

2-589. The company's assault is short, violent, and well ordered. The assault force seizes or secures a geographic objective, or destroys, defeats, or disrupts a designated enemy force. From the probable line of deployment, the assault force maneuvers against or around the enemy to take advantage of support fires. The assault force must closely follow these supporting fires to gain ground that offers positional advantage.

Note. When required, the breach force reduces, proofs, and marks the required number of lanes through the enemy's tactical obstacles to support the maneuver of the assault force. The commander clearly identifies the conditions that allow the breach force to proceed from the probable line of deployment ahead of the assault force. (See appendix G.)

2-590. Between the probable line of deployment and the objective, the battalion can establish an assault position(s) and a final coordination line to control the final stages of the assault. Assaulting forces usually plan to pass through the assault position and deploy to their final assault formation at final coordination line. Stopping at the assault position may allow the enemy to react to the assault and may make it difficult for the assault force to regain the momentum of the assault once the force halts in a covered position. When used, the assault force pauses at the assault position only to—

- Make final equipment preparations, such as to make final preparations for demolitions.
- To ensure all assault forces are in their planned order.
- Wait for preparation fires to finish.

2-591. The objective for the assault force may vary from operation to operation. In every case, the assault force's actions on the objective are critical. Assault forces maneuver through fire and movement. Supporting fires must immediately gain fire superiority on the objective in coordination with fires around and beyond the objective to disrupt enemy reinforcement. As the assault closes on the objective, fires shift just forward of the assault force as it moves across the objective or until ordered to stop or shift to other target beyond the assault force or limit of advance.

Note. The key is to minimize the time between the shifting of fires and the maneuver of the assault force on the objective. The enemy must be suppressed during this time when the assault force is most vulnerable.

Consolidation, Reorganization, and Follow Through

2-592. On the objective, assault forces move across the objective to a predetermined or, on order, limit of advance to control the forward progress of the attack. Assault forces consolidate and reorganize once the objective is seized. Assault forces then dispatch designated teams to go back through the objective to ensure all enemy forces are destroyed, incapacitated, or willing to surrender. Teams also conduct searches for any material of intelligence value.

2-593. *Consolidation* is the organizing and strengthening a newly captured position so that it can be used against the enemy (FM 3-90-1). *Reorganization* is all measures taken by the commander to maintain unit combat effectiveness or return it to a specified level of combat capability (FM 3-90-1). During consolidation and reorganization, the company executes follow-on missions as directed. One mission is to continue the attack against targets of opportunity in the objective area. Whether a raid, attack (as a hasty or deliberate operation), or movement to contact, the company postures and prepares for continued action and to defeat local counterattacks.

2-594. The commander may pass follow-on forces through the assault force, or have them bypass the assault force, to continue the attack. On the objective, the assault force may be tasked to establish support by fire and attack by fire positions. Additional platoons and company mortars may move to the objective to establish

positions. The commander or assault force leader identifies initial support by fire and attack by fire positions to reinforce the company's limit of advance and to support follow-on missions.

Note. The following illustration introduces a fictional scenario as a discussion vehicle for illustrating one of many ways that the Infantry rifle company of the Infantry battalion can conduct an attack. This illustration is a continuation of the scenario started earlier in this chapter focusing on the subordinate companies of Infantry Battalion 2.

ILLUSTRATION OF AN ATTACK

2-595. The following scenario illustrates an attack conducted by Infantry Battalion 2. In this scenario, started earlier in this chapter, an IBCT conducted a movement to contact along two axes of advance. Infantry Battalion 1, initially the main effort, conducted a movement to contact along Axis of Advance Blue (Axis Blue) to the east. Infantry Battalion 2, initially a supporting effort, conducted a movement to contact along Axis of Advance Red (Axis Red) to the west. Infantry Battalion 3 conducted a follow and assume tactical mission task along Axis Blue (see figure 2-33 on page 2-76). During the movement to contact, Infantry Battalion 1 cleared enemy resistance north of Objective Fox but encountered stiff resistance along Axis Blue from platoon size enemy elements. Infantry Battalion 1 was unable to maneuver to generate sufficient combat power to seize Objective Fox, because of the unrestricted terrain and the enemy's clear fields of fires from Objective Fox to the north along Axis Blue. See ATP 3-21.20 for additional information on the scenario regarding the IBCT and subordinate unit missions for the attack.

INFANTRY BATTALION 2 – CHANGE OF MISSION

2-596. Within the scenario, Infantry Battalion 2 commander monitored the progress of the IBCT's main effort along Axis Blue. The battalion commander, per the IBCT commander's guidance, begins visualizing how the battalion might move to assist the IBCT in regaining the initiative along Axis Blue. In coordination with the IBCT commander, the battalion commander and staff begin preliminary planning and WARNORD development to conduct an approach march to Objective Fox. As Infantry Battalion 2 continued its movement to contact along Axis Red, and as forward security forces of the battalion seized Objective Zebra (unopposed), the battalion received a change of mission (conduct an approach march) from the IBCT commander (see figure 2-55). The IBCT commander directed—

- Infantry Battalion 2, main effort, conduct approach march to Assault Positions 3 and 4. On order conduct an attack, seize Objective Fox. Once objective seized, pass follow-on forces through to continue IBCT movement to contact south along Axis Blue and Axis Red.
- Infantry Battalion 1, supporting effort, establish support by fire and attack by fire positions north of Objective Fox. On order, disrupt, fix, and destroy enemy forces surrounding and on Objective Fox to support the main effort.
- Cavalry squadron, establish guard mission to the east of Infantry Battalion 1. On order, conduct movement along the east side of Objective Fox to conduct guard mission forward of IBCT movement to contact south of Objective Fox along Axis Blue.
- Infantry Battalion 3 continues follow and assume tactical mission task. On order, conduct movement along east side of Objective Fox to continue IBCT's movement to contact south of Objective Fox along Axis Blue. (Follows cavalry squadron.)

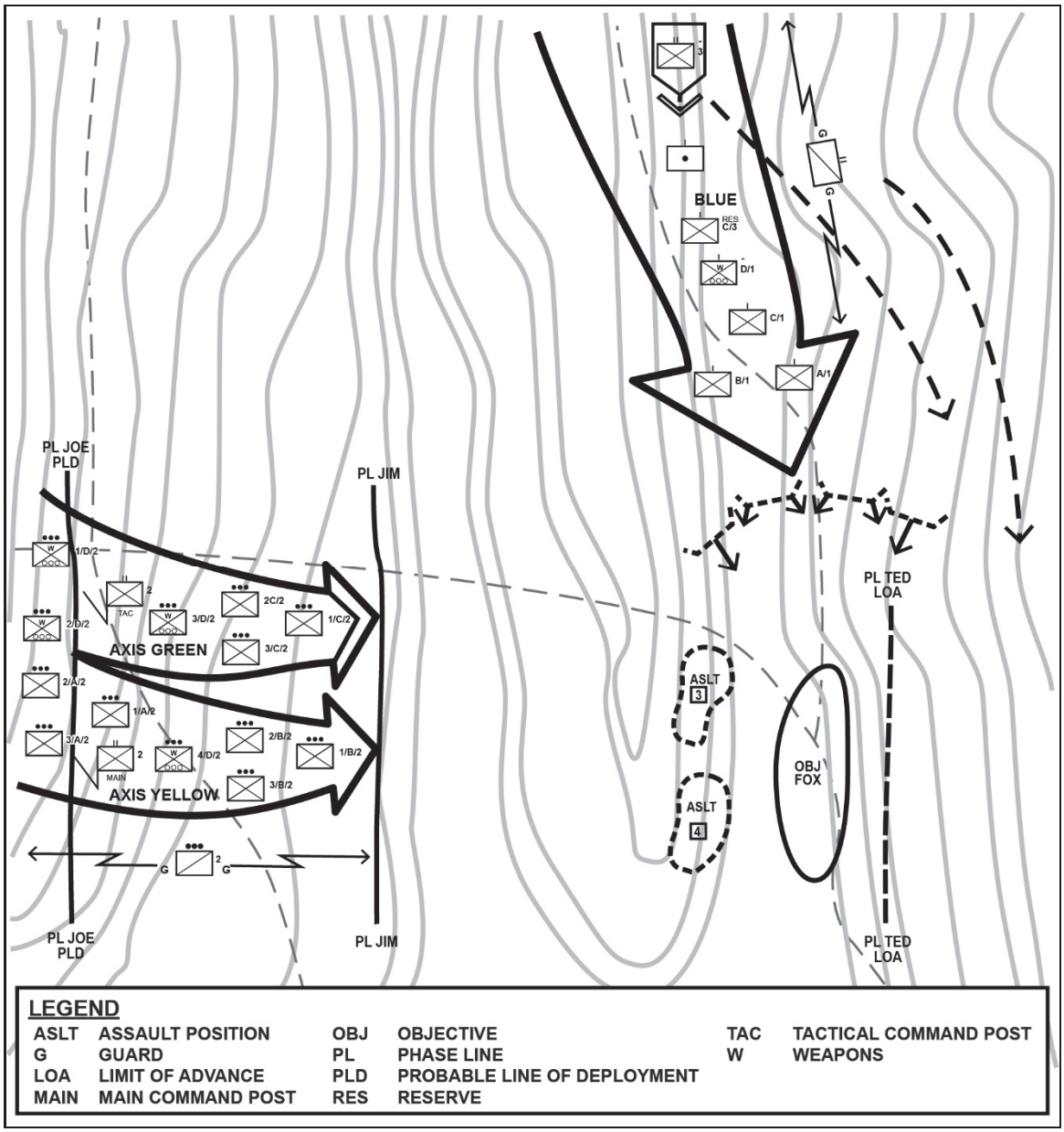


Figure 2-55. IBCT attack (scheme of maneuver), example

Note. The IBCT establishes restrictive fire support coordination measures (not illustrated), on order, east of Phase Line Ted (Infantry Battalion 2 limit of advance) to safeguard Infantry Battalion 2's maneuver, and attack on Objective Fox. In addition to fratricide, these measures facilitated the rapidly changing operation and prevented duplication of engagement between the two maneuver battalions. Restrictive fire support coordination measures included an airspace coordination area, a no-fire area, a restrictive fire area, and a restrictive fire line. (Refer to appendix C and FM 3-09 for additional information.)

Infantry Battalion 2 – Subordinate Unit Task and Order of Movement

2-597. Within the scenario, Infantry Battalion 2 conducts approach march to Assault Positions 3 and 4, on order, conducts an attack and seizes Objective Fox. Not to slow the tactical movement to the assault positions,

the battalion commander maintained the same combined arms teams and order of movement task-organized for the movement to contact. The commander assigned an axis of advance for the approach march and established a probable line of deployment (Phase Line Joe) for the attack, based on the mission variables of METT-TC and the location of the assault positions (see figure 2-38 on page 2-86). During the approach march, the commander assigned tasks to the force conducting the main effort and forces conducting supporting efforts respectively, along with area of operations, axes of advance, phase lines, and separate routes to support the battalion scheme of maneuver for the attack.

2-598. As the battalion approach march neared areas of likely enemy interference from Objective Fox, vicinity Phase Line Joe, the battalion commander divided the battalion axis of advance into two company columns, Axis of Advance Green (Axis Green) and Axis of Advance Yellow (Axis Yellow). Lead companies (Company C and Company B) moved on multiple routes cross-country while employing security forces (platoon size element) forward of the company column's main body (see figure 2-39 on page 2-88). The scout platoon moved from its security force position forward of the battalion to a position south of Axis Yellow to provide security on the battalion's southern flank. Battalion sniper squad moved from its security force location forward of the battalion to a position north of Axis Green to conduct linkup with Company D on the northern flank of the battalion. As the sniper squad crosses Phase Line Jim, the squad conducts route reconnaissance of Axis of Advance Orange (Axis Orange) to the front of Company D. Battalion security forces remain within supporting distance of the battalion main body (see figure 2-56). Battalion subordinate unit task and order of movement is as follows:

- Company C (main effort), with attached engineer platoon (-) and assault platoon, conducts approach march along Axis Green to Assault Position 3.
- Company B (supporting effort), with attached engineer squad and assault platoon, conducts approach march along Axis Yellow to Assault Position 4.
- Company D (supporting effort), with two remaining assault platoons, conducts approach march following Company C along Axis Green. Battalion tactical command post follows main effort (Company C), moves with the Company D. On order, vicinity Phase Line Jim moves on Axis range through Assault Position 5 into Support by Fire Position 3.
- Company A (battalion reserve) conducts approach march, follows Company B along Axis Yellow. One rifle platoon detached to battalion control, detached platoon provides battalion rear security. Battalion main command post follows Company B, moves with Company A.
- Battalion mortar platoon (supporting fires) moves by split section (Section A moves with Company D and Section B moves with Company A). Priority of fires to Company C.
- Battalion scout platoon provides battalion flank security (right flank) south of Axis Yellow.
- Battalion sniper squad conducts route reconnaissance along Axis Orange, establishes position to overwatch Company D movement through Assault Position 5 into Support by Fire Position 3.
- Battalion combat trains, on order occupies support area vicinity Objective Snake (not illustrated), with priority of support to the main effort, initially forward security forces. This echelon support includes maintenance support and treatment team alpha (clinically staffed with the battalion surgeon), and carries mostly Class I, V, and limit Class III.
- Battalion field trains, occupies support area, vicinity Objective Kiwi (not illustrated). This echelon support includes all battalion sustainment not located with the combat trains, includes treatment team bravo (clinically staffed with the physician assistant).

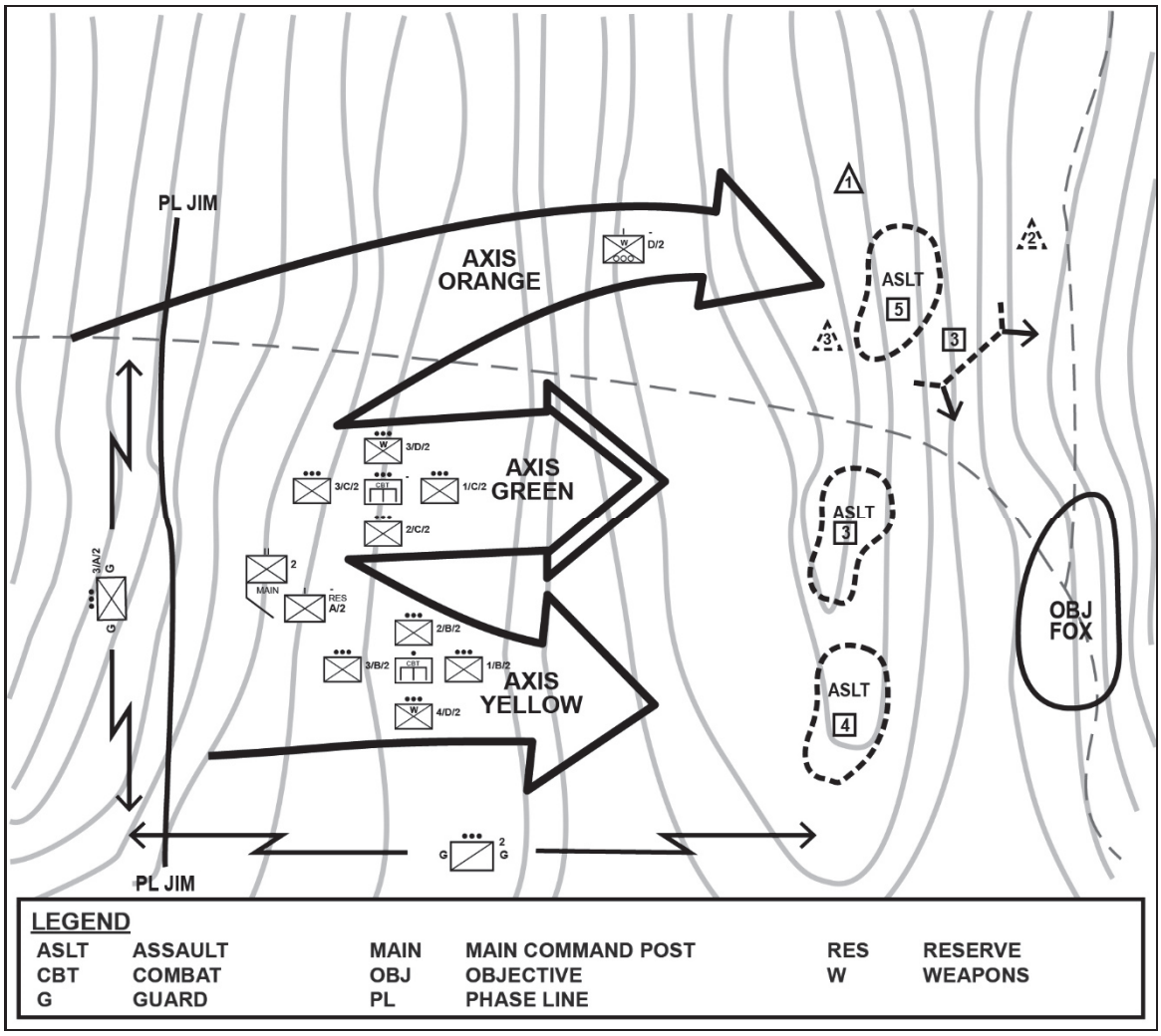


Figure 2-56. Battalion attack (axes of advance), example

Gain and Maintain Enemy Contact

2-599. As Infantry Battalion 2 forces close on the objective, the enemy situation becomes clearer. The battalion sniper squad moves ahead of Company D and conducts a route reconnaissance along Axis Orange. The sniper squad leader establishes Observation Post 3 (sniper team) to overwatch the movement of Company D through Assault Position 5 into Support by Fire Position 3. The sniper squad leader then moves the other two sniper teams to establish forward observation posts to make visual contact with the enemy on Objective Fox. As battalion assault and support forces advance, sniper teams report on enemy activity and maintain surveillance on Support-by-Fire Position 3 and Objective Fox. (See figure 2-56.)

2-600. Subordinate companies, through actions on contact, rapidly develop the situation in accordance with the commander's plan and intent for the attack on Objective Fox. Once battalion security forces gain contact (through surveillance from Observation Post 2 north of Support by Fire Position 3) with the enemy they maintain contact to further develop the enemy situation. Lead maneuver companies [Company C (main effort) and Company B (supporting effort)] of the battalion, along axes green and yellow respectively, employ combat power to destroy (within their capability) enemy security forces trying to hide enemy disposition, capabilities, and intent. (See figure 2-56.)

DISRUPT AND FIX THE ENEMY

2-601. Prior to the attack, attack by fire and support by fire positions established by Infantry Battalion 1 disrupt and fix enemy actions on (initially) and surrounding Objective Fox (see figure 2-39 on page 2-88). Additional shaping operations to disrupt and fix the enemy include preparation fires and deception operations to deceive the enemy. By disrupting and fixing the enemy, the objective of the IBCTs main effort is isolated to prevent the enemy from maneuvering to reinforce the enemy targeted for destruction. Massing forces in one place by using economy of force measures in other areas allows Infantry Battalion 2 to mass the effects of overwhelming combat power against a portion of the enemy.

2-602. As Infantry Battalion 2 moves into position for the attack, the IBCT commander synchronizes all available elements of combat power on the battlefield to achieve a decisive massing of effects on the objective. Critical to the success of the attack is the IBCT commander's assessment and decisions regarding what to disrupt, when to disrupt, and to what end. Disrupting one or more parts of the enemy weakens the entire enemy force allowing the IBCT to isolate and attack key portions of the remaining enemy force. Field artillery counterfire, to destroy or neutralized enemy weapons, disrupts the enemy allowing attacking forces to maneuver and mass effects against the enemy.

Note. Once fire superiority on the objective is achieved by Infantry Battalion 2, the battalion controls all fires west of the restrictive fire line (not illustrated). The IBCT retains control of all fires east of the restrictive fire line. (Refer to appendix C and FM 3-09 for additional information.)

2-603. As with the IBCT mission, critical to the success of the Battalion 2 (specifically Companies C, B, and D) mission is the assessment and decisions regarding what to disrupt, when to disrupt, and to what end. Support by fire positions, established by Company D isolate the portion of Objective Fox that can affect the battalion's assault. (See figure 2-57.) Disrupting one or more parts of the enemy weakens the entire enemy force allowing Company D to isolate and companies C and B to attack key portions of the enemy force. The usage of field artillery, close air support, or Army attack aviation platforms are employed to destroy or neutralize enemy key weapons systems, disrupt the enemy and allow battalion attacking forces to maneuver and mass effects against the enemy.

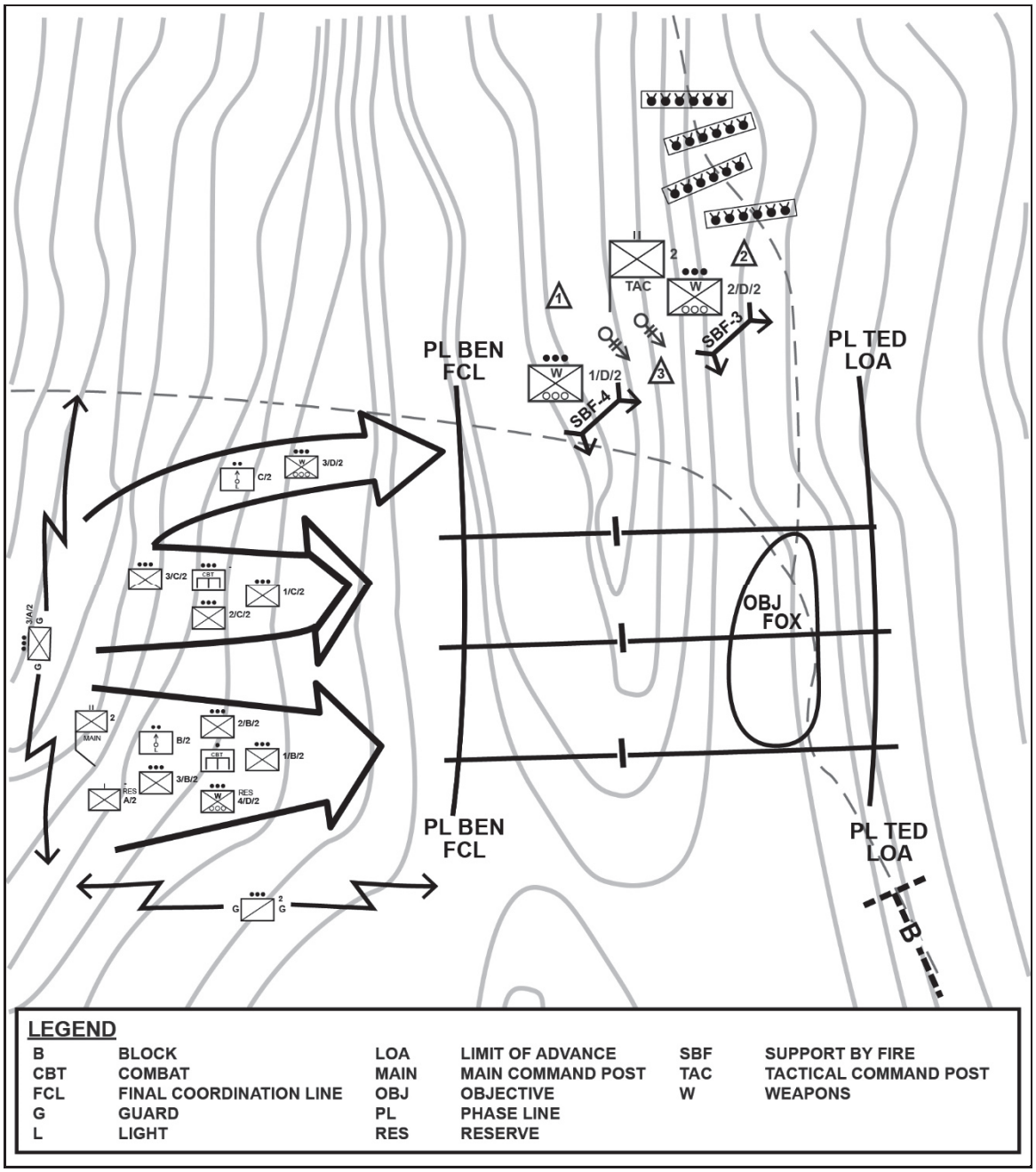


Figure 2-57. Battalion attack (support by fire), example

Note. During the battalion commander's leader's reconnaissance the decision was made, due to the terrain, to establish a second support by fire position (Support by Fire Position 4) to support the battalion's attack.

2-604. Support by fire positions established by Infantry Battalion 2 (through the employment of Company D [First Platoon-Support by Fire Position 4 and Second Platoon/Company D CP-Support by Fire Position 3]) disrupt enemy actions on and surrounding Objective Fox. Additional shaping operations to disrupt include preparation fires (internal to Infantry Battalion 2 and the field artillery battalion from the IBCT) and deception operations (Battalion 1 deceiving the enemy of its change of mission) to deceive the enemy. Company C and

Company B commanders employ attached weapons company assault platoons in such a way that the commander is able to maximize isolation of individual company objectives for the assault. In this example, assault platoons operate on company flanks, utilizing their mobility and operating in split sections on the left and right flanks of the battalion assault.

2-605. By fixing the enemy, the objective is isolated to prevent the enemy from maneuvering to reinforce the enemy targeted for destruction. Massing forces in one place by using economy of force measures in other areas allows Battalion 2 to mass the effects of overwhelming combat power against a portion of the enemy. Support by fire positions, established by Company D isolates the portion of Objective Fox that can affect the battalion's movement and assault. Throughout movement it is critical that the commanders of Company C and Company D coordinate and have the ability to communicate to control fires during critical portions of the assault. It is important for the commanders to have redundant communication and signals to ensure execution, and to mitigate risk during the movement to and the assault on the objective. Maneuver commanders are responsible for the overall tempo of the assault and Company D commander is responsible to ensure effective initiation, shifting and lifting of fires in support of the assault.

MANEUVER

2-606. Seeking to avoid the enemy's defensive strength oriented north against the IBCT's attack south along Axis Blue. The IBCT commander ordered Infantry Battalion 2 to conduct a flank attack from the west, seize Objective Fox and clear enemy to Phase Line Ted (see figure 2-55 on page 2-149). Prior to the establishment of Support by Fire Position 3, the sniper squad leader makes contact with the battalion commander (moving with Company D) to update the commander on the current enemy situation then guides the commander on the leader's reconnaissance of the objective. During the leader's reconnaissance the commander established a forward position (vicinity, Support by Fire Position 3), to control the attack after assault forces cross Phase Line Ben. Sniper teams provided overwatch and security throughout the commander's movement during the reconnaissance. In this scenario, the leader's reconnaissance did not include rifle company commanders due to the battalion's scheme of maneuver.

2-607. As a result of the battalion commander's leader's reconnaissance and situation updates from the IBCT, the battalion commander confirmed the plan to attack with two companies abreast Company C (main effort) on the left and Company B (supporting effort) on the right. Through the information provided, the majority of the enemy's countermobility defenses are oriented north of Objective Fox along Axis Blue. Limited enemy wire obstacles are located to the west of Objective Fox with the majority of obstacles in Company C's area of operation. Though Company B is prepare to breach, from the information provided, its movement will most likely not encounter enemy obstacles. Under this condition, Company B commander must emphasize the importance of staying abreast with Company C to maintain control and the overall tempo of the assault.

Note. The battalion commander establishes command presence in a variety of ways, to include a leader's reconnaissance. Optimally, the commander conducts a leader's reconnaissance with key personnel to confirm or modify the plan. Depending on the enemy situation and battalion scheme of maneuver, the leader's reconnaissance may just involve the commander (with a security team). After the leader's reconnaissance, the commander modifies the plan and disseminates those changes to subordinate leaders and other affected organizations. Under the least favorable condition, the commander may not be able to conduct a leader's reconnaissance. In this case, the commander may utilize other available assets (BCT or higher-level asset) to confirm or modify the plan. When these assets are unavailable and when known conditions are unchanged, the commander executes the mission according to plan.

2-608. As assault forces close on the objective, Company C commander ensures communications with adjacent battalion supporting efforts such as; Company B to the south and Company D (battalion support by fire) to the north. (See figure 2-58.) Company C commander employs attached Assault Platoon 3 in such a way that the commander is best able to maximize isolation of the objective in support of the assault. Company B (supporting effort) conducts assault adjacent to Company C (right side) to eliminate enemy egressing south from Objective Fox. Once battalion Support by Fire Positions 3 and 4 are established, Company D, on order,

initiates suppressive fire to isolate the portion of Objective Fox that can affect the battalion's assault. Company A (battalion reserve) be prepared mission, establish blocking position south of Objective Fox, oriented south on Route Blue. Battalion mortars operated split section. On order priority targets located vicinity Objective Fox, alternate targets enemy avenues of approach south Objective Fox and east of Phase Line Ted limited to the restrictive fire line to the east (not illustrated). The battalion commander/tactical command post locates vicinity Support by Fire Position 3, Sniper Team 1 provides overwatch. From the tactical command post the battalion commander continues to refine the plan and control the attack as company assault forces cross Phase Line Ben (final coordination line).

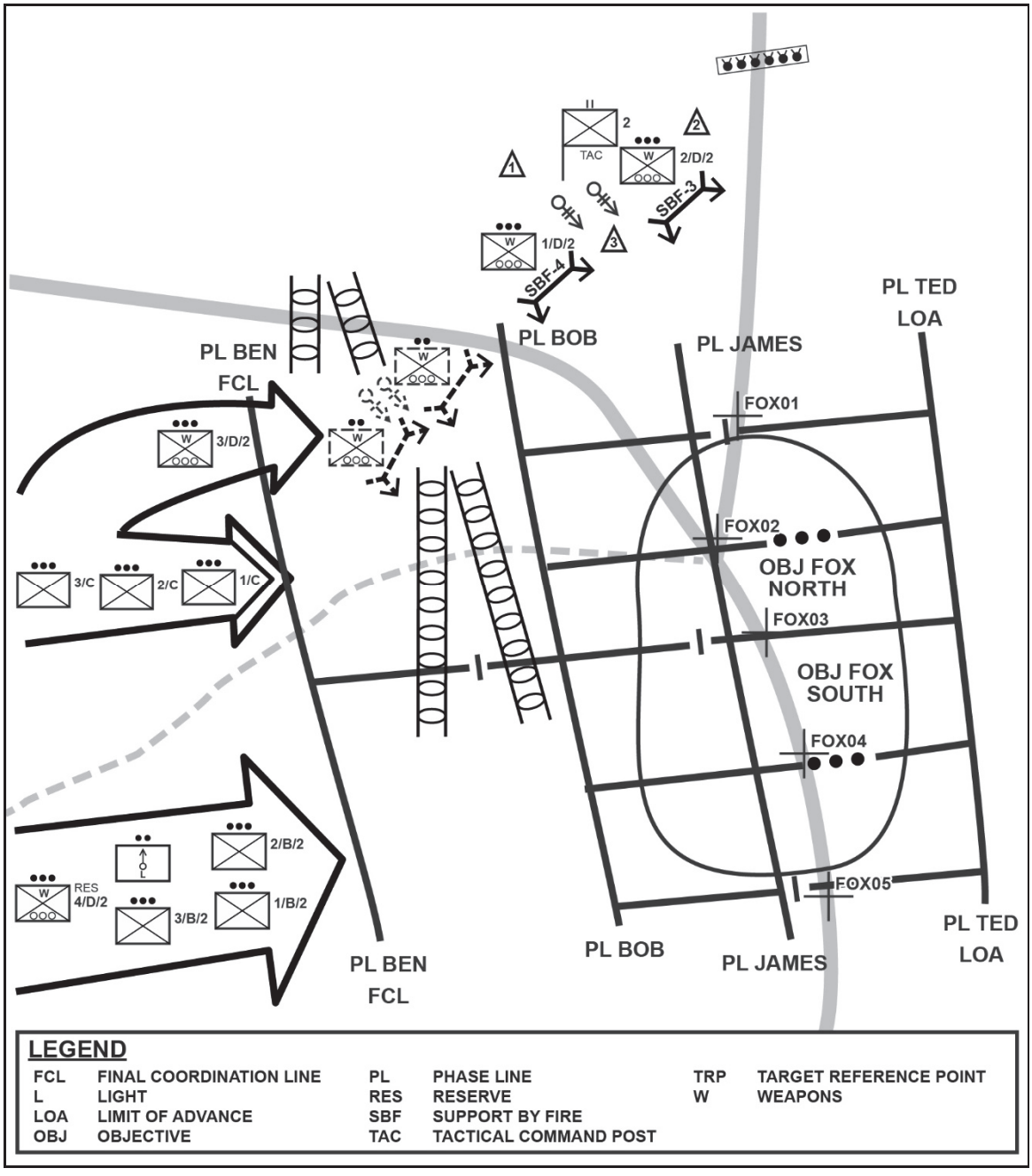


Figure 2-58. Company attack (support by fire), example

Note. For discussion purposes, the company breach and assault will primarily focus on the actions of Company C, the battalion main effort.

2-609. In this scenario, Company C establishes local support by fire positions (with attached Assault Platoon 3) to support the company's attack. (See figure 2-59.) Assault Platoon 3 moves by section on the company's left flank. As Company C's First Platoon advances, Assault Platoon 3, on order or as First Platoon starts to receive effective fires in route to the obstacle begins to suppress the enemy overwatching the obstacle to isolate the point of breach, west of PL Bob. Once the point of breach locations are isolated by Assault Platoon 3, First Platoon moves forward with attached engineers to conduct two explosive breaches of the wire obstacle. The effect of the enemy wire obstacle, west of Objective Fox North, is to block any eastward movement along the trail network. (Note: no obstacles were identified along the eastern route (Company B axis of advance) into Objective Fox South.) First and Second Squads of First Platoon establish local support by fire positions to support engineer breaches. Once the obstacle is breached is open, attached engineers create and mark lanes, and guide Fire Teams A and B from Third Squad through the obstacle to establish two footholds on the far side of the two breaches. Once footholds are established, Fire Teams employ two local support by fire positions to support Second and Third Platoons' assault through the breach and movement to platoon probable line of deployment for the assault of Objective Fox North. (See paragraphs 2-480 to 2-504 on pages 2-127 through 2-132 for a detailed discussion of actions on the objective involving support, breach, and assault elements in the attack).

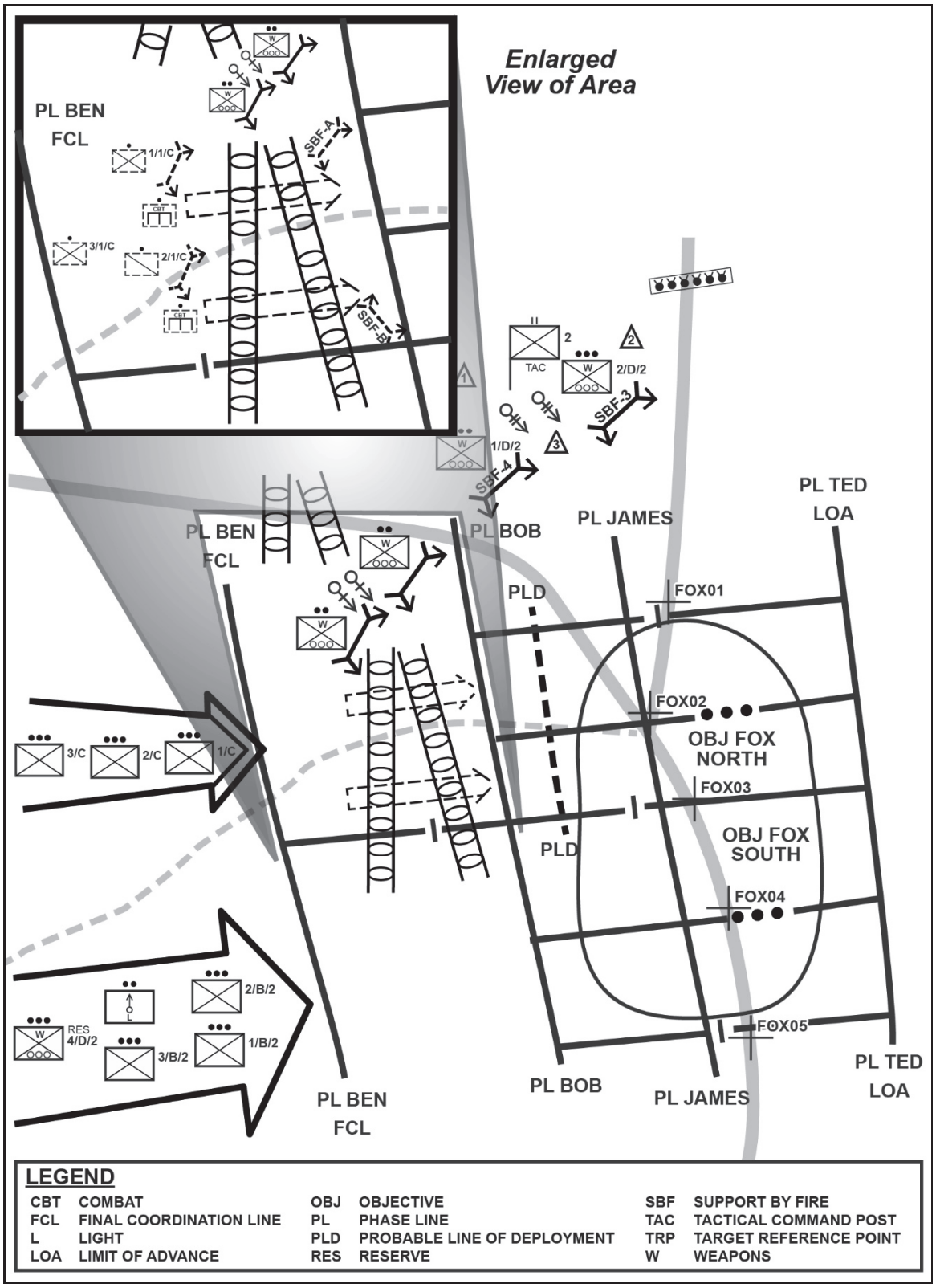


Figure 2-59. Company attack (breach), example

2-610. Once conditions are set for the assault, Second and Third Platoons maneuver through the lanes established by First Platoon. (See figure 2-60.) During the establishment of Support by Fire Positions A and B. Company C commander coordinates with Company D for Support by Fire Positon 4 to the north to cease fire. Support by Fire Position 3 continues to support Second Platoon and Third Platoon (assault forces) maneuver to seize Objective Fox North, assault forces clear to limit of advance, Phase Line TED. Simultaneously, Company B (guiding off Company C's rate of advance to limit of advance, Phase Line Ted) assaults with two platoons abreast, seizes Objective FOX South, assault forces clear to limit of advance, Phase Line TED. Throughout maneuver, assault with two companies abreast, Company C commander and Company B commander position themselves in such a way to effectively coordinate and control maneuver and the tempo of their adjacent companies. The two commanders use target reference points and ground reference grids as control measures to orient fires from the support by fire, indirect fires, and maneuvering units. Company C Mortar Section moves with Assault Platoon 3 in a support by fire role. Company B Mortar Section follows the company in a support by fire role. As the assault reaches the limit of advance, assault forces clear remaining enemy within assigned areas, establish local security, conduct consolidation and reorganization, and prepare for follow-on mission.

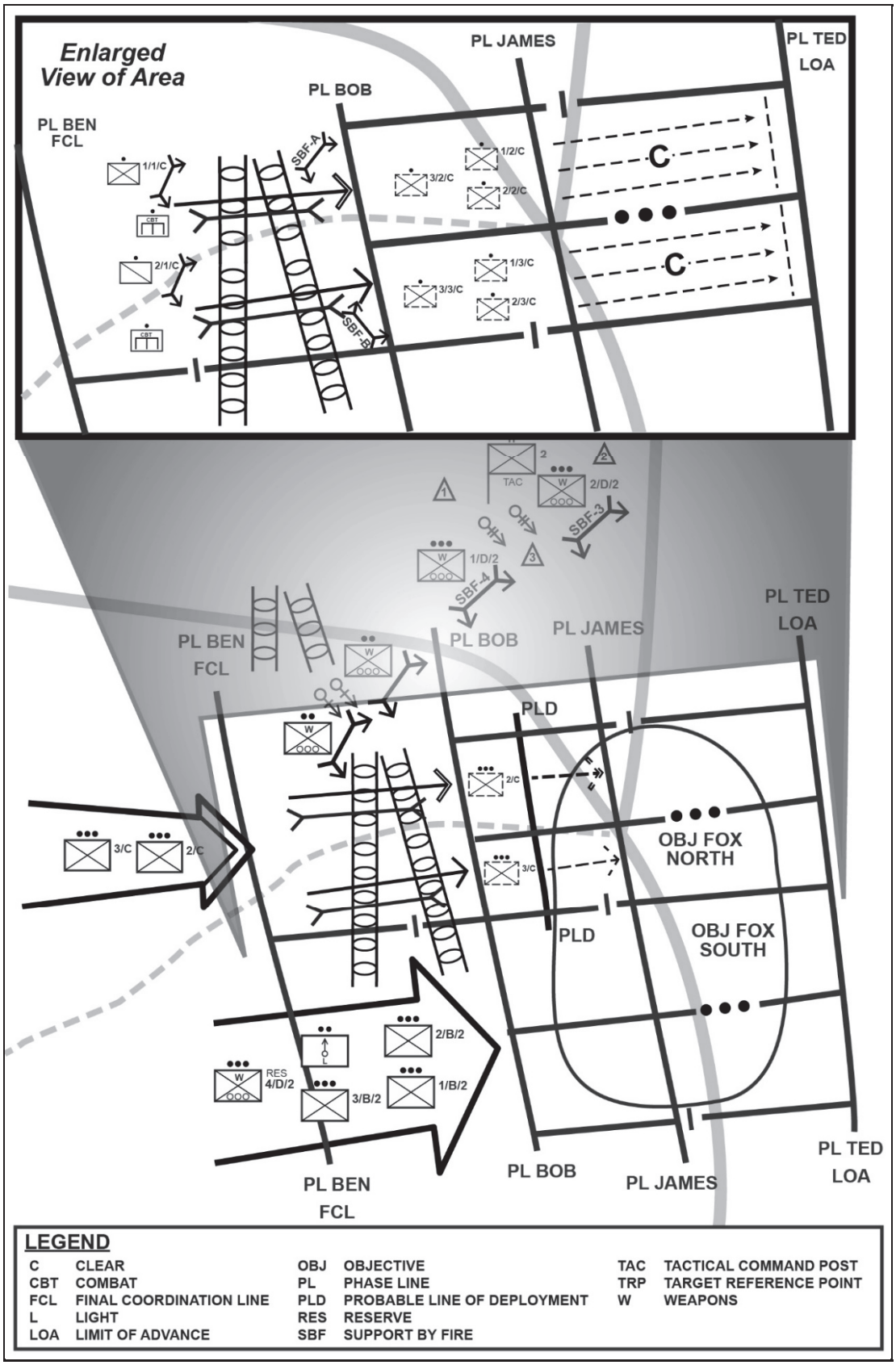


Figure 2-60. Company attack (assault), example

FOLLOW THROUGH

2-611. As elements of Infantry Battalion 2 (specifically Company C and Company B) reach Phase Line Ted, the IBCT commander issues a change of mission (fragmentary order) to subordinate units. IBCT base mission did not change—IBCT continues movement to contact along axes Blue and Red, the IBCT main effort continues to move along Axis Blue (figure 2-61). IBCT limit of advance is still Phase Line Dale to the south (not illustrated) with Objective Bear being the IBCT's final march objective (not illustrated). IBCT subordinate unit task and order of movement is as follows:

- Cavalry squadron, from guard location east of Infantry Battalion 1, conduct movement along the east side of Objective Fox to conduct guard mission forward of IBCT movement to contact south of Objective Fox along Axis Blue.
- Infantry Battalion 3, from follow and assume position, conduct movement along the east side of Objective Fox, conduct movement to contact (main effort) south of Objective Fox along Axis Blue. (Follows Cavalry squadron.)
- Infantry Battalion 1, from support by fire position, conduct movement along the west side of Objective Fox to conduct movement to contact (supporting effort) south of Objective Zebra along Axis Red.
- Infantry Battalion 2, from consolidation and reorganization positions, conduct follow and assume tactical mission task along Axis Blue. (Follows Infantry Battalion 3.) Company C, detached under IBCT control.
- Company C, IBCT reserve, follows Infantry Battalion 3 along Axis Blue.

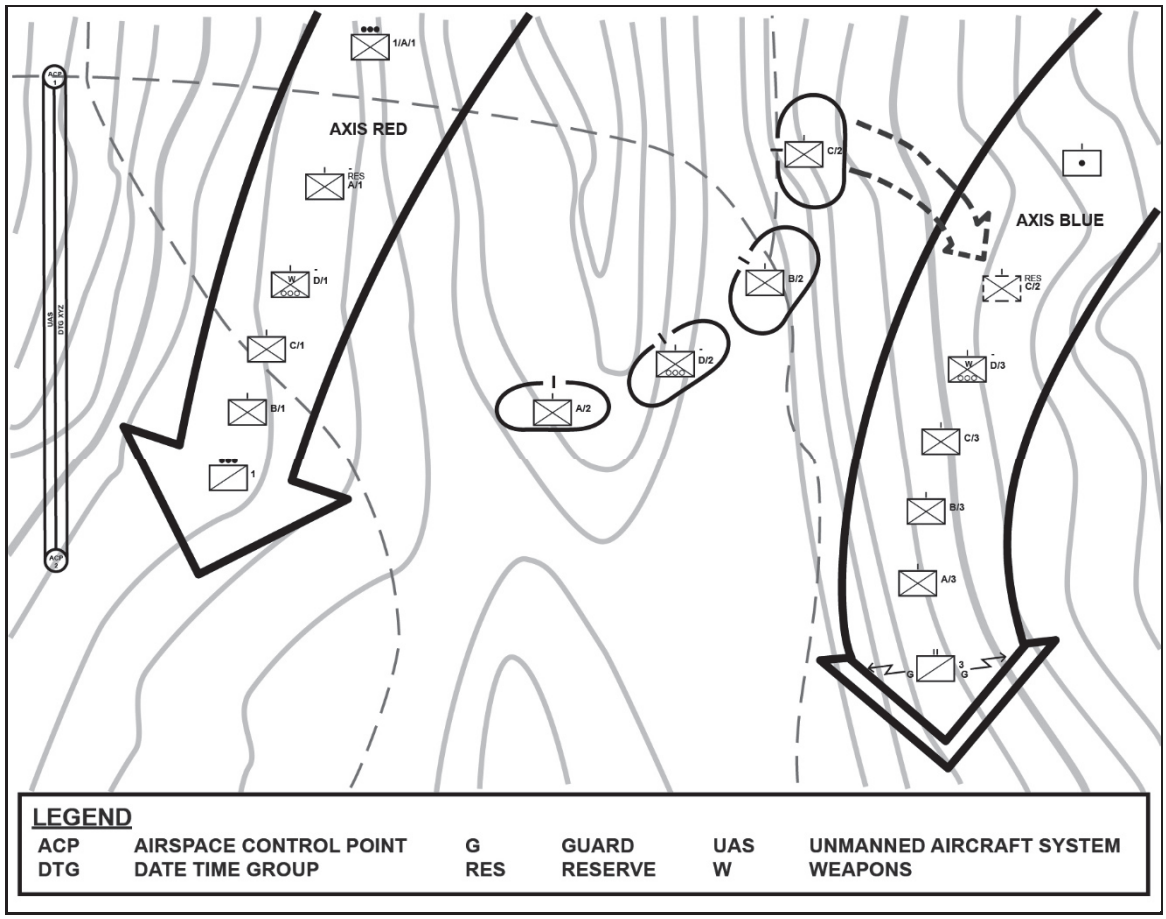


Figure 2-61. Follow through (mission continuation), example

Note. This ends the scenario for the offense.

SUBORDINATE FORMS OF THE ATTACK

2-612. Subordinate forms of the attack have special purposes and include ambush, counterattack, demonstration, feint, raid, and spoiling attack. As subordinate attack tasks, they share many of the planning, preparation, and execution considerations of the attack. The commander's intent and the mission variables of METT-TC determine which of these forms of attack are employed. The commander can conduct each of these forms of attack, except for a raid, as either a hasty or a deliberate operation. Demonstrations and feints, while forms of attack, are also associated with the conduct of military deception operations (see JP 3-13). This section discusses the unique considerations of each subordinate attack task.

AMBUSH

2-613. An *ambush* is an attack by fire or other destructive means from concealed positions on a moving or temporarily halted enemy (FM 3-90-1). An ambush stops, denies, or destroys enemy forces by maximizing the element of surprise. An ambush can employ direct fire systems as well as other destructive means, such as command-detonated mines, indirect fires, and supporting nonlethal effects. An ambush may include an assault to close with and destroy enemy forces. Doctrine categorizes ambushes as near or far ambushes, based on the proximity of the friendly force to the enemy and that ground objectives do not have to be seized and held.

Fundamentals

2-614. The keys fundamental to a successful ambush are surprise, coordinated fires, and control. Surprise allows the ambush force to seize control of the situation. If total surprise is not possible, it must be so nearly complete that the target does not expect the ambush until it is too late to react effectively. The commander positions all weapons, including mines and demolitions, to obtain the maximum effectiveness against the target(s) in the kill zone(s). All fires, including those of supporting artillery and mortars, are coordinated. The support element isolates the kill zone, prevents the target's escape or reinforcement, and delivers a large volume of highly concentrated surprise fire into the kill zone(s). This fire must inflict maximum damage so the assault element can quickly assault and destroy the target. The commander maintains control during movement to, occupation of, and withdrawal from the ambush site. Control is most critical when the ambush unit is approaching the target. Thorough planning, preparation, execution, and assessment (commander and subordinate leaders assess the conduct of the ambush throughout all phases) helps to achieve these fundamentals.

Hasty versus Deliberate Operation

2-615. Ambushes are categorized as hasty or deliberate but take place along a continuum. (See paragraph 1-36 on page 1-7 for additional information.) A hasty ambush is an immediate reaction to an unexpected opportunity conducted using SOPs and battle drill. A deliberate ambush is planned as a specific action against a specific target. Detailed information about the target; such as size, organization, and weapons and equipment carried, route and direction of movement, and times the target will reach or pass certain points on its route, may be available.

Organization of Forces

2-616. A typical ambush is organized into three elements: assault, support, and security. Each of these elements can receive additional combat power if necessary, example teams or assets can include: mortar, machine gun, Close Combat Missile System, artillery, and Army aviation.

Assault Element

2-617. The assault element's goal is to destroy the enemy force. The assault element attacks into and clears the kill zone; additional tasks may include searching for items of intelligence value, capturing prisoners, and completing the destruction of enemy equipment. With the elements that are assigned, the company commander plans to direct the assault to move directly into position or move through a predefined release point. The assault performs a combination of actions including but not limited to; conduct of the main assault,

halt the enemy's motorized column/ moving target, kill and capture personnel, recover supplies and equipment, and destroy vehicles and supplies.

2-618. As search teams are not always used; the leader must decide how and when to use them. When Soldiers leave the security of their well-chosen, concealed ambush position, they are subject to fires from the enemy who may also be hidden and ready. If it is at night, it is suggested to not use devices such as the use of trip flares or illumination to light the search area as this will also expose the search team to the enemy. A common practice is to assume there is hidden enemy-the ambush will not kill them all and the search teams need to remain vigilant utilizing night vision devices, and at times filtered flashlights to expedite searches of the kill zone. White lens flashlights can expedite searches however it will increased the loss of night vision and needs to be carefully thought out while conducting analysis.

Note. Aid and litter teams, when available, may be a part of this element.

2-619. Contingency planning is critical to the assault elements successful reaction to the conduct of the ambush. The commander plans and prepares for events that could occur if the enemy returns a heavy volume of fire back to the ambush line, or if the ambush missed the main body. If this was to occur the commander has the option to break contact, leaving without conducting a search of the kill zone thusly the assault element needs to rehearse how that element will break down, for exfiltration.

Support Element

2-620. The support element supports the assault element by firing into and around the kill zone, and provides the ambush's primary killing power. The support element attempts to destroy the majority of enemy combat power before the assault element moves into the objective or kill zone. The support element does this through the use of the company's organic and/or attached heavy weapons; machine gun teams, Close Combat Missile teams, and mortar and artillery fires.

Security Element

2-621. The security element isolates the kill zone, provides early warning of the arrival of any enemy relief force, and provides security for the assault and support elements. The security element secures the objective rally point and blocks enemy avenues of approach into and out of the ambush site, which prevents the enemy from entering or leaving. As the flanks and rear of an ambush site are open to counterattack unless the security element plans accordingly. Flank and rear security may be enhanced in several different ways to increase security posture isolating the objective. During planning, the commander and security leader:

- Echelon security elements in-depth to ensure redundancy in security.
- Designate sectors for observation, while ensuring no lapse in coverage of an area the enemy may move through.
- Position reconnaissance devices to provide early warning to the security element.
- Ensure security element abides by strict execution of noise and light discipline.
- Ensure the infiltration, and withdraw plan is detailed, easily executed, and the routes to and from security areas are secured when they are moved through.

2-622. Prior to moving into position security elements ensure they are properly camouflaged to reduce movement while in place. Once in place appropriate camouflage of positions is critical to limit the enemy's ability to detect the ambush.

Forms of an Ambush

2-623. The three forms of an ambush are the point ambush, area ambush, and anti-armor ambush. In a point ambush, a unit deploys to attack a single kill zone. The *kill zone* is that part of an ambush site where fires are concentrated to isolate, fix, and destroy the enemy (FM 3-90-1). In an area ambush, a unit deploys into two or more related point ambushes. A unit smaller than a platoon does not normally conduct an area ambush. Anti-armor ambushes focus on moving or temporarily halted enemy armored vehicles and may be part of an

area ambush. Descriptions of each are outlined in further detail in the next section within scheme of maneuver.

Planning and Preparation

2-624. Although the planning and preparation discussed in this chapter for the attack apply for the ambush as well, there are some differences. Because an ambush is normally conducted in isolation within a unit area of operation or within enemy controlled territory, the plan must ensure the unit is not detected prior to initiating the ambush. Detailed planning and preparation ensures the success of the ambush as well as the survivability of the ambushing force during infiltration, actions on the objective, and withdrawal from the objective area.

Mission Analysis

2-625. During mission analysis, leaders identify at least four different locations: the ambush site, the kill zone, security positions, and rally points. As far as possible, so-called ideal ambush sites should be avoided because an alert enemy will avoid them if possible and increase their vigilance when they must be entered. Therefore, surprise is difficult to achieve. Instead, unlikely sites should be chosen when possible.

2-626. When choosing an ambush site, all sources of information must be used to enhance surprise and exploit the enemy's weak points. The commander takes advantage of the terrain exploiting natural cover and concealment afforded by the terrain. Leaders enforce camouflage, noise, and light discipline. Individual positions should be sited in, in order to tie into the terrain and interlocking fires rather than a geometric shape, while tying into natural or man-made obstacles that restrict enemy movement.

2-627. The commander ensures that within the plan that there is enough natural cover, and concealment for forces, good observation and fields of fire, terrain that canalizes the enemy, and obstacles to augment the effects of friendly fire. The commander also assesses; limiting the amount of escape routes for the enemy, preventing the enemy ability to reinforce itself. All the while the terrain needs to appear harmless to the enemy from their position in order to maximize friendly effects.

2-628. Establishing a timeline, and a "no-later-than" time, ensures that the ambush be emplaced by the time necessary to affect the enemy. The lack of an established no later than time can create the potential for an enemy that is prepared to react to the ambushing unit, or a failure in the ambush all together.

2-629. If the ambush is going to be setup for an extended period time the commander should consider that elements must be pulled back to the objective rally point at pre-established times in order to get rest. Extended ambushes of more than twenty-four hours in length may require shifts. Due to the nature of the ambush, and the increased requirement of both noise, light, and discipline it is necessary to for ambush forces to understand there can be no sleeping, talking, eating, or smoking in the ambush site.

2-630. The infiltration of ambushing forces is different in hasty and deliberate ambushes with regard to the time to plan. When possible the commander plans for the movement from the assembly area, patrol base, or LZ, ([optional] to an objective rally point), to the assault, support, and security positions. This means that if necessary the passage of lines, the routes and lanes for infiltration and exfiltration (at a minimum of two planned routes) needs to be rehearsed. Route planning should take into consideration both infiltration and exfiltration in the most direct route possible that prevents elements from crossing each other.

2-631. The commander identifies a fire support plan that integrates the direct fire and obstacle plan, which results in the enemy isolation, inflicts maximum damage, and also supports forces in the rally point. This includes the planning of the company mortar firing point to achieve maximum effect on the enemy. The commander may desire to add additional targets that prevent the enemy's escape in the form of linear targets or final protective fires, and linear smoke targets to obscure the ambushing force during exfiltration.

2-632. The commander identifies engagement criteria and contingencies that prevent the compromise of the ambushing force. The criteria for initiating the ambush might consider; units only engage enemy formations of the same or smaller size and withhold fire until the target moves into the kill zone. Another example may determine an engagement with armor, and that if the armored force has too much space to properly put the enemy in the kill zone, than an attack by fire (as opposed to support by fire) is conducted

followed by breaking contact. Contingency planning may include the actions taken if the ambushing force is prematurely detected.

Scheme of Maneuver

2-633. The commander develops a scheme of maneuver that is simple and clear, and one that maximizes engagement of the enemy's flank or rear and provides early warning of the target(s) approach. Scheme of maneuver includes assault element actions in the kill zone, and details how the ambush element displaces from the ambush site. All elements of the ambush force reconnoiter their routes, including routes to the selected rally points. When possible, elements reconnoiter the routes they will use.

2-634. During development of the scheme of maneuver for the ambush, the form of the ambush will most likely be driven by the terrain, and anticipating the enemy's likely avenue of approach and composition. The form of the ambush (point ambush, area ambush, and anti-armor ambush) directly effects the scheme of maneuver and how the commander emplaces forces.

Point Ambush

2-635. A point ambush usually employs a linear or an L-shaped formation. The names of these formations describe deployment of the support element around the kill zone. The kill zone is that part of an ambush site where fires are concentrated to isolate, fix, and destroy the enemy. The ambush formation is important because it determines whether a point ambush can deliver the heavy volume of fire necessary to isolate and destroy the target. The commander determines the formation to use based on the advantages and disadvantages of each formation in relation to the mission variables of METT-TC.

2-636. The linear and L-shaped ambushes for the Infantry rifle company are conducted as point ambushes at the platoon level. The company coordinates theses point ambushes thusly planning the area ambush and identifying which platoons, for example, will conduct the central ambush, and which will conduct out-lying ambushes.

2-637. The linear ambush formation is effective in close terrain, which restricts the target's movement, and in open terrain where one flank is blocked by existing or reinforcing obstacles. If the situation allows the commander may place similar obstacles between the assault and support elements and the kill zone to protect the ambush force from the target's counter-ambush drills. When the ambush force deploys in a line formation, it leaves access lanes through these protective obstacles so that it can assault the target. An advantage of the line formation is that it is relatively easy to control under all conditions of visibility.

2-638. The assault and support elements generally deploy parallel to the target's route of movement—the long axis of the kill zone—which subjects the target to flanking fire in the line formation (security element positions itself where it can best provide security to the assault and support elements). The size of the target that can be trapped in the kill zone is limited by the size of the area that can be covered by the support element's weapons, obstacles, integrated with direct and indirect fires—trap the target in the kill zone. A disadvantage of the line formation is that the target may be so dispersed that it is larger than the kill zone. (See figure 2-62.)

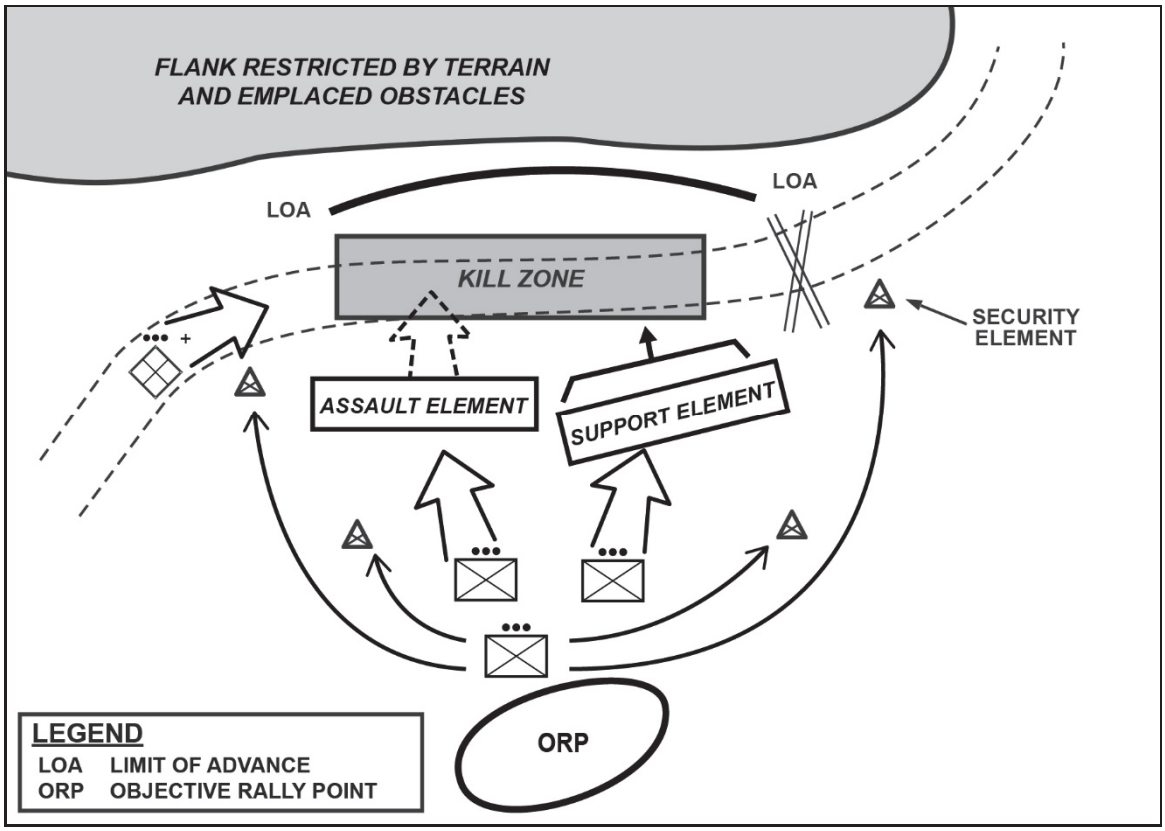


Figure 2-62. Linear ambush

2-639. The L-shaped formation is a variation of the line formation. (See figure 2-63 on page 2-166.) The long leg of the L (assault element) is parallel to the kill zone and provides flanking fire. An advantage of the L formation is that the short leg (support element) is at the end of the kill zone and at a right angle to it and blocks the enemy's forward movement. It also provides enfilading fire that interlocks with fire from the other leg. The commander can employ an L-shaped formation on a straight stretch of trail, road, stream, or at a sharp bend.

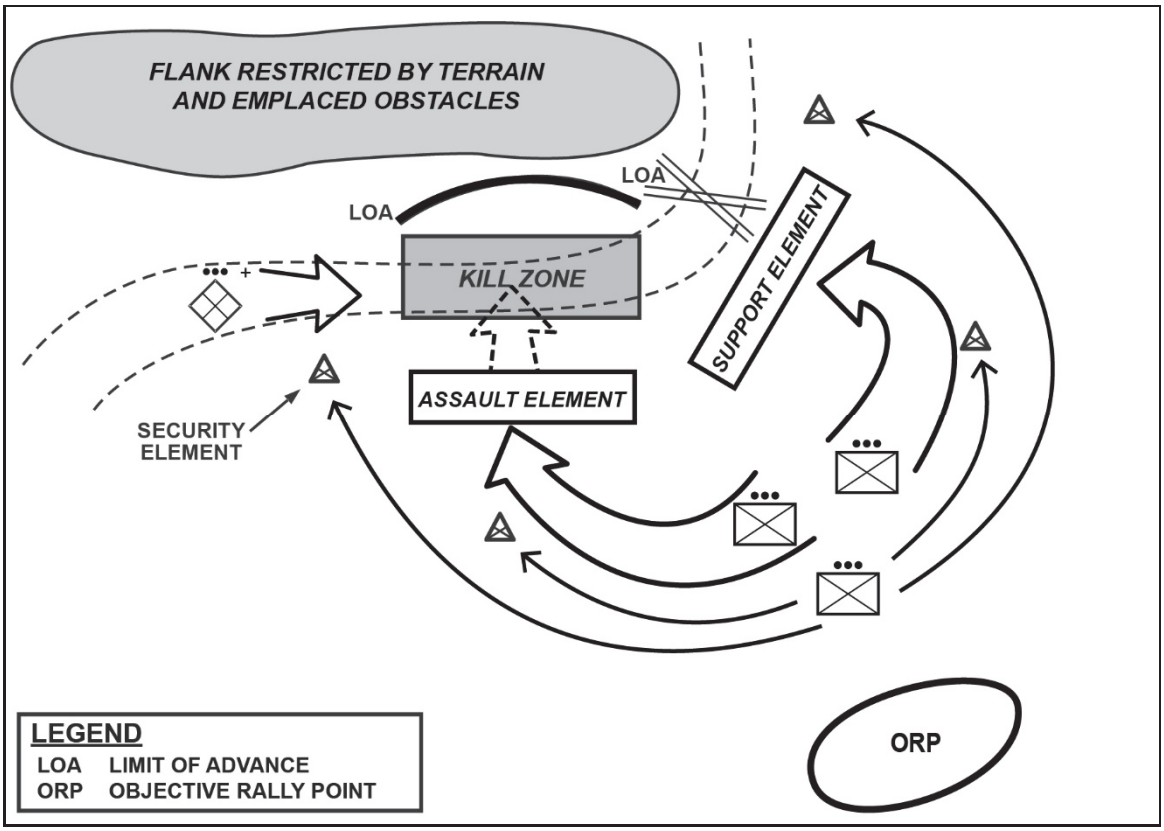


Figure 2-63. L-shaped ambush

Area Ambush

2-640. An area ambush is most effective when enemy movement is largely restricted to trails or roads. The area should offer several suitable point ambush sites. The commander selects a central ambush site around which the commander can organize outlying ambushes. The company typically conducts the area ambush employing individual platoons in different locations to accomplish an objective. Once the site is selected, the commander must determine the enemy's possible avenues of approach and escape routes. Outlying point ambush sites are assigned to subordinates to cover these avenues. Once they occupy these sites, they report all enemy traffic going toward or away from the central ambush site to the commander. These outlying ambushes allow the enemy to pass through their kill zones until the commander initiates the central ambush. Once the central ambush begins, the out-lying ambushes prevent enemy troops from escaping or entering the area. The commander ensures that fratricide is mitigated by utilizing the distance between platoons and the terrain to mask friendly fires. (See figure 2-64.)

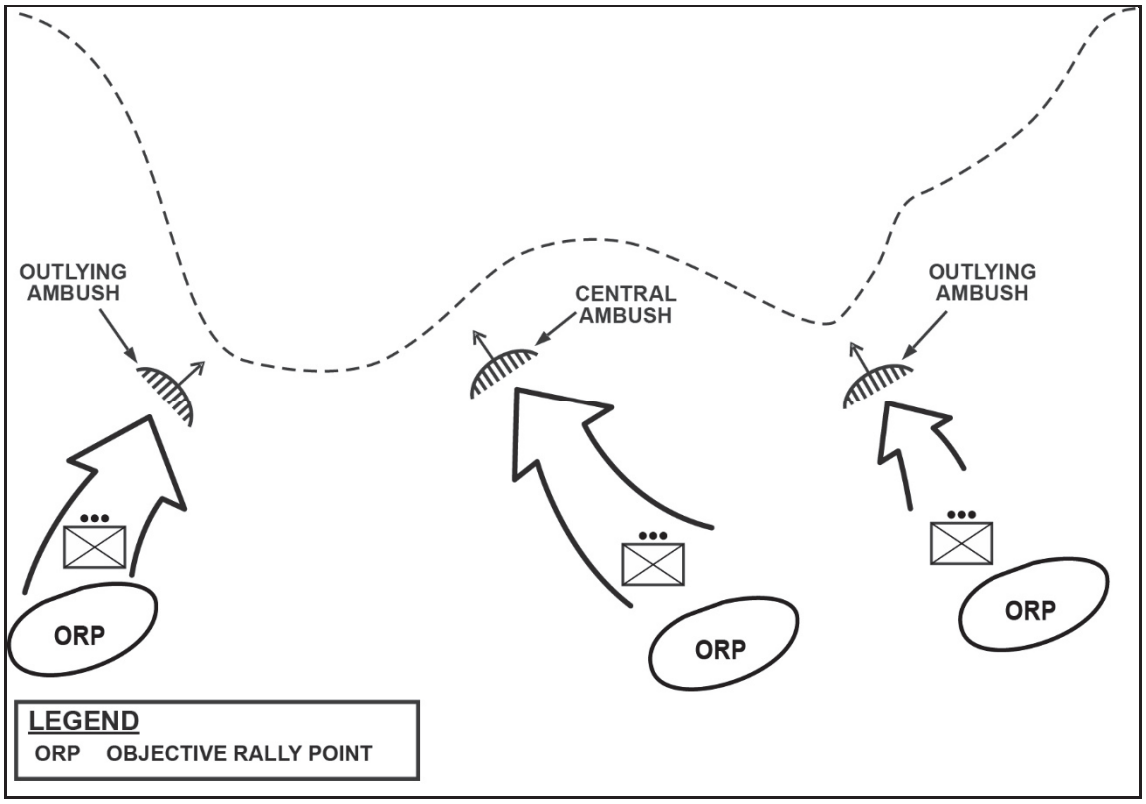


Figure 2-64. Area ambush (central and outlying ambushes)

Anti-Armor Ambush

2-641. Anti-armor ambushes focus on moving or temporarily halted enemy armored vehicles and may be part of an area ambush. The anti-armor ambush assault element will include an armor-killer element. The armor-killer element is built around close combat missile systems with additional Soldier launched munitions available to supplement the close combat missile system fires. The commander considers the mission variables of METT-TC to position all anti-armor weapons to take advantage of their best engagement aspect (rear, flank, or top). When the positioning of the assault element is better describe as an attack by fire position, a separate search element can be established to conduct the assault across the ambush site. This can be the case when an assault/search of the ambush site is not possible do to the distance or restricted terrain between the assault position and the ambush site. (See Figure 2-65 on page 2-168.) When a search/assault across the ambush site is not required the ambush force quickly withdraws once targets are destroyed. The support and security elements function in the same manner as the other forms of ambushes.

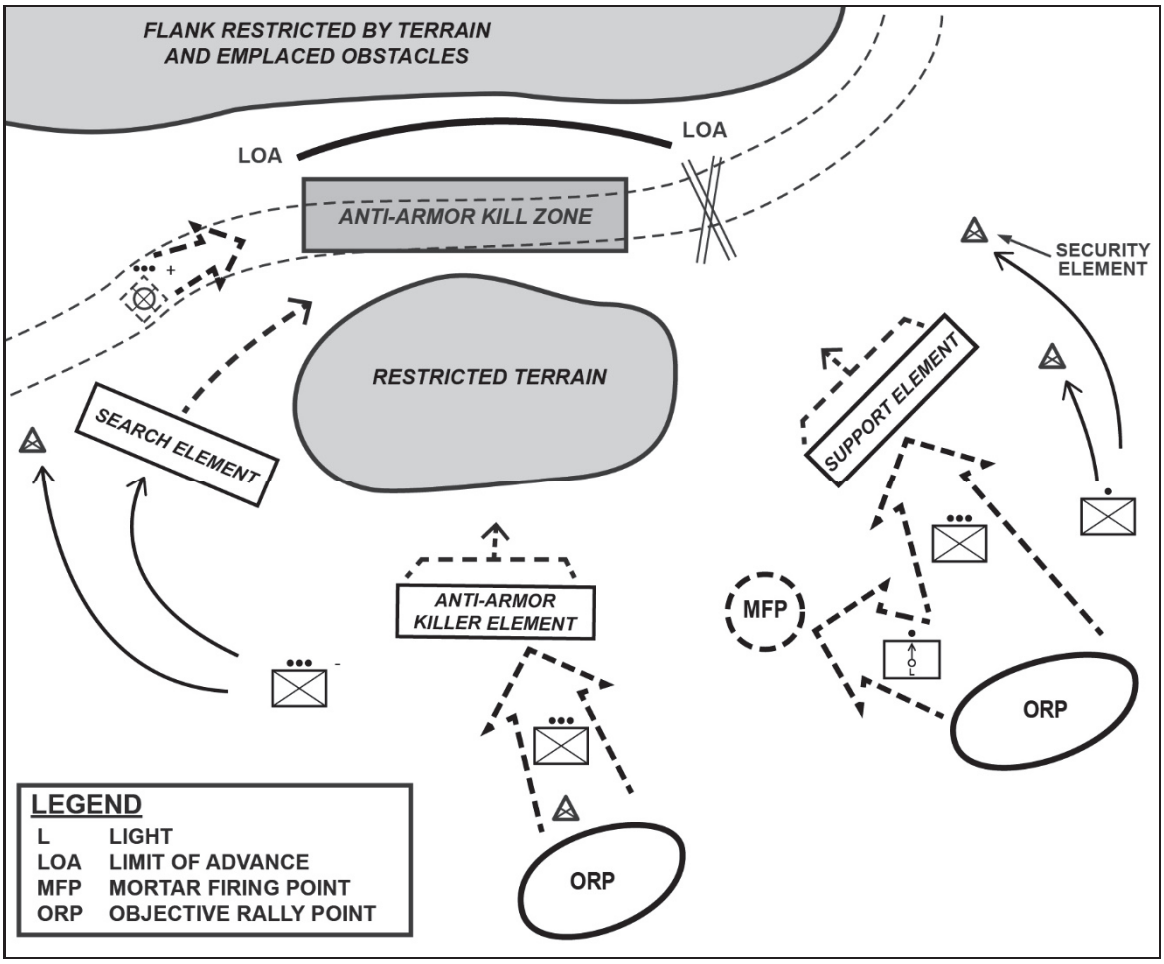


Figure 2-65. Anti-armor ambush (using separate search team)

Leader's Reconnaissance

2-642. The commander and/or subordinate leader conducting an ambush, as with any other attack, conducts a leader's reconnaissance with key personnel to confirm or modify the plan. This reconnaissance should be covert to remain undetected and preclude alerting the enemy. If necessary, the commander modifies the ambush plan and immediately disseminates those changes to subordinate leaders and other affected organizations. Adjusts to the plan based upon findings discovered during the leader's reconnaissance, although not inclusive, can include: adjusted positions, routes, and formation. Typically the leader's reconnaissance (dependent on the company's scheme of maneuver) includes key subordinate leaders, surveillance team, appropriate fire support personnel, and when required a security element. Key considerations with conducting the leader's reconnaissance include—

- Ensuring that the leader's reconnaissance moves undetected.
- Confirming the objective location and that it is a suitable location for the ambush.
- Selecting the kill zone(s).
- Emplacing R&S team(s) to overwatch the objective, while commander returns to the objective rally point, and prepares to emplace the ambush elements. (Note. The R&S team is issued a contingency plan. See ATP 3-21.8 for addition for additional information.)
- Confirming the suitability of assault and support positions, and routes from the objective rally point(s) to the position(s).

- Designating positions and sectors of fire for each element/heavy weapon system in the ambush.
- Identifying control measures (probable line of deployment, assault position, limit of advance, and boundaries, and others as necessary).

2-643. Normally, the security element is in position during the leader's reconnaissance. Though, it is essential for the security element to be in position before the support and assault elements move forward to their ambush positions. Once in position, security teams secure the flanks of the ambush site and provide early warning. A security team remains in the objective rally point if the elements plan to return to the objective rally point after actions on the objective. If the objective rally point is abandoned, a rear security team should be emplaced. Security elements remain at full alert and use all available observation devices to detect the enemy's approach to the ambush site. Each Soldier's duties within each element are rotated as necessary to maintain alertness.

2-644. Upon completion of the leader's reconnaissance the commander determines that conditions are set to allow for link up with remaining assault and support forces. The commander either links up with remaining forces in the objective rally point or to a predetermined link up location. The commander positions/directs all weapons, including mines and demolitions, to obtain the maximum effectiveness against the target in the kill zone. All fires, including those of supporting artillery and mortars, are coordinated. The support element isolates the kill zone, prevents the target's escape or reinforcement, and delivers a large volume of highly concentrated surprise fire into the kill zone. This fire must inflict maximum damage so the assault element can quickly execute the assault and destroy the target.

Setting Conditions

2-645. Once the security element(s) is emplaced, the support element leader moves the support element into the position confirmed during the leader's reconnaissance. Once the support element has moved into place, the support element leader ensures the claymore mines and obstacles are emplaced in the correct positions. The support leader identifies sectors of fire, a technique to prevent fratricide is the employment of limiting stakes. Once the support element is established in its support by fire position, this is communicated to the commander and the support element conducts overwatch during the assault elements movement into position.

2-646. With both security and support positions occupied, the assault element begins their undetected movement to the assault position. Upon reaching the assault positon, leaders identify individual sectors of fire, as assigned by the commander/platoon leader. Limiting stakes are again employed as discussed in the previous paragraph. The assault element ensures the effective emplacement claymore mines, and obstacles that help to destroy the enemy in the kill zone.

2-647. Once the security element spots the enemy and notifies the commander/platoon leader with reports on the direction of movement, size of the target, and any special weapons or equipment carried. The security element also notifies the commander/platoon leader if any enemy forces are following the lead force.

2-648. The commander alerts other elements and determines if the enemy force is too large, or if the ambush can engage the enemy successfully.

Execution

2-649. The company conducts an ambush similarly to a platoon. An ambush utilizes small elements that are well trained and disciplined employing limited weapons, and equipment able to destroy a much larger force. Ambushes reduce the enemy's combat effectiveness by destroying and harassing its forces, and reducing morale at little cost to the employing force. A company will typically conduct an area ambush, while the platoons are employed in conducting point ambushes in support of the company area ambush. Within the company area ambush, a platoon may be conducting an anti-armor ambush.

2-650. The commander uses a variety of ways to communicate the critical information identified during the ambush. This information is delivered in ways that may include but is not limited to; radio transmissions, voice commands, vehicle horns, whistles, or pyrotechnics. Signals must have at least one backup. For example, if the signal to shift fire fails, the assault element should not attack the target unless it receives the backup signal. Signals sent out before initiation of the ambush should not expose the ambush to detection by

the enemy. The commander reviews SOP signals to see if they need to be revised or augmented to meet specific situational requirements.

2-651. The commander ensures all elements within the ambush understand the signals required to control the ambush. Changes to the meaning of audible and visual signals are made frequently to avoid setting patterns that the enemy can recognize. Minimizing setting patterns mitigate the enemy recognition of signals that may encourage the enemy to react in time to avoid the full effects of the ambush. For example, if a white star cluster is always used to signal withdrawal in a night ambush, an alert enemy might fire one and cause the ambush force to withdraw prematurely.

2-652. Subordinate elements of the ambush unit must receive communication that coordinate the ambush by relaying critical information. Events that initiate actions are better to use and are less likely to set a pattern. For example, an enemy of a specified sized and that reaches a designated location or line can be used to initiate action. An approaching enemy target is typically relayed via the security team alerting the support and assault elements that the initiation of the ambush is imminent.

2-653. The commander initiates the ambush by communicating to the support and assault forces to initiate the attack on the kill zone. Signals for initiation may differ but the most commonly used technique is the use of the most casualty producing weapon or explosive as the primary initiator, with a secondary initiating weapon system nearby to engage the enemy if the primary fails to function. For example, an ambush element may use a command-detonated claymore mine, and plans a backup casualty-producing (machine gun/Close Combat Missile System) device for initiating the ambush. This information is passed to all elements, and practiced during rehearsals.

2-654. The ambush commander ensures that the assault and support elements deliver fire with the heaviest, most accurate volume possible on the enemy in the kill zone. In limited visibility, the commander/platoon leader may use infrared lasers to define specific targets in the kill zone. Before assaulting the target, the signal to lift or shift fires is given. The assaulting elements posture themselves to assault before the enemy is able to react to the violence of action. As the assaulting elements move forward utilizing individual movement techniques are employing team or squad bounds. Upon arrival in the kill zone, the assaulting element kills or captures those remaining enemies. Upon reaching the limit of advance the assaulting force halts and establishes security. Reports are gathered from subordinates and relayed to higher headquarters while thorough searches for intelligence are conducted, then reported as well.

Note. Lift, shift fire, cease fire given when the target is to be assaulted; all fires must stop, be shifted, or completely ceased at once so that the assault element can attack before the target can react. Typically once the ambush is initiated, and then ceased all ambush forces will initially listen for signals of an enemy counterattack, and upon recognition of enemy still moving within the kill zone, the ambushing force will usually initiate again to eliminate the threat.

2-655. The order to withdraw from the kill zone or ambush site is given when the ambush has concluded, or as enemy reinforcing forces approach (normally relayed by higher, or security elements).On the commander's order, the ambush force withdraws to the rally point, reorganizes, and starts its return march. At a previously established location, it halts and disseminates any combat information obtained as a result of the ambush to all elements of the ambush force. However, if information systems are able to disseminate this information, the force does not need to halt.

2-656. Once the ambush force returns from conducting the ambush, the ambushing unit is debrief to help identify enemy patterns of response, activities, and procedures, both inside and outside the ambush area. Patterns should be analyzed and reported to all appropriate organizations through intelligence channels. The commander adjusts the tactics, techniques, and procedures employed by the unit to account for these patterns.

Note. The following illustration introduces a fictional scenario as a discussion vehicle for illustrating one of many ways that the Infantry rifle company can conduct an ambush. This illustration primarily focuses on one of an Infantry battalion's (fictional scenario) supporting efforts, Company A conducting an ambush as part of a battalion combined arms operation.

Illustration of an Ambush

2-657. The following scenario illustrates an area ambush conducted by an Infantry rifle company. Company A, supporting effort, conducts the area ambush (west of main effort) in support of the battalion's main effort. Company B, main effort, within the Infantry battalion conducts a company raid (see paragraph 2-706 on page 2-181 for illustration). Battalion scout platoon and Company D, supporting efforts, conducts screen and guard missions forward of Company B objective area to protect and provide early warning to the battalion's main effort (not illustrated). Battalion mortar platoon, supporting effort, moves with Company D. Mortar section, priority of fires goes to the main effort (Company B), order of priority after the main effort: Company A, Company D, battalion scout platoon (not illustrated). Company C, supporting effort (east of the main effort), with two platoons (First and Second Platoons) and mortar section conducts area ambush in support of the battalion's main effort (not illustrated). Third Platoon Company C is the battalion reserve force (not illustrated).

Company A – Troop Leading Procedures

2-658. During the conduct of troop leading procedures (see appendix B for additional information on troop leading procedures), Company A commander determines the form of the ambush (point, area, or anti-armor), engagement criteria, and potential contingencies. The commander concludes that Company A will conduct an area ambush (see figure 2-64 on page 2-167), through the employment of platoons in point ambush locations whereby two outlying ambushes are able to prevent the enemy from moving into/out of the central ambush location. Each platoon will organize with an assault element, a support element, and a security element. Outlying ambushes will include: one linear ambush on the left side of the central ambush and one L-shape ambush on the right side of the central ambush. (See figure 2-62 on page 2-165 and figure 2-63 on page 2-166.) The central ambush will be an anti-armor ambush (see figure 2-65 on page 2-168).

2-659. After mission analysis the commander determines the task organization and the task and purpose for each platoon. The commander determines the most like enemy force is an enemy motorized rifle platoon with three Soviet infantry fighting vehicles with dismounts (two squads) moving in a column along the road within the company's area of operation. The commander concludes that First and Third platoons will cross attach anti-armor Teams (Javelin Close Combat Missile Teams) to facilitate Second Platoon's combat power to destroy the enemy in the central ambush's kill zone. The three platoons conduct point ambushes directed at accomplishing different goals, to achieve a collective desired end state they will be issued differing engagement criteria. Second Platoon (central ambush) will primarily focus on the armor threat. First and Third Platoons (outlying ambushes) will focus on dismounted/light armored vehicle threats and early warning of arriving armored vehicles. (Engagement criteria for each platoon is further discussed below in subordinate unit tasks.) The commander also identifies potential contingencies regarding the engagement criteria that may drive how platoons react if a larger and more equipped force arrives at the ambush, or if enemy contact is made prior to the ambush.

Company A – Subordinate Unit Tasks

2-660. First Platoon (outlying ambush-supporting effort), conducts movement after insertion from Release Point 4 (not illustrated) along platoon infiltration route to Objective Rally Point 1. The platoon then conducts leader's reconnaissance, confirms the plan with the company commander, and moves into position to conduct the supporting ambush. The supporting ambush's purpose is to prevent movement into or away from the primary ambush (Second Platoon). Additionally, the platoon is tasked to provide early warning as mounted enemy forces approach. First platoon attaches anti-armor team (Javelin Close Combat Missile Team) to Second Platoon. The platoon retains a very minimal antitank 4's capability, thusly the platoon will focus primarily on dismounted and mounted threats of three or less light armored vehicles.

2-661. Second Platoon (central ambush-main effort), conducts movement after insertion from Release Point 5 (not illustrated) along platoon infiltration route to Objective Rally Point 2. The platoon then conducts leader's reconnaissance (company commander will lead this reconnaissance effort), confirms the plan with the company commander, and moves into position to conduct the main ambush. The enemy moving through the ambush site is estimated to be composed of three Soviet infantry fighting vehicles. Second platoon is capable of destroying up to four Soviet infantry fighting vehicles. If the enemy force is larger than what the platoon is capable of destroying, the platoon may not engage. If not to engage, the commander will order

ambush elements to remain in position for the next ambush target or to withdraw from the area. If to engage, the platoon engages the target then immediately withdraws from the ambush site.

2-662. Third Platoon (outlying ambush-supporting effort), conducts movement after insertion from Release Point 4 (not illustrated) along platoon infiltration route to Objective Rally Point 3. The platoon then conducts leader's reconnaissance, confirms the plan with the company commander, and moves into position to conduct the supporting ambush. The supporting ambush's purpose is to prevent movement into or away from the primary ambush (Second Platoon). Additionally, the platoon is tasked to provide early warning as mounted enemy forces approach. Third platoon attaches anti-armor team (Javelin Close Combat Missile Team) to Second Platoon. The platoon retains a very minimal antitank 4's capability, thusly the platoon will focus primarily on dismounted and mounted threats of three or less light armored vehicles.

Company A – Scheme of Fires

2-663. The company commander refines the fire support plan, by adding targets along platoon infiltration routes, as well as finalizing final protective fires for platoon support and security elements, and a linear target forward of the assault line for each ambush. Although not the battalion's main effort, in addition to company mortars, the commander plans additional supporting fires from field artillery, close air support, and Army Attack aviation to maximize the echelon of fires (see appendix D). The company commander, in coordination with the battalion, ensures that ambush force routes and ambush location are continually updated in the common operational picture and are not within risk estimate distances when incorporating fires. The commander establishes triggers, for ceasing fires when assaulting forces move through ambush sites in order to prevent fratricide.

Company A – Scheme of Maneuver

2-664. Within this illustration, platoon elements move alone platoon infiltration routes to designated release points. Platoon's move through these designated release points (not illustrated) to platoon Objective Rally Points 1, 2, and 3. As the lead elements of the platoons cross these release points the information is passed to the commander. The commander and 1SG (primary command post) moves with Second platoon (company main effort). The XO (alternate command post) and mortar section moves with Third platoon (supporting effort). As platoons move into and establish their respective Objective Rally Points, the commander orders the mortar section to establish Mortar Firing Point 1 (MFP 1) between Objective Rally Point 2 and 3 to provide supporting fires during the three leaders' reconnaissance. (See figure 2-66.)

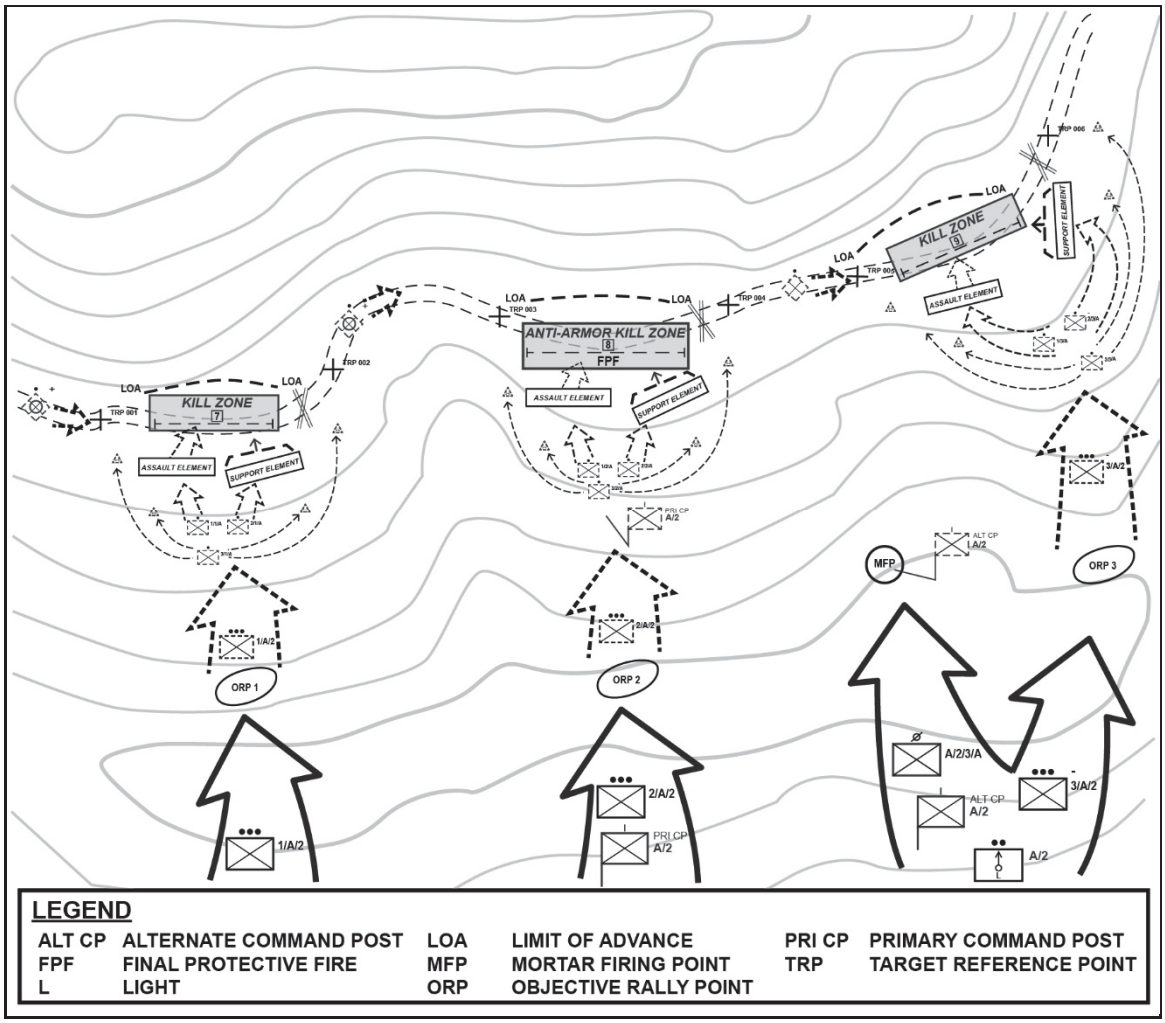


Figure 2-66. Company anti-armor ambush (infiltration and occupation), example

2-665. The occupation of the three objective rally points is conducted in much the same way as an assembly area (see paragraph 2-146 on page 2-41), and a patrol base (see ATP 3-21.8). Each squad within the platoon is assigned a sector within the perimeter of the objective rally point, and is responsible for its security. As platoons occupy objective rally points, platoon leaders prepare for the leaders reconnaissance by assembling the appropriate leaders and personnel outlined earlier in this chapter. Once all platoons have closed within their respective objective rally points, the commander directs all platoons to begin their leader's reconnaissance. Platoon leaders can emplace appropriate surveillance, and both the left, right, and rear security elements while on the leader's reconnaissance. In this illustration, surveillance is left on each ambush site, but security elements are not emplaced at this time.

2-666. As the operation progresses, the commander continuously updates the situation and the plan. In this illustration the commander has selected to emplace both the First and Third Platoons prior to the deployment of the Second Platoon ambush. Those outlying ambushes will act as the company's security element for the area ambush, ensuring there is sufficient warning prior to the enemy arriving in the anti-armor kill zone.

2-667. The three leaders' reconnaissance move undetected, and identify the location to validate the suitability of ambushes, to include: kill zones, support element positions, and assault element positions. The commander and platoon leaders adjust the plan as necessary, and prepare to brief changes identified during the reconnaissance and ensure dissemination once complete. The commander updates the indirect fire plan, by adding a linear target along the enemy ingress/egress routes as templated for First and Third Platoons, as well as a target for final protective fires for Second Platoon. Additional targets are planned that deny the

enemy the ability to retrograde from the primary and supporting ambush sites. The commander establishes priority of fires to support the plan; Second Platoon, First Platoon, then Third Platoon.

2-668. After the commander's leader's reconnaissance and as refinements are made, the commander updates the engagement criteria for each ambush site as necessary. Due to the nature of the Second Platoon's anti-armor ambush, specifically the favorable terrain to provide cover and concealment to the platoon and the organic weapons at its disposal, additional engagement criteria is established. If in the opinion of the Second Platoon Leader the platoon is unable to completely destroy the enemy in the kill zone, the enemy is still engaged, but after initial engagement Second Platoon ambush forces will then break contact following cover and concealed routes back to Objective Rally Point 2. If the platoon is able to destroy the enemy in the kill zone with the weapons systems possessed by the platoon then the enemy will be engaged, and once it is determined the enemy is destroyed the assault element minus the anti-armor section will move through the kill zone to the limit of advance. Additionally contingency actions are fleshed out, to synchronize the entire company in the event of; enemy reinforcements, early initiation, or other need to break contact.

2-669. Once the plan is confirm, the commander orders First and Third Platoons, to move to emplace their point ambushes. As a result of each ambush's terrain analysis, First Platoon and Third Platoon conduct a linear ambush and L-shaped ambush, respectively. Upon the commander's order to emplace First and Third Platoons' ambush forces, the Second Platoon Leader simultaneously moves forward Second Platoon's support element. As First Platoon and Second Platoon assault forces gets close to their positions, they hold just short of the position they will deploy into for the ambush. This short halt is maintained until their support elements are emplaced. Weapons squad leaders are the support element leaders in this illustration and have responsibilities including; ensuring that sectors of fire are interlocking and protective mines are deployed. In this illustration, platoon leaders and platoon sergeants move with their assault elements. First Platoon and Third Platoon assault elements move into their positions once First Platoon and Third Platoon support elements are in place. As First Platoon and Third Platoon ambushes position, Second Platoon's support element moves into position, Second Platoon's assault element moves into its anti-armor assault position once its support element is in positon. (See figure 2-67.)

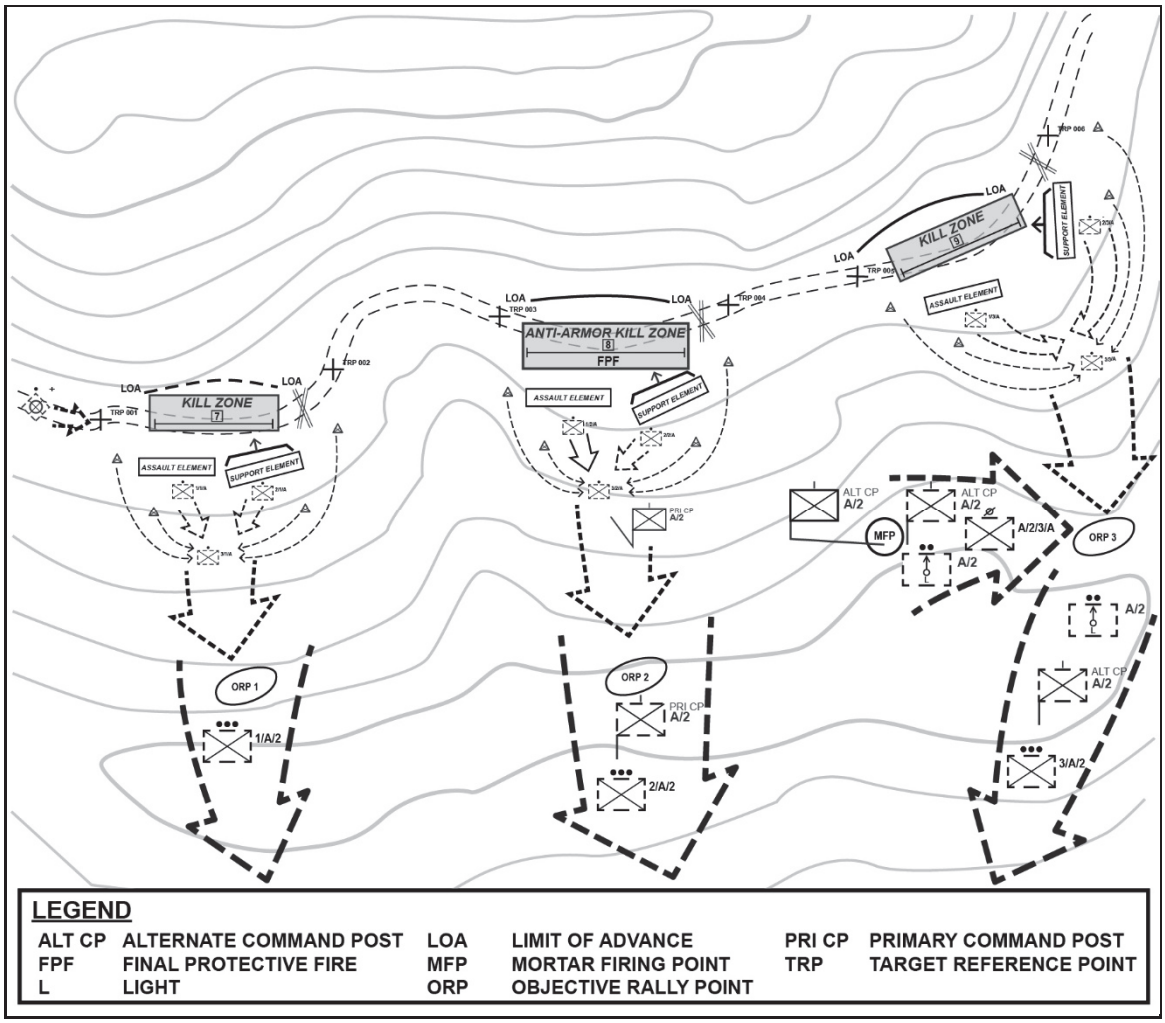


Figure 2-67. Company anti-armor ambush (employment and actions in kill zone), example

2-670. Prior to the enemy's arrival into the kill zone(s), the commander monitors the reports generated by the platoons of the enemy activity at their respective ambush sites. The enemy is templated to move through First Platoon's area before arriving in the central anti-armor ambush kill-zone. First Platoon and Third Platoon have engagement criteria that is different than that of Second Platoon based upon the mission variables of METT-TC previously discussed. Once engagement criteria is met within the central ambush site (Second Platoon) anti-armor kill zone the ambush is executed. The commander then receives reports that the enemy forces that were short of the central kill-zone broke contact back toward First Platoon's ambush location. First Platoon initiates its ambush once engagement criteria is met within its kill zone; destroying the remaining enemy.

2-671. As the area ambush continues, the commander receives a report that additional forces are moving toward First Platoon's ambush site to reinforce the enemy ambushed force. While Second Platoon is finishing its search of the kill zone, First Platoon security forces forward of the area ambush establish visual contact of the mounted threat. The platoon leader reports to the commander that the enemy force is too large for their organic weapon systems to destroy. Based upon engagement criteria, the platoon leader reports that they would be able to delay the movement of enemy force towards Second Platoon's location by engaging with mines and shoulder launched antitank 4 munitions, then immediately break contact. The commander assesses the progress of Second Platoon's search and movement from the ambush site and decides that first platoon will execute that contingency, to include, execution of linear target 7.

2-672. Upon first platoons engagement and breaking contact, the preplanned linear target is initiated to mask first platoons withdrawal to Objective Rally Point 1. Simultaneously, Second Platoon has withdrawn and closed in on Objective Rally Point 2. Third Platoon moves back to Objective Rally Point 3. Once all platoons close on objective rally points, they consolidate and reorganize to begin movement along platoon exfiltration routes to the company linkup well away from the sights and sounds of the company's area ambush.

Note. Though not utilized in the scenario, Second Platoon, anti-armor ambush, templated final protective fires target 8 to be utilized to protect its withdrawal from the ambush site. Third Platoon, point ambush, templated linear target 9 to block ingress movement to the central ambush site and to cover its withdrawal from the ambush site (as illustrated). As executed in the scenario and illustrated, First Platoon, point ambush, templated linear target 7 to block ingress movement to the central ambush site and to cover its withdrawal from the ambush site.

COUNTERATTACK

2-673. A *counterattack* is an attack by part or all of a defending force against an enemy attacking force, for such specific purposes as regaining ground lost or cutting off, or destroying enemy advance units, with the general objective of denying to the enemy the attainment of the enemy's purpose in attacking. In sustained defensive actions, it is undertaken to restore the battle position and is directed at limited objectives. (FM 3-90-1). The commander directs a counterattack—normally conducted from a defensive posture—to defeat or destroy enemy forces, exploit an enemy weakness, such as an exposed flank, or to regain control of terrain and facilities after an enemy success. A unit conducts a counterattack to seize the initiative from the enemy through offensive action. A counterattacking force maneuvers to isolate and destroy a designated enemy force.

2-674. The Infantry battalion as a counterattack force, attacks by fire into an engagement area to defeat or destroy an enemy force, to restore the original position, or to block an enemy penetration. The counterattack is often the deciding action in the defense and becomes the decisive operation upon commitment. The Infantry battalion is best suited for this role in restricted terrain. In unrestricted terrain, the battalion is vulnerable to fires and only possess, with the weapons company, the mobility and potential firepower to counterattack. The commander may plan counterattacks as part of the battalion's defensive plan, or the battalion may be the counterattack force for the brigade or division. (Refer to ATP 3-21.20, FM 3-96 and FM 3-90-1 for additional information.)

DEMONSTRATIONS AND FEINTS

2-675. A *demonstration* in military deception, a show of force similar to a feint without actual contact with the adversary, in an area where a decision is not sought that is made to deceive an adversary (JP 3-13.4). A *feint* in military deception is an offensive action involving contact with the adversary conducted for the purpose of deceiving the adversary as to the location and time of the actual main offensive action (JP 3-13.4).

2-676. A commander uses demonstrations and feints in conjunction with other military deception activities. The commander attempts to deceive the enemy and induce the enemy commander to move reserves and shift fire support assets to locations where they cannot immediately affect the friendly decisive operation or take other actions not conducive to the enemy's best interests during the defense. Both forms are always shaping operations. The commander must synchronize the conduct of these forms of attack with higher and lower echelon plans and operations to prevent inadvertently placing another unit at risk.

2-677. The principal difference between these forms of attack is that in a feint the commander assigns the force an objective limited in size, scope, or some other measure. Forces conducting a feint make direct fire contact with the enemy but avoid decisive engagement. Forces conducting a demonstration do not seek contact with the enemy. The planning, preparing, and executing considerations for demonstrations and feints are the same as for the other forms of attack. Demonstrations support a BCT or higher-level units' plan; the battalion will not conduct demonstrations alone. Demonstrations must be clearly visible to the enemy without being transparently deceptive in nature. Demonstration forces use fires, movement of maneuver forces,

smoke, electronic warfare assets, and communication equipment to support the deception plan. Planning considerations for a demonstration include the following:

- Establish a limit of advance for demonstration forces that allows the enemy to see the demonstration but not to engage it effectively with direct fires.
- Establish other security measures necessary to prevent engagement by the enemy.
- Employ demonstrations to reinforce the enemy's expectations and contribute to the decisive operation.
- Develop contingency plans for enemy contact and avoiding becoming decisively engaged.
- Issue clear follow-on missions to the demonstration force.
- Establish the means to determine the effectiveness of the demonstration and assess its effect on the enemy.

2-678. Force conducting a feint must be of sufficient strength and composition to cause the desired enemy reaction. Feints must appear real; therefore, some contact with the enemy is necessary. The feint is most effective under the following conditions:

- When it reinforces the enemy's expectations.
- When the enemy perceives it as a definite threat.
- When the enemy consistently has committed a large reserve early.
- When the attacker has several feasible course of actions.

2-679. The purposes of a feint may include the following:

- To force the enemy to employ their reserves away from the decisive operation.
- To force the enemy to remain in position.
- To attract enemy supporting fires away from the decisive operation.
- To force the enemy to reveal defensive fires or weaknesses.
- To accustom the enemy to shallow attacks in order to gain surprise with another attack.

2-680. Planning considerations for a feint include the following:

- Resource the feint so it looks like the decisive operation or at least like a significant threat.
- Establish clear guidance regarding force preservation.
- Ensure adequate means of detecting the desired enemy reaction.
- Designate clear disengagement criteria for the feinting force.
- Assign attainable objectives.
- Issue clear follow-on missions to the feinting force.

RAID

2-681. A *raid* is an operation to temporarily seize an area in order to secure information, confuse an enemy, capture personnel or equipment, or to destroy a capability culminating in a planned withdrawal (JP 3-0). Raids are usually small scale, involving battalion size or smaller forces, and surprise attacks requiring detailed intelligence (planners require precise, time-sensitive, all-source intelligence), planning, and preparation. At the company level, a raid is a surprise attack against a position or installation for a specific purpose other than seizing and holding the terrain. A raid is conducted to destroy a position or installation, destroy or capture enemy Soldiers or equipment, or free prisoners. A raid patrol retains terrain just long enough to accomplish the intent of the raid. The raid ends with a planned exfiltration off the objective and a return to the main body.

Note. Operations designed to rescue and recover individuals and equipment in danger of capture normally are conducted as raids.

Fundamentals

2-682. The fundamentals of the raid include surprise and speed, coordinated fires, violence of action, and a planned exfiltration. Surprise and speed is accomplished through infiltration and moving to the objective undetected. Coordinated fires seal off the objective with well-synchronized direct and indirect fires. Violence of action overwhelms the enemy with fire and maneuver. The planned exfiltration allows friendly forces to move off of the objective in a well-organized manner while maintaining security.

Organization of Forces

2-683. When planning a raid the commander considers the functions necessary to conduct a raid, and task organizes appropriately. The raid is normally organized as four elements; command group, security element, support element, and the assault element. Each sub-element is organized and equipped to do a specific part of the overall mission depending upon the specific mission, nature of the target, and enemy situation, and terrain.

2-684. The command group controls the movement, actions on the objective, and movement off of the objective. The commander is typically positioned in the most suitable location to conduct mission command, and maneuver forces to accomplish the mission. This element normally consists of the company commander, fire support officer and non-commissioned officer, other subordinate leaders, and communications to support these leaders. The command element may divided into two mission command elements dependent on the mission, for example, a primary CP and an alternate CP (see appendix A).

2-685. The security element's organization is usually determined by the mission of the raid force, size and type of the enemy force and its mobility, alertness, terrain and avenues of approach into and out of the area, and the time needed to seal off the objective area. The security element is able but not limited to; the conduct of securing the objective rally point, providing early warning, blocking avenues of approach, preventing enemy moving into/ out of the objective area, providing overwatch for units on the objective, providing suppressive fires during the infiltration/actions on the objective/exfiltration, and if capable provide short range air defense. Available snipers teams from battalion and/or designated marksmen are considered in the security elements organization, to both gain critical information on the enemy, and impede on the enemy's mobility on the objective. Snipers are able to provide additional intelligence gathering capability to the commander and precision fires. The commander considers sniper positioning that best suits their weapons, and intelligence gathering capability (see ATP 3-21.20 Appendix E and TC 3-22.10 for more information on sniper employment).

2-686. The assault elements organization is tailored to the assigned mission. During planning the seizure of the objective and the task(s) to be accomplished are examined carefully. Generally, the element's mission is to capture personnel or equipment, or to destroy a capability culminating in a planned exfiltration. The commander of the raid force considers the assault element's organization based on the special teams necessary to accomplish its mission. Necessary teams are identified based on planning considerations that take into account such things as; breaching, supporting snipers, sentry defeat, and friendly liberation, seizure of equipment/destruction, exploitation, and capturing enemy prisoners. The identified teams within the assault element can then be organized into assault teams, prisoner teams, search teams, medical teams, demolition teams, or breach teams to expedite time on the objective. For example, during planning the commander always considers the likelihood of conducting a breach during the raid. If a breaching force is necessary they will likely move with the assaulting element as previously discussed in this chapter.

Planning and Preparation

2-687. Although the planning and preparation discussed in this chapter for the attack apply for the raid as well, there are some differences. Because a raid is normally conducted deep in enemy controlled territory and often conducted against an enemy of equal or greater strength, the plan must ensure the unit is not detected prior to initiating the assault. Detailed planning and preparation ensures the success of the raid as well as the survivability of the raid force during infiltration, actions on the objective, and withdrawal from the objective area.

Phases of the Raid

2-688. When planning the raid the commander considers the phases of the raid. Raids are normally conducted in five phases; insertion and/or infiltration, objective area sealed off (isolation), surprise attack, objective seized and task accomplished, and withdrawal. All phases should be rehearsed thoroughly but special emphasis on the objective seized and task accomplished, and exfiltration plans are exceptionally critical to the raids success.

2-689. Phase I – Insertion and/or infiltration. The raiding force inserts or infiltrates into the objective area. The force launching the raid plans if possible launching the raid during an unexpected time or place by taking advantage of darkness and limited visibility and moving over terrain that the enemy may consider impassable. The raid force avoids detections through proper movement techniques and skillful camouflage and concealment to include taking advantage of natural terrain cover.

2-690. Phase II – Objective area sealed off (isolation). The isolation of the objective area to seal off support or reinforcement from outside the objective, to include enemy air assets is key to the success of the operation. The raiding forces employs both security elements, support elements, direct and indirect fires to successfully isolate the objective

2-691. Phase III – Surprise attack. Any enemy forces at or near the objective are overcome in a violently executed surprise attack using all available firepower for shock effect. Assault forces move through the objective, while using the covering fire of support forces. A simple plan that is coordinated, and rehearsed will allow for the assault element to conduct a rapid and precise assault into and through the objective during phase three.

2-692. Phase IV – Objective seized and task accomplished. The force seizes the objective and accomplishes its assigned task quickly before any surviving enemy in the objective area can recover or be reinforced. It is imperative that raid forces spend as little time as possible while accomplishing their mission on the objective area.

2-693. Phase V – Withdrawal. The raiding force withdraws from the objective area usually using a different route than what was used for movement to the objective. The commander considers a different location for extraction than that of the insertion location. Due to the nature of the raid normally being conducted in enemy held territory it is imperative that the routes, halts, linkup, and pickup locations be located in areas where enemy contact is unlikely.

Intelligence Preparation of the Battlefield

2-694. When a company plans a raid, the company commander relies heavily on the information and analysis produced by the battalion staff (specifically the S-3 supported by the S-2), and in turn conducts the company's intelligence preparation of the battlefield (IPB) based on that information and analysis (see appendix B for more information on the IPB). The company commander utilizes organic, assigned, and attached assets to conduct reconnaissance of the objective to better develop the IPB. Reconnaissance and constant surveillance of the raid objective, external to and within the capability of the raid force, provide the information and intelligence required for planning and updates to the enemy situation on the objective. The information gathered shapes the situation with regard to the enemy, terrain and weather, and civil considerations to help the commander to produce ground reference graphics if necessary.

Movement and Extraction from the Objective

2-695. The company commander considers how the company will arrive at the objective. The commander assesses the need for additional lift capability to deliver the company closer to the objective, for example rotary/fixed wing aircraft, or mounted ground movement (directly to the objective area or of set from the objective). It is important that the commander ensures the insertion/infiltration is not compromised by the delivery platform(s). It is critical that the commander conduct reverse planning, ensuring the development of the ground tactical plan prior to analyzing the delivery method for the company. If the delivery method requested is unable to support the ground tactical plan, the commander re-assesses and makes necessary adjustments in order to allow for greater overall mission success. The commander also considers site selection of LZs, drop zones (DZs), objective rally points, security positions, support locations, and assault positions. These specific sites must support the planned actions at the objective.

2-696. In some instances the commander identifies that an air assault is the best delivery mechanism. Air assault planning is based on careful analysis of the mission variables of METT-TC and detailed reverse planning. Five basic plans comprise the reverse planning sequence. They are: Ground tactical plan, landing plan, air movement plan, loading plan, staging plan. These plans are not developed independently. The company and supporting aviation unit coordinate, develop, and refine concurrently to make best use of available time and resources. They develop the ground tactical plan first, which serves as the basis to develop the other plans. Each plan may potentially affect the others. Changes in an aspect of one plan may require adjustments in the other plans. The air assault task force commander must determine if such adjustments entail acceptable risk. If the risk is unacceptable, the concept of operation must change (for more information on air assault operations see FM 3-99).

2-697. The raiding force may land on or near the objective, or landing far from the objective in order to be undetected. When landing on or near the objective the intent is to seize it before the enemy can react. This avoids forced marches over land carrying heavy loads. If there is no suitable landing area near the objective, or the enemy has a strong reaction force nearby, this option is unfavorable. When the raid force commander selects to land far from the objective and undetected, the company will still conduct an infiltration in order to accomplish their mission. Once on the ground the unit assembles, reorganizes, and moves into an objective rally point near the objective. The objective is seized after security and support elements are in place. This option makes coordinated action easier by establishing control over each individual moving piece, and setting the conditions prior to engaging the enemy.

2-698. Normally fire support systems are positioned to provide immediate responsive fires during the approach, actions on the objective, and exfiltration. Interdiction fires, deception fires, counterfires, and situational obstacles reduce the enemy's ability to react to the raid. It is necessary for the commander to consider the same application of company mortars during all phases of the raid.

2-699. The fire support plan may be greater in complexity depending on the depth of the raid. This can require greater reliance on close air support, Army attack aviation (specifically attack weapons teams and/or scout weapons teams, see FM 3-04), and field artillery than usual due to a deeper objective. A raid often requires more detailed intelligence of the objective area that a company may not be able to gather on their own thusly; the commander should query the battalion to expedite fire support planning.

2-700. Logistical consideration for movements include the type and number of weapons that the raid force will have, movement distance, length of time the raid force will operate in enemy territory, and expected enemy resistance. Identifying aircraft and/or ground linkup procedures for casualty evacuation or resupply, if required, en route, on the objective, and during the exfiltration are critical to each phase of the raid.

Additional Considerations

2-701. Additional planning and preparation considerations include but are not limited to—

- Security in all directions throughout the raid.
- Clear abort criteria for the raid based on the commander's critical information requirements. Criteria may include loss of personnel, equipment, or support assets, and changes in the enemy situation. Abort criteria is normally identified within each phase of the operation.
- Contingency plans for contact before and after actions on the objective.
- Casualty evacuation and raiding force extraction throughout the entire depth of the operation.
- Rally points for units to assemble during movement, to prepare for the attack, and to assemble after the mission is complete and when the force is ready to conduct their planned exfiltration.

Execution

2-702. Once insertion is complete and the infiltration is underway, the company moves to the objective rally point(s). Upon securing the objective rally point(s) the commander initiates the leader's reconnaissance of the objective. Once complete, the plan is either confirmed or adjusted based on newly gathered intelligence. When the plan is finalized, subordinate elements and teams move back to their respective positions. The commander may leave an R&S team to maintain surveillance on the objective and to update the commander upon return on any changes to the enemy situation on the objective.

2-703. Normally, security elements employ before other forces in order to ensure security is established prior to the support, and assault elements moving. The support element then moves into position prior to the assaulting element. Security elements move into position where they can secure the objective rally point(s), warn of enemy approach, block enemy avenues of approach into the objective area, and where they can prevent enemy escape from the objective area. As the assault element and support element move into position, the security element keeps the commander informed of all enemy action. The security element(s) fires only if detected, or on the on order.

2-704. Once support elements, security elements, supporting direct and indirect fire systems are in place the objective area is considered to be isolated. The commander then makes the decision for initiation of the surprise attack on the objective. The support element suppresses the objective and shift fires forward of the assault line or once the decision is made by the commander to do so.

2-705. Once the assault has started, the security element prevents enemy entry into, or escape from, the objective area. Simultaneously the commander is ensuring the rapid execution of the assault, while lifting and shifting fires supporting the assault element. Designated teams, conduct previously rehearsed tasks while on the objective; seizing equipment, employing demolitions, detaining prisoners, liberating friendly forces, conducting sensitive site exploitation and destroying personnel and equipment on the objective.

2-706. During execution, the assault element deploys close enough to the objective to permit immediate assault if detected by the enemy. When the assault has concluded the support element covers the assault element movement off the objective employing direct and indirect fires as necessary. The security element covers the exfiltration of both the assault and support element to the objective rally point or other designated point. The security element then withdraws on order or on a planned signal or event.

Note. The following illustration introduces a fictional scenario as a discussion vehicle for illustrating one of many ways that the Infantry rifle company can conduct a raid. This illustration primarily focuses on the Infantry battalion's main effort, Company B conducting a raid, along with supporting subordinate units within the battalion. ATP 3-21.20, appendix D introduces a fictional raid scenario illustrating one of many ways to employ Infantry forces when mounted on vehicles.

Illustration of a Raid

2-707. The following scenario illustrates a raid conducted by the Infantry rifle company. Company B, main effort, within the Infantry battalion conducts the company raid. Company A, supporting effort, conducts an area ambush (west of the main effort) in support of the battalion main effort (see paragraph 2-656 on page 2-170 for illustration). Battalion scout platoon and Company D, supporting efforts, conducts screen and guard missions forward of Company B objective area to protect and provide early warning to the battalion's main effort (not illustrated). Battalion mortar platoon, supporting effort, moves with Company D. Mortar section, priority of fires goes to the main effort (Company B), order of priority after the main effort: Company A, Company D, battalion scout platoon (not illustrated). Company C, supporting effort (east of the main effort), with two platoons (First and Second Platoons) and mortar section conducts area ambush in support of the battalion's main effort (not illustrated). Third Platoon Company C is the battalion reserve force (not illustrated).

Information Collection Effort

2-708. Within the scenario, the battalion commander requested and allocated unmanned aerial surveillance assets to enable the battalion's information collect effort on Objective Allyson and areas surrounding the objective. The commander identified Company B's Objective Allyson as the priority for UAS support across the battalion, in order to collect information on the objective area for the raid. The commander directed the Battalion Sniper Squad to insert/infiltrate early (in support of Company B) to conduct reconnaissance on Objective Rally Point 2 and the objective (Sniper Element 1, Sniper Squad Leader and Sniper Teams 1 and 2), and Objective Rally Point 1 and the support position (Sniper Element 2, Sniper Team 3). The information collected by UAS and sniper assets revealed an enemy integrated support group (roughly fifteen to twenty military age males operating in close proximity to the objective) providing sustainment operations to enemy

forces in the objective area. By raiding this objective, friendly forces will effectively disrupt the enemies' ability to sustain offensive operations, and enable friendly information collection in support of future friendly operations.

> ***Note***. The commander ensures the information collection effort does alert the enemy to future friendly operations in the battalion's area of operation. For example, UAS operations may include deception operations in adjacent area in order to not create a pattern within the battalion's area of operations that the enemy can anticipate. Also, insertion and extraction locations for the Battalion Sniper Squad should not be the same for Company B.

2-709. Prior to and during the operation, the Battalion Sniper Squad (Sniper Elements 1 [Sniper Squad Leader and Sniper Teams 1 and 2] and Sniper element 2 [Sniper Team 3]) maintain continuous surveillance on the objective area. The Sniper Squad Leader and Sniper Team 2, (while Sniper Team 1 maintains surveillance on the raid objective) awaits Company B (minus) arrival at Linkup Point 5 near templated center Objective Rally Point 2. After orienting, and updating the commander, the sniper squad leader was assigned follow on mission, conduct movement to and reconnaissance of the PZ Cardinal for extraction of the company (minus).

2-710. Sniper Team 3, awaits Third Platoon arrival at Linkup Point 4 near templated center Objective Rally Point 1. After orienting, and updating the Third Platoon Leader, the Sniper Team 3 was assigned follow on mission, conduct movement to and reconnaissance of the PZ Duck for extraction of Third Platoon.

Company B – Scheme of Fires

2-711. The company commander refines the fire support plan, by adding targets along the enemy ingress and egress routes, as well as finalizing final protective fires for support and security elements, and a linear target forward of the assault line on Objective Allyson. In addition to company mortars, the commander plans additional supporting fires from battalion mortars, field artillery, close air support, and Army Attack aviation and higher to maximize the echelon of fires (see appendix D). The company commander, in coordination with the battalion, ensures that ambush forces (Company A) and screen and guard forces (Companies C and D, and battalion scouts) are not within risk estimate distances when incorporating fires. The commander establishes triggers, for ceasing fires when assaulting forces move through the objective in order to prevent fratricide.

Company B – Insertion and /or Infiltration (and Leader's Reconnaissance)

2-712. During mission analysis it was determined that the fifteen to twenty enemy Soldiers on Objective Allyson stay within a few hundred meters of the objective area. With this information, the commander assessed that the most suitable solution for insertion and infiltration was to conduct two separate air assaults offset from the objective to be outside the sight and sound of the objective. Company B was allocated rotary wing lift assets for both the infiltration and exfiltration of its Soldiers. The commander worked with the aviation task force and identified locations suitable as LZs and PZs that supported the commander's concept of operation. In this scenario, the scheme of maneuver utilizes two LZs (Buzzard and Albatross) as depicted in figure 2-68 and PZs (Eagle and Hawk) as depicted in figure 2-69 on page 2-184. The commander with the assistance of the XO and 1SG develop load plans that best utilize the air frames allowable cargo load to support the company while maximizing combat power, and equipment where it is most valuable during the mission. (Refer to FM 3-99 for a detail discussion on air assault operations.)

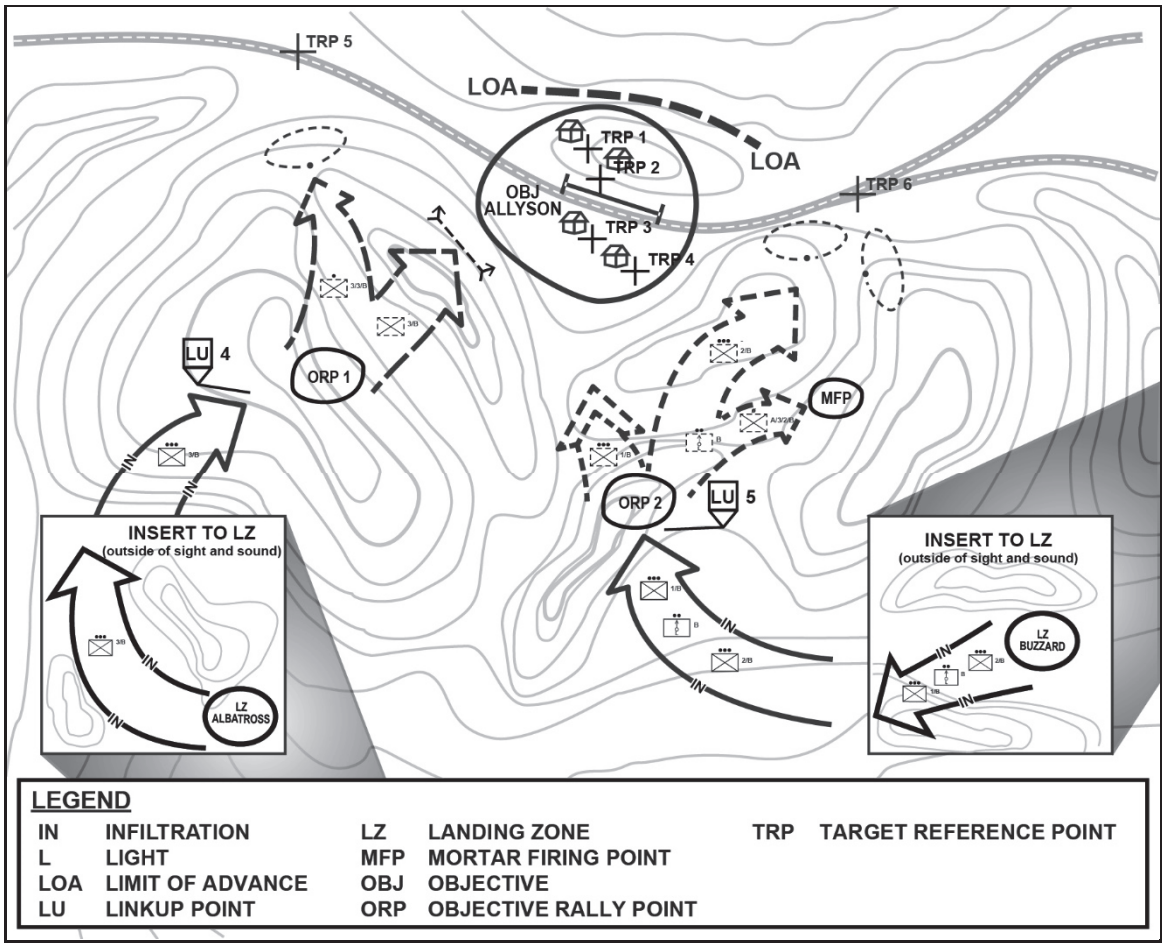


Figure 2-68. Company raid (insertion/infiltration), example

2-713. After inserting into LZ Buzzard (Company B minus) and LZ Albatross (Third Platoon), company elements move undetected to two linkup points then to two objective rally points as part of phase I. The Battalion Sniper Squad occupy hide sites near objective rally points to provide enemy situation updates regarding the objective area. (Note. Battalion Sniper Squad inserted days earlier into an LZ then infiltrated into the objective area, not illustrated.) As company raid elements near their objective rally points they establish linkups with the two sniper elements. (Note. Sniper Element 1, composed of the sniper Squad Leader and Sniper Teams 1 and 2 located Linkup Point 5. Sniper Element 2, composed of Sniper Team 3 located Linkup Point 4.) After linkup with two sniper elements, company raid elements moved from Linkup Points 4 and 5 to respective Objective Rally Points 1 and 2. During this timeframe the commander deploys the company mortars into a mortar firing position to support the operation. The occupation of the two objective rally points is conducted in much the same way as an assembly area (see paragraph 2-144 on page 2-40), and a patrol base (see ATP 3-21.8).

2-714. Once closed on objective rally points, subordinate elements within each objective rally point are assigned sectors and security responsibilities within the perimeter of the objective rally point. Element leaders (assault, support, and security) then prepare for the leader's reconnaissance by assembling the appropriate leaders and personnel. Element leaders plan for the appropriate security within the objective area, in this illustration both left, right, and rear security element locations were confirmed on the leader's reconnaissance. In this scenario, the company commander, First and Second Platoon Leaders, and selected key leader (with the Sniper Squad Leader and Sniper Team 2) conduct a leader's reconnaissance of the objective. (Note. Sniper Team 1 occupies R&S team position overwatching the objective.) The Third Platoon Leader conducted a separate leader's reconnaissance of the support position (with Sniper Team 3), communicating changes or updates to the company commander as necessary.

Note. The commander establishes command presence in a variety of ways, to include a leader's reconnaissance. Optimally, the commander conducts a leader's reconnaissance with key personnel to confirm or modify the plan. Depending on the enemy situation and scheme of maneuver, the leader's reconnaissance may just involve the commander (with a security team). After the leader's reconnaissance, the commander modifies the plan and disseminates those changes to subordinate leaders and other affected organizations. Under some conditions, the commander may not be able to conduct a leader's reconnaissance and may rely on subordinate leaders to recon their portion of the mission. For example, in this scenario the Third Platoon Leader conducts a reconnaissance of the support position, communicating changes or updates to the company commander as necessary.

Company B – Objective Area Sealed Off (Isolation)

2-715. Security elements for the raid employ before other forces in order to ensure security is established prior to the support element, and assault element moving. The support element moves into position once security elements are established in their blocking positions. The commander considers the objective to be isolated once security, support, and indirect fire assets are prepared to execute their tasks. The assaulting force begins movement forward from Objective Rally Point 2 to the assault position(s) (established between Objective Rally Point 2 and the objective) as security and support position finalize their movement into position. During assault force movement, if security and support elements are not yet in position as the assault force closes on the assault position(s), the assault force stops in the assault position until both elements are prepared to execute the raid. If security and support elements are ready to execute the assault force does not stop in the assault position. The support element initiates fires, on order, or as assault forces cross the assault position(s).

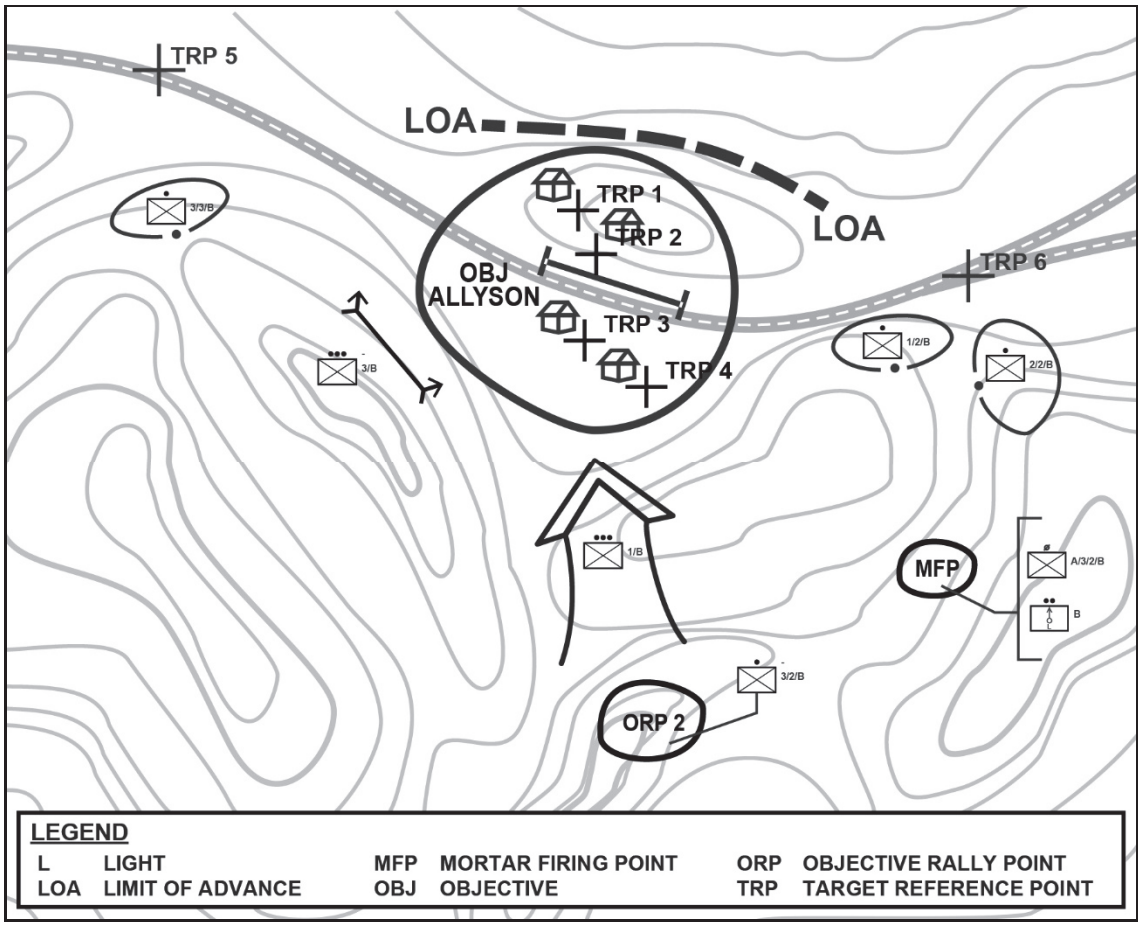


Figure 2-69. Company raid (objective area sealed off/isolation), example

Company B – Surprise Attack/Objective Seized and Task Accomplished/Withdrawal

2-716. The attack begins with overwhelming force and surprise to overwhelm the enemy. (See figure 2-70.) The attack continues in much the same way as the illustration of an attack highlighted earlier in this chapter. Specialty teams execute their assigned tasks once friendly forces seize Objective Allyson and the assault has culminated. The commander calls for the execution of a well-rehearsed exfiltration plan once actions on the objective are complete. The assault force moves from the objective, along a different axis (when possible) than the route that was infiltrated, to PZ Eagle. The commander orders the support element to exfiltrate from their support position and move to a PZ Eagle once the assault has moved off of the objective. Once the commander is satisfied that the conditions allow for the security element to move from their respective locations they also exfiltrate from their blocking positions and move to a PZ Hawk while ensuring they are not pursued. This exfiltration plan normally happens in rapid succession that exercise speed and security.

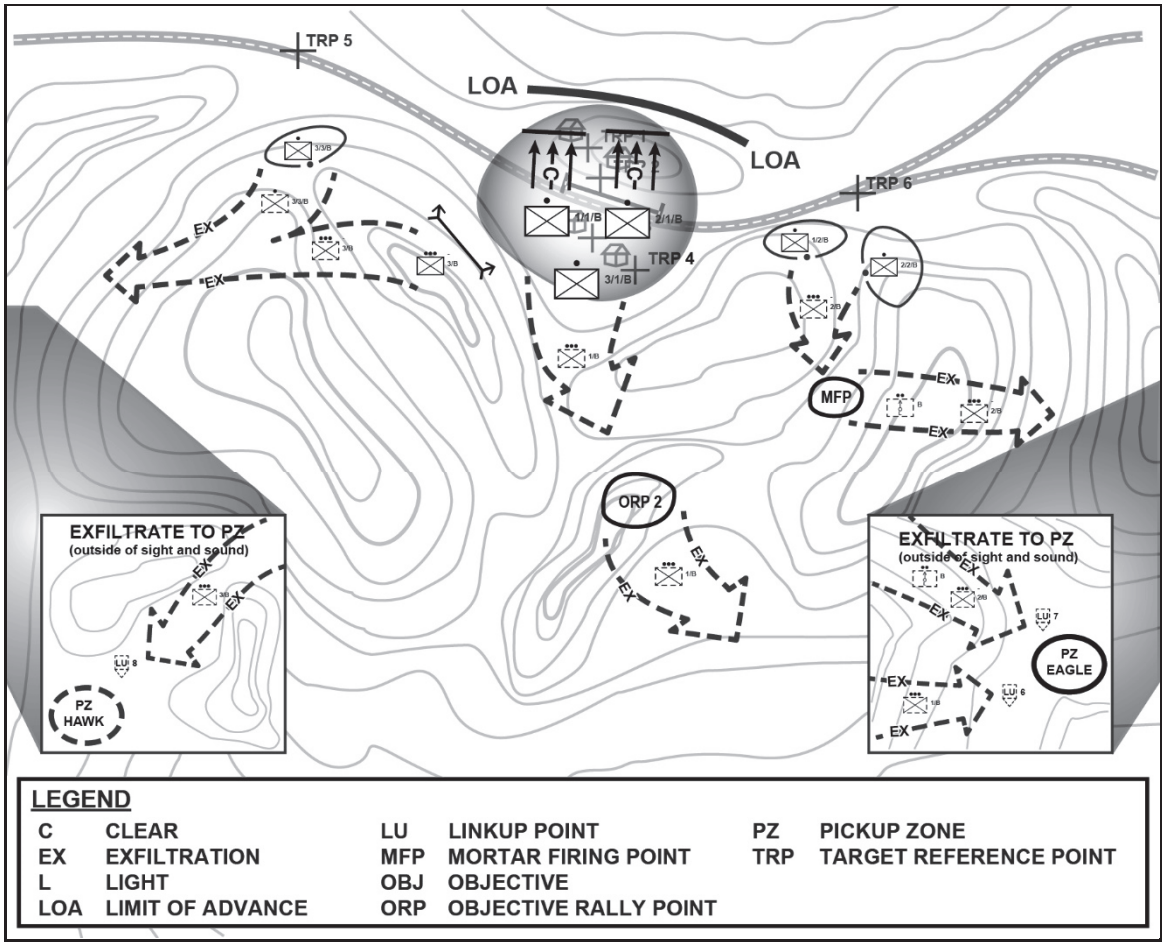


Figure 2-70. Company raid (objective seized and task accomplished/withdrawal), example

Command Element (Primary and Alternate Command Posts)

2-717. Command elements (primary and alternate CPs) conduct movement from the LZ Buzzard to Linkup Point 5 where the command element conducts link up with the Sniper Element 1 (sniper squad leader and two sniper teams) prior to occupying Objective Rally Point 2. The company commander and key personnel within the primary CP, from Linkup Point 5, move to an R&S observation post with sniper squad leader to conduct a leader's reconnaissance to confirm the plan. Throughout the operation the commander moves with the assault element. The XO and key personnel with the alternate CP move from Linkup Point 5 to Objective

Rally Point 2 to prepare for the operation. The XO and alternate CP move with the mortar section to the mortar firing position, then exflitrates, along with the mortars and Second Platoon.

Assault Element (First Platoon)

2-718. First Platoon (main effort), conducts movement from the LZ Buzzard to Linkup Point 5 where they will conduct link up with the Sniper Element 1(sniper squad leader and two sniper teams) prior to occupying Objective Rally Point 2. First Platoon Leader, from Linkup Point 5, moves to an R&S observation post with sniper squad leader to conduct leader's reconnaissance with the commander, Second Platoon Leader, and other key leaders to confirm the plan. The remainder of the company from LZ Buzzard moves from Linkup Point 5 to Objective Rally Point 2 to prepare for the operation. First Platoon assault element is task organized with local support, breach, demolition, aid & litter, and search teams. The platoon conduct movement from Objective Rally Point 2 after security and support elements are in place to isolated and suppress the objective. On order, platoon conducts actions on objective. Once the raid is complete, the platoon moves to Objective Rally Point 2 to disseminate information and prepare for exfiltration. On order, First Platoon (with objective rally point security team from Second Platoon) conducts exfiltration to Linkup Point 6 east of Objective Rally Point 2, conducts linkup with Sniper Squad Leader and Sniper Team 1 vicinity PZ Eagle for follow on extraction.

Security Element (Second Platoon—Right Side Security and Objective Rally Point 2/Mortar Firing Security)

2-719. Second Platoon (supporting effort), conducts movement from LZ Buzzard to Linkup Point 5, and then continues minus the platoon leader to Objective Rally Point 2. Second platoon is responsible for Objective Rally Point 2, mortar firing point, and right side security. Upon the company commander's confirmation of the plan, Second platoon occupies security positions (blocking position) directed at possible enemy avenues of approach into the objective area with Squads 1 and 2. Squad 3 establishes Objective Rally Point 2 (Fire Team B with squad leader) and mortar firing point (Fire Team A) security. Security elements establish right side security prior to the establishment of the support position. Once the raid is complete and the order for exfiltration is given, Second Platoon will remain in place providing security for both assault and support forces until the commander orders them to move to the Linkup Point 7 to the east of Objective Rally Point 2. Second Platoon's security element (right side security) moves through the mortar firing point, secures the mortar section and Third Squad's Fire Team A (mortar firing point security) prior to moving to Linkup Point 7, conducts linkup with Sniper Team 2 vicinity PZ Eagle for follow on extraction.

Support/Security Element (Third Platoon—Support and Left Side Security)

2-720. Third Platoon (supporting effort), conducts movement from the LZ Albatross to the Linkup Point 4 to make contact with Sniper Team 3 then continues to Objective Rally Point 1. From objective rally point, Sniper Team 3 leader leads support and security element leaders to conduct leader's reconnaissance of the support position and left side security positions. Upon confirmation of the plan and the order to move from the commander, left side security moves into position prior to the establishment of the support by fire positon. Third Platoon, Third Squad occupies left side security position (blocking position) directed at possible enemy avenues of approach into the objective area. Third Platoon, Squad 1 and Squad 2 establish support by fire positions for the raid. The support element conducts support by fire with a purpose to suppress the objective in support of the main effort. (Note. Support element normally moves in to place directly after or simultaneously with the security element.) Once the raid is complete and the order for exfiltration is given, Third Platoon will remain in place providing overwatch for assault forces until the commander orders them to move to the link up location for extraction. On order, Third Platoon (support element and left side security element conduct linkup prior to movement) moves to Linkup Point 8 to the west of Objective Rally Point 1, conducts linkup with Sniper Team 3 vicinity PZ Hawk for follow on extraction.

Mortar Section

2-721. Mortar section, (supporting fires) conducts movement from LZ Buzzard to Linkup Point 5, continues to Objective Rally Point 2 then occupies mortar firing point to the rear of right side security elements. Once position established, the section provides responsive, and accurate fires to suppress the enemy during movement to and within the objective area. The commander plans additional targets as necessary to support

ingress and egress routes (not illustrated). Once the raid is complete and the order for exfiltration is given, the mortar section will remain in place providing fires to friendly forces until the commander orders them to move. Second Platoon will move through the mortar firing point to linkup with the mortar section. Second Platoon and mortars, then move to Linkup Point 7 east of Objective Rally Point 2, conducts linkup with Sniper Team 2 vicinity PZ Eagle for follow on extraction.

Note. Extraction intended purpose—the two PZ extractions will occur simultaneously.

SPOILING ATTACK

2-722. A *spoiling attack* is a tactical maneuver employed to seriously impair a hostile attack while the enemy is in the process of forming or assembling for an attack (FM 3-90-1). The objective of a spoiling attack is to disrupt the enemy's offensive capabilities and timelines while destroying targeted enemy personnel and equipment, not to seize terrain and other physical objectives. A commander conducts a spoiling attack to—

- Disrupt the enemy's offensive preparations.
- Destroy key assets that the enemy requires to attack, such as fire support systems, fuel and ammunition stocks, and bridging equipment.
- Gain additional time for the defending force to prepare its positions.
- Reduce the enemy's current advantage in the correlation of forces.

2-723. A commander conducts a spoiling attack whenever possible during the conduct of friendly defensive tasks to strike an enemy force while it is in assembly areas or attack positions preparing for its own offensive operation or is stopped temporarily. The commander synchronizes the conduct of the spoiling attack with other defensive actions. A spoiling attack usually employs armored, attack helicopter, or fire support elements to attack enemy assembly positions in front of the friendly commander's main line of resistance or battle positions. (Refer to ATP 3-21.20, FM 3-96, and FM 3-90-1 for additional information.)

SECTION IV – EXPLOITATION AND PURSUIT

2-724. During the offense, combined arms maneuver involves taking the fight to the enemy and never allowing enemy forces to recover from the initial shock of the attack. *Exploitation*, which is an offensive task that usually follows a successful attack and is designed to disorganize the enemy in-depth (ADRP 3-90) and *pursuit*, which is an offensive task designed to catch or cut off a hostile force attempting to escape, with the aim of destroying it (ADRP 3-90). Often involve pushing all available forces to the limit of their endurance to capitalize on momentum and retain the initiative. Commanders maintain momentum by anticipating and transitioning rapidly as the situation develops. Retaining the initiative pressures enemy commanders into abandoning their preferred course of actions, accepting too much risk, or making costly mistakes. As these conditions occur, friendly forces seize opportunities and create new avenues for exploitation or pursuit to break the enemy's will through relentless and continuous pressure.

EXPLOITATION

2-725. Exploitation is the primary means of translating tactical success into operational advantage. Exploitation can occur regardless of the operational theme or point along the range of operations in which the exploitation occurs. All units, regardless of their size, conduct exploitation, although discussions tend to focus on the activities of large units during conduct of major operations. Small tactical units also conduct exploitations. For example, during counterinsurgency operations, an Infantry battalion could conduct a company level raid on a particular civilian residence during the night to exploit the information and intelligence gathered during the conduct of a company level cordon and search operation that occurred earlier in the day. In this example, effective search procedures, tactical site exploitation, tactical questioning, and the use of R&S assets are keys to the company being able to conduct exploitation.

2-726. During the conduct of major operations, exploitation often follows a successful attack to take advantage of a weakened or collapsed enemy. The purpose of exploitation can vary, but it generally focuses on capitalizing on a temporary advantage or preventing the enemy from establishing an organized defense or conducting an orderly withdrawal. To accomplish this, the brigade combat team or higher-level unit attacks

rapidly over a broad front to prevent the enemy from establishing a defense, organizing an effective rear guard, withdrawing, or regaining balance. The Infantry battalion as part of the IBCT secures objectives, severs escape routes, and destroys enemy forces. Failure to exploit success aggressively gives the enemy time to reconstitute an effective defense or regain the initiative by a counterattack.

2-727. The conditions for exploitation develop quickly. Often the lead battalion or subordinate unit in contact identifies the collapse of the enemy's resistance. The higher-level commander must receive accurate assessments and reports of the enemy situation to capitalize on the opportunity for exploitation. Typical indications of good conditions for exploitation include—

- A significant increase in enemy prisoners of war.
- An increase in abandoned enemy equipment and material.
- The overrunning of enemy artillery, command and control facilities, and logistics sites.
- A significant decrease in enemy resistance or in organized fires and maneuver.
- A mixture of support and combat vehicles in formations and columns.
- An increase in enemy movement rearward, especially of reserves and fire support units.

2-728. Should the Infantry battalion conduct exploitation as part of a larger operation, it might receive the mission to seize a terrain-oriented objective. In this case, the battalion avoids decisive engagement and moves to the objective as quickly as possible. If assigned a force-oriented objective, the battalion seeks and destroys enemy forces anywhere within its area of operation. Air assaults by the battalion or part of the battalion are an effective method to seize blocking positions in the enemy's rear. The exploitation ends when the enemy reestablishes its defense, all organized enemy resistance breaks down, or the friendly force culminates logistically or physically. (Refer to FM 3-90-1 and FM 3-96 for additional information.)

PURSUIT

2-729. A pursuit differs from the exploitation in that it always focuses on completing the destruction of fleeing enemy forces by destroying their ability and will to resist. Unlike an exploitation, which may focus on seizing key or decisive terrain instead of the enemy force, pursuit operations begin when an enemy force attempts to conduct retrograde operations. At that point, it becomes most vulnerable to the loss of internal cohesion and complete destruction. An aggressively executed pursuit leaves the enemy trapped, unprepared, and unable to defend, faced with the options of surrendering or complete destruction.

2-730. Pursuits include the rapid shifting of units, continuous day and night movements, hasty attacks, containment of bypassed enemy forces, large numbers of prisoners, and a willingness to forego some synchronization to maintain contact with and pressure on a fleeing enemy. Pursuits require swift maneuver and attacks by forces to strike the enemy's most vulnerable areas. A successful pursuit requires flexible forces, initiative by commanders at all echelons and a high tempo during execution.

2-731. Two options exist when conducting a pursuit. Both pursuit options involve assigning a subordinate the mission of maintaining direct-pressure on the rearward moving enemy force. The first option is a frontal pursuit that employs only direct-pressure. The second is a combination that uses one subordinate element to maintain direct-pressure and one or more other subordinate elements to encircle the retrograding enemy. The combination pursuit is more effective, generally. The subordinate applying direct-pressure or the subordinate conducting the encirclement can conduct the decisive operation in a combination pursuit.

2-732. During the pursuit, the commander exerts unrelenting pressure to keep the enemy force from reorganizing and preparing its defenses. The Infantry battalion or brigade combat team may be a part of a corps or division pursuit, either functioning as the direct-pressure or encircling force. Although the Infantry battalion may pursue a physical objective, the mission is the destruction of the enemy's main force.

2-733. A mobility advantage over the enemy is vital to the effectiveness of the pursuit. A combination of Armored and Stryker forces, combined with Infantry conducting air assaults, can be extremely effective when cutting off the enemy forcing them to either surrender or be destroyed. The range, speed, and weapons load of attack reconnaissance units makes them uniquely useful in an exploitation or pursuit to extend the ground commander's reach. Dismounted movement over difficult terrain allows Infantry units to seize blocking positions. (Refer to FM 3-90-1 and FM 3-96 for additional information.)

Chapter 3
Defense

The Infantry rifle company conducts defensive tasks to defeat enemy attacks, gain time, control key terrain, protect critical infrastructure, secure the population, and economize forces. Most importantly, the company sets conditions to transition to the offense or operations focused on stability. Defensive tasks alone are not decisive unless combined with offensive tasks to surprise the enemy, attack enemy weaknesses, and pursue or exploit enemy vulnerabilities. Even within the conduct of the battalion's defense, the Infantry rifle company exploits opportunities to conduct offensive actions within its area of operation to deprive the enemy of the initiative, and create the conditions to assume the offense. This chapter discusses the doctrinal basis for the defense and introduces a fictional scenario as a discussion vehicle for illustrating one of many ways that an Infantry company conducts defensive actions. The scenario focuses on potential challenges confronting the company commander in accomplishing a mission but is not intended to be prescriptive of how the rifle company performs any particular operation.

SECTION I – DOCTRINAL BASIS FOR THE DEFENSE

3-1. As with the offense, defensive techniques cannot be discussed in isolation. There must be a seamless continuity and understanding between the fundamental doctrinal principles, tactics, and procedures, covered in Army doctrinal reference publications and field manuals, and the techniques covered in this Army techniques publication. This section briefly discusses defensive tasks, forms of the defense, and supporting doctrinal terms. The reader should refer to ATP 3-21.20, FM 3-96, FM 3-90-1, FM 3-90-2, and ADRP 3-90 for additional information.

DEFENSIVE TASKS

3-2. *Defensive tasks* are tasks conducted to defeat an enemy attack, gain time, economize forces, and develop conditions favorable for offensive or stability tasks (ADRP 3-0). There are three basic defensive tasks—area defense, mobile defense, and retrograde. These three tasks have significantly different concepts and pose significantly different problems. Each defensive task is dealt with differently when planning and executing the defense. Although, the names of these defensive tasks convey the overall aim of a selected defense, each typically contains elements of the other and combines static and mobile elements. As with offensive tasks, defensive tasks can result in non-physical effects, such as those generated in the information environment. For example, the use of deception in support of operations security can be highly effective at gaining time and tactical deception can support the economization of forces.

CHARACTERISTICS OF THE DEFENSE

3-3. Characteristics of the defense include disruption, flexibility, maneuver, mass and concentration, operations in-depth, preparation, and security. See ADRP 3-90 for a detailed discussion of each characteristic. These characteristics are defined below:

- Disruption. The defender disrupts enemy tempo and synchronization, ability to mass fires, reconnaissance and security forces, and main body formation.

- Flexibility. The defense requires preparation in-depth, use of reserves, the ability to shift the battalion's main effort, supplementary positions within the defense, and the ability to counterattack.
- Maneuver. Maneuver allows the commander to achieve a position of advantage over the enemy, mass and concentrate combat power, and to take full advantage of terrain.
- Mass and concentration. The defender shapes and decides the engagement by massing the effects of combat power in time and space and accepting risk in some areas to mass effects elsewhere.
- Operations in-depth. Simultaneous application of combat power throughout the depth of the defender's area of operation allows for the destruction of the enemy with attacks to its flanks, as that enemy force is most exposed and vulnerable.
- Preparation. Preparation, an inherent strength of the defense, provides the defender time to study the ground and select positions that allow the massing of fires on likely approaches. Defenders use available time to combine natural and manmade obstacles to canalize attacking forces into engagement areas, coordinate and rehearse actions on the ground, gaining intimate familiarity with the terrain, place security, intelligence, and reconnaissance forces throughout the area of operations, and continue defensive preparations in-depth, even as the close engagement begins.
- Security. Measures taken to protect the defender against all acts designed to, or which may, impair the defender's effectiveness to deceive the enemy as to friendly locations, strengths, and weaknesses, inhibit or defeat enemy reconnaissance, provide early warning, or to disrupt enemy attacks early and continuously.

PLANNING CONSIDERATIONS

3-4. The product of planning is an order—a directive for future action. The commander begins with an assigned area of operation, identified mission, and available forces. The commander develops and issues planning guidance based on their own visualization in terms of the means to accomplish the mission. The commander controls the defense by using control measures to provide the flexibility needed to respond to changes in the situation, and to allow the commander to concentrate combat power rapidly at the decisive point. The six-warfighting functions are the framework for discussing planning considerations that apply to all primary and subordinate defensive tasks. (See FM 3-96 and FM 3-90-1 for a detailed discussion of defensive planning considerations and control measures.)

FORMS OF THE DEFENSE

3-5. The three subordinate forms of the defense (defense of a linear obstacle, perimeter defense, and reverse-slope defense) have special purposes and unique consideration associated with each. When conducting a subordinate form of the defense, proper evaluation and organization of the company's area of operation are essential to maximize the effectiveness of the defending force. The commander exploits the advantages of occupying the terrain where the battle will occur and positions the company to engage the attacker from locations that give the defending force an advantage. These locations may include defilades, rivers, thick woods, swamps, cliffs, canals, built-up areas, and reverse slopes. In all three forms, the commander uses existing and reinforcing obstacles and other key terrain to impede the enemy's movement. The commander selects terrain that allows massing friendly fires but forces the enemy to commit forces piecemeal into friendly EAs, exposing portions of the enemy force for destruction without giving up the advantages of fighting from protected positions. The three forms of the defense provide distinct advantages to the defender and its subordinate units during an area defense and the operations of the fixing force during a mobile defense. (Refer to ATP 3-21.20, FM 3-96, and FM 3-90-1 for additional information.)

DEFENSE OF A LINEAR OBSTACLE

3-6. The defense of a linear obstacle is similar to a forward defense with the intent being to limit the terrain over which the enemy can gain influence or control. A linear obstacle adds to the strength of the defense and can be a river, a stream with steep embankments or a manmade obstacle such as a highway or embankment. The key to success in a defense of a linear obstacle is maintaining the integrity of the defense by preventing the enemy from securing a foothold on the friendly side of the obstacle. When the enemy is able to gain and

maintain a foothold, the company must contain it and prevent its expansion. The commander should have a plan to conduct a delay if the enemy gains sufficient strength to attack out of the bridgehead. Defending units integrate additional obstacles to stop enemy forces, channel them into planned EAs, and to further, enable the integrity of the linear obstacle. The defense of a linear obstacle usually forces the enemy to deploy, concentrate forces, and conduct breaching operations. (See figure 3-1.) When attacked, the defending force isolates the enemy, conducts counterattacks, and delivers fires onto the concentrated force to defeat attempts to breach the obstacle.

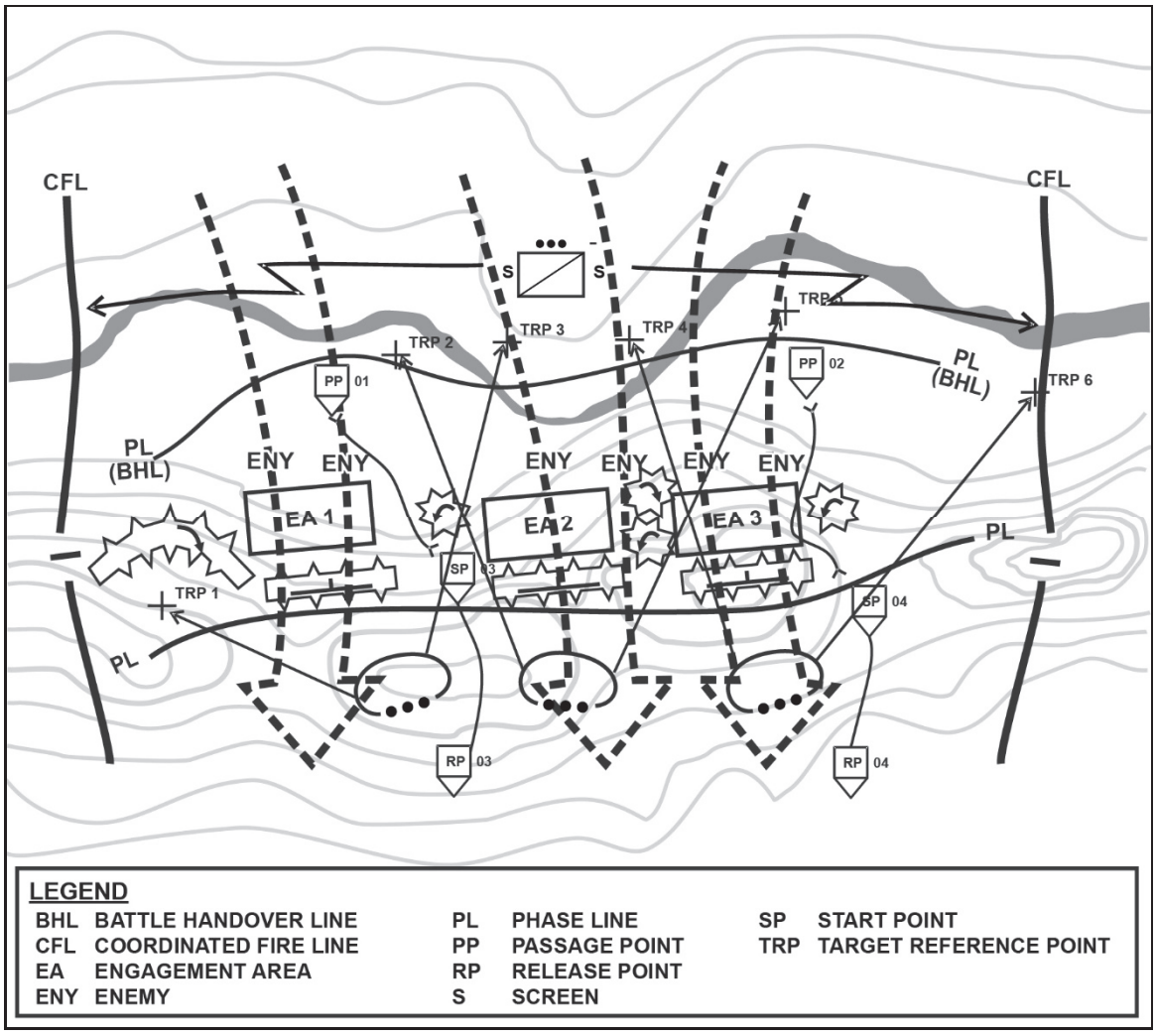


Figure 3-1. Defense of a linear obstacle (mutual support between rifle platoons)

3-7. The main purpose of the defense of linear obstacle, as with any defense, is to force or deceive the enemy into attacking under unfavorable circumstances. The defending commander seeks to dictate where the fight will occur, preparing the terrain and other conditions to the defenders advantage while simultaneously denying the enemy adequate intelligence friendly forces defensive composition and disposition. During planning, the commander uses intelligence products to identify probable enemy objectives and approaches. From those probable objectives and approaches, named areas of interest and targeted areas of interest are developed. The commander considers the mission variables of METT-TC to determine how best to concentrate efforts and economize forces. A detailed terrain analysis is most likely the most important process that the commander completes. A successful defense relies on a complete understanding of terrain in order to determine likely enemy course of actions (COA) and the best positioning of company assets to counter them.

3-8. During preparation, the commander monitors subordinate actions, and tracks higher and adjacent unit situations and the enemy situation. The commander updates and refines plans based on additional reconnaissance and updated intelligence information. The commander continues to disseminate modifications and adjustments through fragmentary orders and conducts much of the preparation phase simultaneously with security operations, continuing even as forces gain contact with the enemy. Throughout the preparation phase, the company commander, and all subordinate leaders physically inspect preparatory activities to update weapons positioning, setting of obstacles, direct and indirect fire plans and associated triggers, sustainment operations, and battle positions and Soldier knowledge of their missions are all critical checks. The preparations that are conducted are captured utilizing sector sketches that identify all improvements made to the defensive plan and illustrate a common operating picture across the formation. Subordinate platoons develop two sets of their sector sketch, one for them to retain and the other is provided to the company. The company sketch is typically prepared by the commander, with the assistance of command post personnel, and updated throughout preparation and as the plan is updated.

3-9. During execution, the defense of a linear obstacle often entails relatively long frontages. Based on the mission and the frontage assigned, the commander positions units that mutually support each other throughout the length and depth of the defense. Mutual support exists when positions and units support each other by direct and indirect fires to prevent the enemy from attacking one position without being subject to fire from one or more adjacent positions. Mutual support increases the strength of all defensive positions, prevents defeat in detail, and helps prevent infiltration between positions.

3-10. The commander may position all rifle platoons forward to enable mutual support between platoons, positioning a small reserve, to block the most likely avenue of enemy approach. The rifle company and its subordinate platoons are normally responsible for their own security and establish listening posts or outposts directly to their front. The scout platoon, or subordinate element, may deployed forward or to the flank to provide early warning and help to update the company and the battalion as a whole on enemy activities. This defense is commonly referred to as a linear defense that may be contiguous, or non-contiguous with adjacent elements. The company commander in some instances will be provided information from the scouts that require action, such as engaging approaching enemy with their organic indirect fires as the scouts identify targets. Counter-reconnaissance efforts are critical to deny the enemy the intelligence of defensive positions, and to disrupt the enemy's attack as they move into the main battle area.

3-11. In some instances the battalion weapons company might conduct shaping operations to establish the necessary conditions for the decisive operation in the main battle area through attrition, disrupting, and delaying the enemy. The battalion commander in other instances may assign the company an assault platoon from the weapons company to reinforce organic forces. The commander considers METT-TC to ensure the effective use and employment of those assets to support the battalion commander's intent. The company commander may utilize the attached assault platoon to forward of company battle positions to provide early warning, screen obstacle emplacement, and provide anti-armor, indirect/direct fires on an encroaching enemy reconnaissance force. The commanders overall situational awareness is necessary for both the higher echelon, and company defense.

3-12. When the company defends a narrow frontage, commander at all echelons has numerous options that may be chosen. For example the company commander may deploy two rifle platoons forward while retaining a rifle platoon in-depth or as a reserve positioned to block enemy penetrations. In another instance the battalion commander may do the same with regard to companies. The weapons company is positioned in-depth and, the scout platoon may be deployed forward or may secure a flank so it is imperative that the company commander is prepared to support the higher commander's scheme of maneuver, and meet the commander's intent. All commanders continuously update subordinate elements to prevent fratricide of friendly units. When defending in a narrow frontage or a long frontage, the brigade combat team commander can position a second battalion behind the battalion deployed along the obstacle allowing the forward battalion to deploy the maximum combat power forward to ensure the integrity of the obstacle. As a result the company may be employed in various defensive postures in support of common objectives.

3-13. The commander employs fires in-depth to destroy the enemy and project combat power to the enemy side of the obstacle. Forward observers may be positioned forward in observation posts and with reconnaissance forces, and may be assigned to observe specific named areas of interest or targeted areas of interest. Forward observers within the main battle area with rifle platoons may be assigned to observe specific

named areas of interest or targeted areas of interest. Army aviation attack and reconnaissance unit attacks may be conducted in close proximity or in direct support of the main battle area or against enemy forces not in direct contact with the maneuver forces. Artillery and mortar fire support plans are integrated into the direct fire plans of the forward rifle companies.

PERIMETER DEFENSE

3-14. A perimeter defense is a defense oriented in all directions. A perimeter defense by design has a secure inner area with most of the combat power located on the perimeter. (See figure 3-2.) Perimeters vary in shape depending on the terrain and situation with the perimeter shape conforming to the terrain features that best use friendly observation and fields of fire. The commander in a perimeter defense designates the trace of the perimeter, battle positions, contact points, and lateral and forward boundaries. When the commander determines the most probable direction of enemy attack, that part of the perimeter covering that approach may be reinforced with additional resources. Once the threat is determined and from which direction resources such as additional gun teams, and javelins are emplaced to eliminate the enemy along the identified avenue of approach. The commander employs patrols, raids, ambushes, air attacks, and supporting fires to harass and destroy enemy forces before they make contact with the perimeter. The commander increases the effectiveness of the perimeter by tying it into a natural obstacle, such as a river, which allows the defending unit to concentrate its combat power in more threatened areas. Normally, if a reserve is identified by the company commander it is centrally located to react to any point of penetration along the company perimeter.

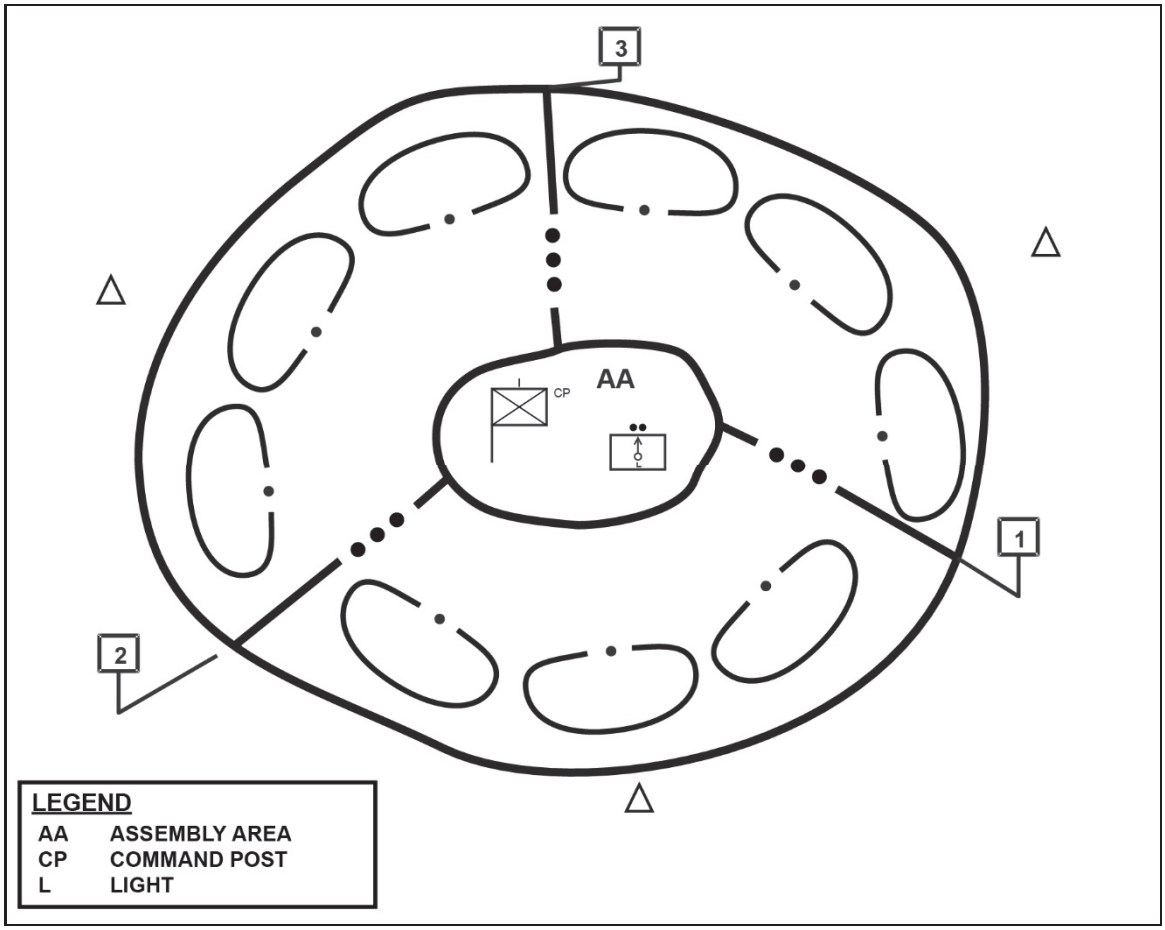


Figure 3-2. Perimeter defense (platoons positioned forward)

3-15. The commander can employ the perimeter defense as an option when conducting an area or mobile defense. The commander establishes a perimeter defense when the company must hold critical terrain, such as a strong point, or when it must defend a noncontiguous area of operation where the perimeter defense is

not tied in with adjacent units. The company may also form a perimeter when conducting Airborne and air assault operations, when it is bypassed and isolated by the enemy and must defend in place, or when it is securing an isolated objective, such as a bridge, mountain pass, or airfield. Unless executing a strong point, the perimeter defense usually does not take considerable time and resources to execute. The prerequisites for a successful perimeter defense are aggressive patrols (combat and reconnaissance, see ATP 3-21.8) and security operations outside the perimeter. The commander designates checkpoints, contact points, passage points, and passage routes for elements operating outside the boundary of the perimeter. Forces within the perimeter can perform these activities, or another force external to the company can perform them.

3-16. The commander may employ all defending forces forward along the perimeter or establish a defense in depth within the perimeter. Figure 3-3, illustrates one of many ways the company can organize forces for a perimeter defense. In this example, the commander positions platoons forward along the perimeter. The commander divides the perimeter into a platoon area of operations with boundaries and contact points. Rifle platoons orient on their respective sectors of fire. The command post is locates at the center, and the mortar firing point locates near the command post. This organization of forces reduces the possibility of fratricide and friendly fire incidents within the perimeter and maximizes combat power on the perimeter.

3-17. Figure 3-3 illustrates an organization of forces where the commander constructs an outer and inner perimeter that mutually support one another to create depth in the defense. Platoons position two squads with attached gun teams along the outer perimeter and one squad in towered the interior of the perimeter this is commonly referred to as a Lazy V. When each platoon ties into one another and postures its forces in the same way this is commonly referred to as a Lazy W. This organization of forces provides depth to each platoons area of operations. Attacks against outer and inner perimeter elements range from long-range sniper, mortar, or rocket fire, attacks by suicide demolition squads, and attacks by major enemy ground and air forces. Within the perimeter, the commander positions forces to decrease the possibility of an enemy simultaneously suppressing the inner and outer perimeter forces with the same fires. Tactical positions on the outer perimeter achieve the maximum degree of mutual support when they are located to observe or monitor the ground between them, or conduct patrols to prevent enemy infiltration. In open terrain, the commander covers gaps on the outer perimeter between units with fires.

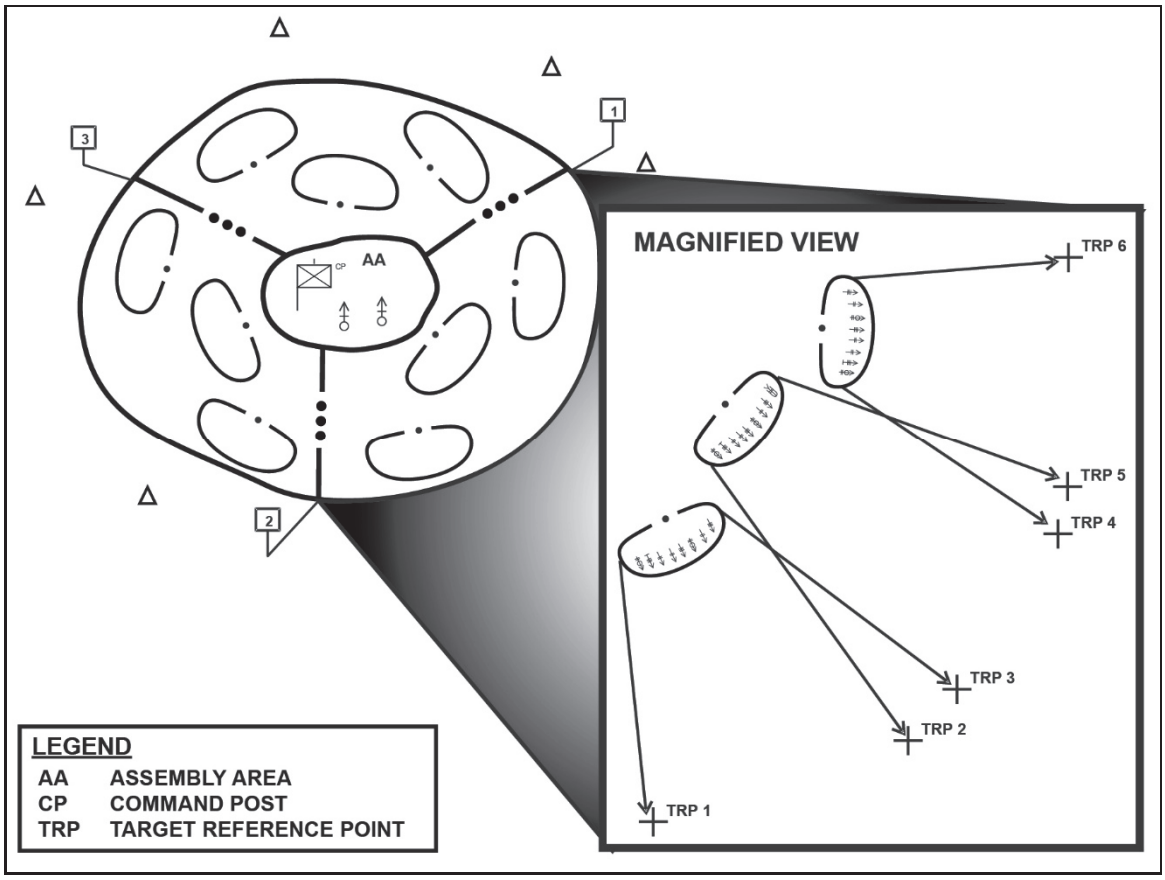


Figure 3-3. Perimeter defense (squads positioned in-depth)

3-18. The Y-shaped perimeter defense uses the available terrain as effectively as possible when cover and concealment, and fields of fire do not support the physical positioning of the company in a circular manner. The Y-shaped perimeter emplaces platoon battle positions on three different axes radiating from one central point. It is categorized as a perimeter defense because it is still effective against and attack from any direction. The Y-shaped defense provides security and perimeter fires in all direction without positioning soldiers along the perimeter of a circular formation. Although each platoon battle position has a primary orientation for its direct and indirect fires, it is also necessary to be prepared to reorient and mass fires into the EA to the platoons rear. The Y-shaped perimeter defense is likely to be more effective in mountainous terrain, or a dense jungle environment that presents limited fields of fire and when the most likely enemy approach is difficult to identify, or in limited visibility. In the Y-shaped perimeter defense each platoon may situate its soldiers directed in both directions. For example a platoon may orient half of its soldiers into EA1 and the other half on EA2, utilizing pre-established supplementary individual fighting positions to allow for Soldiers to reposition when it is required to mass fires into either EA.

3-19. The commander positions the command post, mortars, reserve if deemed necessary, and sustainment assets where they are best able to effect the defensive fight. The placement of these elements, and assets may prove to be difficult due to the lack of depth within the perimeter and the nature of the Y-shaped ambush shape.

3-20. The most challenging aspect of the Y-shaped perimeter defense is the establishment of fire control measures. Fire control measures are essential in or to safely fight in the Y-shaped defense to prevent fratricide. The commander ensures, and conducts check on leaders to examine each battle position to ensure the limits of fire for each and every weapon system. It is imperative that limits of fire for each weapon system do not allow fires into the adjacent platoon position. In a mountainous environment, firing downward into the engagement areas may make this simpler, but the commander plans them never the less. (See figure 3-4.)

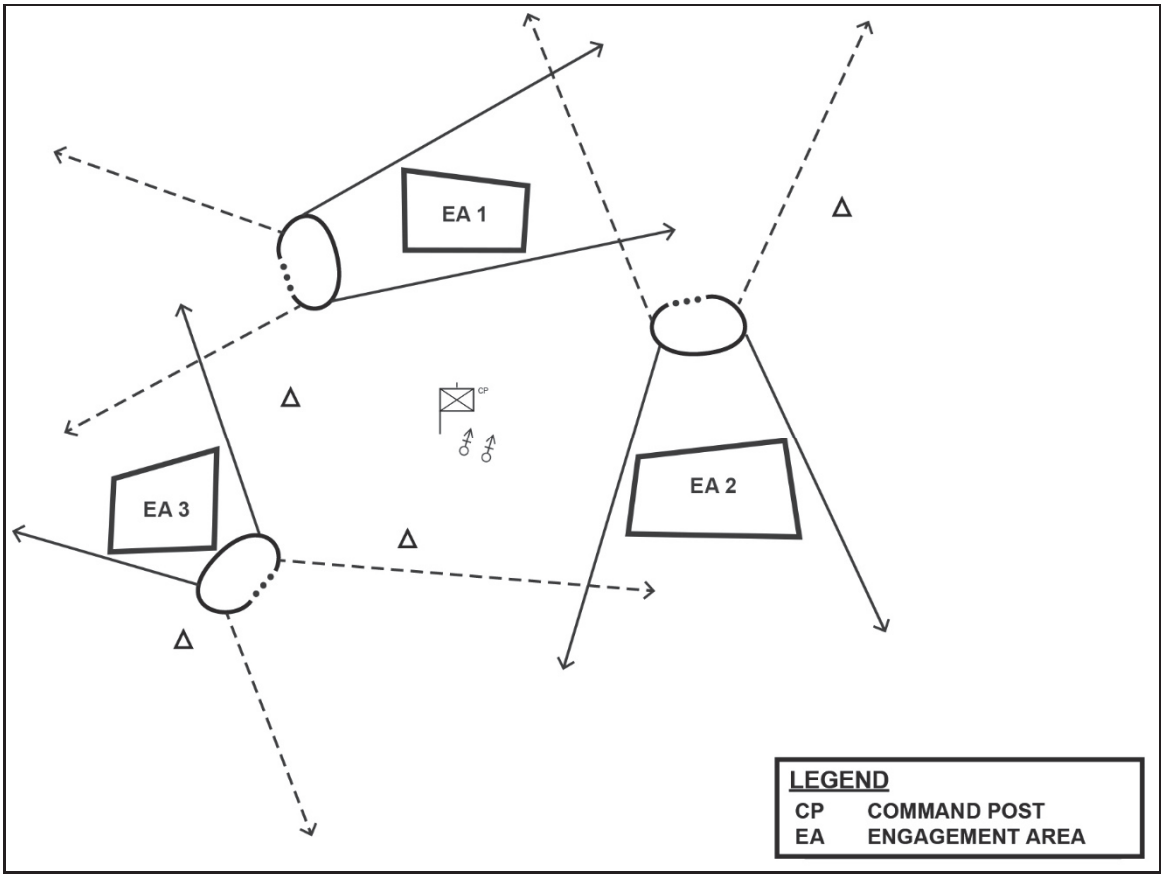


Figure 3-4. Y-shaped perimeter defense (primary and alternate engagement areas)

3-21. The final protective line (FPL) is where the commander intends to checked the enemy's assault by interlocking fires from all available weapons and obstacles (see appendix D). The commander may select to use an FPL to ensure an encroaching enemy that has gained ground, endangering the defender is eliminated before they are overrun.

3-22. There are numerous techniques and considerations the commander considers to ensure the effectiveness of the Y shaped, and modified Y shaped. Positioning machine guns closer to the interior of the Y (commonly referred to as the apex) to allow an FPL that covers the platoon front while firing away from the adjacent platoon. The commander can consider covering areas of the engagement area closest to the apex with mines, and obstacles at the company's disposal to reduce the need for direct fires in these areas. Identify those positions at most risk to friendly fires and prepare the fighting position to protect the Soldier from fires in this direction. The commander also considers detailed engagement criteria when utilizing this type of defense; allowing the enemy to penetrate deep into the EA and destroying them in much the same fashion as an ambush. The commander must consider that the loss of a platoon position may compromise the entire company's defense. It is also essential to be aware that if this type of defense is established on a prominent terrain feature the enemy has the ability to mass fires, and may be able to fix the company with direct fires, and finish the defender with massed indirect fires.

3-23. When the most likely enemy avenue of approach is identified with reasonable certainty, the company commander may adjust the normal platoon orientations to concentrate fires utilizing the modified Y-shaped perimeter defense (figure 3-5). Utilizing the modified Y entails accepting risk in another area of the perimeter. The company security plan should compensate for the assumed risk with heightened security, observation posts, reconnaissance and security patrols, unmanned ground sensors, and any other measures that might be available to the commander.

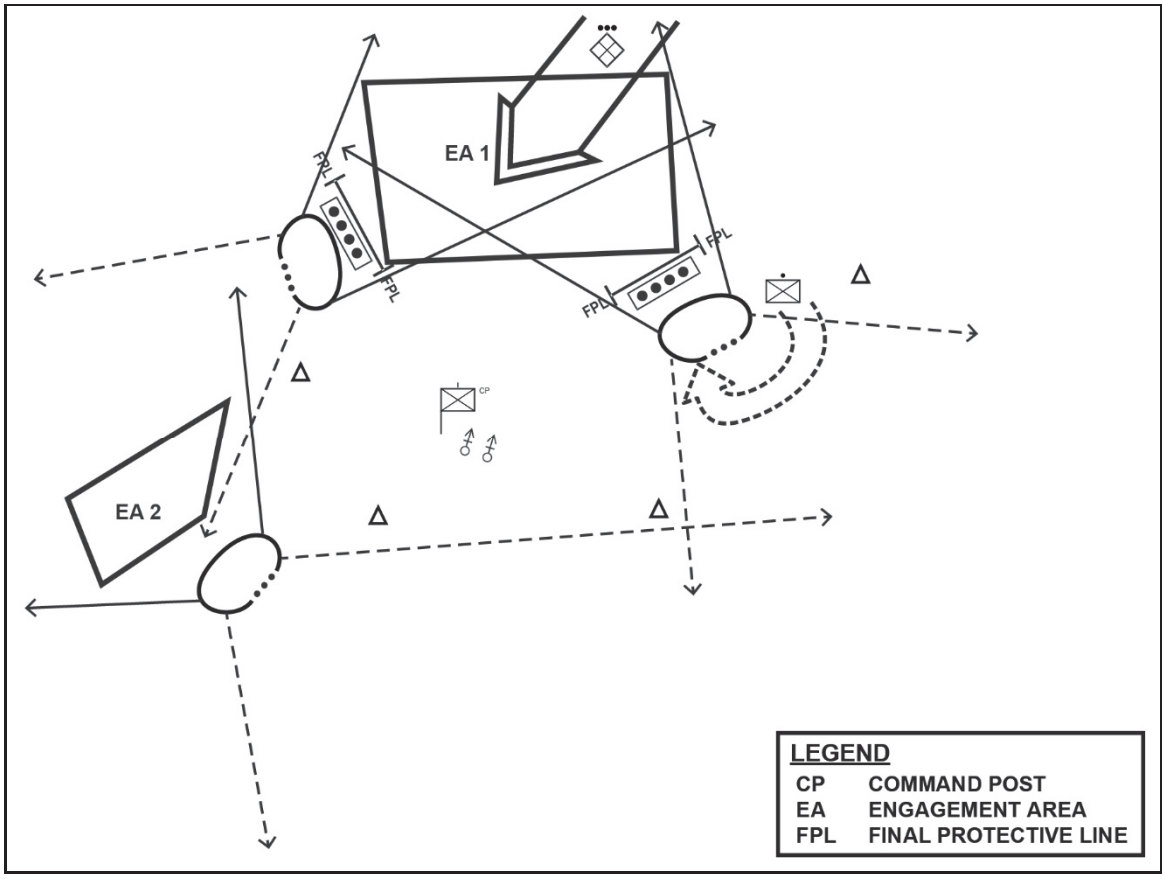


Figure 3-5. Modified Y-shaped perimeter defense (primary and alternate engagement areas)

Note. It is important to remember that all the fundamentals of a perimeter defense previously discussed apply to both the Y and modified Y-shaped perimeter defense.

3-24. When conducting any of the aforementioned perimeter defenses commander does not allow gaps between defensive fighting positions when the unit is in restrictive terrain. At night or during periods of limited visibility, the commander may position tactical units closer together to retain the advantages of mutual support. Defending during periods of limited visibility or nighttime conditions, subordinate unit leaders must coordinate the nature and extent of their mutual support. The ability of the attacker to create conditions of smoke—including thermal neutralizing smoke—and the smoke and dust associated with a battle also means that the defending commander must be able to rapidly modify the defense to one effective during limited visibility. In fact, the commander should assume limited visibility rather than full visibility during defensive planning. During limited visibility, the commander may—

- Move forces forward to more closely observe an obstacle.
- Use unmanned aircraft system resources to detect enemy movement.
- Emplace stay behind forces to report enemy activity.
- Plan white light and infrared illumination.

3-25. Observation posts, organic reconnaissance and surveillance (R&S) patrols, and battalion scouts provide early warnings of pending enemy actions to ensure the commander has time to react to any threat. The commander needs to have a clear understanding surrounding the employment of all elements outside the perimeter either in order to reduce the risk of fratricide. The commander may augment perimeter security with squad-sized or smaller observation posts and aerial surveillance forward of the perimeter, provided and controlled by units on the perimeter. Security forces are positioned to observe avenues of approach. R&S patrols cover areas that cannot be observed by stationary forces. Any security force operating outside the perimeter coordinates their passage of lines into and out of the perimeter with the appropriate perimeter units. The distance from the perimeter at which security elements operate is determined primarily by their mobility, availability of fire support, communications, and the location and mobility of the enemy.

3-26. Employment of organic and attached weapons in a perimeter defense are generally as prescribed for other defense operations. The commander uses engagement areas, target reference points, final protective fires (FPFs), and principal direction of fire control measures. Figure 3-6 illustrates three rifle platoons along the outer perimeter, company mortars, and headquarters within the inner perimeter. In this example, engagement areas are established where the commander intends to contain and destroy an enemy force with the massed effects of all available weapons and supporting systems. The commander designates engagement areas to cover each enemy avenue of approach into the perimeter. The commander determines the size and shape of the engagement area by the relatively unobstructed line-of-sight from the weapon systems in their firing positions and the maximum range of those weapons.

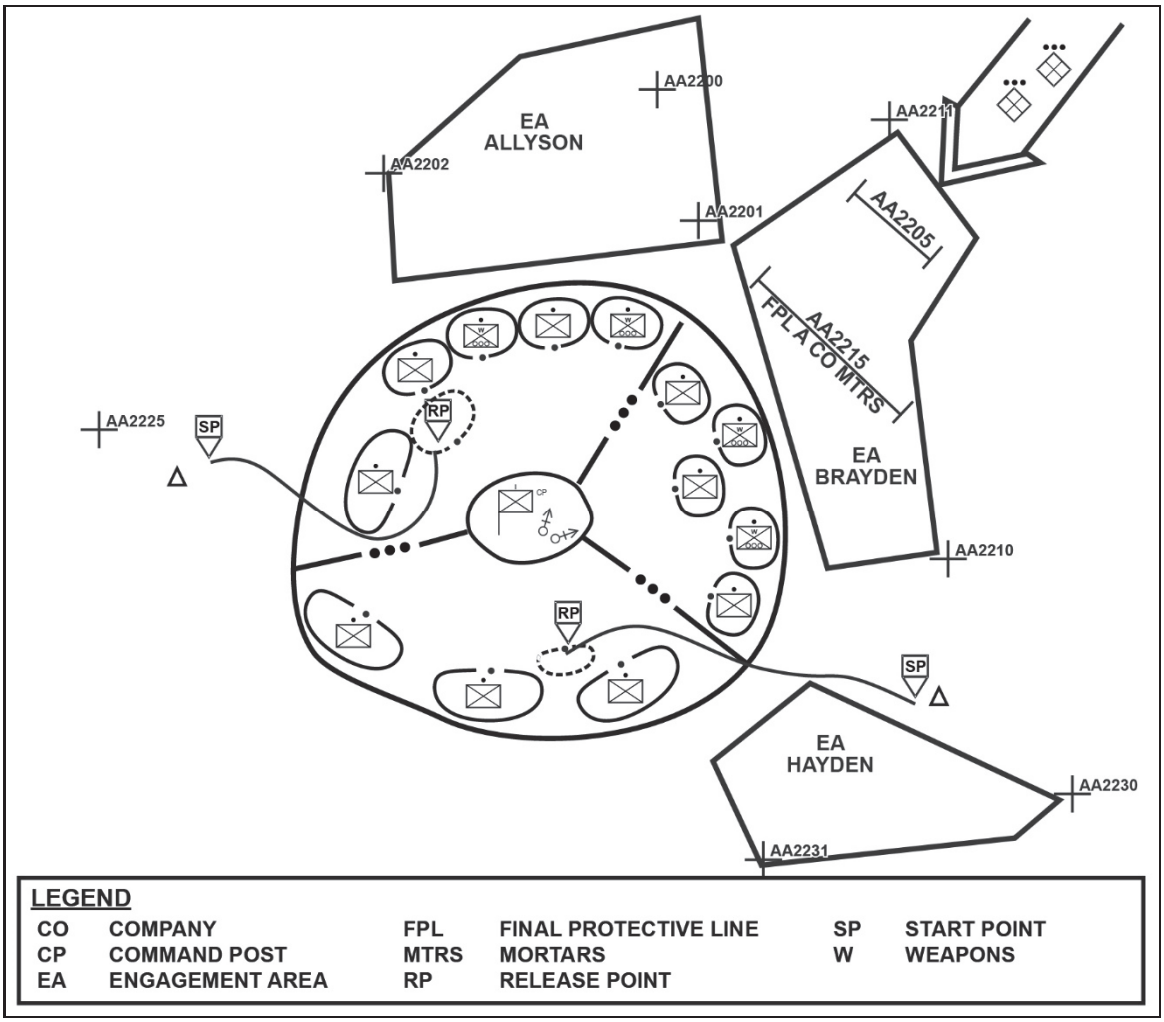


Figure 3-6. Perimeter defense (engagement area control measures)

3-27. Once EAs are determined, the commander arrays available forces and weapon systems in positions to concentrate overwhelming effects into these areas. The commander routinely subdivides an engagement area into smaller engagement areas for subordinates using one or more target reference points or by prominent terrain features. The commander assigns a *sector of fire*, that area assigned to an element, crew-served weapon, or an individual weapon within which it will engage targets as they appear in accordance with established engagement priorities (FM 3-90-1), to subordinates within each engagement area. Indirect fires engage the enemy as far forward of the perimeter as possible and may support the company from within or outside the perimeter. Available fires from outside the perimeter are coordinated and integrated into the overall defensive plan. Using fire support from outside the perimeter conserves ammunition from within the perimeter.

3-28. The commander positions the reserve if deemed advantageous to block the most dangerous avenue of approach and assigns supplementary positions to the reserve on other avenues that may become critical. Ideally, the reserve has the mobility necessary to react to enemy action in any portion of the perimeter. If attached Assault platoons and attached armor, initially occupying firing positions on the perimeter, may be tasked to reinforce other elements along the perimeter. If the perimeter is penetrated, the reserve blocks the penetration or counterattacks to reduce the penetration and restore the perimeter. After committing the reserve, the commander must reconstitute the reserve to meet other possible threats. This reconstitution force normally comes from an unengaged element in another portion of the perimeter. When an unengaged force is used to constitute a new reserve, sufficient forces must be retained in the vacated area to defend that portion of the perimeter.

3-29. Sustainment elements may support from within the perimeter or from another location, depending upon the mission and status of the company, type of transport assets available, weather, and terrain. When resupplied by air, availability of landing and drop zones protected from the enemy's observation and fire is a critical consideration in selecting and organizing the perimeter. Since aerial supply is vulnerable to weather and enemy fires, emphasis is placed on supply economy and protection of available stocks. Sustainment assets within the perimeter should locate in protected locations from which they can provide continuous support. These assets should come under the control of the company trains (see Appendix I). Company trains location and operations should not restrict or be restricted by maneuver forces, fire support assets, and the reserve.

REVERSE SLOPE DEFENSE

3-30. An alternative to defending on the forward slope of a hill or a ridge is to defend on a reverse slope. In such a defense, the Infantry rifle company deploys the majority of forces on terrain that is masked from enemy direct fire and ground observation by a topographical crest (hill or ridgeline). Although some subordinate elements and weapon systems might be positioned on the forward slope, the crest, or the counterslope (a forward slope of a hill to the rear of a reverse slope), most forces are positioned on the reverse slope. The goal of this defensive technique is to control the topographical crest direct, and indirect fire and to make the enemy commit forces against the forward slope of the defending company causing enemy forces to attack in an uncoordinated fashion across the exposed topographical crest. Firing from covered and concealed positions throughout the battle area, the defending unit maintains a distinct advantage over the exposed enemy forces and canalizes the enemy through unfamiliar terrain into planned engagement areas. (See figure 3-7 on page 3-12.)

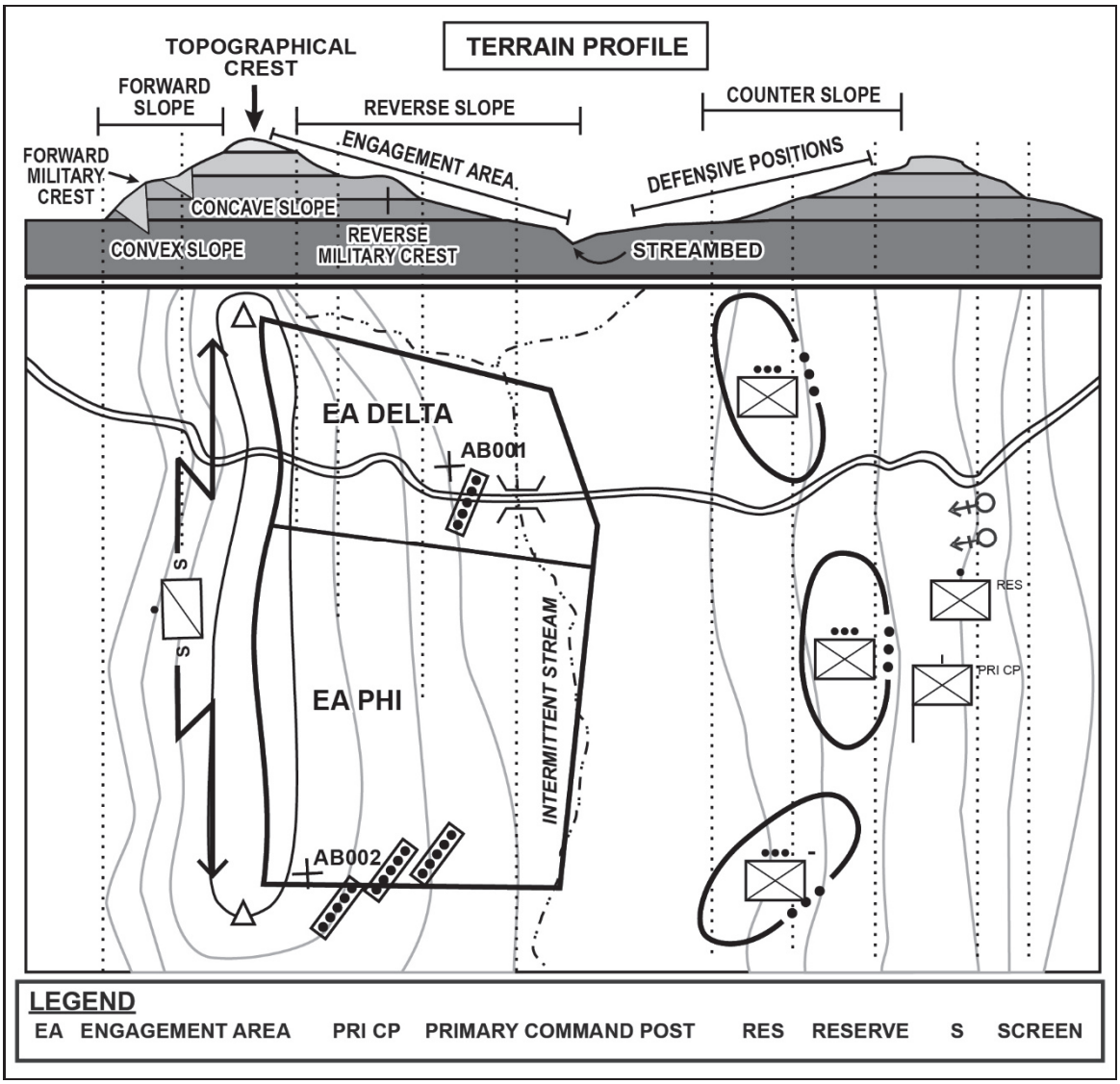


Figure 3-7. Company reverse slope defense (slope terminology)

3-31. The commander may position all or part of the defending company to employ a reverse-slope defense. This technique allows subordinate units to concentrate direct fires into a relatively small area while being protected from the enemy's direct observation and supporting fires. The defender is able to destroy the enemy that is isolated forward units through surprise and concentrated fires. The control of the forward slope is essential for success. Gaining control of the forward slope can be accomplished by using dominating terrain behind the defender or by using stay behind forces, such as scout and sniper teams, that can observe and call for fire on the attacker. A reverse-slope defense is generally conducted at battalion level and below within an area of operation that is conducive to the use of a reverse-slope defense. The commander may choose to conduct a reverse slope defense when—

- Enemy fire makes the forward slope untenable.
- Lack of cover and concealment on the forward slope makes it untenable.
- The forward slope has been lost or has not yet been gained.
- The forward slope is exposed to enemy direct fire weapons fired from beyond the effective range of the defender's weapons.
- Moving to the reverse slope removes the attacker's standoff advantage.
- The terrain on the reverse slope affords better fields of fire than the forward slope.

- The defender wants to avoid creating a dangerous salient (an outwardly projecting part of a line of defense).
- The commander is forced to assume a hasty defense while in contact with or near the enemy.

3-32. As this technique positions the bulk of the defense on the far side of any elevated terrain (a hill, ridge, or mountain) on the side opposite from the attacking force as pictured in figure 3-8 on page 3-14. In some instances the vegetation, or terrain may not allow for the bulk of forces to be positioned on the opposite hill. In this instance the commander utilizes the continued defilade caused by the intervisibility line of the terrain to prevent the enemy from observing, and employing indirect and direct fires on defensive forces but may also position forces on the counter-slope. The reverse slope's principal military significance lies in the fact that its position places it outside the reach of the enemy's direct observation and direct-fire weapons. The reverse slope also hinders both the attacker's ability to observe the defender's positions, and reducing the effectiveness of the attacker's long-range weapons (such as tanks and artillery). This technique may succeed in deceiving the enemy as to the true location and organization of friendly forces main defensive positions. Ideally, as the attacker advances and passes over the top of the hilltop or ridgeline, the attacker is engaged (ambushed) by defensive short-range fire from the company. EAs and obstacles are generally positioned on the reverse slope with the topographical crest normally marking the far edge of the EA. The defender dominates the topographical crest by fires to prevent the enemy from successfully engaging it. The forward edge of the position should be within small -arms range of the crest. The forward edge should be far enough from the crest that fields of fire allow the company time to place well-aimed fire on the enemy before they reach friendly positions.

3-33. To succeed, the commander prevents the attacker from conducting a detailed observation of the reverse-slope defense through the deployment of aggressive patrols (combat and reconnaissance) and security operations forward of the topographical crest. The company establishes observation posts and combat outposts on, or forward of the topographical crest. This allows long-range observation over the entire front, and indirect fire coverage of forward obstacles. Observation posts may vary in size and should include forward observers. During limited visibility, the numbers may increase to improve security. Depending upon specific missions, security forces forward of the topographical crest, conduct patrols [both combat and reconnaissance (to include surveillance)], and security operations to engage enemy reconnaissance and main body forces. Security forces position forward to stop or delay the enemy, disorganize the attack, and deceive the enemy as to the location of company’s main defensive positions. As security forces withdraw, stay behind forces or use unmanned aircraft systems to maintain observation, fire support, and security to the front. Once withdrawn, security force may either reinforce the reserve or move into a battle position for the main engagement. When Infantry forces from the weapons company are assigned to the rifle company they can provide mobility, optics, and long-range direct fire capabilities to the company’s defense.

3-34. When conducting a reverse slope defense it is important for the commander to consider emplace place over-watching elements forward of the topographic crest and on the flanks to protect the main defensive positions of the defending company. This is especially desirable when over-watching elements can observe and place fires on the crest and forward slope. Over-watching elements maintain observation and fires over the entire forward slope as long as possible to destroy enemy forces, thus preventing the enemy from massing for a final assault. In the main battle area on a counter slope (also known as the reverse forward slope), fires must cover the area immediately in front of the reverse slope positions to the topographical crest. The commander organizes defensive positions to permit fires on enemy approaches around and over the crest and on the forward slopes of adjacent terrain features, when capable. These positions may come in the form of primary, alternate, subsequent, or supplementary positions. The company’s fire support plan goals are to; destroy, disrupt, and attrit enemy forces on the forward slope, prevents the enemy’s occupation and use of the topographical crest. Key factors affecting the organization of these areas are mutually supporting covered and concealed positions, numerous existing and reinforcing obstacles, integrated with the ability to bring devastating fires from all available weapons onto the crest, and a counterattack force. The counterattack plan specifies measures necessary to clear the crest or regain it from the enemy control. Depending on the terrain, the most desirable location for the reserve may be on the counter slope or the reverse military crest of the counter slope.

3-35. Another variation available to the commander, when line of sight restrictions exist to a unit’s direct front, is to organize a system of reverse slope defenses firing to the oblique defilade, each covering the other. (See figure 3-8 on page 3-14.) In this example, battalion main battle area positions were unable to engage

targets directly to their front, but could cover each other using oblique defilade. Line of sight restrictions can be obstacles, terrain, and vegetation driven. This system of reverse slope defenses protects defenders from enemy frontal and flanking fires and from fires coming from above the main defensive area.

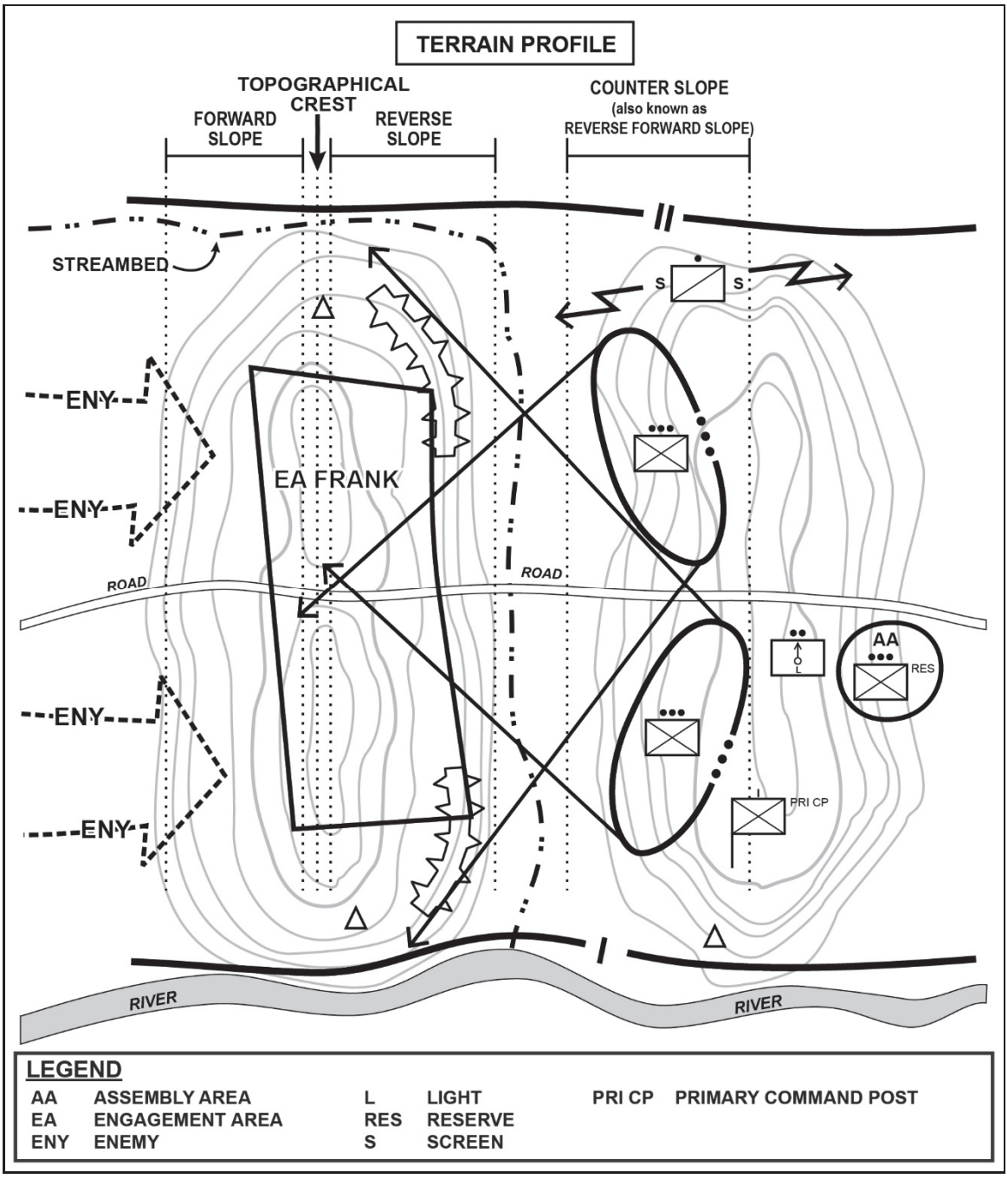


Figure 3-8. Company reverse slope defense (oblique defilade)

3-36. The defending commander's major advantage over the attacker, as in any defense, is the ability to select the ground on which the battle takes place. The commander positions subordinate forces in mutually supporting positions in-depth to absorb enemy penetrations or canalize them into prepared engagement areas, defeating the enemy's attack by concentrating the effects of overwhelming combat power. Defending forces have the advantage of preparing the terrain by reinforcing natural obstacles, fortifying positions, and rehearsing operations. First preparing the ground to force the piecemeal commitment of enemy forces and

their subsequent defeat in detail. Then preparing the ground to force the enemy to fight where the enemy does not want to fight, such as in open areas dominated by terrain that offers adequate cover and concealment for the occupying defending force. Advantages specific to a reverse slope defense include—

- Masked enemy ground observation of the main battle area.
- Degraded observation capabilities of most surveillance devices and radar.
- Ineffective enemy direct fire on main defensive positions without coming within range of the defender.
- Enemy exposure when the enemy masses the effects of direct fire weapons.
- Enemy's inability to identify obstacles on the reverse slope.
- Enemy's inability to determine the strength and location of main defensive positions.
- Enemy's inability to observe fires in main battle area.
- Tactical surprise over the enemy gained by the defender.
- Freedom of movement within the battle area due to the lack of enemy ground observation.
- Cover and concealment (topographical crest) to enable preparation of the defense.

3-37. As the reverse slope defense pursues offensive opportunities through surprise and deceptive actions. Once a reverse slope defense is employed successfully to halt an enemy attack, it may have limited further value because the effect of surprise will be difficult to attain. Disadvantages to a reverse slope defense include—

- Observation of the enemy may be limited, and the defender may be unable to cover obstacles on the forward slope by direct fire.
- The topographical crest may limit the range of important direct-fire weapons. These weapons may have to locate separately from the company's main battle area to exploit their range.
- The enemy holds the high ground in an attack and attacks downhill; any counterattack by the defending force is uphill.
- Because the reverse military crest must be controlled, the effectiveness of the reverse slope defense is reduced during limited visibility.

SITUATIONS UNIQUE TO THE CONDUCT OF DEFENSIVE TASKS

3-38. During the conduct of defensive tasks, situations requiring denial operations, defending encircled, and stay-behind operations have their own unique planning, preparation, and execution considerations. In the defense, denial operations conducted to deprive the enemy of some or all of the short-term benefits of capturing an area may be required. In other defensive situations, the Infantry Battalion may become encircled and a subordinate company to the battalion may be directed to conduct operations as a stay behind force. These actions may be planned or forced by the enemy. In addition to the actions addressed above, this section discusses linkup between friendly ground forces specific to these actions and selected forms of maneuver specific to the offense (See ATP 3-21.20 for more information regarding situations unique to the conduct of defensive task that include; denial operations, defending encircled, breakout from encirclement, and stay behind operations).

DENIAL OPERATIONS

3-39. *Denial operations* are actions to hinder or deny the enemy the use of space, personnel, supplies, or facilities (FM 3-90-1). This may include destroying, removing, and contaminating those supplies and facilities or erecting obstacles. The commander designs denial operations to deprive the enemy of some or all of the short-term benefits of capturing an area. Denial operations differ from countermobility operations that use or enhance the effects of natural and man-made obstacles to deny the enemy freedom of movement and maneuver. In denial operations, the definition of a unit's military equipment and supplies could expand to include military installations and any civilian equipment and supplies used by the friendly force. Under the law of war, the destruction of civilian property is only permitted where required by immediate military necessity (See ATP 3-21.20 for more information regarding denial operations).

Note. As stated in chapter 2, encirclement operations can be offensive or defensive in nature. Offensive encirclement operations are designed to isolate an enemy force. Defensive encirclement operations, referenced below, are the result of a unit's isolation by the actions of an enemy force. Isolation can occur due to the chaotic, intense, and highly destructive nature of combat operations. Isolation can also occur when operations extend across large areas containing relatively few units to maneuver against one another or when units operate in restrictive terrain. (Refer to ATP 3-21.20 and FM 3-90-2 for a detail discussion of offensive and defensive encirclement operations.)

DEFENDING ENCIRCLED

3-40. An element when encircled can continue to defend, conduct a breakout from encirclement, exfiltrate toward other friendly forces, or attack deeper into enemy-controlled territory. When defending encircled, the defender normally establishes a perimeter on restrictive terrain, ideally controlling a choke point or other key terrain. The battalion's form of maneuver once becoming encircled depends on the commander's intent and the mission variables of METT-TC. A company or platoon may find itself encircled as a result of offensive actions, as a detachment left in contact (DLIC), when defending a strong point, when occupying a combat outpost, or when defending an isolated defensive position.

3-41. During encirclement, the commander (or the senior commander or leader within the encircled force) assumes command over all encircled forces and takes immediate action to protect them. The commander reestablishes unity of command and reorganizes any fragmented units and places Soldiers separated from their parent units under the control of other units. In most cases, the encircled element establishes a perimeter defense when faced with encirclement by an enemy force. The commander maximizes the capabilities of available forces establishing mutually supporting positions forward or in-depth, depending on the terrain, within and around the perimeter along principal enemy avenues of approach. Units occupy the best available defensible terrain though it may be necessary to attack to seize key or decisive terrain so that it is incorporated into the perimeter defense. Once the commander or senior leader assigns defensive area of operations and battle positions to subordinates, basic preparations specific to priorities of work are similar to any perimeter defense though situation dependent to the actual assets available to the encircled force. (Section I of this chapter discusses the conduct of a perimeter defense. See ATP 3-21.20 for more information regarding defending encircled.

BREAKOUT FROM AN ENCIRCLEMENT

3-42. A *breakout* is an operation conducted by an encircled force to regain freedom of movement or contact with friendly units. It differs from other attacks only in that a simultaneous defense in other areas of the perimeter must be maintained (ADRP 3-90). A breakout is both an offensive and a defensive mission. An encircled force attempts to conduct breakout operations normally when one of the following four conditions exist:

- The commander directs the breakout or the breakout falls within the intent of a higher commander.
- The encircled force does not have sufficient relative combat power to defend itself against enemy forces attempting to reduce the encirclement.
- The encircled force does not have adequate terrain available to conduct its defense.
- The encircled force cannot sustain itself long enough to be relieved by forces outside the encirclement.

3-43. Prior to encirclement, when possible, the commander reorganizes the encircled force for breakout based on available resources. The commander then initiates a breakout attack as quickly as possible prior to or after the enemy encircles the force. Once the commander determines the scheme of maneuver for the breakout attack, it organizes to give each force enough combat power to accomplish its mission. The commander typically organizes the encircled force to conduct rupture, follow-and-assume, main body, and rear guard missions. The rifle company, weapons company, and/or other subordinate element within the battalion performs one or more of these missions. When sufficient forces exist in the encirclement, the commander may organize a reserve and a separate diversionary force. When a company performs a breakout

from an encirclement, platoons and/or subordinate elements within the company generally organize into a rupture force, main body force, and rear guard force.

3-44. When planning for the breakout a rapid, simple, and well-executed plan is usually best. The unit may not have a second chance. The commander's plan takes advantage of limited visibility, difficult terrain, and surprise and normally does not attack in the obvious direction. Combat power will never be stronger and the enemy's combat power will not be weaker as the enemy retains the ability to resupply and reinforce. Regardless of whether the enemy plans to contain the force or annihilate the encircled force, it is imperative that the company take action as quickly as possible. During execution, the commander exploits darkness and limited visibility, taking all possible precautions to deceive the enemy about the location of the rupture attack and the positioning of subordinate forces. (See ATP 3-21.20 for more information regarding breakout from an encirclement.)

Exfiltrate Toward Other Friendly Forces

3-45. When the possibility of massing sufficient combat power to create a rupture during breakout seems remote or if another force cannot relieve a friendly unit, an exfiltration during periods of reduced visibility and in close terrain may offer the greatest probability of success. An *exfiltration* is the removal of personnel or units from areas under enemy control by stealth, deception, surprise, or clandestine means. See also special operations; unconventional warfare (JP 3-50).

Note. *Exfiltrate* is a tactical mission task where a commander removes Soldiers or units from areas under enemy control by stealth, deception, surprise, or clandestine means (FM 3-90-1). Friendly forces exfiltrate when enemy forces have encircled them and other friendly forces cannot relieve them. In addition to being encircled by enemy forces, units returning from a raid, an infiltration, or a patrol behind enemy lines can also conduct an exfiltration. (Refer to ATP 3-21.20 and FM 3-90-1 for additional information.)

Attack Deeper Into Enemy-Controlled Territory

3-46. When the possibility of conducting a breakout or exfiltration from encirclement seems remote, attacking deeper into enemy territory may be a COA that the enemy is not likely to expect. The previously encircled force may attack deeper to seize key terrain, disrupt the enemy's offensive action, locate to more favorable defensive terrain, or provide an opportunity for linkup from another direction or extraction point. Attacking deeper is only feasible if the company can sustain itself while isolated, or when that sustainment can come from aerial resupply and enemy supply stocks. (Refer to ATP 3-21.20 for additional information.)

STAY-BEHIND OPERATIONS

3-47. A *stay-behind operation* is an operation in which the commander leaves a unit in position to conduct a specified mission while the remainder of the forces withdraw or retire from an area (FM 3-90-1). A stay-behind force may also result from enemy actions that bypass friendly forces. The main purpose of a stay-behind force is to destroy, disrupt, and deceive the enemy. A stay-behind force is a high-risk mission because of the danger that it will be located, encircled, and destroyed by the enemy. When it is unlikely that an encircled company and/or subordinate element will be able to breakout or exfiltrate the entire force, part of the force may stay behind to create a diversion or perform a DLIC mission.

3-48. The Infantry rifle company is especially suited to conduct stay-behind missions in complex terrain. The company takes advantage of such terrain, reinforced by the use of situational obstacles to enhance the effects of natural obstacles to deny enemy freedom of movement and maneuver. Restricted and severely restricted terrain offers cover for the movement of company elements and favors using ambushes against the enemy. Elements of the company are best suited to exfiltrate by means of dismounted march or air movement once the stay-behind operation concludes.

3-49. As part of a defense, a company conducting a stay-behind operation may occupy hide positions well forward of the forward edge of the battle area. As the enemy passes, the elements of the company attack the enemy through a series of raids and ambushes. The intent of these attacks may be to attrit the enemy or to

cause enemy follow-on forces to be more cautious and to slow down to clear possible attack and ambush sites. An Infantry force can be inserted via infiltration, air assault, or parachute; it can also be a bypassed force. Sustaining (see appendix I) the force(s) can be in the form of caches or aerial resupply. (Refer to ATP 3-21.20 for additional information.)

RELIEF IN PLACE

3-50. A *relief in place* is an operation in which, by direction of higher authority, all or part of a unit is replaced in an area by the incoming unit and the responsibilities of the replaced elements for the mission and the assigned zone of operations (Army uses the term, area of operations) are transferred to the incoming unit (JP 3-07.3). Normally, the Infantry rifle company conducts a relief in place as part of a larger operation, primarily to maintain the combat effectiveness of committed forces. The battalion or higher headquarters directs when and where to conduct the relief and establishes the appropriate control measures. Normally, during the conduct of combat operations, the unit relieved is defending. However, a relief in place may set the stage for resuming offensive operations or serve to free the relieved unit for other tasks.

General Considerations for a Relief in Place

3-51. Upon receipt of the order to conduct the relief, relief commanders establish liaison personnel in order to exchange information pertinent to the relief operation. For example, relieving platoon leaders partnered with the relieved platoon leader when possible. Commanders emphasize communications, intelligence handover, and transfer of command. If possible, the incoming company command post collocates with the main command post of the company in positon to facilitate continuous information exchanges relative to the occupation plan, fire support plan, and intelligence updates that include past, present, and probable enemy activities.

3-52. Face-to-face coordination reduces any potential misunderstandings related to relief preparation or the forthcoming operations. The relieving unit can establish advance parties to conduct detailed face-to-face coordination and preparations for the operation, down to the platoon level. Depending on the situation, advance parties infiltrate forward to avoid detection. An advance party normally includes the echelon's tactical command post, which co-locates with the main command post of the unit being relieved.

3-53. Depending on the amount of planning and preparations associated with the relief in place, a relief is characterized as either a deliberate operation or hasty operation. The major differences are the depth and detail of planning and, potentially, the execution time. Detailed planning generally facilitates shorter execution time by determining exactly what the commander believes needs to be done and the resources needed to accomplish the mission. Deliberate planning allows the commander and staff to identify, develop, and coordinate solutions to most potential problems before they occur, and to ensure the availability of resources when, and where needed.

3-54. When either force gains direct fire contact with an enemy force, the force immediately notifies the other unit and the higher headquarters. When responsibility for the area of operation has not passed, the relieving unit becomes under the operational control of the force not yet relieved. The relieved unit becomes operational control to the relieving unit when the responsibility for the area of operation has passed to the relieving unit.

3-55. Responsibility for the area transfers, as directed by the senior common commander, normally when the incoming unit has a majority of the fighting force in place and all mission command systems are operating. Units involved in a relief in place should be of similar type—such as mounted or dismounted—and task organized to help maintain operations security. The relieving unit usually assumes as closely as possible the same task organization as the unit being relieved, and assigns responsibilities and deploys in a configuration similar to the relieved unit. As support elements of the unit being relieved displace, they leave the relieving unit supply stocks according to previously coordinated arrangements. (Refer to ATP 3-21.20 for additional information.)

Planning a Relief in Place

3-56. Once ordered to conduct a relief in place, the commander of the relieving unit contacts the commander of the unit to be relieved. The collocation of unit and subordinate command posts, when conditions allow,

helps achieve the level of coordination required. As a minimum, the relieving unit establishes communications and liaison with the unit being relieved. The WARNORD, from the common higher headquarters, designates the time of relief, relieving and relieved units, and sequence of events. The WARNORD specifies the future missions of the relieved force, route priorities, any restrictions on advance parties, any extraordinary security measures, and the time and place for issuing the complete order.

Increased Burden on Mission Command

3-57. The meeting of friendly ground forces, inherent in a relief, places an increased burden on mission command. The consequences of mutual interference between relief forces and the complexity associated with such areas as traffic control, fire support coordination, and obstacle plans, and the relief in place of mission command systems require close coordination between all headquarters involved.

3-58. In a deliberate relief, units exchange plans and liaison personnel, conduct briefings, perform detailed reconnaissance, and publish orders with detailed instructions. In a hasty relief, the commander abbreviates the planning process and controls the execution using oral and fragmentary orders. The relieving unit receives current intelligence, operations, and sustainment information from the battalion being relieved, as well as from IBCT or common higher headquarters, adjacent units, and subordinate elements.

3-59. Commanders establish early liaison between the stationary and the relieving subordinate forces and identify measures to control the relief. Control measures associated with a relief in place are generally restrictive to prevent fratricide. As a minimum, these control measures include the area of operations with its associated boundaries, battle positions, contact points, start points, routes, release points, assembly areas, fire support coordination measures, and direct fire control measures, such as target reference points and engagement areas.

3-60. Once received, the relieving unit verifies the obstacle records of the unit being relieved. Handover of obstacles is a complex procedure. Initially, the engineer priority is on mobility to get the relieving unit into the area of operation. Mobility focuses on those routes and lanes leading into the area of operation. Once the relief occurs, priority of the mobility and survivability effort transitions to support the relieving unit's continuing mission. The commander may require supporting engineers to assist with survivability tasks to support the relieving force.

Tactical Vulnerability

3-61. A relief in place, by nature, is a tactically vulnerable operation. During initial planning care must be taken, and plans must address, security operations (screen and guard missions) that provide sufficient security to warn friendly forces in case the enemy tries to take advantage of the relief. The battalion and subordinate companies involved must concentrate on security while preparing for and executing the operation. The intent of the operation is to complete the relief without discovery by the enemy. Consequently, commanders involved in the relief typically plan reliefs for execution during periods of reduced visibility. To enhance security, commanders' emphasis face-to-face coordination, impose light and noise discipline and electromagnetic emission control measures, such as radio silence or radio-listening silence.

Mask the Relief

3-62. While the battalion and subordinate companies involved plan, prepare, and execute the relief in place, the IBCT or common higher headquarters and other units continue actions to mask the relief. These include using deception (demonstrations and feints), concealment, obscuration, radio silence, and harassing and interdiction fires. The IBCT or common higher headquarters executes operations to attack and disrupt the enemy's uncommitted and reserve forces during the relief. The intent is to fix or distract the enemy, so that the enemy does not detect or interfere with the relief.

3-63. Deception, in regards to the relief to achieve surprise, leads the enemy into inaccurate perceptions. Deception of the enemy requires a detailed knowledge of friendly vulnerabilities. A counterintelligence assessment of enemy collective capabilities directed against the friendly forces involved in the relief can provide that detailed knowledge. The commander secures success through deceptive techniques and procedures and cyber electromagnetic activities to inaccurately portray friendly forces involved in the relief,

mislead enemy commanders, and deny those same enemy commanders the ability to use cyberspace and the electromagnetic spectrum against the relief.

3-64. Concealment from the enemy is a primary planning concern for relief commanders to hide necessary friendly force concentrations. Dispersion (laterally and in-depth) and multiple routes at company and subordinate levels decrease the possibility of enemy units massing on friendly elements as they organize and position prior to executing the relief. The enemy should perceive only one command structure during the relief operation—that of the battalion and companies being relieved—until the operation is complete.

Relief Techniques

3-65. The commander directing the relief, in coordination with relief commanders and staffs during planning, determine the most appropriate method for executing the relief by using one of three techniques. The three techniques for conducting a relief in place are sequential, simultaneous, or staggered.

Sequential

3-66. A sequential relief occurs when each element in the relieved unit is relieved in succession, from right to left or left to right, depending on how it is deployed. This technique is the most deliberate and time-consuming; however, it minimizes confusion and maintains the best mission command and readiness posture. A sequential relief involves sequentially relieving maneuver companies of the battalion one at a time. Separate routes to the rear of the relieved companies' locations are planned for each maneuver company and placed on the operations overlay. Routes are labeled sequentially and correspond to the order in which the company executes them during the relief. When the lead company reaches its release point, platoons are guided into the positions they are occupying. Crews exchange range card and fire support information. Once the relief occurs, relieved units move to the rear to occupy their next location. When the lead company is in position, the next company moves along its designated route(s) to relieve its counterpart: thereby repeating the relief process. This process repeats until each company has been relieved. When transfer of supplies from the relieved unit is directed, battalion S-4s coordinate a transfer point to execute the exchange.

Simultaneous

3-67. A simultaneous relief occurs when all elements are relieved at the same time. Simultaneous relief takes the least time to execute, but is more difficult to control and more easily detected by the enemy. A simultaneous relief involves simultaneously relieving maneuver companies of the battalion at the same time. Separate routes to the rear of the relieved companies' locations are planned and labeled for each maneuver company and placed on the operations overlay. When relieving companies reach their release points, platoons are guided to the positions they are occupying. Crews exchange range card and fire support information, and the relieved unit then moves to the rear to its next location. When transfer of supplies from the relieved unit is directed, battalion S-4s coordinate a transfer point to execute the exchange.

Staggered

3-68. A staggered relief occurs when the commander relieves each element in a sequence determined by the tactical situation, not its geographical orientation. As with a sequential relief, staggered reliefs can occur over a significant amount of time. Separate routes to the rear of the relieved companies' locations are planned and labeled for each maneuver company and placed on the operations overlay. When relieving companies reach their release points, platoons are guided to the positions they are occupying. Information exchanges and transfers of supplies are the same as in the other two techniques. Once the relief occurs, relieved units move to the rear to occupy their next location. When the first company to move is in position, the next company is identified to move along its designated route(s) to relieve its counterpart: thereby repeating the relief process. This process repeats until each company has been relieved.

Preparation for a Relief in Place

3-69. The complexity of a relief in place requires extensive liaison and reconnaissance during preparation. Exchanging information about the enemy and civilian situations, friendly dispositions, terrain analysis, and fire support and obstacle plans, coupled with reconnaissance, helps relief commanders to prepare for the

mission. Liaison by the IBCT commander, or common higher headquarters commander, enable leaders' reconnaissance of the area of operation they will assume. Leaders' reconnaissance includes the lowest-echelon leader allowed by the tactical situation and required by the situation. The reconnaissance focuses on the route into the positions the unit is to occupy, the positions themselves, the current disposition of the unit being relieved, and any obstacles that could affect the movement.

3-70. The commander conceals the relief from the enemy for as long as possible. At the first indication that relief is necessary, which is usually the WARNORD for the relieving unit, both the relieved unit and the relieving unit review their operations security plans and procedures. Commanders may use military deception measures during preparation activities to maintain secrecy. To maintain security during preparation, the relieving unit makes maximum use of the relieved unit's radio nets and operators. Both units involved in the relief operate on the command frequencies and encryption variables of the combat net radios of the relieved unit at all levels. The relieved unit's signal officer is in charge of communications throughout the relief operation.

3-71. Relief units conduct rehearsals to discover any weaknesses in the plan and familiarize all elements of both forces with the plan. Finding time for rehearsals requires commanders and staffs to focus on time management. R&S efforts before troop movement allow commanders to make necessary changes to the plan prior to rehearsals. During troop movement, reconnaissance elements of the relieving unit precede its movement with a route reconnaissance to intermediate assemble areas. Reconnaissance elements then conduct reconnaissance of the routes leading from the assembly areas to the positions of the unit being relieved.

3-72. Relief units exchange as much information as possible during rehearsals or at least prior to troop movement when combined relief unit rehearsals are not possible. Units involved share information including communications security procedures and graphic overlays consisting of—

- Primary and alternate linkup points.
- Checkpoint and waypoint information.
- Unit disposition and activity (friendly and enemy).
- Locations and types of obstacles.
- Fire control measures including restrictive fire lines and no-fire areas.

3-73. On occasion, when units involved in a relief in place are not of similar type, such as an Infantry company relieved by a mechanized Infantry company, the relieving unit still assumes as closely as possible the same task organization as the unit being relieved and assigns responsibilities and deploys in a configuration similar to the relieved unit. Under these conditions, commanders allocate time to construct individual vehicle fighting positions.

Executing a Relief in Place

3-74. When executing a relief in place, the linkup method chosen prior to the intermediate assembly area (when used) usually involves conducting linkup at a predetermined contact point(s). During movement to the contact point(s), the commander and subordinate leaders monitor the progress and execution of the linkup to ensure that established positive control measures are followed or adjusted as required. Contact points must be readily recognizable and posted on overlays. When possible, the moving force should halt short of the contact point and send a smaller force (patrol) forward to pinpoint the contact point. After the patrol makes contact with the force in position at the contact point, the patrol may leave a portion of patrol at the contact point then move back with the remaining members of the patrol to guide the subordinate unit back to conduct linkup. Following linkup the relieving force is guided to an assemble area, or depending on the situation, guided directly into relief positon(s). (See figure 3-9 on page 3-22.)

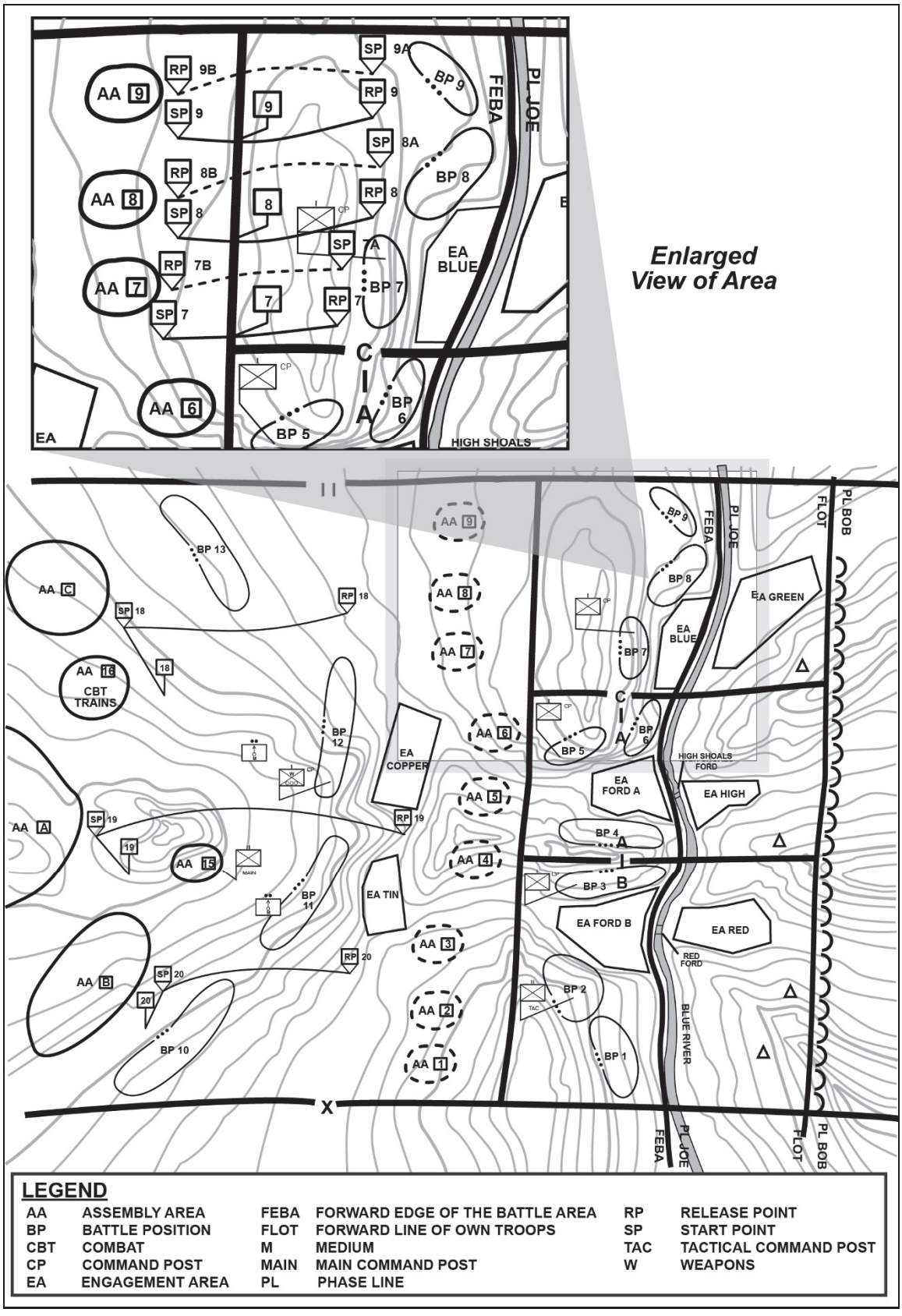


Figure 3-9. Battalion relief in place (companies occupy same positions)

3-75. In situations where the commander desires to conceal the relief from the enemy, such as during a sequential or staggered relief, the relieving unit may occupy the same positions as the unit it relieves. Alternatively, the relieving unit may establish more favorable positions in the vicinity of the relieved unit's location. Occupying different positions makes early discovery by the enemy more likely. Any increase in activity in forward positions can reveal the relief to the enemy. During the relief, counterreconnaissance actives attempt to counter detection by the enemy while information collection systems attempt to detect if the enemy can discover the relief before its completion.

3-76. In a simultaneous relief, the relieving unit begins moving from its current location to assembly area (when used) in the area of operation of the force being relieved. Once the relief begins, all elements involved execute the relief as quickly as possible. Both forces are vulnerable to enemy attack because of the concentration, movement, and intermingling of forces in a simultaneous relief. Any unnecessary delay during execution provides the enemy additional time to acquire and engage the forces involved. Relief forces in the area of operation come under the operational control of the relieving unit commander at the time or triggering event previously established by the plan, for the operation.

3-77. As the first relieving element arrives from the assembly area (when used) to assume the position, it establishes a screen forward of the relieved unit's positions as the tactical situation permits. The remainder of the relieving unit moves forward to positions behind the unit being relieved. The relieving unit may use the relieved unit's alternate and supplementary defensive positions to take advantage of any previous defensive preparations. At the previously established time or event, passage of command takes place. At that point, if possible, the commander of the relieving unit informs all units involved in the relief of the passage of command.

3-78. As the relieved unit continues to defend, the relieving unit's advance parties coordinate procedures for the rearward passage of the relieved unit. On order, the relieved unit begins withdrawing through the relieving unit and moves to assembly areas. Crew-served weapons of subordinate companies are usually the last elements relieved after exchanging range cards. The relieving unit replaces them on a one-for-one basis to the maximum extent possible to maintain the illusion of routine activity. The relieved unit's supporting and sustainment assets assist both the relieved unit and the relieving unit during this period.

3-79. A relief does not normally require the battalion's fire support assets to relieve weapon system for weapon system, unless the terrain limits the number of firing positions available. Generally, the relieved battalion's fire support assets remain in place until all other relieved elements displace and are available to reinforce the fires of the relieving battalion in case the enemy tries to interfere. If the purpose of the relief is to continue the attack, the fire support assets of both forces generally remains in place to support the subsequent operation.

Note. Relief in place during the conduct of operations centering on the stability element of decisive action involve many of the planning, preparation, and execution considerations mentioned above. Time is not normally such an important factor and most reliefs in place or transfers of authority in these types of operations are deliberate and may occur over an extensive time-period.

LINKUP

3-80. A linkup is a meeting of friendly ground forces, which occurs in a variety of circumstances. Linkup operations happen when an encircled battalion or subordinate company breaks out (breakout attack, see paragraph 3-44 on page 3-17) to rejoin friendly forces or exfiltrates (see paragraph 3-46 on page 3-17) towards friendly forces, or when a force comes to the relief of an encircled element. During the conduct of defensive and offensive tasks, linkups happen when forces conduct forward or rearward passage of lines or battle handover. During the conduct of offensive tasks linkup operations result from the linkup of two encircling arms conducting a double envelopment, when converging maneuver forces meet to complete the encirclement of an enemy force, or when an advancing force reaches an objective area previously seized by an Airborne or air assault. During infiltration (see paragraph 2-15 on page 2-7 for information on infiltration), through or into an area occupied by enemy forces, attacking forces conduct linkup when two infiltrating elements in the same or different infiltration lanes or in an area of operation are scheduled to meet to consolidate before proceeding on with their missions.

General Considerations for a Linkup

3-81. The key to a successful linkup is the commander's integration and synchronization of one of two linkup methods. The preferred method is when the moving force has an assigned limit of advance near the other force and conducts the linkup at a predetermined contact point or points to coordinate further operations. The commander uses the other method during highly fluid operations when the enemy force escapes from a potential encirclement, or when one of the linkup forces is at risk and requires immediate reinforcement. In this method, the moving force continues to move and conduct long-range recognition via radio or other measures, stopping only when it makes physical contact with the other force.

3-82. When the company commander, or higher commander, directs a linkup operation, the commander establishes minimum control measures. The commander assigns each subordinate force conducting the linkup an area of operation defined by lateral boundaries and a restrictive fire line that also acts as a limit of advance to ensure positive control and reduce the risk of fratricide. The commander transmits these and other restrictive fire support coordination measures to linkup forces. These restrictive fire support coordination measures are subsequently adjusted as require and overlays are updated as one or both forces moves to linkup. This process continues until a single restricted fire line is established between the forces. Usually, this is the point on the ground where the two forces plan to establish contact. Both forces may be moving toward each other, or one may be stationary. Whenever possible, joining forces exchange as much information as possible before starting an operation. The headquarters ordering the linkup establishes—

- A common operational picture using available mission command systems, such as blue force tracker.
- Command relationship and responsibilities of each force before, during, and after linkup.
- Coordination of fire support before, during, and after linkup, including control measures.
- Linkup method.
- Recognition signals and communication procedures, including pyrotechnics, armbands, vehicle markings, gun-tube orientation, panels, colored smoke, lights, and challenge and passwords.
- Operations to conduct following linkup.

3-83. In addition to the minimum control measures addressed in paragraph 3-82 above, the headquarters ordering the linkup can establish no-fire areas around one or both forces and establish a coordinated fire line beyond the area where the forces linkup. The commander establishes a no-fire area to ensure that uncleared air-delivered munitions or indirect fires do not cross either the restrictive fire line or a boundary and impact friendly forces. The establishment of a coordinated fire line allows available joint fires to expeditiously attack enemy targets approaching the area where the linkup is to occur.

Note. A restrictive fire support coordination measure prevents fires into or beyond the control measure without detailed coordination. The primary purpose of restrictive measures is to provide safeguards for friendly forces. Restrictive fire support coordination measures include an airspace coordination area, a no-fire area, a restrictive fire area, and a restrictive fire line. Establishing a restrictive measure imposes certain requirements for specific coordination before the engagement of those targets affected by the measure. (See FM 3-52 for a description of an airspace coordination area.)

3-84. When attacking forces infiltrate undetected through or into an area occupied by enemy forces, the higher commander may establish a linkup point or points to consolidate forces before proceeding on with the mission. (See paragraph 2-15 on page 2-7 for information on infiltration.) As with the selection of infiltration routes or lanes, the commander selects linkup points that avoid the enemy, provide cover and concealment, and facilitate navigation. The commander designates alternate linkup points, as enemy action may interfere with the primary linkup point(s). These and other control measures are adjusted during the operation to provide for freedom of action prior to and during the linkup. These same general actions and control measures are required when forces exfiltrate undetected through enemy territory to linkup with other friendly forces. Linkup point or points where two exfiltrating elements are scheduled to meet should be easily identifiable point on the ground, large enough for all exfiltrating elements to assemble, and offer cover and concealment.

Planning a Linkup

3-85. The commander directing the linkup establishes command relationships and responsibilities for the forces involved. Positive control during linkup is necessary to prevent inadvertent fratricidal as forces move to linkup. The higher headquarters plan prescribes the primary and alternate day and night identification and recognition procedures, vehicle systems, and manmade materials used to identify friend from enemy.

3-86. Whenever possible, forces conducting linkup establish liaison during planning and continue it throughout the linkup operation. Liaison parties require the capability to communicate with parent unit(s). As the distance closes between linkup forces, the necessity to track movement and maintain close liaison increases. Use of Army manned and unmanned aircraft systems can improve and expedite this process.

3-87. When linkup operations require a passage of lines, once through friendly lines, and to affect the linkup, the force moves out as in an exploitation; speed, aggression, and boldness characterize this action. If possible, the linkup force avoids enemy interference with its mission and concentrates its efforts on completing the linkup. When an enemy force threatens the successful accomplishment of the mission, the enemy is either destroyed or bypassed and reported.

3-88. The communication plan includes all essential frequencies and secure variables to maintain communication between the two forces. Linkup forces use voice systems as required to share combat information and to identify friend from enemy.

Preparing for a Linkup

3-89. Whenever possible, linkup forces exchange as much information as possible before starting an operation. The forces involved share information including communications security procedures and graphic overlays consisting of—

- Primary and alternate linkup points.
- Checkpoint and waypoint information.
- Unit disposition and activity (friendly and enemy).
- Locations and types of obstacles.
- Fire control measures including restrictive fire lines and no-fire areas.

3-90. When time is available, the directing headquarters and subordinate forces involved in the linkup, conduct rehearsals. When time is not available, the directing commander walks the linkup commanders (when available) through the operation. The commander stresses the linkup and coordination required to reduce the potential for fratricidal engagements between linkup forces. In addition, the commander ensures that each linkup commander is prepared to respond to an enemy meeting engagement or attack before the linkup.

Executing a Linkup

3-91. When conducting a linkup, both forces may be moving or one may be stationary. The linkup method chosen may involve conducting the linkup at a predetermined contact point(s) or when involved in a highly fluid situation, stopping only when one force makes physical contact with the other force. Using either method, the commander monitors the progress and execution of the linkup to ensure that established positive control measures are followed or adjusted as required. (Refer to ATP 3-21.20 for additional information.)

KEY DOCTRINAL TERMS AND DEFINITIONS

3-92. The following key doctrinal terms and definitions are used throughout this and other chapters and appendixes. Refer to referenced publications for additional information.

- *Block* is also an obstacle effect that integrates fire planning and obstacle efforts to stop an attacker along a specific avenue of approach or prevent the attacking force from passing through an engagement area (FM 3-90-1). See paragraph 2-323 on page 2-92 for the definition of the term, block, when used as a tactical mission task.

- *Counterreconnaissance* is a tactical mission task that encompasses all measures taken by a commander to counter enemy reconnaissance and surveillance efforts. Counterreconnaissance is not a distinct mission, but a component of all forms of security operations (FM 3 90-1).
- *Disengage* is a tactical mission task where a commander has the unit break contact with the enemy to allow the conduct of another mission or to avoid decisive engagement (FM 3-90-1).
- *Final protective fire* is an immediately available prearranged barrier of fire designed to impede enemy movement across defensive lines or areas. (JP 3-09.3).
- *Fix* is also an obstacle effect that focuses fire planning and obstacle effort to slow an attacker's movement within a specified area, normally an engagement area (FM 3-90-1). See paragraph 2-324 on page 2-93 for the definition of the term, fix, when used as a tactical mission task.
- *High-value target* is a target the enemy commander requires for the successful completion of the mission (JP 3-60).
- *Target area of interest* is the geographical area where high-value targets can be acquired and engaged by friendly forces. (JP 2-01.3).
- *Terrain management* is the process of allocating terrain by establishing areas of operation, designating assembly areas, and specifying locations for units and activities to deconflict activities that might interfere with each other (ADRP 5-0).

SECTION II – AREA DEFENSE

3-93. The *area defense* is a defensive task that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright (ADRP 3-90). The focus of the area defense is retaining terrain where the bulk of the defending force positions itself in mutually supporting, prepared positions. Units maintain their positions and control the terrain between these positions. The defeat mechanism is normally the massing of combat power to destroy the enemy in engagement areas. Area defenses are conducted when—

- Directed to defend or retain specified terrain.
- Forces available have less mobility than the enemy does.
- The terrain affords natural lines of resistance.
- The terrain limits the enemy to a few well-defined avenues of approach.
- There is time to organize the position.
- Conditions require the preservation of forces.

ORGANIZATION OF FORCES

3-94. The Infantry commander organizes an area defense around the static framework of the defensive positions seeking to destroy enemy forces by interlocking fire or local counterattacks. The commander has the option of selecting from the two forms of defensive maneuver; defending in-depth or defending forward. The depth of the force positioning depends on the threat, task organization of the battalion, and nature of the terrain. When the commander defends forward within an area of operation, the force is organized so that most of the available combat power is committed early in the defensive effort. In an area defense, the commander organizes the defending force to accomplish information collection, security, main battle area, reserve, and sustainment missions. (Refer to ATP 3-21.20 and FM 3-96 for additional information.)

3-95. An IBCT area defense consist of four complementary elements: security area and main battle area, and its reserve and sustainment missions. The *security area* is that area that begins at the forward area of the battlefield and extends as far to the front and flanks as security forces are deployed. Forces in the security area furnish information on the enemy and delay, deceive, and disrupt the enemy and conduct counterreconnaissance (ADRP 3-90). The *main battle area* is the area where the commander intends to deploy the bulk of the unit's combat power and conduct decisive operations to defeat an attacking enemy (ADRP 3-90). The *reserve* is that portion of a body of troops, which is withheld from action at the beginning of an engagement, in order to be available for a decisive movement (ADRP 3-90). The company considers the positioning of forces in the security area and main battle area and within the reserve in much the same way the battalion does, see ATP 3-21.20.

3-96. The Infantry rifle company normally conduct defensive operations as part of a battalion to disrupt or destroy an enemy force, control terrain, or protect a friendly force. The orientation of the company defense is determined from the mission analysis. The company's purpose in the mission statement clearly focuses the company towards the enemy, the terrain, or a friendly force. The company may take part in many differing roles as part of a larger force; part of the security forces and main body, conducting information collection (reconnaissance, surveillance, and security operations), or as part of the reserve. The company defense normally focuses on reconnaissance and security actions, defensive operations, and actions by the reserve.

3-97. A simple, complete concept of the operation is critical to the company's defenses. The company uses numerous security techniques in concert with deliberate well planned defensive positions, incorporating such things as ambushes, reconnaissance and security patrolling (movement to contact). The company commander analyzes how the terrain effects where the enemy can go, and where to emplace forces from the company that deny the enemy the ability to compromise the battalion, and company defenses.

3-98. Company missions within the security area consist of security, reconnaissance, surveillance, and counterreconnaissance tasks. Depending on the specific missions assigned, the company may simply observe and report, engage with indirect fires, and or engage with direct fire weapons. Security operations are crucial throughout the defense-initially, to support the preparation of the defense; early in the fight, to disrupt the enemy attack and or to identify the main effort; and in the main battle area, to support the commanders decision making process. The company commander considers activities that must be conducted in the security area that inhibit the enemy compromising the defense. Combat patrols, ambushes, security patrols, and raids should be considered in concert with the preparation of defensive positions. The combat power applied to these combat patrols are effected by METT-TC and the higher commander's intent.

3-99. Company missions conducted in the main battle area are oriented on enemy destruction, terrain retention, and force protection. Normally, the decisive fight occurs in the main battle area; therefore, the main effort is located there. Units tasked with security missions or reserve missions must support the main effort in the commander's concept for conducting the defense.

3-100. The company reserve allows the commander to seize and maintain the initiative. Although the reserve does not have an assigned mission that directly supports the main effort, the commander attempts to employ the reserve at the decisive time and place to ensure the success of the defense.

3-101. The company's sustainment mission in an area defense requires a balance between establishing forward supply stocks of ammunition, barrier material, and other supplies in sufficient amounts, and having the ability to move the supplies in conjunction with enemy advances. Maintenance and medical support, with their associated repair parts and medical supplies, must also be balanced between being employed forward and having the ability to move.

3-102. Echeloned trains (combat and field) provide the battalion commander with the flexibility to execute sustainment mission in support of the area defense. Battalion combat trains, when established, normally locates in the battalion's sustainment area and position dependent upon the mission variables of METT-TC. Sustainment missions from the battalion combat trains are conducted throughout the battalion's area of operations as well as the brigade's support area.

3-103. Company trains are located between 500 and 1000 meters away from the company's combat missions. By placing at least one terrain feature between it and the enemy, the company trains will be out of the enemy's direct fire weapons. In some circumstances it may be necessary to emplace cache's forward of the company trains, and to the rear of the command post in a defilade position, with cover when possible for easier access throughout the duration. During the area defense it is important for the company commander with the assistance of the XO to locate the company trains where it is easily defended, and within reasonable proximity to the logistics resupply point. In some instances the company trains will collocate within the battalion combat trains with caches of supply placed in proximity of the forward defending elements.

3-104. A company may perform all of these operations at the same time in its own sector; or it may be tasked to do one or more of them for a larger unit. (See ATP 3-21-20 for more information.)

DOCTRINAL BASIS FOR AN AREA DEFENSE

3-105. An area defense capitalizes on the strength inherent in a closely integrated defensive organization on the ground. The defending force limits the enemy's freedom of maneuver and channels the enemy into designated engagement areas. Shaping operations, designed to regain the initiative, limit the attacker's options and disrupt the enemy's plan. Shaping operations, coupled with sustaining operations, combine with the decisive operations of the main battle area force to defeat the enemy.

PLANNING

3-106. Planning an area defense is a complex effort requiring detailed planning and extensive coordination. In the defense, synchronizing the effects of warfighting functions with information and leadership allows the commander to apply overwhelming combat power against selected advancing enemy forces to unhinge the enemy commander's plan and destroy the enemy's combined-arms team. An area defense is a mix of static and dynamic actions. As an operation evolves, the commander may shift decisive and shaping operations to disrupt and maintain pressure on the enemy and to deny the enemy freedom of maneuver and the initiative. The commander's defensive plans must address how the preparations for, and the conduct of, the area defense impact the civilian population of the area of operations. (Refer to ATP 3-21.20 and FM 3-96 for additional information.)

3-107. As with all company planning, when conducting the defense the commander utilizes troop leading procedures—dynamic processes used by small unit leaders to analyze a mission, develop a plan, and prepare for an operation, as outlined in appendix B. During planning, the following considerations are taken into account for planning and the troop leading procedures are applied as necessary. The troop leading procedures are fluid and can be ever changing, and adjusting based upon the information available. The following section titles are outlined as the warfighting functions that provide an intellectual organization for common critical functions. The six warfighting functions are the framework for discussing planning considerations that apply to all primary and subordinate offensive tasks. (See FM 3-96 for a detailed discussion, by warfighting function, of offensive planning considerations.) When the company commander conducts planning during troop leading procedures, the following areas (warfighting functions) are considered.

Mission Command

3-108. Upon receipt of a battalion defensive WARNORD the commander begins troop leading procedures (See appendix B for more information) and makes an estimate of the situation. The result of this estimate is a concept that includes control measures, the fires plan, the reconnaissance, surveillance, and security plans, logistics plan, and employment of the reserve if necessary.

3-109. The commander considers the mission variables of METT-TC to determine how best to concentrate efforts and economize forces. A detailed terrain analysis might be the most important process that the commander completes. The commander conducts the mission analysis based on available products, and information disseminated by the commander, and staff. A successful defense relies on a complete understanding of terrain in order to determine likely enemy COA and the best positioning of the company's assets to counter them. Initially, integrated with the staff's intelligence preparation of the battlefield (IPB), the company commander visualizes the enemy's anticipated actions. The company commander refines the battalion's IPB to focus on the details of the operation in the company's area of operation. Normally, the battalion commander defines where and how the battalion will destroy or defeat the enemy and how they envision the company executing its portion of the battalions fight.

3-110. The company commander determines how and where to defeat the enemy, where it is believed the enemy will go, the terrain, the forces available, and the battalion commander's intent. The commander may define a defeat mechanism that includes the use of single or multiple counterattacks to achieve success. The commander analyzes the unit's role in the battalion fight, and determine how to accomplish the battalion commander's intent. In an area defense, the company usually achieves success by massing the cumulative effects of obstacles and fires to defeat the enemy forward of a designated area, often in conjunction with a battalion counterattack. When followed by a delaying operation, success is achieved by combining maneuver, fires, and obstacles, and by avoiding decisive engagement until conditions are right to achieve the desired effect of gaining time or shaping the battlefield for a higher echelon counterattack.

3-111. The commander analyzes the forces and assets available, paying particular attention to the obstacle assets and fire support allocated by the battalion to the company. The commander identifies specific engineer and fire support allocation to subordinate engagement areas, and sectors of fire in terms of capability, resources, and priority. For example, engineer analysis should define engineer capability in terms of the number of obstacles of a specific effect engineers can emplace in the time available. Fire support analysis should include the number of targets that can be engaged with an expected result at what point in the battle.

3-112. The company commander understands the control measures established by the battalion commander regarding the battalion area of operation include designating the security area, the BHL, the main battle area with its associated forward edge of the battle area, and the echelon support area. The company commander typically uses areas of operation, engagement areas, target references, direct fire control, and fire support coordination measures to synchronize the employment of combat power.

3-113. With a definitive understanding of the assets available, the commander determines what effects combat forces, fires, and obstacles must achieve on enemy formations by avenue of approach and how these effects will support both the battalion and company defeat mechanism. The commander assigns; a mission with stated task and purpose for each subordinate unit, establishes priorities for protection and sustainment, and develops obstacle and fire support plans concurrently with the defensive force array, defining a task and purpose for each obstacle and target in keeping with the commander's stated fire support tasks and intended obstacle effects. The desired end state is a plan, which defines how the commander intends to mass the effects of direct and indirect fires with obstacles and use of terrain to shape the battlefield and to destroy or defeat the enemy. For example, the commander may plan to *canalize*—a tactical mission task in which the commander restricts enemy movement to a narrow zone by exploiting terrain coupled with the use of obstacles, fires, or friendly maneuver (FM 3-90-1)—the enemy's movement into a predetermined position where the enemy is vulnerable to piecemeal destruction.

3-114. In planning the commander develops a concept for each COA discerned the mission analysis. Each COA should be developed starting at a potential decisive point, and determining the result that must be achieved at the decisive point to accomplish the mission. Determining the decisive point and times, and locations to project combat power allows the commander to anticipate the fight to come. The commander determines the purposes that must be achieved at the decisive point to accomplish the mission. Normally the purpose from the company mission statement clearly states the desired result. In some instances the commander must analyze the situation more closely to determine the desired result. The commander will then determine the purposes to be achieved by the main and supporting efforts (the supporting purposes must be clearly linked to the main efforts assigned purpose). The main effort's purpose is often the purpose from the company's mission statement. At times the company purpose must be modified slightly to be appropriate for the main effort platoon. When modified it must be clear that by achieving the main effort's purpose the company will achieve its purpose. Supporting purposes are selected by determining what must be achieved to support the success of the main effort. The commander then ensures that all essential tasks for subordinate units are identified, that once accomplished will achieve the desired end state.

3-115. In planning the transition to countermobility and survivability work in detail, the commander ensures adequate time for subordinate troop-leading procedures. Prior to transition, the commander—

- Sites situational obstacles early.
- Plans multiple locations to support depth and flexibility in the defense.
- Ensures adequate time, resources, and security for obstacle emplacement systems.
- Integrates triggers for execution of situational and reserved obstacles in the decision support template.
- Focuses the countermobility effort to shape the enemy's maneuver into positions of vulnerability.
- Ensures adequate mobility for withdrawing security forces, the reserve, and repositioning of main battle area forces.
- Plans appropriately for Class IV and Class V (mines) download sites as near to the emplacement location as is practical.
- Establishes early on the priority of effort and the priority of support.

3-116. The commander considers the entire area of operations, the enemy, and information collection activities necessary to shape an operational environment and civil conditions.

Movement and Maneuver

3-117. Maneuver allows the commander to take full advantage of the area of operations and to mass and concentrate when desirable. Maneuver, through movement in combination with fire, allows the company to achieve a position of advantage over the enemy to accomplish the mission. The commander studies the ground and selects positions that allow the massing of fires on likely approaches. The commander concentrates forces directed within the engagement area and positions security, intelligence, and reconnaissance force and surveillance assets forward of defensive positions to gain the most amount of information about the enemy as they move toward the engagement area.

3-118. When conducting an area defense the commander combines static and mobile actions to accomplish the mission. Static actions usually consist of fires from prepared positions. Mobile actions include using the fires provided by units in prepared positions as a base for counterattacks and repositioning units between defensive positions. The company commander can use the reserve and uncommitted forces to conduct counterattacks and spoiling attacks to desynchronize the enemy forces or prevent them from massing, or that the company may be employed as a counterattacking force in support of the battalion area defense.

Area of Operations

3-119. A defense in an area of operation (area defense) provides the greatest degree of freedom of maneuver (movement in combination with fires) to achieve a position of advantage in respect to the enemy. The battalion most often selects this method, employing subordinate companies when it has an adequate amount of depth and width to the battlefield. For both the battalion, and company defenses to be cohesive, phase lines, engagement areas, battle positions, and obstacle belts help to coordinate subordinate maneuver forces and achieve synchronized action. Assignment of area of operations allow flexibility and prevents the enemy from concentrating overwhelming firepower on the bulk of the defending force. Forces defending against an enemy with superior mobility and firepower must use the depth of their positions to defeat the enemy. The depth of the defense must come from the initial positioning of units throughout the area of operation, not from maneuvering. A properly positioned and viable reserve and counterattack force enhances depth.

3-120. A *contiguous area of operation* is where all subordinate forces' areas of operations share one or more common boundaries (FM 3-90-1). In a contiguous area of operations, the most outer platoon shares the company boundary with an element adjacent to them. The commander ensures proper coordination with the adjacent company commander, to effectively interlock fires and prevent enemy envelopment and penetration through the battalion line of defenses at the company boundary. In some instances, it may necessary to coordinate countermobility assets between companies to achieve the intended task and purpose of an obstacle that meets the battalion commander's intent for the battalion. It is also important for coordination of patrols in support of company defensive operations between companies, and bordering platoons.

3-121. In *noncontiguous area of operations*, where one or more of the commander's subordinate force's areas of operation do not share a common boundary (FM 3-90-1), the company will defend across a broader front, ensuring security to the flanks. The commander ensures the appropriate level of combat power in across the defense. The commander ensures that the defense is postured in such a way that it is able to react to all contingencies in the enemy course of action by selecting battle positions of the appropriate type. It is also important for coordination of patrols, and indirect fire plans in support of company defensive operations between companies, and bordering platoons. In some instances, the use of a company reserve is tasked to react to potential enemy threat across a broad front.

3-122. When defending in-depth on a noncontiguous battlefield, the commander may position defending subordinate units in successive layers of battle positions along likely enemy avenues of approach. (See figure 3-10 on page 3-33.) Battle position perimeters vary in shape depending on the terrain and situation. Perimeter shapes conform to the terrain features that best use friendly observation and fields of fire. The commander can increase the effectiveness of unit perimeters by tying it into a natural obstacle, such as a river, which allows the defending unit to concentrate its combat power in more threatened areas. As the commander determines the most probable direction of enemy attack, that part of the perimeter covering that approach may be reinforced with additional resources. The commander positions the reserve to block the most dangerous avenue of approach and assigns on-order positions on other critical avenues. Security forces locate on avenues of approach between the protected force and known or suspected enemy

locations. Noncontiguous operations place a premium on initiative, decentralized security operations, and innovative logistics measures.

Position Selection

3-123. During an area defense, the scout platoon may position forward of the Infantry battalion's main battle area. The commander gives the scout platoon specific priority information requirements to allow for its efficient deployment within the battalion's security area and to position itself for the preparation and execution of the area defense. The battalion scout platoon, often with augmentation, or with support from an Infantry rifle company attempts to discern enemy intentions by collecting information on the massing of forces and troop movement. On a noncontiguous battlefield, the scout platoon is positioned between main body forces and known or suspected enemy locations. When operating in support of the battalion defenses the rifle company needs to ensure it is synchronized with battalion in order to maintain proper situational awareness of adjacent units. When emplacing listening and observation posts and launching reconnaissance and security patrols, the commander ensures all patrols and observation posts are situationally aware of units forward of their position. It is important for subordinate elements conducting observation posts and reconnaissance and security patrols to relay valuable information collected by battalion scouts, and adjacent units as to ensure their positions up to date situational awareness. The commander should employ enough forces in the company's security zone to gather information regarding enemy movement, without severely degrading defensive preparations and posture.

3-124. Once the rifle company has been assigned their area of operation, the commander analyzes the precise positions that subordinate elements will occupy. The commander determines any potential area between higher headquarters, adjacent, and subordinate units that is unassigned. Any area within the company area of operation that is not assigned to a subordinate unit remains the responsibility of the company. The company may plan to cover this area with available R&S assets, to include ground sensors and unmanned aircraft systems along with higher echelon information collection assets, or with observation posts and reconnaissance and security patrolling. However dependent upon mission analysis, the commander may accept risk by placing no assets to monitor or react to this unassigned area. The commander plans local counterattacks to isolate and destroy any enemy that manages to penetrate through a gap in the area of operations, including unassigned areas.

3-125. Conditions favor a battalion defense that takes advantage of the mobility of the weapons company and scout platoon, combined with the defensive abilities but relatively immobility of its rifle companies. The battalion can increase the depth of the security area or main battle area, emphasizing the mobility and firepower of the weapons company while the rifle companies develop strong defensive positions. Once completing their tasks, these mobile elements may then conduct a passage of lines and may be attached to rifle companies. The rifle companies then pick up the fight and defend in place. It is important for the company commander to anticipate the time and location that these mobile assets will be emplaced or moved to during contingencies. In some instances the rifle company will proactively ensure that defensive battle positions be prepared for these mobile platforms prior to their arrival in support of the company. Positions that maximize both the mobility and weapons systems available on these mobile platforms should be identified, planned for, and implemented early. (See figure 3-10 on page 3-33.) The need for flexibility for available combat power to the company requires graphic control measures to assist in control during local counterattacks and repositioning of forces. Specified routes, phase lines, attack-by-fire positions, support areas, engagement areas, target reference points, and other fire control measures are required for the effective synchronization of maneuver.

3-126. The company as part of the battalion may be employed as the reserve. When the company is employed as a reserve the battalion commander decides where the reserve is emplaced. If the company is selecting its own reserve it will also make the decision on where to put the reserve. When deciding where to place the reserve, the commander decides whether to orient the reserve on its most likely mission or its most important mission. The commander expends significant effort during the planning process to ensure the reserve can effectively be used when needed. The commander may locate the reserve within the area of operation where it can employ the road network to rapidly displace throughout the area of operation in response to a number of opportunities or contingencies. In restrictive terrain that lacks routes for movement, the commander can task organize the reserve into small elements and position them where they can react

quickly to local combat developments. This dispersion provides increased protection but reduces the ability of the reserve to mass fires.

3-127. In contiguous areas of operation the IBCT will direct, coordinate, and monitor most support area operations for the battalion from the brigade support area. In noncontiguous areas of operation, positioning is critical to the responsiveness and survivability of support units/areas. The battalion commander protects support forces and critical assets by conducting area security operations. The commander uses area security operations to protect the rapid movement of echelon support areas (combat and field trains) or protect forward positioned stocks and cached commodities in addition to their respective echelon support areas. The commander clearly defines responsibilities for the security of units within echelon support areas and coordinates to mitigate the effects of security operations on the primary functions of units located within echelon support areas. Company trains (see appendix I for information on echeloned trains) are positioned in a location unaffected by enemy fires and is METT-TC dependent. In most cases the company will push to a logistics resupply point for all maintenance and support.

Battle Positions

3-128. A *battle position* is a defensive location oriented on a likely enemy avenue of approach (ADRP 3-90). The battle position is an intent graphic that depicts the location and general orientation of the majority of the defending forces. The commander's use of a battle position does not direct the position of the subordinate's entire force within its bounds since it is not an area of operation. The subordinate commander can move elements freely within the assigned battle position. To comply with the commander's intent, a force can maneuver outside the battle position to adjust fires or to seize opportunities for offensive action. Repositioning of units between battle positions must be carefully coordinated to prevent fratricide. (Refer to ATP 3-21.20 and FM 3-96 for additional information.)

3-129. The battle position prescribes a primary direction of fire by the orientation of the position. When the company is participating in a battalion area defense the battalion commander defines when and under what conditions the company can displace from the battle position or maneuver outside of the battle position. The company commander does the same for subordinate platoons, issuing and adjusting changes and updates continuously addressing guidance for combat patrols; raids, ambushes, and security patrols being conducted while the company conducts the defense. (See ATP 3-21.8 for more information.) The company commander also ensures platoons understand the conditions to reposition, and displacement criteria planning considerations for a battle position, although not all inclusive, may include—

- Establishment of outposts and observation posts forward of battle positions.
- Combat patrol plan and routes forward of battle positions.
- Activities in the company security area.
- All around security, and the utilization of mines.
- Development of integrated fires plans that include final protective fires.
- Priorities of work.
- Counterattack plans.
- Stockage of supplies.
- Integration and support of subordinate forces outside the strong point.
- Actions of adjacent units.
- Fire control measures in support of the battle position.
- Obstacles and battle position emplacement and orientation.

3-130. The commander also takes into consideration the positioning of the company headquarters personnel and equipment. These personnel are likely comprised of the commander, first sergeant, radiotelephone operators, fire support officer, fire support noncommissioned officer, and mortars. The commander selects a location that will position the commander in the best location to control all forces in concert with one another. The location of the command post battle position, and the mortar firing point(s) should be positioned to a centrally located position within the defense that allows for the most control of subordinate, attached, and supporting forces without being decisively engaged as the enemy approaches the engagement area. There should be enough space allocated between the engagement areas to the headquarters element to afford forward platoons ample space to reposition if necessary as the engagement begins. The command post should

be in a defilade, also, and concealed from air and ground observation. The route to and from the command post should be adequately covered and concealed. It is important for the commander to identify and prepare an alternate command post in the event that the command post needs to be relocated during the engagement.

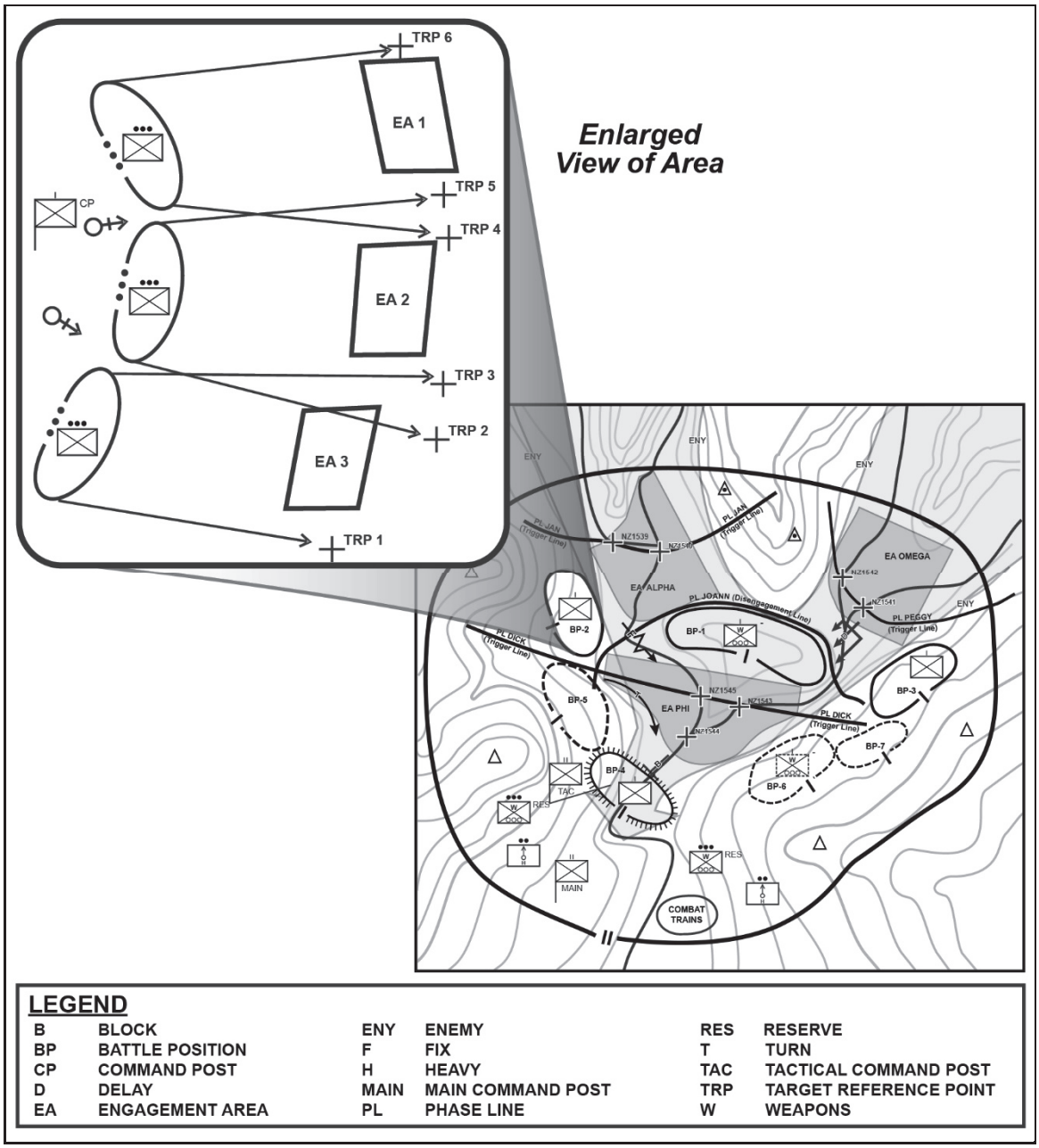


Figure 3-10. Company battle position as part of the battalion defense (disposition of forces)

3-131. The three levels of preparation for a battle position are occupy, prepare, and plan. Occupy is the complete preparation of the position where subordinate units will initially defend. Units fully plan, prepare, and occupy positions before they defend no later than time specified in the OPORD. Companies rehearse the occupation, and company commanders establishes a trigger for occupation of the position. Units occupying the battle position, despite time constraints, dig in survivability positions, construct fighting positions, designate target reference points, develop direct and indirect fire plans, emplace obstacles, clear fields of fire, and pre-stock ammunition.

3-132. The use of on-order battle positions, with the associated tasks prepare or plan, adds flexibility and depth to the defensive plan. Prepare missions, normally critical to the defense maintain security on the position and on the routes to the position. Prepare means that the unit fully reconnoiters the position and the corresponding engagement area, marking positions in the battle position and fire control measures in the engagement area. From the battle position, units accomplish all actions to enable the execution of the mission immediately on occupation. Planning, coordination, and rehearsals are required for the unit to displace to the battle position and accomplish the mission. Plan means that the unit fully reconnoiters the engagement area and battle position. The unit specifically plans tentative unit positions in the battle position, and establishes fire control measures in the engagement area. The unit also coordinates and plans for defense from the position. Leaders reconnoiter, select, and mark positions, routes, and locations for security elements. Then coordinate movement and other actions, such as preparing obstacles and occupation plans, with other elements of the battalion.

3-133. The commander allocates space to elements within the battle position area based on the space available, terrain, and mission task. The commander thinks at a minimum two levels down, but considers the mutual support, and siting of obstacles from all battle positons within the company area of operations to ensure the most effective defense. When practical, the commander should allow enough space on each battle position for dispersed primary, alternate, and supplementary positions for key weapons. The commander can vary the number of maneuver elements in the battle position by allocating larger platoon battle positions. Battle positions can also reflect positions in-depth. They may take a shape other than the standard oblong shape, which suggests a linear defense within the battle position. Large positions also increase dispersion to counter enemy fires. The commander can combine company area of operations and battle positions in the battalion area of operation to suit the tactical situation.

3-134. The five types of battle positions are primary, alternate, supplementary, subsequent, and strong point. The commander always designates the primary battle position. A *primary position* is the position that covers the enemy's most likely avenue of approach into the area of operations (ADRP 3-90). A primary position is the best position to accomplish the assigned mission. Routes between positions should be well known and rehearsed (optimally under the same conditions expected during execution). The commander designates and prepares alternate, supplementary, and subsequent positions as required.

3-135. An *alternate position* is a defensive position that the commander assigns to a unit or weapon system for occupation when the primary position becomes untenable or unsuitable for carrying out the assigned task (ADRP 3-90). The alternate position covers the same area as the primary position. These positions allow the defender to carry out original task, such as covering an avenue of approach or engagement area, using the original direct fire plan. Alternate positions increase the defender's survivability by allowing engagement of the enemy from multiple positions and movement to other positions in case of suppressive or obscuring fires.

3-136. A *supplementary position* is a defensive position located within a unit's assigned area of operations that provides the best sectors of fire and defensive terrain along an avenue of approach that is not the primary avenue where the enemy is expected to attack (ADRP 3-90). A supplementary position is assigned when more than one avenue of approach into a unit's area of operations exist.

3-137. A *subsequent position* is a position that a unit expects to move to during the course of battle (ADRP 3-90). The defending unit may have a series of subsequent positions (particularly in delay operations), each with associated primary, alternate, and supplementary positions. (See figure 3-11.)

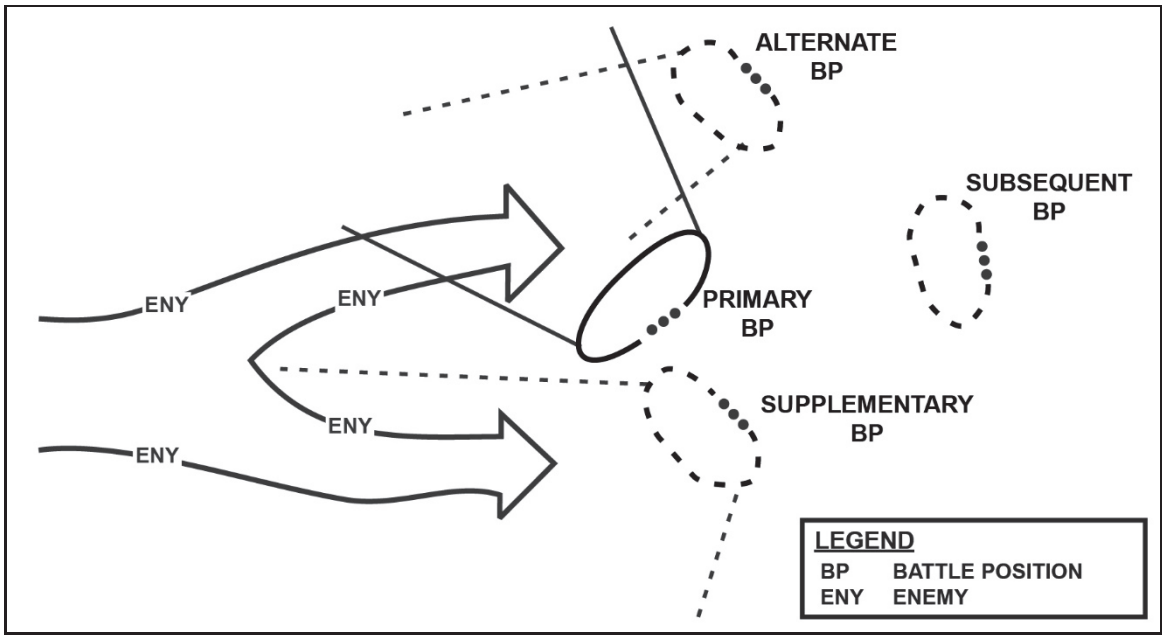


Figure 3-11. Primary, alternate, supplementary, and subsequent battle positions

3-138. A *strong point* is a heavily fortified battle position tied to a natural or reinforcing obstacle to create an anchor for the defense or to deny the enemy decisive or key terrain (ADRP 3-90). A strong point implies retention of terrain to control key terrain and blocking, fixing, or canalizing enemy forces. Before assigning a strong point mission, the commander ensures that the strong point force has sufficient time and resources to construct the position, which requires significant engineer support. Defending units require permission from the higher headquarters to withdraw from a strong point. Once the strong point is occupied, all units and equipment not essential to the defense are displaced from the strong point. All combat, maneuver enhancement, and sustainment assets within the strong point require fortified positions. Extensive protective and tactical obstacles are required to provide an all-around defense. (See battle position 4 in figure 3-10 on page 3-33.)

Engagement Areas

3-139. An *engagement area* is an area where the commander intends to contain and destroy an enemy force with the massed effects of all available weapons and supporting systems. (FM 3-90-1). The success of any engagement depends on how effectively the commander integrates the direct fire plan, the indirect fire plan, the obstacle plan, Army aviation fires, close air support, and the terrain within the engagement area to achieve the tactical purpose. Figure 3-10 on page 3-33 depicts the company's engagement area used within the context of a battalion perimeter defense. Within the defense, the company commander positioned defending platoons (defense in-depth) in successive layers of battle positions (primary, alternate, and strong point) along the enemy's most likely avenue of approach.

Engagement Area Development

3-140. The commander develops engagement areas, to include engagement criteria and priority, to cover each enemy avenue of approach. Within the company main battle area, the commander determines the size and shape of the engagement area(s) by the relatively unobstructed line-of-sight from the weapon systems firing positions and the maximum range of those weapon systems. Once the commander selects engagement areas, the commander arrays available forces and weapon systems in positions to concentrate overwhelming effects into these areas. The commander routinely subdivides engagement areas into smaller engagement areas for subordinates using one or more target reference points or by key terrain or prominent terrain feature. The commander assigns sector of fires to subordinates to ensure complete coverage of engagement areas and to prevent fratricide and friendly fire incidents. Responsibility for an avenue of approach or key terrain is never split.

3-141. Security area forces, to include field artillery fire support teams and observers, employ fires to support operations forward of the company's main battle area using precision and other munitions to destroy enemy reconnaissance and security forces and identified high-payoff targets, and to attrit enemy forces as they approach the main battle area. The employment of fires within the security area also help to deceive the enemy about the location of the main battle area. The commander, assisted by the company fire support officer plans the delivery of fires at appropriate times and places throughout the area of operations to slow and canalize the enemy force as the enemy approaches. The employment of fires allows security area forces to engage the enemy without becoming decisively engaged. To prevent fratricide, the commander designates no-fire areas where security area forces are positioned. The commander uses fires to support the withdrawal of security forces once shaping operations are completed within the security area and the defending unit is prepared to conduct main battle area operations.

3-142. *Engagement criteria* are protocols that specify those circumstances for initiating engagement with an enemy force (FM 3-90-1). Engagement criteria may be restrictive or permissive in nature. For example, the commander may instruct a subordinate platoon leader not to engage an approaching enemy unit until the enemy commits to an avenue of approach. The commander establishes engagement criteria in the direct fire plan in conjunction with engagement priorities and other direct fire control measures to mass fires and control fire distribution.

3-143. *Engagement priority* is the order in which the unit engages enemy systems or functions (FM 3-90-1). The commander assigns engagement priorities based on the type or level of threat at different ranges to match organic weapon systems capabilities against enemy vulnerabilities. Engagement priorities are situationally dependent and used to distribute fires rapidly and effectively. Subordinate elements can have different engagement priorities but will normally engage the most dangerous targets first, followed by targets in-depth or specialized systems, such as engineer vehicles.

3-144. A *target reference point* is a predetermined point of reference, normally a permanent structure or terrain feature that can be used when describing a target location. (JP 3-09.3). The company and subordinate units may designate target reference points to define unit or individual sectors of fire and observation, usually within the engagement area. Target reference points, along with trigger lines, designate the center of an area where the commander plans to distribute or converge the fires of all weapons rapidly to further delineate sectors of fire within an engagement area. Once designated, target reference points may also constitute indirect fire targets.

3-145. A *trigger line* is a phase line located on identifiable terrain that crosses the engagement area that is used to initiate and mass fires into an engagement area at a predetermined range for all or like weapon systems (ATP 3-21.20). A trigger line is a phase line located on identifiable terrain that crosses the engagement area. The commander can designate one trigger line for all weapon systems or separate trigger lines for each weapon or type of weapon system. The commander specifies the engagement criteria for a specific situation. The criteria may be either time- or event-driven, such as a certain number or certain types of vehicles to cross the trigger line before initiating engagement. The commander can use a time-based fires delivery methodology or a geography based fires delivery.

Note. The example below addresses the general steps to engagement area development for the area defense illustrated in section II of this chapter. In this example, rifle companies and weapons company of the Infantry battalion 2 task force conduct an area defense (defense in-depth) against a motorized Infantry and armor threat. The fictional scenario within this example, used for discussion purposes, is not the only way to develop an engagement area. For clarity, many graphical control measures, such as phase lines, are not shown.

Engagement Area Development (Motorized Infantry and Armor Threat), Example

3-146. Although often identified as a method to defeat enemy armor, engagement areas are an effective method to defeat any enemy attack whether the attack is primarily an armor, Infantry, or a mixed armor and Infantry force. The key is the identification of the likely enemy avenues of approach and actions, and the placement of adequate friendly forces, obstacles, and fires to defeat the enemy. The following seven-step engagement area development process, used for discussion purposes, represents one way a rifle company

builds an engagement area. The commander integrates these steps within the troop leading procedures (see Appendix B for more information on troop leading procedures) and the IPB (see ATP 2-01.3 for more information on the IPB). The steps of engagement area development include the following (asterisks denote steps that occur simultaneously):

- Identify likely enemy avenues of approach.
- Identify most likely enemy course of action.
- Determine where to kill the enemy.
- Position subordinate forces and weapons systems.*
- Plan and integrate obstacles.*
- Plan and integrate fires.*
- Rehearse the execution of operations within the engagement area.

Note. Within the scenario, the IBCT commanders focuses the intelligence preparation of the battle field effort on the characteristics of the operational environment that can influence enemy and friendly operations and how the operational environment influences friendly and enemy courses of actions. The IBCT staff (specifically the S-2 and S-3) identified three likely enemy avenues of approach to and through the IBCT's area of operation. Two enemy avenues of approach were identified within the Blue River Valley, Avenue of Approach 1 and Avenue of Approach 2 (area of operations assigned to Infantry Battalion 2). A third enemy avenue of approach was identified north of the Blue River Valley (area of operations assigned to Infantry Battalion 1, not illustrated). Success, against these likely enemy avenues of approach, results in allowing the commander to quickly choose and exploit terrain, weather, and civil considerations to best support the mission.

3-147. Step 1, identify likely enemy avenues of approach. The rifle company commander utilizes the staff products and intelligence provided by Infantry battalion 2. The battalion, utilizing the products and intelligence from the IBCT staff, identified characteristics that helped to determine the effects of the terrain, weather, and civil considerations on both enemy and friendly operations within the battalion's area of operation. This information is disseminated to the subordinate rifle companies, by which the company commanders conduct mission analysis and begins steps 1, 2, and 3 (receive the mission, issue a WARNORD, and make a tentative plan, respectively) of the troop leading procedures simultaneously. The primary analytic tools used to aid in determining this effect, specific to terrain, are the modified combined obstacle overlay and the terrain effects matrix. The company commander expands upon the products received from the battalion to further identify the enemy avenues of approach.

3-148. Figure 3-12 (on page 3-38) depicts the two enemy avenues of approach and illustrates the battalion commander's understanding of the terrain, and how it's defined. The commander identifies restricted terrain, severely restricted terrain in order to identify which routes will impede the enemy's movement. The commander identifies unrestricted terrain, by which the enemy is able to move unimpeded. The commander also identifies key terrain that is critical to the defense, will allow for the best position to engage enemy forces and thus preventing enemy forces from establish themselves. Key terrain forward of the Green River is critical to the battalion's area defense because occupying these position will allow the engagement of enemy forces forward of the river, preventing the establishment of an enemy force on the east bank and the use of crossing sites to support movement into less restrictive terrain west of the Green River.

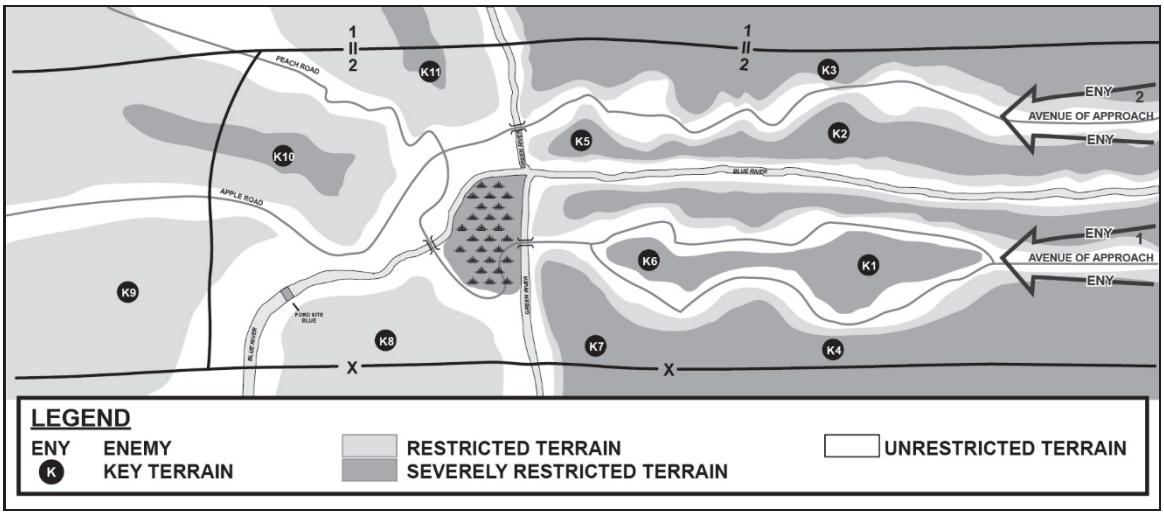


Figure 3-12. Identify likely enemy avenues of approach, example

3-149. The company commander's detail analysis, and identification of likely enemy avenues of approach begins in step 3 of the troop leading procedures (make a tentative plan), it is an ongoing running assessment to ensure the location of the engagement area is sound. Planning considerations for step one of engagement area development include, but are not limited to—

- Conduct initial reconnaissance.
- Identify key and decisive terrain.
- Determine which avenues provide cover and concealment for the enemy.
- Determine the terrain the enemy is likely to use to support each avenue.
- Evaluate lateral routes adjoining each avenue of approach.

3-150. Based upon the information provided by the S-2 in the scenario, enemy Avenue of Approach 1 and Avenue of Approach 2 mounted movement though the terrain forward (west) of the Green River is restricted, thus hindering enemy movement to some degree. The terrain typically consists of moderate-to-steep slopes or moderate-to-densely spaced obstacles, such as trees or rocks. Enemy forces within this restricted area will have difficulty maintaining preferred speeds, moving in combat formations, and transitioning from one formation to another. Enemy movement will require zigzagging or frequent detours. A poorly developed road system will hinder the enemy's ability to sustain its attack along both enemy avenues of approach. The unrestricted terrain further west from Green River will allow the enemy to move unimpeded along enemy Avenue of Approach 1 and Avenue of Approach 2 once clear of the river.

3-151. The terrain along enemy Avenue of Approach 3, identified to the North of the Blue River valley, is severely restricted (not illustrated). Steep slopes and large or densely spaced obstacles with little or no supporting roads characterize the terrain. Though suitable for dismounted movement, the terrain within Avenue of Approach 3 impedes motorized Infantry and armor movement. Swamps and the rugged terrain within this area are examples of restricted areas for dismounted Infantry forces. The road system utilized to sustain the enemy's attack is very limited along Avenue of Approach 3. Avenue of approach 3 is templated in the adjacent Battalion 1 area of operation. (Refer to ATP 2-01.3 for additional information on determining terrain characteristics and the terrain's effect on operations.)

Note. The IBCT and battalion commanders and staffs, during step 4 of the IPB, identify and develop possible enemy course of actions that can affect the IBCT's mission. Enemy course of action development requires identifying and understanding the significant characteristics related to enemy, terrain, weather, and civil considerations of the operational environment and how these characteristics affect friendly and enemy operations, steps 1 and 2 of the IPB, respectively. The purpose of evaluating the enemy, step 3 of the IPB, is to understand how an enemy can affect friendly operations. The commander, in order to plan for all possible contingencies, understands all course of actions an enemy commander can use to accomplish the enemy objective(s). To aid in this understanding, the staff determines all valid enemy course of actions and prioritizes them from most to least likely. The staff also determines which enemy course of action is the most dangerous to friendly forces. To be valid, enemy course of actions should be feasible, acceptable, suitable, distinguishable, and complete—the same criteria used to validate friendly course of actions. (See ATP 2-01.3.)

3-152. Step 2. Identify most likely enemy course of action. The battalion commander and staff (specifically the S-2 and S 3) determine the enemy's most likely course of action, within the scenario, is to attack with two battalions (motorized Infantry battalion task forces) abreast, one along Avenue of Approach 1 and one along Avenue of Approach 2. The enemy's approach, compartmentalized forward of the Green River, restricts movement and prevents the attacking enemy force from fully exploiting its combat superiority. The terrain forward of the Green River allows for the massing of friendly fires with the enemy piecemeal commitment into friendly engagement areas. The terrain requires the enemy to zigzag and commit to frequent detours (due to the compartmentalization during movement), exposing portions of the enemy force for destruction without giving up the advantage of friendly forces fighting from protected positions.

3-153. The enemy's main effort, predicted to move along Avenue of Approach 2, requires crossing one river, the Green River. A secondary effort of the enemy (the enemy the company faces), predicted to move along enemy Avenue of Approach 1, requires crossing both the Green and Blue Rivers. (See figure 3-13 on page 3-41.) The least likely enemy avenue of approach, Avenue of Approach 3 (Battalion 1 area of operation, not illustrated) to the north, though the largest area of operation to defend requires the enemy to move through severely restricted terrain to the east and west of the Green River. The enemy, predicted to establish multiple infiltration lanes (company and platoon size elements) along this approach, infiltrates forces to the rear to disrupt friendly operations. According to the analysis from the battalion, enemy follow-on forces are anticipated to be an armor battalion task force that will attempt to exploit enemy successes along enemy Avenues of Approach 1 and 2.

3-154. Within enemy Avenue of Approach 1 (south of the Blue River) and Avenue of Approach 2 (north of the Blue River) the enemy will most likely conduct mounted movement in a company column as they approach the engagement area, and as they move through battalion 2's security area. Once in the vicinity of company engagement areas each enemy battalion will deploy one company north as a supporting effort and one to occupy an attack by fire position, a second supporting effort will attempt to move through the engagement area vicinity company employed obstacles and attempt to breach. Upon breaching successfully the enemy will move the main effort forward to secure a foothold to pass supporting efforts 1 and 2 through the breach to continue their march. Procedures for determining the enemy's most likely course of action the commander considers the following;

- Determining how the enemy will structure the attack.
- Determining how the enemy will use reconnaissance assets. Will they attempt to infiltrate friendly positions?
- Determining where and when the enemy will change formations and establish support by fire positions.
- Determining where, when, and how the enemy will conduct the assault or breaching operations.
- Determining where and when they will commit follow-on forces.
- Determining the enemy's expected rates of movement.
- Assessing the effects of combat multipliers and anticipated locations/areas of employment.

Note. The desired end state of step 4, determine threat course of actions, of the IPB process is the development of graphic overlays (enemy situation templates) and narratives (enemy course of action statements) for each possible enemy course of action identified. Generally, there will not be enough time throughout the troop leading procedures to develop enemy situation overlays for all course of actions. The commander assesses and refines the list of high-value targets provided by the staff. Once products are complete, the commander constructs overlays depicting the enemy's most likely and most dangerous course of action to development the friendly scheme of maneuver. (Refer to ATP 3-21.20, ATP 2-03.1, and FM 6-0 for additional information.)

3-155. Step 3. Determine where to kill the enemy. Whether planning deliberately or rapidly when determining where to kill enemy, the battalion commander and subordinate commanders maintain a shared understanding of the steps within the IPB. Within the scenario, company commanders focus efforts to determine the effects of the terrain, weather, and civil considerations on the enemy avenues of approach identified within (Avenues of Approach 1 and 2 along the Blue River) and north of the Blue River Valley (Avenue of Approach 3, not illustrated). During step 4 of the IPB, determine threat course of actions, the company commander refines the battalion staff estimates to identify and develop possible enemy course of actions that can affect the company mission. Based on the results of this analysis, the commander concentrates efforts and economizes forces to kill the enemy east of the Green River along avenue of approach 1 to best utilize the restricted and severely restricted areas forward in the area of operations. (See figure 3-13.)

3-156. The following steps apply in identifying and marking where the enemy engagement is to occur:

- Identify target reference points that align with the identified most likely course of action allowing the Infantry platoon and squad to identify where it will engage enemy forces through the depth of the area of operations.
- Identify and record the exact location of each target reference point.
- In marking target reference points, use thermal sights to ensure visibility at the appropriate range under varying conditions, including daylight and limited visibility (darkness, smoke, dust, or other obscurants).
- Determine how many weapon systems will focus fires on each target reference point to achieve the desired end state.
- Determine which element will mass fires on each target reference point.
- Establish engagement areas around target reference points.
- Develop the direct fire planning measures necessary to focus fires at each target reference point.

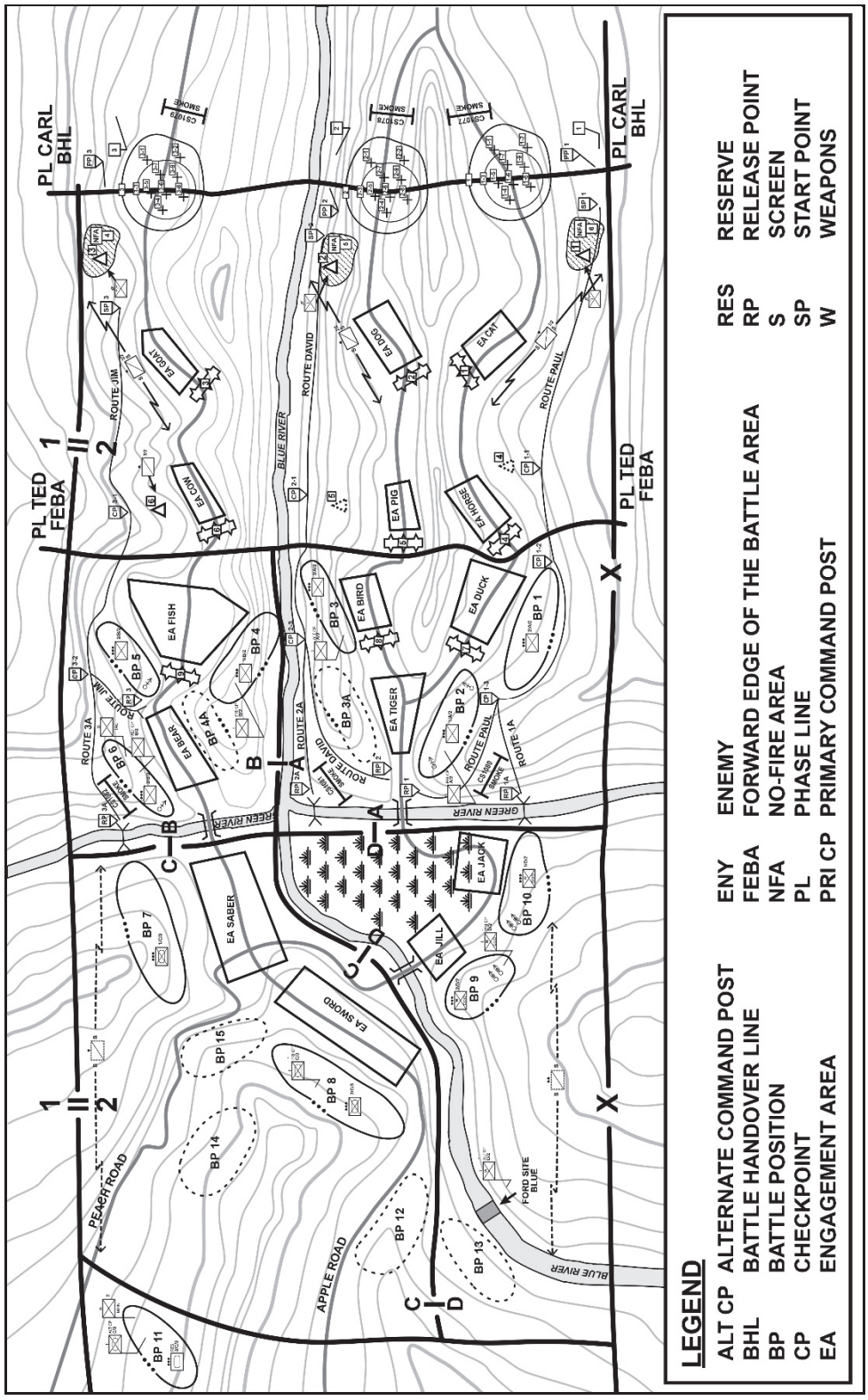


Figure 3-13. Engagement area (motorized Infantry and armor threat), example

3-157. Step 4. Position subordinate forces and weapons systems. Within the scenario, the company commander's concept for the area defense (Company B) required the positioning of subordinate forces and

weapon systems to accomplish their mission independently and in combination by means of fires, the employment of obstacles, and absorbing the strength of the attack within defensive battle positions. The commander assigned subordinate platoons battle positions, based on the mission variables of METT-TC. The commander has the ability to maximize decentralized execution empowering subordinate platoon leaders to position battle positions within their assigned area of operations, however it is necessary for the company commander to ensure the entire company is synchronized to mutually support one another. The commander addresses security requirements for the flanks of assigned area of operations by assigning responsibility to a subordinate element or organizing a security force or observation post(s) to accomplish that mission. If possible the commander can retain a reserve, in this scenario the combat power does not allow for a robust reserve but the commander employs one squad to prevent enemy penetrations between positions, to reinforce fires into an engagement area, or to help a portion of the security force or main body disengage from the enemy if required. (See figure 3-13 on page 3-41.) The following steps are helpful in selecting and improving battle positions and emplacing the Infantry platoon and squad, crew-served weapon systems, assault platoon vehicles, and dismounted Infantry positions:

- Conduct a leader's reconnaissance of the tentative battle positions.
- Reconnoiter engagement areas to confirm selected positions are tactically advantageous.
- Confirm and mark the selected battle positions.
- Ensure battle positions do not conflict with those of adjacent units and are tied in with adjacent positions.
- Select primary, alternate, and supplementary fighting positions to achieve the desired effect for each target reference point.
- Ensure platoon sergeants, vehicle commanders, or dismounted Infantry squad leaders position weapon systems so each target reference point is covered by the required number of weapons, vehicles, and squads.
- Ensure positions allow vehicle commanders, loaders, and gunners (as applicable for each vehicle or weapons system) to observe the engagement area and engage enemy forces from the hull down position.
- Stake vehicle or weapons system positions according to unit SOPs so engineers can dig in the positions while vehicle crews perform other tasks.
- Confirm all vehicle or weapons system positions.

Note. When possible, select battle positions while moving in the engagement area. Using the enemy's perspective enables the commanders and subordinate leader to assess survivability of positions.

3-158. Step 5. Plan and integrate obstacles. Countermobility planning addresses how security area and main battle area forces reinforce the natural defensive characteristics of the terrain with the employment of obstacles. The company commander with the assistance of the engineer leader (when attached) determine an obstacle groups intent relative to its location, and effect to block, disrupt, fix, and turn attacking enemy forces into planned engagement areas. Countermobility planning includes the positioning of protective obstacles to prevent the enemy from closing with defensive battle positons, and integrating mines, wire, indirect fires, and direct fires in conjunction with placement. The commander sites each obstacle on the ground with the assistance of the available engineer leader. The commander, fire support officer, engineer, and platoon leaders integrate obstacles within the company defense, and ensure the most effective coverage of indirect and indirect fires are tied in. The commander has the option to expedite integration of obstacles, with organic company support, in most cases it is more time effective to assist engineers in placement of obstacles, and securing obstacle work sites. The commander ensures a well thought out plan outlining disengagement criteria, actions on contact, and security plan prior to obstacle emplacement. The engineer leader on the ground should have a thorough grasp of the commanders defensive scheme of maneuver prior to emplacing obstacles or moving forward of defensive battle positions. The commander assigns the—who, what, when, where, and why regarding responsibility for guides and lane closures.

3-159. Within this scenario, the commander's concept for the employment of obstacles within the area defense forces the enemy to enter established engagement areas positioned where the commander intends to kill the enemy. To succeed, the company through the employment of obstacles and the static positioning of platoon battle positions control, stop, or canalize attacking enemy forces to counteract the enemy's initiative. The commander, through dynamic actions, with the assistance of organic and battalion reserve covers gaps between positions and takes advantage of available offensive opportunities such as a local attack or counterattack that do not risk the integrity of the defense.

3-160. Step 6. Plan and integrate fires. Before the enemy closes into direct fire engagement areas, in either the security area or the main battle area, the company directs the initiation of fires. The commander with the assistance of the fire support officer determines the purpose of fires, and where that purpose is best achieved. This plan provides the most effective fires resources and mitigate the risk of fratricide as the attacking enemy nears the designated engagement areas while supporting air assets conduct army aviation and close air support attacks. The establishment of an observation plan with redundancy is necessary for each target (observers could include members of the company fire support team, or maneuver elements with fire support execution responsibilities identified during planning. During engagement area development, direct fire control measures, and fire support coordination measures, such as target reference points, trigger lines (taking into consideration enemy movement rates), and FPFs enable observed fires and the obstacle plan to force the enemy to use avenues of approach covered by friendly engagement areas. These shaping operations typically focus on enemy high-payoff targets, such as command and control nodes, engineer, fire support, and air defense assets and follow-on forces for destruction or disruption. It may be critical to identify areas where friendly elements will likely be such as observation posts that require no fire areas to limit fratricide.

3-161. Step 7. Rehearse the execution of operations within the engagement area. The company coordinates and rehearses engagement area actions on the ground, gaining intimate familiarity with the terrain. The company commander, executive officer (XO), engineer leader, fire support officer, platoon leaders, at a minimum, rehearse the sequence of events with subordinate leaders for each engagement area. The purpose of this rehearsal is to ensure that every leader and Soldier understands the plan and that elements are prepared to cover their assigned areas with direct and indirect fires. There is a myriad of ways a commander can conduct the rehearsal (see appendix B for more information on rehearsals); the following is a list of options (although not all-inclusive) the Infantry rifle company commander can use to conduct rehearsals:

- Use friendly forces to depict the enemy and to initiate subordinates' actions.
- Use the company trains to depict the enemy moving along mounted avenues of approach.
- The commander can move down the dismounted avenues of approach and have subordinates identify when they begin and cease to engage.

3-162. During rehearsals, the commander confirms designated target reference points, trigger lines, FPFs, engagement areas, and other direct fire control measures and indirect fire coordination measures in each engagement area within the area of operation. Once in position, the commander may modify subordinate unit positions and preplanned control measures during rehearsals to improve defensive capabilities as required. The commander ensures the integration of fires by adjusting the planned positions of weapon systems to obtain maximum effectiveness against targets in the planned engagement area. The commander coordinates all fires, including those of supporting Army aviation and close air support, used to isolate the targeted enemy force in the planned engagement area while preventing the target's escape or reinforcement. The company rehearses the confliction of fires to ensure maximum damage before the enemy can respond. The commander rehearses the actions of the organic reserve if necessary to reinforce fires, and the passage of lines for reinforcements forward or rearward, add depth, or block, to restore a position by counterattack, or to reinforce the destruction of enemy forces within planned engagement areas. The company also rehearses movement from hide positions to battle positions, or from one battle position to another (primary to alternate for example).

3-163. The company commander rehearses the planned actions within the company engagement area(s). Platoon leaders reconnoiter and identify positions and identify movement or withdrawal routes and revises them as required. Company commanders rehearse assigned weapon system primary sectors of fire and secondary sectors of fire to increase the capability of concentrating fire in certain areas in accordance with established criteria and priorities for engagement. Secondary sectors of fire, when there are no targets in the primary sector or when the commander needs to cover the movement of another friendly element, correspond

to another element's primary sector of fire to obtain mutual support. Secondary sectors of fire are rehearsed and confirmed depending on the availability of time before execution. Subordinate commanders may impose and rehearse additional fire control measures as required and as time permits. The company rehearses the effects on enemy, and preparation and transmission of critical reports.

Forms of Defensive Maneuver

3-164. The commander may choose between two defensive maneuver forms when planning an area defense: a defense in-depth or a forward defense. The company commander usually selects the form of defensive maneuver, but the higher headquarters' commander may define the general defensive scheme for the battalion. These two employment choices are not exclusionary. Part of a defending unit can conduct a forward defense, while the other part conducts a defense in-depth). The specific mission may also impose constraints such as time, security, and retention of certain areas, which are significant factors in determining how the unit will defend.

Defense In-Depth

3-165. A defense in-depth is the preferred option when tactical conditions allow. Defense in-depth reduces the risk of the attacking enemy penetrating the defense and affords some initial protection from enemy indirect fires. The company may participate in a higher echelons defense in-depth, or organize its organic forces in-depth. A defense in-depth limits the enemy's ability to exploit a penetration through additional defensive positions employed in-depth. The defense in-depth provides more space and time to exploit information collection efforts and fire support to reduce the enemy's options, weaken the enemy force, and set the conditions for the enemy's destruction, disintegration, or dislocation. The defense provides the commander more time to gain information about the enemy's intentions and likely future actions before decisively committing to a plan. (See paragraph 3-278 on page 3-74 for an example illustrating a company as part of a battalion task force defending in-depth against a motorized Infantry and armor threat.)

3-166. When the commander has the option of conducting a defense in-depth, the commander then uses security forces and forward main battle area elements to identify, define, and control the depth of the enemy's main effort while holding off secondary thrusts. Doing so allows the commander to conserve combat power, strengthen the reserve, and better resource the counterattack. Even if the enemy is initially successful, the defense in-depth allows the defender to execute decisive maneuver by effectively repositioning subordinate units to conduct counterattacks or to prevent penetrations. Dependent on the mission variables of METT-TC, it may require forces with at least the same mobility as the enemy to maneuver to alternate, supplementary, and subsequent positions. The mobility of the enemy force can determine the disengagement criteria of the defending forces as they seek to maintain depth. The commander considers using a defense in-depth when—

- The mission allows the company and/or battalion to fight throughout the depth of the area of operations.
- The terrain does not favor a forward defense and there is better defensible terrain deeper in the area of operations.
- Sufficient depth is available in the area of operation.
- Cover and concealment forward in the area of operation is limited.
- Chemical, biological, radiological, and nuclear weapons may be used.
- The terrain is restrictive and limits the enemy's maneuver and size of attack.

Forward Defense

3-167. In the forward defense, the company will normally participate as part of a larger element in the forward defense. When the commander defends forward in an area defense the battalion employs the majority of its combat forces near the forward edge of the battle area. The battalion scout platoon may establish a relatively narrow security area forward of the main battle area to limit the terrain over which the enemy can gain influence or control. The battalion fights to retain these forward positions, conducts counterattacks against enemy penetrations, or destroys enemy penetration in forward engagement areas. To accomplish this, the commander deploys forces or plans counterattacks well forward in the main battle area or even beyond the main battle area. Due to its inherent lack of depth, the forward defense is the least preferred option. While the battalion may lack depth, companies and platoons array forces as able in-depth.

3-168. During a forward defense, the commander uses surveillance assets and reconnaissance and security forces forward to find the enemy in vulnerable situations and exploit the opportunity to conduct a spoiling attack to weaken the enemy's main attacking force and disrupt the enemy's operations. The commander uses a forward defense when a higher commander directs the commander to retain forward terrain for political, military, economic, and other reasons. Alternatively, a commander may choose to conduct a forward defense when the terrain in that part of the area of operation, including natural obstacles, favors the defending force because—

- Terrain forward in the area of operations favors the defense.
- Strong, existing natural or man-made obstacles, such as a river or a canal, are located forward in the area of operation.
- Assigned area of operation lacks depth due to the location of the protected area.
- Natural engagement areas occur near the forward edge of the battle area.
- Cover and concealment in the rear portion of the area of operation is limited.
- Directed by higher headquarters to retain or initially control forward terrain.

Forward Defense Against an Infantry Threat (Static Actions Oriented on Terrain Retention), Example

3-169. In this example (see figure 3-14 on page 3-46), the Infantry battalion conducts an area defense, retains terrain west of the Blue River. The enemy can attack within the battalion's area of operations with an estimated Infantry regiment and can reinforce with tanks if a bridgehead is secured. The terrain is broken and hilly with alternating wooded and cleared areas. Steep slopes and the moderate to heavy wooded areas restrict vehicular movement. The Blue River is not fordable to vehicles and cannot be crossed by Infantry without some delay or special equipment except at High Shoals Ford and Red Ford.

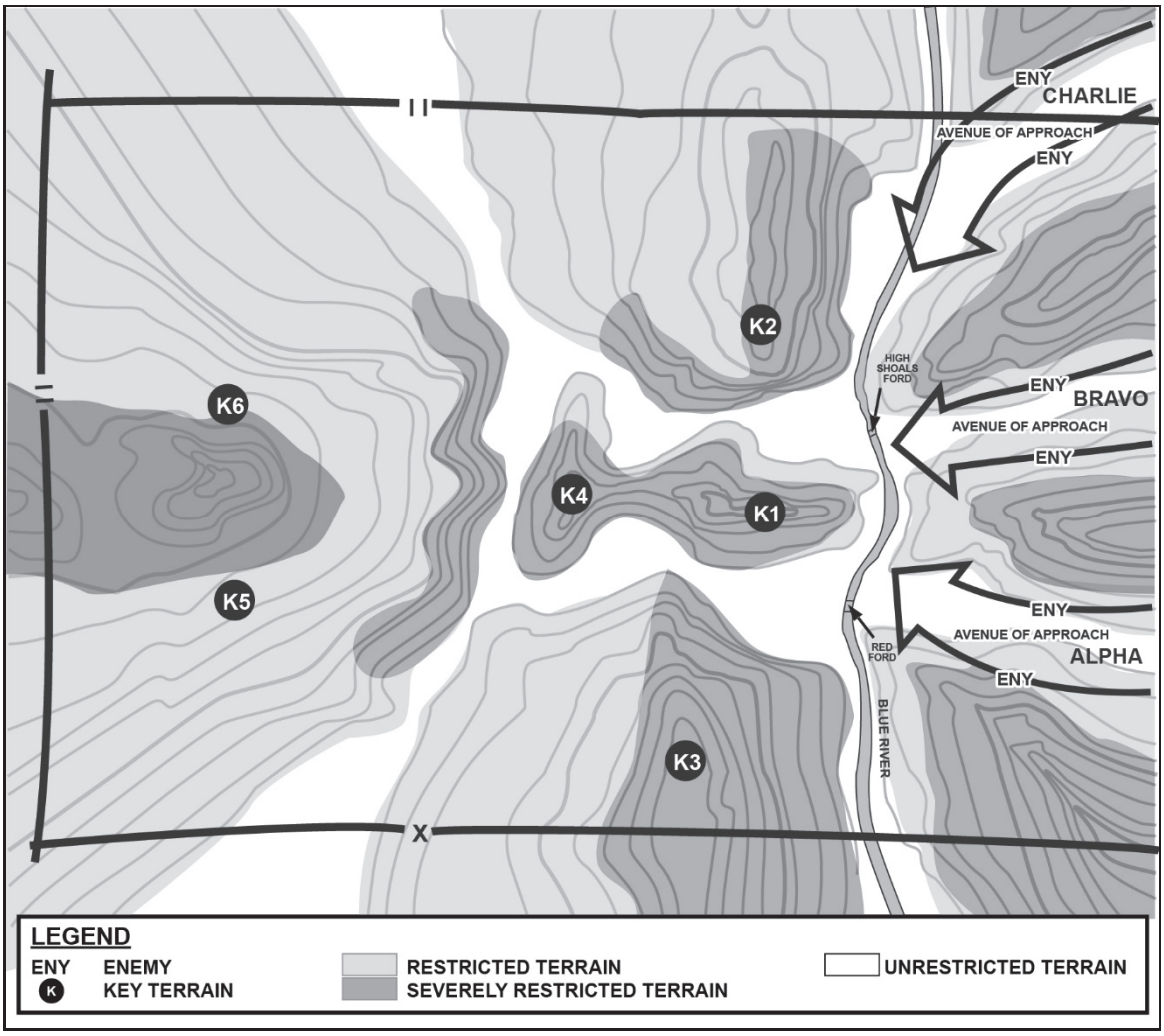


Figure 3-14. Key terrain and avenues of approach, example

3-170. The commander and staff identify *key terrain*—any locality, or area, the seizure or retention of which affords a marked advantage to either combatant (JP 2-01.3)—as shown in figure 3-14. Key Terrain 1, 2, and 3 are critical to the defense because occupying them will allow the engagement of enemy forces forward of the river, preventing the establishment of an enemy force on the east bank and the use of crossing sites to support continuous movement into and through the battalion's area of operations. The commander designates Key Terrain 1 as decisive terrain in the concept of operations to communicate its importance to battalion staff and subordinate commanders. *Decisive terrain,* when present, is key terrain whose seizure and retention is mandatory for successful mission accomplishment (FM 3-90-1). From Key Terrain 4, elements can slow or stop enemy forces, which may seize Key Terrain 1, 2 and 3 and attempt to push through the battalion area of operations toward Key Terrain 5 and Key Terrain 6. Elements positioned on Key Terrain 5 and 6 can counterattack to regain control of area vicinity Key Terrain 1, 2, 3, and 4.

Note. In operations over mountainous terrain, the analysis of key and decisive terrain is based on the identification of these features at each of the three operational terrain levels. Understanding there are few truly impassable areas in the mountains. The commander recognizes that what may be key terrain to one force may be an obstacle to another force. The commander also recognizes that properly trained forces can use high obstructing terrain as a means to achieve decisive victories with comparatively small-sized combat elements. (Refer to ATP 2-01.3 and ATTP 3-21.50 for additional information.)

3-171. The commander and staff identified two *avenues of approach*—the air or ground route leading to an objective (or to key terrain in its path) that an attacking force can use (ADRP 3-90)—into and through the battalion's area of operations. Although the enemy can attack on both, Avenue of Approach Alpha is the largest and most dangerous to the defense (figure 3-14). The seizure of Key Terrain 1 by the enemy would give the enemy a vehicle-crossing site (Red Ford) and a protected area from which the enemy could continue the attack on less restrictive terrain. The battalion commander decides to establish a forward defense with three rifle companies forward, which allows detection and engagement of the enemy at any point the enemy may choose to attack. The battalion commander determines that by positioning companies along the river, the commander could exploit the linear obstacle (Blue River) to gain good observation and fires on enemy forces attempting to seize crossing sites. The commander exploits the canalization of the enemy as it moves through the narrow passage ways, forcing them to attempt to breach as they are exiting the narrow passage point and forced to attack piecemeal.

3-172. Company commanders visualizes the allocation of forces based on the location and size of avenues of approach and the width and depth of the company areas of operation. Companies defend forward with platoons in-depth, allowing each company to gain mutual support between platoons and with adjacent units. The depth allotted to a forward company allows enough space to deploy available combat elements and provides suitable terrain for alternate and supplementary positions, the company command post, company mortars, and company trains. In deciding on the depth of forward company area of operations, the battalion commander considers the location of the battalion reserve. The areas provided to forward companies does not include the terrain required for the battalion reserve. (See figure 3-15 on page 3-48.)

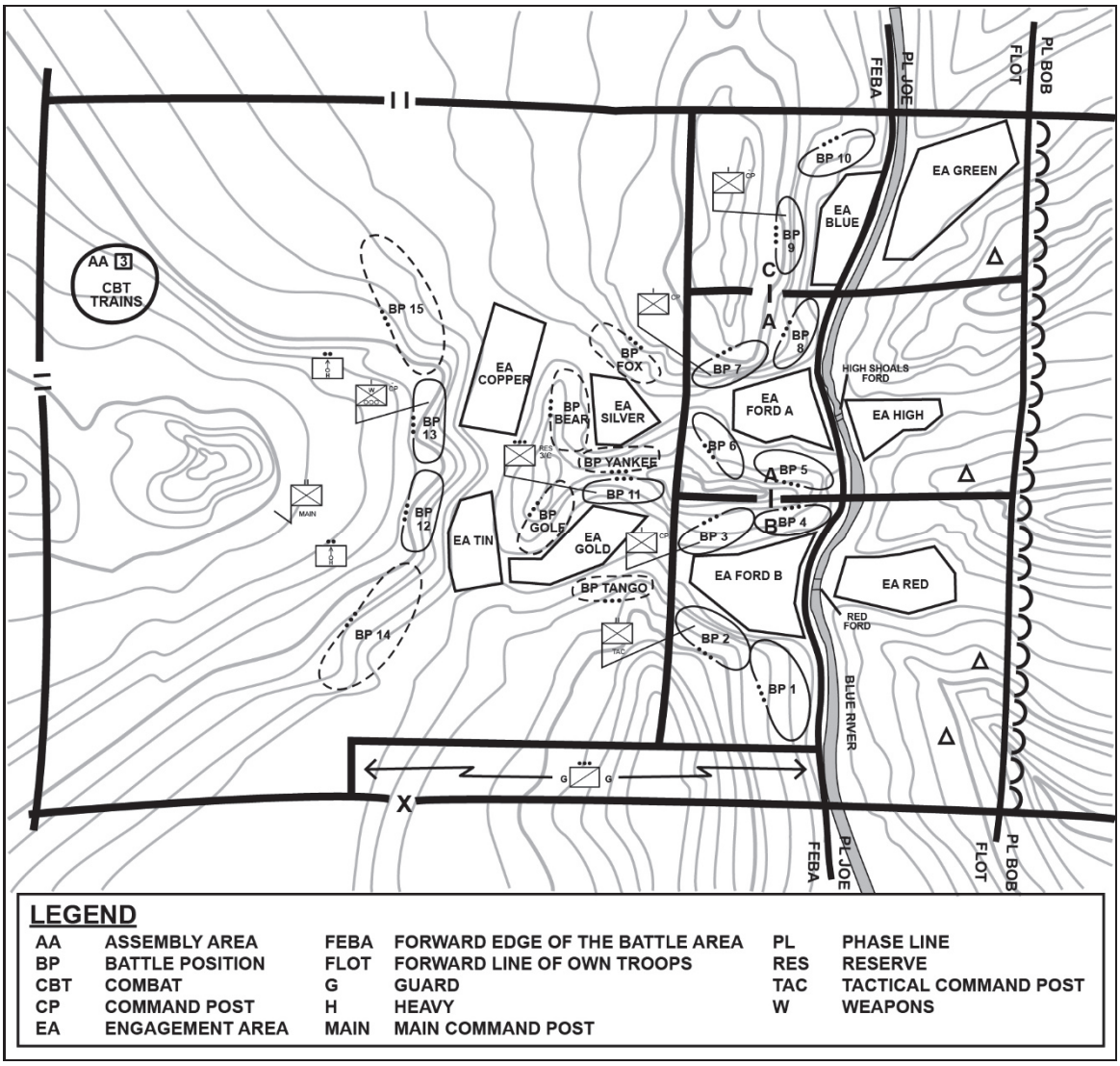


Figure 3-15. Company and platoon employment, example

3-173. The battalion commander determines that three rifle platoons and one assault platoon (battalion main effort) is required to defend Avenue of Approach Alpha, three rifle platoons and one assault platoon to defend Avenues of Approach Bravo, and two rifle platoons to defend Avenue of Approach Charlie (north of High Shoals Ford). The commander weights the battalion's main effort with priority of fires to block enemy penetration on Avenue of Approach Alpha. The battalion defends with two companies forward, with platoons in-depth, along the two most dangerous avenues of approach, Alpha and Bravo. Company C defends with two platoons forward on Avenue of Approach Charlie (least likely avenue of approach). Company D (weapons company-minus) establishes overwatch positions from primary and alternate battle positions (Battle Positions 12, 13, 14, and 15) to the rear of forward rifle companies. On order, establish supplementary (overwatch) positions (Battle Positions Tango, Golf, Bear, and/or Fox) to the rear of Company B, along Avenue of Approach Alpha and Company A, along Avenue of Approach Bravo. The commander designates one rifle platoon from Company C (vicinity Battle positon 11) as the battalion reserve with a be-prepared mission to block the most dangerous avenue of approach, Alpha. The commander also assigns an on-order position to the reserve, Yankee, to block Avenue of Approach Bravo.

Note. Due to the limited number of firing positions along the river, the battalion commander retains two of the four assault platoons under the Company D commander's control. Assault platoons, controlled by the Company D commander, initially establish battle positions 12 and 13 to assist in-depth to limit the enemy advance. Should the enemy establish a crossing site across the river, on order, Company D conducts counterattacks to establish attack by fire positions (tentative battle positions are Tango, Golf, Bear, or Fox) to reinforce forward companies A and B. The commander positions the scout platoon initially to conduct R&S and security operations forward of the battalion (not illustrated), on order, conduct guard mission to the right flank of Company B to defeat, cause to withdraw, or fix enemy dismounted movement south of Battle Position 1 and along the southern boundary of the battalion. Battalion mortars operate split section, initially positioned forward vicinity Battle Positions Golf and Tango (not illustrated) with priority of fires to security area actions. On order, reposition by section to firing positions vicinity Battle Positions 12 and 13 with priority of fires to main battle area actions initially in Engagement Area Red, then Engagement Area Ford B (see figure 3-15).

Army Aviation Support

3-174. In the defense, the speed and mobility of aviation can assist the Infantry in the concentration of forces and tactical flexibility. Army aviation attack and reconnaissance units support the Infantry with aerial R&S, observed fires (in contact), and deep operations (out of contact) independent of the ground maneuver. Army Aviation attacks against enemy forces in or out of contact can be the decisive or shaping operation at the tactical or operational level and enable the combined arms team to maintain the tempo of operations while presenting multiple dilemmas to the enemy at the ground maneuver commander's time and place of choice.

3-175. Army aviation attack and reconnaissance units, in close coordination with the Infantry, attack to destroy, defeat, disrupt, divert, or delay enemy forces to enable the combined arms team to seize, retain, or exploit the initiative. These attacks can also be either hasty or deliberate. In either case, the ground maneuver commander (in contact) is responsible for the integration and synchronization of Army aviation in the ground scheme of maneuver and controls the distribution and de-confliction of Army aviation maneuver and fires during maneuver. Synchronization of aviation assets into the defensive plan is important to ensure aviation assets are capable of massing fires and to prevent fratricide. Detailed air-ground integration and coordination is necessary to ensure efficient use of aviation assets. (See appendix D for additional information on air-ground operations.)

3-176. In support of the area defense, Army aviation forces support forward security area operations and mass fires during the main battle area fight. When assigned aviation assets the commander gives careful consideration to engagement area development and direct fire planning. (Refer to ATP 3-21.20 and ATP 3-91.1 for additional information.)

Note. During deep operations, Army aviation attack and reconnaissance units conduct operations as a maneuver force with manned and unmanned systems maneuvering interdependently. *Manned-unmanned teaming* is the integrated maneuver of Army aviation rotary wing and unmanned aircraft systems to conduct movement to contact, attack, reconnaissance, and security tasks (FM 3-04). Manned-unmanned teaming enables increased depth and breadth of aviation reconnaissance and maneuver, longer persistence over the reconnaissance objective, increased ability to gain and maintain enemy contact, greater survivability and more options to develop the situation with enhanced maneuver, fires, and mission command. Army aviation attack and reconnaissance units can attack deep high-payoff targets, enemy concentrations and moving columns, and disrupt the enemy at the decisive point. Aviation forces employ in-depth to attack exploitation forces or follow-on echelons before they can move forward to the close battle. (Refer to FM 3-04 and ATP 3-04.64 for additional information.)

Countermobility Operations

3-177. *Countermobility* operations are those combined arms activities that use or enhance the effects of natural and man-made obstacles to deny enemy freedom of movement and maneuver (ATP 3-90.8). Primary purposes of countermobility operations are to shape enemy movement and maneuver and to prevent the enemy from gaining a position of advantage. In support of the area defense, countermobility operations are conducted to disrupt enemy attack formations and assist in defeating the enemy in detail. Countermobility operations channel attacking enemy forces into engagement areas throughout the depth of the defense and protect the flanks of friendly counterattack forces. Countermobility operations shape engagements, maximize the effects of fires, and provide close-in protection around defensive positions to defeat the final assault of the enemy and to prevent and warn of intrusion into critical support area sites and fixed sites such as bases. (Refer to ATP 3-90.8 for additional information.)

Countermobility Planning

3-178. The company commander using available battalion staff products develops the countermobility plan concurrently with the fire support plan and defensive scheme of maneuver, guided by the battalion commander's intent. The conduct of countermobility operations typically involves engineers and includes proper obstacle integration with the maneuver plan, adherence to obstacle emplacement authority, and positive obstacle control. Combined arms obstacle integration synchronizes countermobility operations into the concept of operations. Because most obstacles have the potential to deny the freedom of movement and maneuver to friendly forces and enemy forces, it is critical that the commander properly weighs the risk and evaluates the trade-off of employing various types of obstacles.

3-179. Obstacle control is essential in supporting the commander's plan. Responsibilities for executing tasks within countermobility operations can be broadly divided into two entities: emplacing unit and owning unit. This framework helps the commander plan for and assign responsibilities for obstacle execution to subordinate units. The responsibilities of each may vary based on the type of obstacle and the situation. The commander's concept of operations will include the following tasks:

- Site obstacles.
- Construct, emplace, or detonate obstacles.
- Mark, report, and record obstacles.
- Maintain obstacle integration.

Note. See ATP 3-21.8 for information on the types and employment of friendly obstacles.

Terrain Reinforcement

3-180. Countermobility operations typically reinforce the terrain to block, fix, turn, or disrupt the enemy's ability to move or maneuver, giving the commander opportunities to exploit enemy vulnerabilities or react effectively to enemy actions. The commander reinforces the terrain to prevent the enemy from gaining a position of advantage taking full advantage of the natural restrictiveness of the existing terrain to minimize the time, effort, and materiel needed to achieve the desired obstacle effects. Reinforcing the terrain focuses on existing and reinforcing obstacles. Existing obstacles are inherent aspects of the terrain that impede movement and maneuver. Existing obstacles may be natural (rivers, mountains, wooded areas) or man-made (enemy explosive and nonexplosive obstacles and structures, including bridges, canals, railroads, and embankments associated with them).

3-181. Reinforcing obstacles are those man-made obstacles that strengthen existing terrain to achieve a desired effect. Reinforcing obstacles must be planned and emplaced to support the maneuver commander's plan, while not hindering friendly-force mobility. Obstacle plans are developed based on a thorough understanding of the commander's intent and concept of operations, enemy mobility capabilities, and the effects of the natural terrain and existing obstacles. Only then can the true value of integrating obstacles, observation, fires, and maneuver be realized. The basic employment principles for reinforcing obstacles are—

- Support the maneuver commander's plan.
- Integrate with observation and fires.

- Integrate with other obstacles.
- Employ in-depth.
- Employ for surprise.

3-182. Reinforcing obstacles on land consist of land mines, networked munitions, and demolition and constructed obstacles. A *land mine* is a munition on or near the ground or other surface area that is designed to be exploded by the presence, proximity, or contact of a person or vehicle (ATP 3-90.8). Land mines can be further defined as antivehicle or antipersonnel. They can be air-, artillery-, or ground-delivered. Land mines can be employed in quantities within a specific area to form a minefield, or they can be used individually to reinforce nonexplosive obstacles. Land mines fall into the two general categories—persistent and nonpersistent. Persistent land mines are not capable of self-destructing or self-deactivating. Nonpersistent land mines are capable of self-destructing or self-deactivating.

Note. As of 1 January 2011, U.S. forces are no longer authorized to employ persistent (those that are not self-destructing or self-deactivating) or nondetectable land mines. See JP 3-15 for more information on the laws, agreements, and policies that are most significant to the employment of obstacles.

3-183. *Networked munitions* is a remotely controlled, interconnected, weapons system designed to provide rapidly emplaced ground-based countermobility and protection capability through scalable application of lethal and nonlethal means (JP 3-15). Demolition obstacles are created using explosives. Examples include bridge or other structure demolition (rubble) and road craters. (See ATP 3-90.8, Appendix B for more information on demolition obstacles.) Constructed obstacles are created without the direct use of explosives. Examples include wire obstacles, antivehicle ditches, or similar construction that typically involves the use of heavy equipment. (See ATP 3-90.8, appendix C for more information on construction obstacles.)

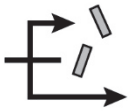
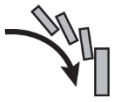
3-184. Reinforcing obstacles, categorized as tactical and protective, are employed as part of the movement and maneuver and protection (see paragraph 3-99 on page 3-27) warfighting functions. Tactical obstacles help shape enemy maneuver and prevent the enemy from gaining a position of advantage, while protective obstacles protect people, equipment, supplies, and facilities against threats. The primary purposes of tactical obstacles are to shape enemy maneuver and to maximize the effects of fires. Tactical obstacles directly attack the ability of a force to move, mass, and reinforce; therefore, they affect the tempo of operations. Commanders integrate obstacles into the scheme of movement and maneuver to enhance the effects of fires. Preexisting obstacles that a unit reinforces and integrates with observation and fires may become tactical obstacles. The types of tactical obstacles are clearly distinguished by the differences in execution criteria. The three types are—

- *Directed obstacle*, an obstacle directed by a higher commander as a specified task to a subordinate unit (ATP 3-90.8).
- Situational obstacle, an obstacle that a unit plans and possibly prepares prior to starting an operation, but does not execute unless specific criteria are met. The commander considers types of obstacle to employ, and the trigger.
- *Reserved obstacle*, an obstacle of any type, for which the commander restricts execution authority (ATP 3-90.8).

Obstacle Intent

3-185. An *obstacle* is any natural or man-made obstruction designed or employed to disrupt, fix, turn, or block the movement of an opposing force, and to impose additional losses in personnel, time, and equipment on the opposing force (JP 3-15). Obstacle intent describes how obstacles support the commander's concept of operations. Obstacle intent consists of the— target, effect, relative location. The target is the enemy force that the commander wants to affect with tactical obstacles. The commander usually identifies the target in terms of the enemy size and type, the echelon, the avenue of approach, or in combination. Tactical obstacles and fires—direct and indirect—manipulate the enemy in a way that supports the commander's intent and scheme of movement and maneuver.

3-186. Obstacle effect describes the effect that the commander wants the obstacle(s), combined with fires, to have on the enemy. The obstacle effect—drives integration, focuses subordinate fires, focuses obstacle effort, and multiplies firepower effects. Important to remember, obstacle effects occur because of the combined effects of fires and obstacles, rather than from obstacles alone. Tactical obstacles produce one of the following effects: disrupt, turn, fix, and block. (See figure 3-16.) Obstacle effect symbols are used as control measures for obstacle groups and as elements of the control measures for obstacle zones and belts. During course-of-action development, obstacle effect symbols are also used in developing and showing the initial obstacle plan that supports each course of action.

APPLICATION	DESCRIPTION	PURPOSE	FIRES AND OBSTACLES MUST:	OBSTACLE CHARACTERISTICS
DISRUPT 	• The arrows indicate the direction of enemy advance. • The length of the arrows indicate where the enemy is slowed or allowed to bypass.	• Breakup enemy formations. • Interrupt the enemy's timetable and C2. • Cause premature commitment of breach assets. • Cause the enemy to piecemeal his attack.	• Cause the enemy to deploy early. • Slow part of his formation while allowing part to advance unimpeded.	• Do not require extensive resources. • Difficult to detect at long range.
TURN 	• The heel of the arrow is the anchor point. • The direction of the arrow indicates the desired direction of the turn.	• Force the enemy to move in the direction desired by the the friendly commander.	• Prevent the enemy from bypassing or breaching the obstacle belt. • Maintain pressure on the enemy force throughout the turn. • Mass direct and indirect forces at the anchor point of the turn..	• Tie into impassable terrain at the anchor point. • Consist of obstacles in depth. • Provide a subtle orientation relative to the enemy's approach.
FIX	• The arrow indicates the direction of enemy advance. • The irregular part of the arrow indicates where enemy advance is slowed by obstacles.	• Slow an attacker within an area so he can be destroyed. • Generate the time necessary for the friendly force to disengage.	• Cause the enemy to deploy into attack formation before encountering the obstacles. •Allow the enemy to advance slowly in an EA or AO. • Make the enemy fight in multiple directions once he is in the EA or AO.	• Arrayed in depth. • Span the entire width of the avenue of approach. • Must not make the terrain appear impenetrable.
BLOCK	• The vertical line indicates the limit of enemy advance and where the obstacle ties into severely restricted terrain. • The horizontal line shows the depth of the obstacle effort.	• Stop an attacker along a specific avenue of approach. • Prevent an attacker from passing through an AO or EA. • Stop the enemy from using an avenue of approach and force him to use another avenue of approach.	• Prevent the enemy from bypassing or penetrating through the belt. • Stop the enemy's advance. • Destroy all enemy breach efforts.	• Must tie into impassable terrain. • Consistent of complex obstacles. • Defeat the enemy's mounted and dismounted breaching effort.
Direction of enemy attack ⟶				

LEGEND

AO AREA OF OPERATION C2 COMMAND & CONTROL EA ENGAGEMENT AREA

Figure 3-16. Tactical obstacle effects

3-187. Relative location refers to the location of a tactical or protective obstacle in relation to maneuver or fire control measures such as assembly areas, battle positions, or engagement areas. Engineers and other countermobility planners describe planned obstacle locations in relation to maneuver or fire control measures to help maneuver commander visualize linkages between obstacles, fires, and maneuver and to ensure obstacle integration. (Refer to ATP 3-90.8 for additional information.)

Obstacle Control Measures

3-188. *Obstacle control measures* are specific measures that simplify the granting of obstacle-emplacing authority while providing obstacle control (FM 3-90-1). The commander establishes obstacle control by delegating or withholding emplacement authority; marking, reporting, recording, and tracking obstacles; and restricting types or locations of obstacles through obstacle control measures. The commander uses obstacle control measures and other specific guidance or orders to grant or withhold obstacle emplacement authority

to subordinate commanders and provide obstacle control. Obstacle control measures consist of—obstacle zones, obstacle belts, obstacle groups, obstacle restrictions.

3-189. An *obstacle zone* is a division-level command and control measure, normally done graphically, to designate specific land areas where lower echelons are allowed to employ tactical obstacles (JP 3-15). Obstacle zones are permissive, allowing a BCT to place reinforcing obstacles to support BCT's scheme of maneuver without interfering with future operations. Obstacle zones are assigned to a single subordinate unit to ensure unity of effort, keeping tactical obstacle responsibility along the same lines as control of direct and indirect fires. Normally assign an obstacle effect (block, fix, turn, or disrupt) is not assigned to an obstacle zone, allowing subordinate commanders flexibility in using obstacles.

3-190. An *obstacle belt* is a brigade-level command and control measure, normally depicted graphically, to show where within an obstacle zone the ground tactical commander plans to limit friendly obstacle employment and focus the defense (JP 3-15). An obstacle belt assigns an intent to the obstacle plan and provides the necessary guidance on the overall effect of obstacles within a belt. The commander plans obstacle belts within assigned obstacle zones to grant obstacle-emplacement authority to subordinate units. Obstacle belts focus obstacles to support the BCT scheme of maneuver and ensure obstacles do not interfere with the maneuver of any higher headquarters.

3-191. *Obstacle groups* are one or more individual obstacles grouped to provide a specific obstacle effect (FM 3-90-1). The Infantry battalion and company use obstacle groups to ensure subordinate units emplace individual obstacles that support the higher headquarters scheme of maneuver.

3-192. Individual obstacles that the company can construct include antitank ditches, abatis, booby traps, minefields, roadblocks, craters, and wire obstacles. Subordinate units integrate obstacle groups with direct- and indirect-fire plans. The battalion commander can plan the placement of obstacle groups anywhere in an obstacle zone or belt, respectively. Unlike obstacle zones or belts, obstacle groups are not areas but relative locations for actual obstacles. Obstacle groups are displayed using the obstacle-effect graphics. When detailed planning is possible (to include detailed on-the-ground reconnaissance), the commander may show obstacle groups using individual obstacle graphics.

Note. In rare cases, brigades, divisions, or even corps may use obstacle groups for specific tactical obstacles.

3-193. The commander may use obstacle restrictions to provide additional obstacle control and to limit the specific types of obstacles used, such as restricting the use of buried mines. Obstacle restrictions ensure that subordinates do not use obstacles with characteristics that impair future operations. These restrictions also allow the commander to focus the use of limited resources for the decisive operation by restricting their use elsewhere. An *obstacle restricted area* is a command and control measure used to limit the type or number of obstacles within an area (JP 3-15). The commander with emplacement authority uses obstacle restricted areas to restrict obstacle placement. The obstacle restricted area graphic depicts the impacted area, the unit imposing the restriction, and the restrictions in effect. (Refer to ATP 3-90.8 for additional information.)

Wire Obstacles

3-194. The three types of wire obstacles are protective, tactical, and supplementary. (See figure 3-17 on page 3-54.) Protective wire can be a complex obstacle providing all-round protection of a platoon perimeter. It might also be a simple wire obstacle on the likely dismounted avenue of approach into a squad ambush position. Command-detonated M18 claymore munitions can be integrated into the protective wire or used separately. Tactical wire is positioned to increase the effectiveness of the company's fires. Usually, it is positioned along the friendly side of the machine gun final protective lines. Tactical minefields may also be integrated into these wire obstacles or used separately. Supplementary wire obstacles can break up the line of tactical wire. This helps prevent the enemy from locating friendly weapons (particularly the machine guns) by following the tactical wire.

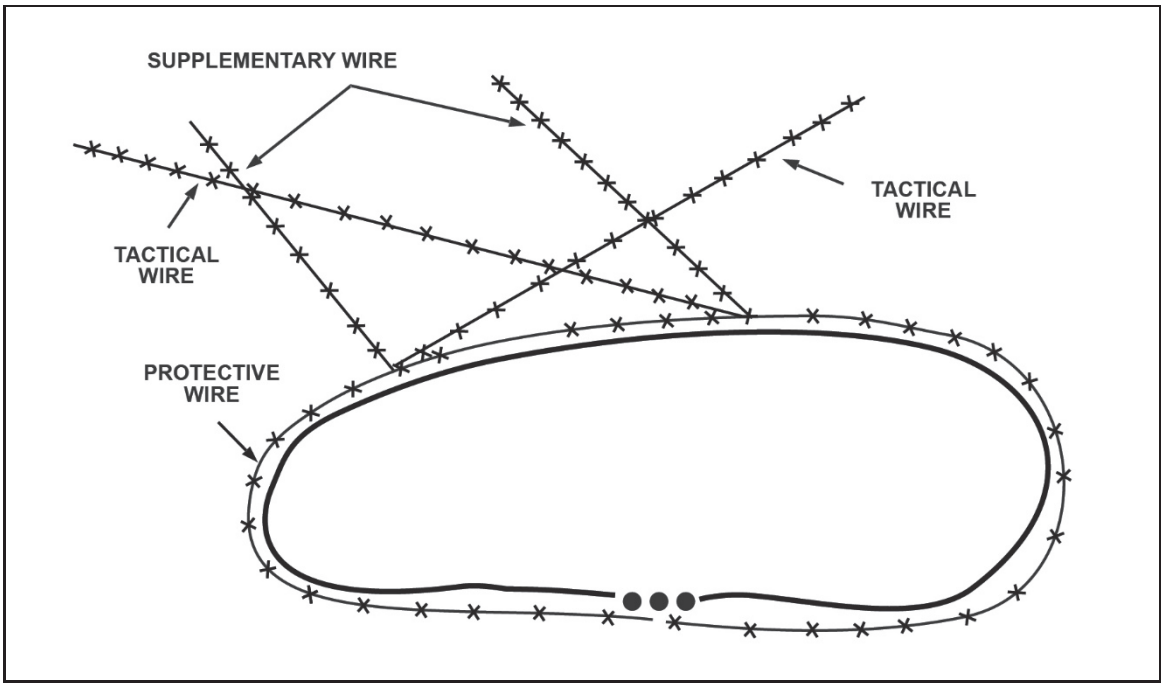


Figure 3-17. Protective, tactical, and supplementary wire obstacles

Note. The company typically is responsible for actions related to lanes through obstacles. These duties can include marking lanes in an obstacle, reporting locations of the start and end points of each lane, operating contact points, providing guides for elements passing through the obstacle, and closing the lane.

Mobility

3-195. When planning an area defense, the commander identifies the mobility requirements by analyzing the scheme of maneuver, counterattack options, reserve planning priorities, fire support, protection, and sustainment movement requirements, and adjacent and higher unit mission, movement and maneuver. The commander with the assistance of attached engineers (if available) integrates analysis into the obstacle plan while avoiding the impediment of friendly maneuver when possible. Because the bulk of the engineer force is committed to countermobility and survivability during preparation, the commander uses clear obstacle restrictions on specific areas within the area of operation to maintain mobility. Mobility support linkup and coordination is factored into the overall defensive preparation timeline.

3-196. When obstacles must be constructed along a mobility corridor that primarily supports friendly movement. A lane or gap and associated closure procedures are planned and rehearsed. Lanes or gaps may be closed with situational or reserved obstacles. Beyond preparing and marking lanes and gaps through obstacles, engineers normally perform mobility tasks once defensive preparations are complete. Mobility assets may then be positioned to counter templated enemy situational obstacles, or be task organized to the reserve, counterattack force, or any other unit that must maneuver or move subsequent to the execution of the defense. To do this effectively, mobility asset and supported maneuver units integrate, prepare, and rehearse.

3-197. Although not specifically designed or intended as an obstacle, structures may pose as an obstacle based on existing characteristics or altered characteristics that result from combat operations or a catastrophic event. Structures such as bridges and overpasses present an inherent impediment to mobility based on weight and clearance restrictions. Existing obstacles are shown on the combined obstacle overlay developed as part of the IPB. As described in ATP 3-34.80, geospatial engineering is critical in accurately predicting the effects that existing obstacles will have on enemy and friendly movement and maneuver.

3-198. On occasion when subordinate companies of the battalion require significant mobility support during defensive preparation. For example, route reduction or clearance, road repair or maintenance, and landing zone and pickup zone clearance. Engineers have resources to perform these tasks, but cannot perform them and simultaneously prepare the defense. Engineer augmentation above the IBCT, when available can perform general engineering tasks, leaving IBCT engineer assets from the brigade engineer battalion to assist in the construction of the battalion defense.

Civil Consideration

3-199. The commander considers how to minimize civilian interference with combat operations while protecting civilians from future hostile actions according to the law of war. The commander considers the type and size of the area of responsibility, line-of-communication security, and the threat and plan for detainee operations and dislocated civilians to determine how their presence may affect movement and maneuver. The commander must also consider the threat civilians pose to defending force and its operations if enemy agents or saboteurs are part of the civilian population.

Intelligence

3-200. IPB is a critical part of defensive planning. (See ATP 2-01.3.) IPB helps the commander determine where to concentrate combat power, where to accept risk, and where to plan the potential decisive operation. The battalion integrates intelligence from the higher echelon's collection efforts and from units operating forward of the battalion's area of operations and is then disseminated to subordinate to company commanders, who then conduct IPB at the company level. Information collection includes collection from spot reports, tactical unmanned aircraft systems, and other higher-level collection assets. Early warning of enemy air attack, Airborne or helicopter assault or insertion, and dismounted infiltration are vitally important to provide adequate reaction time to counter these threats as far forward as possible. To aid in the development of a flexible defensive plan, the IPB presents all feasible enemy course of actions. The essential areas of focus are terrain analysis, determination of enemy force size and likely course of actions with associated decision points, and determination of enemy vulnerabilities.

3-201. In the defense, key terrain is usually within and behind the defensive area, such as terrain that gives good observation over avenues of approach to and through the defensive position; terrain that permits the defender to cover an obstacle by fire; or areas along lines of communications that affect the use of reserves or sustainment operations. Key terrain may include portions of the population, such as political, tribal, and religious groups or leaders; a localized population; infrastructure; or governmental organizations. Weather conditions can affect visibility as well. Temperature can affect the use of thermal sights. Cloud cover can negate illumination provided by the moon. Additionally, precipitation and other obscurants can have varying effects as well. Low visibility is beneficial to offensive and retrograde operations because it conceals concentration of maneuver forces, thus enhancing the possibility of surprise. Low visibility hinders the defense because cohesion and control become difficult to maintain, reconnaissance operations are impeded, and target acquisition is degraded.

3-202. Avenues of approach are air or ground routes used by an attacking force leading to its objective or to key terrain in its path. The identification of avenues of approach is important because all course of actions that involve maneuver depend on available avenues of approach. During offensive tasks, the evaluation of avenues of approach leads to a recommendation on the best avenues of approach to a command's objective and identification of avenues available to the enemy for counterattack, withdrawal, or the movement of reinforcements or reserves. In a defense operation, it is important to identify avenues of approach that support enemy offensive capabilities and avenues that support the movement and commitment of friendly reserves. Avenues of approach are developed by identifying, categorizing, and grouping mobility corridors and evaluating avenues of approach.

3-203. Depending on the size and capabilities of the attacking force, functions can be allocated to disruption, the enemy's main defense, support, and reserve. Reconnaissance and other security measures are a constant activity to observe Avenues of approach near a complex battle position in order to provide early warning to the enemy. The commanders analysis throughout the IPB focuses on determining the enemy's—

- Main, supporting, and reinforcing efforts.
- Use of reserves.

- Use of special munitions.
- Use of air support.

Fires

3-204. Supporting the commander's concept of operations during the defense involves attacking and engaging targets throughout the area of operation with massed or precision fires. The commander and available fire support planners (FSO, fire support NCO, and FIST teams) make maximum use of any preparation time available to plan and coordinate supporting fires. Planners ensure fires complement and support all security forces forward of the main battle area as these fires play a key role in disrupting the attacker's tempo and synchronization during the defense. Fire support planning and execution must address flexibility through operations in-depth and support to defensive maneuver. The commander promotes freedom of action within the main battle area by using the least restrictive control measures necessary to implement the scheme of maneuver. The commander ensures all key avenues of approach, and obstacles are considered when employing indirect fires, incorporating all available firepower where the enemy will likely attack.

3-205. The company may utilize unmanned aircraft systems, remote sensors, and reconnaissance and security forces to call for fire on the enemy throughout the area of operation. Quick, violent, and simultaneous action throughout the depth of the defender's area of operations can degrade, confuse, and paralyze an enemy force just as that enemy force is most exposed and vulnerable. Though the company may receive priority of fires for a specific mission or phase of the defense, the commander must not overly rely on indirect fire assets available from the brigade and battalion. Company mortars may be the primary indirect fire assets for the company. (See FM 3-09.) Additional fire support considerations for supporting the commander's concept of operations include—

- Allocating initial priority of fires security forces forward.
- Observation plans.
- Planning targets along enemy reconnaissance mounted and dismounted avenues of approach.
- Engagement of approaching enemy formations at vulnerable points along their route of march.
- Planning the transition of fires from the security area to through the main battle area fight.
- Planning the echelonment of fires (see Appendix D).
- Incorporating existing fire support coordination measures and detailed triggers to adjust them.
- Developing clear triggers to initiate fires and adjust priority of fires.
- Ensuring integration of fires in support of obstacle effects.
- Ensuring the integration of fires with the counterattack plan and repositioning contingency plans.
- Identifying and targeting high priority targets.
- Airspace deconfliction.
- Integration and positioning of organic mortars.
- Planning final protective fires.

Sustainment

3-206. Sustainment considerations within the Infantry are characterized by constrained organic assets. Planning for sustainment operations throughout the security area is critical to sustaining reconnaissance and security operations to prevent enemy forces from determining friendly force disposition. Forces operating within the security area are configured prior to departure of the main battle area with a minimum of 72-hour logistics package of Class I (subsistence), Class III (petroleum, oil, and lubricants), and Class V. Preconfigured combat loads are positioned in the combat trains to expedite resupply operations. (See Appendix D.) Pre-stocked classes of supply (Classes IV and V) are pre-positioned as required within the defense. Sustainment support to the security area must include planning for both ground and aerial resupply and medical evacuation of long duration observation points. The commander must select the locations of both company trains, and casualty collection point. Both should be positioned to not be decisively engaged, but ensures accessibility. Non-essential gear should be kept toward the rear of the defense near the company trains, or under watch by company personnel and located in the battalion field trains.

3-207. Enemy actions and the maneuver of combat forces complicate medical operations, as will the depth and dispersion of the defense. Defensive operations must include health service support to medical personnel who have much less time to reach a patient, complete vital emergency medical treatment, and remove the patient from the battle site. With the enemy's initial attack and the battalion's counterattack producing the heaviest patient workload, they are also the most likely times for the enemy's use of artillery and CBRN weapons. These enemy attacks can disrupt ground and air routes and delay evacuation of patients to and from treatment elements.

Protection

3-208. Because the battalion and company defends to conserve combat power for use elsewhere or later, the commander must secure the force. The commander enables security, by means of providing information about the activities and resources of the enemy, through the employment reconnaissance forces and surveillance assets within the assigned area of operation. The battalion commander may employ counterreconnaissance forces, and establish combat outposts and observation posts to counter enemy R&S efforts. The commander integrates company R&S efforts, and security operations with those of the IBCT and information collection assets.

3-209. Soldiers must conduct individual preventative measures such as; the use of sunglasses, sunscreen, mosquito netting, insect repellent, and personal hygiene. The company must use and properly employ the unit field sanitation team to ensure a healthy and fit fighting force (See TC 4-02.3 for more information).

3-210. As discussed in Chapter 2, personnel and physical assets have inherent *survivability*—a quality or capability of military forces which permits them to avoid or withstand hostile actions or environmental conditions while retaining the ability to fulfill their primary mission (ATP 3-37.34), which can be enhanced through various means and methods. One way the battalion can enhance survivability when existing terrain features offer insufficient *cover*, protection from the effects of fires (FM 3-96), and *concealment,* protection from observation or surveillance (FM 3-96), is to alter the physical environment to provide or improve cover and concealment. Similarly, natural or artificial materials may be used as camouflage to confuse, mislead, or evade the enemy. Together, these are called *survivability operations*—those military activities that alter the physical environment to provide or improve cover, concealment, and camouflage (ATP 3-37.34). Although survivability encompasses capabilities of military forces both while on the move and when stationary, survivability operations focus more on stationary capabilities—constructing fighting and protective positions and hardening facilities.

3-211. Within the area defense, protective obstacles employed to protect people, equipment, supplies, and facilities against threats are key enablers to survivability operations. Protective obstacles provide local, close-in protection to prevent the enemy from delivering a surprise assault from areas close to defending positions. Protective obstacles protect the emplaced position by warning, mitigating, and preventing hostile actions and effects. (See ATP 3-90.8.) The commander uses protective obstacle effects (warning, mitigation, and prevention) to convey intent and facilitate protective obstacle planning and design. Protective obstacles employed in support of the area defense must be capable of being rapidly emplaced, and recovered or destroyed. FPFs are integrated within the protective obstacle plan to defeat the final assault of the enemy.

3-212. As the company conducts survivability operations within the limits of their capabilities. Engineer and CBRN assets provide additional capabilities to support survivability operations in support of the company. Engineer support to survivability operations is a major portion of the enhance protection line of engineer support and the integration of survivability priorities for critical systems and units within and supporting the battalion. (See FM 3-34) CBRN assets support survivability through protection and contamination mitigation measures. Immediate and operational decontamination techniques allow forces to withstand operations in contaminated environments. CBRN reconnaissance assets determine likely locations for enemy employment of CBRN weapons. CBRN defense consists of measures to minimize or negate the vulnerabilities and effects of a CBRN incident. (See Appendix H.)

3-213. In the defense, the commander determines the location of enemy prisoner of war (EPW) if taken by friendly elements. The EPW collection point is located in a defensible guarded location in defilade to the rear of the company, until EPW's can be repositioned to the battalion EPW site.

PREPARATION

3-214. Preparation activities help the commander, and subordinate units of the rifle company (including attachments) understand the situation and their roles in the overall operation. The commander takes every opportunity to improve situational understanding prior to execution, through the integration of intelligence and operations. The commander continuously plans, tasks, and employs aggressive and continuous information collection assets and forces throughout the preparation of the defense. The company commander may need adjust the plan, or be forced to adjust the plan due to changes in the battalion security plan or as a result of intelligence updates (from higher or within the company). These adjustments might put the company in a role to; screen, guard, or secure in order to support the battalion concept. The commander conducts spoiling attacks during preparation to disrupt the enemy's offensive preparations. The following paragraphs discuss key activities (although not inclusive) that the commander, and subordinate units conduct to ensure the company is protected and prepared for execution.

Security

3-215. Just as the company ensures it is able to support the battalion security plan, the commander also ensures the company security plan is in place to keep the enemy from observing or surprising the company. The security is established and sustained throughout the defensive. The commander bases this plan on tasks received from the battalion, on the enemy situation, the terrain, and on visibility conditions. The commander should ensure the usage of active measures, passive measures, and counter-reconnaissance. Active control measures; observation posts, reconnaissance and security patrolling, and one-hundred percent security. Passive measures consist of; camouflage, movement control, light and noise discipline, proper radio etiquette, and unmanned ground sensors. Counter reconnaissance focus on denying the enemy information, and deceiving the enemy into motivating them to do what the defender wants them to do.

Rehearsals

3-216. Rehearsals allow the commander to assess subordinate preparations and identify areas that may require more supervision. The commander considers time, preparation activities, and operations security when selecting a rehearsal type. (See appendix B.) Rarely will the company have enough time to conduct a full-force rehearsal given the tempo of operations and the potentially large size of the area of operations. When possible the commander considers conducting key leader map and terrain board rehearsals at night in order to focus attention during periods of increased visibility on inspecting preparations and working with subordinate leaders. Rehearsals should cover—

- Reconnaissance and surveillance missions.
- Security operations.
- Battle handover and passage of lines.
- Security area and main battle area engagement rehearsals.
- Closure of lanes (as required).
- Movement from hide positions to battle positions.
- Usage of fire commands, triggers, and maximum engagement lines for both direct and indirect systems.
- Shifting of fires to refocus and redistribute effects.
- Displacement to battle positions (subsequent, supplementary, and alternate BPs).
- Engagement, disengagement, reposition, and withdrawal criteria.
- Cross leveling and resupply of critical classes of supply (Class V).
- Reserve employment options and commitment criteria.
- Actions to deal with enemy penetrations, major enemy efforts along areas of risk or flank avenues of approach, and enemy actions in the rear area.
- Sustainment, particularly casualty evacuation, emergency resupply operations, and reorganization.
- Execution of routes for repositioning, movement of the reserve, withdrawal, and movement to casualty collection points, and higher echelon exchange points.

- Execution of follow-on missions to exploit defensive success.
- Integration of aviation assets, when applicable.

Note. The company commander should coordinate rehearsals with the battalion to ensure other units rehearsals are not planned for the same time or location. Coordinating rehearsals leads to more efficient use of planning and preparing time for all battalion units. It also eliminates the danger of misidentification of friendly forces in the rehearsal area, which could result in fratricide.

Survivability and Countermobility

3-217. Much of the strength of a defense rests on the integration and construction of reinforcing obstacles, exploitation of existing obstacles, and actions to enhance the survivability of the force through construction of fighting positions and fortifications. The commander's intent focuses survivability and countermobility preparation through the articulation of obstacle intent (target, effect, and relative location), and priorities and establishment of priorities for survivability and countermobility. Guided by that intent, the company commander nests the company plan to support the battalion mission.

3-218. With the assistance of available engineer support coordinated by the battalion engineer staff planner, the company commander establishes coordinated priorities of work. The priority of work tasks established by the commander outline survivability and countermobility instructions for its attached and subordinate units. The commander should instruct subordinates to augment and assist engineering attachments and assets in order to expedite improvement of the defense. If little to no engineer support is available, the company commander must establish these same priorities early for its subordinate platoons to begin as soon as possible due to the lack of engineer assets. In some instances this may require obstacles intended to limit mobility, and survivability locations are fully prepared by organic company elements.

3-219. The commander takes into account the survivability of individual fighting positions, and typically prioritizes work on positions that are most critical and require the most time to prepare (vehicular positions, gun positions, mortar firing point, and command post). If available the commander allocates engineering assets to assist in subordinate elements in preparation of survivability.

Monitoring of Preparation Activities

3-220. During preparation, the commander assisted by the XO and 1SG directly monitors the preparatory actions and track the higher and adjacent unit situations and the enemy situation.

3-221. The commander establishes priorities of work that may include but is not limited to; security plan, establishing R&S plans (that fit into the battalion scheme of maneuver), preparing appropriate fighting positions for all weapon systems, emplacing anti-armor assets such as javelins, conducting engagement area rehearsals, obstacle employment (mines/wire), and marking target reference points. The priorities of work within the defense is not a finite list and the commander should ensure that all efforts to defend are made prior to the meeting engagement. The following is an example of a priority of work list. The sequence lists priorities, but the tasks on this list may be conducted simultaneously as follows:

- Post local security.
- Establish and maintain communications with higher.
- Establish observation posts and listening posts and assign subordinate responsibilities.
- Establish company reconnaissance and surveillance missions.
- Position TOWs, Javelins, AT4s, machine guns and soldiers and assign sectors of fire.
- Position other assets (command post, mortars, vehicles, company trains).
- Designate final protective fires and final protective lines.
- Clear fields of fire, and prepare range cards and sector sketches.
- Adjust indirect-fire final protective fires that are clear of friendly forces.
- Prepare fighting positions.
- Emplace obstacles and mines.

- Mark and improve markings for target reference points and direct fire control measures.
- Improve primary fighting positions (overhead cover).
- Prepare alternate and supplementary positions.
- Reconnoiter movements.
- Consolidate subordinate sector sketches into company sector sketch.
- Establish rest plan.
- Rehearse engagement and disengagement actions.
- Adjust positions and control measures as required.
- Stockpile ammunition, food, and water.
- Dig trenches between positons.
- Recon routes.
- Continue position improvements.

3-222. The commander updates and refines plans based on additional reconnaissance and updated intelligence information. The commander continues to disseminate any modifications through fragmentary orders. The commander conducts much of the preparation phase simultaneously with operations conducted in the security area, continuing even as forward-deployed forces gain contact with the enemy. The commander ensures local security is conducted and that subordinate platoons are aware of observation posts, reconnaissance and security patrols, and area of operation responsibility.

3-223. The commander updates both copies of the company sector sketch, retaining one for the company headquarters and providing the other to higher headquarters. This sector sketch incorporates all defensive activities to include; sectors of subordinate weapons systems (interlocking fires), obstacles, lanes, target reference points, and all other pertinent information surrounding the company defense. It is essential that the commander walk every position to best site in obstacles, and ensure interlocking and clear fields of fire. The commander should inquire and inspect battle positions to ensure all Soldiers understand engagement and disengagement criteria sectors of fire and the overall plan.

3-224. Throughout the preparation, the commander, 1SG, and platoon leadership physically inspect preparatory activities. Weapons positioning, setting of obstacles, battle position emplacement (all types), direct and indirect fire plans and associated triggers, sustainment operations, and Soldier knowledge of their missions are all critical checks. The commander ensures that the 1SG and XO are aware of the situation and logistics requirements.

3-225. As subordinate units position elements and execute defensive preparations, the commander coordinates their activities within the overall situation. The commander monitors the enemy situation through information collection efforts at the company, and battalion level. The battalion maintains an information collection matrix that focuses battalion efforts on indicators that reveal the enemy's likely time and direction of attack that is used to update companies in addition to their own organic capabilities. The commander continually analyzes battalion assessments to determine the effects on preparation time available and any changes to the course of action. Company information collection reporting thresholds are updated as the situation changes and as the information collection effort answers information requirements.

3-226. During preparation the FSO must assist the commander in planning the indirect fires to support the overall defense, and advise the commander on the status of firing units and the ability to employ smoke and illumination. The FSO also coordinates with the battalion FSO, firing units, and platoon FOs to ensure the firs plan is fully synchronized and fully understood. The FSO and fire support NCO ensure that platoon FOs understand the fires plan and rehearse, and that all equipment is fully mission capable. It is essential that all fires personnel understand repositioning criteria and rehears target and responsibility for targets.

3-227. The mortar platoon and section leader must choose a tentative firing position and observation posts, complete the mortar portion of the fires plan (based upon the company OPORD), take part in leader's reconnaissance, and coordinate and confirm the mortar indirect fires plan with the appropriate company elements. The mortar section leader ensures that the mortar firing point is dug in.

3-228. The commander monitors the status of subordinate rehearsals, and conducts company rehearsals and updates the plan as needed based on continuously updated intelligence and the status of preparations. The

XO analyzes the status of logistics and maintenance of equipment within the company to determine any required adjustments to the plan or task organization. The commander and attached available engineer assets monitor the progress of all engineer efforts within the area of operation and continually projects the end state of this effort based on the current and projected work rates. The commander, assisted by recommendations from available engineer support identifies potential shortfalls early and determines how to shift assets to make up for the shortfalls or recommend where to accept risk. As the enemy closes on the company's area of operations, the company begins final preparations that typically include—

- Final coordinating of battle handover and passage of lines.
- Positioning of situational obstacle employment systems.
- Verifying communications status.
- Evacuating unused Class IV and V to prevent capture or loss to enemy action.
- Withdrawing engineer forces from forward areas.
- Linking up fire support, protection, and sustainment assets with reserve or other supported combat forces (if not previously accomplished).
- Adjusting reconnaissance and surveillance patrols to ensure it still meets the commander's priority intelligence requirements, or potential reconnaissance and security patrol and observation posts repositioning.
- Final positioning or repositioning of reconnaissance and surveillance assets, security forces, and observers.
- Positioning of teams to close lanes in obstacles or execute reserved obstacles.
- Executing directed, reserve, or situational obstacles.
- Periodic situation updates and issuing of final guidance to subordinates.
- Registering indirect fire targets with mortars, if not already done.
- Conducting a final radio or even map rehearsal with key leaders.
- Updating targets, resources, and priorities.
- Cover gaps between defensive positions, reinforce those positions as necessary, and counterattack to seal penetrations or block enemy attempts at flanking movements.

Time Management

3-229. A critical aspect of defensive planning is managing available time. The commander decides what must be accomplished during daylight to enable platoons, and squad to continue defensive preparations into darkness. Because there is never enough time to prepare the defense, the commander must make use of all time.

3-230. Platoon and squad positions identified and prepared during hours of limited visibility may not be completely effective during daylight. The commander's initial estimate of the time available must include the amount of daylight needed for subordinate leaders to identify primary positions. Additionally, using engineer digging assets during hours of limited visibility is often very difficult and can be dangerous and safety precautions need to be taken if daylight hours run short and digging assets must still be employed.

3-231. The commander may establish a detailed time schedule for completing key actions and events in the priority of work. This ensures that all units are generally at the same point in the priority of work. This also allows rehearsals to be scheduled effectively for the entire unit. An example of this time schedule might be—

- 1000-Primary fighting positions dug and camouflaged.
- 1500-Company rehearsal for the counterattack.
- 1600-Leaders sand-table rehearsal of the indirect fire plan.
- 1900-Primary positions complete, platoons rehearse disengagement and movement to supplementary positions.
- 2200-Limited visibility rehearsal for the counterattack.

3-232. The following sample planning scenario is provided to outline the conduct an estimate when the limited hours of daylight are a significant factor. This scenario will help to facilitate the defensive illustration later in this chapter. In this scenario the commander receives the defensive OPORD at 0900 on day 1 in a

battalion assembly area. The company is currently positioned five kilometers from where the defense will be conducted. The enemy is not expected to attack within 48 hours, which is no earlier than 0900 on day 3. Begin morning nautical twilight is at 0700 and end evening nautical twilight is at 1800. The commander's one third of the time would allow for the completion of the OPORD issuance at 0100 on day two. This however will waste valuable time for position preparation on the first night, at first light platoon leaders will most likely be reconnoitering to site key weapons systems, and squad positions. In the best case, personnel will be just starting to prepare fighting positions two hours after daylight (0900, day 2), this only leaves 24 hours for preparations. In this example, the commander decides that it would be more effective to make better use of available daylight; thusly, selecting the following timeline to maximize use of daylight:

- Day 1 0900 to 1000, upon receipt of the battalion OPORD, the commander conducts an abbreviated analysis based upon METT-TC. The commander then issues an immediate fragmentary order to move and occupy a position in the defensive area. The commander chooses gather platoon leaders, and the FSO and security elements from each platoon and conduct a leader's recon, and also act as the quartering party for the company. The commander places the XO in charge of preparation and movement of the company's main body.
- 1100 the commander, platoon leader's, FSO, and security elements arrive on site.
- 1115 the commander dispatches platoon leaders and security to recon key points of tentative positions that were previously determined during the map reconnaissance.
- 1115 to 1300, the commander makes a tentative plan.
- 1300, upon the return of PLs the commander revises the tentative plan based upon the recon reports.
- 1330 to 1400, the commander issues the OPORD to available leadership and the PLs continue planning.
- 1530, when the main body of the company arrives the platoon leaders begin establishments of their defenses and proceed to communicate their OPORDs to subordinate leaders.
- 1600, squad leaders designate primary, alternate, and supplementary positons during daylight. The platoon leader and commander now have two hours of daylight left to site in obstacles, and walk battle positions to make adjustments before preparations to positions established.

EXECUTION

3-233. A defending force within the main battle area uses a variety of tactics, techniques, and procedures to accomplish the mission. At one end of the defensive continuum is a static defense oriented on terrain retention. At the other end is a dynamic defense focused on the enemy. The commander combines static actions (see figure 3-15 on page 3-48) to control, stop, or canalize the attacking enemy forces and dynamic actions (see figure 3-18 on page 3-67) to cover gaps between defensive positions, reinforce those positions as necessary, and counterattack to seal penetrations or to block enemy attempts at flanking movements.

3-234. Throughout the area defense, the commander conducts shaping operations designed to regain the initiative by limiting the attacker's options and disrupting the enemy's plan. Shaping operations prevent enemy forces from massing and create windows of opportunity for the conduct of decisive maneuver, allowing the defending force to defeat the attacking enemy in detail. The mission variables of METT-TC determine how closely the commander synchronizes shaping operations (or supporting efforts) with the decisive operation (or main effort). R&S missions and security operations are normally components of shaping operations.

Gain and Maintain Enemy Contact (Security Area Actions)

3-235. Once security area forces have moved into the security area, actions in the security area predominantly focus on reconnaissance, counter reconnaissance, target acquisition, reporting, destruction, delay of the enemy main body, and battle handover. Security area forces integrate these actions with friendly forces forward of them, maintaining information flow and security. Security area forces may execute battle handover with forward elements then assist them in executing a rearward passage. Throughout security area operations, security forces coordinate and crosstalk with units to their rear. When security forces execute rearward passage of lines and battle handover they may then move to the flanks of the main battle area or occupy an assembly area to the rear to plan for future operations. On approaches that the enemy

does not use, the commander may desire to leave elements of the security force forward to preserve observation and access to enemy flanks.

3-236. Information collection within the security area provides the commander with information to support decision making, to provide early warning and reaction time, and to support targeting. Guided by the commander's critical information requirements, the four primary tasks conducted as part of information collection (reconnaissance, security operations, surveillance, and intelligence operations) help provide the following information—

- Location, movement, and destruction of enemy reconnaissance and security forces and surveillance assets.
- Speed, direction, composition, and strength of enemy formations.
- Locations of high-payoff targets (for example-indirect fire, bridging, and command and control assets).
- Enemy actions at decision points.
- Enemy flanking actions, breaching operations, and force concentrations.
- Battle damage assessment.
- Movement of follow-on forces.

3-237. As the enemy's attack begins, reconnaissance and security forces identify committed enemy unit positions and capabilities, determines the enemy's intent and direction of attack, and gains time to react. The commander uses the information available, in conjunction with military judgment, to determine the point at which the enemy commits to a course of action. The battalion staff integrates the information provided by reconnaissance and security forces and surveillance assets with information received from higher and adjacent units, subordinate units, unified action partners, or special operations forces operating within the area of operation. The battalion commander ensures the distribution of a common operational picture throughout the force during the battle as a basis for subordinate commander actions. The company commander analyzes the information and the effect on its role in the defense, and adjusts the plan and disseminates information to subordinate elements. In an area defense, critical decisions for the commander normally include—

- Initiation and employment of direct and indirect fires against enemy formations as follows:
- Modifications or adjustments to the defensive plan.
- Execution of situational and reserved obstacles.
- Withdrawal of forward security forces.
- Commitment of the reserve, counterattack, or both.

Disrupt and Fix the Enemy (Security Area Engagement)

3-238. Engagements in the security area normally are limited. Counterreconnaissance forces focus on locating and destroying enemy reconnaissance elements. As the enemy closes into the area, observers initiate indirect fires and the execution of reserved obstacles. The focal points are normally early warning and identification of the enemy's decisive and shaping operations, strength, and composition of threat forces, and direction of attack in order for the commander to make decisions and position forces. In the event enemy reconnaissance and security forces and surveillance assets penetrate the security area, forces operating in the security area must be prepared to conduct target handover with the main battle area forces.

3-239. After making contact with the enemy, the commander seeks to disrupt the enemy's plan, the enemy's ability to control forces, and the enemy combined arms team. Ideally, the results of the commander's shaping operations should force a disorganized enemy, whose ability to synchronize its elements has been degraded, to conduct a movement to contact against prepared defenses. Once the process of disrupting the attacking enemy begins, it continues throughout the defense of the security area. The battalion commander may choose to use assault platoons to engage enemy formations at longer distances under the control of the battalion, the weapons company, or other security force commander (rifle company commander). The rifle company commander should have a clear and concise understanding of the battalion commander's intent on using task organized assault platoons. The commander also ensures though that these elements are not decisively engaged, and that they retain their ability to maneuver. These forward units also call for close air support,

Army attack aviation, and precision guided munitions from artillery and mortars. Security area engagements can provide the following advantages:

- Depth to the area of operation.
- More time to prepare in the main battle area.
- A weaken enemy.
- Confusion to the location of the friendly defensive positions.
- Forces the enemy to deploy and more clearly indicate their main attack or intentions.

3-240. Within the security area, the commander does everything possible to limit the options available to the enemy. To limit the enemy's options, in addition to disrupting the enemy, the commander conducts shaping operations to constrain the enemy into a specific course of action, control enemy movements, or fix the enemy in a given location. The company will likely participate as a part of a larger battalion force when conducting operations within the security area, and main battle area. While executing these operations, the commander continues to find, delay, or attrit enemy follow-on and reserve forces to keep them from entering the main battle area. The commander has several options to help fix an attacking enemy force. The commander can design shaping operations—such as securing the flanks and point of a penetration—to fix the enemy and allow friendly forces to execute decisive maneuver elsewhere. Combat outposts and strong points can also deny enemy movement to or through a given location. The commander uses obstacles covered by fire to fix, turn, block, or disrupt to limit the enemy's available options. Properly executed obstacles (situational and reserved) are a result of the synthesis of top-down and bottom-up obstacle planning and emplacement. Blocking forces can also affect enemy movement. A blocking force may achieve its mission from a variety of positions depending on the mission variables of METT-TC.

3-241. The commander coordinates the battle handover between security forces and main battle area forces as quickly and efficiently as possible to minimize their vulnerability to enemy fire. When the battle handover is a transfer of responsibility for the battle from the IBCT's or a higher unit's security area force to the Infantry battalion. The higher commander who established the security force prescribes criteria for the handover and designates the location where the security forces will pass through, routes, contact points, and the BHL. The BHL is normally forward of the forward edge of the battle area where the direct fires of the forward combat elements of the battalion can effectively overwatch the elements of the passing unit. The IBCT commander or other higher headquarters commander coordinates the battle handover with the battalion commander. This coordination overlaps with the coordination for the passage of lines, and the two should be conducted simultaneously. Coordination normally includes—

- Establishing communications, this includes ensuring linkage on tactical radios and tactical radio networks (see ATP 6-02.53) and effective information overlap.
- Providing updates on both friendly and enemy situations and the addition of appropriate command posts and leaders to the message groups on situation reports and updates.
- Coordinating passage, which includes identifying passage points and lanes, and recognition signals and exchanging or disseminating graphics of these and obstacle overlays.
- Collocating command posts.
- Dispatching representatives to contact points and establishing liaisons.
- Coordinating recognition signals.
- Reporting status of obstacles and routes, including overlays.
- Coordinating fire support, protection, and sustainment requirements, with particular attention given to casualty and equipment evacuation requirements.
- Coordinating actions to assist the security force with breaking enemy contact.
- Coordinating and exchanging maneuver, obstacle, and fire plans.
- Coordinating location, communications plans, and fire support coordination measures (specifically no fire areas) to any stay-behind forces.

3-242. Within the Infantry battalion, the battle handover between battalion security forces and the forward Infantry companies in the main battle area are less complicated, but equally as critical and must be planned in detail. Security forces and forward companies identify rearward passage points and lanes, coordinate movement with the individual units or units covering them and through which they are moving. Frequently, the first elements to displace are the maneuver forces that were executing counter reconnaissance, moving to

initial defensive positions in the main battle area, or acting as the battalion or IBCT reserve. The battalion scout platoon normally displaces to vantage points on the flanks, moves to establish surveillance on other avenues of approach, or infiltrates back to the rear portion of the battalion's area of operation. When battle handover occurs within the battalion, companies within the main battle area—

- Assist with passage of lines and disengagement.
- Gain and maintain contact with enemy forces as battle handover occurs.
- Maintain security.
- Execute on order, reserved obstacles and prepared to emplace situational obstacles in the security area as the passing force withdraws.

Maneuver (Main Battle Area Engagement)

3-243. In an area defense, the decisive operation is decided in the main battle area. The commander shapes and decides the engagement by massing the effects of combat power. Effects are synchronized in time and space and should be rapid and unexpected so that they break the enemy's offensive tempo and disrupt the enemy's attack. Synchronized prior planning and preparation bolster the effects of combat power, increasing the effectiveness of the defense.

Scheme of Maneuver

3-244. Depending on the defensive scheme of maneuver, the defender may fight primarily from a single series of positions or it may conduct delay operations capitalizing on movement and repeated attacks to defeat the enemy in-depth. Forward positioned forces, obstacles, and fires are used to break the enemy's momentum, force the enemy to deploy earlier than desired, reduce the enemy's numerical advantage, disrupt enemy formations and tempo, and force the enemy into positions of vulnerability. The defender masses fires and integrates obstacles to disrupt, turn, fix, block, canalize and then destroy attacking enemy forces in engagement areas throughout the battalion's area of operations.

3-245. As the operation evolves, the commander knows that there will probably be a requirement to shift the decisive operation and shaping operation(s) or the main effort and supporting effort(s) to press the engagement and keep the enemy off balance. The commander integrates information collection tasks to shift the effects of fires and maneuver forces so that they are repeatedly focused, and refocused to achieve decisive, destructive, and disruptive effects upon the enemy's attack. IPB enables information collection to determine likely enemy actions, while security area forces and main battle area forces confirm or deny those actions.

3-246. Throughout the area defense, the all echelons must maintain a cohesive defense if it is to defeat the enemy. This does not mean, however, that the forces must be massed close together or that companies must have mutually supporting fires. With forces dispersed, companies can maintain cohesion by maintaining the common operational picture, crosstalk among subordinates, and the continual tracking and reporting of the enemy. Subordinate units, and recommendations from the staff provide information allowing the commander to continually assess the enemy's options and movement while identifying means to defeat them. With forces widely dispersed, continual assessment of time and distance variables are essential. To maintain defensive cohesion, subordinate companies keep their movement, positioning, and fires consistent with the battalion commander's intent, the defensive scheme of maneuver, and the obstacle plan.

3-247. Unless the battalion or other higher headquarters plan makes other provisions (for example-a higher echelon reserve or counterattack force is responsible), the rifle company is responsible for controlling enemy advances within its area of operations. When a penetration threatens the defender, commanders may take several actions to counter the situation. In order of priority, the commander may do any or all of the following:

- Allocate priority of all available fires, to include artillery and mortar fires, Army aviation attack, and close air support, to the threatened unit. (This is the most rapid and responsive means of increasing the combat power of the threatened unit.)
- Direct or reposition adjacent units to engage enemy forces that are attacking the threatened unit. (This may not be possible if adjacent units are decisively engaged.)
- Commit the reserve to reinforce the threatened unit.
- Commit the reserve to block, contain, or destroy the penetrating enemy force.

- Accept penetration of insignificant enemy forces and maintain contact with them as they move deeper into the main battle area.
- Move forces to alternate, supplementary, or subsequent positions or to withdraw forces.
- Commit attached engineers or other element to assist in containing the penetration or to constitute a new reserve.

3-248. When a penetration occurs, units within the main battle area continue to fight, refuse their flanks, and engage the enemy's flanks and rear. The penetrated force must try to minimize the penetration to prevent the area of penetration from widening and to protect adjacent unit flanks. Adjacent units take immediate action to secure their exposed flanks, which may include security missions or the establishment of a blocking position(s). Adjacent units also may need to reposition forces or direction of fire, readjust subordinate area of operations and tasks, or commit their reserve. Forces within the main battle area try to reestablish contact across the area of penetration when possible.

3-249. During combat operations, sustainment operations are tailored in response to changes in tactical requirements. The company XO in coordinates with the battalion S-4, who then works with the forward support company, fully integrates sustainment operations with the battalion battle rhythm through planning and oversight of on-going operations. Logistical synchronization matrices and logistics reports are used to initiate and maintain synchronization between operations and sustainment functions.

3-250. Protection of sustainment operations and locations ensures continuity of logistics operations. Because committing combat forces to sustaining operations and locations such as the combat or field trains diverts combat power from the main battle area, the commander carefully weighs the need for such diversions against the possible consequences to the overall operation. Generally, support elements in both the company and battalion area of operations rely on positioning, movement, and self-protection for survival. They—

- Establish sustainment operations in covered and concealed areas away from likely enemy avenues of approach.
- Establish and maintain perimeter security and early warning observation posts, integrating weapons and crews that are in the rear for repair operations.
- Keep sustainment elements ready to move on short notice as the security battle begins.
- Maintain internal security if not augmented by the battalion for any movement while executing sustaining operations.

3-251. Early warning to sustainment elements to the rear of the battalion's area of operations is critical to survival in the event of a penetration of the main battle area or an enemy attack from an unexpected area. Sustainment plans and rehearsals address actions to be taken in the event of attacks on sustaining operations, including defensive measures, displacement criteria, casualty evacuation, routes, rally points, and subsequent position. (See Appendix I for additional information.)

Note. The example below is a continuation of the scenario from paragraph 3-165 on page 3-44, specifically figure 3-14 on page 3-46 and figure 3-15 on page 3-48. As this scenario continues, the enemy commits its main attack along Avenue of Approach 1. Once the enemy intent is confirmed, the battalion commander moves mobile elements of the battalion to reinforce Company B, the battalion's main effort.

Forward Defense Against an Infantry Threat (Mobile Actions Focused on the Enemy), Example

3-252. In this example, the enemy commits its main attack along Avenue of Approach 1. The battalion commander repositions mobile forces to reinforce the battalion's main effort along Avenue of Approach 1. Simultaneously, the commander allocates additional fire support to the area threatened by the enemy's main attack. The commander alerts the IBCT commander to the threat and that the battalion has confirmed the enemy's commitment to Avenue of Approach 1. The battalion commander's goal is to prevent the enemy's further advance by using a combination of fires from prepared positions, obstacles, and mobile elements of the battalion. (See figure 3-18.)

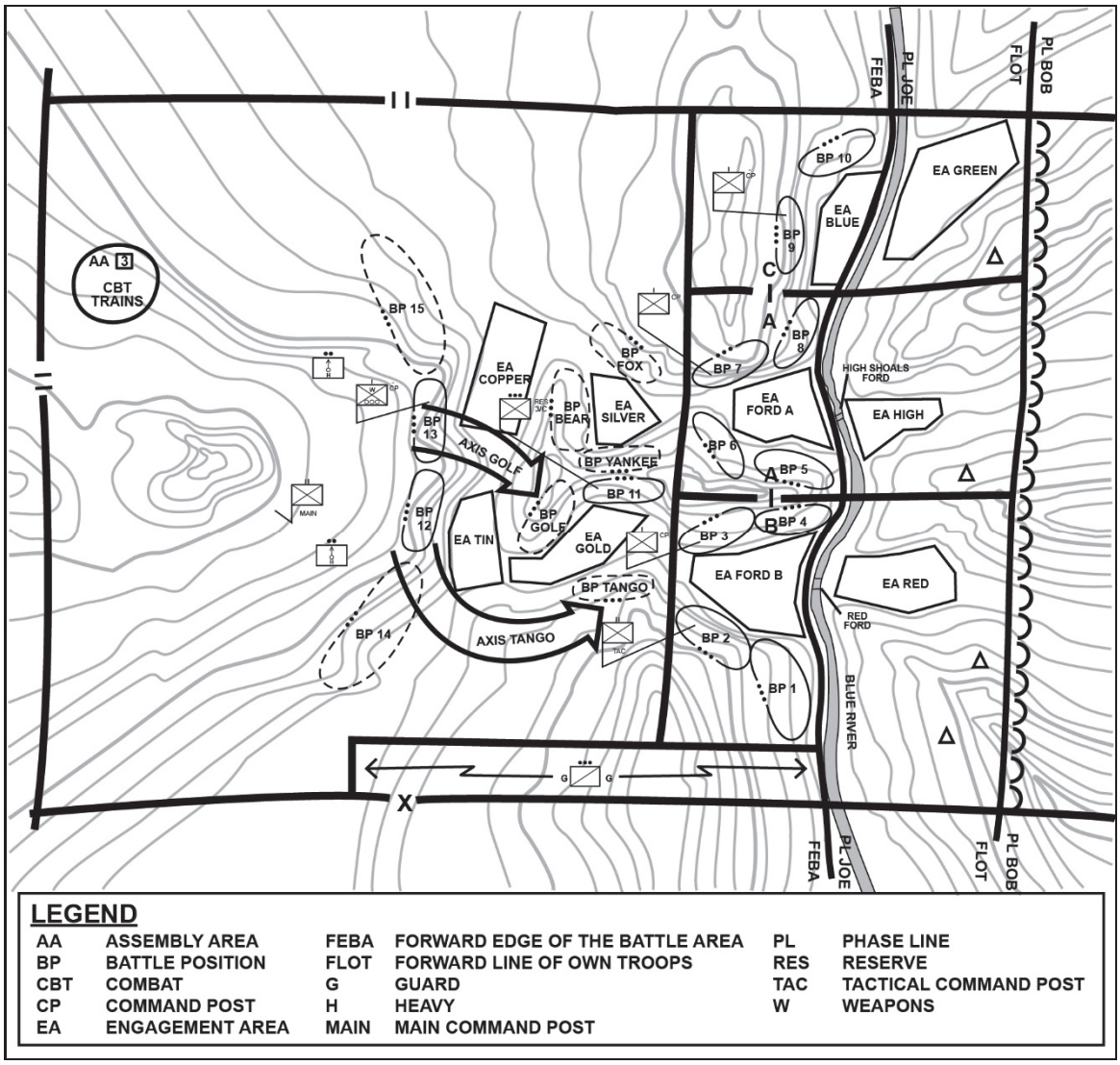


Figure 3-18. Mobile actions focused on the enemy

3-253. As in the earlier example (see the first note on page 3-49), due to the limited number of firing positions along the river, the battalion commander retained two of the four assault platoons under Company D commander's control. Company D initially established battle positions 11 and 12 to assist in limiting the enemy advance along Avenues of Approach 1 and 2. Once the enemy committed its attack only along Avenue of Approach 1, the battalion commander ordered Company D commander to occupy attack by fire positions located in the vicinity of Battle Positions Tango and Golf to reinforce the battalion's main effort, Company B along Avenue of Approach 1.

3-254. Once the scout platoon confirmed the enemy's commitment to Avenue of Approach 1. The commander ordered the platoon to screen to the right flank of Company B to provide early warning of enemy dismounts moving south of Red Ford. Battalion mortars operating split section, initially positioned forward vicinity Battle Positions Golf and Tango with priority of fires to security area actions. The commander repositioned the mortar platoon by section to firing positions vicinity Battle Positions 11 and 12 with priority of fires to Company B main battle area actions initially in Engagement Area Red, then Engagement Area Ford B.

Follow Through

3-255. The rifle company as part of the Infantry battalion may conduct local counterattacks to restore or preserve defensive integrity. Unless the conduct of the defense has left the battalion largely unscathed, the battalion usually lacks the ability to conduct a significant counterattack by itself. If the battalion has the ability to organize a counterattack force, this force must have mobility or be pre-positioned in a position of advantage to attack the enemy from an unexpected flank. Within the context of the IBCT's operations, a defending battalion and its company's may execute a counterattack in support of the IBCT's defensive posture, as part of a larger force seeking to complete the destruction of the enemy's attack, or as part of a transition to offensive tasks.

AREA DEFENSE SEQUENCE OF EVENTS, EXAMPLE

3-256. The rifle company may assume a defensive mission following an attack of its own or in anticipation of an enemy attack. Most defenses will follow a sequence of events similar to the example sequence addressed below, as part of a larger defense. This sequence of events is used for discussion purposes and is not the only way to sequence an area defense. With any sequence, the commander understands events will vary depending on the mission variables of METT-TC and to some degree, events will overlap.

LEADER'S RECONNAISSANCE

3-257. Before occupying any position, to include those in the forward security area, leaders at all echelons conduct some type of reconnaissance of their area of operation and position(s). The reconnaissance effort is as detailed as possible in regards to the mission variables of METT-TC. Reconnaissance can consist of a simple map reconnaissance, or a more detailed leader's reconnaissance and initial layout of the new position. When feasible, the commander and subordinate leaders conduct a leader's reconnaissance of the complete area of operation to develop plans based on their view of the actual terrain. When available, the commander may use aviation assets to conduct the leader's reconnaissance.

3-258. The success of the leader's reconnaissance is critical to conduct occupation without hesitation and to begin priorities of work prior to and immediately upon occupation. Participants in the reconnaissance include the commander, subordinate platoon leaders, other key leaders, and security personnel. The goals are, but not limited to, identification of enemy avenues of approach, engagement areas, sector of fires, the tentative obstacle plan, indirect fire plan, observation post locations, command post locations, mortar firing point, and logistics element locale. The commander develops a plan for the leader's reconnaissance that includes the following:

- Provisions for security.
- Areas to reconnoiter.
- Priorities and time allocated for the reconnaissance.
- Considerations for fire support, communications, and casualty and medical evacuation plans.
- Contingency plan in the event that the reconnaissance is compromised.

ESTABLISH SECURITY

3-259. When the rifle company is part of a larger unit's area defense, the higher level commander establishes a forward security area before the company moves to defend. Even with this forward security area established, the company must still provide for its own security, especially over large geographical areas or in complex terrain and noncontiguous area of operations. In order to prevent the enemy from observing and interrupting defensive preparations and identifying unit positions, the battalion establishes the security area well forward of the planned main battle area for the battalion, but within indirect fire and communications range. When the battalion commander is unable to push the security area forward to achieve this objective, the battalion may have to hold its positions initially, as it transitions and then withdraws units to the defensive main battle area, establishing a forward security force in the process. The rifle company may be called upon to act as anyone of these forces in the conduct of the defense.

3-260. When security forces of the IBCT are forward of the Infantry battalion, the battalion commander integrates the battalion security force actions with that of the IBCT and adjacent battalions. In contiguous

area of operations, the battalion commander normally organizes and defines the security area forward of the forward edge of the battle area and assigns company areas of operation to prevent gaps in the battalion area defense. In noncontiguous area of operations, the battalion commander normally organizes and defines the security area forward of the main battle area, or along likely avenues of approach. In noncontiguous area of operations, individual companies will have more responsibility for independent security areas actions. The commander ensures the independent security area actions at all levels within the company level align with the security area plan for the Infantry battalion and if applicable the IBCT.

3-261. As the commander arrays security forces forward of the battalion's main battle area, the battalion commander and company commanders also plan security operations within the main battle area, to prevent enemy reconnaissance, reduction of obstacles, targeting of friendly positions, and other disruptive actions. Subordinate units secure obstacles, battle positions, command posts, and sustainment sites (company trains) throughout the area of operation. The threat force and battlefield organization will dictate the commander's decision whether elements conducting sustaining operations have adequate security to conduct sustaining operations. With extended lines of communication, the company may also move to secure logistical elements moving forward from the battalion field or combat trains to secure their own logistical needs. In some instances the battalion may provide security to company trains to logistics resupply points, whereby the company moves to secure that logistics release point location prior to its arrival.

Occupation and Priorities of Work

3-262. When the battalion establishes a security area independent of the IBCT or other higher echelon. A subordinate company or platoon within the battalion may be identified as a security force to deploy forward as remaining forces occupy and prepare positions in the main battle area. Security of the main battle area is critical during occupation to ensure units within the battalion avoid detection and maintain combat power for the actual defense. The plan of occupation for the must be thoroughly understand to maximize the time available for occupation and preparation of the defense. When establishing the security area, the battalion commander may lead with the scout platoon to conduct reconnaissance and establish observation post along the forward edge of the security area. Rifle company commanders should ensure they maximize situational awareness of their forces understanding of security force locations. The company may be called to assist or augment forward security forces from the scout platoon, or conduct security force operations in support of the battalion. Security forces conduct observation posts, and from these observation posts, the security forces use long-range fires to hinder the enemy's preparations, to reduce the force of the enemy's initial blows, and to start the process of wresting the initiative from the enemy. Throughout the security area, security forces position and reposition to—

- Prevent enemy observation of defensive preparations.
- Defeat infiltrating enemy reconnaissance forces.
- Prevent the enemy from delivering direct fires or observed indirect fires into the battalion area defense.
- Provide early warning of the enemy's approach.

3-263. Within the main battle area, and depending on the situation, commanders at all levels may send a subordinate force to initially secure positions prior to the main body's arrival. The mission of this force is to continue to conduct reconnaissance of key terrain and obstacles, guide and provide local security as the defenses main body occupies the defense and initiates priorities of work. As all elements within the main battle area establish local security, priorities of work continues and includes but is not limited to refining the plan, positioning of forces, preparing positions, constructing obstacles, planning and synchronizing fires, positioning logistics, and conducting inspections and rehearsals. To aid in operations security and to reduce vulnerability, the company commander analyzes the benefits of dispersion against the requirements and resources for the security area. Usually, the greater the dispersion between platoons (or company's within the battalion defense) the larger the security area.

3-264. Throughout occupation and priorities of work in the main battle area, security area actions continue without interruption. Security forces may be assigned screen, or area security missions. Security force may position to screen and provide early warning along the most likely enemy avenues of approach, reinforced in depth with sections or platoons from Infantry or weapons companies. When applicable, the commander integrates reconnaissance and ground maneuver units in the security forces. This provides the forces required

for the hunter-killer technique where reconnaissance forces primarily locate the enemy element(s) and attack them with indirect fires, not to engage in direct fire attack except in self-defense. The reconnaissance force then guides the maneuver force to destroy, neutralize, or repel threat forces with direct fires. Security force commanders analyze the positioning and repositioning of mounted and unmounted forces, to avoid the enemy's ability to identify friendly forces.

SECURITY AREA ENGAGEMENT

3-265. When the defender is part of the higher echelon's area defense, the commander integrates engagements within the defending commander's security area and that of the higher echelon. When the defending commander establishes a security area independent of a higher echelon, the defending unit's planned indirect fires usually include forward observers and fire support teams executing indirect fire targets on a primary enemy avenue of approach. These security teams can come in the form of the scout platoon, Infantry Rifle Company, or a combination of both. This can be in support of the higher headquarters' scheme of fires using IBCT or higher echelon artillery, or in support of the battalion, and company scheme with the use of organic mortars and allocated artillery fires.

3-266. The scheme of fires within the security area combined with the use of situational obstacles serve to disrupt the enemy and canalize the enemy in the engagement areas, and to force the enemy to commit enemy engineer assets prior to the main battle area engagement. As situational obstacles are planned and triggered relative to specific enemy attack options, they are related to accomplishing a specific essential counter mobility task (see ATP 3-90.8) and fire support task (see FM 3-09) allowing for more effective engagements within the security area. Forward security forces employed forward may cover these situational obstacles with direct fires prior to their withdrawal to positions within the main battle area.

3-267. When the battalion, or company supports a higher echelon's or its own scheme of maneuver by fighting a delay through the depth of the security area and into the main battle area. The purpose may be to take advantage of restrictive avenues of approach, to set the conditions for a counterattack, or to avoid a decisive engagement until favorable conditions are set. As security forces complete the rearward passage of lines, main battle area forces assumes control of the battle at the BHL. Battle handover from forward security forces to forward main battle area forces requires firm, clear arrangements—

- For assuming command of the action.
- For coordinating direct and indirect fires.
- For the security force's rearward passage of lines.
- For closing lanes in obstacles.
- For movement of the security force with minimal interference to main battle area actions.

3-268. As security area engagements transition into the main battle area, security area forces withdraw to battle positions within the main battle area and counterattack or reserve positions. Security area forces may move to a flank or to the rear of the main battle area to provide security.

MAIN BATTLE AREA ENGAGEMENT

3-269. The commander seeks to defeat, disrupt, or neutralize the enemy's attack forward of or within the main battle area. The commander integrates direct and indirect fires with the obstacle plan, local counterattacks and reserve forces to destroy the enemy in designated engagement areas or to force the enemy transition to a retrograde or hasty defense. The commander focuses fires in an effort to attack the enemy throughout the depth of the area of operation. However, fire support may be limited to critical points and times. Control measures allow the commander to rapidly concentrate the use of combat power at the decisive point, provide flexibility to respond to changes, and allocate responsibility of terrain and obstacles to synchronize the employment of combat power.

3-270. As attacking forces reach the forward edge of the battle area, the enemy will try to find weak points in the defense and attempt to force a passage, possibly by a series of probing attacks. Forward elements engage the enemy's lead forces as the enemy attack develops along identified enemy avenues of approach. The commander arrays forces and establishes engagement areas using obstacles and fires to canalize enemy forces. When shaping operations allow for the canalization the enemy. The enemy advance slows and the

increased density of forces present good targets for defensive fires within engagement areas. The maximum effects of these simultaneous and sequential fires, brought to bear at this stage of the battle, enable the destruction of the attacking enemy force.

3-271. When the defending unit is unable to bring sufficient combat power to shape the enemy's advance prior to entering the main battle area the commander masses direct and indirect fires and conducts movement to gain or regain a positional advantage over the advancing enemy force. The commander reassigns priorities of support and reposition forces to meet the enemy where the enemy actually is rather than where the commander's defensive plan projected that the enemy would be. The commander controls the commitment of local counterattack and reserve forces to engage enemy penetrations. Within this situation, higher echelon forces engage enemy follow-on forces with long-range rockets and air support to reinforce. The slowing or delay of enemy follow-on forces into the main battle area enables the defeat of the enemy's attack in detail, one echelon at a time. Defeat of these forces in the main battle area can disrupt the enemy's timetable and lead to the creation of exploitable gaps between committed and subsequent echelons to create conditions for a counteroffensive.

CONSOLIDATION, REORGANIZATION, AND FOLLOW THROUGH

3-272. Following a successful defense, the defender can exploit by counterattack based on branches and sequels to the plan before the enemy can secure gains or organize a defense. The higher commander's concept of operations and the mission variables of METT-TC dictate the follow-on mission, for example a counteroffensive that allows the battalion and company to regain the initiative. When the situation prevents offensive action, the defending unit continues to defend. As in the initial establishment of the defense, gaining depth in the security area is critical. A local counterattack can provide space for establishment or reestablishment of the security area and time for the rest of the battalion to consolidate and reorganize.

Note. The following section illustrates a fictional scenario as a discussion vehicle illustrating one of many ways an Infantry battalion and subordinate companies can conduct an area defense. In this scenario the IBCT defends against three enemy avenues of approach. (See figure 3-12 on page 3-38.) Infantry Battalion 1 defends against enemy Avenue of Approach 3 the least likely enemy approach (not illustrated). Infantry Battalion 2 defends against enemy Avenue of Approach 1 and Avenue of Approach 2, the most likely avenues of approach. This illustration will mainly focus on Infantry battalion 2. Engagement area development for this illustration is found in paragraphs 3-147 through 3-164 on pages 3-37 to 3-43. The Infantry Battalion 3 of the IBCT is under division control as part of the counterattack force (air assault-not illustrated) for the corps.

ILLUSTRATION OF AN AREA DEFENSE

3-273. In this illustration the company conducts an area defense as part of a larger battalion area defense in depth. The battalion defense is nested within its higher echelon of the IBCT area defense. The IBCT, battalion, and companies prepare defenses to counter a motorized Infantry and armor threat. Army aviation assets, initially controlled at the IBCT and battalion level, conduct aviation attacks in support of higher echelon defensive tasks. Available aviation assets may eventually be postured in support of company and platoon defenses. As the enemy advances field artillery and mortar fire support plans are integrated to support forward security actions in support of security area operations, and those in the main battle area. Infantry companies and subordinate platoons incorporate those supporting fires from aviation, artillery, and direct fires into countermobility obstacles. Companies and platoons work within the plan and assigned priorities of work to maximize the timely completion of the area defense. As companies begin preparations, the battalion establishes combat and field trains and begins to work the defensive logistical concerns that will assist the establishment of the defense (Class IV), and the coordination with company trains to meet their logistical requirements.

INFANTRY BRIGADE COMBAT TEAM—TASK ORGANIZATION AND SCHEME OF MANEUVER

3-274. Within this scenario, the IBCT is tasked-organized with two Infantry battalions, a combined arms battalion, a cavalry squadron, a field artillery battalion, a brigade engineer battalion, and a brigade

support battalion. Infantry Battalion 2 is task-organized with two Infantry rifle companies, a mechanized Infantry company team (two mechanized Infantry platoons and one tank platoon), and a weapons company. Company C, the third Infantry rifle company from Infantry Battalion 2, was placed under BCT control as the reserve for the IBCT. Infantry Battalion 1 is task-organized with its three Infantry rifle companies and weapons company. The combined arms battalion is tasked-organized with two armor company teams, each with two tank platoons and one mechanized Infantry platoon. The IBCT commander weighted the main effort by attaching the mechanized Infantry company team from the combined arms battalion to Infantry battalion 2, as stated above. No change in task organization for the IBCT cavalry squadron, field artillery battalion, and brigade engineer battalion. The brigade support battalion is task organized with the logistical elements required to support the combined arms battalion. Subordinate unit task organization and scheme of maneuver is as follows:

- Infantry Battalion 2, main effort, conducts an area defense. The battalion defends in-depth with two Infantry rifle companies, with one assault platoon each attached, forward, and a mechanized Infantry company team (two mechanized Infantry platoons) and weapons company (two assault platoons) back. The tank platoon from the mechanized Infantry company team is the battalion reserve. (Illustrated.)
- Infantry Battalion 1, supporting effort, conducts an area defense to the north of Infantry battalion 2. The battalion defends in-depth with two Infantry rifle companies forward, and one Infantry rifle company back. The weapons company (two assault platoons) is the battalion reserve. (Not illustrated.)
- The combined arms battalion, two armor company teams, is the counterattack force for the IBCT. (Not illustrated.)
- Infantry Rifle Company C from Infantry Battalion 2 is the reserve for the IBCT. Company C is mounted and has two attached assault platoons from Infantry battalion 1. (Not illustrated.)
- The cavalry squadron establishes the security area forward of the IBCT main battle area. (Not illustrated.)
- The brigade engineer battalion priorities of work, countermobility, survivability, and then mobility. Priority of engineer effort initially to Infantry battalion 2, then to the mobility of the IBCT counterattack force.
- The field artillery battalion provides priority of fires initially to security area forces, then to Infantry Battalion 2, on order to the IBCT counterattack force. (Not illustrated.)
- The brigade support battalion establishes the brigade support area just forward of the division support area. Priority of support initially to security area forces, then to Infantry Battalion 2, finally to the IBCT counterattack force. (Not illustrated.)

INFANTRY BATTALION 2—TASK ORGANIZATION AND SCHEME OF MANEUVER

3-275. Infantry Battalion 2, tasked-organized as a battalion task force, conducts an area defense against a motorized Infantry and armor threat. The battalion commander organized the defense in-depth around a static framework of defensive positions seeking to destroy enemy forces and dynamic local counterattacks designed to defeat or destroy an enemy force, restore an original position, or block enemy penetration. The commander weighted the battalion main effort (Company B is the company used to illustrate the defense) with priority of fires, priority of engineer effort, and priority of support. The battalion commander organized the task force with a forward security force, a main battle area force, and a reserve force. (See figure 3-19.)

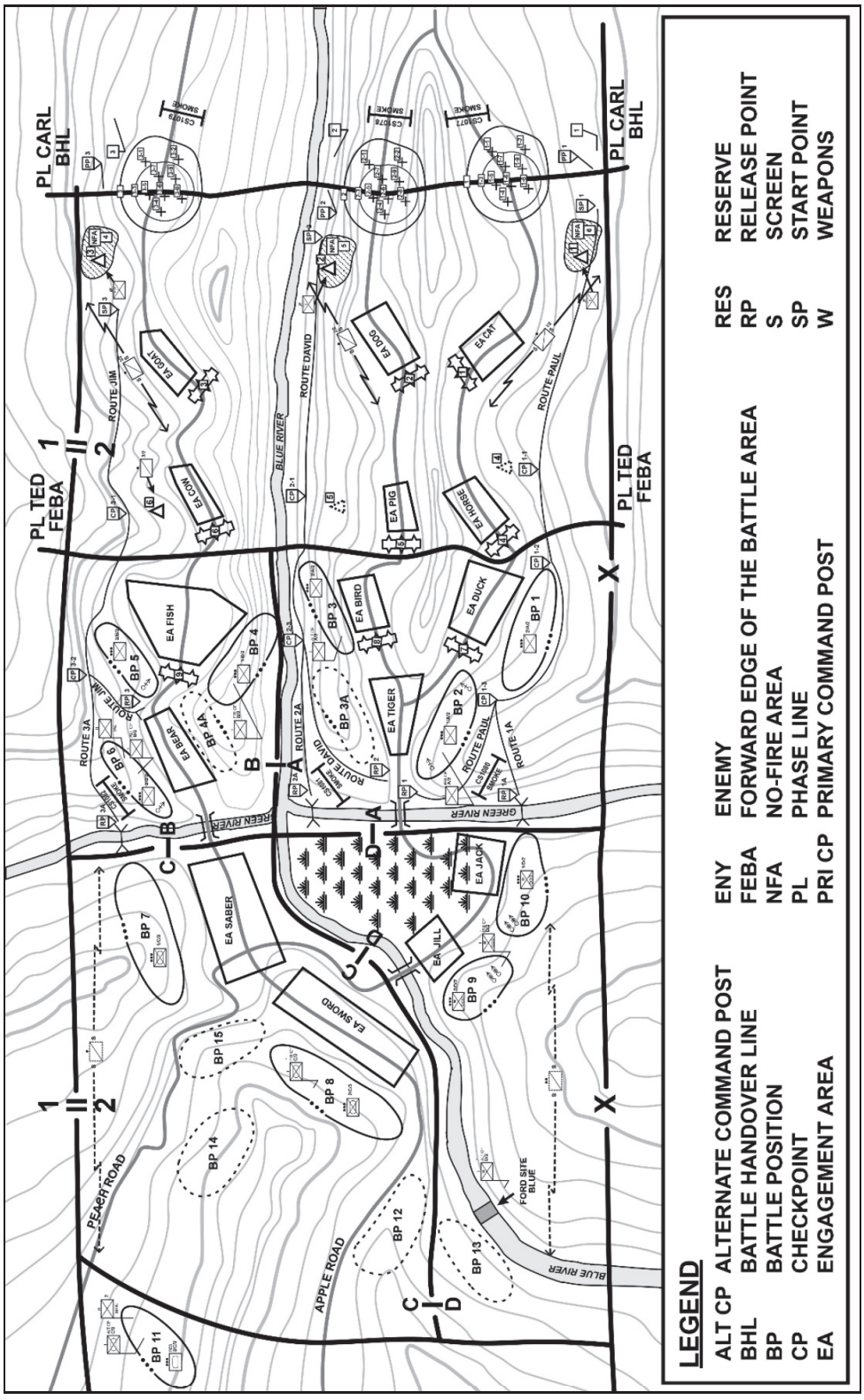


Figure 3-19. Battalion area defense (defense in depth), example

3-276. Within the battalion security area, established just forward of the battalion's main battle area and to the rear of the IBCT security area, the commander assigned security force missions, established observation

posts, and specified named areas of interest and targeted areas of interest to observe. In the main battle area, the commander organized the battalion task force to defend in-depth with two Infantry rifle companies forward and a mechanized Infantry company team and weapons company back. The tank platoon from the mechanized Infantry company team, placed under battalion control, established battle position 11 as the battalion reserve just forward of the brigade support area.

3-277. The commander, through the targeting process (see ATP 3-60), determined target sets and fire support priorities and assigned priority of fires initially to forces within the security area. In the main battle area, the priority of engineer effort went to countermobility, then survivability. As the battalion task force establishes the defense, battalion unit trains (includes sustainment support for mechanized company team) organize to establish echelon trains—battalion field trains and battalion combat trains—to support the battalion's defense in-depth. Subordinate unit task organization and scheme of maneuver—

- The scout platoon screens forward of the battalion's main battle area. The platoon establishes contact with IBCT security area forces and prepares to assist in their rearward passage of lines. On order, the scout platoon conducts a rearward passage of lines and conducts screens west of the Green River.
- Sniper squad, with attached forward observers, establishes observation posts to observe named areas of interest and targeted areas of interest within the battalion security area along enemy Avenues of Approach 1 and 2. On order, the sniper squad with attachments conducts a rearward passage of lines to occupy subsequent observation posts within the main battle area or may stay in place to provide combat information as the enemy advances.
- Company B, battalion main effort, with attached assault platoon occupies Battle Position 4 and Battle Position 5, destroys enemy targets in Engagement Area Fish; occupies Battle Position 6, destroys enemy targets in Engagement Area Bear. Battalion tactical command post initially collocates vicinity Battle Position 6.
- Company A, with attached assault platoon occupies Battle Position 1, destroys enemy targets in Engagement Area Cat; occupies Battle Position 2, destroys enemy targets in Engagement Area Dog; and occupies Battle Position 3, destroys enemy targets in Engagement Area Bird.
- The mechanize Infantry company occupies Battle Position 7, destroys enemy targets in Engagement Area Saber and occupies Battle Position 8, destroys enemy targets in Engagement Area Sword.
- Company D occupies Battle Position 9, destroys enemy targets in Engagement Area Jill and occupies Battle Position 10, destroys enemy targets in Engagement Area Jack.
- Tank platoon, battalion reserve establishes battle position 11, receives be prepared mission to conduct local counterattacks to defeat, destroy, or block enemy penetration or reinforce position and gaps as necessary. Battalion main command post initially collocates vicinity Battle Position 11.
- Battalion mortar platoon operates by split section vicinity Battle Positons 9 and 10. On order, displaces by section to subsequent firing positions to provide continuous fire support, priority of fires initially to forward security forces, then Company B the battalion main effort.
- Battalion combat trains establish support area to the rear of Battle Position 11 in the battalion's main battle area. This echelon of support includes maintenance support and treatment team alpha (clinically staffed with the battalion surgeon), and carries mostly Class I, V, and limit Class III. (Not illustrated.)
- Battalion field trains establish support area to the rear of the battalion's main battle area in the brigade support area. This echelon of support includes all battalion sustainment not located with the combat trains, includes treatment team bravo, clinically staffed with the physician assistant. (Not illustrated.)

COMPANY B—TASK ORGANIZATION AND SCHEME OF MANEUVER

3-278. Company B, is tasked-organized with an attached heavy weapons assault platoon. The company has been identified by the battalion commander as the battalion main effort, and conducts an area defense against a motorized Infantry and armor threat. Company B's mission is to conduct an area defense, occupying Battle Positions 4 and 5, destroying enemy targets vicinity of Engagement Area Fish, and also occupy Battle

Position 6, to destroy enemy targets vicinity engagement Area Bear. The battalion tactical command post will initially collocate vicinity Battle Position 6. During mission analysis, the company commander identifies a subsequent battle position to be used as the enemy advances through EA Fish, and occupy Battle Position 4A. The company commander identifies the usage of primary, alternate, and subsequent positions for dynamic (assault platoon) forces to be able to re-position rapidly.

3-279. The company commander organizes the defense in-depth around a static framework of defensive positions seeking to destroy enemy forces and dynamic local counterattacks designed to defeat or destroy an enemy force, restore an original position, or block enemy penetration. The commander weighted the main effort (Second Platoon) with priority of fires, priority of engineer effort, and priority of support. (See figure 3-20.)

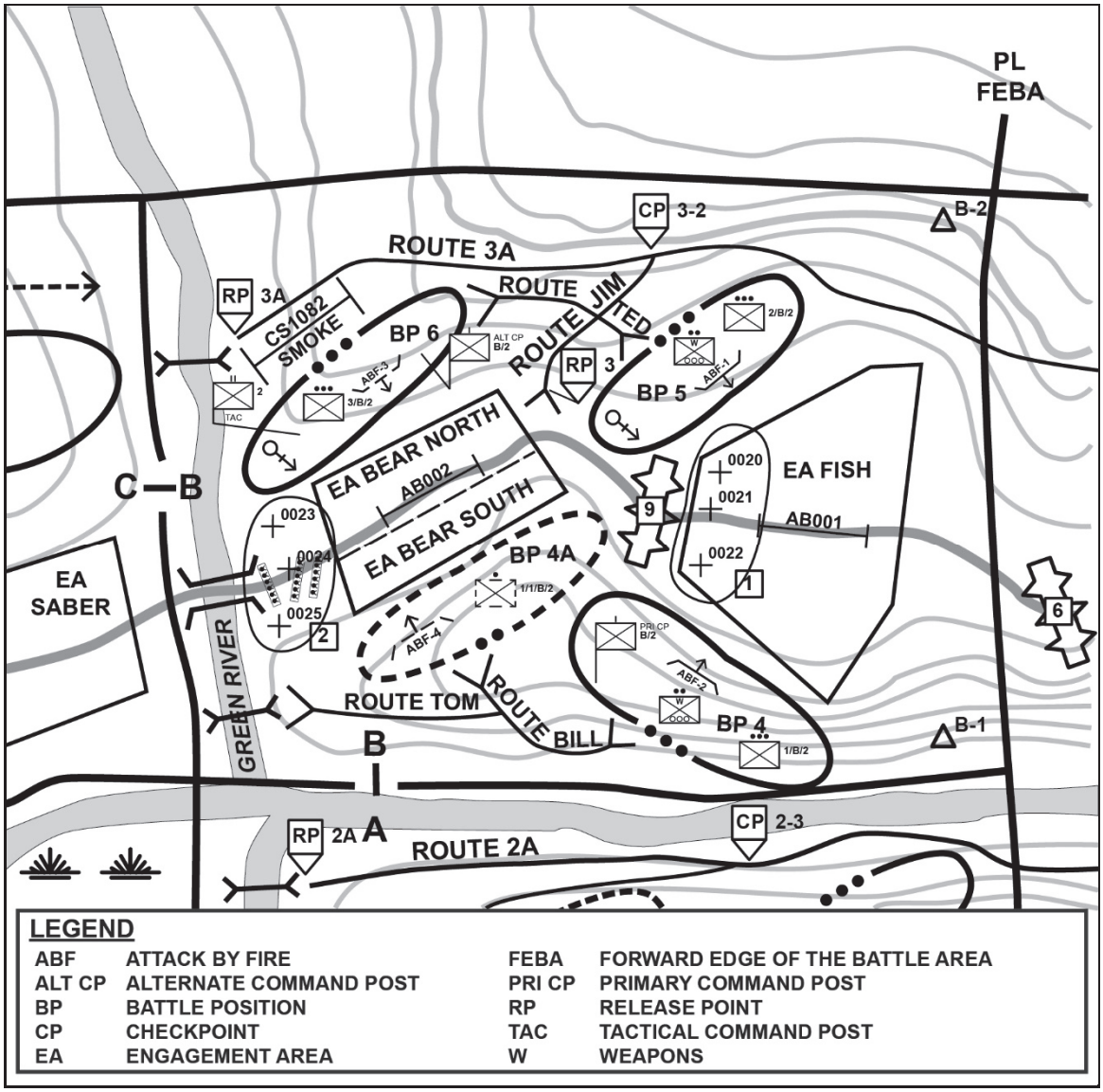


Figure 3-20. Company area defense (Company B defense in depth), example

3-280. Within the company area of operations, the company commander identified the need for observation posts and listening posts, for reconnaissance patrols and security patrols within the company's area of operation. During analysis the commander identifies locations between battle positions that require a presence to identify advancing enemy forces.

3-281. The commander identifies effective routes, and overwatch locations for attached mobile forces such as the assault platoon. The commander selects overwatch locations, and support locations that are synchronized with the entire company security plan, and nested within the battalions plan.

3-282. The commander ensures that company observation posts, linkup locations, and checkpoints are nested within the battalion's overall defensive plan. The commander identifies crucial friction points between adjacent units that require additional coordination for passage of friendly forces to the rear, closure of marked lanes in support of company defenses, and triggers for battle handover.

3-283. The commander with the assistance of the FSO, and fire support NCO determine target sets and fire support priorities and assigned priority of fires operations within the company's area of operation. Priority of engineer support is to countermobility, then survivability. As the company establishes the defense, company trains (includes sustainment support for attached assault platoons) organize—to support the company's defense in-depth. Subordinate unit task organization and scheme of maneuver follows:

- Second Platoon, company main effort, occupies Battle Position 5 to destroy enemy targets in EA Fish. Establishes Observation Post 2 to provide early warning of the enemy's approach.
- First Platoon, Supporting Effort 1, occupies Battle Positon 4 to destroy the enemy targets in EA Fish, and on order occupies Battle Position 4A to destroy enemy targets in EA Bear. Establishes Observation Post 1 to provide early warning of the enemy's approach.
- Third Platoon, Supporting Effort 2, occupies battle positon 6 to destroy enemy targets in EA bear.
- Assault Platoon, Supporting Efforts 3 and 4, Assault Platoon Section 1 occupies Attack-By-Fire Positions 1 and Assault Platoon Section 2 occupies Attack-By-Fire Positions 2. On-order, sections conduct movement to Attack-By-Fire Positon 3 and Attack-By-Fire Position 4 to destroy enemy targets in EA Bear.

Gain and Maintain Enemy Contact

3-284. Gaining and maintaining enemy contact without becoming decisively engaged, in the face of the enemy's determined efforts to destroy friendly reconnaissance, surveillance, and security actions is vital to the success of defensive actions. Within the scenario, security area forces (battalion scout platoon, sniper squad, and attached forward observers) performed R&S tasks and security operations to gain information, using every opportunity through limited offensive action to attrit, delay, and harass the enemy prior to engagement in the main battle area. As security area forces conduct R&S to determine the enemy's chosen course of action, these same forces seek to defeat enemy reconnaissance forces, and hide the Infantry battalion's dispositions, capabilities, and intent. The battalion commander uses collected information and other combat information provided by means belonging to higher echelons, in conjunction with military judgment, to determine the point at which the enemy commits to a course of action.

3-285. Within the battalion security area, (see figure 3-21) the scout platoon conducts two squad screens south of the Blue River and one squad screen to the north of the river with the reconnaissance objective to determine the enemy course of action. Secondary tasks include providing early warning of enemy dismounted movement along enemy avenues of approach, and establishing contact with IBCT security forces forward of the BHL, Phase Line Carl. Although primary passage points for the IBCT cavalry squadron are through the supporting effort (Infantry Battalion 1) to the north. The scout platoon prepares to assist elements of the cavalry squadron as required through passage points 1, 2, and 3, vicinity the BHL. The scout platoon may, or in some combination, assist in the passage of lines, establish Observation Posts 4, 5, and 6 to facilitate future offensive actions, or conduct a rearward passage of lines itself. The sniper squad, with attached forward observers, establishes Observation Posts 1, 2, and 3 along the BHL, two teams south of the Blue River and one team to the north of the river. The mission of the sniper teams is to observe named areas of interest and targeted areas of interest within the battalion security area along enemy Avenues of Approach 1 and 2.

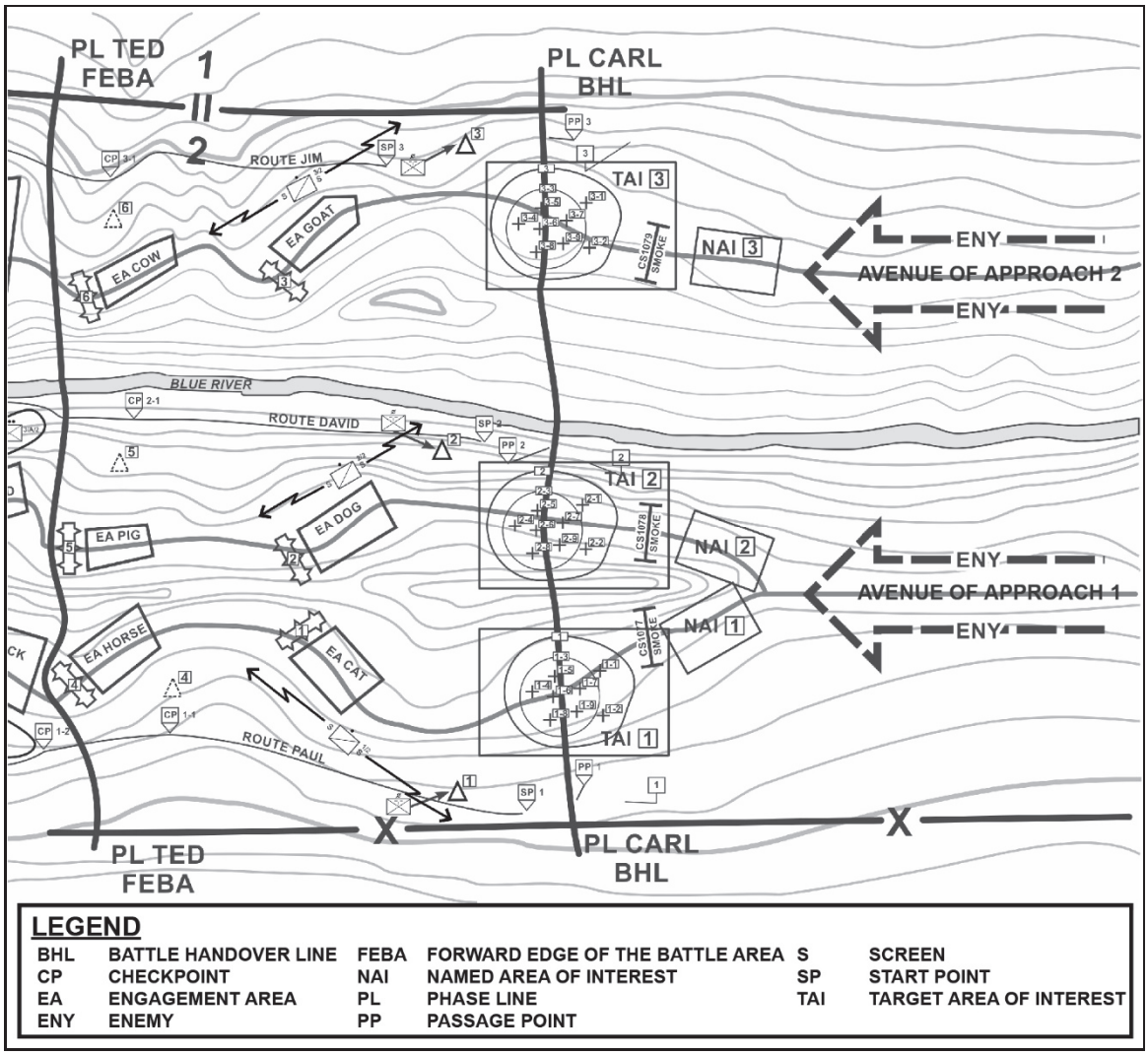


Figure 3-21. Battalion area defenses (security area engagement), example

3-286. Within the IBCT scenario to conduct passage of lines with forward security force (cavalry squadron), Company B in the main battle area is responsible for the conduct of checkpoint 3-2 (conducted by Second Platoon) and Release Point 3-A (Third Platoon). (See figure 3-20 on page 3-75.) With the assignment of tasks: conduct observation post operations, reconnaissance and security patrolling, linkup points, checkpoints, release points, and passage points, they are only successful if prior coordination is done correctly. When forward elements move through the battalion security area to conduct rearward passage of lines through the company's area of operation, the company commander coordinates the movement with higher, and adjacent units to ensure success.

3-287. Subordinate elements within the company must be aware of any movement through their area of operation. Efforts are made to expedite this movement quickly, quietly, and along routes unidentifiable to the enemy. Subordinate elements may have to close a lane (obstacle) after the movement of forward unit to the rear to limit the enemy advance. Company leaders should rehearse actions to ensure all elements understand the sequencing, and engagement criteria to limit fratricide especially since this will typically happen during periods of limited visibility.

3-288. As enemy forces approach the main battle area, security area forces when their positioning allows may continue limited offensive action to attrit the enemy, or displace to alternate positions to facilitate future offensive actions. When security area forces withdraw through the main battle area, they move as quickly as possible using multiple passage points and lanes along the forward edge of the battle area. Throughout this

process, security area forces take advantage of previous liaison and plans, making any required last-minute coordination with main battle area forces at contact points to ensure a rapid rearward movement.

Disrupt and Fix the Enemy

3-289. When friendly forces make contact with the enemy, the commander seeks to disrupt the enemy's plan, the enemy's ability to control forces, and the enemy combined arms team by countering the enemy's initiative and preventing the enemy from massing overwhelming combat power. The commander initiates actions to force the enemy into engagement areas to destroy the enemy's cohesion and disrupt the tempo and advancement of the enemy to the main battle area. In addition to disrupting the enemy, the commander conducts limited offensive actions to constrain the enemy into a specific course of action, control enemy movements, or fix the enemy in a given location the commander does this through the execution of observation posts that are able to call for fire on advancing enemy forces, reconnaissance and security patrolling that identify enemy forces without being decisively engaged, and unexpected defensive positions and obstacles. Additionally, the commander considers the use of enabling attachments, such as the assault platoon that can disable a potential mounted threat, to deliver longer range effects that have precise range finding systems that increase the accuracy of calling for fire on enemy forces.

3-290. During the defense, the commander concentrates organic, and engineer efforts on countering the enemy's mobility and canalizing the enemy and forcing them into friendly forces engagement areas. The commander also uses varying battle positions; primary, alternate, subsequent, and supplementary allow the commander to conduct the defense in a more dynamic way. The commander ties the countermobility operations to the indirect fires plan, and direct fires plan that will affect the enemy when advancing forces are fixed. When the enemy's attacking force assumes slows, or begins to assume a more defensive posture, the commander rapidly coordinates and concentrates all defending fires against unprepared and unsupported segments of the attacking enemy force. During this time the commander may direct subordinate element to reposition to supplementary battle positions to deliver a fiercer blow to the enemy.

Note. In this scenario, the commander establishes priorities among countermobility and survivability efforts and synchronizes these efforts with static and dynamic actions. Throughout the depth of the battalion defense, the priority of engineer effort for the Infantry battalion is countermobility, then survivability. Countermobility priority of support is first to the security area then to the main battle area. Survivability priority of support is to the mechanized Infantry company team, specifically Battle Position 7 and Battle Position 8. Mobility priority of support focuses at the IBCT echelon, specifically the counterattack force.

Maneuver

3-291. During engagement within the battalion security area, Infantry Battalion 1 (not illustrated) and Infantry battalion 2 assume responsibility for the battle at the BHL, Phase Line Carl. (See figure 3-22.) As security forces moved towards and through the BHL, the battalion commander increased the intensity of indirect fires (as required) and along withdrawal routes forward of the BHL from battalion level and above fire support assets to enable security forces to break contact. Both static and dynamic actions initially from battalion security area forces, then from main battle area forces and higher echelon enablers, provide support to cover the withdrawal of the IBCT security force, and if required to close passage points. The battalion commander planned obscurants (linear smoke targets) to assist security forces with breaking contact with the enemy forward of the BHL. Sniper Teams 1, 2, and 3 established Observation Posts 1, 2, and 3 respectively, within the battalion's forward security area to collect information on the enemy and to provide overwatch during battle handover.

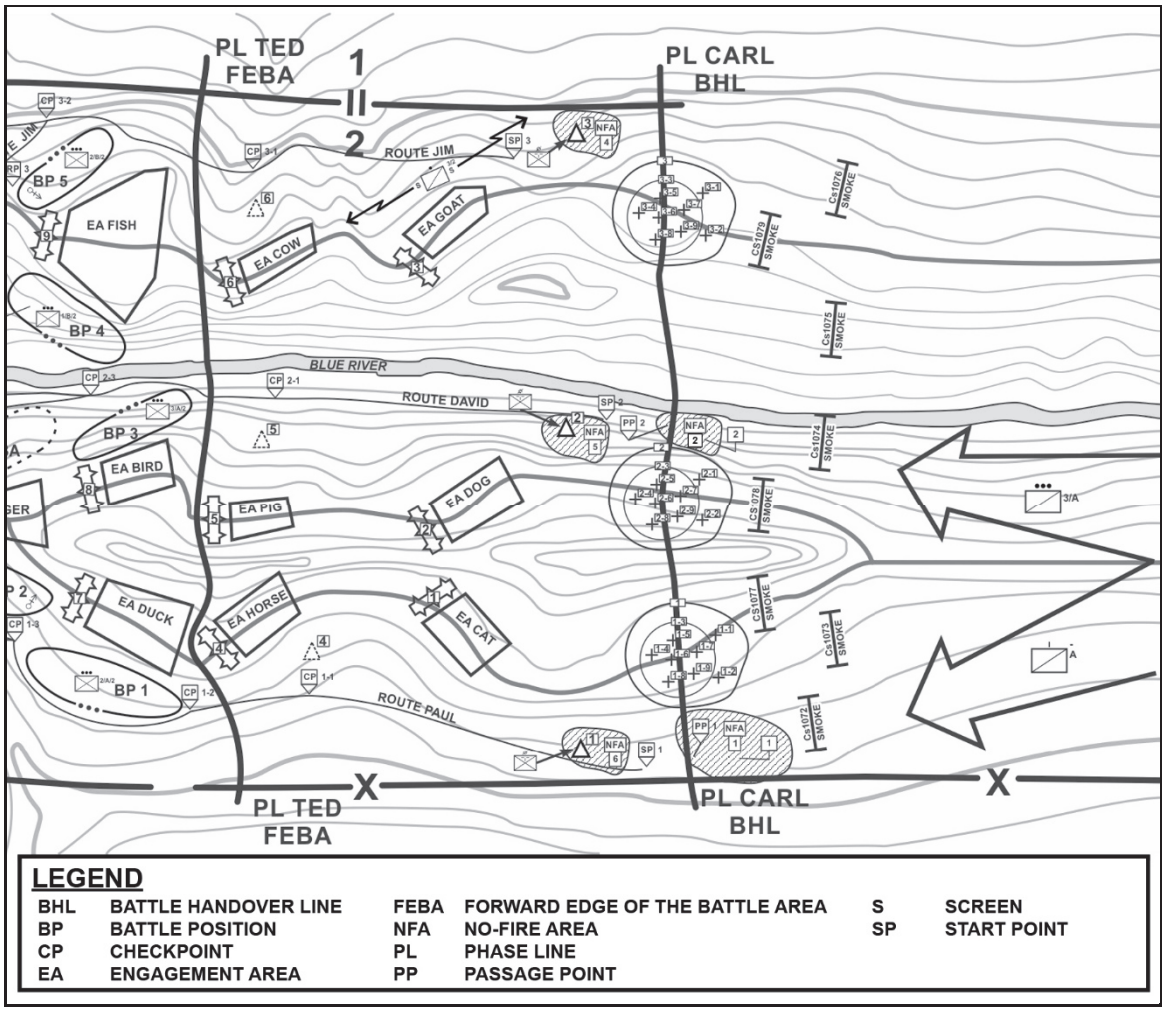


Figure 3-22. Battalion area defense (battle handover), example

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Note. As stated early, the primary reward passage of lines for the IBCT cavalry squadron is through Infantry Battalion 1 (not illustrated) to the north of the IBCT main effort (Infantry Battalion 2). Infantry Battalion 2 still plans and prepares for a rearward passage of lines to assist subordinate elements of the cavalry squadron. For discussion purposes, the cavalry squadron employed one troop (Cavalry Troop A) south of the Blue River requiring a rearward passage of lines through Infantry Battalion 2. As discussed previously, Second and Third Platoons from Company B, assumes responsibility for Checkpoint 3-2, and Release Point 3-A, and are postured to assist in rearward passage of lines.

3-292. As the Cavalry troop begins movement to withdraw through passage points, the Battalion Scouts Platoon receives a change of mission. Scout Squad 3 continues to screen north of Engagement Area Goat to provide early warning of enemy dismounted movement north of Engagement Area Goat. Through previous liaison and coordination with IBCT security forces (Cavalry Troop A), the remainder of the scout platoon (postured forward of Company A) successfully initiated the rearward passage Cavalry Troop A through Passage Points 1 and 2. After Cavalry Troop A successfully moved alone Route Paul and Route David through Checkpoints 1-1 and 2-1, Scout Squads 1 and 2 established Observation Posts 4 and 5 in their respective locations to gain information on the enemy and to conduct limited offensive action to attrit the enemy and facilitate future offensive actions. Cavalry Troop A continued rearward movement along Route Paul and Route David to Release Point 1 and Release Point 2, then continued movement to the brigade rear

for follow-on mission. Scout squad 3 (change of mission) conduct movement to and establish Observation Post 6 to gain information on the enemy and to conduct limited offensive action to attrit the enemy and facilitate future offensive actions. During this passage of lines Company B is fully prepared to facilitate movement through passage Release Point 3A.

3-293. During engagement within the main battle area, the commander does not allow the attacking enemy to consolidate, unless it fits within the scheme of maneuver. (See figure 3-23.) As attacking enemy forces reach the main battle area of Infantry Battalion 2 (battalion task force), and into Company B area of operations the enemy may try to find weak points in the defense and attempt to force a passage, possibly by a series of probing attacks. As the enemy attack develops, forward elements engage the enemy's lead forces along identified enemy avenues of approach. The commander arrays forces, based on the mission variables of METT-TC, and establishes engagement areas using obstacles and fires to canalize enemy forces. The commander takes actions to increase the kill probabilities of various weapon systems at different ranges, to include establishing range markers for direct fire weapons, confirming the zero on weapons, or clearing obstacles that might snag the cables over which travel the commands of wire-guided munitions.

3-294. Company B conducts maneuver by employing massed direct and indirect fires and movement to gain positional advantage over the assaulting enemy force. The commander directs the engineer obstacle and sustainment effort by the assignment of priorities. During the battle, the commander repositions forces to meet the enemy where the enemy actually is rather than where the commander projected that the enemy would be. The enemy advance may slow because of canalization and the increased density of forces resulting from limited maneuver space, presenting good targets for defensive direct and indirect fires and Army aviation fires and close air support. The maximum effects of simultaneous and sequential fires are brought to bear at this stage of the battle.

3-295. The commander keeps gaps between platoon defensive battle positions under surveillance, covered by fire or, where possible, blocked by barriers or repositioned friendly forces. Commanders leverage the use of choke points and obstacles to prevent enemy penetration. Company defensive schemes of maneuver clearly define the responsibility for dealing with any enemy penetration. If the enemy succeeds in penetrating forward employed forces in the main battle area, the commander blocks the penetration immediately and destroys this enemy force as soon as possible, using a local counterattack force within the company area of operation. The lowest possible echelon conducts this local counterattack; however, the commander must be aware of the problem of piecemeal commitment.

3-296. The defensive battle for Company B begins when the planned signal and event for initiating fires occurs (a preplanned trigger). In a noncontiguous area of operation, the authority for the initial engagement will reside with the commander, normally. In some instances, the authority for engagement may be delegated to the lowest level. The initial engagement is conducted within Engagement Area Fish when elements from First Platoon, Second Platoon, and the assault platoon identify advancing enemy forces. The company initiates at the maximum effective range of each of their weapons systems. (See figure 3-23.)

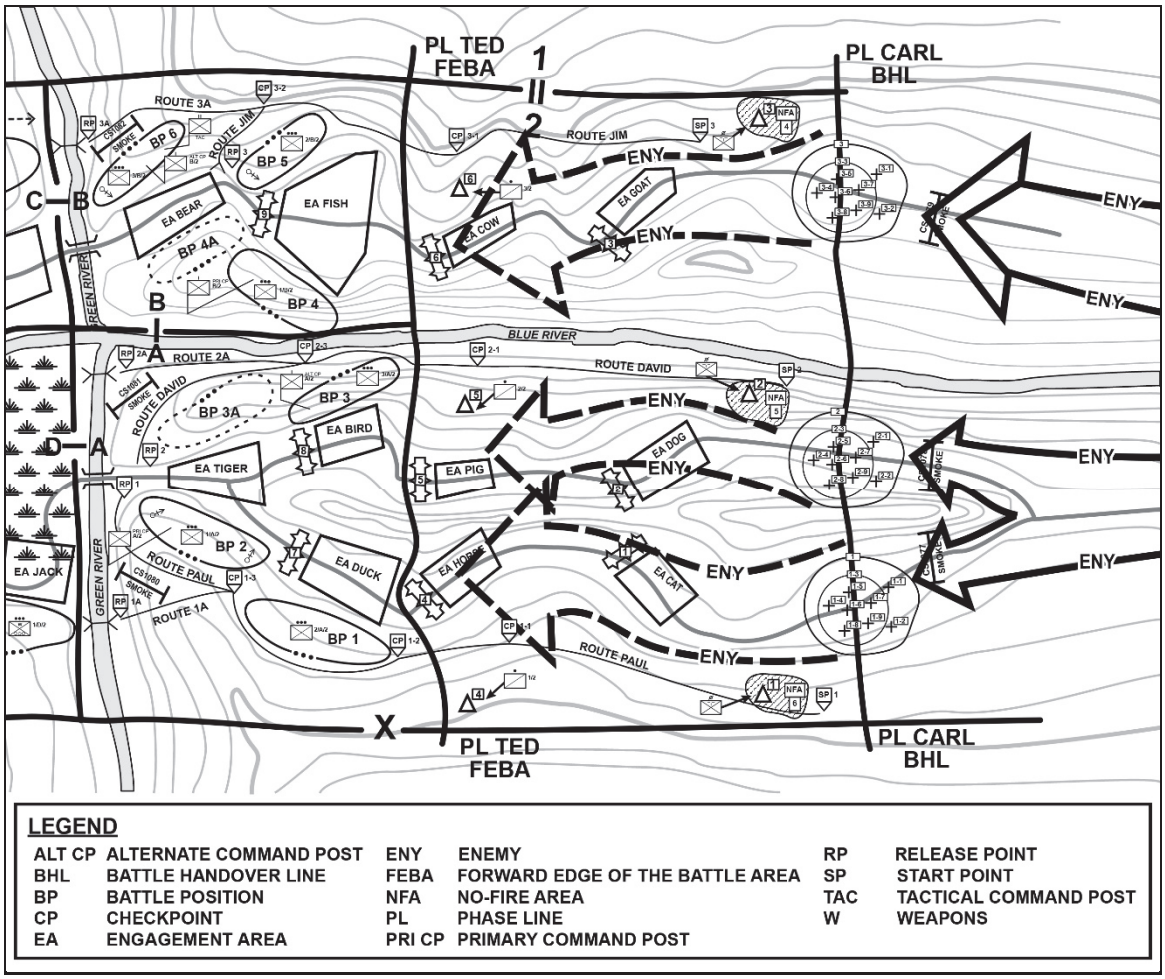

Figure 3-23. Battalion area defense (engagement within the main battle area), example

3-297. Platoon and squad leaders conduct the fight according to the commander's concept and the well-rehearsed plan. As the fight ensues, all company weapons oriented at EA Fish fire at appropriate targets as they come within range in accordance with the company fires plan. Leaders and forward observers are alert to direct and control fire where it is best allocated to avoid wasting ammunition. The rate of fire increases as the enemy approaches. As attacking armored forces approach they begin to be affected by previously established counter-mobility obstacles, indirect fires oriented vicinity of those obstacles, and direct fires from appropriate weapons systems (TOWs, Javelins, and AT4s). As the enemy approaches Phase Line Cards the commander with the assistance of the FSO call for the firing (on-order) of linear target AB0001. The fire support effect for this linear target is to force the armored threat to button up, and its Infantry forces to dismount. As enemy moves into the engagement area the commander repositions forces as necessary. When necessary the commander and subordinate leaders reposition forces to previously prepared supplementary battle positions. Protective obstacles (not illustrated) are positioned forward of platoon battle positions to block enemy attacks into Battle Positions 4, 5, and 6, and if time permits Battle Position 4A. As the enemy approaches Obstacle Belt 9, the commander fires Group Target 1. (See figure 3-24 on page 3-82.)

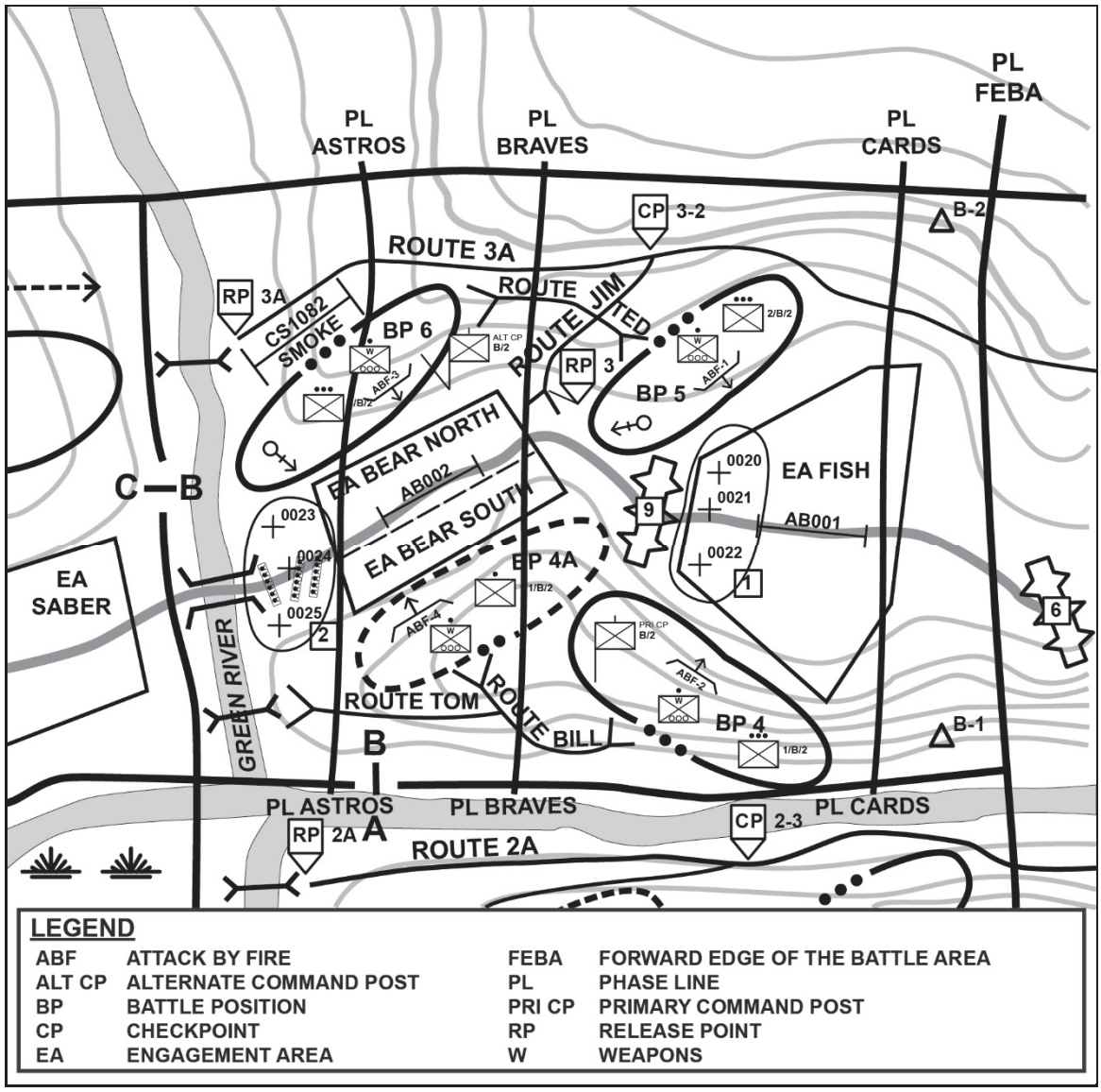

Figure 3-24. Company B area defense (extend actions in depth), example

3-298. As the enemy advances in EA Fish, the enemy attacking formations are being attrited; but, the enemy continues forward. The commander employs FPFs to halt or slow enemy attacks into battle positions (not illustrated). The FPF is also the trigger for First Platoon, and assault platoon forces to begin moving to previously prepared subsequent battle positions, alternate positions to continue to effect the enemy in EA Bear. Upon firing the FPF, the commander also considers the usage of smoke to conceal the movement of First Platoon the alternate positions. Second Platoon forces continue to engage the enemy with appropriate weapons systems, and when necessary direct fire weapons fire their FPLs until attacks into their positions are halted or their positions are bypassed by enemy forces. Platoon leaders keep the commander aware of the current ongoing fight in their areas. When Second Platoon fires are no longer effective on bypassing enemy forces the commander uses a predesignated signal to cease fire.

3-299. As First Platoon and assault platoon sections make their way to their alternate battle positons, the enemy force begins to arrive into EA Bear. The commander ensures that the battalion commander is updated on ongoing contact with the enemy, and continues to report to higher. The commander also communicates with adjacent units, and rear units within the battalion area defense with regard to the enemy situation that will potentially affect them. As the enemy forces advance in EA Bear the company

continues to engage them to destroy targets in the EA as they did in EA Fish, tying all fires to obstacles and forcing the enemy to attack piecemeal.

3-300. When the enemy's main body (enemy main effort) approached EA bear, making its way to PL Braves the Company B commander called for the firing of Linear Target AB0002. On-order called for the firing of Linear Target Group 2 once the enemy began movement into the obstacle adjacent to EA Bear and once the enemy's main body reached PL Astros.

3-301. When the enemy bypasses element of Company B, or is repelled by Company B the commander re-establishes operations and employs patrolling units to maintain enemy contact or to prepare for another attack. Indirect fire is called on areas where the enemy is apt to consolidate, and re-organize. In some situations, a spoiling attack against an enemy force may be appropriate (see chapter 2 for information on spoiling attacks). As the company consolidates and reorganizes to prepare for another attack, the commander updates higher, and adjacent units. In addition to its readiness status after consolidation and reorganization, when bypassed by an enemy the commander reports to units to its rear of the approaching enemy's composition and disposition to better prepare them to continue to fight the full depth of the battalion's area defense. After consolidation and reorganization the commander considers whether the return of company elements that have repositioned to subsequent and alternate battle positions back to their primary positions. In this illustration once enemy forces have bypassed, or been repelled first platoon is then repositioned forward to prepare for the next attack by enemy forces in vicinity of EA Fish. (See figure 3-25 on page 3-84.)

Note. Subordinate units do not abandon a position unless it fits within the higher commander's intent, or that higher commander grants permission to do so. In this scenario, forward defending forces (Company B) plan contingency missions for withdrawal (dismounted) to subsequent battle positions during the course of battle elements of Company B move from Checkpoint 3-2 along Route 3a to raft site (Release Point 3a). In addition to contingency planning for the withdrawal of subordinate units, the commander plans for and organizes a DLIC and stay-behind forces when the scheme of maneuver requires them.

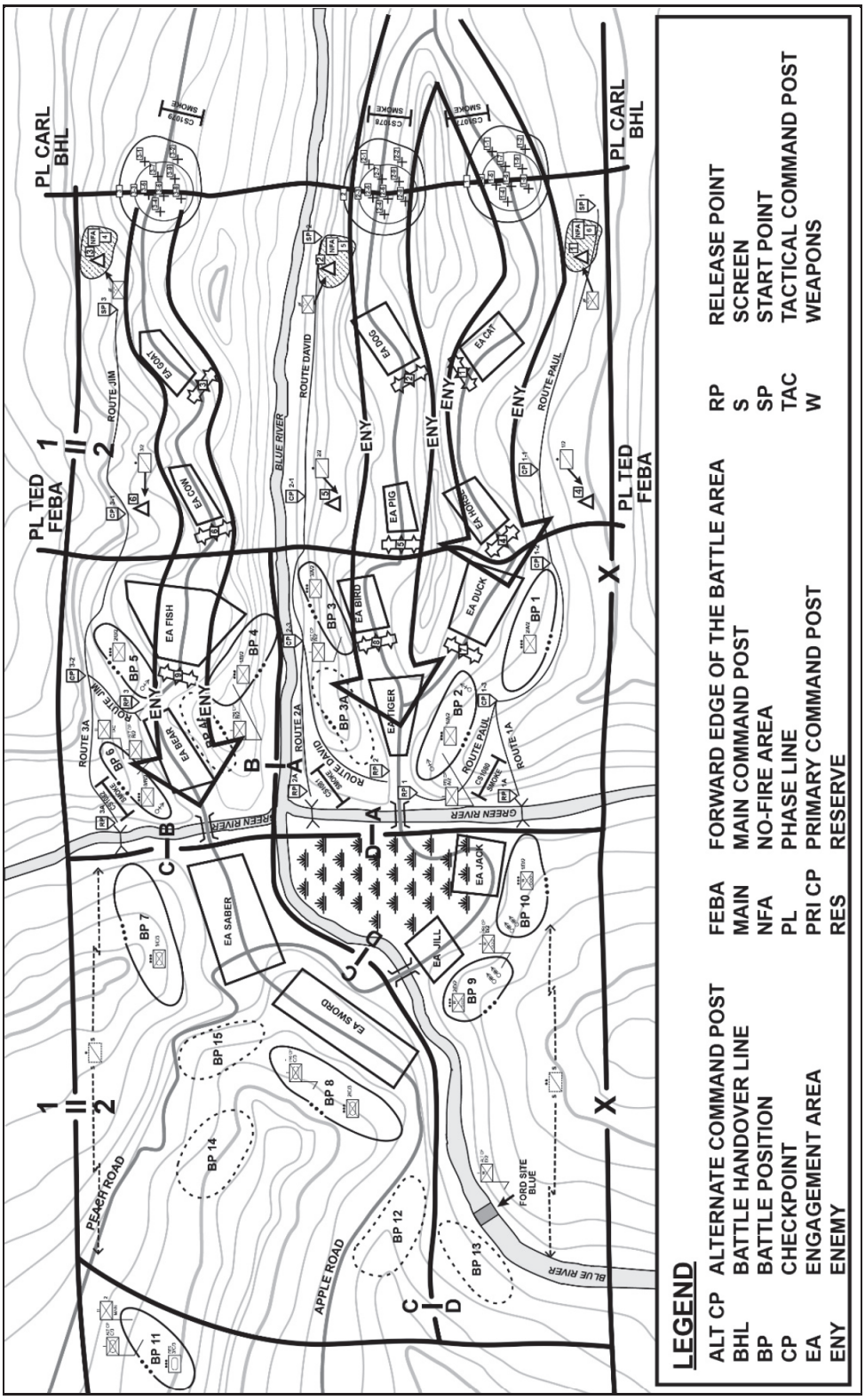

Figure 3-25. Battalion area defense (extend actions in depth), example

3-302. As a battle develops, one of the battalion commander's most critical decisions is when to commit the reserve. The commander controls commitment of the reserve with all available local resources to prevent

the enemy from consolidating gains deep within the battalion's main battle area. When possible, the commander launches the reserve when the enemy presents a flank or rear, overextends, or the enemy's momentum dissipates. In this battle, the commander used available resources to block, contain, or delay the enemy to gain time to employ IBCT or higher-echelon counterattack forces or reserve. In the scenario, the reserve is committed to block (Battle Position 15) the enemy's advance along Avenue of Approach 2 (enemy attack along Avenue of Approach 1 was defeated). (See figure 3-26 on page 3-86.) Within this situation, the commander and staff plan how to integrate reinforced company and platoon battle positions into the defensive scheme, and adjust or establish new boundaries or positions.

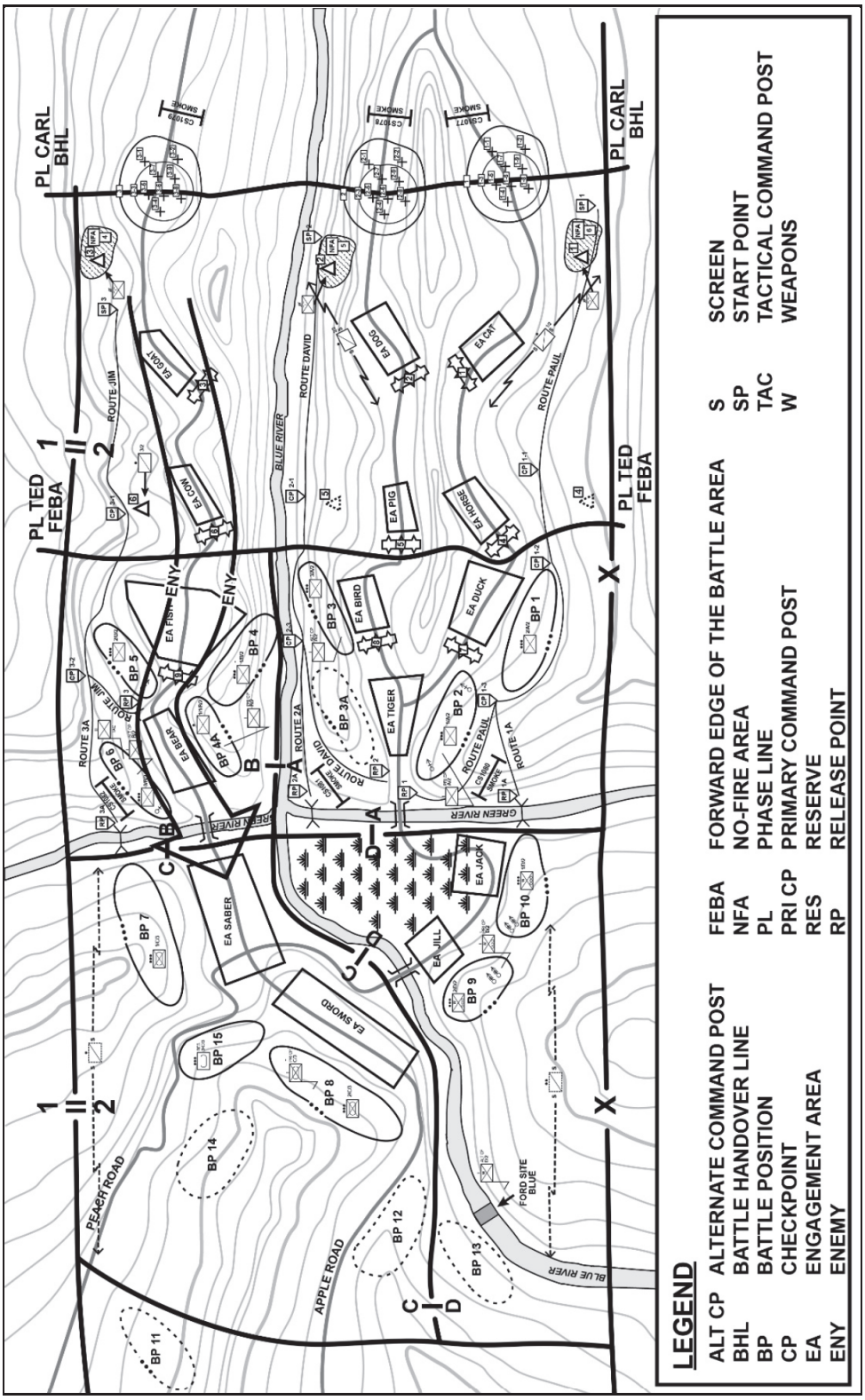

Figure 3-26. Battalion area defense (commitment of the reserve), example

Follow Through

3-303. The purpose of the defensive action illustrated within this scenario was to retain terrain and create conditions for a counteroffensive to regain the initiative. In the scenario the IBCT tasked-organized with two Infantry battalions, a combined arms battalion, a cavalry squadron, a field artillery battalion, a brigade engineer battalion, and a brigade support battalion to defend against three enemy avenues of approach. The third Infantry battalion of the IBCT, under division control, participated as part of the corps counterattack force (air assault-not illustrated within the scenario).

3-304. Initially the IBCT cavalry squadron established a security area forward of IBCT's main battle area. As enemy forces advanced, the squadron attrited enemy motorized Infantry and armor forces within its capability. The cavalry squadron conducted battle handover then moved to the rear of the BCT's main battle area to conduct follow-on missions. Infantry Battalion 1 and 2 defended in-depth, within the IBCT's main battle area, causing the enemy to sustain unacceptable losses short of any decisive objectives. The IBCT commander counterattacked to regain the initiative as the division transition to offensive actions. The combined arms battalion, two armor company teams, was the counterattack force for the IBCT (IBCT counterattack-not illustrated within the Infantry battalion scenario).

3-305. Within Infantry Battalion 2, Company B conducted its defense in-depth, and repositioned forces upon pre-determined triggers within the engagement areas along the enemy avenues of approach. Once assault platoon and First Platoon forces had repositioned to subsequent or alternate battle positions they once again began to engage approaching forces until attrited or until the enemy had bypassed their location. Once the commander deemed a move necessary the company postured for the next wave of enemy forces with engagement area fish. The company continues to reposition forces to attrit the enemy in support of the defense in-depth in this manner until the higher echelon commander issues change of mission instructions. (See ATP 3-21.20 for additional information on the Infantry battalion 2 mission.)

SECTION III – MOBILE DEFENSE

3-306. The *mobile defense* is a defensive task that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force (ADRP 3-90). A mobile defense orients on the destruction of the attacking enemy force, as opposed to retaining terrain, by permitting the enemy to advance into a position that exposes the enemy to a decisive counterattack. The commander may yield ground in some areas to allow the enemy commander to think the attack has been successful or to entice the enemy force to move toward an engagement area where the enemy is vulnerable to the striking force's attack. (Refer to FM 3-90-1 for additional information.)

> ***Note***. A division is the smallest unit that can conduct, versus participate in, a mobile defense. This is because of its ability to fight multiple engagements throughout the width, depth, and height of the division area of operations, while simultaneously resourcing fixing, striking, and reserve forces.

3-307. When the division plans to conduct a mobile defense, subordinate BCTs may shape the penetration of the enemy attack as part of the division fixing force. The division commander allocates only an absolute minimum amount of combat power to the fixing force within the division area of operations. For a typical division with four to six attached BCTs this may be as small as a single BCT or two BCTs at the most. The division commander allocates the maximum available combat power at the time of attack to the striking force. The mobile striking force should possess greater combat power than that of the enemy force it seeks to defeat or destroy and be capable of equal or greater mobility. At the division level, this translates into two or more BCTs supported by the field artillery brigade and combat aviation brigade, and joint fires. The reserve of a division conducting a mobile defense may consist of a single Stryker or combined arms battalion task force or may be a reinforced armored or Stryker BCT. (Refer to ATP 3-91 for additional information.)

3-308. In a mobile defense, an IBCT attached to the division is normally part of the fixing force. The fixing force conducts either an area defense or a delay structured to establish the conditions necessary for the successful conduct of the striking force's attack. The division commander takes advantage of the fixing force fighting a mix of static (defensive positions) and dynamic (local counterattacks) actions. Within the mobile

defense, fixing forces reposition as necessary and conduct local counterattacks to control the depth and breadth of an enemy penetration and ensure the retention of ground from which the striking force can launch the decisive counterattack. When facing large enemy penetrating forces, division shaping operations or supporting efforts repeatedly isolate portions of the enemy force that are then attacked by the striking force, which defeats the enemy in detail. An IBCT or a subordinate Infantry battalion task force can garrison a strong point to shape the enemy's penetration. This and other graphic control measures help the division commander direct the division's BCTs and supporting brigades throughout the execution portion of a mobile defense. (Refer to sections II and IV of this chapter for additional information on the conduct of an area defense or delay, respectively.)

3-309. The attack by the *striking force*—a dedicated counterattack force in a mobile defense constituted with the bulk of available combat power (ADRP 3-90)—in the engagement area isolates the targeted penetrating enemy force and defeats or destroys that enemy force, if possible. When shaping the commitment of the striking force, the commander may use Infantry to isolate targeted enemy forces through vertical envelopment. This form of maneuver requires local air superiority and the suppression of most enemy air defense systems during the time Infantry units move along air movement corridors to their respective landing zones. Once on the ground, air assault forces require direct fire and indirect fire support capable of defeating, when the threat exist, counterattacking enemy armor systems. Fires include a situationally appropriate mixture of dismounted anti-armor systems, Army attack aviation, close air support, and precision guided munitions delivered by cannon and rocket. (Refer to FM 3-99 for additional information on conducting an air assault.)

SECTION IV – RETROGRADE

3-310. A *retrograde* is a defensive task that involves organized movement away from the enemy (ADRP 3-90). The enemy may force these operations, or a commander may execute them voluntarily. In either case, the higher commander of the force executing the operation must approve the retrograde. Retrograde operations are transitional operations; they are not considered in isolation. In a retrograde the battalion, and subordinate companies are usually part of a larger scheme of maneuver designed to regain the initiative and defeat the enemy. (Refer to FM 3-90-1 for additional information.)

GENERAL CONSIDERATIONS FOR THE RETROGRADE

3-311. Retrograde movements may be classified as delaying, withdrawal, or retirement actions. Delaying actions trade space for time, preserve friendly combat power, and inflict maximum damage on the enemy. Withdrawal actions involve a planned voluntary disengagement from the enemy conducted with or without enemy pressure. Retirement involves an organized movement to the rear by a force that is not in contact with the enemy. In each action, a force moves to the rear, using combinations of combat formations and marches. (Chapter 2 discusses combat formations and troop movement.) The commander may use all three actions singularly or in combination with other offensive or defensive tasks.

3-312. The commander executes retrogrades to—

- Disengage from operations.
- Gain time without fighting a decisive engagement.
- Resist, exhaust, and damage an enemy in situations that do not favor a defense.
- Draw the enemy into an unfavorable situation or extend the enemy's lines of communications.
- Preserve the force or avoid combat under undesirable conditions, such as continuing an operation that no longer promises success.
- Reposition forces to more favorable locations or conform to movements of other friendly troops.
- Position the force for use elsewhere in other missions.
- Simplify sustainment of the force by shortening lines of communications.
- Position the force where it can safely conduct reconstitution.
- Adjust the defensive scheme to secure more favorable terrain.
- Deceive the enemy.

3-313. The commander considers mobility as it relates to the enemy and friendly organic forces. When possible the commander may be responsible for the movement of forces aboard mounted platforms provided by higher and therefore must conduct link-up with supporting forces. When this is not the case, and the commander must move dismounted, Infantry rifle companies consider the use of routes that move through restricted, and severely restricted terrain. Against a mobile enemy, to the degree possible, the Infantry battalion avoids open terrain with high-speed avenues of approach.

3-314. The commander also must understand the battalion plan with regard to sustainment, and casualty assistance. Do to the fluidity of the retrograde, the commander may have to adjust casualty collection points during different portions of the mission.

3-315. The commander is prepared to adjust fires based on the plan and the movement of the enemy toward friendly forces as they retrograde. The commander plans triggers for indirect fires along the retrograde route that degrade enemy capabilities.

3-316. It is important that the commander be aware of the effects of the retrograde can play in negatively affecting the participating Soldiers' attitudes more than any other type of operation because they may view the retrograde as a defeat. The commander must maintain the unit's aggressiveness and not allow retrograde operations to reduce or destroy unit morale. The commander can counter any negative effects of the operation on unit morale by planning and efficiently executing the retrograde and ensuring that Soldiers understand the purpose and duration of the operation.

Note. During a retrograde (mainly when conducting a delaying operation or withdrawal operation) the Infantry battalion, or subordinate company may become encircled or be directed to conduct operations as a stay-behind force. This may be planned or forced by enemy action. When encircled or acting as a stay behind force the battalion or subordinate company normally establishes a perimeter on restrictive terrain, ideally controlling a choke point or other key terrain. When adequately sustained, often by Army aviation or Air Force assets, the battalion and company can remain in position indefinitely and attack the enemy in its rear or against more vulnerable support units. If the battalion or subordinate company cannot be adequately sustained, then it must conduct a breakout as soon as possible. See ATP 3-21.20 for more information on defending encircled and conducting a stay-behind operation than discussed earlier in this chapter.

DELAY

3-317. A *delaying operation* is an operation in which a force under pressure trades space for time by slowing down the enemy's momentum and inflicting maximum damage on the enemy without, in principle, becoming decisively engaged (JP 3-04). When conducting a delay, the Infantry battalion or subordinate company yields ground to gain time while retaining flexibility and freedom of action. The battalion or subordinate company may execute a delay when it has insufficient combat power to attack or defend or when the higher unit's plan calls for drawing the enemy into an area for a counterattack, as in a mobile defense. (Refer to ATP 3-21.20 for additional information.)

ORGANIZATION OF FORCES

3-318. The battalion's organization of forces depends on how the IBCT has structured its forces unless the battalion operates independently. The IBCT normally organizes into a security force, main body, and reserve, though operations extended across large areas may preclude the use of an IBCT-controlled security force and reserve. In this case, the IBCT may direct the battalion to organize its own security, main body, and reserve forces; the same as if the battalion was operating independently. The IBCT commander can designate a battalion as the security or reserve force for the IBCT.

3-319. When the battalion operates independently or establishes its own security force within the IBCT's area of operation, the battalion normally uses the scout platoon and the sniper squad as a screening force. These elements position to observe the most likely enemy avenues of approach and can initiate fires to slow and weaken the enemy. These elements may be reinforced with other elements, for example, assault platoons

from the weapons company, forward observers, and fire support teams executing direct and indirect fire targets on a primary enemy avenue of approach.

3-320. The battalion's main body, which contains the majority of the force's combat power, may use alternate or subsequent positions to conduct the delay. The commander usually deploys the main body as a complete unit into a forward position when conducting a delay from subsequent positions. The commander divides the main body into two parts, roughly equal in combat power, to occupy each set of positions when conducting a delay from alternate positions. The commander retains a reserve, normally a company or company minus, to defeat enemy penetrations, reinforce positions, or assist units with breaking contact. Reserve missions require the force tasked to be the reserve to have the mobility and strength to strike with such force that an enemy has no option but to react to it.

3-321. When conducting a delay, the rifle company does not typically fight on its own, but as part of the battalion. The rifle company can delay, and draw the enemy into vulnerable positions. The company tries to cause the enemy casualties to stop them when possible. The company is expected to aggressively fight, without becoming decisively engaged. This is done by defending, disengaging, moving, and defending again. This will also include counterattacks, and spoiling attacks when possible. The company commander must ensure that the company plan fits into the framework of the higher echelon commander to afford forces maximum efforts in moving during the delay. This means that the company commander will assign areas of operations, or battle positions to platoons in order to best coordinate the company tasks within the delay operations.

DOCTRINAL BASIS FOR A DELAY

3-322. The delay is one of the most demanding of all ground combat operations. A delay wears down the enemy so that friendly forces can regain the initiative through offensive action, buy time to establish an effective defense, or determine enemy intentions as part of a security operation. The purpose of the delay is to control the enemy's tempo by forcing the enemy to deploy multiple times and repeatedly concentrate its combat power to defeat the delaying force. Although the company must establish and maintain contact, it should avoid becoming decisively engaged, except when directed to prevent enemy penetration of a phase line for a specific duration. It is critical that the commander's intent defines what is more important to the mission: gaining time, inflicting casualties on the enemy, or protecting the force. Normally in a delay, inflicting casualties on the enemy is secondary to gaining time. The commander establishes risks for each delay but ordinarily maintaining freedom of action and avoiding decisive engagement is of ultimate importance.

Planning

3-323. Conducting a delay requires the close coordination of forces and a clear understanding by subordinates of the commander's intent, the scheme of maneuver, and detailed mission graphics. The potential for the loss of control is high in delay operations, making cross talk and coordination between commanders and subordinate leaders extremely important. Subordinate initiative is critical, but it must be in the context of close coordination with others. Plans must be flexible, with control measures throughout the area of operation allowing forces to maneuver to address all possible enemy options. Planning considerations for the area defense address in section II of this chapter apply to delaying operations. The six-warfighting functions below are the framework for discussing planning considerations specific to delaying operations for the company.

Mission Command

3-324. Centralized planning and decentralized execution characterize a delaying operation. Critical to the success of the delay is the shared understanding of the operational environment and the operation's purpose, and the problems and approaches to solving them. The commander's intent provides a clear and concise expression of the purpose of the delaying operation and the desired military end state for the delay. The commander's intent becomes the basis on which subordinate leaders develop plans that transform thought into action. The higher commander's intent provides the basis for unity of effort in delaying operations.

Parameters of the Delay

3-325. The commander clearly articulates the parameters of the delay in the order, specifically subordinate missions in terms of space, time, and friendly strength. Through these parameters, normally stated in paragraph 3 of the delay order tasks to subordinate units, the commander provides direction for actions during the delaying operation as planned and when subordinate are unable to meet the initial terms of the delay mission.

3-326. First within these parameters, the company commander is directed to conduct one of two directed approaches to conduct the delay: delay within the area of operation (see figure 3-27 on page 3-96) or delay forward of a specified line or terrain feature for a specified time (see figure 3-28 on page 3-97). Time during the conduct of a delay is usually based on another unit completing its activities, such as establishing rearward defensive positions. A mission of delay within an area of operation implies that force integrity is a prime consideration. In this case, the company delays the enemy as long as possible while avoiding decisive engagement. Generally, this force displaces once predetermined criteria have been met, such as when the enemy force reaches a *disengagement line*—a phase line located on identifiable terrain that, when crossed by the enemy, signals to defending elements that it is time to displace to their next positions (ADRP 3-90).

3-327. The second parameter the order must specify is what is considered acceptable risk. Acceptable risk ranges from accepting decisive engagement by holding terrain for a given period to avoiding decisive engagement in order to maintain the delaying force's integrity. The depth available for the delay, the time needed by the higher headquarters and subsequent missions for the delaying force determine the amount of acceptable risk.

3-328. Third, the order must specify whether the delaying force may use the entire area of operation or whether it must delay from specific battle positions. A delay using the entire area of operation is preferable, but a delay from specific positions may be required to coordinate two or more units in the delay.

3-329. The battalion commander normally assigns the company an area of operation when—

- There is no dominating terrain on the enemy avenues of approach
- When the battalion area of operation is extremely wide.

3-330. The company commander then may assign areas of operation or initial and subsequent delay positions for subordinate platoons. The commander defends and withdraws by platoons bounding them to the rear.

3-331. The battalion commander normally assigns the company a series of battle positions in the event that—

- The battalion is delaying in restrictive terrain where the enemy can be canalized into selected areas.
- When there is terrain that dominates the avenues of approach.
- When the battalions area of operation covers a narrow frontage.

3-332. When the battalion commander has assigned the company a series of battle positions from which to delay, the company moves from one battle position to another as directed by the battalion commander. If it coincides with the battalion plan the company commander may choose platoon battle positions and fight a delay action between assigned company battle positions. The company commander must decide which positions require preparation and allocate time and resources to them.

3-333. The battalion commander has greater control of the delay when delaying from battle positions. However, the company commander has more control when delaying in sector. The battalion commander can impose more control of the company's rearward movement by assigning phase lines and times for these lines to be crossed, in conjunction with the battalion scheme of maneuver. The company will have the same control by assigning its own triggers for platoons crossing phase lines as well.

3-334. If the delay is conducted over a long distance either method may be used. No matter which is used the company commander chooses the platoon positions and the routes to them. If there is terrain that is defendable forward of a battalion established phase line, the commander may consider defending there for the required amount of stated time for that particular phase line.

Command Posts Operations

3-335. The company commander positions (includes the positioning of primary and alternate CPs when utilized) where best to oversee the conduct of the delay. The commander positions to control the fight as the primary CP, and directs the XO or other identified leader to conduct a secondary command post (alternate CP) to ensure communications with the battalion is not lost as the commander maneuvers with platoons throughout the delay.

Control Measures

3-336. Control measures are the same for both alternatives addressed in paragraph 3-226 on page 3-60, except that during a delay forward of a specified line for a specified time, the company commander annotates the phase line with the specified time. If the delaying force is ordered to hold the enemy forward of a given phase line (delay line, see paragraph 3-337 on page 3-92) for a specified time, mission accomplishment outweighs preservation of the force's integrity. Such a mission may require the force to defend a given position until ordered to displace. Control measures, for example battle positions, engagement areas, and attack-by-fire positions, allow the company commander and subordinate leaders to direct the fight more closely giving subordinates a clearer picture of how the commander envisions fighting the delay.

3-337. The battalion commander may dictate specific events to control the company's delay, for example, the enemy penetration of a phase line can trigger the initial repositioning of subordinate forces to subsequent positions during the course of the battle. The commander may also use phase lines to control the timing and movement of delaying units though assigning time minimums to delays by phase line can limit subordinate commanders to delaying on or forward of those lines, at least until the specified times. A *delay line* is a phase line where the date and time before which the enemy is not allowed to cross the phase line is depicted as part of the graphic control measure (FM 3-90-1). Contact points, coordination points, restrictive fire lines, coordinated fire lines, trigger lines, target reference points, checkpoints, and other control measures are established to avoid fratricide and support subordinate unit coordination.

Note. Designating delay lines is a command decision that imposes a high degree of risk on the delaying unit. The delaying unit must do everything in its power—including accepting decisive engagement—to prevent the enemy from crossing that line before the time indicated. A delay line may also be event driven. For example, a commander can order a delaying unit to prevent penetration of the delay line until supporting engineer assets complete construction of a rearward obstacle belt. (Refer to ATP 3-21.20 and FM 3-90-1 for additional information.)

Deception

3-338. The delay must include the integration of direct and indirect fires and situational obstacles to make the enemy doubt the nature of the friendly mission and leave no choice but to deploy and maneuver. Engagement at maximum ranges for all weapons systems causes the enemy to take time-consuming measures to deploy, develop the situation, and maneuver to drive the delaying force from its position. An aggressive enemy commander will not deploy if friendly forces are determined to be delaying; the enemy commander will use mass and momentum to develop sufficient pressure to cause subordinate units of the company to fall back, or to become decisively engaged.

Movement and Maneuver

3-339. The delay order addresses the conduct of movement prior to the execution phase of the operation, the scheme of maneuver and priorities for the delay and defines how much freedom subordinate leaders have in maneuvering their forces. The battalion specifies constraints on maneuver and requirements for coordination. The commander defines the criteria for disengagement and maneuver to alternate and subsequent positions or area of operation, and identifies the series of battle positions or phase lines from which or forward of which the company and its subordinates units must fight.

Scheme of Maneuver

3-340. The nested company scheme of maneuver must allow the battalion to dictate the pace of the delay and maintain the initiative. The company commander selects positions that inflict maximum damage on the enemy, support disengagement, and enable delay actions to alternate or subsequent positions. The commander may choose to delay from alternate or subsequent positions depending on the strength of the companies and the size of the area of operation.

3-341. During delaying operations, the commander normally assigns deep and parallel areas of operation to delaying forces. This provides enough terrain for subordinate units to operate in-depth, and maximizes the ability for allocated assets to support simultaneously multiple units throughout the operation. The commander makes provisions for coordinated action along enemy avenues of approach that diverge and pass from one subordinate area of operation to another. When determining the scheme of maneuver, positions should incorporate as many of the following characteristics as possible:

- Good observation and long-range fields of fire.
- Covered or concealed routes of movement to the rear.
- A road network or areas providing good cross-country trafficability.
- Existing or reinforcing obstacles to the front and flanks.
- Maximize use of highly defensible terrain.

3-342. During planning the commander considers the company's specific maneuver actions, fires, obstacles, and the employment of other supporting assets necessary to degrade the enemy's mobility and support friendly forces' disengagement to alternate or subsequent positions. This planning is especially critical at locations and times when delaying forces may become decisively engaged with the enemy. As the commander develops and refines the plan, it develops decision points for key actions. This includes triggers for the employment of fires and situational or reserve obstacles; displacement of subordinate units to alternate or subsequent positions; and movement of indirect fire assets, mission command systems, and sustainment assets. The commander also selects routes for reinforcements, artillery, command posts, and sustainment elements to use and synchronizes their movements with the delaying actions of forward units.

Engineer Tasks and Support

3-343. Engineer priorities during a delaying operation are normally countermobility first, then mobility. However, restrictive terrain that impedes friendly movement may require the commander to reverse priorities. Close coordination is necessary so that engineer obstacles are covered by fire and do not impede the planned withdrawal routes of delaying forces or the commitment of a counterattacking and reserve force. (See ATP 3-21.20 for more information.)

Avoiding Decisive Engagement

3-344. A key to avoiding decisive engagement is to maintain a mobility advantage over the attacking enemy. The commander seeks to increase the company's mobility while degrading the enemy's ability to move. The company improves its mobility by—

- Maintaining contact with the enemy, maintaining reconnaissance, surveillance, and security on flanks, and coordinating with adjacent units to prevent forces from being isolated.
- Prioritizing and task-organizing mobility assets to maximize the ability of the company to perform the delay.
- Reconnoitering routes and battle positions.
- Improving routes, combat trails, bridges, and fording sites between delay positions, as time and resources permit.
- Using indirect fires and obstacles to support disengagement and to cover movement between positions.
- Task-organizing and positioning breaching assets within subordinate formations to breach enemy scatterable mines rapidly.
- Using multiple routes.
- Controlling traffic flow and restricting refugee movements to unused routes.

- Keeping logistical assets uploaded and mobile.
- Caching ammunition on rearward routes and ensuring that units know the locations of these supply points. If possible, supply points are guarded and prepared for destruction when not used by delaying forces.
- Task organizing additional medical and equipment evacuation assets to subordinate platoons to increase the ability to disengage and displace rapidly.
- Positioning air defense assets to protect bridges and chokepoints on rearward routes.

3-345. As the commander seeks to increase mobility. The commander degrades the enemy's ability to move through planning and an understanding of the area of operation. The company, in coordination with battalion assets, degrades the mobility of the enemy by—

- Maintaining continuous pressure on the enemy throughout the area of operation.
- Attacking logistics as well as maneuver and fire support assets.
- Securing and controlling chokepoints and key terrain that dominates high-speed avenues of approach.
- Destroying enemy reconnaissance and security forces and surveillance assets to blind the enemy and causing the enemy to move more deliberately.
- Employing a combination of directed, situational, and reserved obstacles.
- Employing indirect fires, obscurants, manned-unmanned teaming, and close air support, if available.
- Using deception techniques such as dummy positions.

Delay Techniques

3-346. When conducting a delay the both the battalion and company commanders normally assigns subordinate units contiguous areas of operation that are deeper than they are wide. The commanders synchronize the employment of these combined arms teams throughout the depth of each assigned area of operation for the delay. When commanders expect to delay for only a short time or the area of operation lacks depth, the delaying unit may be forced to fight from a single set of positions. When commanders expect the delay to last for a longer period, or if sufficient depth is available, the delaying unit may delay from either alternate or subsequent positions. In both techniques, delaying units normally reconnoiter delay positions before occupying them and, if possible, post guides on one or two positions. The company commander typically sends a quartering party to conduct the reconnaissance of routes, and positions to effectively employ machine guns, mortars, Javelins, AT4's and TOW's (TOWs when attached to companies). Sending a quartering party to the delay location may also guide arriving units into their positions and pre-position water, ammunition, and other supplies at each positon. The quartering party is also able to coordinate with any units to the rear of the company when a passage of lines is required. If the company has thoroughly reconnoitered and rehearsed the delay, the quartering party may not be required.

3-347. In executing both methods of delay, it is critical that the delaying units maintain contact with the enemy between delay positions. Table 3-1 summarizes the comparison of two delay techniques.

Table 3-1. Comparison of two delay techniques

METHOD OF DELAY	*USE WHEN*	*ADVANTAGE*	*DISADVANTAGE*
Delay from alternate positions	Area of operation is narrow. Forces are adequate to split between different positions (in-depth).	Allows positioning in-depth. Harder for enemy to isolate units. Increases flexibility. Allows more time for maintenance.	Requires continuous coordination. Requires passage of line, increasing vulnerability and fratricide potential. Engages only part of the force at one time.

Delay from subsequent positions	Area of operation is wide. Forces available are not adequate to position in-depth.	Reduced fratricide risk. Ease of mission command. Repeated rearward passages not required.	Limited depth to the delay positions. Easier to penetrate or isolate units. Less time is available to prepare each position. Less flexibility.

3-348. In a delay from alternate positions (see figure 3-27 on page 3-96), two or more units in a single area of operation occupy delaying positions in-depth. As the first unit engages the enemy, the second occupies the next position in-depth and prepares to assume responsibility for the operation. The first force disengages and passes around (preferred method) or through the second force. The force then moves to the next position and prepares to reengage the enemy while the second force takes up the fight. If the area of operation is narrow, the company employs platoons in-depth occupying alternate positions. This enables a strong delay, with forces available to counterattack or assist in the disengagement of the forces in contact. Using alternate positions helps maintain pressure on the enemy and helps prevent the company and subordinate platoons from being decisively engaged. A delay from alternate positions is particularly useful on the most dangerous avenues of approach because it offers greater security and depth than a delay from subsequent positions. However, it also poses the highest potential for fratricide and vulnerability as units pass near or through each other.

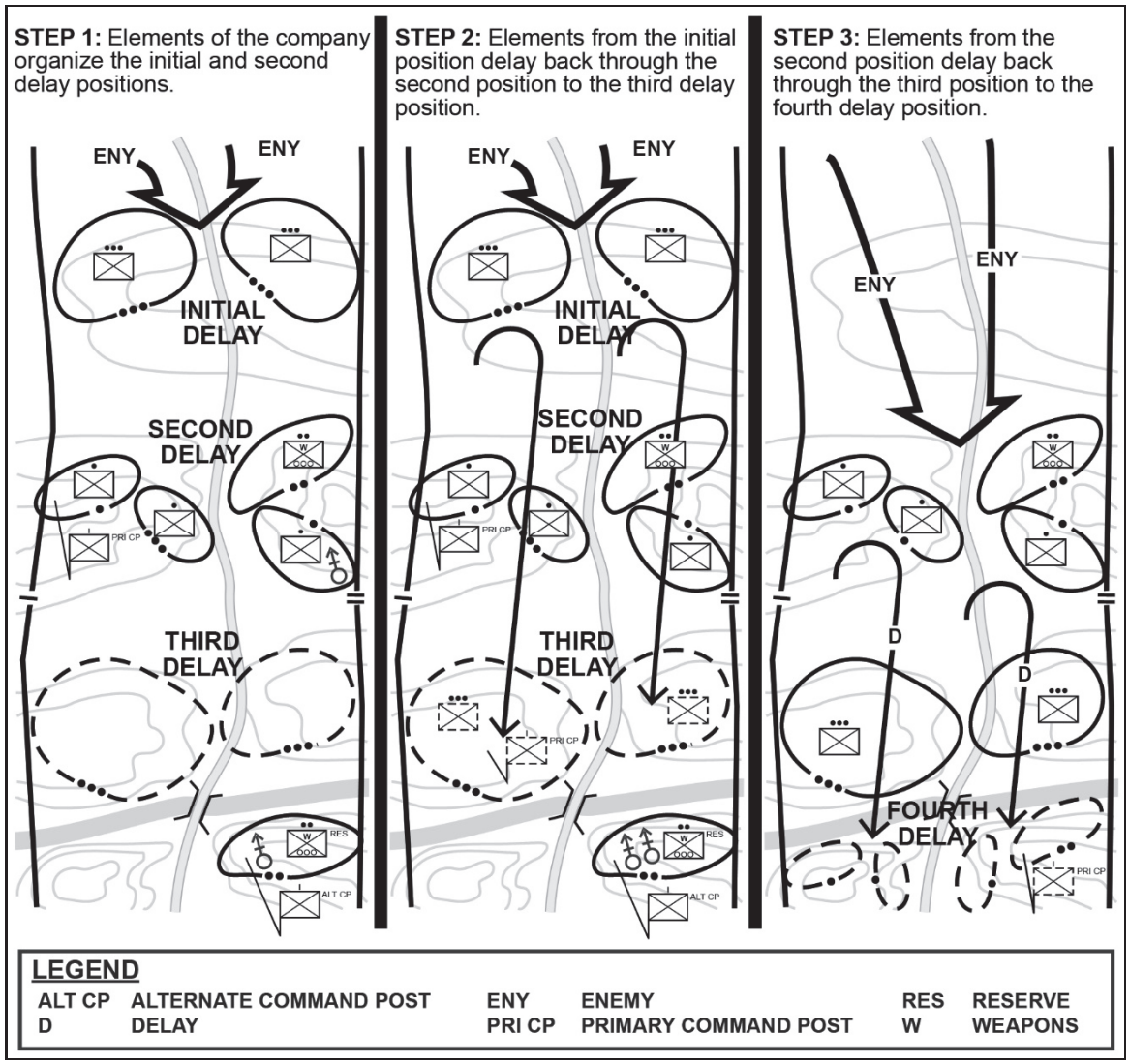

Figure 3-27. Delay from alternate positions

3-349. A delay from subsequent positions is used when the assigned area of operation is so wide that available forces cannot occupy more than a single layer of positions. (See figure 3-28.) In a delay from subsequent positions, the majority of forces are arrayed along the same phase line or series of battle positions. The forward forces delay the enemy from one phase line to the next within their assigned area of operations. This is the least preferred method of delaying since there is a much higher probability of forces becoming isolated or decisively engaged, particularly if the delay must be maintained over more than one or two subsequent positions. The delay force also has limited ability to maintain pressure on the enemy as it disengages and moves to subsequent positions unless it has been allocated additional and adequate indirect fire support.

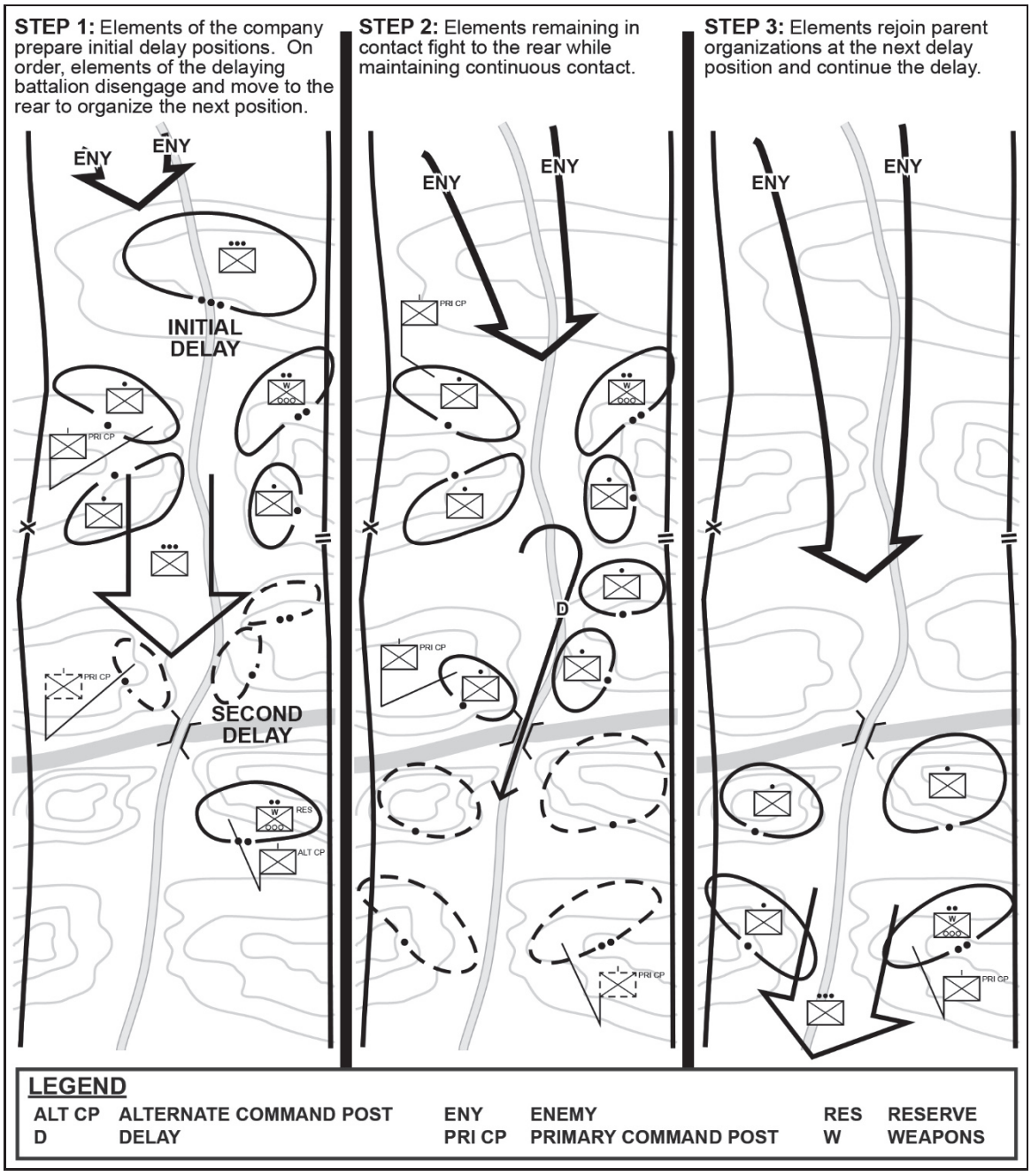

Figure 3-28. Delay from subsequent positions

Intelligence

3-350. During the IPB, the commander utilizes intelligence and updated information provided by the S-2 and S-3 to analyze the effects of terrain and the anticipated enemy situation to identify positions that offer the best opportunity to engage, delay, and inflict damage on the enemy force. As the commander develops delay alternate and subsequence positions and control measures, the commander calculates enemy closure rates and compares them to friendly displacement rates between positions. The commander considers the time and space factors for each enemy avenue of approach to dictate the amount of time subordinate units have to engage the enemy and move, before becoming decisively engaged. From this analysis, the commander develops triggers and lines for displacement to alternate and subsequence positions in-depth. The

commander also considers key weapons systems and triggers for their displacement, to cover friendly movement that slows the enemy. (Refer to ATP 2-01.3 for additional information.)

Fires

3-351. The extended frontages and ranges common to delaying operations, and in general to retrograde operations, make the provision of fire support difficult and limit the commander's ability to mass fires. For that reason, normally delaying forces often have more than the normal allocation of fire support assets. The commander balances the decision to commit fire support systems forward against anticipated requirements in subsequent battle stages. The commander uses when available; rotary- and fixed-wing aircraft to augment fires or replace artillery systems and to reduce risk through the ability to conduct air movement of artillery systems (rotary-wing only). The following are key considerations for the fire support plan:

- Attack the enemy throughout and forward (Infantry battalion and above) of the company area of operation.
- Engage the enemy with fires to inflict casualties and disrupt enemy approach before they reach friendly delaying positions.
- Plan FPFs for each series of delaying positions to support disengagement.
- Mass fires on high-payoff targets and canalizing terrain to limit the momentum of the enemy's attack.
- Plan and designate priority targets along routes from one delaying position to the next.
- Mass all available fires to support disengagements.
- Use obscuration and screening fires to conceal and screen friendly positions and movements.
- Plan appropriate mortar positions, for example split section, to provide support throughout the mission.
- Establish clear priorities and detailed triggers to adjust them.
- Develop detailed triggers to initiate and lift fires for each target.

Sustainment

3-352. The requirement to maintain continuous support during the delay requires sustainment organizations to echelon (see appendix I) their assets throughout the area where the delay will take place. This echeloning, coupled with the wide dispersion of combat forces that is inherent in a delay, complicates the conduct of the delay. Communication within the sustainment system, accurately tracking the battle, and anticipating support requirements are especially important. The following are key sustainment planning considerations:

- Keep the sustainment assets mobile and supplies uploaded.
- Consider placement, and employment of task-organized ambulances and recovery vehicles from the battalion.
- Synchronize resupply operations with the scheme of maneuver and the anticipated enemy situation to ensure continuity of support. Increase Class III and V stocks and position forward.
- Do not coordinate for throughput too far forward, which might cause assets to be caught in the fight or add to route congestion. This may not apply during the initial preparations for the delay.
- Plan routes for sustainment assets that do not conflict with maneuver elements or refugee movement.

Protection

3-353. Because of the importance of countermobility and mobility tasks, a company participating in a delay probably has few engineer assets to devote to the survivability operations. Company subordinate units construct survivability positions, within the limits of their capabilities, in-depth, as required, to support repositioning forces. The company maximizes the use of camouflage, concealment, and cover when constructing primary, alternate, and subsequence fighting and protective positions. In the case of camouflage and concealment, survivability operations include both stationary and on-the-move capabilities. Military deception, part of the mission command warfighting function, can be enabled by the use of survivability operations intended to help mislead enemy decision makers. This may include the use of dummy or decoy positions or devices. (Refer to ATP 3-37.34 for additional information.)

3-354. Obscuration fires on or near enemy positions decrease an enemy's capability to visually sight friendly forces. The commander employs obscuration, when and where weather conditions allow, to provide concealment for movement and assemblies. Obscuration curtains, blankets, and haze (see ATP 3-11.50) can protect friendly withdrawing forces, critical points, positons, and routes however; the commander takes precautions to ensure that the obscuration does not provide a screen for the enemy's advance. The commander may employ obscuration to assist with breaking contact with the enemy or to deceive the enemy of actual intentions. Terrain that hinders the mobility and surveillance capabilities of enemy combat systems and supporting tactical vehicles can offers concealment and cover for the movement of friendly forces. (Refer to ATP 3-21.20 for additional information.)

Preparation

3-355. Defensive preparations for the conduct of an area defense discussed in Section II of this chapter also apply during the conduct of a delay. Resources—including the time available to prepare (specifically in regards to not becoming decisively engaged)—determine the extent of preparations. Throughout preparation, the commander assigns a high priority to R&S missions, and security operations. Additionally, the preparation of alternate, supplementary, and subsequent positions receives a higher priority than in either a mobile or an area defense. Understanding that it is not always possible to complete all preparations before starting the delaying operation, delaying units continue to prepare and adapt plans as the situation develops.

Organization of a Battle Position

3-356. In the delay, the company prepares battle positons in a manner similar to the area defense. However, when organizing battle positions, the commander places more emphasis on width than depth, as well as reconnaissance and preparing routes for displacing. Within each battle position most of the available firepower is oriented toward the expected enemy avenue of approach. Flank and rear security units are normally manned with forces internal to the delaying force. The commander plans and reconnoiters withdrawal routes from primary positions to alternate, supplementary, and subsequent positions in accordance with the plan. In preparing a battle position, the commander places less emphasis on installing protective obstacles, FPFs, and ammunition stockpiling than would occur in either an area or a mobile defense. Battle positions within a delaying operation are sometimes referred to as delay positions and alternate positions and subsequent positions during the conduct of a delay.

Rehearsals

3-357. When conducting a rehearsal, key leaders, as a minimum rehearse the operation against all feasible enemy course of actions to promote flexibility during decision making. The commander examines each subordinate unit's plan as they fight the delay during the rehearsal, paying close attention to the following:

- Direct and indirect fire instructions.
- Timing of movements (to include in limited visibility).
- Delaying actions from one position to the next, to include disengagement criteria and triggers.
- Means and methods of disengaging from the enemy.
- Maintaining contact with the enemy as the force moves to alternate and subsequent positions.
- Execution of situational and reserved obstacles to include closure of lanes.
- Movement times, routes, and positioning of fire support, engineer, protection, and sustainment assets.

3-358. The commander also rehearses contingencies to deal with enemy penetrations and decisive engagement, and the opportunity to resume the offense. Rehearsals serve to synchronize the movement of maneuver forces, fire support, protection, and sustainment units. During rehearsal, it is especially important to portray movement times and required routes realistically to identify potential conflicts.

Inspections and Pre-Operations Checks

3-359. Preparations include inspections and pre-operations checks of subordinates. These inspections and checks ensure subordinate units, Soldiers, and systems are as fully capable and ready to execute the mission as time and resources permit and to ensure delaying forces have the resources necessary to accomplish the

mission. The loads that Soldier's carry is of particular importance during delaying operations. How much Soldiers carry, how far, and in what configuration are critical mission considerations requiring command emphasis. The commander and subordinate leaders inspect and check subordinate units to ensure—

- Movement, maneuver, fire support, and obstacle plans are consistent with the commander's intent and concept of operations.
- Delaying units coordinate to maintain cohesion and mutual support during the delay.
- Subordinate unit engagement areas enable the company and higher echelon scheme of maneuver.
- Engagement area development includes disengagement criteria, routes, and triggers that support the maneuver plan within its area of operation.

Execution

3-360. When the company is part of a larger scheme of maneuver designed to regain the initiative and defeat the enemy, the complex nature of a delay requires maneuver elements within the delaying operation to execute different, complementary, actions. In a single delaying operation, attacks, area defenses, mobile defenses, and other actions may occur in any sequence or simultaneously. When conducting a delay, as in an area defense (see section II of this chapter), the company defends using a variety of tactics, techniques, and procedures to accomplish the mission. Security forces are deployed well forward of the initial delay positions of the main body to buy time, to establish an effective delay, and to give early warning of any enemy approach. Forward security forces detect and report as enemy forces approach to confirm the enemy's probable course of action. The company, as part of the Infantry battalion conducting the delay, receives a complete five-paragraph OPORD that includes task organization, mission, and the concept. The company then receives a delay task that allows the company commander flexibility in conducting a mission. In some instances the company will receive more specific tasks such as block enemy movement for one hour, destroy enemy in a specified engagement area, or disrupt enemy forces on a specified avenue of approach. In addition to this the company commander should receive the following:

- The initial delay positions.
- The battalion plan for controlling engagements and disengagements, and movement.
- Area of operations and battle positions.
- The location of assembly areas (if necessary).
- General routes.
- Quartering party instructions (if used).
- Special instructions concerning attachments.
- Priorities and efforts of supporting engineers.

3-361. The commander then gives the platoon leaders a complete five-paragraph OPORD that includes the platoon missions. The missions to platoons are not normally delay tasks, and are normally more specific to the tasks the platoons will conduct such as; defend, block, destroy, or disrupt. The commander also ensures the platoon leaders are given battle positons to initially defend from. The commander also clearly states the plan for controlling engagements, the sequence, and criteria for disengagement, movement instructions, and subsequent positions to the rear, general routes, and special instructions for specific weapons systems. The commander, with the assistance of the XO, ensures that the movement of supplies are postured in the correct location. The commander also issues priorities for efforts of the supporting engineers.

Gain and Maintain Enemy Contact

3-362. As with the area defense, the commander ensures security plans are in place to employ security and reconnaissance patrols, and observation posts to identify enemy advances. Once the most forward company forces (or forward positioned forces) make contact with the enemy, they maintain contact. Security forces use covered, concealed, and coordinated routes to avoid enemy and friendly fires.

Disrupt and Fix the Enemy

3-363. Security forces fix, defeat, and destroy the enemy's reconnaissance and security elements without risking decisive engagement. These forces direct fires at the approaching enemy force as far forward of the

delay positions as possible to disrupt and fix the enemy. Engaging a moving enemy at long ranges tends to inflict far more casualties on an attacking enemy than the enemy can inflict on the delaying force; it also slows the enemy force's tempo of operations. The more a delaying force can blind an enemy force through the elimination of that force's reconnaissance assets, the more likely the enemy force is to hesitate and move with caution.

3-364. As the enemy closes with security forces, company forces move back through or around the initial positions of the main body to subsequent positions that allow them to observe the main body area and assist in the disengagement and movement of forces to their next positions. This also prevents the enemy from finding gaps between delaying units and attacking the exposed flanks of delaying units. When the company occupies the forward line of own troops, engagements forward of the company's initial delaying positions are normally limited to observed fires to continue the disruption and attrition of the attacking enemy.

Maneuver

3-365. The company maneuvers to force the enemy to deploy multiple times and repeatedly concentrate its combat power to defeat the delaying forces of the company. The commander makes decisions about disposition, displacement, timing, and engagement in the context of the higher commander's intent and priority for the delay. For example, when time is more important than force preservation, or vice versa? In many instances, the delaying force its elements must accept decisive engagement to execute the mission in conjunction with the actions of another force.

Disposition

3-366. As delaying operations evolve, the commander closely controls the disposition of security, main body, and reserve forces (if available) in order to maintain cohesion. When participating in the conduct of the delay the rifle company masses effects and concentrates actions quickly for a short period to inflict the maximum damage on the enemy at the maximum range. To avoid decisive engagement, the company disengages before the enemy can breach obstacles or mass effective fire on delaying forces.

3-367. In determining the disposition of the delaying force, the commander takes advantage of the terrain by selecting terrain that favors friendly actions and hampers enemy actions. The terrain dictates where elements of the company can orient on a moving enemy force and ambush it. During a delay, compartmentalized terrain facilitates shorter displacements initiated at closer range to the enemy. The commander conducts operations in compartmentalized terrain select locations that restrict the enemy's movement and prevent the enemy force from fully exploiting its combat superiority. In restricted terrain, positions may be close together, except when conducting a delay using air assault or air movement techniques.

3-368. The commander considers natural and artificial obstacles, particularly when the enemy has numerous armored combat systems. Earlier displacements at greater distances with good, long-range fields of fire are generally required to stay in front of the advancing enemy. Under these conditions (flat and open terrain), delaying forces of the Infantry battalion are usually augmented with motorized transportation assets and increased indirect fire support and Army aviation and Air Force assets.

Displacement

3-369. As delaying forces displace, they move to the flanks of delay positions and do not move through friendly engagement areas or target reference points, unless the tactical situation makes such movement necessary. Delaying forces ensure their routes do not reveal the locations of other friendly elements to include stay-behind forces and forward observers. Delaying forces may move by bounds within the platoon, and company to maintain direct fires on the enemy and cover movement. Short, intense engagements at near maximum range with sustained fires and covering obscurants, are key to forcing the enemy into deploying early and often for a decisive engagement. Observers position to the flanks in-depth to observe and shift fires as forces delay to alternate and subsequent positions.

3-370. Once a delay starts, subordinate units displace rapidly between positions using obstacles and defensive positions in-depth to slow and canalize the enemy. The commander exploits the mobility of the attached weapons company's platoon combat systems (when attached) to confuse and defeat the enemy.

Whenever possible, the commander grasps any fleeting opportunity to seize the initiative, even if only temporarily. By aggressively contesting the enemy's initiative through offensive action, the delaying force avoids passive patterns that favor the attacking enemy.

Timing and Engagement

3-371. As the advancing enemy force approaches, the enemy crosses one or more trigger lines and moves into engagement areas within the range of the delaying force's anti-armor missiles and heavy and small arms direct fires. The commander holds the delaying force's direct fire, until the enemy is positioned where the fire plan and scheme of maneuver require their use. The commander controls fires from the delaying force in the same manner as in any defense. The more damage the delaying force can inflict on the enemy, the longer the force can stay in position.

3-372. As the enemy force presses its attack and maneuvers against the delaying force, the commander constantly assesses the action to guide the engagements of delaying units. Throughout the delay, the battalion and company rely heavily on fires external to the battalion (field artillery, and Army and Air Force aviation assets) to suppress the enemy, so delaying units can disengage, move, and occupy new positions. When a subordinate unit is unable to maintain separation from the enemy, the commander can shift additional combat multipliers and other resources to that particular area of operation to counter the enemy's success. As one subordinate unit displaces, the commander may order other subordinate units to change their orientation to cover the move.

3-373. Sustainment elements position to the rear of the company delaying efforts as far as possible but close enough to provide adequate support. Ammunition stocks must be capable of sustaining the quantity of fire support required in the delay. Maintenance operations supporting the battalion focus on evacuating rather than returning damaged vehicles and equipment to combat. Vehicles and equipment are fixed quickly in position, evacuated to the echelon support area, or destroyed to prevent enemy capture.

Parameters of the Delay Mission (Area of Operation and Specific Line or Terrain Feature for a Specific Period)

3-374. When the company is part of the battalion's scheme of maneuver, the battalion commander must specify certain parameters in an order for a delay mission. First, the commander must direct one of two alternatives: delay within the area of operation or delay forward of a specified line or terrain feature for a specified time. A mission of delay within the area of operation implies that force integrity is a prime consideration. Usually, a mission of delay for time is based on another unit completing its activities, such as establishing rearward defensive positions.

3-375. When the company is assigned a mission, or task to conduct delaying operations within an area of operation, the intent of the operation is to slow and control the enemy tempo and to defeat as much of the enemy as possible without sacrificing the integrity of the delaying force. The higher commander provides guidance regarding intent and desired effect on the enemy, though restrictions regarding terrain, time, and coordination with adjacent forces are minimized. A delay within an area of operation is normally assigned when force preservation is of higher priority and there is considerable depth within the assigned area of operation (see figure 3-29).

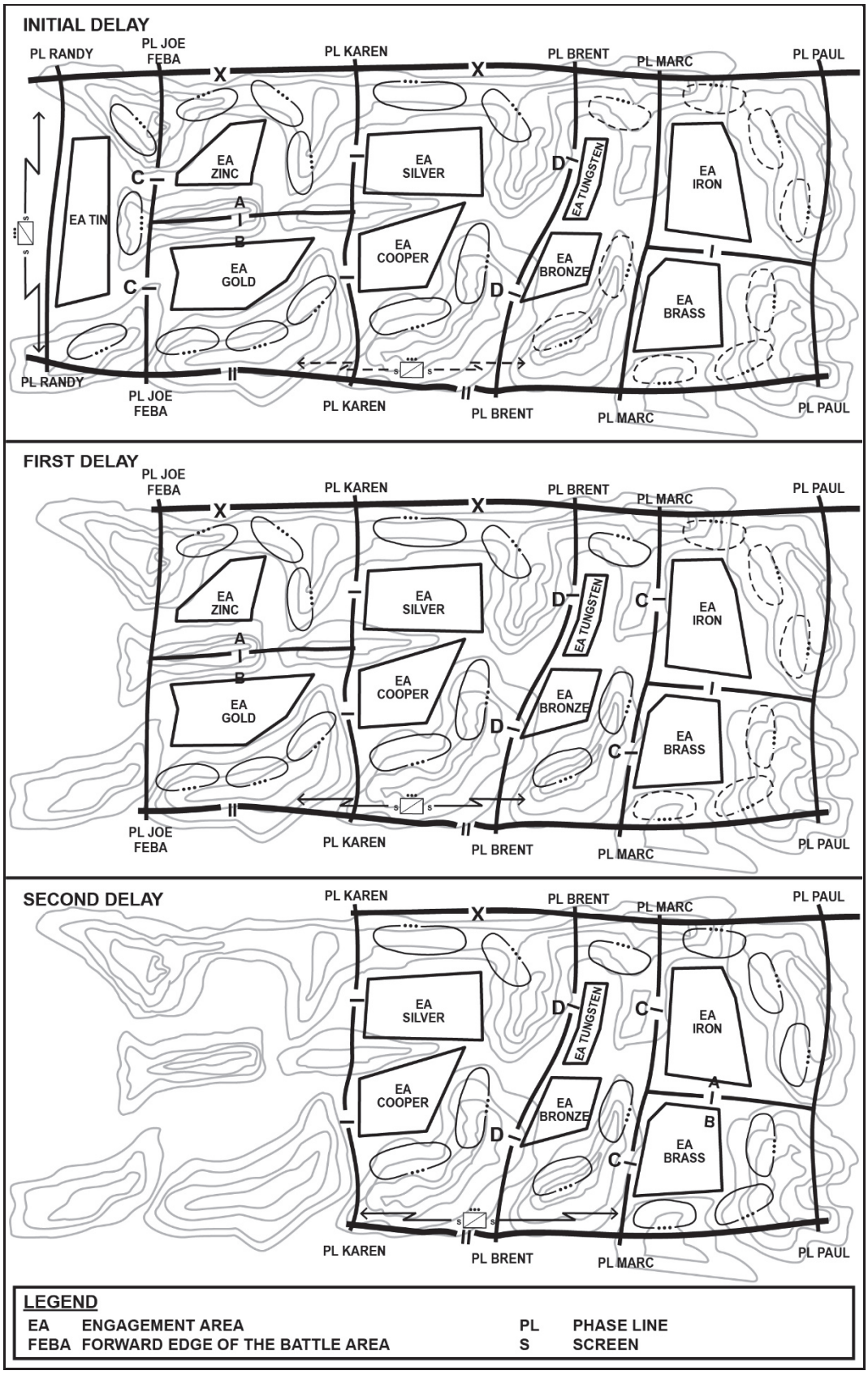

Figure 3-29. Delay within an area of operation

3-376. When the mission is to delay forward of a specific line or terrain feature for a specific period, the company must control the enemy's attack and retain specified line or terrain to achieve some purpose relative to another unit that can include setting the conditions for a counterattack, for completion of defensive preparations, or for the movement of other forces or civilians. Normally in a delay, inflicting casualties on the enemy is secondary to gaining time. This parameter carries a much higher risk, with the likelihood that part of, or the entire unit becoming decisively engaged. The timing of the operation is most often controlled graphically by a series of phase lines with associated dates and times to define the desired delay-until period. (See figure 3-30.)

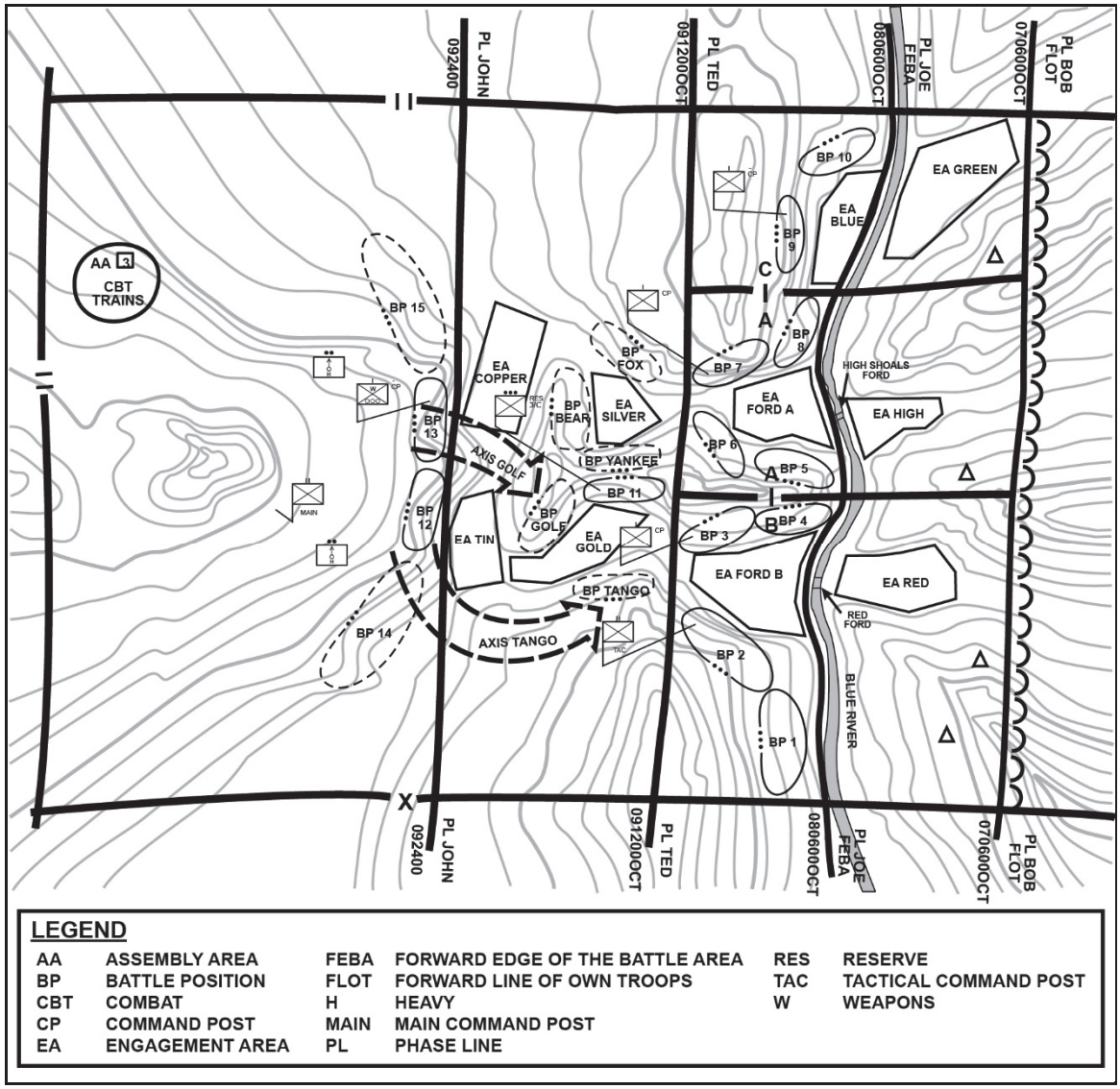

Figure 3-30. Delay forward of a terrain feature for a specified time

Follow Through

3-377. A delaying operation terminates when the delaying force conducts a rearward passage of lines through a defending force, the delaying force reaches defensible terrain and transitions to the defense, the advancing enemy force reaches a culminating point, or the delaying force goes on the offense once reconstituted. Ideally, a company and its subordinates that has been delaying conducts a rearward passage of lines through the established defense of another friendly force. When the advancing enemy force reaches a culminating point, the delaying force may maintain contact in its current

position, withdraw to perform another mission, or transition to the offense. In all cases, the commander plans for the expected outcome of the delay and actions taken after termination of the delay based on the situation and the higher commander's plan.

WITHDRAWAL

3-378. A *withdrawal operation* is a planned retrograde operation in which a force in contact disengages from an enemy force and moves in a direction away from the enemy (JP 3-17). Withdrawing units, whether all or part of a committed force, voluntarily disengage from the enemy to preserve the force or release it for a new mission. Based on the higher headquarter order and the enemy situation, the battalion's withdrawal may be assisted or unassisted and may take place with or without enemy pressure.

ORGANIZATION OF FORCES

3-379. As in the delay, the organization of forces depends on how the higher headquarters has structured its forces unless that force is operating independently. The IBCT normally organizes into a security force, main body, and reserve, though operations extended across large areas may preclude the use of an IBCT-controlled security force and reserve. In this case, the IBCT may direct the battalion to organize its own security, main body, and reserve forces; the same as if the battalion was operating independently. The IBCT commander or the Infantry battalion commander organizes a *detachment left in contact*, an element left in contact as part of the previously designated (usually rear) security force while the main body conducts its withdrawal (FM 3-90-1), and a stay-behind force (see paragraphs 3-48 to 3-50 on page 3-17 and 3-18) if the scheme of maneuver requires them. When the battalion operates independently the battalion commander can designate a company as the security or reserve force for the battalion.

3-380. When the battalion operates independently or establishes its own security force within the IBCT's area of operation, the battalion normally uses the scout platoon and the sniper squad as a screening force when the withdrawal is not under pressure. These forces position to observe the most likely enemy avenues of approach and can initiate fires to slow and weaken the enemy. When the withdrawal is under enemy pressure these elements can be reinforced with other elements, for example, assault platoons from the weapons company, forward observers, and fire support teams executing direct and indirect fire targets on a primary enemy avenue of approach. When withdrawing under pressure the commander may make provision to resource a DLIC, normally established with an Infantry rifle company or company combined arms team, to cover the remaining elements of the battalion (main body minus the reserve) as they withdraw. Normally all platoons move to the rear at the same time if a company is dedicated as a DLIC. In some instances the company may dedicate a platoon as DLIC.

3-381. The battalion's main body consists of all elements remaining after the commander resources a security force and the reserve. The battalion commander retains a reserve, normally a company or company minus, to counter penetrations between positions, reinforce threatened areas, and protect withdrawal routes. When the complete formation withdraws under pressure, the reserve may take limited offensive action, such as spoiling attacks, to disorganize, disrupt, and delay the enemy. Reserves may also extricate encircled or heavily engaged forces. The force tasked with the reserve mission requires the mobility and combat power to accomplish assigned tasks.

DOCTRINAL BASIS FOR A WITHDRAWAL

3-382. Withdrawals are inherently dangerous because they involve moving units to the rear and away from what is usually a stronger enemy force. The heavier the previous fighting and the closer the contact with the enemy, the more difficult the withdrawal. Ideally, the commander avoids withdrawing from action under enemy pressure, though this is not always possible.

Planning

3-383. The commander plans and coordinates a withdrawal in the same manner as a delay (see paragraph 3-314 on page 3-89), though some mission variables of METT-TC apply differently because of the differences between a delay and a withdrawal. A withdrawal may precede a retirement

operation or follow a delaying operation. Control measures used in the withdrawal are the same as those in a delay or an area defense.

General Considerations for the Withdrawal

3-384. Because a withdrawing force is most vulnerable if the enemy attacks, the commander normally plans for a withdrawal under enemy pressure. The commander then develop contingencies for a withdrawal without pressure. The commander's main considerations include—

- Plan for the next mission following the withdrawal.
- Disengagement criteria (time, friendly situation, enemy situation).
- Plan for a deliberate break in contact from the enemy.
- Plan for deception to conceal the withdrawal for as long as possible.
- Rapid displacement of the main body, safeguarded from enemy interference.
- Selection and protection of primary withdrawal routes and alternate withdrawal routes.
- Sitting of obstacles behind the detachment left in contact to complicate the enemy's pursuit.
- Ensuring fire support and sustainment assets remain within distance to support withdrawing units, security forces, and detachments left in contact.

3-385. Planning for a withdrawal normally begins with the preparation of the plan for the next mission. Initial planning includes the development of disengagement criteria, route selection, and displacement timing based on the friendly and enemy situation. The follow-on mission for the company drives the end state of the withdrawal in order to best position units to accomplish the next mission. The desired end state can include withdrawing to an assembly area for follow-on missions or the establishment of a new defensive position. Alternatively, subordinate units of the company can withdraw indirectly to either area through one or more intermediate positions. When preparing the new defensive position, the commander balances the need for security with the need to get an early start on the defensive effort.

3-386. The commander's plan for the withdrawal clearly defines how to deceive the enemy as to the execution of the withdrawal; how to disengage from the enemy; and the end state of the operation in terms of time, location, and disposition of friendly and enemy forces. The commander usually confines rearward movement to times and conditions when the advancing enemy force cannot observe the activity and easily detect the withdrawal operation. To help preserve secrecy and freedom of action, for example, the commander considers visibility conditions and times when the enemy's R&S effort can observe friendly movements.

3-387. When planning for the deliberate break from the enemy the commander has essentially two options: break contact using deception and stealth or break contact quickly and violently under the cover of supporting fires reinforced by obstacles to delay enemy's pursuit. In either option, the commander may employ obscuration to assist with breaking contact with the enemy or to deceive the enemy of the company's actual intentions. Terrain that hinders the mobility and surveillance capabilities of enemy combat systems and supporting tactical vehicles can offers concealment and cover for the movement of friendly forces.

Assisted and Unassisted Withdrawal

3-388. When the withdrawal is assisted, the assisting force(s) occupies positions to the rear of withdrawing forces and prepares to accept control of the situation. The assisting force can also assist withdrawing forces with route reconnaissance, route maintenance, fire support, protection, and sustainment. Both forces closely coordinate the withdrawal. After coordination, the withdrawing force delays to a BHL, conducts a passage of lines, and moves to its final destination. Generally in an assisted withdrawal, the withdrawing force coordinates the following with the assisting force:

- Rearward passage of lines.
- Reconnaissance of withdrawal routes.
- Forces to secure choke points or key terrain along the withdrawal routes.
- Forces to assist in movement control such as traffic control.
- Required combat, fire support, protection, and sustainment to assist the withdrawing battalion in disengaging from the enemy.

3-389. In an unassisted withdrawal, the withdrawing force establishes its own security and disengagement from the enemy. Subordinate units reconnoiter and secure routes used in its rearward movement while fire support and sustainment echelons support the withdrawal. The commander establishes a security force as the rear guard while the main body withdraws. The commander, if possible, designates a flank security, or a screen as the situation requires. Sustainment and other support forces normally withdraw first, followed by combat forces not tasked with the security or reserve mission. However, sustainment and other support forces as they move to the rear must continue to maintain the ability to support the withdrawing force. To deceive the enemy as to friendly movement and if withdrawing under enemy pressure, the commander establishes a DLIC. As subordinates withdraw, the DLIC disengages from the enemy and follows the main body to its final destination.

Withdrawal Under and Without Enemy Pressure

3-390. When withdrawing under enemy pressure, all subordinate units withdraw simultaneously when available routes allow, using delaying tactics (see paragraph 3-314 on page 3-89) to fight their way to the rear. In the usual case, when simultaneous withdrawal of all forces is not practical, the commander decides the order of withdrawal. The commander then makes three interrelated key decisions: when to start the movement of selected sustainment and main body elements, when forward elements should start thinning out, and when the security force should start its disengagement operations. The commander avoids premature actions that lead the enemy to believe a withdrawal is being contemplated. The commander anticipates the enemy's means of interference and plans the employment of security forces, field artillery, and Army and Air Force aviation assets to counter this interference. Additional factors influencing this decision may include—

- Subsequent missions.
- Availability of transportation assets and routes.
- Disposition of friendly and enemy forces.
- Level and nature of enemy pressure.
- Degree of urgency associated with the withdrawal.

3-391. When withdrawing without enemy pressure the commander plans when to begin the withdrawal and has the option of taking prudent risks to increase the displacement capabilities of the withdrawing force. For example, the main body may be ordered to conduct a tactical road march instead of moving in tactical formations. The commander can plan for stay-behind forces (see paragraph 3-48 on page 3-17) as part of the operation.

Detachment Left in Command

3-392. When the company is part of the battalion's scheme of maneuver, a DLIC is generally a company size element that remains behind to deceive the enemy into believing the battalion is still in position while most of the unit withdraws. The detachment simulates—as nearly as possible—the continued presence of the main body until it is too late for the enemy to react to the main body's withdrawal. The battalion commander develops specific instructions about what the detachment is to do when the enemy attacks and when and under what circumstances the detachment continues to delay or conduct withdrawal. When the DLIC disengages from the enemy, the detachment uses the same techniques as in the delay. When required, and if available, the battalion commander provides the detachment with additional recovery, evacuation, and transportation assets to use after disengagement to speed its rearward movement.

3-393. The commander uses two methods to resource the DLIC. The first is for each forward subordinate maneuver element (generally the company) of the battalion to leave a sub-element in place (see figure 3-31 on page 3-108). For example, each forward rifle company leaves a task- organized platoon or detachment in contact. This is the least desirable option since it complicates mission command and task organization. The battalion commonly uses this option when the subordinate companies have lost significant portions of their mission command systems. Typically, these elements fall under a detachment commander designated by the battalion commander.

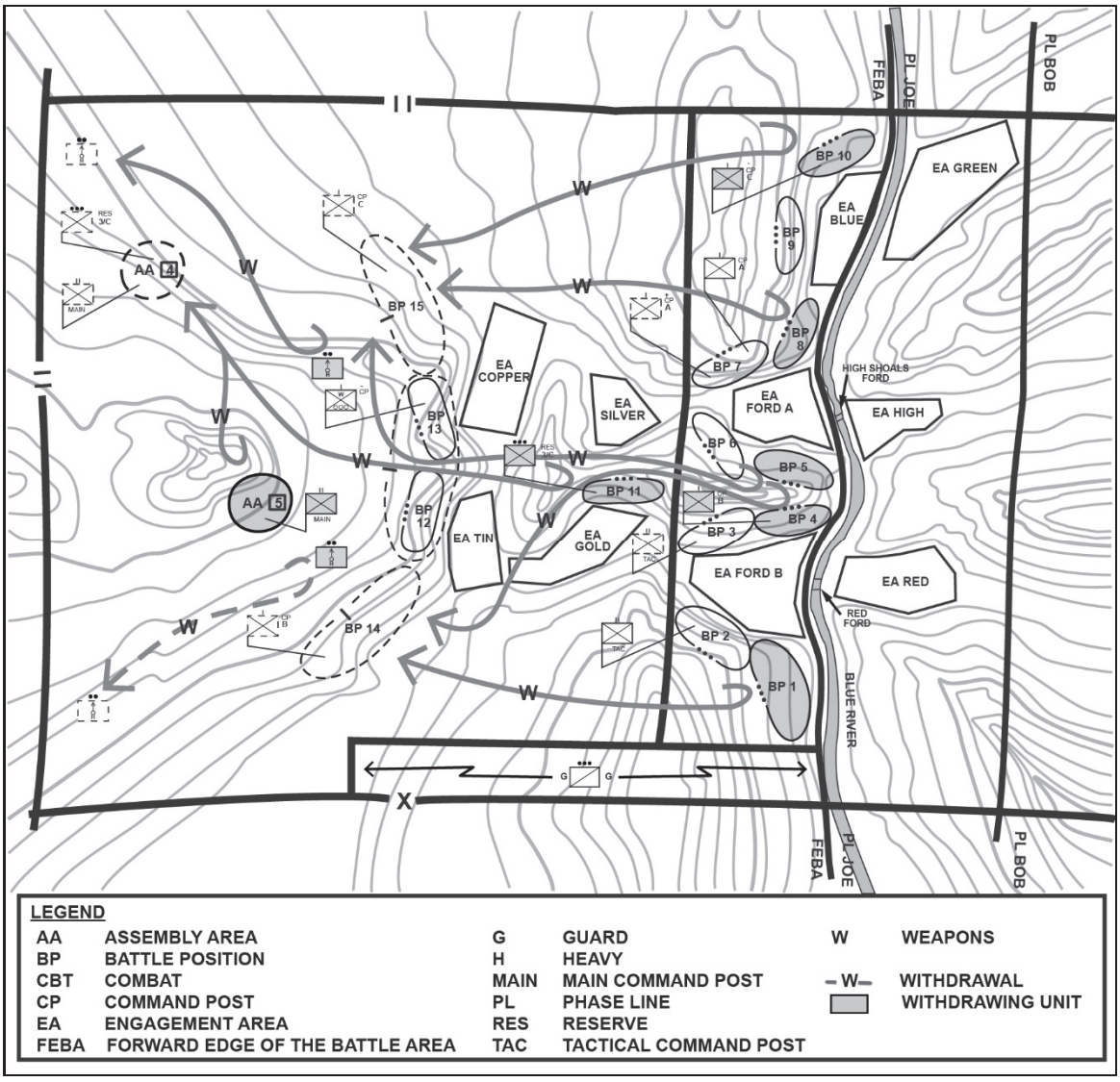

Figure 3-31. Detachment left in contact (multiple sub-elements left in place)

Note. When subordinate units of the battalion are widely dispersed or the battalion's withdrawal area of operation is in an area with multiple corridors, the commander may have subordinate units control separate detachments left in contact. Each forward subordinate maneuver element (generally the Infantry rifle company) of the battalion establishes and controls its detachment, allowing for effective dispersion of forces while maintaining mission command.

3-394. The second method involves one forward subordinate maneuver element (generally a subordinate company) of the battalion staying behind as the DLIC. For example, a battalion with three or two maneuver companies positioned forward leaves one of the forward positioned companies as the DLIC. (See figure 3-32.) The DLIC normally repositions its forces (expanding its security responsibilities) to cover the width of the battalion's area of operation.

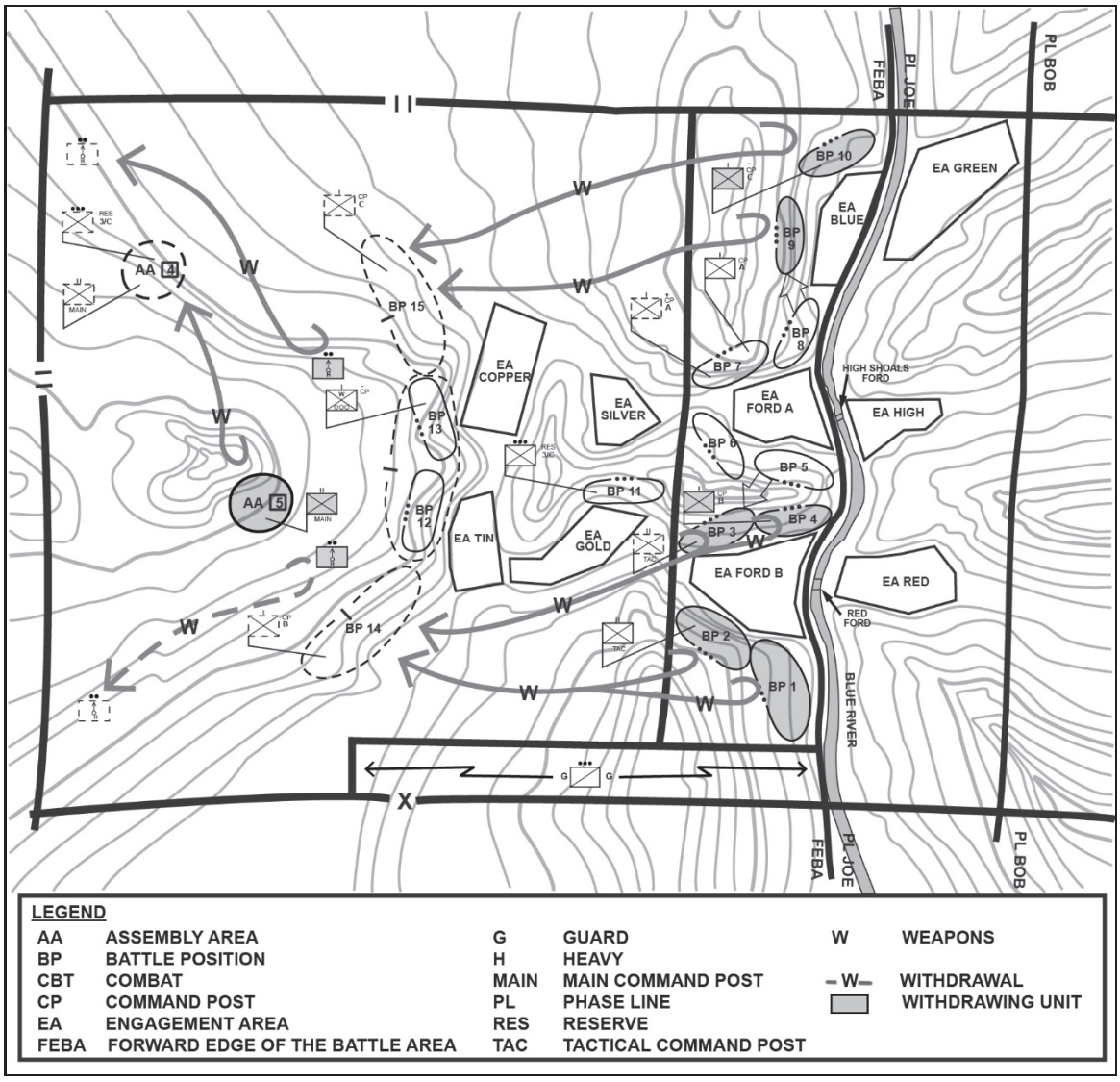

Figure 3-32. Detachment left in contact (one task-organized unit left in place)

3-395. An additional security force behind the existing main defensive positions of the DLIC can be established to assist in the withdrawal process. The security force can be created from withdrawing units or from an assisting unit. The DLIC can delay to the security force to its rear and join it, or delay back, conduct battle handover, and then conduct a rearward passage of lines. In either case, the additional security force becomes the rear guard.

3-396. When the company is selected as the battalion DLIC, the commander reposition platoons and weapons to cover the battalion's withdrawal. This normally includes repositioning a platoon in each of the other company positons (relief in place). To cover the most dangerous avenues of approach in to those positions, and repositioning weapons to cover the most dangerous avenues of approach into the battalions area of operation. Normally, the DLIC company is task organized and reinforced by the battalion, for example attached assault platoon section, mortar section, or other external enabler (if available).

3-397. If the company is directed to have a company DLIC, it normally consist of one-third of the company's rifle strength and half of the company's crew served weapons. The commander may however, have each platoon leave a platoon DLIC. The three platoon DLICs makeup the company DLIC.

3-398. If a platoon is selected as the company DLIC, the platoon leader repositions squads and weapons to cover the company's withdrawal. This normally includes repositions a squad in each of the other platoon positons to cover the most dangerous avenue of approach into that position, and repositioning weapons to cover the most dangerous avenues of approach into the company's position. If each platoon is to have a DLIC as part of the company DLIC, normally the platoon leader leave one third of the platoon's rifle strength, and half of the key weapon systems.

3-399. The DLIC whether the battalions or the company's, strives to conceal the withdrawal and deceive the enemy by continuing the normal operating patterns of the unit. If the enemy attacks during the withdrawal, the DLIC covers the main body's withdrawal by fire. Once the main body is at its next position or a designated distance or time from the old positions, the DLIC commander orders the withdrawal of the DLIC. The DLIC withdraws using the same basic plan as the main body used. If under attack the DLIC may have to delay to the rear until it can disengage, and then withdraw to the rear. The company mortars may be part of the DLIC. Part of their ammunition may be carried by the main body.

3-400. If the company DLIC is to occupy the observation posts and positions of other companies, the commanders concerned coordinate the time and the sequence of the relief. The relief must occur at the designated time and before companies withdraw.

3-401. The DLIC fire support officer sometimes from the rifle company obtains the consolidated battalion fires plan and coordinates all indirect fire for the DLIC. In most instances this will be the responsibility of the battalion FSO.

Preparation

3-402. Preparation for a withdrawal are conducted the same manner as a delay. Preparation activities ensure subordinate units and Soldiers have a clear understanding of the withdrawal plan and the current enemy situation. To the extent possible, subordinate leaders conduct inspections and rehearse key portions of the plan to ensure maneuver units and Soldiers understand their portion of the plan or role and that supporting elements and equipment are positioned and ready to execute the withdrawal.

3-403. When preparing for an assisted withdrawal, the commander ensures adequate coordination for battle handover and passage of lines. The focus of the rehearsal for the withdrawal is on actions to maintain security, disengagement from the enemy (when under enemy pressure), and the movement of forces. When possible, key leaders or liaisons from the assisting force attend rehearsals. During rehearsals, control measures are confirmed to include fire support coordination measures. Leaders rehearse the plan against the full range of possible enemy actions. The commander rehearses contingencies for reverting to a delay, commitment of the reserve, and enemy interdiction of movement routes.

3-404. In an unassisted withdrawal, the unit establishes its own security force and reserve and coordinates those actions with the unit's main body. The unit reconnoiters and secures routes to the rear and the support areas it will use during movement to the rear. In both unassisted and assisted withdrawals, the unit rehearses the plan to disengage from the enemy. Because the force is most vulnerable if the enemy attacks, the commander always plans for a withdrawal under pressure, then develops contingencies for a withdrawal without pressure.

3-405. When support positions are located along the movement route, they are normally secured and concealed. In addition to simplifying support requirements during movement to the rear these support areas reduce the enemy's ability to interfere with logistics operations. They also allow sustainment units to withdraw earlier (prior to execution) than they otherwise could. When advising the commander, sustainment planners carefully consider whether to place supplies in caches along the route(s) understanding that once cached, supplies are difficult to recover if the operation does not go as planned. During preparation, the unit evacuates or destroys all supplies (other than medical supplies) that the unit is unable to evacuate to prevent capture. The commander establishes destruction criteria, which is time- or event-driven, for each class of supply.

Note. Before withdrawing to the rear, the main body may dispatch quartering parties.

3-406. Prior to the withdrawal subordinate company commanders must has a clear understanding of the mission. During backbriefs the battalion commander reinforces the following points; this information is then pushed to subordinate platoons to ensure situational understanding:

- When the withdrawal will start.
- Location of battalion assembly area (if used), and what each company is to do upon their arrival.
- Location of company assembly areas.
- Identification of routes to take from the company assembly areas to the battalion assembly area or their next position.
- Determination of the size, composition, and mission of the DLIC, and who the commander will be.
- Identification of upcoming battalion and company mission(s).
- Movement of company vehicles to the rear (including times and sequencing).
- Special instructions on the control of TOWs and mortars.
- Deception plan.

Execution

3-407. As the battalion and/or subordinate companies execute the withdrawal, the designated security force (generally the rifle company) counter the enemy's try to disrupt the withdrawal or pursue. If the security force and the reserve cannot prevent the enemy from closing on the main body, the commander commits some or all of the main body to prevent the enemy from interfering further with the withdrawal. The main body delays, attacks, or defends as the situation requires. In this event, the withdrawal resumes at the earliest possible time. If the enemy blocks movement to the rear, the battalion must adjust its order of withdrawal march to ensure sustainment and supporting elements are not the primary fighting force to eliminate the threat. Friendly forces shift to alternate routes and bypass the interdicted area. Alternatively, they may attack through the enemy.

Gain and Maintain Enemy Contact

3-408. Typically, when under enemy pressure, the security force maintains contact with the enemy until ordered to disengage or until another force takes over the task. When performing the role of a DLIC, the security force simulates the continued presence of the main body, which normally requires the additional allocation of combat multipliers beyond that normally allocated to a force of its size. The security force, or when established a DLIC, provides a way to break contact from the enemy sequentially. To conceal the security force's withdrawal, the movement is generally conducted during times of limited visibility or under obscuration to screen friendly movement and to reduce both the accuracy of enemy direct-fire systems and the enemy's ability to observe friendly movement. During withdrawal, the security force uses alternate and successive positions until the entire force breaks contact with the enemy.

Disrupt and Fix the Enemy

3-409. With the most probable threat to a withdrawing force being a pursuing enemy, the commander organizes the majority of available combat power to the security force as a rear guard or a DLIC. When an enemy security zone exists between friendly and enemy forces, the existing security force can transition on order to a rear guard mission. When the withdrawing force is in close contact with the enemy, this security zone does not normally exist. Withdrawal under these conditions require that security forces, performing a rear guard mission, adopt different techniques. A DLIC provides a way to sequentially break contact with the enemy.

Note. When conducting the withdrawal without enemy pressure, the security force acts as a rear guard.

3-410. When the enemy can infiltrate or insert forces ahead of the withdrawing main body force, the commander may establish an advance guard to clear the route or area of operation as the main body withdraws. The commander may designate a company or the scout platoon and/or sniper squad reinforced

with Infantry and mortars as the advance guard. The commander task-organizes the advance guard, in addition to rear guard security forces or the detachment left in contact with engineers when available, with mobility assets going to the advance guard and countermobility assets, and to a lesser extent mobility assets going to the rear guard or the detachment left in contact.

Maneuver

3-411. With security forces positioned forward, the main body moves as rapidly as possible rearward on multiple routes to reconnoitered intermediate or final positions. Usually support assets and sustainment units, along with their convoy escorts, move first and precede combat units in the movement to the rear. After the main body withdraws a safe distance, the commander orders the security force to begin its rearward movement. When not pursued by the enemy, the security force may move in a march column. Once the security force begins moving, it assumes the duties of a rear guard. Security elements balance security and deception with speed as it disengages. Security forces maintain tactical movement and security techniques until they break contact and are clear of the enemy; it then withdraws as rapidly as possible. The main body moves rapidly on multiple routes to designated positions and may occupy a series of intermediate positions before completing the withdrawal. Despite confusion and enemy pressure, subordinate units follow specified routes and movement times.

Follow Through

3-412. Once the battalion and/or subordinates companies successfully disengage from the enemy, the command has two options. The battalion can rejoin the overall defense under more favorable conditions or transition into a retirement and continue to move away from the enemy and towards its next mission. Once out of contact with the enemy, the battalion and/or subordinate companies, when required, may reconstitute and/or conduct a task organization change.

RETIREMENT

3-413. A *retirement* is a form of retrograde in which a force out of contact moves away from the enemy (ADRP 3-90). Retirements are conducted to reposition forces for future operations or to accommodate the current concept of operation. The Infantry battalion or individual companies normally conducts retirement as a tactical road march (see paragraph 2-66 on page 2-25) where security and speed are the most important considerations. When moving to an assembly area the retiring force's ability to defend from the assembly area and protect itself during movement are major factors in positioning the assembly area(s) and identifying the retirement route(s). Though interference from enemy ground forces is not anticipated, mobile enemy forces, unconventional forces, air strikes, air assault operations, or long-range fires may attempt to interdict the retiring force. Typically, within this type retrograde another unit's security force covers the movement of the retiring force. (Refer to ATP 3-21.20 for additional information.)

Chapter 4
Stability

Operations focused on stability ultimately aim to establish conditions the local populace regards as legitimate, acceptable, and predictable. Stabilization is the process to identify and mitigate underlying sources of instability to establish the conditions for long-term stability. Stability tasks focus on identifying and targeting the root causes of instability and building the capacity of local institutions.

Army forces accomplish stability missions and perform tasks across the range of military operations in coordination with other instruments of national power. Stability missions and tasks are part of broader efforts to establish and maintain the conditions for stability in an unstable area before or during hostilities, or to reestablish enduring peace and stability after open hostilities cease.

The first two sections of this chapter discuss the doctrinal foundation and organization of forces for operations focused on the stability element of decisive action. Sections III and IV introduce scenarios, as discussion vehicles, illustrating the methods and ways the Infantry rifle company of the Infantry battalion conducts operations in support of the stability tasks. Scenarios focus on the challenges confronting the company commander and subordinate leaders in accomplishing stability-focused missions or tasks. These scenarios are not intended to be prescriptive of how the Infantry rifle company performs any particular operation.

SECTION I – FOUNDATION FOR OPERATIONS FOCUSED ON STABILITY

4-1. Ensuring a state's long-term stability depends on applying combat power to those tasks that are, in fact, essential. Essential stability tasks lay the foundation for success in sustaining the burdens of governance, rule of law, and economic development that represent the future viability of a state. Establishing this foundation depends on applying combat power to the essential stability tasks identified during the initial assessment of the situation and the framing of the basic problem. The Infantry rifle company conducts missions, tasks, and activities in support of essential stability tasks. This section provides the foundation for the conduct of company level operations focused on supporting stability tasks.

STABILITY PRINCIPLES

4-2. Based on the four principles (conflict transformation, unity of effort, legitimacy and host-nation ownership, and building partner capacity) that lay the foundation for long-term stability, Army units conduct operations focused on stabilizing the environment and transforming conditions of the environment and the state toward normalization. Units at different echelons balance these principles to mitigate fragile state characteristics prevalent at the national, regional, and local levels. Long-term stabilization efforts within an operational environment transform the drivers of conflict while maintaining *unity of effort*, which is coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization, which is the product of successful unified action (JP 1), among diverse actors. Fundamental to long-term stability and critical to the host-nation's legitimacy is its involvement and ownership to build trust and confidence among the states populace. Building partner capacity addresses potentially the most important effort to support and enable partners so they can perform their roles effectively. (Refer to ADRP 3-07 and FM 3-96 for additional information.)

UNDERSTANDING THE OPERATIONAL ENVIRONMENT

4-3. Operations focused on stability require the company commander to demonstrate cultural understanding and a clear appreciation of the myriad stability tasks to determine which are fundamentally essential to mission success. The commander and subordinate leaders must understand the potential for conflicts among individuals and agencies with differing cultural backgrounds. For example, interagency conflict may arise because of perceived differences in organizational goals or attitudes about the appropriateness of military involvement. Anticipating counterproductive confrontations and taking steps to resolve individual and organizational conflicts constructively is paramount to successful collaboration. Additional preemptive strategies for managing conflict include ensuring all stakeholders are identified and included in making decisions.

INTERORGANIZATIONAL COLLABORATION

4-4. During stability, the commander ensures the key players support interagency partnership, established ground rules, and collaborative interagency strategies to accomplish the mission. The commander must understand the importance of ensuring that interagency partners explore various alternatives, and that all partners participate. The commander adopts consensus-building leadership behavior, to include open discourse, friendly debate, and discussion with opinion sharing and feedback from participants.

4-5. Understanding an operational environment includes understanding organizational goals or attitudes for all stability partners. Within operations focused on stability, the commander must act cooperatively rather than competitively, building relationships to achieve coordinated goals. Organizations can increase collaboration by providing their representatives with a clear understanding of their organization's functions and authority within the larger civil-military partnership. Regular interaction with interagency partners also contributes to an increased understanding of roles and mission requirements. Success in operations focused on stability requires an awareness of trends that influence views of the actors and an understanding of factors that shape or constrain options and capabilities for partner organizations.

MILITARY AND CIVILIAN ORGANIZATIONAL CULTURES

4-6. Military and civilian organizational cultures differ in significant ways comprising factors such as shared values, norms, expectations, and practices. An organizational culture influences how individuals approach work and what they regard as mission accomplishment. When team members with different organizational cultures interact with one another, differences become evident and can create tension in the group. The commander and subordinate leaders can minimize difficulties by educating themselves on these organizational differences—in mission objectives, size, and resource capabilities, and neutrality among others—and challenges in information sharing and improving their understanding of and attitudes toward partners. The commander develops the information needed to understand partner organizations, their component teams, and their place in the stability activities and goals to achieve the desired end state conditions. This understanding forms the backdrop for assessing the effect of military actions, plans, and decisions on partner organizations. A poor understanding of the partners must be avoided because it can hamper trust and impair integration of military team members in interagency decision-making.

STABILITY IN OPERATIONS

4-7. Operations focused on stability, range across all military operations and offer perhaps the most diverse set of circumstances the Infantry rifle company faces. The objective of operations focused on stability is to create conditions that the local populace regards as acceptable in terms of violence; the functioning of governmental, economic, and societal institutions; and that adhere to local laws, rules, and norms of behavior. During decisive action, the company commander seeks to create and maintain the conditions necessary to seize, retain, and exploit the initiative; and to *consolidate gains*, which is the activities to make enduring any temporary operational success and set the conditions for a stable environment allowing for a transition of control to legitimate authorities (ADRP 3-0)—through partnership with associated diverse enabling organizations. The company, in coordination with the battalion and partner organizations, provide the means to secure and stabilize the operational environment and to conduct operations to establish and maintain stability or to reestablish stability. The commander keeps in mind how these

operations transition in a comprehensive approach to avoid considering them in isolation. (Refer to FM 3-07 and FM 3-96 for additional information.)

SECURE AND STABILIZE THE OPERATIONAL ENVIRONMENT

4-8. During operations focused on stability, companies within the battalion provide the means to secure and stabilize the operational environment enough so the host nation can begin to resolve the root causes of conflict and state failure. Company operations focused on stability establish conditions that support the transition to legitimate host-nation governance, a functioning civil society, and a viable market economy. These operations establish the foundation for a safe and secure environment that facilitates reconciliation among local or regional adversaries. The commander shapes the operational environment through action, influences the population and its leaders, and consolidates gains to seize, retain, and exploit the initiative and set the conditions for a stable environment. The commander and subordinate leaders within the company identify and mitigate sources of instability, understand and nest operations within political objectives, and achieve unity of effort and a shared vision across the operational environment. (Refer to FM 3-07 for additional information.)

Identify and Mitigate Sources of Instability

4-9. To identify and mitigate sources of instability, the company in coordination with battalion, conducts information collection (reconnaissance, security operations, surveillance, and intelligence operations [specifically military intelligence assets within and external to the military intelligence company at IBCT]) to gain a detailed understanding of the sources of instability and the capabilities and intentions of key actors. Sources of instability are actors, actions, or conditions that exceed the legitimate authority's capacity to exercise effective governance, maintain civil control, and ensure economic development. Enemy forces leverage sources of instability to create conflict, exacerbate existing conditions, or threaten to collapse failing or recovering states.

District Stability Framework

4-10. The United States Agency for International Development (known as USAID) developed the district stability framework to increase the effectiveness of stability missions. The district stability framework was designed to guide and support stabilization efforts by helping civilians and military organizations identify the causes of instability, develop activities to diminish or mitigate them, and evaluate the effectiveness of the activities in fostering stability at the tactical or operational level. The district stability framework supports unity of effort by providing partners with a common framework to—

- Understand an operational environment from a stability-focused perspective.
- Maintain focus on the local population and its perceptions.
- Identify the sources of instability in a specific local area.
- Design activities that specifically address the identified sources of instability.
- Monitor and evaluate activity outputs and impacts, as well as changes in overall stability

4-11. The district stability framework helps overcome many of the challenges to successful operations focused on stability. The framework helps to—

- Keep military formations focused on the center of gravity for operations focused on stability, the population and its perceptions.
- Provide a common operational picture for all interagency teams in an area of operations. By focusing on sources of instability, partner organizations can focus their varied resources and expertise on shared priorities.
- Prioritize activities based on their importance to the local populace and their relevance to the overarching mission of stabilizing the area.
- Enhance continuity between military formations. Units can easily pass district stability framework data along from one unit to the next, establishing a clear baseline that identifies sources of instability and the steps taken to mitigate them.
- Empower tactical-level formations by giving them hard data useful for decision making at their level and for influencing decisions at higher levels.

- Identify measures of performance and measures of effectiveness for unit activities rather than simply tracking measures of performance.
- Track indicators of overall stability by assessing whether an area is becoming more stable.
- Identify issues that matter most to the population; the district stability framework helps identify information themes that resonate with the population.

District Stability Framework Process

4-12. The district stability framework process has four steps. Ideally, all interagency partners in the area participate in the process, organized through the creation of an interagency stability working group. This work group is generally established at the IBCT level. The four basic steps are: situational awareness, analysis, design, and monitoring and evaluation.

Situation Awareness

4-13. The district stability framework process uses four lenses to achieve a population-centric, stability oriented, situational awareness of an area of operations. The stability working group examines the area of operations from four perspectives: an operational environment; cultural aspects; stability and instability dynamics; and local perceptions. This examination helps military and civilian leaders achieve a situational awareness of stability conditions and underlying factors.

Analysis

4-14. After gaining this initial situational awareness, the district stability framework process provides tools to analyze and identify potential sources of instability, their causes, the desired objectives, and the indicators that measure progress in addressing each source of instability. The analysis consists of four tasks: identify potential sources of instability, vet each source against instability criteria, determine if the source meets two of the three instability criteria, and prioritize the sources of instability. The instability criteria are—

- Decreased support for the government or legitimate governance institution.
- Increased support for adversaries or enemies.
- Undermining of the normal functioning of society.

4-15. After identifying and prioritizing the sources of instability, a tactical stability matrix is filled out for each source of instability. Examples of sources of instability include, but are not limited to—

- Insurgents forming a shadow governmental structure.
- Religious, ethnic, economic, and political friction between different groups within the local population.
- Natural disasters or resource scarcity.
- Super-empowered individuals disrupting legitimate governance.
- Severely degrading infrastructure or environment.
- Immature, undeveloped, or atrophied government, social, or economic systems.
- Ineffective or corrupt host-nation security forces.

Design

4-16. In the design step, working group members (including interagency partners) design, prioritize, and synchronize stabilization activities. The stability working group develops activities to diminish the sources of instability identified during the analysis step. The process begins by brainstorming potential stabilization activities and continues by filtering and refining the proposed activities against a set of stability criteria, design principles, and resource availability. The design step is integrated with and similar to the Army design methodology's activities, develop an operational approach and develop the plan, described in ADRP 5-0.

Monitoring and Evaluation

4-17. The final step in the district stability framework process takes place during and after the implementation of stability activities. Monitoring and evaluation are conducted in three ways:

- Measures of performance—track implementation of an activity.
- Measures of effectiveness—measure the effect that an activity achieved.
- Overall stability—assess the overall stabilizing effect of all the activities conducted over a longer period, as well as the influence of external factors.

4-18. As work group members monitor and evaluate, they identify lessons about what worked, what did not work, and what partners can do to improve their stability efforts as they repeat the district stability framework process in the future. Effective monitoring and evaluating supports the commander's decision making throughout the operations process, focusing on the perceptions of the population and to inform a common operational picture for the battalion and IBCT, and their interagency partners. Monitoring and evaluating informs and influences audiences by identifying themes that resonate with the population.

Nest Operations within Political Objectives

4-19. Operations focused on stability nest within political objectives. Proper nesting requires an ability to achieve unity of effort through comprehensive engagement and a thorough depth of cultural astuteness. A detailed analysis, based on careful consideration of operational (mainly at the IBCT) and mission variables, helps the commander to understand and visualize the civil component and shapes future stabilization activities to secure and stabilize the operational environment within the area of operation. To ensure the most comprehensive analysis, the IBCT and battalion staffs' analysis of operational and mission variables includes all relevant information retained by each military and nonmilitary actor. Relevant information includes the results of past assessments and related analyses to understanding threats to civilians and determining ways to shape the environment to enhance the legitimacy and host-nation ownership and building partner capacity.

Shared Vision Across a Stable Environment

4-20. Shared vision among the participating military forces, civilian and governmental agencies (both U.S. and international), and host-nation organizations, institutions, and forces reflects a comprehensive approach and the norms and collective experience of a diverse group of actors. In operations emphasizing stability tasks; time, space, purpose, and resources affect the environment and end state conditions and objectives. Military and nonmilitary actors integrate military and nonmilitary means to achieve shared objectives while understanding that many of the nonmilitary considerations are most important to ensure long-term stabilization of the operational environment. The commander and subordinate leaders within the company engage and establish links to all partners to facilitate and integrate plans and operations with those of other partners through comprehensive engagement. Examples of comprehensive engagement includes engaging with key leaders and the population, conducting multinational operations with international and host-nation police and military partners, building the capacity of (or enabling) other partners, developing effective civil-military operations centers, and enabling humanitarian assistance.

Establish, Maintain, or Reestablish Stability

4-21. Operations to establish, maintain, or reestablish stability involve numerous military and civilian organizations and are often protracted. In addition to the fundamentals of the operations process described in ADP 5-0 and ADRP 5-0, when planning these operations the commander and subordinate leaders within the company recognize complexity; balance resources, capabilities, and activities; recognize planning horizons; and avoid planning pitfalls.

Recognize Complexity

4-22. Given the inherent complex and uncertain nature of operations dominated by stability and that, the multifaceted drivers of instability are difficult to identify, commanders and staffs of the IBCT use the Army design methodology (see ADRP 5-0) to provide the Infantry rifle company with an understanding of the root cause of instability and approaches to solve problems. The Army design methodology is an iterative process of understanding and problem framing that uses elements of operational art (see ADRP 3-0) to conceive and

construct an *operational approach*—a broad description of the mission, operational concepts, tasks, and actions required to accomplish the mission (JP 5-0)—to solve identified problems. The Army design methodology results in an improved understanding of an operational environment. Based on improved understanding, commanders (IBCT and battalion) issue planning guidance, to include an operational approach, to guide more detailed planning using the military decision-making process. The understanding developed through Army design methodology continues throughout the operations process in the form of continuous assessment. Assessment, for example updated running estimates, help commanders' to measure the overall effectiveness of employing forces and capabilities.

Operational Approach

4-23. An operational approach provides a unifying purpose and focus to all operations and provides the framework that relates tactical tasks to the desired end state. The operational approach conceptualizes the commander's vision for establishing the conditions that define the desired end state. When developing an operational approach, the commander considers how to employ a combination of defeat and stability mechanisms. Defeat mechanisms are dominated by offensive and defensive tasks, while stability mechanisms are dominant in stability tasks that establish and maintain security and facilitate consolidating gains in an area of operation.

4-24. A *defeat mechanism* is a method through which friendly forces accomplish their mission against enemy opposition (ADRP 3-0). The commander uses a combinations of four defeat mechanisms: destroy, dislocate, disintegrate, and isolate. Applying focused combinations produces complementary and reinforcing effects not attainable with a single mechanism. Used individually, a defeat mechanism achieves results proportional to the effort expended. Used in combination, the effects are likely to be both synergistic and lasting. Defeat mechanisms are not tactical missions; rather, they describe broad tactical effects. The commander translates these effects into tactical tasks.

4-25. A *stability mechanism* is the primary method through which friendly forces affect civilians in order to attain conditions that support establishing a lasting, stable peace (ADRP 3-0). As with defeat mechanisms, combinations of stability mechanisms produce complementary and reinforcing effects that accomplish the mission more effectively and efficiently than single mechanisms do alone. The four stability mechanisms are compel, control, influence, and support. Compel means to use, or threaten to use, lethal force to establish control and dominance, effect behavioral change, or enforce compliance with mandates, agreements, or civil authority. Control involves imposing civil order. Influence means to alter the opinions, attitudes, and ultimately behavior of foreign friendly, neutral, adversary, and enemy populations through information related capabilities, presence, and actions. Support is to establish, reinforce, or set the conditions necessary for the instruments of national power to function effectively.

Primary Stability Tasks

4-26. *Stability tasks* are tasks conducted as part of operations outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief (ADRP 3-07). Stability tasks are part of every operation. However, the proportion of stability tasks, in relation to offensive and defensive tasks, may change. Whether an operation is a peace operation preventing conflict or a large-scale combat operation, forces will always integrate offensive, defensive, and stability tasks. For example, in a peace operation, the Infantry rifle company may still perform offensive tasks such as a raid, cordon and search, and search and attack (see chapter 2) during the conduct of counterinsurgency operations. Conversely, in large-scale combat operations, the company performs stability tasks to control captured areas or to provide emergency essential services. The Army's six primary stability tasks are:

- Establish civil security.
- Establish civil control.
- Restore essential services.
- Support governance.
- Support economic and infrastructure development.
- Conduct security cooperation. (See FM 3-22 for additional information.)

4-27. The combination of stability tasks conducted during operations depends on the situation. In some operations, the host nation can meet most or all of the population's requirements. In those cases, Army forces work with and through host-nation authorities. Commanders use civil affairs operations to mitigate how the military presence affects the population and vice versa. Conversely, Army forces operating in a failed state may need to support the well-being of the local population. That situation requires Army forces to work with civilian organizations to restore basic capabilities. Civil affairs operations prove essential in establishing the trust between Army forces and civilian organizations required for effective, working relationships.

Note. Section III of this chapter illustrates two scenarios where the Infantry rifle company of the Infantry battalion conducts area security missions during transition after open hostilities.

4-28. Six Army primary stability tasks (figure 4-1) correspond directly to the six stability sectors, used by the Department of State, Office of the Coordinator for Reconstruction and Stabilization, and directly support the broader efforts within the stability sectors. Together these six primary stability tasks and the Department of State stability sectors provide a mechanism for interagency tactical integration, linking the execution of discreet tasks among the instruments of national power required to establish end state conditions that define success. Tasks performed in one sector inevitably create related effects in another sector; planned and performed appropriately, carefully sequenced activities complement and reinforce these effects. The subordinate tasks performed by the Infantry rifle company, within the Infantry battalion, under the primary stability tasks directly support broader efforts within stability executed as part of unified action. *Unified action* is the synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort (JP 1). Refer to ADRP 3-07 and FM 3-07 for additional information.

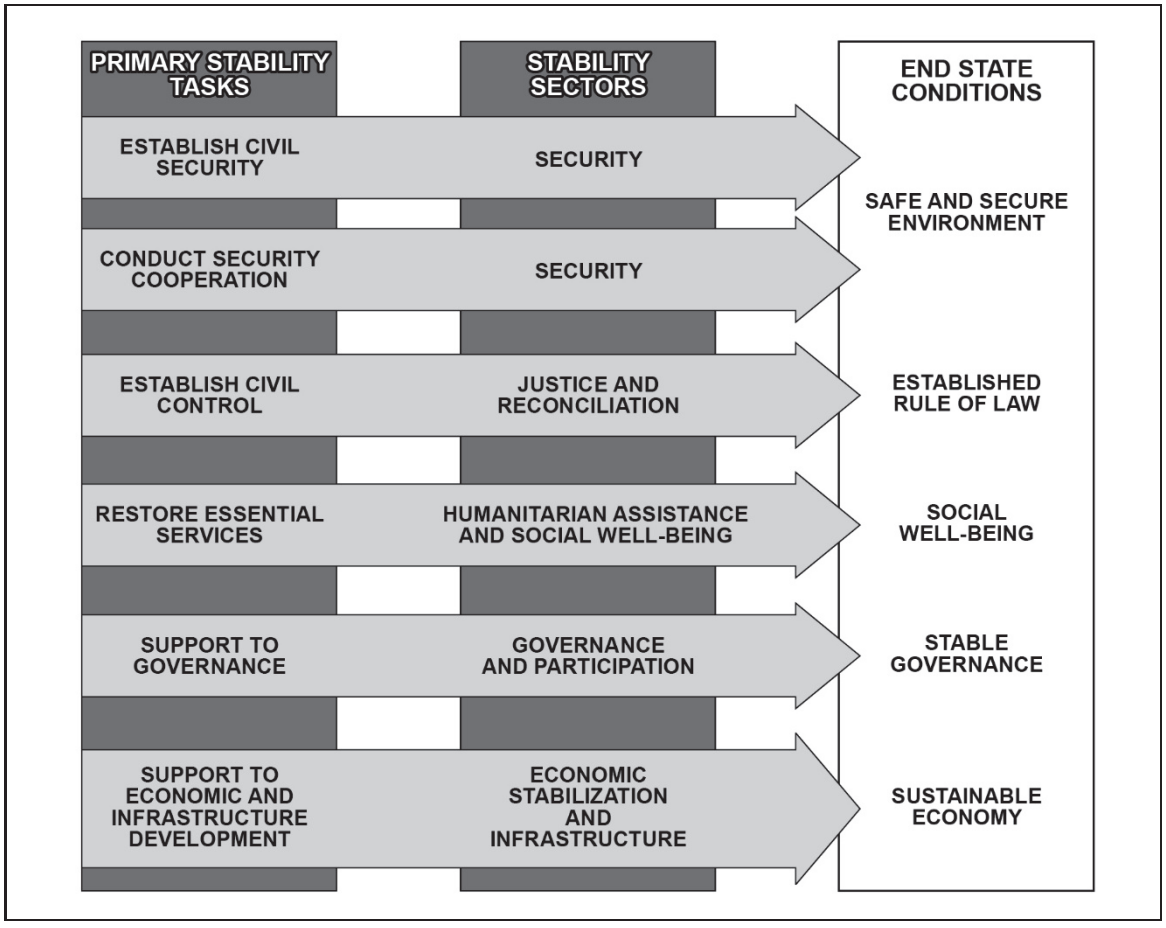

Figure 4-1. Mechanism for interagency tactical integration

4-29. Over time, to ensure safety and security is sustained, unified action partners perform numerous tasks across all stability sectors. As part of a joint team working with unified action partners, achieving a specific objective or setting certain conditions often requires the company within the battalion to perform a number of related tasks among the six primary stability tasks. An example of this is the effort required to provide a safe, secure environment for the local populace. Rather than the outcome of a single task focused solely on the local populace, safety and security are broad effects. The company can help achieve safety and security by performing a number of related tasks to assist in ending hostilities, isolating belligerents and criminal elements, demobilizing armed groups, eliminating explosives and other hazards, and providing public order and safety. (Refer to FM 3-96 for additional information.)

Related Activities and Missions

4-30. Operations characterized by stability tasks often combine with certain activities and missions common to Army operations. These activities and missions cut across all stability tasks regardless of the focus and require increased emphasis and attention by the commander. Some activities—such as security sector reform and disarmament, demobilization, and reintegration—cut across the primary stability tasks and may be the centerpiece of an operation. For example, *security sector reform* is a comprehensive set of programs and activities undertaken by a host nation to improve the way it provides safety, security, and justice. (JP 3-07). Within the security sector reform, company transformation tasks (see paragraphs 4-34) may focus on these programs and activities undertaken to improve the way a host nation provides safety, security, and justice to help enable conditions for enduring stability and peace.

4-31. The primary stability task of establishing security cooperation (SC) (see FM 3-22) may include the Infantry rifle company, depending on the missions assigned, conducting security force assistance (see section IV of this chapter) as a subset of SC. Security force assistance offers a means of support for SC activities in support of building capacity of a foreign security force. As soon as the foreign security force can perform this task, the company transitions this task within civil security to the host nation. Related activities and missions (see FM 3-07 for additional information) include—

- Information operations.
- Protection of civilians.
- Mass atrocity response operations.
- Security sector reform.
- Disarmament, demobilization, and reintegration.
- Destruction, monitoring, and redirection of weapons of mass destruction (WMD) and mitigation of chemical biological radiological, and nuclear (CBRN) hazards. (See appendix H.)
- Security cooperation.
- Peace operations.
- Foreign humanitarian assistance.
- Counterinsurgency.
- Foreign internal defense.

Note. Security cooperation involves all Department of Defense interactions with foreign defense establishments to build defense relationships that promote specific U.S. security interests, develop allied and friendly military capabilities for self-defense and multinational operations, and provide U.S. forces with peacetime and contingency access to a host nation. (JP 3-22).

Stability Framework

4-32. The stability framework refers to the range of failed, failing, and recovering states. The distinction among them is rarely clear, as fragile states do not travel a predictable path to failure or recovery. This framework encompasses the stability tasks performed by military and civilian actors across the range of military operations. When applied, the stability framework helps the commander identify the types and ranges of tasks performed in the phases and identify lead responsibilities and priorities. Stability tasks occur in three phases: initial response, transformation, and fostering sustainability phases. (Refer to FM 3-96 for additional information.)

Initial Response Phase

4-33. The initial response phase generally reflects tasks executed to stabilize an operational environment in a crisis state. During this phase, the company in support of the battalion mission performs stability tasks during or directly after a conflict or disaster where the security situation hinders the introduction of civilian personnel. The company conducts operations that safeguard the local population and prevent factions or actors contributing to sources of instability. Identifying actors and their intentions during this phase through information collection allows the company to seize the initiative during this phase.

Transformation Phase

4-34. The transformation phase represents the broad range of post-conflict reconstruction, stabilization, and capacity building tasks where host-nation security forces and, potentially, intergovernmental organization peacekeepers begin to contribute. During the transformation phase, the company can conduct security force assistance (see section IV of this chapter) as a subset of SC to develop the ability of the host nation to defend against internal and external threats, contribute to multinational operations, and assist other partner nations to provide for their security. SC activities of these types transition in a relatively secure environments, free from most wide-scale violence, often to support broader civilian efforts. Throughout transformation, the company continues in partnership with unified action partners according to the legitimate government binding agreements.

Fostering Sustainability Phase

4-35. Fostering sustainability encompasses long-term efforts that capitalize on capacity-building and reconstruction activities to establish conditions that enable sustainable development. The company transitions to a steady state posture focused on advisory duties and continued SC to enable the host nation to sustain development. The company usually performs fostering sustainability phase tasks only when the security environment is stable enough to support tasks.

End State Conditions

4-36. To achieve conditions that ensure a stable and lasting peace, stability tasks in operations capitalize on coordination, cooperation, integration, and synchronization among the indigenous population and institutions, unified action partners, other civil entities, and the interagency. These complementary civil military efforts aim to strengthen legitimate governance, restore or maintain rule of law, support economic and infrastructure development, and foster a sense of national unity. These complementary efforts also seek to reform institutions to achieve sustainable peace and security and create the conditions that enable the host-nation government to assume responsibility for civil administration.

Balance Resources, Capabilities, and Activities

4-37. When planning operations dominated by stability the commander, weights limited resources and capabilities according to priority of effort. When requirements for operations dominated by stability outpace available resources and capabilities necessary to reestablish conditions of peace and stability, planning involves focusing efforts toward accomplishing the mission while carefully rebalancing resources, capabilities, and activities across multiple lines of effort. While the commander typically focus resources on the decisive operation, the commander must also provide sufficient resources to capitalize on unforeseen opportunities and to provide impetus for other efforts. The numerous stability tasks involved in an operation require specific capabilities that are often just as limited in availability. An effective plan judiciously applies these capabilities where and when most needed. The commander synchronizes the activities in time and space to create the greatest effect, one that achieves broad success in one line of effort while reinforcing progress in the others. (Refer to ADRP 3-07 for additional information.)

Recognize Planning Horizons

4-38. Based on imperfect knowledge and involving assumptions about future operations dominated by stability that are fundamentally uncertain in nature affect the commander's planning horizon and ability to plan. A *planning horizon* is a point in time commanders use to focus the organization's planning efforts to

shape future events (ADRP 5-0). Uncertainty increases with the length of the planning horizon and the rate of change in the environment. A fundamental tension in planning for operations emphasizing stability tasks is the tension between short-term needs and long-term objectives. Immediate security or humanitarian concerns can create a need for short-term solutions with negative impacts for longer-term objectives, such as in establishing stable governance or a sustainable economy. (Refer to ADRP 5-0 for additional information.)

Avoid Planning Pitfalls

4-39. The challenges for operations dominated by stability involving various systems, cultures, and personalities can create significant pitfalls to developing a coherent, integrated plan. Collaborative planning for stability in an operation, especially among the many diverse participants, presents unique challenges and opportunities.

4-40. The first pitfall consists of attempting to forecast and dictate events too far into the future based on the assumption that events will progress on a logical, linear path to the future. Plans often underestimate the scope of changes in direction that may occur, especially in operations that occur among populations, where predictability is elusive at best. Effective planning includes sufficient branches and sequels to account for the nonlinear nature of events.

4-41. The second pitfall consists of trying to plan in too much detail. While plans must include detail, planning in more detail than needed only consumes available time, which is normally limited. Failure to keep plans to the essentials violates the troop leading rule of allowing subordinates two-thirds of the time for and subsequent planning and preparation at their echelon, as well as limiting their freedom of action under mission command.

4-42. The third pitfall consists of using planning as a scripting process that tries to prescribe the course of events with precision. When planners fail to recognize the limits of foresight and control, the plan tends to become a coercive and overly regulatory mechanism that restricts initiative and flexibility.

4-43. The fourth pitfall is the danger of institutionalizing rigid planning methods that lead to inflexible or overly structured thinking. This tends to make planning rigidly process-focused and produce plans that overly emphasize detailed procedures.

Note. Planning provides a disciplined framework for approaching and solving complex problems. Familiarity with the requisite processes and steps typically speeds the planning effort, and repetition only serves to imbue it with an inherent efficiency. The danger is in taking that discipline to the extreme. This especially proves dangerous in the collaborative environments typical of operations with a dominant stability component, where the mix of different planning cultures and processes can stymie progress. Stakeholders may want to follow a rigid, institutionalized planning methodology or, in some situations, not use any planning methodology whatsoever. In a collaborative environment, the commander streamlines the planning effort, providing economy of effort and coordination among team members working on the same problem.

CONSIDERATIONS FOR TRANSITIONS

4-44. In the context of stabilization activities, transitions occur across each of the six primary stability tasks to achieve the end state. All partners must understand transition, the transfer of responsibility, authority, power, and accountability incrementally on several levels and by numerous partners. Stabilization activities within the stability framework are designed within three transition phases: repair and (re)establish systems, normalize systems, and transfer and exits. The measures of performance (MOPs) or measures of effectiveness (MOEs) indicating the appropriate time to complete tactical transitions must be, to the extent possible, clear and specific.

Transition Planning

4-45. A well-structured transition plan nests company and battalion short-term stabilization actions with long-term end states. The numerous layers of tasks conducted by the company, its battalion higher

headquarters and other partners, compound the challenges to the transition plan. Numerous lines of effort crossing different transition phases potentially add complexity to partner organizations within the area of operation. To ensure success, the company, its battalion higher headquarters, and unified action partners clearly plan and express the steps for transition and their withdrawal so local actors have time to adapt to their responsibilities and structures. The phases of the stability framework (see paragraphs 4-32 to 4-35 on pages 4-8 and 4-9) nests with the three stability transition phases, with initial response tasks generally occurring in transition phase 1, transformation tasks in transition phase 2, and fostering sustainability tasks in transition phase 3 (table 4-1).

Table 4-1. Phases of the stability framework and stability transition phases

PHASES OF THE STABILITY FRAMEWORK	*INITIAL RESPONSE*	*TRANSFORMATION*	*FOSTERING SUSTAINABILITY*
Stability transition phases:	1—Repair and (re)establish systems	2—Normalize systems	3—Transfer and exit

Phase 1—Repair and (Re)Establish Systems

4-46. Transition phase 1, based on the security situation, initiates the repair or replacement of systems that were once active or in control of the host nation. The commander initiates the transition phase with a comprehensive approach towards mentoring and advising host-nation military leaders to ensure the host nation becomes willing to and capable of assuming its legitimate responsibilities. The Army rules of allocation provide a civil affairs company to each IBCT to support civil-military operations. A civil military affairs team is then normally attached to the battalion and is organized to assist in planning and execution of subsequent transition phases and coordinate horizontally and vertically within the civil component of the operational environment to ensure that military efforts support host-nation agencies and organizations. The commanders, staffs, and subordinate leaders cooperate and coordinate with all partner agencies and organizations recognizing that military efforts are just one part of successfully building host-nation autonomy.

Phase 2—Normalize Systems

4-47. Transition phase 2, in this context, refers broadly to host-nation political, economic, social, and military structures that ensures—a safe and secure environment, the rule of law, social well-being, stable governance, and a sustainable economy. Phase 2 begins as the host-nation government becomes operational, and its management of civil security, civil control, essential services, governance, economic development, and infrastructure tasks becomes routine practice. This phase takes time. Host-nation personnel take the lead, while partners continue to mentor and coach. The host nation owns and operates the systems and processes. Mentors seek to understand the culture, norms, and customs of the host nation to help determine when to terminate education, training, mentoring, and coaching support.

Phase 3—Transfer and Exit

4-48. As systems normalize during phase 2 with the host nation, the battalion and subordinate company, the IBCT and unified action partners begin to remove themselves from the local bureaucracy within the area of operation. With clear transfer plans developed in transition phase 2, the process of transferring responsibilities may begin to occur. Commanders expect to transfer different aspects of an operation at different times based on setting conditions. Additionally, commanders consider that delays in one sector may delay the transfer in another and plan accordingly to anticipate and account for potential delays.

Standard Measures

4-49. MOPs and MOEs are standard measures used to analyze progress when moving from one transition phase to another. Reports on what is being done to achieve success and whether or not what is being done is successful in each transition phase is essential to determining progress. Standard measures must be clear and achievable to provide a true picture of progress. The commanders, staffs, and subordinate leaders integrate assessments with host-nation, interagency, and interorganizational partners in determining the criteria for

MOPs and MOEs and determining what standard to use. Integrating MOEs and MOPs help ensure all partners work to the same purpose and the same goal. (Refer to ADRP 5-0 for additional information on the assessment process.)

SECTION II – ORGANIZATION OF FORCES

4-50. When conducting operations focus on stability tasks, just as when conducting primarily offensive and defensive tasks, the organization of forces for the Infantry rifle companies of the Infantry battalion is based on the mission variables of METT-TC. As the overall plan develops and the required task organizations for the companies and the battalion are determined, the request for forces process gives commanders the ability to request capabilities not normally available at the company or battalion echelon. In all cases, commanders alter the command and support relationships of subordinate elements attached within the companies and/or battalion, or under operational control according to the mission variables of METT-TC.

4-51. While each stability-focused operation takes place in its own specific operational circumstances, there are common organizational considerations that apply. Operations focused on the conduct of stability tasks typically involve the battalion and subordinate companies with more multinational partners than do operations centric to the conduct of offensive and defensive tasks. Throughout the operations process (see paragraph 1-44 on page 1-8), specifically during troop leading procedures at company level and the military decision-making process at battalion level, the structure of the supported host nation government or transitional military authority impacts the organizations or individuals interacting with the battalion and company commanders, the battalion staff, and subordinate leaders within the company. During the operations process, the battalion commander may designate additional staff officers to work nontraditional actions with subordinate companies and the host nation government or transitional military authority at different levels in addition to the liaison the battalion and subordinate companies conduct during the operations process.

4-52. As the battalion commander determines the required organization of forces, the staff integrates capabilities internal to the battalion with attached capabilities to accomplish assigned missions and to meet changing situations within the battalion headquarters and subordinate companies. When considering which capabilities to allocate to subordinate companies, and which to maintain at the battalion headquarters, the commander understands that task organization and support arrangements will change frequently due to the relative nature and duration of operations in support of stability tasks. The unique aspects of stability tasks requires individual augmenters and augmentation cells to support unique force-tailoring requirements and personnel shortfalls. Augmentation, driven by METT-TC considerations, enables coordination with the media, government agencies, nongovernmental organizations, international organizations, other multinational forces, and U.S. Army civil affairs forces.

4-53. Specific requirements, driven by a stability task(s), can result in the augmentation of the battalion headquarters and subordinate companies with additional functional capabilities. Civil affairs, military police, military working dogs, public affairs teams, special forces teams, joint units, host nation security forces (when operational control or tactical control), multinational units, military information support units, and additional engineer and sustainment assets are tailored to enable these requirements. (Note. Special forces teams and joint units usually are a coordinating relationship, not a command relationship.) When situations destabilize within the local population, the battalion commander and subordinate commanders determine which capability, through augmentation or liaison team (through either a command relationship or coordinating relationship), is best to monitor and report on the situation. Depending on the situation, unit ministry, engineers, psychological operations, civil affairs, counterintelligence, linguistics, and logistics personnel may be candidates for such teams.

4-54. Most operations focused on the conduct of stability tasks requires the subordinate companies of the Infantry battalion to coordinate, integrate, and synchronize operations with a variety of outside organizations. These include other U.S. Armed Services or government agencies as well as international organizations, including nongovernmental organizations, coalition, and United Nation military forces or agencies. During stability, coordination and integration of civilian and military activities must take place at every level to ensure synchronization efforts. Normally, the battalion with its subordinate companies plan operations to complement those of participating government and private agencies. The commander ensures battalion civil-military objectives and concept of operations are understood at company and below and by the indigenous population and institutions government and private agencies. If the battalion has an attached civil affairs

team, that team in conjunction with the S-9 and coordinating centers such as the civil-military operations center, normally established at IBCT level are designed to accomplish this task. The outcome of this civil coordination helps to nest the battalion civil-military operations plan, conduct by subordinate companies, with the IBCT civil-military objectives resulting in unity of effort.

4-55. Deployments associated with the conduct of stability-focused operation often require the battalion and its subordinate companies to plan and prepare for the potential that it will provide one or more mobile training teams (see ATP 3-05.2) to host national security forces. When a separate U.S. training organization does not exist, for example, an Infantry rifle companies within the Infantry battalion should be able to provide host nation security forces with training, advice, and assistance in Infantry tactics and the use of Infantry weapons up through battalion level. Training and assistance includes counterinsurgency tactics and techniques (see FM 3-24.2). When provided by the battalion, mobile training teams (company and platoon level) may be placed under the operational control of a U.S. security assistance organization and should be able to provide limited advice and assistance on the conduct of other stability tasks. At a minimum, small units within each company will be expected to mentor/advise those host nation counterparts with which they work. (Refer to FM 3-22 and section IV of this chapter for additional information on security force assistance.)

4-56. Early on in the planning process the battalion personnel staff section, in coordination with subordinate company and with brigade and higher echelon manpower and personnel staff sections, screen personnel files to review the records of identified Soldiers that might have specific skill sets useful to the battalion or higher echelon during the conduct of stability focused operations. The review by brigade and battalion manpower and personnel staff sections might not be completed before deployment, especially as it pertains to newly assigned Soldiers. These skill sets include individuals with professional certification or work experience in those non-military fields that might have utility during operations focused on the conduct of stability tasks. Individuals that have the necessary degree of cultural understanding and foreign language skills enable the effective augmentation of IO and public affairs requirements.

Note. A database, usually maintained at division level, is created to track the college degrees, civilian work experience, cultural knowledge, and language proficiencies of Soldiers identified during the personnel files screening. (Refer to ATP 3-91 for additional information.)

4-57. During prolonged operations when an Infantry rifle company commander does not employ a tactical command post (CP[s]), the commander exercises economy of scale to establish the skill sets appropriate during the conduct of operations in support of stability tasks. Company standard operating procedures (SOPs) address the specifics for this, including procedures that quickly detach a tactical CP (primary and/or alternate CP at company level) from a more stationary/permanent facility/CP. When participating in operations focused on the conduct of stability tasks as part of short-term military engagement or limited contingency operations, the company commander may choose to deploy only the Primary CP into the area of operation specific to the engagement or operation.

SECTION III – OPERATIONAL AREA SECURITY

4-58. Population-centric operational area security is common across the range of military operations, but is almost a fixture during the conduct of stability-focused operations. Population-centric operational area security typically combines aspects of the area defense and offensive tasks (for example search and attack, cordon and search, raid, and ambush) to eliminate the efficacy of internal defense threats. During the conduct of area security operations, the commander must understand the relationship with host nation authorities and the civilian population. A clear understanding of the commander's authority is essential in exercising that degree of control necessary to ensure security and safety to all military forces and the civilian population located within the Infantry battalion and subordinate company areas of operation.

OPERATIONAL OVERVIEW

4-59. *Operational area security* is a form of security operations conducted to protect friendly forces, installations, routes, and actions within an area of operation (ADRP 3-37). During the conduct of stability-focused operations, area security operations establish and maintain the conditions for stability in an unstable

area before or during hostilities, or enduring peace and stability after open hostilities cease. Operational area security is often an effective method of providing civil security and civil control during operations focused on stability. Security objectives, regardless of which element of decisive action (offense, defense, or stability) currently dominants, ensure freedom of action over a prolonged period in consonance with the commander's concept of operation and intent.

CIVIL CONSIDERATIONS

4-60. Civil considerations reflect the influence of manmade infrastructure, civilian institutions, and attitudes and activities of the civilian leaders, populations, and organizations within the operational environment on the conduct of military operations. The commander analyzes civil considerations in terms of the categories expressed in the memory aid known as ASCOPE (areas, structures, capabilities, organizations, people, and events). See ATP 2-01.3 for additional information on these categories.

4-61. Since civilians are normally present in operations with a dominant stability component, the company normally restrains its use of force when conducting area security operations. However, the commander remains responsible for protecting the force and considers this responsibility when considering rules of engagement. Restrictions on conducting operations and using force must be clearly explained and understood by everyone. Subordinate leaders and Soldiers of the company must understand that their actions, no matter how minor, may have far-reaching positive or negative effects. Subordinate leaders and Soldiers must realize that media (either hostile or neutral) and adversaries can quickly exploit their actions, especially the way they treat the civilian population.

AREA SECURITY

4-62. *Area security*, a security task conducted to protect friendly forces, installations, routes, and actions within a specific area (ADRP 3-90), takes advantage of the local security measures performed by all units, regardless of their location in the area of operation. Local security includes any local measure taken by units against enemy actions. Local security, dependent upon the situation, may involve avoiding enemy detection or deceiving the enemy about friendly positions and intentions. Local security may include finding any enemy forces in the immediate vicinity and knowing as much about their positions and intentions as possible. Local security prevents a unit from being surprised, and is an important part of maintaining the initiative during area security.

4-63. The requirement for maintaining local security is an inherent part of any area security mission. Units use both passive and active measures to provide local security. Passive local security measures include using camouflage, movement control, noise and light discipline, operations security, and proper communications procedures. Measures also include employing available sensors, night-vision devices, and daylight sights to maintain surveillance over the area immediately around the unit. Active measures, dependent upon the situation, may include—

- Using observation posts, combat outposts, combat patrols, reconnaissance patrols, and using unmanned surveillance systems to allow for early detection of enemy.
- Establishing specific levels of alert based on the mission variables of METT-TC.
- Establishing stand-to times. (Unit standard operating procedures detail activities during the conduct of stand-to.)

ECONOMY-OF-FORCE MISSIONS

4-64. The Infantry rifle company, charged with execution, conducts an area security operation as an economy-of-force mission. Area security missions are numerous, complex, and generally never ending. For this reason, the commander synchronizes and integrates security efforts, focusing on protected forces, installations, routes, and actions within the company's assigned area of operation. Protected forces within the company, range from subordinate units and elements, echeloned command posts, and sustainment (external support elements and company trains when established). Protected installations can be part of the sustainment base, or they can constitute part of the area's civilian infrastructure. Protected ground lines of communication include the route network to support the numbers, sizes, and weights of tactical and sustainment area

movement within the company's area of operation. Actions range from securing key points (bridges and defiles) and terrain features (ridgelines and hills) to large civilian population centers and their adjacent areas.

Offensive and Defensive Activities

4-65. During the conduct of stability-focused tasks, area security missions are a mixture of offensive and defensive activities involving not only subordinate companies and platoons, but also those host nation security forces over which the company or Infantry battalion has a command relationship such as operational control, or can otherwise influence. Offensive area security activities include subordinate tasks of movement to contact (search and attack or cordon and search missions, see chapter 2) and combat patrols (see ATP 3-21.8), when required, designed to ambush detected enemy forces and/or to conduct raids (see chapter 2) within the company's area of operation. Defensive area security activities include the establishment of a perimeter defense (see chapter 3) base perimeter security (see ATP 3-21.20, appendix I), combat outposts, observation posts, surveillance, moving and stationary screen and guard missions, and reconnaissance and counterreconnaissance missions.

Note. During the conduct of offensive or defensive-focused tasks, company forces engaged in area security operations can saturate an area or position on key terrain to provide protection through early warning, reconnaissance, surveillance, and/or security operation (screen or guard missions), and to guard against unexpected enemy or adversary attack with an active response. Early warning may come from ground base forces and/or ground- and space-based sensors. Forces engaged in area security operations are typically organized in a manner that emphasizes their mobility, lethality, and communications capabilities. (Refer to chapter 2 and chapter 3 for additional information.)

4-66. During offensive or defensive-focused tasks, area security operations are often designed to ensure the continued conduct of sustainment operations to support decisive and shaping operations by generating and maintaining combat power. Area security operations may be the predominant method of protecting support and consolidation areas that are necessary to facilitate the positioning, employment, and protection of resources required to sustain, enable, and control forces. (Refer to appendix I for additional information.)

Readiness

4-67. During area security operations, forces must retain readiness over longer periods without contact with the enemy. This occurs most often when the enemy commander knows that enemy forces or insurgents are seriously overmatched in available combat power. In this situation, the enemy commander normally tries to avoid engaging friendly forces unless it is on terms favorable to the enemy. Favorable terms include the use of mines and booby traps. Area security forces must not develop a false sense of security, even if the enemy appears to have ceased operations in the secured area. The commander must assume that the enemy is observing friendly operations and is seeking routines, weak points, and lax security for the opportunity to strike with minimum risk. This requires the commander to influence subordinate small-unit leaders to maintain the vigilance and discipline of their Soldiers to preclude this opportunity from developing.

PLANNING CONSIDERATIONS

4-68. During operational area security planning, the commander apportions combat power and dedicates assets to protection tasks and systems based on an analysis of the operational environment, the likelihood of threat action, and the relative value of friendly resources and populations. Based on an initial assessment of the operational environment, the commander task organizes subordinate units and elements and assigns security areas within the company's area of operation. Although all resources have value, the mission variables of METT-TC make some resources, assets, or locations more significant to successful mission accomplishment from enemy or adversary and friendly perspectives. Throughout the operations process the commander relies on the risk management process and other specific assessment methods to facilitate decision making, issue guidance, and allocate resources (see appendix B). Criticality, vulnerability, and recoverability are some of the most significant considerations in determining protection priorities that become the subject of the commander's guidance and the focus of area security operations.

MISSION COMMAND

4-69. During area security operations, the company commander devotes considerable time and energy to the problems of coordination and cooperation due to the joint, interagency, and multinational nature of stability-focused tasks. The company plans and conducts area security operations in concert with partner participants towards a unified effort, often as a supporting organization rather than the lead organization. The commander uses liaisons to enable unity of effort between partner elements and the coordination centers established by the battalion or IBCT.

Interagency and Multinational Organizations

4-70. One factor that distinguishes the conduct of stability-focused tasks from the conduct of offensive- and defensive-focused tasks is the requirement for interagency coordination at company level and below. During area security operations with interagency partners, the commander has inherent responsibilities. These responsibilities include the requirement to clarify the mission; to determine the controlling legal and policy authorities; and to task, organize, direct, sustain, and care for the organizations and individuals for whom the company provides the interagency effort. The commander also ensure seamless termination of the mission under conditions that ensure the identified objectives are met and can be sustained after the operation.

4-71. When operating inside or with multinational organizations, the company commander and subordinate leaders should expect to integrate foreign units down to the platoon level. Security force assistance activities within an area security mission require carefully selected and properly trained and experienced personnel (as trainers or advisors) who are not only subject matter experts, but also have the sociocultural understanding, language skills, and seasoned maturity to more effectively relate to and train foreign security forces. Additionally, the commander and subordinate leaders within the company train with the fact that they will routinely interact with multinational partners during other area security missions. SOPs at the company and battalion will require modification to incorporate multinational small units that do not have compatible communications and information systems.

Desired End State

4-72. The commander's definition of the desired end state is a required input to area security operations. While end state is normally described as a stable, safe, and secure environment during stability focused operations, this description is not sufficient. Initial MOE and performance quantifying that environment are determined during the planning process. (Refer to appendix B and section I of this chapter for additional information.) Measures of effectiveness and performance are important in stability-focused area security operations since traditional combat measures, such as territory gained, enemy personnel killed or captured, and enemy combat vehicles destroyed or captured do not apply. The commander also ensures the desired end state reflects the prolonged time-period associated with many stability-focused area security operations.

4-73. Achieving the desired end state requires a knowledge of operational design, the ability to achieve unity of effort, and a thorough depth of cultural awareness (see section I of the chapter) relating to the company's area security operation within the battalion area of operation. Through economy of forces, the commander identifies a finite amount of available combat power to apply against the essential tasks associated with a given area security operation. Identifying essential tasks lays the foundation for the success of security area operations that represent the future stability of a state. Decisions about use of combat power are more than a factor of the size of the force deployed, its relative composition, and the anticipated nature and duration of the mission. Assuring the long-term stability depends on applying unity of effort to the tasks that are, in fact, essential.

Human Component

4-74. No other military activity has as significant a human component as operations that occur among the people. Human beings capture information and form perceptions based on inputs received through all the senses. Humans see actions and hear words. Humans compare gestures and expressions with the spoken word. Humans weigh the messages presented to them by the company and other sources with the conditions that surround them. When the local and national news media are unavailable or unreliable, people turn to alternative sources, such as the internet—where information flows freely at unimaginable speeds—or rumor

and gossip. Perception equals truth to people lacking objective sources of information. Altering perceptions requires shaping information according to how people absorb and interpret information, molding the message for broad appeal and acceptance.

Information Operations

4-75. The final success or failure of the company's area security operation rests with the perceptions of the inhabitants within and external to the company's area of operation and goes beyond defeating the enemy. Securing the trust and confidence of the civilian population is the chief aim of IO, which integrates and synchronizes information-related capabilities to generate effects in the information environment necessary to influence enemy, adversary, neutral, and friendly audiences.

Information-Related Capabilities

4-76. Information operations synchronization of information-related capabilities promotes the legitimacy of the mission and reduces bias, ignorance, and confusion by persuading, educating, coordinating, or influencing targeted audiences. Further, it promotes–through Soldier and leader engagement, civil affairs operations, and military information support operations, among other information-related capabilities–interaction at all echelons with these audiences so these target audiences understand the objectives and motives of company and that of the Infantry battalion and IBCT, and the scope and duration of area security actions. Combined with broad efforts to build partner capacity, for example, security force assistance (see Section IV). Information operations are essential to achieving decisive results: a stable host nation government and peaceful civilian population. (Refer to FM 3-13 for additional information.)

Note. When attached or established within the Infantry battalion, an IO officer or NCO planner is responsible for synchronizing and deconflicting information-related capabilities employed in support of company operations. In coordination with the IO officer at the IBCT, the IO officer or NCO staff planner synchronizes capabilities within the battalion staff that communicate information to audiences and affect information content and flow of enemy or adversary decision-making while protecting friendly information flow. (See ATP 3-21.20 for additional information on the synchronization and deconflicting of information-related capabilities at the battalion level.)

4-77. Within the security environment, enemies, adversaries, and other organizations use propaganda and disinformation against the commander's efforts to influence various civilian populations within and external (area of interest) to the company's area of operation. A coordinated IO plan informs and counters the effects of propaganda and misinformation. The plan (generally developed at the IBCT level in coordination with the division IO officer and public affairs officer) establishes mechanisms, such as a media center and/or editorial board, to educate and inform local and international media, which in turn, informs the public, with accurate and timely information. Additionally, civil affairs operations and military information support operations within the company's area of operation are integrated into counterpropaganda efforts at the IBCT level through the IO working group.

4-78. When needed, the battalion chaplain can play an important role in bridging gaps with religious leaders that set conditions for future successful key leader engagements and civil affairs operations within the company's area of operation. During planning, the chaplain advises the company commander concerning matters of religion, culture, and religious key leaders in the area of operation and areas of interest. The chaplain and unit ministry team provide important, up-to-date perspectives concerning local, provincial, and national atmospherics not often included or clear in other sources. This information is coordinated with the battalion IO NCO and IBCT IO working group.

Soldier and Leader Engagement

4-79. Without a detailed Soldier and leader engagement plan distributed from battalion, different units and elements meet with and engage local leadership with different desired end states thereby undermining the ability of any or all forces to build capacity and work towards transition to host nation lead. Coordination between subordinate companies and elements or units within the area of operation, when working with the same host nation individual or office, enables unity of effort and the desired end state for the battalion's area

security operation. The creation of a detailed engagement plan includes identifying differences between provinces or localities within the province and sets out the objectives to reach the desired end state. Host nation leaders in a city, district or province have face-to-face meetings with these leaders to advance the creation and building of host nation capacities.

Operations Security

4-80. Operations security is as important during the conduct of stability-focused operations as it is during the conduct of offensive- and defensive-focused operations. Operations security contributes to the company's ability to achieve surprise during area security missions, thus enabling its chances for success. Within the company area of operation, human adversaries/enemies monitor the company's normal activities to detect variations in activity patterns that forecast future operations. They monitor the conversations of Soldiers both on duty and off duty to gain information and intelligence. Adversaries/enemies monitor commercial internet activity and phone calls from company operational and recreation facilities. They will look at trash created by company activities. The absence of operations security about company activities contributes to excessive friendly casualties and possible mission failure in area security operations just like it does in combat operations. Information superiority hinges in no small part on effective operations security; therefore, measures to protect essential elements of friendly information cannot be an afterthought. (Refer to FM 3-96 for additional information.)

Notes. The need to maintain transparency of intentions during area security operations is a factor when balancing operations security with information release. Release authority for information–to include foreign disclosure rules–must be fully understood by commanders, staffs, and subordinate leaders within the IBCT. The public affairs and IO officers (see FM 3-61 and FM 3-13, respectively) lead the coordination and synchronization processes within the IBCT. Release authority for information rests with the commander at the appropriate level.

MOVEMENT AND MANEUVER

4-81. During the conduct of stability-focused operations, the company plans its area security movement and maneuver simultaneously with offensive and defensive movement and maneuver, though with an extensive emphasis on security and engagement skills (negotiation, rapport building, cultural awareness, and critical language phrases). Movement and maneuver within the company's area of operation is normally decentralized to the platoon and squad level. Through economy of force, the commander determines the right mix of forces to quickly transition between operations as the situation requires. During area security operations, the commander plans for future movement within the company's area of operation and, as required, in adjacent areas of operation. The company's lethal capabilities make the execution of area security operations possible even if the probability of combat is remote. When new requirements develop the commander plans for the shifting of priorities when the need arises.

Fire and Movement

4-82. The application of fire and movement lends itself to several offensive and defensive tasks (for example cordon and search [see chapter 2], search and attack [see chapter 2], and area defense [see chapter 3]) within the civil security and civil control primary stability tasks. Across the range of military operations, the Infantry battalion and its subordinate units play a major role in ensuring the outcome of these primary stability tasks.

Note. The company and its subordinate platoons and squads are useful in the conduct of other primary stability tasks because of their deterrence value and the flexibility and labor the Infantry rifle companies of the Infantry battalion provide to the IBCT commander (for example security force assistance [see section VI of this chapter) within the security cooperation primary stability task).

Mobility and Countermobility

4-83. Mobility and countermobility operations are key enablers to area security. In stability focused area security operations, mobility operations allow civilian traffic and commerce to continue or resume. Resuming normal civilian activities in the company's area of operation is an important objective within stability focused area security operations. Countermobility operations indirectly support stability focused area security operations in regards to offensive and defensive tasks.

4-84. Mobility operations focus on keeping ground lines of communications open for both civilian and military activities and on reducing the threat of mines and other unexploded ordnance to the same. During area security, the company commander, in coordination with the battalion commander and staff, develop the countermobility plan concurrently with the fire support plan and defensive scheme of maneuver, guided by the battalion commander's intent. When combat engineer support falls under the mobility and countermobility tasks, it can include—

- Constructing combat roads and trails.
- Breach existing obstacles (including minefields).
- Marking minefields, including minefield fence maintenance.
- Clearing mines and debris from roads.
- Conducting route reconnaissance to support the main supply routes and civilian lines of communications.
- Creating obstacles between opposing factions to prevent easy movement between their positions.

4-85. The company, in coordination with the battalion, employs roadblocks not only to restrict traffic for security purposes, but also to control the movement of critical cargo. Cargo could be generators designed to restore electric power in a large area or items that support the population and resources within the company's area of operation.

Occupy an Area or Relief in Place

4-86. Planning for the company's occupation of an area or relief in place begins before the company deploys or when being relieved, redeploys. Planning includes not only company forces and their activities, but also other the battalion, governmental agencies, multinational partners, host nation agencies, and potential international organizations. The mission variables of METT-TC determine the occupation or relief in place that occurs. Sometimes occupation, much like occupying an initial area of operation is appropriate. This can take place when the company's stability-focused area security operation occurs within limited intervention or peace operations. A relief in place may be appropriate during the conduct of an area defense (see chapter 3). However, a stability-focused area security transition by function may be more effective if the relief in place is to takes place with host nation military forces and civil authorities within the range of military operations of irregular warfare. Some of these functions include medical and engineer services, local security, communications, and sustainment. Company plans do not remove a provided capability from the area of operation until the replacement capability is operating.

Surveillance, Reconnaissance, and Security Operations

4-87. In restrictive and unrestrictive terrain, the commander relies on manned and unmanned surveillance assets and reconnaissance and security forces to collect information within the company's area of operation. In restrictive terrain, reconnaissance and security forces within the company's area of operation focus on key terrain such as potential choke points to assist in this collection. Using a *combat outpost*, a reinforced observation post capable of conducting limited combat operations (FM 3-90-2), is a technique for employing reconnaissance and security forces in restrictive terrain that precludes mounted reconnaissance and security forces from covering the assigned area. While the mission variables of METT-TC determine the size, location, and number of combat outposts a unit establishes, a reinforced platoon typically occupies a combat outpost. A combat outpost must have sufficient resources to accomplish its designated missions, such as conducting aggressive combat patrolling and reconnaissance patrolling. Combat outposts are established when observation posts (see chapter 2 and chapter 3 for information on observation post activities) are threaten by insurgency or in danger of being attacked by enemy forces infiltrating into and through the company's assign area of operation.

Note. During the conduct of defensive-focused operations, the commander uses a combat outpost to extend the depth of the security area, to keep friendly forward observation posts in place until they can observe the enemy's main body, or to secure friendly forward observation posts that will be encircled by enemy forces. Mounted and dismounted forces can employ combat outposts. (Refer to chapter 3 for additional information.)

Army Aviation

4-88. Army aviation attack and reconnaissance units with manned and unmanned systems—when deployed early with initial response forces—can be a significant deterrent on the indigenous combatants, particularly if factions or insurgence are not yet organized during the initial response phase (see paragraph 4-33 on page 4-9). Attack and reconnaissance helicopters may be employed to act as a response force against enemy threats. Along with unmanned aircraft systems, attack and reconnaissance helicopters may conduct reconnaissance, surveillance, and/or security over wide areas and provide the company, through coordination with the battalion, a means for visual route reconnaissance and early warning. Utility helicopters provide an excellent mission command capability to support stability focused area security operations and to transport patrols or security elements throughout the area of operation. Cargo helicopters provide the capable to move large numbers of military and civilian security force personnel and to conduct resupply when surface transportation is unavailable or routes become impassable.

Note. The battalion, in support of the companies, plans measures for the effective use of all resources, to include, exploiting airpower for transportation and resupply over extended distances and, where appropriate, tightly controlled close air support.

Reserve and Response Force Operations

4-89. Maintaining a reserve during any operation is difficult. Often, the commander finds that the company has more tasks than units do, and stability focused area security operations are no exception. Nonetheless, contingencies or missions may arise that require establishing a reserve. Maintaining a reserve allows the establishing commander to plan for worst-case scenarios and to exploit opportunities, provide flexibility, and conserve the force during long-term operations.

4-90. The response force, see paragraphs 4-105 and 4-106 on pages 4-23 and 4-24, differs from a reserve in that it is not in support of a particular engagement. A response force is a dedicated force on a base with adequate tactical mobility and fire support designated to defeat Level I and Level II threats and shape Level III threats until a tactical combat force (see note on page 4-25) can defeat them or other available response forces. The response force answers to the establishing headquarters. (See ATP 3-91.) Considerations when establishing a response force include—

- Threat.
- Communication equipment and procedures.
- Alert procedures.
- Transportation.
- Training priorities.

4-91. To counter an indirect fire threat against subordinate Infantry rifle companies, the battalion commander employs counterfire radars (located within the field artillery battalion of the IBCT) throughout and area of operation to locate hostile indirect fire systems. The use of quick reactionary forces, attack helicopter, or local friendly forces are ideal for response to counterfire radar acquisitions as clearance of fire procedures are often time consuming and not necessarily reliable when determining locations for host nation forces. Additionally, indiscriminate use of indirect fire on counterfire radar acquisitions can lead to unwanted collateral damage.

INTELLIGENCE

4-92. The conduct of stability focused tasks demands greater attention to civil considerations—the political, social, economic, and cultural factors in an assigned area of operation—than does the conduct of conventional offensive and defensive focused tasks. During operational area security, commanders expand the IPB process beyond geographical and force capability considerations. (See ATP 2-01.3 for additional information on IPB for stability missions.) Information collection, specifically plan requirements and assess collection, enables relevant, predictive, and tailored intelligence within the company's area of operation. (See ATP 2-01 for additional information on the specific functions for stability missions.) Intelligence cells and knowledge management elements within the IBCT and battalion headquarters develop procedures to share collected intelligence data and products to the company. (See ATP 2-19.4 for additional information on intelligence techniques for stability missions.)

Understanding

4-93. Operational area security requires the integration of the IBCT and battalion's information collection effort with that of the company's collection effort to develop a clear understanding of all potential threats and the populace. Success in the stability environment requires a cultural understanding to gauge the reaction of the civilian population within and external to the company's area of operation to a particular course of action conducted, to avoid misunderstandings, and to improve the effectiveness of the execution of that course of action by the company and/or battalion and IBCT. Changes in the behavior of the populace may suggest needed change in tactics, techniques, and/or procedures or even strategy. Biographic information, leadership analysis, and methods of operation within the existing cultural matrix are keys to understanding the attitudes and ability of positional and reference civilian leaders to favorably or unfavorably influence the outcome of company's area security operations.

Indicators of Change

4-94. During area security operations, the commander, in coordination with the battalion commander and staff tie priority intelligence requirements to identifiable indicators of change within the operational environment, to include, civil inhabitants and their cultures, politics, crime, religion, economics, and related factors and any variances within affected groups of people. The commander often focuses on named areas of interest in an effort to answer critical information requirements to aid in tactical decision making and to confirm or deny threat intentions regardless of which element of decisive action currently dominants. During area security operations, priority intelligence requirements related to identifying enemy and adversary activities are tracked where appropriate.

Commander's Critical Information Requirements

4-95. Due to the increased reliance on human intelligence (HUMINT), when conducting area security operations, the commander emphasizes the importance of battalion commander's critical information requirements (CCIRs) to all personnel within the company. CCIRs are information requirements identified by the commander as being critical to facilitating timely decision making, where answers to CCIRs can come from small unit activities within the company. For example combat outposts/observation posts within the company's area of operation often provide the most time sensitive combat information to the commander. All personnel must be given appropriate guidance to improve information-gathering capabilities throughout the company. Interpreters, military source operations, speaking to local civilian personnel, security operations, and patrolling (combat and reconnaissance) are primary sources for assessing the economic and health needs, military capability, and political intent of those receiving assistance who or are otherwise a party to the area security operation. (Refer to ADRP 5-0 and ATP 3-55.4 for additional information.)

4-96. The commander ensures HUMINT assets assigned to the company are employed effectively and integrated at the lowest level possible. Once assigned, the company accounts for HUMINT asset security and must understand established tasking priorities and command relationships for temporary and long-term commitments. (Refer to FM 2-22.3 for additional information.)

Note. Medical personnel must know the Geneva Convention restrictions against medical personnel collecting information of intelligence value except that observed incidentally while accomplishing their humanitarian duties.

Employment and Control of Human Intelligence Collection Teams

4-97. When HUMINT collection teams are attached to the company, the commander considers security when planning for their employment. (See FM 2-0.) Generally, three security conditions exist: permissive, uncertain, and hostile.

Permissive Environment

4-98. In a permissive environment, HUMINT collection teams normally travel throughout the area of operation without escorts or a security element. HUMINT collectors may frequently make direct contact with overt sources, view the activity, or visit the area that is the subject of the information collection effort. They normally use debriefing and elicitation as their primary collection techniques to obtain firsthand information from local civilians and officials.

Uncertain Environment

4-99. In an uncertain environment, security considerations increase, but risk to the collector is weighed against the potential intelligence gain. An uncertain environment limits use of controlled sources and requires additional resources. HUMINT collection teams should still be used throughout the area of operation but normally are integrated into other ground reconnaissance or other missions. For example, a HUMINT collector may accompany a patrol visiting a village. Security for the team and their sources is a prime consideration. HUMINT collection teams are careful not to establish a fixed pattern of activity or arrange contacts in a manner that could compromise the source or the collector. Debriefing and elicitation are still the primary collection techniques. Teams are frequently deployed to conduct collection at checkpoints, refugee collection points, and detainee collection points. They may conduct interrogations of detainees within the limits of applicable laws and policies.

Hostile Environment

4-100. In a hostile environment, the three concerns for HUMINT collection are access to the sources of information, timeliness of reporting, and security for the HUMINT collectors. A hostile environment requires significant resource commitments to conduct controlled source operations. Prior to the entry of a force into a hostile area, HUMINT collectors may be used to debrief civilians, particularly refugees, and to interrogate other detainees who have been in the area. HUMINT collection teams are normally located with the friendly units to facilitate timely collection and reporting. HUMINT collectors accompany lead elements or ground reconnaissance forces during operations. They interrogate detainees and debrief refugees, displaced persons, and friendly force patrols.

Security Missions

4-101. Due to the possibility of tying forces to fixed installations or sites, security missions may become defensive in nature. When this occurs the company commander carefully balances with the need for offensive action. Early warning of enemy activity through information collection is paramount in the conduct of area security missions to provide the commander with time to react to any threat or other type change identified within the stability environment. The IPB identifies the factors effecting security missions within the assigned area of operation. Factors, although not inclusive, include—

- The natural defensive characteristics of the terrain.
- The existing roads and waterways for military lines of communication and civilian commerce.
- The control of land and water areas and avenues of approach surrounding the area security.
- The control of airspace.
- The proximity to critical sites such as airfields, power generation plants, and civic buildings.

FIRES

4-102. The conduct of fires in support of stability-focused tasks is essentially the same as for offensive-focused and defensive-focused tasks. However, constraint is vital in the conduct of fires during stability-focused tasks. Such constraint typically concerns the munitions employed and the targets engaged to obtain desired effects. Constraint increases the legitimacy of the organization that uses it while potentially damaging the legitimacy of an opponent.

Employment of Fires

4-103. Employment of fires provide continuous deterrents to hostile action and are a destructive force multiplier for the commander, regardless of which element of decisive action currently dominants. Within stability-focused tasks, the planning and delivering of fires precludes fires on protected targets, unwanted collateral damage, and the political ramifications of perceived excessive fire. In addition to lethal effects, the targeting functions of the battalion fire support cell includes nonlethal effects input to the information collection plan and the targeting work groups at the IBCT and battalion headquarters (see appendix D for targeting functions within the company).

4-104. During the employment of fires, the commander having the ability to employ a weapon does not mean it should be employed. In addition to collateral damage considerations, the employment of fires could have second and third order negative effects. Collateral damage could adversely affect efforts to gain or maintain legitimacy and impede the attainment of both short- and long-term goals. For example, excessive force can antagonize those friendly and neutral parties involved. The use of nonlethal capabilities should be considered to fill the gap between verbal warnings and deadly force to avoid unnecessarily raising the level of conflict. Key considerations for employment of fires in support of stability-focused tasks include—

- Stability-focused tasks conducted in noncontiguous areas of operation complicate the use of fire support coordination measures, the ability to mass and shift fires, and clearance of fires procedures.
- Key terrain may be based more on political, cultural and/or social considerations than physical features of the landscape; fires may be used more frequently to defend key sites than to seize them.
- Rules of engagement are often more restrictive than in combat operations; commander's guidance for fires requires careful consideration during development and wide dissemination to all levels.
- Precision-guided munitions and/or employment of nonlethal capabilities may be necessary to limit collateral damage.
- Fires that may be used to demonstrate capabilities, as a demonstration (see chapter 2), or during a denial operation (see chapter 3).

Note. Mortars due to their smaller bursting radius, reduce collateral damage. Mortars are generally more responsive to the small unit operations common to area security missions. In addition to lethal fires, mortars may provide illumination to demonstrate deterrent capability, observe contested areas, or support area and consolidation area security missions (including patrolling [reconnaissance and combat]).

Application of Lethal and Nonlethal Capabilities

4-105. Though highly effective for their intended purpose, lethal capabilities may not always be suitable. For example, during stability-focused tasks, the application of lethal fires is normally greatly restricted, making the use of nonlethal capabilities the dominant feasible option. The considerations for use of nonlethal capabilities in targeting should not pertain to only specific phases or missions, but should be integrated throughout the area of operation. Escalation of force measures can be established in order to identify hostile intent and deter potential threats at checkpoints, entry control points and in convoys. Such measures remain distinct from other use of force guidance such as fire support coordination measures and are intended to protect the force, minimize the use of force against civilians while not interfering with self-defense if attacked by adversaries. One of the primary mechanisms for employing non-lethal capabilities and generating non-

lethal effects is IO. Participating in the targeting process, IO synchronizes a range of non-lethal capabilities to produce non-lethal effects that advance the desired end state. Thus, IO participates in the targeting process.

4-106. Decisive action requires the judicious use of lethal force balanced with restraint, tempered by professional judgment. The critical decision to either ethically apply lethal force in accordance with the moral principles of the Army Ethic, or to exercise restraint, particularly in stability operations, has both immediate and long term consequences for the force. Alert junior leaders recognize the dynamic context of a tactical situation and can use their professional judgment to apply informed lethal and non-lethal force to achieve the commander's intent. Any use of force generates a series of reactions. The general rule for the use of force is "do not create more enemies than you eliminate with your action." The more force is applied, the greater the chance of collateral damage and mistakes. Those life and death decisions must be made at the point of action, often by the most junior and least trained Soldiers in the company. Thus pre-deployment training and also in-the area of operations must address and reinforce those moral, legal, and ethical decisions by each member of the company. Following combat action in which casualties occurred – friendly, enemy or non-combatants, the chain of command needs to facilitate candid after action reviews that allow leaders and Soldiers to critique their actions and share their experiences with one another. This helps mitigate and prevent moral injury, as well as capture lessons learned. (See ATP 6-22.5 for more information)

Fire Support Coordination Measures

4-107. As during offensive- and defensive-focused tasks, fire support coordination measures are established for stability-focused tasks to facilitate the attack of high-payoff targets throughout the area of operations. Restrictive fire support coordination measures are those that provide safeguards for friendly forces and noncombatants, facilities, or terrain. For example, no-fire areas and restrictive fire areas may be used not only to protect forces, but also to protect populations, critical infrastructure, and sites of religious or cultural significance. Regardless of which element of decisive action currently dominants, coordination measures are required to coordinate ongoing activities to create desired effects and avoid undesired effects.

Note. Fire support coordination, planning, and clearance demands special arrangements with joint and multinational forces and local authorities. These arrangements include communications and language requirements, liaison personnel, and procedures focused on interoperability. The North Atlantic Treaty Organization standardization agreements (commonly called STANAGs) provide excellent examples of coordinated fire support arrangements. These arrangements provide participants with common terminology and procedures.

PROTECTION

4-108. Company activities associated with executing operational area security (ADRP 3-37), physical security (see ATP 3-39.32), operations security (ADRP 3-37), and antiterrorism (ATP 3-37.2) tasks enhance the security of the command within an area of operation. In large part, the measures within these four tasks are the same or complementary. Stability-focused operations closely resemble company activities for these tasks during the conduct of offensive- and defensive-focused operations though the company generally works closer with civilian inhabitants. (Refer to FM 3-96 for additional information.)

Assessments to Support Protection Prioritization

4-109. Initial planning by the commander requires various assessments to support protection prioritization; namely threat, hazard, vulnerability, criticality, and capability within the company's area of operation. The commander uses a vulnerability assessment methodology that includes the review of site-specific characteristics, mission, threat analysis, security plans and procedures, and any specific command concerns. Assessment determines which assets can be protected given no constraints (critical assets) and which assets are protected with available resources (defended assets). The commander makes decisions on acceptable risks and provides guidance to the staff so that they can employ protection capabilities based on the critical asset list and defended asset list. These lists are coordinated with the battalion's and subordinate units. All forms of protection are used and employed during preparation and continue through execution to reduce friendly vulnerability.

Note. Deploying battalions and higher echelons should have a trained Level II antiterrorism officer assigned. An assigned antiterrorism officer works to ensure that security considerations are integrated into company and platoon base designs and operations. These individuals guide subordinate companies of the battalion in conducting threat assessment, criticality assessments, and vulnerability analysis to determine each company/subordinate platoon's vulnerability to terrorism. (Refer to ATP 3-91 and ATP 3-37.2 for additional information.)

Protection Template

4-110. The protection template lists and integrates all protection tasks in an appropriate way for use by subordinate companies of the battalion, and any base and base cluster operations envisioned to be established during company area security operations. The protection cell when established within the battalion S-3 section, augments the staff with a small protection planning cell that maintains and publishes the template in coordination with the IBCT protection cell. The template is use as a reference prior to or during employment. Company and base/base cluster situational modifications to this template, and their regular rehearsal of all parts of their protection plans are inspected periodically by the IBCT protection working group. During inspections, the protection working group identifies weak areas in subordinate protection plans, ensures that area of operation protection best practices are incorporated into the plans of the company/battalion, and provides protection-related observations, insights, and lessons learned to subordinate companies of the battalion, and any unit relieving the battalion or subordinate company/platoon within its area of operation.

Note. Key protection tasks conducted within the company's area security operation include area security, CBRN operations, coordination of air and missile defense, personnel recovery operations, explosive ordnance disposal operations, and detainee operations. (Refer to FM 3-96 for additional information on integrating and synchronizing protection tasks.)

Protective Sevices

4-111. The commander may determine that it is necessary (or be required) to provide protective services from within the company to protect high value host nation civil and military authorities or other selected individual(s). This requirement usually occurs when host nation security forces have been so extensively penetrated by hostile elements that they cannot be trusted to provide protective services or when host nation security forces lack the technical skills and capabilities to provide the desired degree of protection. The element(s) tasked to perform protective services for designated personnel receives as much training and specialized equipment as is possible prior to the mission. (Refer to ATP 3-39.35 for additional information.)

Allocation of Combat Power

4-112. Protection of installations or areas of operation (including route and convoy security) by the company requires significant allocation of combat power when a threat beyond organized crime exists. Conducting resupply from one base to another is treated as a tactical action and tracked from the company to the battalion main command post current operations cell. When the battalion establishes a company or platoon response force(s), care is taken so that the response force does not establish patterns when responding to incidents. Establishment of patterns—same route, same combat formation, configuration and order of vehicles, and same response force responding from the same base—allows an enemy to ambush the response force at a point of its choosing.

Note. Dependent on the situation, host nation security forces are involved as much as possible in the performance of the above protection tasks. Host-nation support is important in the variety of services and facilities that can support security and protection of assets within the company's area of operation. Services provided by the host nation relieve the company of the need to provide equivalent capabilities thereby reducing the company's sustainment and protection footprint.

Threat Levels

4-113. Threats within the company's security area operation are categorized by the three levels of defense required to counter them. Any or all threat levels may exist simultaneously in the company's area of operation. Emphasis on base defense and security measures may depend on the anticipated threat level. Within the company's area of operation all elements protect themselves from Level I threats. This includes medical elements although they have reduced defensive capabilities since they can only use their non-medical personnel to provide their own local security. Locating medical elements on bases with other units mitigate this factor.

4-114. The commander positions response forces to respond to a level II threat (enemy force or activities that can be defeated when augmented by a response force) in appreciation of time-distance factors so that no element is left outside supporting distance from a response force. The commander integrates fire support assets into the composition of the response because of the speed at which these assets can react over the extensive distances involved in area security operations. Where possible, host nation security assets constitute part of the response to smooth the interactions of these forces with the civilian population.

Note. A Level III threat is an enemy force or activities beyond the defensive capability of any local reserve or response force. The response to a Level III threat is a tactical combat force, generally established no lower than division level due to the inability to resource at lower echelons. (See ATP 3-21.20, appendix I for additional information on threat levels.)

Survivability

4-115. Precautions should be taken to protect positions, headquarters, support facilities, and accommodations including the construction of obstacles, protective bunkers, fighting positions, and shelters. Company subordinate platoons and elements practice alert procedures and develop drills to occupy positions. Engineer forces enable, when available, survivability needs. Subordinate units maintain proper camouflage and concealment based on the mission variables of METT-TC. Area security forces are vulnerable to personnel security risks from local employees and other personnel subject to bribes, threats, or compromise. The threat from local criminal elements is a constant threat and protection consideration. The most proactive measure for survivability is individual awareness by Soldiers in all circumstances. Soldiers look for things out of place and patterns preceding aggression. Commanders and subordinate leaders ensure Soldiers remain alert, do not establish routines, and maintain appearance and bearing. (Refer to chapter 3 and ATP 3-37.34 for additional information.

Notes. In stability-focused operations, the enemy sniper poses a significant threat to dismounted (or mounted) movement and marches. Counter-sniper drills should include rehearsed responses, reconnaissance and surveillance (R&S), and cover and concealment. The company's rules of engagement provide instructions on how to react to sniper fire, including restrictions on weapons used depending on the circumstances. For example, rules of engagement may allow units to use weapon systems, such as a sniper rifle team, to eliminate a positively identified sniper even in a crowded urban setting because of the reduce possibility for collateral damage. (See ATP 3-21.20, appendix E and ATP 3-21.18 for additional information.)

An enemy improvised explosive device (IED) attack is another major threat to dismounted (or mounted) movement and marches. Prior to the conduct of any area security mission, commanders and subordinate leaders brief personnel on the latest IED threat types, usage, and previous emplacements within an area of operation or along mounted and dismounted movement or march routes. All Soldiers maintain situational awareness by looking for IEDs and IED hiding places. Units vary routes and times, enter overpasses on one side of the road and exit out the other, train weapons on overpasses as the movement passes under, and avoids chokepoints to reduce risk. Units should expect an IED attack at any time during movements and expect an ambush immediately after an IED detonation. Early mornings and periods of reduced visibility are especially dangerous since the enemy has better opportunities to emplace IEDs without detection. (Refer to ATP 3-21.18 and ATP 3-21.8 for additional information.)

Air and Missile Defense

4-116. Offensive and defensive air defense planning considerations continue to apply when the company conducts stability-focused operations. However, the air threat trends toward Group 1 and 2 unmanned aircraft systems (see ATP 3-04.64) employed by enemy forces opposing the company's effort to provide a stable, safe, and secure environment. Air and missile defense sensors and mission command elements external to the battalion provide early warning against aerial attack, and populate the battalion/company common operational picture. Soldiers train in aircraft recognition and on rules of engagement due to multiple factions using the same or similar aircraft, to include international and private organizations employing their own or charter civilian aircraft. (Refer to ATP 3-01.8 for additional information.)

4-117. Counterrocket, artillery, and mortar batteries may be located in or near the company's area of operation to support its area security mission. Battery sensors detect incoming rockets, artillery, and mortar shells and may be used to detect Group 1 and 2 unmanned aircraft systems. The battery's fire control system predicts the flight path of incoming rockets and shells, prioritizes targets, and activates the supported area of operation's warning system according to established rules of engagement. Exposed elements within the area of operation then can take cover and provide cueing data that allows the battery's weapon system to defeat the target before the target can impact the area. The battalion commander clearly defines command and support relationships between counter-rocket, artillery, and mortar elements and the company during planning. (Refer to ATP 3-01.60 for additional information.)

4-118. The company commander and subordinate leaders ensure all passive and active air defense measures are well planned and implemented. Passive measures include use of concealed routes and assembly areas, movement on secure routes, marches at night, increased intervals between elements of the columns, and dispersion. Active measures include use of organic and attached weapons according to the OPORD and unit SOP. Air guard duties assigned to specific Soldiers during dismounted (or mounted) movements and marches give each a specific search area. For movements and marches, seeing the enemy first gives the unit time to react. Leaders understand that scanning for long periods decreases the Soldier's ability to identify enemy aircraft. During extended or long movements and marches, Soldiers are assigned air guard duties in shifts. (Refer to ATP 3-21.18 and ATP 3-21.8 for additional information.)

Force Health Protection

4-119. The nature of area security in support of stability-focused tasks requires the battalion surgeon to stress planning for the provision of preventive medicine, veterinary services, and combat and operational stress control over that inherent in supporting offensive- and defensive-focused tasks. The company area security focused within the conduct of stability-focused tasks interacts with the civilian population of its area of operations to a far greater degree. Under these conditions, the probability of Soldiers exposure to zoonotic diseases, toxic industrial chemicals and other pollutants, and bad food and water increases. The prolonged tours of duty typically associated with these operations and the enemy's use of unconventional weapons, such as mines and suicide bombers, tends to increase psychiatric casualties. The battalion surgeon coordinates the employment of combat stress teams with the chaplain to best meet the needs of Soldiers within the company for stress control. (Refer to FM 3-96 and ATP 4-02.8 for additional information.)

Chemical, Biological, Radiological, and Nuclear Operations

4-120. CBRN operations, measures taken to minimize or negate the vulnerabilities and effects of a CBRN incident, involve a combination of active and passive defense measures to reduces the effectiveness or success of CBRN weapon employment. An effective CBRN defense by the company counters enemy threats and attacks and the presence of toxic industrial materials in its area of operations by minimizing vulnerabilities, protecting friendly forces, and maintaining an operational tempo that complicates enemy or terrorist targeting

4-121. The Infantry rifle company employs key CBRN passive defense activities organized within two overarching CBRN principles (protection and contamination mitigation) to survive and sustain area security operations in a CBRN environment. The commander, in coordination with the battalion staff, integrates these principles regardless of the mission type. (See appendix H for additional information.)

4-122. The commanders considers the requirement for CBRN support if evidence exists that enemy forces or terrorists have employed CBRN agents or have the potential for doing so. A mix of different CBRN units—such as decontamination, hazard response, reconnaissance, and surveillance—are necessary to balance capabilities. The CBRN staff officer at the battalion participates in the intelligence process to advise the commander of commercial and toxic industrial materials in the local area. (Refer to FM 3-96 and FM 3-11 for additional information.)

Convoy Security

4-123. Convoy security is a specialized kind of area security operations conducted to protect convoys. Units conduct convoy security operations anytime there are insufficient friendly forces to secure routes continuously in an area of operations and there is a significant danger of enemy or adversary ground action directed against the convoy. The company may conduct convoy security operations in conjunction with route security operations within its area of operation. Planning includes designating units for convoy security; providing guidance on tactics, techniques, and procedures for units to provide for their own security during convoys; or establishing protection and security requirements for convoys carrying critical assets. Local or theater policy typically dictates when or which convoys receive security and protection. (Refer to ATP 4-01.45 for additional information.)

SUSTAINMENT

4-124. Dependent on the mission variables of METT-TC, sustainment elements may support the company from within its area of operation or from locations outside the area of operation. The threat within the assigned area of operation is generally the major consideration in determining the size and composition of forces (support and operational) arrayed during an area security operation. Support elements (and any other force) within the area of operation must be able to defend themselves against a level I threat, a small enemy force that can be defeated by those units normally operating in the echelon support area, consolidation area, or by the perimeter defenses established by friendly bases and base clusters. The commanders at echelon use a response force to respond to a Level II threat (see paragraph 4-113 on page 4-26). Host nation security forces, when feasible, may be an effective means of reinforcing the security of sustainment elements supporting from within and external to respective areas of operation because of their knowledge of the area, its language, and customs. (See appendix I for additional information.)

Notes. Base and base cluster defense is the cornerstone of successful area security operations, support area, and consolidation area efforts. The application of effective area security for bases and base clusters and their tenant and transient units is achieved by developing a comprehensive plan linked to site selection, layout, and facility design. ATP 3-21.20 appendix I outlines the organization of forces, control measures, and considerations pertaining to planning, preparing, and executing base and base cluster operations.

The commander assess the need for providing protection to contractors operating within the company's area of operation and designate forces to provide security to them when appropriate. The mission of, threat to, and location of each contractor determines the degree of protection needed. Protecting contractors involves not only active protection to provide escort or perimeter security, but also training and equipping of contractor personnel in self-protection (protective equipment and weapons). Under certain conditions, contract security forces may be another means of reinforcing the security of sustainment elements supporting from within and external to the company's area of operation, and base and cluster defenses.

PREPARATION

4-125. During preparation activities, the Infantry rifle company continues to plan, train, organize, and equip for area security missions within its area of operation. The conduct of preparation activities in support of stability-focused tasks is essentially the same as for offensive- and defensive-focused tasks. (See ADRP 5-0 for a complete discussion.) However, factors that distinguish stability-focused tasks are the increased requirement for interagency coordination at company level and below and the demands on the company commander and subordinate leaders to perform tasks or functions outside their traditional scope of duties. The commander's realignment of organizations and functions during operational area security reflect carefully weighing and acceptance of risk (for example—economy of force) to reflect the demands of the company's area security mission.

MISSION COMMAND

4-126. Stability-focused tasks within area security operations tend to be more complex and involve to a greater extent unified action partners. Company preparatory activities stress authoritative relationships established between the company and the other military service components or agencies that operate in assigned or projected areas of operation. Though difficult, the company commander strives to achieve unity of command, spending a great deal of effort during preparations to clarify the roles and functions of the various, often completing agencies. The commander, when required, modifies standard command and support relationships to meet the requirements of the situation.

Inherent Responsibilities

4-127. The company commander has inherent responsibilities—including the requirements to clarify the mission; to determine the controlling legal and policy authorities; and to organize, direct, sustain, and care for the organizations and individuals for whom they provide the effort in interagency and multinational operations. The commander serves as the unit's chief engager, responsible for informing and influencing audiences inside and outside the organization. For example, the commander often integrates host nation security forces and interagency activities with subordinate platoons and down to the individual Soldier level for support units. With this in mind, obtaining the necessary numbers of scalable communications packages and linguist to support the company's planned operations and training are important preparatory activities.

Continue to Coordinate and Conduct Liaison

4-128. Coordinating and conducting liaison ensures that the commander and subordinate leaders internal and external to the company understand their unit's role in upcoming operations, and that they are prepared to perform that role. In addition to military forces, many civilian organizations may operate in the same area of operation. Their presence can both affect and be affected by company operations. Continuous coordination and liaison between the command and unified action partners helps to build unity of effort, especially with civilian organizations because of the variety of external organizations and the inherent coordination challenges.

4-129. Available resources and the need for direct contact between sending and receiving headquarters determines when to establish liaison. Establishing and maintaining liaison enables direct communications between the sending and receiving units or headquarters beginning with planning and continue through

preparing and executing, or it may start as late as execution. Commander coordinates with the battalion staff, higher, lower, adjacent, supporting, and supported units and civilian organizations. Coordination includes, but is not limited to the following:

- Sending and receiving liaison teams.
- Establishing communication links that ensure continuous contact during execution.
- Exchanging standard operating procedures.
- Synchronizing security operations with R&S plans to prevent breaks in coverage.
- Facilitating civil-military coordination among those involved.

Continue to Build Partnerships and Teams

4-130. As part of the company's coordination efforts, the commander may establish or utilize (coordinated from battalion) special negotiation elements that move wherever they are needed to build partnerships or teams and/or diffuse or negotiate confrontations within the company area of operation. Echeloned elements partner with linguist support and personnel with the authority to negotiate on behalf of the appropriate level chain of command. As the company and these elements conduct preparatory activities, subordinate units of the company rehearse activities supporting these operations and when required ensures that these elements have access to required transportation and communications assets.

Initiate the Information Network

4-131. During preparation, the information network is tailored and engineered to meet the specific needs of each operation and partnered participant. This includes not only communications, but also how the commander expects information to move between and be available for the commander and subordinate leaders and their units within an area of operation. During preparation, the company and subordinate units prepare and rehearse the information network supporting the plan. Network considerations include the following:

- Management of available bandwidth.
- Availability and location of data and information.
- Positioning and structure of network assets.
- Tracking status of key network systems.
- Arraying sensors, weapons, and the information network to support the concept of the operation.

Note. Defining the ground rules for sharing unclassified information between the Infantry rifle companies of the battalion, other military forces and foreign governments, nongovernmental organizations and international agencies according to higher commander policy is an important function of the division and IBCT knowledge management and foreign disclosure officers. The division G-6 and IBCT signal staff officer (S-6) staff sections are responsible for disseminating and implementing those ground rules.

MOVEMENT AND MANEUVER

4-132. Success in area security operations hinge on protecting the company forces within the area of operation and their ability to act in support stability-focused tasks. The positioning and repositioning of forces address the early detection and defeat of enemy forces attempting to operate within the company's area of operation. Enemy attacks within the company's area security range from individual saboteurs and terrorist acts to enemy insurgent operations.

Assign and Define Responsibility

4-133. During preparation activities, the commander assigns and defines responsibilities for the security of units within the company's area of operation and/or respective base or base cluster. Subordinate areas of operation and/or base and base cluster commanders are responsible for the local security of their respective area and/or base and base cluster. Individual area of operation and base commanders designate protection

standards and defensive readiness conditions (in coordination with the battalion's security plan) for tenant units and units transiting through their area or base. The commander coordinates with the battalion main command post to mitigate the effects of security operations on the primary functions of units located within the area of operation.

Degree of Risk

4-134. The degree of risk the commander accepts within an area security operation, regarding the enemy threat, invariably passes to the subordinate unit leaders of the company assigned an area security mission. For example, a company subordinate unit leader moves security forces to decrease the threat's impact on logistics and medical units to support the company's continued operations at the anticipated level. When available and to not divert any company/battalion assets from their primary area security missions, military police (see ATP 3-39.30) or other available security force (possibly host nation) screen or guard friendly command post facilities and critical sites from enemy observation or attack. Company subordinate unit security plans, to protect command posts, critical sites, base, base clusters, and security corridors, are rehearsed and inspected by the commander. These plans address support unit, site, and base and convoy defense against Level I threats. Plans also address response force operations directed against Level II and Level III threats (see paragraphs 4-113 and 4-114 on page 4-26).

Terrain Management

4-135. Terrain management is the process of allocating terrain by establishing areas of operation. The commander designates assembly areas and specifies locations for units and activities to deconflict movements and repositioning of units, and other activities that might interfere with each other. The commander and subordinate unit leaders assigned an area security mission manage terrain within their boundaries and identify and locate key terrain in the area. The battalion operations officer, with support from others in the staff, deconflict operations, control movements, and deter fratricide as companies move to execute planned area security missions. The commander and staff also track and monitor unified action partners and their activities in the company's area of operation.

Terrain Preparation

4-136. Terrain preparation starts with the situational understanding of the terrain through proper terrain analysis. Terrain preparation involves shaping the terrain to gain an advantage, such as improving cover, concealment and observation, fields of fire, new obstacle effects through reinforcing obstacles, or mobility operations for initial positioning of forces. Terrain preparation can make the difference between the area security operation's success and failure. The commander must understand the terrain and the infrastructure of their area of operations as early as possible to identify potential for improvement and establish priorities of work, and to begin preparing the area.

INTELLIGENCE

4-137. As the company prepares, the commander takes every opportunity to improve situational understanding prior to and during operations specific to aggressive and continuous collection. The commander executes collection, in coordination with the battalion S-2 and S-3, focused on requirements tied to the execution of tactical missions [normally intelligence operations (undertaken by military intelligence units and Soldiers), reconnaissance, surveillance, and security operations], early in planning and continues it through preparation and execution.

Note. *Intelligence operations* are the tasks undertaken by military intelligence units and Soldiers to obtain information to satisfy validated requirements (ADRP 2-0).

Information Collection

4-138. Within the company area of operation, the commander continuously plans, tasks, and employs collection forces and assets, for example the company's Raven UAS team, to collect timely and accurate

information as part of the battalion collection effort. Collection helps to satisfy the CCIRs, in addition to other information requirements. Collection efforts within the company worked through the battalion intelligence cell (specifically the intelligence staff officer) to the IBCT intelligence cell. Intelligence cells, in coordination with the IBCT provost marshal, work to develop a readily searchable database—including biometric data if possible—of potential insurgents, terrorists, and criminals within the company's area of operation. This information is use by patrols to identify individuals, according to applicable guidance, when encountered during civil reconnaissance patrols (see ATP 3-21.8) and other operations. (Refer to appendix B for additional information.)

Analysis and Dissemination of Information and Intelligence

4-139. *Intelligence analysis* is the process by which collected information is evaluated and integrated with existing information to facilitate intelligence production (ADRP 2-0). The commander, in coordination with the battalion commander and staff, refine security requirements and plans (including counterterrorism and counterinsurgency) as answers to various requests for information become available. Timely, relevant, accurate, predictive, and tailored intelligence analysis; reporting; and products enable the company commander to determine the best locations to place area security measures and to conduct area security missions in support of stability-focused tasks. Rehearsal of area security measures and missions enable subordinate units to understand how these measures and missions fit into the company's area security operation, and that of the host nation when applicable. (Refer to ATP 2-19.4 for additional information.)

PROTECTION

4-140. As preparation activities continue, the commander's situational understanding may change over the course of the area security operation, enemy actions may require revision of the security plan, or unforeseen opportunities may arise. Protection assessments made during planning may be proven true or false. Intelligence analysis from R&S may confirm or deny enemy actions or show changed security conditions in the area of operations because of shaping operations. The status of friendly forces may change as the situation changes. In any of these cases, the commander identifies the changed conditions and assesses how the changes might affect upcoming area security missions. Significant new information requires commanders to make one of three assessments listed below regarding the area security plans:

- The new information validates the plan with no further changes.
- The new information requires adjustments to the plan.
- The new information invalidates the plan, requiring the commander to reframe and develop a new plan.

4-141. Protecting information during preparation activities is a key factor in protecting company subordinate units and the overall battalion area security operation. The secure and uninterrupted flow of data and information allows the company to multiply its combat power and synchronize battalion and other unified action partner capabilities and activities. The need to be candid and responsive to requests for information balance the need to protect operational information, such as troop movements, security plans, and vulnerabilities identified during preparation (inspections and rehearsals). Working closely with all partners develop the essential elements of friendly information to preclude inadvertent public disclosure of critical or sensitive information. Information protection includes cybersecurity, computer network defense, and electronic protection. All three are interrelated. (Refer to ADRP 3-37 for additional information.)

SUSTAINMENT

4-142. Resupplying, maintaining, and the issuing of supplies or equipment occur during temporary and long term area security commitments. Repositioning of sustainment assets also occur. During preparation, the company XO, with the support of the company ISG and supply sergeant, takes action to optimize means (force structure and resources) for supporting the commander's area security plan. These actions include, but are not limited to, identifying and preparing, in coordination with the battalion S-4, bases, host-nation infrastructure and capabilities, contract support requirements, and lines of communications. Sustainment actions will also include forecasting and building logistics packages as well as understanding endemic health and environmental factors. Integrating environmental considerations will sustain vital resources and help reduce the logistics footprint for the company. The XO focuses on identifying the resources currently

available and ensuring access to them. During preparation, the XO continues to support planning (branch and sequel development) and the targeting (lethal and nonlethal) process.

EXECUTION

4-143. Though close combat dominance remains the principal means to influence enemy actions, the conditions and standards of performance are modified by the mission variables of METT-TC and the more restrictive rules of engagement required during the conduct of stability-focused tasks. The general scope of company missions supporting stability-focused tasks include security operations, patrols and patrolling (reconnaissance and combat), intelligence operations (for example human intelligence assets from outside the Infantry battalion), surveillance (ground forces and aerial assets [Raven UAS team in the company]), convoy security, and Soldier and leader engagements. Additionally, missions often require the establishment of static security posts, base and base clusters, searches, roadblocks, checkpoints, observation posts, and combat outposts supports the conduct of stability-focused tasks. The condition set surrounding each mission differs and requires detailed analysis and planning.

Apportionment of Combat Power and Dedicated Assets

4-144. The company commander, during area security operations, apportions combat power and dedicates assets to protection tasks based on an analysis of the operational environment, the likelihood of enemy action, and the relative value of friendly resources and populations. Although all resources have value, the mission variables of METT-TC make some resources, assets, or locations more significant from enemy or adversary and friendly perspectives. The commander relies on risk management (see appendix B) and other assessment methods to facilitate decision-making, issue guidance, and allocate resources. Criticality, vulnerability, and recoverability are some of the most significant considerations in determining protection priorities that become the subject of the commander's guidance and the focus of the company's area security efforts.

Notes. Within the illustration below, the IBCT conducts area security operations to establish stability after open hostilities cease. With the complex and dynamic nature of an area security operation, it is important to remember that area security tasks and activities change from day to day, based upon the mission variables of METT-TC.

The illustration introduces fictional scenarios (nonlinear and noncontiguous areas of operation) as discussion vehicles for the conduct of area security operations. The illustration provides a brief overview of the IBCT and subordinate battalions and squadron missions, but primarily focus on the companies of the Infantry battalion conducting area security operations within their assigned area of operations.

Illustration of an Infantry Brigade Combat Team Area Security Operation (Nonlinear and Noncontiguous Areas of Operation)

4-145. In this illustration, the IBCT commander emphasizes the conduct of area security by the IBCT when subordinate battalions do not share a boundary (noncontiguous areas of operation). The IBCT headquarters, usually the current operations integrating cell within the main command post, retains responsibility for the area not assigned to subordinate battalions. (Note: for the same reason, when subordinate companies do not share a boundary [noncontiguous areas of operation], the battalion headquarters, usually the current operations integrating cell within the main command post, retains responsibility for the area not assigned to subordinate companies.) Key responsibilities of the IBCT and battalions, in support of subordinate companies, include area security; information collection, integration, and synchronization; and clearance of fires within those portions of the IBCT's area of operation not assigned to subordinate battalions, likewise for subordinate companies. (This is in addition to the other six doctrinal responsibilities of area owning unit commanders that includes terrain management, civil affairs operations, movement control, personnel recovery, airspace control of assigned airspace, and minimum-essential stability tasks [see ADRP 3-90 for a discussion of each responsibility]).

4-146. The following scenario, used for discussion purposes, represents one way the IBCT, its subordinate battalion and companies, may employ forces during the conduct of an area security operation in nonlinear and noncontiguous areas of operation. In this scenario, the IBCT's area security operation spans an area of operation approximately 95 kilometers wide and 70 kilometers in length. The mountain range separating Infantry Battalion 1 and 2 spans an area approximately 20 kilometers wide. Example IBCT area security task organization and concept of operation follows:

Infantry Brigade Combat Team

4-147. The IBCT conducts area security, across two provinces separated by a mountain range (unassigned area within the IBCT's area of operation), to support host-nation operations. (See figure 4-2.) The IBCT main command post positions in the eastern province within *forward operating base (FOB)*—an airfield used to support tactical operations without establishing full support facilities. (JP 3-09.3)—Talon. Infantry battalion 2, the cavalry squadron, the brigade engineer battalion, and the brigade support battalion headquarters collocate with the IBCT headquarters elements in FOB Talon. The IBCT is task organized with one field artillery battery (M777) positioned within FOB Talon. An explosive ordnance disposal company, positioned in FOB Talon, supports operations across the IBCT's area of operation. A Special Forces Detachment locates in the western province to support division operations within and external to the IBCT's area of operation. An Infantry rifle platoon augments the detachment to assist in base defense and day-to-day operations. Company D (from Infantry Battalion 2), with two assault platoons, establishes IBCT reserve in the eastern province. Company D's, IBCT reserve, be prepared mission is to respond to activities within unassigned areas of the IBCT and Infantry Battalion 2. Infantry Battalion 1 is assigned an area of operation in the western province. Infantry Battalion 3 is under division control (not illustrated).

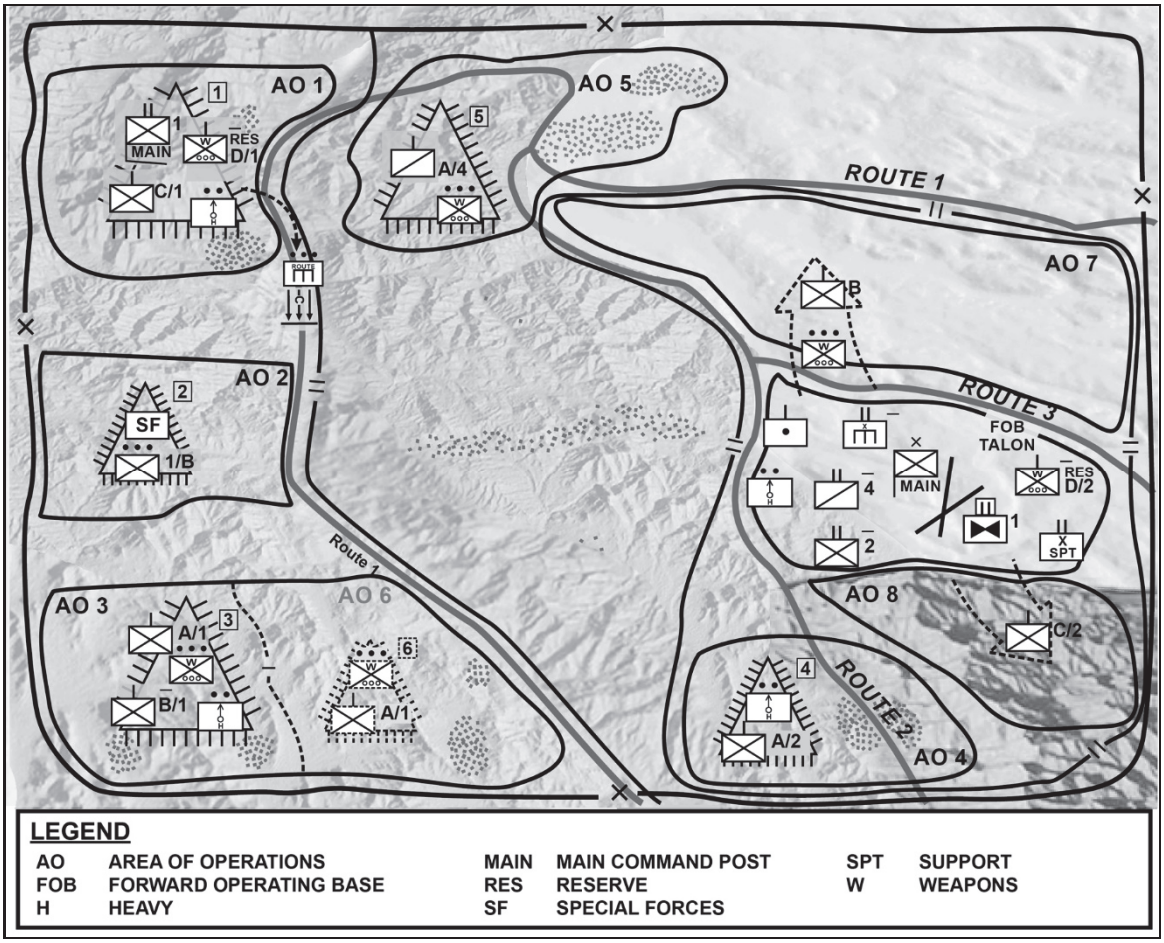

Figure 4-2. IBCT area security operation (nonlinear and noncontiguous areas of operation), example

Cavalry Squadron

4-148. Cavalry squadron commander and staff, located FOB Talon, conduct mission command for reconnaissance, surveillance, and security operations within the unassigned areas (specifically the mountain range separating the eastern and western provinces) of the IBCT as required. Troop A occupies Combat Outpost 5 with attached assault platoon, conducts area security within Area of Operation 5. Troop B, response force, positions at the airfield on FOB Talon. Troop C supports route clearance operations along route 2, on order, conducts reconnaissance and security operations within the unassigned areas of the IBCT.

Aviation Task Force 1

4-149. Aviation task force 1, direct support (attack and assault aircraft) to the IBCT, conducts air operations in support of the IBCT's area security operation. The IBCT commander, assisted by the combat aviation brigade commander, brigade aviation officer, air liaison officer, air defense and airspace management officer, and aviation task force commander, applies the appropriate level of combat power necessary to achieve mission success across the IBCT's area of operation. When the aviation task force cannot resource mission requirements, the brigade aviation element coordinates with the division joint air ground integration center (see ATP 3-91.1) for the additional aviation assets. (Refer to FM 3-96 and FM 3-04 for additional information.)

Note. The ability of the Army aviation commander, in coordination with the ground commander, to exercise mission command is essential to the execution of air-ground operations (see appendix D). The optimal establishment of command posts, integration of the air and ground staffs, and utilization of mission command systems are integral to both commanders' ability to understand, visualize, describe, direct, lead, and assess operations. Air-ground operations are complicated more when host nation and multinational partners participate in, or are in support of area security operations. Army aviation facilitates mission command with Airborne command and control systems and communication relay packages, a key enabler in area security operations. (Refer to ATP 3-04.1 for additional information.)

Special Forces (Operational Detachment Alpha)

4-150. Operational Detachment Alpha, with a coordinating relationship to the IBCT, establishes Combat Outpost 2 and is responsible for Area of Operation 2 within the western province. Company B, Infantry Battalion 1 attaches one Infantry rifle platoon to the detachment. Specific tasks, although not inclusive, in support of host nation operations include special reconnaissance, high value target extraction, and security force assistance to host nation special forces within the IBCT's area of operation.

Note. *Special reconnaissance* is reconnaissance and surveillance actions conducted as a special operation in hostile, denied, or politically sensitive environments to collect or verify information of strategic or operational significance, employing military capabilities not normally found in conventional forces. (JP 3-05).

Brigade Engineer Battalion

4-151. The brigade engineer battalion headquarters, brigade signal company, and military intelligence company collocate in FOB Talon. A route clearance package from the brigade engineer battalion locates Combat Outpost 1, transitions to Combat Outposts 2 and 3 based upon clearance efforts for a given mission. Capabilities provided by the brigade engineer battalion, although not inclusive, include a CBRN reconnaissance platoon, an analysis and integration platoon (human intelligence), a multisensor ground platoon, and a tactical unmanned aerial system platoon. (Refer to ATP 3-34.22 for additional information.) As illustrated in this example, the brigade engineer battalion is responsible for FOB Talon base defense mission. IBCT headquarters and headquarters company is task organized within the brigade engineer battalion and assumes the duties and responsibilities (what is commonly referred to as the mayor cell) to coordinate for basic life support within FOB Talon.

Note. The route clearance platoon from the brigade engineer battalion provides for its own security during clearance operations. As part of a larger effort with an increased threat, an Infantry rifle company or platoon conducts route clearance operations with an attached route clearance package.

Brigade Support Battalion

4-152. Brigade support battalion, located FOB Talon, provides direct support to subordinate units within the IBCT area of operation. Company A, distribution company, conducts replenishment operations. Company B, field maintenance company provides field maintenance support, to include recovery. Company C, brigade support medical company provides Role 1, unit level medical care, and Role 2, basic primary care, Army Health System support. The brigade support battalion provides mortuary affairs for the IBCT.

Infantry Battalion 2

4-153. Infantry Battalion 2, responsible for assigned area of operation in the eastern province, conducts area security and maintains lines of communication running north to south along Route 2. (See figure 4-2 on page 4-34.) Battalion main command post locates FOB Talon. Battalion mortars operate in split section with one mortar section located FOB Talon and one mortar section located Combat Outpost 4. Rifle companies, illustrated in the example, are responsible for area security within their areas of operation in support of host nation operations. Company A occupies Combat Outpost 4. Company B, with attached assault platoon, operates out of FOB Talon to conduct operations in Area of Operation 7. Company C operates out of FOB Talon to conduct operations in Area of Operation 8. Company D, with two assault platoons, establishes IBCT reserve in the eastern province. Company B and Company C based out of FOB Talon supports, as required, the brigade engineer battalion's base defense of FOB Talon.

Infantry Battalion 3

4-154. Infantry Battalion 3, under division control, is the tactical combat force (see note on page 4-25 for information on the tactical combat force) for level III threats to divisional assets (not illustrated).

Infantry Battalion 1

4-155. Infantry Battalion 1, responsible for assigned area of operation in the western province, conducts area security and maintains lines of communication running north to south along route 1. (See figure 4-2 on page 4-34.) Battalion main command post locates in Combat Outpost 1. Battalion mortars operate in split section with one mortar section (two mortars) located Combat Outpost 1 and one mortar section (two mortars) located Combat Outpost 3. The battalion, augmented with a route clearance package (operates from Combat Outpost 1), prevents the enemy from influencing operations along route 1 within the IBCT's area of operation. Route clearance package transitions to Combat Outposts 2 and 3 based upon clearance efforts for a given mission. Example company area security task organization and concept of operation follows:

Company B

4-156. Company B (minus), Combat Outpost 3, with two rifle platoons and one assault platoon is responsible for assigned Area of Operation 3 in the western province. Company conducts area security and maintains lines of communication running north to south along route 1. First Platoon, augments Special Forces Detachment located Combat Outpost 2, assists in base defense and day-to-day operations. Battalion mortar section (2 mortars) collocate in Combat Outpost 3. Company A initially collocates with Company B in Combat Outpost 3 before transitioning to establish a combat outpost in Area of Operation 6.

Company C

4-157. Company C, Combat Outpost 1, responsible for assigned Area of Operation 1 in the western province. Company conducts area security and maintains lines of communication running north to south along route 1. Battalion main command post and battalion mortar section (2 mortars) collocate in Combat Outpost 1. Company D (minus), with two assault platoons, collocates in Combat Outpost 1.

Company D

4-158. Company D, with two assault platoons, establishes battalion reserve in the western province. Company D be prepared mission is to respond to activities within the unassigned areas of the battalion. Company D attaches one assault platoon (Assault Platoon 3) to Company B and one assault platoon (Assault Platoon 4) to Company A.

Notes. Company A scenario, used for discussion purposes, represents one way the Infantry rifle company may employ forces during the conduct of an area security operation. Prior to Company A's collocation with Company B at Combat Outpost 3, the company conducted R&S, and security operations within IBCT unassigned areas (mountain range separating the eastern and western provinces) specifically east of Route 1 along Area of Operation 3. After the conduct of these operations, Company A withdrew from the western province to FOB TALON in the eastern province (see figure 4-2 on page 4-34) to reconstitute and prepare for a new mission in the western province.

Upon the receipt of a new mission, Company A commander conducted a thorough mission analysis during troop leading procedures. (See appendix B for more information for information on company troop leading procedures.) The company completed troop leading procedures then positioned at FOB Talon airfield. Company task organization included one assault platoon and one combat engineer squad. On order, Company A, with attachments, conducted an air movement from FOB Talon to Combat Outpost 3. Company A establishes positions in Combat Outpost 3 collocating again with Company B. Company A conducts R&S missions from Combat Outpost 3 into and throughout Area of Operation 6. R&S missions enable the positioning of Combat Outpost 6 within Area of Operation 6. On order, Company A conducts movement to establish Combat Outpost 6 in assigned Area of Operation 6 to facilitate area security operations alone Route 1 with host nation forces.

Company A's movement to establish Combat Outpost 6 enables the establishment of a new base defense zone for host nation forces within Area of Operation 6. Additionally, the establishment of Combat Outpost 6 enables partnering with host nation forces during area security operations throughout Area of Operation 6. The establishment of the base defense zone within Area of Operation 6 enables company level security force assistance activities, increasing the effectiveness of host nation forces within the western province.

A week prior to Company A's operation, the IBCT commander, in coordination with Battalion 1 and Squadron 4 commanders, planned for and conducted operations to deceive the enemy of the IBCT's main effort in the south to establish a permanent combat outpost in Area of Operation 6. Deception operations were limited in nature involving Combat Outposts 1 and 4 in the north and were concluded once Company A established its initial perimeter for the Combat Outpost 6. Combat Outpost 6 was required to counter increased enemy activities originating from Area of Operation 6.

Company A

4-159. Company A, positioned Combat Output 3-Area of Operation 3, receives the order to establish Combat Outpost 6 to better support current security area operations within Area of Operation 6. During planning for the march (mounted march [see appendix F for information on mounted operations] conducted during limited visibility) to establish Combat Outpost 6, Company A and Company B commanders, and Base Defense Zone (BDZ) 3 host nation forces commander deconflict fire support and coordinate to resolve potential issues (for example, Company A's mounted march with host nation forces) that may arise during Company A's movement.

Note. Host nation concept of operation—one platoon size element (acting as liaison/quartering party) conducted mounted march from BDZ 3 with Company A to establish Combat Outpost 6. Follow-on mission, remainder of host-nation company conducts mounted march from BDZ 3 to establish BDZ 6 once Combat Outpost 6 is established and fully operational. Host national platoon acts as liaison from Combat Outpost 6 in support of the host nation's follow-on mission.

Company A—Area Security Operation (Mounted March and Linkup), Example

4-160. Three days prior to Company A's mounted march to establish Combat Outpost 6, First Platoon conducted mounted march to host nation force BDZ 3, adjacent to Combat Outpost 3. While at BDZ 3, First Platoon coordinated with the host nation forces that were to establish BDZ 6 in Area of Operation 6. Preparations for mounted march with the host nation included rehearsing procedures to linkup en route with Company A during the march to establish Combat Outpost 6. Company A, and host nation forces guided by First Platoon, start point time was end of evening nautical twilight (EENT) on the night of the movement. Company A and host nation forces conduct mounted march through Area of Operation 3 into Area of Operation 6 with—

4-161. First Platoon, mounted march from its position in BDZ 3, guides host nation force platoon to Linkup Point 1 to facilitate (en route linkup-two moving forces) Company A linkup (see paragraph 2-183 on page 2-49 information on linkup operations) with the host nation force. (See figure 4-3.) Company A halts short of Linkup Point 1. Company A's lead element moves to and establishes Linkup Point 1. Prior to reaching Linkup Point 1, lead elements of First Platoon, guiding host nation platoon, stops short of the linkup point. One squad from First Platoon moves forward to make contact (long range recognition signal-FM voice and near range recognition signal-red filtered flash light) with Company A's lead element. Once contact is made, one fire team from the squad making the linkup moves back to bring the rest of First Platoon and the host nation platoon forward. With linkup complete, Company A continues mounted march into Area of Operation 6 with: Second Platoon first in order of march followed by Assault Platoon 4, Third Platoon, the company mortar section, and the host nation platoon follow by First Platoon.

Note. Nontraditional threats, such as the insider threat, can undermine area security activities as well as the cohesion with partnering force. See paragraphs 4-211 on page 4-56 and 4-224 on page 4-58 for a discussion on insider threats.

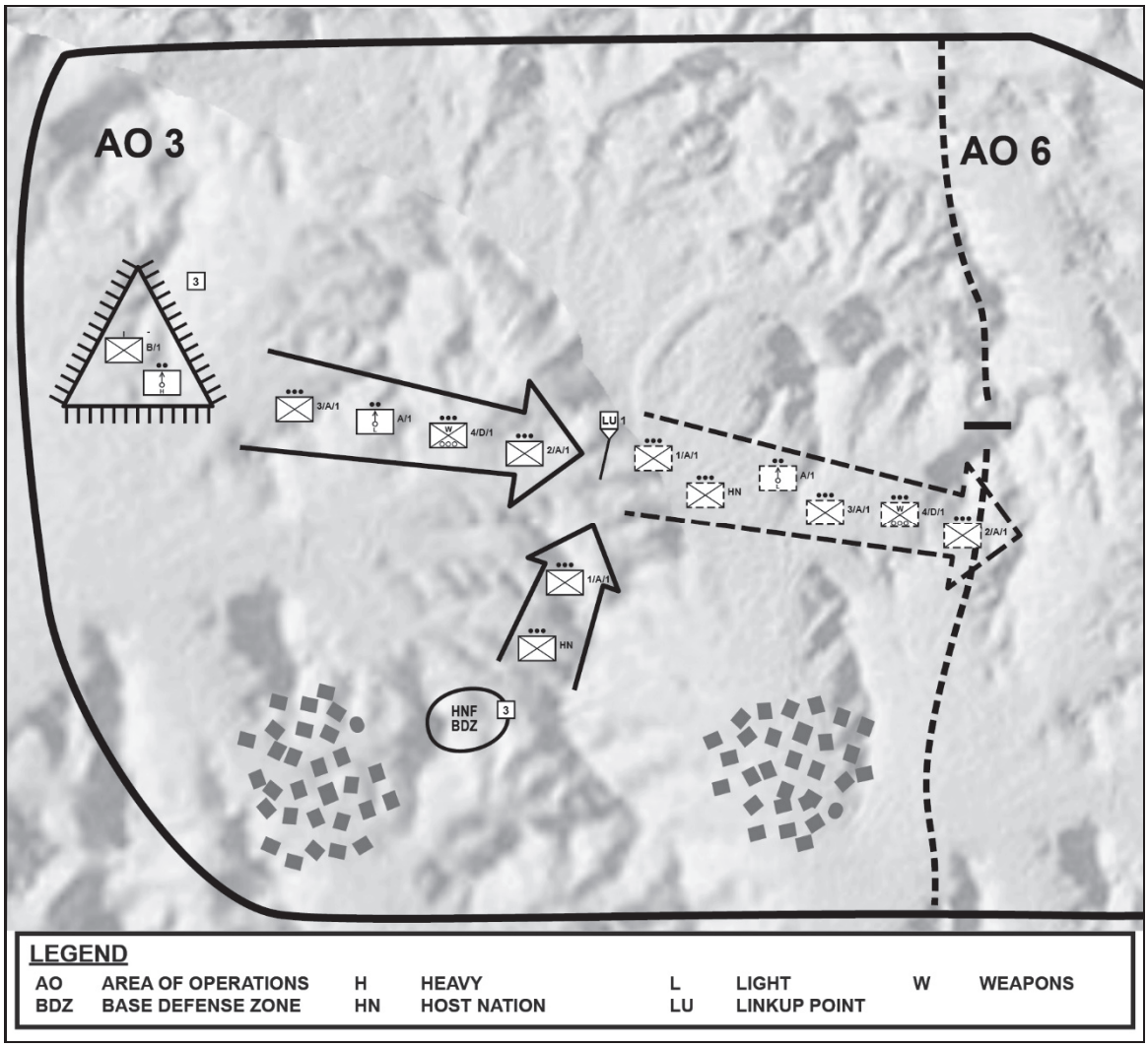

Figure 4-3. Company area security operation (mounted march and linkup), example

Company A—Area Security Operation (Establish Overwatch, Battle Position 5), Example

4-162. Company A conducts mounted march through Release Point 1 to establish Combat Outpost 6 within Area of Operation 6. (See figure 4-4 on page 4-40.) As Company A approaches Release Point 1, Assault Platoon 4 and mortar section prepare to move along Axis Green to establish overwatch, Battle Position 5 to the northwest of proposed combat outpost in Area of Operation 6. As assault platoon and mortar section deploy along Axis Green, Second Platoon halts once it clears Release Point 1. Third Platoon closes on Second Platoon then continues movement to Release Point 2. Company A (minus), if necessary, halts prior to Release Point 2 until Assault Platoon 4 and mortars establish Battle Position 5.

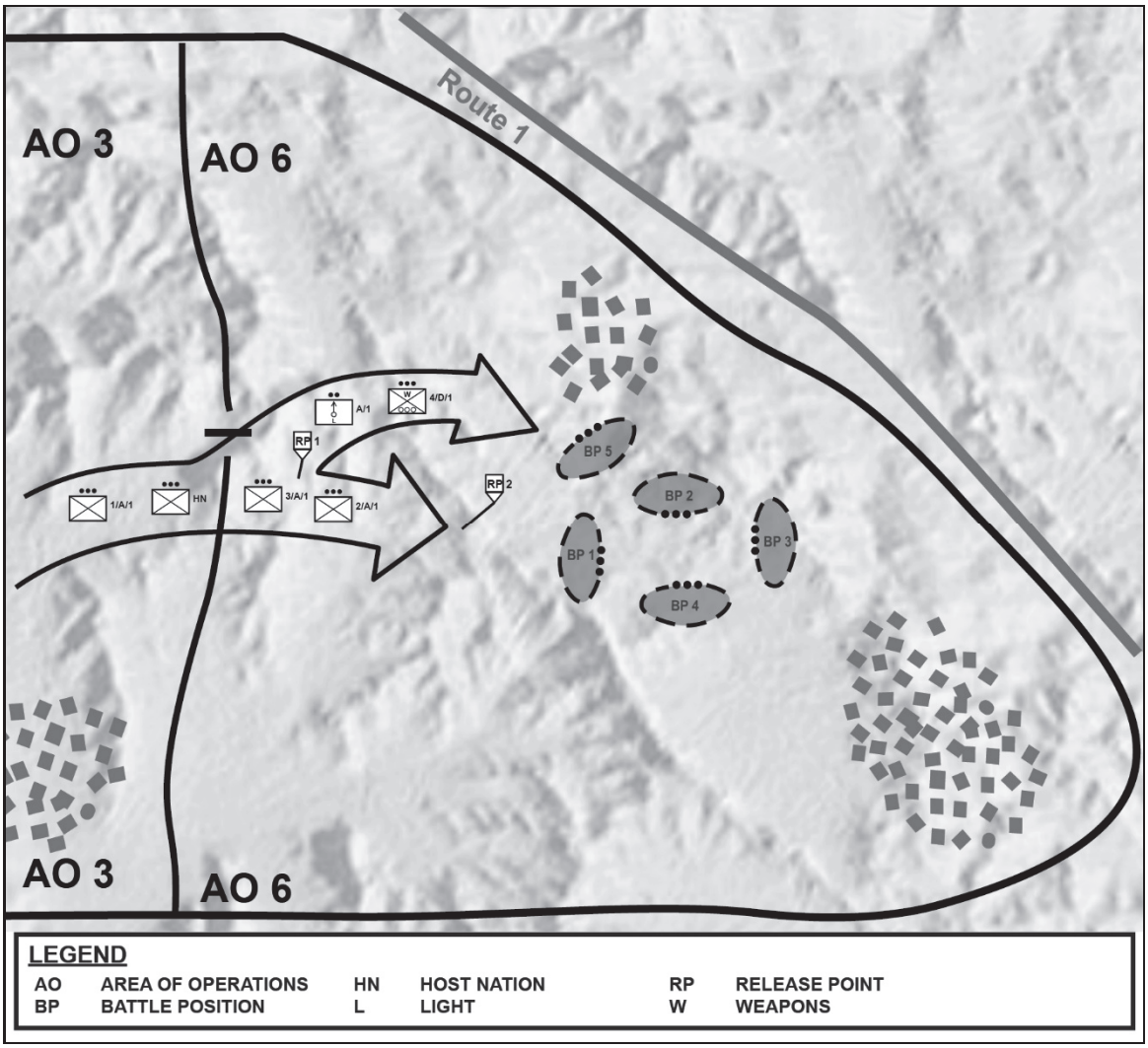

Figure 4-4. Company area security operation (actions Release Point 1), example

Company A—Area Security Operation (Establish Initial Perimeter for Combat Outpost 6), Example

4-163. Once overwatch position (Battle Position 5) established, Company A clears (see figure 4-5) to establish the initial perimeter for Combat Outpost 6 with—Second Platoon (lead element) moves through Release Point 2, clears to Battle Position 2. Third Platoon and host nation platoon move through Release Point 2, clears to Battle Position 3 and Battle Position 4, respectively. First Platoon moves through Release Point 2, establish Battle Position 1.

Figure 4-5. Company area security operation (actions Release Point 2), example

4-164. Once the initial outer perimeter is established for the combat outpost, Company A improves positions internal to the combat outpost. (See figure 4-6 on page 4-42.) The host nation platoon, during this period, is pulled off the perimeter to occupy an assemble area to begin preparations for the follow-on mission (establishment of BDZ 6) within Area of Operation 6. Preparations include—R&S of propose location for the BDZ and the plan for and occupation by the host nation platoon's parent company.

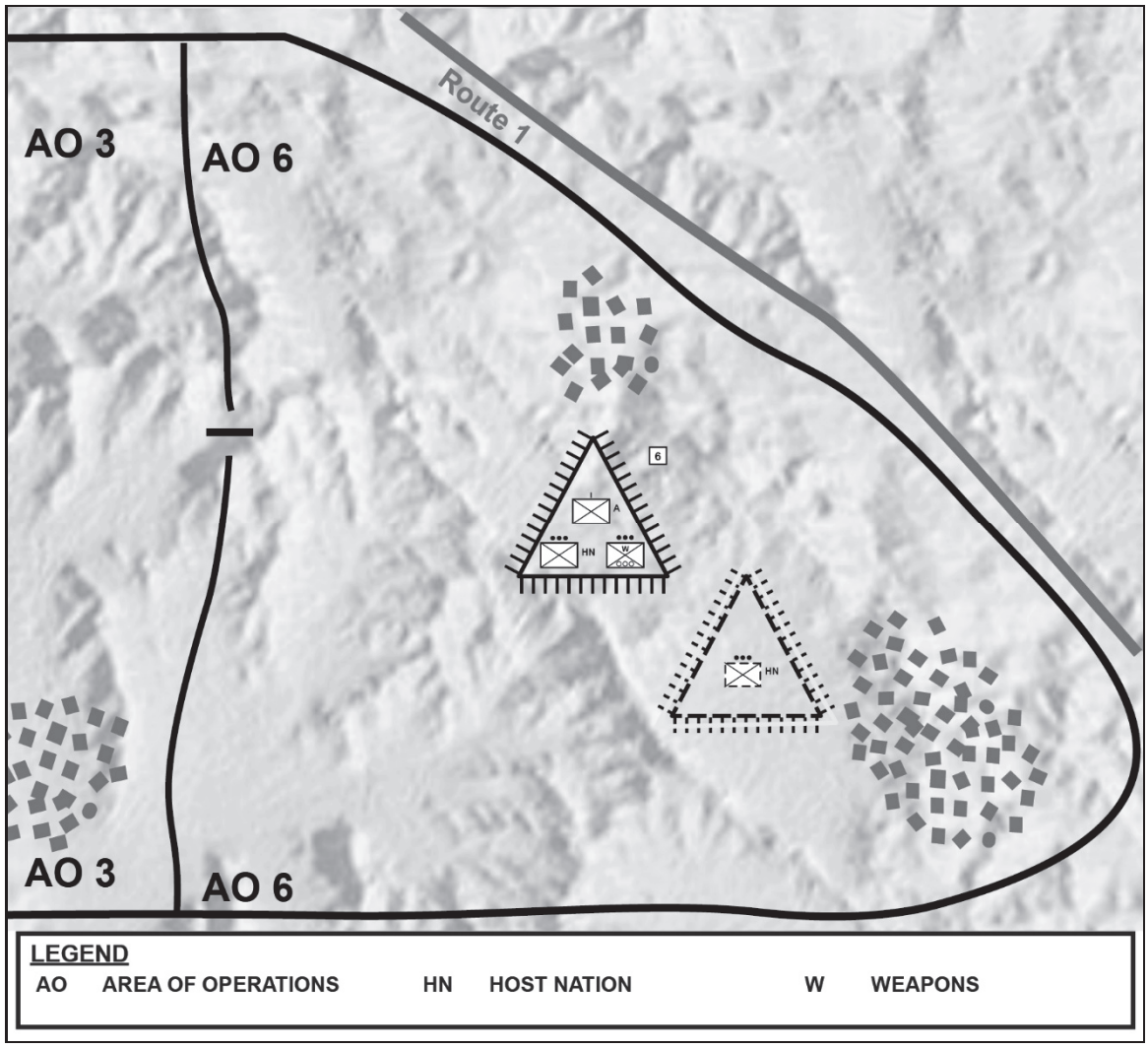

Figure 4-6. Company area security operation (follow-on mission), example

ILLUSTRATION OF AN AREA SECURITY (NONLINEAR AND CONTIGUOUS AREAS OF OPERATION)

4-165. In this illustration, battalion areas of operation within the IBCT's area security mission do not share a boundary. The IBCT retains responsibility for the area not assigned to subordinate battalions. The IBCT commander assigned each battalion an area of operation (noncontiguous areas of operation) in the central province to conduct area security and maintain lines of communication running within the central province. Infantry Battalion 1 (see figure 4-7) positioned in the center; Infantry Battalions 2 and 3 (not illustrated) positioned in the eastern and western portions, respectively; and the cavalry squadron positioned in the northern portion of the central province execute area security activities within the IBCT's area of operation. The IBCT main command post locates, Base (see ATP 3-21.20, appendix I for information on base operations) Gecko, within Infantry Battalion 1 area of operation. IBCT headquarters and headquarters company assumed the duties and responsibilities (commonly referred to as the mayor cell) to coordinate for basic life support within Base Gecko. The IBCT enables subordinate battalion operations from Base Gecko with the necessary enablers to augment combat power within battalion areas of operation. Critical area security enablers, although not inclusive, include the following:

- Route clearance packages.
- Intelligence operations, for example human intelligence teams.

- Provincial reconstruction teams.
- Close air support.
- Army aviation rotary-wing and unmanned aircraft systems (attack and reconnaissance)
- One system remote viewing terminal, real-time unmanned aircraft system or manned aircraft video.

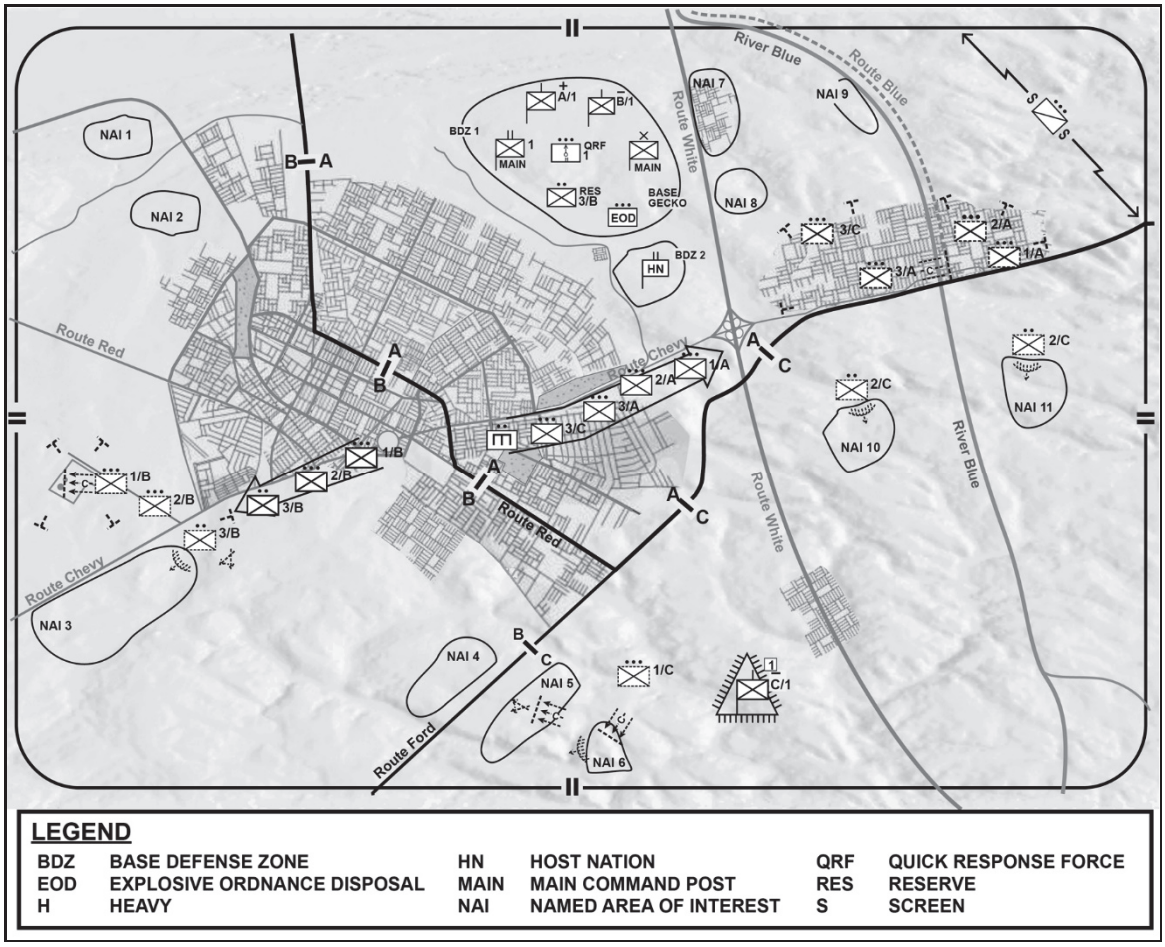

Figure 4-7. Battalion area security operation (nonlinear and contiguous areas of operation), example

Battalion 1—Support to Host Nation Operations

4-166. Infantry Battalion 1 conducts area security in support of host nation operations. The Battalion, minus Company C, stages out of Base Gecko adjacent to the host nation military base for the central province. The battalion commander task organizes, and assigns areas of operation and essential tasks to subordinate units. Depending on the mission, subordinate units may collocated with the higher headquarters, while other subordinate units (typically company and platoon) establish individual combat outposts or observation post. As operations progress, the commander may re-task units, or change the array of forces to meet changes in the threat, assist host nation security forces, or provide persistent surveillance to an area for a specific timeframe. Battalion reserve (normally a platoon size force) rotates between companies, dependent upon METT-TC. Battalion scout and sniper elements conduct R&S missions and security operations tasks in support of battalion and company stability-focus tasks. Battalion mortars and other allocated fire support assets position where they are able to most effectively influence the area of operation.

4-167. In this example, the battalion conducts security force assistance to help organize, train, equip, rebuild, and advise host nation forces. Select forces within the battalion, tasked organize to align

with the appropriate counterpart, plan, prepare, and execute security force assistance. When conducting unilateral and partnered operations and training it is important for subordinate commanders and leaders to assess the potential for an insider attack. Commanders and leaders take the appropriate precautions to prevent insider threats by identifying personnel to pull security (covertly) at each echelon, and having all participants to remain vigilant in identifying insider threat behavior. (See section IV for additional information on security force assistance).

4-168. During mission analysis, the commander and staff identify specific targets and areas likely to benefit ongoing operations through lethal and nonlethal means. (Lethal [for example, mortars and artillery, Army attack aviation-manned and unmanned, and close air support] and nonlethal [for example, electronic warfare, see appendix B of this publication] effects are planned for and allocated to companies in support of operations.) The company commander identifies priority of effort to subordinate platoons based upon METT TC. Companies resource details from subordinate elements to secure the battalion commander, command sergeants major, or other headquarters personnel necessary to be on a mission outside a secured perimeter, typically referred to as a personal security detachment.

4-169. The battalion commander and subordinate commanders ensure appropriate measures are taken to account for all Soldiers at all times. *Personnel recovery* is the sum of military, diplomatic, and civil efforts to prepare for and execute the recovery and reintegration of isolated personnel. (JP 3-50). Commanders conduct contingency planning and coordinate actions to be taken for the potential of missing personnel (commonly called duty status whereabouts unknown, or DUSTWUN) to expedite personnel recovery in the event it happens. Contingency planning and coordination covers immediate actions to recover missing personnel. Examples of these actions may include securing avenues an enemy may use to flee with kidnapped friendly personnel, clearing operations that clear an area of known enemy and facilitate locating personnel gone missing, and coordination/communication outside of the unit to expedite recovery. (Refer to FM 3-50 for additional information).

Note. Regardless of level of command, guidance must be communicated to organizations or individuals on expectations in an isolating event. Effective personnel recovery planning guidance accounts for the operational environment and the execution of operations. Personnel recovery guidance broadly describes how the commander intends to employ combat power to accomplish personnel recovery tasks within the higher commander's intent. This guidance is developed based on three interrelated categories, which are personnel recovery guidance, isolated Soldier guidance, and evasion plan of action. Commanders develop and include personnel recovery guidance in execution documents. Personnel recovery appears in Appendix 13, Personnel Recovery, of Annex E, Protection, of the OPORD (see FM 6-0). Commanders translate the personnel recovery guidance and develop isolated Soldier guidance. Isolated Soldier guidance provides Soldiers with guidance concerning isolating incidents. Isolated Soldier guidance focuses on awareness, accountability, reporting of isolation incidents, and actions to take when isolated. There is no set format; isolated Soldier guidance is intended to be flexible for the mission, area, and threat, and adjusted by the tactical commander as required. Evasion plan of action are specific instructions and are developed when the risk of isolation is elevated. Evasion plan of actions are developed by units for specific missions or when conditions change. All echelon battalions have trained personnel recovery specialists. The personnel recovery specialist and the personnel recovery officer responsibilities fall into four broad categories: advisor to the commander, point of contact for personnel recovery efforts to the staff and others, coordinator of personnel recovery activities across the command, and trainer.

4-170. The battalion mortar platoon, response force, operates in split section to allow for two simultaneous employments within the battalions area of operation, if necessary. As the battalion's response force, the mortar platoon provides support across the battalion in a wide range of roles. For example securing explosive ordinance detachment elements, retrieving detainees, providing security for casualty evacuation and medical evacuation, and augmenting combat power through fire support and/or maneuver. The mortar platoon leader and/or platoon sergeant conduct time distance analysis to ensure they are able to arrive on scene in an appropriate amount of time.

4-171. The battalion scout platoon, northeast of Company A, conducts a screen to provide early warning. Scouts overwatch Company A to identify enemy indirect fire teams attempting to influence the cordon and search, humanitarian assistance operations, and fires from the battalion mortars.

4-172. The battalion commander, with the assistance of the battalion S-3, ensures subordinate unit movement and maneuver is coordinated to prevent bottlenecks, and allow friendly freedom of movement. As operations continue the commander arrays forces as needed to meet mission requirements for a given day. As the commander assigns each company an area of operation, within each company the company commander assigns platoon missions based on the battalion concept of operation and upon changes within their area of operation.

Company and Platoon—Area Security Tasks and Activities

4-173. The following example scenarios, act as vehicles to explain how companies and platoons conduct tasks and activities within the battalion on any given day during the course of area security operations. Company figures below are representations from figure 4-7 on page 4-43. Subordinate company and platoon tasks and activities within this example include:

Company A

4-174. Company A, assigned the northeastern area of operation within the battalion, conducts cordon and knock (see figure 4-8 on page 4-46) due to the permissive nature of the threat. (See ATTP 3-06.11 for additional information on the cordon and knock technique.) Company A is the main effort for the battalion on this day. The purpose of Company A's mission is threefold: gather information from the local populace regarding possible enemy in the area, identify suspected weapons staging/cache sites used to enable smuggling into the eastside of the battalion's area of operation, and provide humanitarian aid to the local village by handing out blankets and having healthcare personnel screen children for possible illnesses. Company C, Third Platoon is operational control to Company A for the duration of the mission. During planning and preparation, the company coordinates with and participates in host nation security force information collection efforts within the area of operation. During course of action analysis the commander identified the company's task organization to maximize combat power. Subordinate unit tasks and purpose include:

- First Platoon (supporting effort). Conducts a blocking position and traffic control posts to prevent enemy influence within the village that would affect the main effort.
- Second Platoon (supporting effort). Conducts clearing operations in the vicinity of Route Blue and the local market of potential threats, then establishes overwatch position to allow friendly freedom of action within the area of operations.
- Third Platoon (main effort). Conduct cordon and knock to provide humanitarian aid to local populace. Conduct key leader engagements, engage local populace to assess threat in the area. Secure activities of medical teams, HUMINT teams, and provincial reconstruction teams throughout the operation.
- Third Platoon, Company C (attached supporting effort). Conducts inner and outer cordon responsibilities to assume blocking position in support of the main effort to prevent enemy influence during cordon and knock operations. On order Third Platoon, Charlie Company secures engineering assets and moves vicinity of Bridge 1 to conduct a site survey of the bridge along Route Chevy upon completion of the cordon and knock.

Note. When conducting cordon and search the commander takes into consideration the potential presence of booby traps in the area to be searched. It may be more effective to conduct a tactical call out (call personnel to come out of the search building) to support searching efforts of and lower the risk of booby trapped houses.

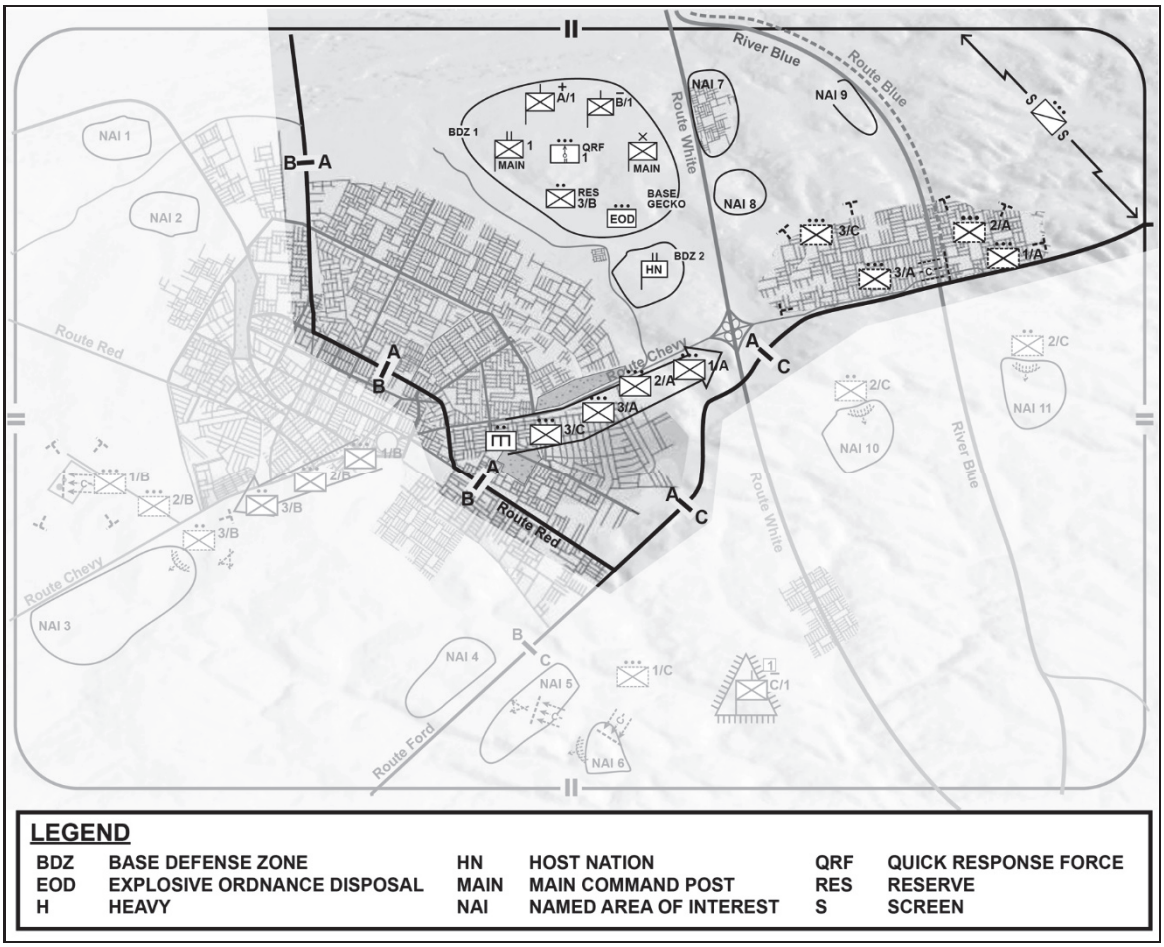

Figure 4-8. Company area security operation (cordon and knock), example

Company B

4-175. Company B, assigned the northwestern area of operation within the battalion, conducts cordon and kick (see figure 4-9) due to the non-permissive nature of the threat. (See ATTP 3-06.11 for additional information on the cordon and kick technique.) Company B is a shaping operation for the battalion on this day. The purpose of Company B's mission is to kill or capture members of a known insurgent cell and weapons smuggling ring in an area identified during the targeting process. The company collects information on enemy activities in the area and criminal facilitators during the operation. The company searches potential weapons cache sites suspected of use prior to the movement of these weapons to the eastern side of the battalion's area of operation.

4-176. Company B departs the forward operating base three hours after the route clearance package cleared routes Chevy and Red. As during all operations, the company stays aware of the potential improvised explosive device threat and conducts themselves accordingly during movement and at a halt (See ATP 3-21.18 for information addressing IEDs). Company B operates unilaterally during this operation due to the fact that host-nation security forces are undermanned in this area of operation. Upon culmination of the cordon and search, Company B follow-on mission is to return to the host-nation base to prepare for the conduct of troop leading procedures and patrolling training with host nation security forces. Subordinate unit tasks and purpose include:

- First Platoon (main effort). Establishes inner cordon, conducts searches and identifies, isolates, and secures enemy combatants for tactical questioning to confirm or deny enemy activities.
- Second Platoon (supporting effort). Establishes outer cordon, overmatches objective to enable main effort freedom of movement on and around the objective to execute searches.

- Third Platoon (supporting effort). Conducts clearance of NAI 3, conducts overwatch of those locations employing several small ambush sites (commonly referred to as small kill teams). Executes interdiction patrols to prevent the enemy from fleeing the area, and caching weapons for later attacks on friendly forces.

4-177. During operations Company B identifies, and detains a group of known enemy. Company takes the appropriate steps to ensure the proper transfer of detainees to a detention facility. In this scenario the company separates the detainees, and conducted on site tactical questioning to gain information. Once completed, the company communicates with battalion to request pick up of detainees to enable the continuation of the company's operation. The battalion then launches the battalion response force, with host-nation police in trail to pick up detainees and conduct the proper detainee transfer. This is one example of how a transfer may occur; ultimately, detainee operations will be conducted adhering to the higher headquarter standard operating procedure for detainee operations.

Note. Although this operation was conducted unilaterally, in some instances it may be necessary to partner with the host nation military, or local law enforcement to execute a cordon and search. In this event as with any operation it is critical to coordinate, and rehearse the operation fully to ensure mission accomplishment. It may be necessary to conduct a Key leader engagement, with the police chief or other leader, may be necessary to properly prepare for the execution of this mission.

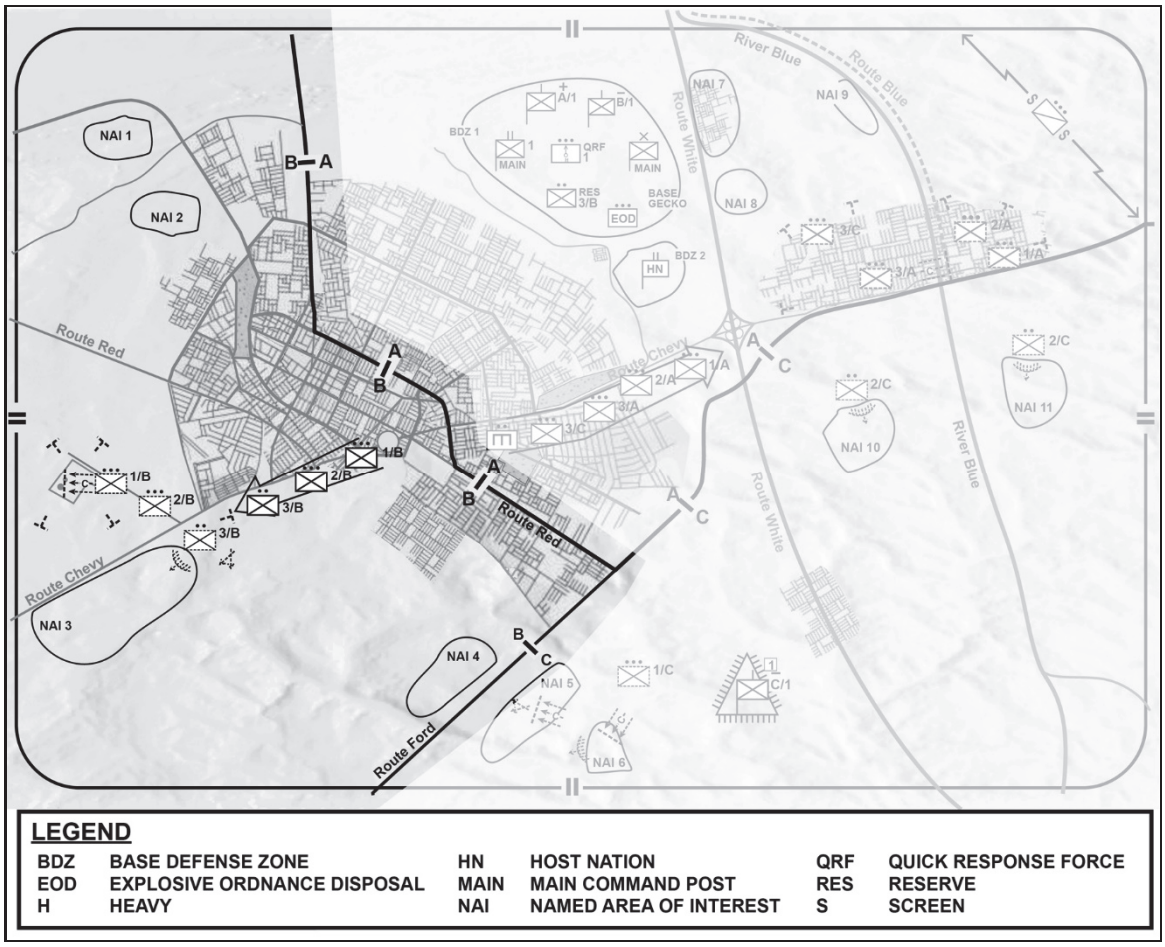

Figure 4-9. Company area security operation (cordon and kick), example

Company C

4-178. Company C, assigned the southeastern area of operation within the battalion, establishes Combat Outpost 1 and executes operations south of Route Ford. Company C conducts clearance of NAI 5 and NAI 6 and overwatches NAI 10 and NAI 11 to deny enemy lines of communication, and access to cache and enemy indirect fire locations. (See figure 4-10.) The establishment of small kill teams/ambushes, strictly adhering to rules of engagement practices, engage enemy who attempt to influence friendly operations. Subordinate unit tasks and purpose include:

- First Platoon (main effort). Conducts clearance of NAIs 5 and 6, denying the enemy access to known indirect fire locations (commonly referred to as Points of Origin, POO sites)
- Second Platoon (supporting effort). Conducts overwatch of NAI 10, and 11 denying the enemy freedom of movement south of the battalion main effort.
- Third Platoon. Operational control to Company A.

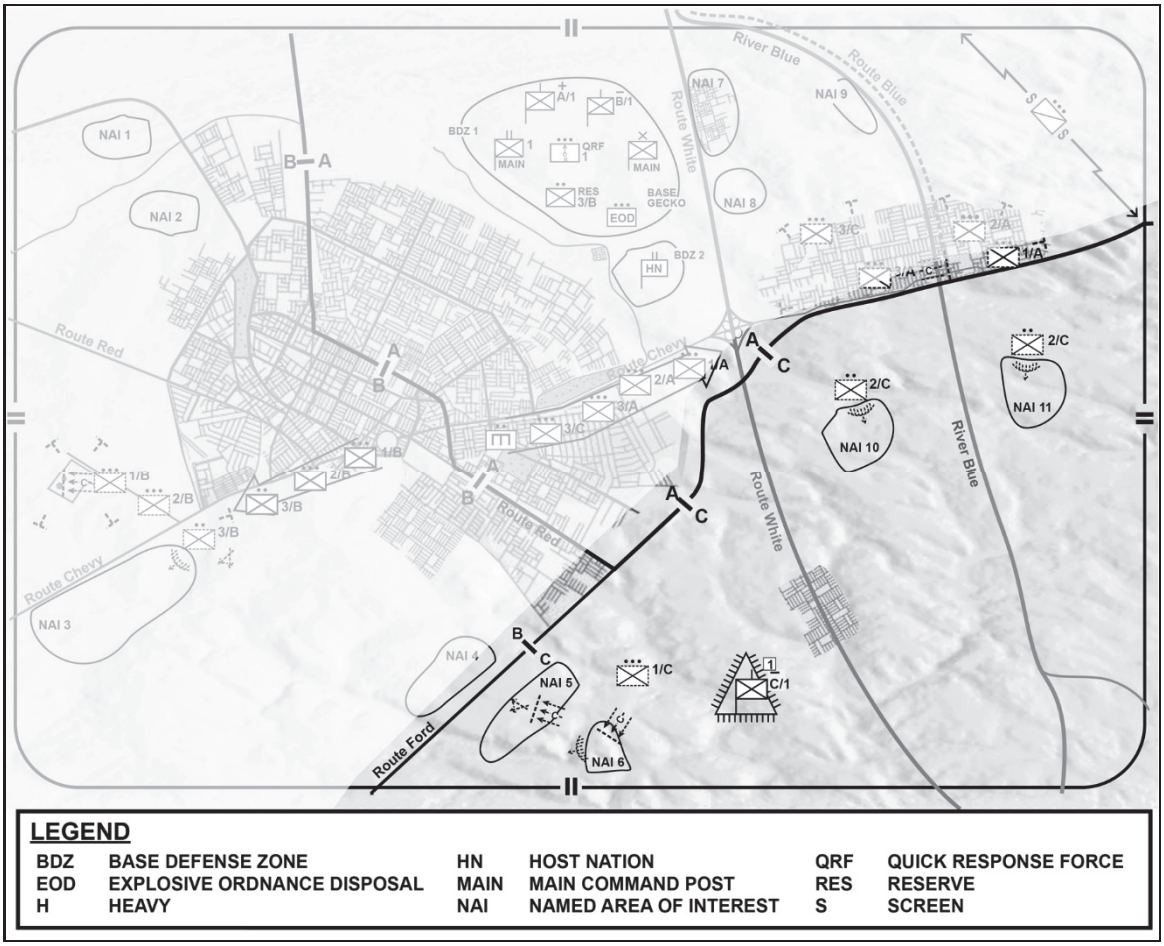

Figure 4-10. Company area security operation (Combat Outpost 1), example

Company D

4-179. Company D (not illustrated), under IBCT control, establishes the IBCT response force within Infantry Battalion 2's area of operation in the eastern portion of the IBCT's area of operation. Infantry Battalion 2 has an area of operation four times the size of Infantry Battalion 1's area of operation.

SECTION IV – SECURITY FORCE ASSISTANCE

4-180. Security force assistance (SFA) contributes to unified action by the United States Government to support the development of the capacity and capability of foreign security forces (FSF) and their supporting institutions, whether of a partner nation or an intergovernmental organization (regional security organization). The development of capacity and capability is integral to successful stability missions and extends to all organizations and personnel under partner nation control that have a mission of securing its population and protecting its sovereignty from internal and external threats. FSF are considered to be duly constituted foreign military, paramilitary, police, and constabulary forces such as border police, coast guard, and customs organizations, as well as prison guards and correctional personnel; and their supporting institutions.

OPERATIONAL OVERVIEW

4-181. SFA activities are conducted to organize, train, equip, rebuild (or build), and advise foreign security forces from the ministerial/department level down through the tactical units. The Department of Defense maintains capabilities for SFA through conventional forces, special operations forces, the civilian expeditionary workforce, and when necessary contractor personnel in both joint operational area and a non-joint operational area environment. SFA activities require carefully selected and properly trained and experienced personnel (as trainers or advisors) who are not only subject matter experts, but also have the sociocultural understanding, language skills, and seasoned maturity to more effectively relate to and train FSF. Ideally, SFA activities help build the FSF capacity to train their own forces independent of sustained United States Government efforts.

Note. Department of Defense Instruction 5000.68, *(Security Force Assistance [SFA])*, describes the process of interaction with FSF that initially involves training and assisting (interacting "with" the forces). The next step in the process is advising, which may include advising in combat situations (acting "through" the forces). The final phase is achieved when foreign security forces operate independently (act "by" themselves).

SUPPORT TO SERVICE AND JOINT OPERATIONS MISSIONS

4-182. SFA activities are conducted across the range of military operations and across the conflict continuum (from peace through war) supporting service and joint operations and missions (figure 4-11 on page 4-50). Significant SC and military engagements are routinely conducted worldwide for peacetime theater and global shaping through the geographic combatant commanders' theater campaign plans. Some of those SC activities are likely to include SFA activity efforts in the lower range of the conflict continuum. Timely and effective execution of relevant SFA activities as part of SC for shaping in the theater campaign may contribute to stabilization and perhaps a measure of deterrence to prevent the requirement for U.S. forces having to conduct a contingency operation. Joint forces must have the ability to conduct SFA activities throughout all phases of an operation/campaign to effectively partner with FSF supporting U.S. or U.S.-led multinational requirements. (Refer to FM 3-22 for additional information.)

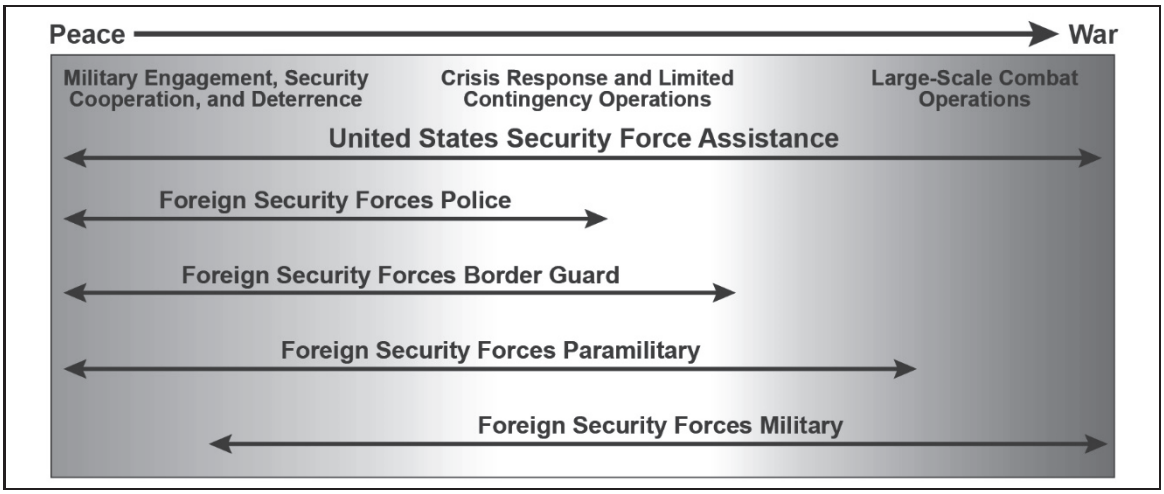

Figure 4-11. Security force assistance in the conflict continuum

Note. For the purpose of the following discussion, SFA is addressed within the initial response, transformation, and fostering sustainability phases of the stability framework.

PHASING FOR SECURITY FORCE ASSISTANCE

4-183. Phasing for SFA, initial response, transformation, and fostering sustainability, mirror the stability framework described in section I of the chapter and are based on the operational environment. SFA can start in any phase or may even move to a previous phase due to changes in the conditions of the operational environment. Differences within and between phases may not change on the surface, but relationships with FSF can change drastically. For example, the latter stage of the transformation phase can differ greatly from the initial stages of the transformation phase. Span of control and the area of operation for SFA can expand within a phase and as operations continue within the stability framework. As the three phases are based on the operational environment, they provide a baseline for augmentation. Potential augmentation may require military police, legal, public affairs, civil affairs, psychological operations, engineering, sociocultural experts, sustainment, and SFA team personnel.

Note. A provincial reconstruction team embedded at IBCT level is a key element during the conduct of security force assistance. The IBCT leads the effort to establish civil security, establish civil control (when approved by Congress), and to develop and enable foreign security forces. The embedded provincial reconstruction team has the lead for support to economic and infrastructure development, restore essential services, and support to governance. Together the IBCT and an embedded provincial reconstruction team are able to effectively support the FSF and execute all six primary stability tasks.

Initial Response Phase

4-184. The initial response phase occurs during or immediately after a conflict where the operational environment prevents civilian personnel from operating effectively. The operational environment is typified as non-permissive. Thus, the objective of this phase is to improve the security situation, reducing the threat to the populace and creating the conditions that allow civilian personnel to safely operate.

4-185. SFA in the initial response phase is normally required when FSF lack the capability or capacity to provide the required level of security. This phase often requires SFA efforts to help generate and train or assist new and existing FSF. This phase may require a combination of the types of SFA and considerable support, sustainment, and medical resources. IBCT activities during the initial response may have to be

conducted with multinational major combat operations, to include providing a safe, secure environment for the local populace. SFA efforts during this phase focus on improving the FSF capability and capacity so all security forces—U.S., other, and FSF—provide a secure environment and reduce the threat. As security conditions improve, transition to the transformation phase begins.

Transformation Phase

4-186. In the transformation phase, SFA activities seeks to assist FSF to stabilize the operational environment in a crisis or vulnerable state. The operational environment in this phase is more permissive than the initial response phase; however, military forces will often be required to provide security to some actors. Activities in this phase normally include a broad range of post-conflict reconstruction, stabilization, and capacity-building efforts, which the embedded provincial reconstruction team is essential for long-term success. Objectives in this phase include continuing efforts to improve the security situation, reducing the threat to the populace, building host-nation capacity across the stability sectors, and facilitating the comprehensive approach to assist FSF.

4-187. The transformation phase represents a broad range of SFA activities to support FSF. The initial response phase differs from the transformation phase in the FSF capability to provide for a safe and secure environment. More specifically, FSFs may have a level of proficiency to no longer need a permanent U.S. and FSF relationship for tactical operations. However, they may still need full-time advisors and support, sustainment, and medical assistance. Embedded provincial reconstruction team members will continue to play a vital role in assisting governance and development efforts throughout this phase. SFA end state for this phase seeks to establish conditions so the host nation's security sector can provide a secure environment with its own security forces.

Fostering Sustainability Phase

4-188. In this phase, the focus of SFA continues to shift toward assisting institutions required to sustain FSFs. This phase encompasses long-term efforts to assist FSF. FSF conduct independent operations and can provide a safe, secure internal environment. While SFA activities may be initially required during this phase, activities reduced as FSF become more capable and viable. The determination for the battalion to receive a change of mission from SFA is based on the policy and conditions of the operational environment. Provincial reconstruction teams and other forces may remain to support a theater SC plan.

TRANSITIONS

4-189. Transitions during SFA are dependent upon the conditions within the operational environment. Transitions are initially identified during planning using a comprehensive approach. Transitions can occur simultaneously or sequentially in different levels or war and in separate echelons, to include having potentially at the tactical level, transitions for different units within the battalion's area of operations. Major transitions can include the Infantry battalion in the beginning of an initial response phase being the supported unit with the FSF transitioning to the supported unit later on in the phase. At this point in the transformation phase, the area in which the battalion conducts SFA will expand. This expansion can occur multiple times during the transformation phase, which is based on conditions, especially the capability and capacity of FSF. The commander, to facilitate flexibility, visualizes and incorporates branches and sequels into the overall plan to enable transitions. Unless planned, prepared for, and executed efficiently, transitions can reduce the tempo of the operation, slow its momentum, and surrender the initiative.

PLANNING CONSIDERATIONS

4-190. Planning for SFA, like any other operation, begins either with the anticipation of a new mission or the receipt of mission as part of the military decision-making process. The Army design methodology is particularly useful as an aid to conceptual planning when integrated with the detailed planning typically associated with the military decision-making process to develop the capacity and capability of FSF and their supporting institutions. Planning helps the commander create and communicate a common vision between the staff, subordinate commanders, and unified action partners.

Planning results in a plan and orders that synchronize the action of participating partners in time, space, and purpose to achieve objectives and accomplish missions.

COMPREHENSIVE APPROACH

4-191. SFA planning requires a comprehensive approach, as well as an in-depth understanding of the operational environment. Planning must be nested within policy, internal defense and development strategy, the campaign plan, and any other higher-echelon plans. Continuous and open to change, planning for SFA includes identifying how to best assist the FSF and developing a sequence of actions to change the situation. Planning involves anticipating consequences of actions and developing ways to mitigate them.

Note. Internal defense and development focuses on building viable institutions (political, economic, social, and military) that respond to the needs of society. Ideally, internal defense and development is a preemptive strategy. However, if an insurgency or other threat develops, it becomes an active strategy to combat that threat. To support the host nation effectively, U.S. forces, especially planners, consider the host-nation's internal defense and development strategy. (Refer to FM 3-22 for additional information.)

4-192. Considering the elements of operational art provides the IBCT commander and staff with a combination of conventional forces while leveraging the unique capabilities of special operations forces, to assist in achieving SFA objectives. The planning for and selection of the appropriate mix of military forces, civilian expeditionary workforce, and/or civilian personnel and contractors should be a deliberate decision based on thorough mission analysis and a pairing of available capabilities to requirements. Important factors to consider in these decisions include the nature of the host-nation force, the nature of the skills or competencies required by the host-nation force, and the nature of the situation and environment into which U.S. forces will deploy.

UNDERSTANDING

4-193. Understanding the operational environment is fundamental to all operations, and essential to SFA activities. An in-depth understanding of the operational environment includes the size, organization, capabilities, disposition, roles, functions, and mission focus of host-nation forces, opposing threats, regional players, transnational actors, joint operational area, or non-joint operational area of responsibility, especially the sociocultural factors of the indigenous and other relevant populations. Identifying all actors influencing the environment and their motivations will help planners and practitioners define the goals and methods for developing host-nation security forces and their institutions.

4-194. The plan, which includes the commander's intent, provides understanding to U.S. and FSF on the actions to take. (SFA planning may involve the development of non-military security forces and their supporting institutions.) Plans and orders provide decision points and branches that anticipate options that enable the force to adapt as the operation unfolds. This is especially important for SFA, as these operations tend to be prolonged efforts. Units conducting SFA often rotate before achieving all objectives. As a result, planning should establish objectives and milestones that can be achieved during the battalion's mission. These objectives and milestones must support higher echelon plans, including the campaign plan and internal defense and development strategy.

Note. SFA planning may involve the development of nonmilitary security forces and their supporting institutions.

LEGITIMACY

4-195. Legitimacy of the forces providing SFA may be tenuous during some phases of a complex operation, but it is an essential consideration for achieving long-term objectives. SFA should aim to ensure that all FSF operate within the bounds of domestic and international laws, respect human rights, and that they support wide-ranging efforts to enforce and promote the rule of law, thus supporting legitimacy and transparency.

Legitimacy fosters transparency and confidence among host-nation government, FSF, host-nation population, and United States Government agencies. Another aspect of legitimacy is supporting host-nation ownership in the SFA effort, because it facilitates a sense of sustainability for building a capacity or security reform through acceptance by the host-nation population.

4-196. Throughout planning, the commander and staff consider how each SFA activity affect popular perceptions, and focus on the activities that enable the legitimacy of the host-nation government and FSF, not just make them technically competent. Commander and staff must ensure an appropriate information management plan is developed for SFA in coordination with interagency partners and the IBCT or other higher headquarters. SFA advisors/trainers must work with the FSF to give a positive context and narrative to the FSF professionalization efforts and capacity to secure the population. Coordination of the information themes and messages among the U.S., FSF, and the host-nation government, and the presentation or availability of information to the indigenous population can limit or mitigate the propaganda efforts of insurgents or hostile forces. This may serve to mitigate the potential for destabilizing influences of hostile forces or criminal elements to propagandize SFA efforts and damage the host-nation government's credibility and legitimacy.

SECURITY FORCE FUNCTIONS

4-197. Security forces perform three generic functions: executive, generating, and operating. The executive function includes strategic and operational direction that provides oversight, policy, and resources for the FSF generating and operating functions. The generating function develops and sustains the capabilities of the operating forces. In the U.S., the generating function is primarily performed by the Services. For the U.S., this function is performed by its military schools, training centers, and arsenals. FSF generating forces refer to the capability and capacity of the FSF to organize, train, equip, and build operating force units. FSF operating forces form operating capabilities through the use of concepts similar to warfighting functions to achieve FSF security objectives.

Note. Employing operational forces to fill SFA capabilities associated with developing the FSF generating function (FSF tasks such as "develop FSF doctrine" or "stand up a staff officer's college"), and possibly in the FSF executive function (ministries) would likely be beyond the inherent capability of the operating force and would likely require special training or augmentation by subject matter experts drawn from U.S. generating organizations.

4-198. U.S. operating forces are typically better suited to develop FSF operating force capabilities than they are to developing FSF generating forces of generating capabilities. Typically, the battalion is tasked to train and/or advise FSF operating forces. The operating function employs military capabilities through application of warfighting functions of mission command, movement and maneuver, intelligence, fires, protection, and sustainment during actual operations. Operating, as it applies to police security forces, may include training and actual operations with the integration of patrolling, forensics, apprehension, intelligence, investigations, incarceration, communications, and sustainment. Operating forces are responsible for collective training and performing missions assigned to the unit.

SECURITY FORCE ASSISTANCE TASKS

4-199. SFA activities normally use the following general developmental tasks of organize, train, equip, rebuild and build, advise and assist, and assess (OTERA-A). These functional tasks, serving as SFA capability areas, are used to develop the capabilities required by the FSF. OTERA-A tasks are a tool to develop, change, or improve the capability and capacity of FSF. Through a baseline assessment of the FSF, and considering U.S. interests and objectives, the commander and staff planners can determine which OTERA A tasks will be required to build the proper capability and capacity levels within the various units of the FSF. Assessments of the FSF against a desired set of capabilities will assist in developing an OTERA A based plan to improve FSF. (Refer to FM 3-22 for additional information.) The following are basic descriptions of the OTERA-A tasks:

- Organize. All activities taken to create, improve, and integrate doctrinal principles, organizational structures, capability constructs, and personnel management. This may include doctrine

development, unit or organization design, command and staff processes, and recruiting and manning functions.

- Train. All activities taken to create, improve, and integrate training, leader development, and education at the individual, leader, collective, and staff levels. This may include task analysis, the development and execution of programs of instruction, implementation of training events, and leader development activities.
- Equip. All activities to design, improve, and integrate materiel and equipment, procurement, fielding, accountability, and maintenance through life cycle management. This may also include fielding of new equipment, operational readiness processes, repair, and recapitalization.
- Rebuild or Build. All activities to create, improve, and integrate facilities. This may include physical infrastructures such as bases and stations, lines of communication, ranges and training complexes, and administrative structures.
- Advise/Assist. All activities to provide subject matter expertise, guidance, advice, and counsel to FSF while carrying out the missions assigned to the unit or organization. Advising may occur under combat or administrative conditions, at tactical through strategic levels, and in support of individuals or groups.
- Assess. All activities for determining progress toward accomplishing a task, creating an effect, or achieving an objective using MOE and MOP to evaluate foreign security force capability. Once an objective is achieved, the focus shifts to sustaining it.

DECISIONS TO REDUCE OR OFFSET RISK

4-200. Risk management (see appendix B is the Army's process for helping organizations and individuals make informed decisions to reduce or offset risk. Risk management measures identified in SFA planning add to the plan's flexibility during execution. A flexible plan can mitigate risk by partially compensating for a lack of information. SFA planning requires a thorough, comprehensive approach to analyzing and agreeing upon risk reduction measures. Each SFA activity is distinct based on context and changes over time. There is a risk of focusing SFA efforts in one area or type of relationship at the expense of others based on short-term goals. To mitigate this risk, SFA activities should be regarded as the providing means and ways to achieve meaningful mid- to long-term objectives with partners as well as the end states.

4-201. Reducing or offsetting risk, not only relies on the security force assistance force and supporting agencies, but also on the FSF elements in question. Conditions determine when to use an element of the FSF. The battalion commander and staff use assessments to determine objectives and requirements for reducing or offsetting risk. Risk applies to how well the FSF, the Infantry battalion, and other host-nation and partner organizations agencies can tolerate changes in the operational environment, as well as the challenges and conditions inherent to the operation.

4-202. Reducing or offsetting risk does not only rely on the SFA force and supporting agencies but also on the FSF elements in question. Conditions determine when to use an element of the FSF. The battalion commander and staff use assessments to determine objectives and requirements for reducing or offsetting risk. Risk applies to how well the FSF, the Infantry battalion, and other host-nation and partner organizations agencies can tolerate changes in the operational environment, as well as the challenges and conditions inherent to the operation.

4-203. The Infantry battalion commander and subordinate commanders and FSF commander and subordinate commanders assess the risk associated with the employment forces and mitigate that risk as much as possible. For example, advisors from the Infantry battalion play a significant role in SC mission such as the SFA. They live, work, and sometimes are required to fight with their partner FSF. The relationship between advisors and FSF is vital. Advisors are not merely liaison officers. Though they do not command foreign security force units, they are a necessary element to understanding the human dimension, specifically managing relationships and mitigating risk between the SFA forces and FSF, across the range of military operations.

SUSTAINING ACTIVITIES

4-204. Sustaining SFA activities consists of two major components: the ability of the United States and other partners to sustain the SFA activities successfully and the ability of host-nation security forces to sustain their capabilities independently over the long term. The first component may be predicated on the host-nation maintaining legitimacy while the second component should be considered holistically when working with the host nation to build their security forces. It is important to consider the sociocultural factors, infrastructure, and education levels of prospective FSF when fielding weapons systems and maintaining organizations. Though this is not a battalion, BCT, or division decision, a strong recommendation through the SFA chain should be made in regards to this consideration.

INTELLIGENCE

4-205. Intelligence provides an assessment of host nation and potential adversaries' capabilities, capacities, and shortfalls. It involves understanding sociocultural factors, information and intelligence sharing, and intelligence training. Information sharing between the battalion and FSF must be an early consideration for planners. A continuous intelligence effort will gauge the reaction of the local populace and determine the effects on the infrastructure of SFA efforts as well as evaluate strengths, weaknesses, and disposition of opposition groups in the area. Ultimately, intelligence supports the SFA and FSF leaders' decision-making processes, and supports the protection of friendly forces and assets. Intelligence support teams (see paragraph A-12 on page A-3) are requested, when required, from the military intelligence company within the IBCT to support the assistance efforts.

Note. Train personnel two deep in every staff section or advisory subunit on foreign disclosure before deployment. Interaction with host nation and FSF, even the North Atlantic Treaty Organization or other coalition allies requires foreign disclosure officer approval. This will become a huge bottleneck if not trained for and decentralized.

PROTECTION

4-206. Protection is incumbent upon the commander to fully understand the threat environment within the battalion's area of operation. By having access to fused intelligence from local, regional and national resources, the commander can accurately assess threats and employ measures to safeguard SFA personnel and facilities. Protection planning considerations should address additional support requirements for the response force, emergency procedures, personnel recovery, or the requirement to integrate SFA personnel into the host-nation protection plan.

4-207. Nontraditional threats, such as the insider threat, can undermine SFA activities as well as the cohesion of U.S. forces and FSF. Tactically, the breakdown of trust, communication, and cooperation between host nation and U.S. forces can affect military capability. Adversaries may view attacks against U.S. forces as a particularly effective tactic, especially when using co-opted host-nation forces to conduct these attacks. While these types of insider or green on blue" attacks have been context-specific to a particular theater, the commander should ensure that protection plans take into account the potential for these types of attacks and plan appropriate countermeasures.

Note. More stringent protection controls and measures that are overtly heavy handed must be well balanced yet culturally sensitive enough to not send the wrong message to the very people and organizations the United States is trying to assist.

LOGISTICS

4-208. Logistics planners at the battalion level must understand the IBCT's concept of support and sustainment estimates that outline the responsibilities and requirements for maintaining logistics support for deployed forces within the IBCT's area of operation. Logistics support might include support of SFA augmentees and FSF within the battalion's area of operation to conduct operational missions (supporting

host-nation civilians or military forces with medical, construction, power generation, maintenance and supply, or transportation capabilities).

PREPARATION

4-209. Preparation for SFA creates conditions that improve the Infantry battalion's opportunities for success. The degree to which the battalion is tasked within SFA operations depends on preparation in terms of cultural knowledge, language, functional skills, and the ability to apply these skills within the operational environment. Preparation includes, but is not limited to, initiate security and information collection, continue to coordinate and conduct liaison, refine the plan, complete task organization, conduct pre-mission training, conduct rehearsals and inspections; continue to build partnerships and teams, and initial movement. Preparation facilitates and sustains plans-to-operations transitions, including those to branches and sequels, which are of vital importance for the often-dynamic operational environment for SFA.

PREMISSION PREPARATIONS

4-210. After receiving a mission, the battalion continues detailed preparation activities, prepares for and rehearse classes given in country, and conduct extensive briefings on the area of operation. Key staff and subordinate unit actions particular to SFA include the following:

Current Operations

4-211. The battalion operations staff officer (S-3) ensures predeployment training for Soldiers, to include preparation for training FSF and rehearsals for movement. The S-3 reviews the program of instruction for training FSF, to include getting approval from the commander, and higher headquarters if necessary. The S 3, in coordination with IBCT S-9 (civil affairs officer), ensures the operation plan minimizes how operations affect the civilian population and addresses ways to mitigate the civilian impact on military operations. The civil-military operations plan is coordinated with the indigenous population and institutions, unified action partners, other civil entities, and interagency as necessary. This coordination might include civil affairs battalions or brigades, provincial reconstruction teams, or United States Agency for International Development project officers in the area of operation.

Note. The primary staff officers of the current operations cell may be called upon to be the primary advisors to the host-nation forces staff sections and cells.

4-212. The battalion intelligence staff officer (S-2) supervises the dissemination of intelligence and other operationally pertinent information within the unit and, as applicable, to higher, lower, or adjacent units or agencies. The S-2 monitors the implementation of the intelligence collection plans to include updating the commander's priority intelligence requirements, conducting area assessment, and coordinating for additional intelligence support. The S-2 establishes liaison with FSF intelligence and security agencies (within the guidelines provided by applicable higher authority). The S-2 assesses the intelligence threat and resulting security requirements, including coordination with the S-3 on specific security and operations security measures.

4-213. The battalion personnel staff officer (S-1) supervises the battalion personnel staff section, in coordination with brigade and higher echelon manpower and personnel staff sections, screen personnel files to review the records of identified Soldiers that might have specific skill sets useful to the battalion or higher echelon during the conduct of stability focused operations. Skill sets include individuals with professional certification or work experience in those non-military fields that might have utility during operations focused on the conduct of stability tasks. (See paragraph 4-55 on page 4-13 for additional information.)

4-214. The battalion logistics staff officer (S-4) supervises, as required, the logistics support of SFA augmentees and FSF within the battalion area of operation to conduct operational missions (supporting host nation civilians or military forces with medical, construction, power generation, maintenance, supply, or transportation capabilities). (See paragraph 4-89 on page 4-20 for additional information.)

4-215. The battalion signal staff officer (S-6), in coordination with the IBCT S-6, ensures depth in communication and synchronization between organizations both horizontally and vertically within the battalion's proposed area of operation. In coordination with the IBCT S-9 and S-6, establishes communications as early as possible upon arrival with the civil-military operations center (normally established at IBCT level), civil liaison teams, civil information management architecture, and supporting networks to facilitate communication and coordination with the nonmilitary agencies.

4-216. The company executive officer (XO) ensures coordination with the battalion logistics staff officer (S-4) who supervises, as required, the logistics support of security force assistance augmentees and FSFs within the battalion area of operation to conduct operational missions (supporting host-nation civilians or military forces with medical, construction, power generation, maintenance, supply, or transportation capabilities). The XO ensures support and training occurring during the security force assistance mission is nested with higher headquarters.

4-217. The commander, with the assistance of the XO and communications NCO in coordination with the S-6, ensures depth in communication and synchronization between organizations both horizontally and vertically within the units proposed area of operation.

Predeployment Training

4-218. During predeployment training, Soldiers receive training, materials, and briefings on the operational area. This training can cover the history, culture, religion, language, tribal affiliations, local politics, and cultural sensitivities as well as any significant nongovernmental organizations operating in the operational area. Advisors focus their premission training on the specific requirements of developing FSF. The training emphasizes the host-nation culture and language and provides cultural tips for developing a good rapport with foreign personnel. (Refer to FM 7-0 for premission training for SFA.)

4-219. Based on the battalion commander's, or higher commander's training guidance, subordinate unit commanders assign missions and approve the draft mission-essential task list that supports SFA. The staff plans, conducts, and evaluates training to support this guidance and the approved mission-essential task list for SFA missions. Subordinate commanders prioritize tasks that need training. Since there is never enough time to train in every area, commander's focus on tasks essential for mission accomplishment.

4-220. Once commanders select tasks for training, the staff builds the training schedule and plans on these tasks. The staff provides the training requirements to the commander. After approving the list of tasks to be trained, the commander includes the tasks in the unit training schedule. The staff then coordinates the support and resource requirements with the S-3 and S-4. Finally, the commander ensures standards are enforced during training.

Evaluation

4-221. Evaluations can be either internal or external. Internal evaluations occur at all levels, and they must be inherent in all training. External evaluations are usually more formal and conducted by a headquarters one or two levels above the unit being evaluated. This subject must be carefully planned and discussed with FSF leaders to account for cultural sensitivities and current capabilities. A critical weakness in training is the failure to evaluate each task every time it is executed. Every training exercise provides potential for evaluation feedback. Every evaluation is also a training session. Leaders and trainers must continually evaluate to optimize training. Evaluation must occur as the training takes place. Emphasis is on direct, on-the-spot evaluations. However, leaders allow Soldiers to complete the task first. Leaders plan after action reviews at frequent, logical intervals during exercises. This technique allows the correction of shortcomings while they are still fresh in everyone's mind. The after action review eliminates reinforcing bad habits.

Specified Training

4-222. Augmentation elements require area orientation, refresher combat training, field-training exercises, and the like. Unit training objectives are for developing capabilities to conduct internal and external defense activities for tactical operations, intelligence operations, psychological operations, populace and resources control operations, and civil affairs and advisory assistance operations in the host nation language. Units identified for SFA begin intensified training immediately upon deployment notification.

4-223. After deployment to the host nation and before commitment to operations, the unit may receive in-country training at host-nation training centers or at designated training locations. This training helps personnel become psychologically and physically acclimated to the host nation. This training also allows commanders and staff some time to coordinate and plan within their own command and with civilian and military joint and multinational organizations. After commitment, training continues and is stressed between operations, using needed improvements identified in operations as the basis for training.

4-224. Insider attacks are a threat in any area of operation. The battalion commander ensures that military forces, civilian expeditionary workforce, and/or civilian personnel and contractors are trained to identify behavioral indicators of possible insider threats and the means to apply prevention tools to mitigate this threat. Cultural awareness yields situational awareness and leads to increased force protection for SFA personnel. Eliminating and/or minimizing the insider threat, especially by proper preparation and training of forces, is critical to mission success.

Note. To reduce the potential for insider attacks, FSF should be further vetted to identify individuals whose motivations toward the host nation and United States Government are in question.

BUILD PARTNERSHIPS AND TEAMS

4-225. The Infantry battalion of the IBCT, augmented for SFA, will have subordinate units whose sole focus is working with FSF. Advisor teams may be formed from BCT or battalion organic resources, external augmentation, or a combination. These teams optimally are embedded with the counterpart unit(s), or they may reside on a U.S. camp and commute to FSF they support. The method depends on policy, direction from higher headquarters, the conditions of the operational environment, and capacity of the FSF camps to accommodate the U.S. forces.

Security Force Assistance Brigade

4-226. Security force assistance brigades (when established) will provide SFA to host-nation FSF. The security force assistance brigade provides organic forces to form the basis for the security force assistance brigade mission to support FSF. The company team is the foundation for the security force assistance brigade's mission and is augmented with additional personnel and assets to accomplish the mission.

Support to Security Force Assistance Activities

4-227. The Infantry battalion and subordinate companies of the IBCT may support security force assistance activities, including potentially supporting multiple FSF organizations in its area of operation. Additionally, these FSF organizations may each report through different host-nation government channels and even to different ministries. To synchronize efforts in this case, U.S. forces must achieve unity of effort. Similarly, each of the FSF organizational commanders should synchronize their efforts with the host-nation government representatives, as appropriate.

4-228. Figure 4-12 depicts an example task organization, used for discussion purposes, for a battalion and subordinate companies supporting multiple SFA activities. Within the task organization, one company team acts as a response force with adequate tactical mobility and designated fire support to defeat Level I and Level II threats. The response force shapes Level III threats until a tactical combat force or other capable response force can defeat it. Additionally, the task organization depicts how a company team may form the foundation for host nation military and border support. Finally, the task organization depicts how a company team may provide police support. Support is in the form of two platoons supporting police assistance teams and a third platoon in a combined (multinational) security station providing support to a police assistance team.

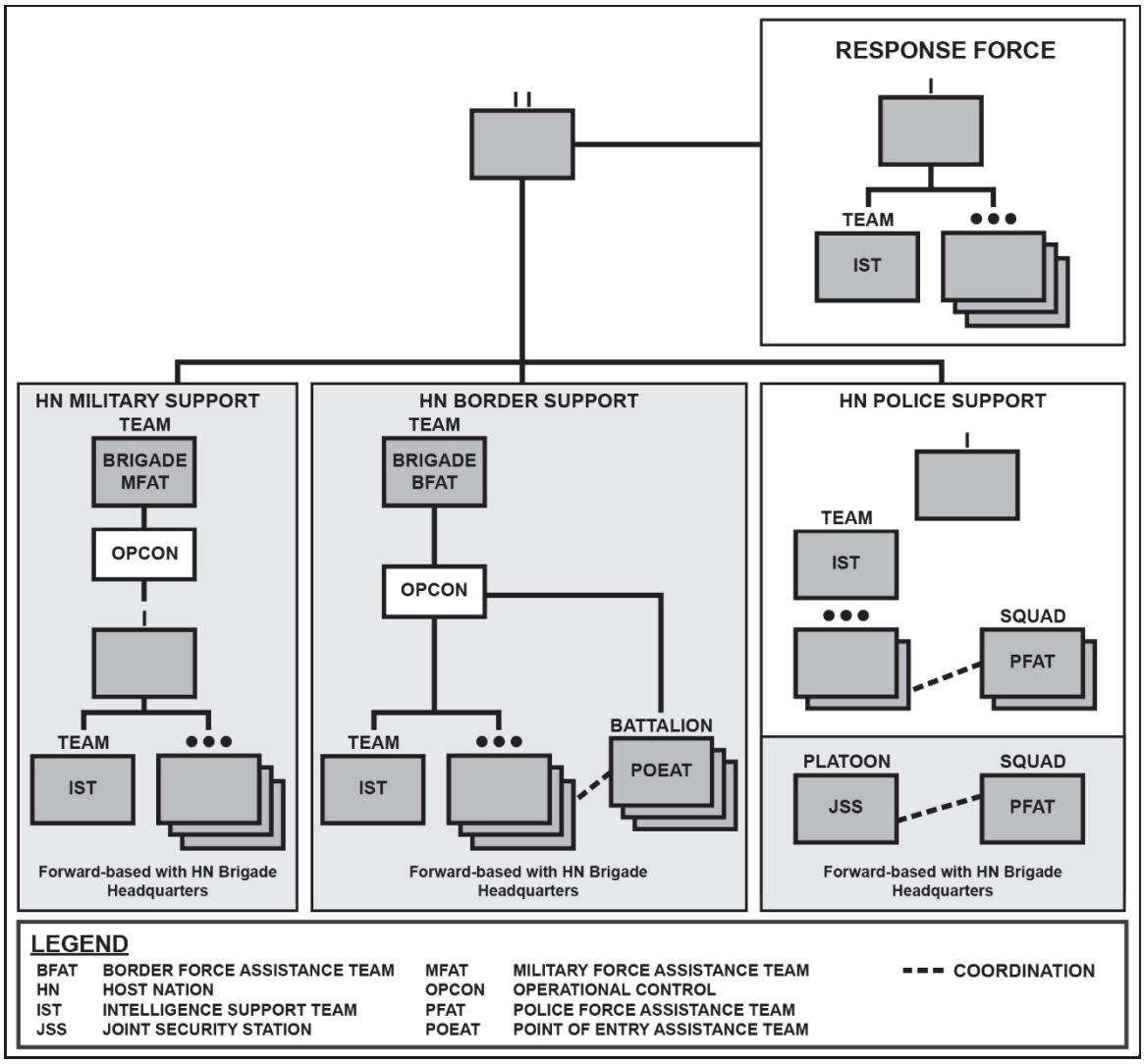

Figure 4-12. Battalion and company support to security force assistance, example

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Note. The designation of force assistance teams used in figure 4-5 on page 4-41 are not to be prescriptive of how the Infantry battalion might support a particular SFA activity. Designations are intended to be used as a guide illustrating one way the battalion may task organize to support multiple SFA activities within an area of operation.

4-229. Subordinate units of the IBCT conducting SFA are best located inside the base of the FSF to be trained. Collocation facilitates integration with the FSF and allows the two forces to form mutual understanding and trust. Collocation and the close cooperation often facilitates and improves the population's perception of the legitimacy of U.S. and foreign security forces, which can be an essential condition of the overall mission's end state.

4-230. When protection conditions require, a U.S. area may be established in the FSF base, although this is not optimal. Key considerations for collocation may include the threat, FSF acceptance, physical space inside the FSF base, sustainment capabilities, medical facilities, and availability of response forces.

4-231. When U.S. forces are operating out of smaller outposts in an urban environment, the local populace sees the integration and presence of the U.S. and foreign security forces working together. This integration

not only enhances overall operational effectiveness and trust, living and working together builds legitimacy of the two forces as well as FSF; it reinforces trust between the FSF and the people they are tasked to protect.

DEPLOYMENT

4-232. SFA is often conducted in operational environments in which U.S. forces are guests of the host nation or partner organization. When not already in country, SFA units move into the operational area by following their deployment OPORD and standing operating procedures. (See FM 3-22 for information on deployment activities.) When located within the operational area, units conduct troop movement (see paragraphs 2-38 to 2-52 on page 2-20 through page 2-22) to their assigned area of operation.

Note. See FM 3-22 for information on redeployment and post-deployment activities.

IN-COUNTRY PREPARATIONS

4-233. Upon arrival, the commander and S-3 brief the higher headquarters on the planned execution of the mission and reconfirm the required command relationship. Local conditions may require the unit to confirm or establish its in-country and external mission command systems and sustainment functions relationships from outside its operational area upon arrival. The SFA unit establishes direct working relationships with the next higher in- or out-of-country supporting element to—

- Determine the limits of the available support and expected reaction time between the initiation of the support request and fulfillment.
- Confirm or establish communications procedures between the supporting element and the SFA unit, to include alternative and emergency procedures for mission command, all support operations, and medical evacuation.

4-234. The SFA unit establishes procedures to promote interagency cooperation and synchronization. The unit—

- Identifies the location of the concerned host nation, U.S., or other agencies.
- Contacts the concerned agency to establish initial coordination.
- Exchanges information or intelligence.
- Confirms or establishes other coordination protocols as necessary.
- Incorporates the newly established or changed procedures into the plans for mission execution.

4-235. The unit immediately establishes operations security procedures to support its mission execution and identifies rally points incorporated into its defensive, evasion, and personnel recovery plans.

4-236. After receiving a detailed briefing and further guidance from the advance party, unit personnel continue to develop effective rapport with the FSF commander and counterparts. They also assess their working, storage, and living areas for security and verify the location of the training site, communications center, dispensary area, and FSF troop area. With the FSF commander, the unit commander—

- Establishes rapport.
- Conducts introductions in a businesslike, congenial manner.
- Briefs on the unit's mission, its capabilities, and the restrictions and limits imposed on the detachment by the higher U.S. commander.
- Ensures all unit personnel fully support FSF and firmly believes a joint U.S.-FSF effort will succeed. Requests counterpart linkup be made under the mutual supervision of the FSF commander and the unit commander.
- Ensures all current unit plans are tentative and that assistance is needed to finalize them.
- Deduces or solicits the actual estimate of unit capabilities and perceived advisory assistance and material requirements.
- Recommends the most desirable courses of action while emphasizing how they satisfy present conditions, achieve the desired training, and meet advisory assistance goals.

- Informs the higher in-country U.S. commander of any significant changes in the unit's plan to assist FSF.

4-237. Through the S-2, the commander's priority intelligence requirements are based on the latest information available and requirements for additional priority intelligence requirements that arise from modified estimates and plans. The S-2 also—

- Hardening its positions based on available means and requirements to maintain low visibility.
- Maintaining unit internal guard system with at least one Soldier who is awake and knows the locations of all other unit personnel. The guard reacts to an emergency by following an internal alert plan and starting defensive actions.
- Maintaining communications with all subordinate unit personnel deployed outside the immediate area controlled by the main body.
- Establishing plans for immediate defensive actions in the event of an attack or a loss of rapport with hostile reaction.
- Discussing visible security measures with foreign counterparts to ensure understanding and to maintain effective rapport. Unit personnel do not divulge sensitive information for the sake of possible rapport benefits.
- Encouraging the foreign unit, through counterparts, to adopt additional security measures identified when analyzing the foreign unit's status and inspecting its facilities.
- Coordinating defensive measures with the foreign unit to develop a mutual defensive plan. Unit personnel obtain from the unit's present reaction and defensive plans for attack. They encourage the foreign unit to conduct mutual full-force rehearsals of defensive plans; if unsuccessful, the unit conducts internal rehearsals of the plans.

EXECUTION

4-238. In execution, the battalion commander, staff, and subordinate commanders focus efforts on translating decisions, made during planning and preparation, into actions supporting the SFA mission. Once the Infantry battalion arrives in-country, it begins the employment of forces to support the development of FSF capabilities and capacities. Employment of the battalion occurs generally with the establishment of advising, assisting, and training teams and key individuals. These teams and key individuals partner with foreign counterparts during FSF planning [preparing the FSF for the mission(s) itself] to increase the capability and capacity of FSF planning processes, as well as to increase the probability of success.

Note. SFA activities normally use the general developmental tasks (known as FSF development tasks) of OTERA-A to develop the functional capabilities required by the FSF.

FOREIGN SECURITY FORCE DEVELOPMENT TASKS—ADVISE, ASSIST, AND TRAIN

4-239. The Infantry battalion and subordinate companies conducting SFA missions normally task organize into smaller rotational teams, and identifies key individuals, for execution. These teams and key individuals focus on advising, assisting, or training a specific partner individual, unit, or activity. These teams and key individuals include, but are not limited to, Infantry battalion training, advising, or advisory teams and individuals. Specialized teams and individuals may also be required for partner sustainment, engineer, or police units.

Advise and Assist Foreign Security Forces

4-240. The Infantry battalion and subordinate companies, with possible additional augmentation teams, advise and assist FSF to improve their capability and capacity. Advising establishes a personal and a professional relationship where trust and confidence define how well the advisor will be able to influence the foreign security force. Assisting is providing the required supporting or sustaining capabilities so FSF can meet objectives and the end state. The level of advice and assistance is based on conditions and continues

until FSF can establish required systems or until conditions no longer require it. Advising and assisting teams from the battalion do not permit the FSF to fail critically at a point that would undermine the overall effort.

Battalion and Company Security Force Assistance—Advise and Assist Scenario, Example

4-241. The following advise and assist scenario example, used for discussion purposes, represents different ways to advise and assist FSF operations. Key Infantry battalion and company advisors include the—

Battalion Commander

4-242. Before the mission, the Infantry battalion commander advises and assists the FSF commander. The FSF commander then issues planning guidance for planning the execution of the mission and clarifies commander's intent. The battalion commander advises and assists the FSF commander throughout the operations process for the tactical operation(s). By accompanying the FSF commander when the mission is received from higher headquarters, the battalion commander assists any subsequent missions. The battalion commander monitors how FSF subordinate units understand the commander's intent and all specified and implied tasks.

4-243. During the execution of the mission, the battalion commander helps the FSF commander provides mission command during operations. While monitoring the tactical situation, the battalion commander recommends changes to the chosen course of action(s) to exploit the situation. After monitoring the flow of information, the battalion commander recommends improvements to the use of intelligence collection assets and the processes used by subordinates to report required information.

Battalion Executive Officer

4-244. The battalion executive officer performs the organizational analysis of the FSF coordinating staff sections to ensure efficiency during the planning process according to the FSF commander's initial planning guidance. With the foreign counterpart, the executive officer advises and assists the counterpart in directing foreign staff sections as they develop estimates, plans, and orders. The executive officer monitors the liaison and coordination with FSF higher headquarters, recommending changes to improve efficiencies.

Battalion Staff

4-245. Before the mission, members of the battalion staff advise and assist foreign counterparts in preparing staff estimates and courses of actions for essential tasks. The battalion staff helps write tentative plans and/or orders based on the FSF commander planning guidance and FSF standing operating procedures. Plans, depending on the situation, may include primary, alternate, contingency, and emergency plans.

4-246. During execution, the battalion staff helps foreign counterparts coordinate the execution of FSF tasks. The staff assists in the dissemination of FSF plans and/or orders to senior and adjacent staff sections and supporting elements. The battalion staff helps notify higher, lower, or adjacent staff sections of modified estimates and plans. The staff—led by the S-3 and S-2 and the S-3 and S-2 counterparts—helps update the CCIRs with the latest information and future requirements.

Personnel Staff Officer, S-1

4-247. The personnel staff officer provides advice, assists, and makes recommendations to the foreign counterpart for all matters concerning human resources support. This includes monitoring the maintenance of foreign unit strength, pay, accountability of casualties, and unit morale. The S-1 must emphasize to subordinates the need to assist counterparts in paying troops and accounting for funds. Close observation of disbursement and unobtrusively polling FSF troops about their pay is a vital, but an unfamiliar, skill set amongst U.S. troops.

> ***Note***. U.S. forces' automated pay systems are nothing like the cash-only transactions in FSF. Graft, corruption (ghost soldiers/policemen), and extortion are rife in these circumstances.

Intelligence Staff Officer, S-2

4-248. The intelligence staff officer advises and assists the monitoring of FSF operations security to protect classified and sensitive material and operations and recommends improvements. By helping the foreign counterpart update the situation map, the intelligence staff officer helps to keep both commands up to date on the current situation. The intelligence officer recommends improvements to the standing operating procedures of the main command post (when established the tactical operations command post) communications framework so the intelligence section receives situation reports. The intelligence officer helps the counterpart monitor the collection, evaluation, interpretation, and the dissemination of information. The intelligence officer assists in the examination of captured insurgent documents and material. The intelligence officer helps gather and disseminate intelligence reports from available sources to ensure the exploitation of all unit operations assets. The intelligence officer helps the counterpart to brief and debrief patrols operating as a part of R&S activities. The intelligence officer works with the advisor operations officer to develop R&S plans with the FSF partner.

Note. As above, train personnel two deep in every staff section or advisory subunit on foreign disclosure before deployment. Interaction with host nation and FSF, even the North Atlantic Treaty Organization or other coalition allies requires foreign disclosure officer approval. This will become a huge bottleneck if not trained for and decentralized.

Operations Staff Officer, S-3

4-249. The operations Staff officer helps the foreign counterpart to prepare tactical plans and/or orders using estimates, predictions, and information. The operations officer monitors command and communications nets, assists in preparing all plans and orders, and helps to supervise the training and preparation for operations. The operations officer monitors the planning process and makes recommendations for consistency with FSF partner objectives and goals.

Logistics Staff Officer, S-4

4-250. The logistics staff officer advises and assists the foreign counterpart in maintaining equipment readiness; monitoring the support provided to the foreign unit, its subunits, and attachments; and in recommending improvements. The logistics officer helps to supervise the use of transportation assets.

Signal Staff Officer, S-6

4-251. The signal staff officer advises and assists the foreign counterpart for all matters concerning network operations, network transport, information services, and spectrum management operations within the battalion's SFA and FSF area of operation. The signal officer monitors communications security throughout planning, preparation, and execution of SFA and FSF activities. The signal officer ensures SFA personnel are trained in the protection of sensitive communications equipment and cryptographic materials during the execution of FSF operations. The signal officer identifies SFA and FSF communications requirements, obtains communications resources for austere locations, and ensures redundant and backup systems are available and tested.

4-252. The Signal officer, in coordination with the IBCT, continuously assess and assist interorganizational information management coordination, normally required among participating interagency partners and the affected partner nation organizations. The signal officer uses assessments as part of the SFA and FSF communications synchronization plan. The signal officer uses foreign disclosure procedures and a tailored and responsive information- sharing process as part of the SFA and FSF assessment plan for dissemination with interagency partners and/or multinational audience.

Civil Affairs Team

4-253. A civil Affairs team is generally assigned to each battalion to conduct civil affairs operations in support of the civil-military operations plan. The civil affairs team is the basic civil affairs tactical support element provided to a supported commander. The civil affairs team executes civil affairs operations

and is capable of conducting civil reconnaissance and civil engagement along with assessments of the civil component of the operational environment. The success of the overarching civil affairs operations plan is predicated on the actions of the civil affairs team at the lowest tactical levels. The civil affairs team, due to its limited capabilities, relies on its ability to leverage other civil affairs assets and capabilities through reachback to the civil affairs company civil-military operations center in order to shape operations. The civil-military operations center is a standing capability formed by civil affairs units and is tailored to the specific tasks associated with the mission and normally augmented by other enablers such as engineer, medical, and transportation resources available to the supported commander. The civil affairs team attached to the battalion will interface with the S-9, civil-military operations center and civil affairs company at the IBCT level to ensure all battalion civil-military operations are nested with the IBCT commander's civil-military operations plan.

Civil Military Teams

4-254. Upon deployment, civil-military teams advise the SFA and FSF commanders and staffs on civil-military considerations and coordinate efforts of any civil affairs units supporting the FSF operation. Civil-military teams mentor counterpart teams and the supported foreign element staff on civil-military operations and the importance of respecting human rights. Civil-military teams may introduce counterparts to relevant nongovernmental organizations, United States Agency for International Development project officers, and provincial reconstruction team staff.

Note. The judge advocate (judge advocate general corps) mentors (provide legal mentorship) and/or coordinates the legal and moral obligations of military commanders to civilian populations under their control. (See AR 27-1 and FM 1-04.)

Company-Level and Below Advisors

4-255. Company-level and below advisors assist foreign counterparts to analyze the FSF mission and commander's intent from higher headquarters. Company advisors assist FSF company commanders and subordinate leaders restate the mission, conduct an initial risk assessment, identify a tentative decisive point, and define their own intent. Company advisors assist their foreign counterparts to analyze the mission and operational variables. From these variables, advisors help their foreign counterparts to develop a course of action that meets the higher headquarters concept of operations and commander's intent. Company advisors assist in the conduct of operations and the flow of information to the FSF higher commander.

Train Foreign Security Forces

4-256. Battalion trainers (or advisors) consistently provide and instill leadership at all levels of the FSF organization. Depending on the circumstances, the battalion may execute an SFA training missions unilaterally, or as part of a multinational force. In any case, leadership is especially important in the inherently dynamic and complex environment associated with SFA. SFA activities require the personal interaction of battalion trainers (or advisors) and FSF trainees, and other military and civilians organizations/agencies. A high premium is placed on effective leadership from junior, to the most senior noncommissioned and commissioned officers. This leadership must fully comprehend the operational environment and be prepared, fully involved, and supportive for FSF training to succeed. An effective FSF requires leadership from both the provider and the recipient sides throughout training to help build the FSF capacity to train their own forces.

Battalion and Company Security Force Assistance—Training Scenario, Example

4-257. Battalion and company trainers work with the FSF to give a positive context and narrative to the FSF professionalization efforts and capacity to secure the population. Coordination of the information themes and messages among the Infantry battalion, FSF, and the host-nation government, and the presentation or

availability of information to the indigenous population can limit or mitigate the propaganda efforts of insurgents or hostile forces. This may serve to mitigate the potential for destabilizing influences of hostile forces or criminal elements to propagandize the battalion's training effort and damage the FSF credibility and legitimacy. (Refer to FM 7-0 for additional information.) The following example – training scenario, used for discussion purposes, represents different ways to support FSF training.

Training Assessment

4-258. Prior to training the FSF, the battalion commander begins with a training assessment, in coordination with the FSF commander, of the training plans designed prior to the battalion's employment. This assessment is important to evaluate the FSF and to exercise the working relationship between the Infantry battalion and company, and the FSF. The training assessment covers all aspects of leadership, training, sustainment, and professionalization. To support an assessment, the battalion commander analyzes the following specific foreign unit considerations:

- The unit's mission and mission-essential task list and capability to execute them.
- Staff capabilities.
- Personnel and equipment authorization.
- Physical condition.
- Any past or present foreign influence on training and combat operations.
- Operational deficiencies identified during recent operations or exercises with U.S. personnel.
- Sustainment capabilities, to include training programs.
- Internal training programs and personnel.
- Training facilities.

4-259. The battalion commander and subordinate commanders assess the level of professionalism of FSF, both units and individuals. Adhering to established rules of engagement, ethics that meet the established laws and regulations of the commanding authority, laws for land warfare, and human rights are key areas that require assessment. The FSF support of civilian leaders and political goals also fall within this assessment.

4-260. Battalion subordinate leaders, working with FSF leaders, evaluate current members of the FSF for past military skills and positions. Often military reorganizations arbitrarily shift personnel to fill vacancies outside their knowledge and experience.

Analysis of the Prepared Training Plan

4-261. After completing the training assessment, the battalion commander and subordinate commanders analyze the prepared training plans and determine if changes are necessary. Training plans stress the deficiencies identified in the training assessment. The training plan identifies those in the host nation able to help train FSF to strengthen the legitimacy of the process. Using a comprehensive approach within the battalion's area of operations can provide support and expertise that enhance the training and operations process, and the FSF eventual self-sustainment. As the FSF gains sufficient capacity and capabilities to perform independently, trainers/advisors transition from a leading role to a mentoring role.

Program of Instruction

4-262. In coordination with the FSF staff and subordinate units, the staff and subordinate units of the Infantry battalion develop programs of instruction. These programs incorporate all training objectives that satisfy the training requirements identified during assessment. Training programs support these requirements. The FSF commander approves these programs of instruction prior to execution by the battalion. When executing programs of instruction, trainers/advisors adhere to training schedules consistent with changes in the mission variables. Trainers/advisors ensure through their counterparts and the FSF commander that all personnel receive training. Foreign counterpart trainers rehearse all classes approved on the programs of instruction.

Presentation of Instruction

4-263. Presenting the training material properly, trainers follow lesson outlines approved in the programs of instruction. All training clearly states the task, conditions, and standards desired during each lesson, ensuring the FSF understand them. Trainers/advisors state all warning and safety instructions (through interpreters when required) to the FSF. The training to reinforce the concepts includes demonstrations of the execution of each task, stressing the execution as a step-by-step process. Trainers monitor FSF progress during instruction and practical exercises, correcting mistakes as they are made.

Training Methodology (Crawl-Walk-Run)

4-264. An effective method of training used is the crawl-walk-run training methodology to assist trainers in teaching individual tasks, battle drills, and collective tasks, and when conducting field exercises. This methodology is employed to develop well-trained leaders and units. Crawl-walk-run methodology is based on the three following characteristics in lane training:

- Crawl (explain and demonstrate). The trainer describes the task step-by-step, indicating what each individual does.
- Walk (practice). The trainer directs the unit to execute the task at a slow, step-by-step pace.
- Run (perform). The trainer requires the unit to perform the task at full speed, as if in an operation, under realistic conditions.

4-265. During all phases, the training must include the mission of the unit in the context of the higher unit's mission to assist with the practical application of the training. Identifying the higher commander's mission and intent, as well as the tasks and purposes of other units in the area, adds context to the training. This method is expanded to include the role of other actors.

4-266. Trainers continue individual training to improve and sustain individual task proficiency while units train on collective tasks. Collective training requires interaction among individuals or organizations to perform tasks, actions, and activities that contribute to achieving mission-essential task proficiency. Collective training includes performing collective, individual, and leader tasks associated with each training objective, action, or activity. (Refer to FM 7-0 for additional information.)

Collective Training

4-267. Collective training starts at squad level. Squad battle drills provide key building blocks to support FSF operations. Battalion and company trainers link battle drills and collective tasks through a logical, tactical scenario in situational training exercises. Although this exercise is mission-oriented, it results in more than mission proficiency. Battle drills and collective tasks support situational training exercises, while these exercises support operations. Battalion and company trainers/advisors must understand the operational environment when training FSF; training incorporates how internal and external threats and civilians affect the environment.

4-268. Flexibility in using Army doctrine in training enhances efforts to make training realistic. Battalion and company trainers/advisors modify Army doctrine to fit the FSF level of expertise, mission command systems, the tactical situation, and sustainment base. Often the structure and capabilities of FSF differ from that required by Army doctrine. When FSF counter an insurgency, these exercises emphasize interplay among psychological and tactical, populace and resources control, intelligence, and civil affairs operations. (Refer to FM 7-0 for additional information.)

Individual Training

4-269. Individual training within the FSF by the battalion and companies emphasize physical and mental conditioning, tactical training, basic rifle marksmanship, first aid, combatives, and the operational environment. Individual training includes general tactics and techniques of security operations and the motivation, operations, and objectives of internal and external threats. Tough and realistic training conditions troops to mentally and physically withstand the strain of continuous operations. The battalion and companies cross-trains the FSF on all types of weapons, communications and other equipment, and skills particular to their unit. Personnel losses must never cause weapons, communications equipment, or essential skills to be lost due to a lack of fully trained replacement personnel.

Small-Unit Leader Training

4-270. SFA activities frequently entail rapidly changing circumstances; thus, FSF small-unit leaders must be able to plan and execute operations with little guidance. Battalion and company trainers/advisors stress small-unit leadership training concurrently with individual training. Tools the trainer uses to train leaders are manuals, previously established training, tactical exercises without troops, and unit missions. Small-unit leader training by the battalion develops aggressiveness, tactical proficiency, and initiative. Small-unit leader training should include combined arms technical training procedures for forward observer and close air support. Leadership training includes land navigation in difficult terrain and under conditions of limited visibility. Mission readiness and the health and welfare of subordinates are continuous parts of training.

FOREIGN SECURITY FORCE DEVELOPMENT TASKS—ASSESS

4-271. The functional tasks of OTERA-A serve as SFA capability areas used by the SFA battalion to develop, change, or improve the capability and capacity of the FSF. By conducting an assessment of the FSF, the SFA battalion can determine which area or areas within the OTERA-A construct to use to improve the FSF to the desired capability and capacity. In essence, the SFA battalion conducts an assessment of the FSF against desired capabilities and then develops an OTERA-A plan to help the FSF build capability and capacity.

Assess Security Force Assistance Activities

4-272. During SFA assessments to evaluate the status of FSF capabilities and capacity, assessments by the Infantry battalion and companies establish a measurement at a particular time and can be compared to other assessments to observe differences and progress attributable to SFA activities. Activity assessment by the battalion and companies involve deliberately comparing forecasted outcomes with actual events to determine the overall effectiveness of the battalion's employment. More specifically, assessment helps the battalion and subordinate company commanders determine progress toward attaining the desired end state, achieving objectives, and performing tasks.

Battalion and Company Security Force Assistance, Assessment Scenario, Example

4-273. The assessment developmental task, not limited to planning, preparing, or executing, by the Infantry battalion is ongoing throughout the operations process. Assessment involves continuously monitoring and evaluating the operational environment to determine what changes might affect the conduct of training and operations. The following example – assessment scenario, used for discussion purposes, represents different ways to assess training and operations.

Foreign Security Force Training and Evaluation

4-274. In training, the after action review provides the critical link between training and evaluation. The review is a professional discussion that includes the training participants and focuses directly on the training goals. An after action review occurs after all collective FSF training. Effective after action reviews review training goals with the responsible FSF commander. During the review, SFA trainers/advisors ask leading questions, surface important tactical lessons, explore alternative course of actions, assist the retention teaching points, and keep the after action review positive.

Comprehensive Review

4-275. The battalion and company commanders encourage FSF commanders to conduct a comprehensive review of collective training events with the entire unit, or at a minimum, with key subordinate leaders. If possible, the review occurs during the field portion of the training when the unit assembles at logical stopping points. During the review, the battalion commander and subordinate trainer/advisors avoid criticizing or embarrassing the FSF commander or subordinates. After action reviews provide feedback to increase and reinforce learning, providing a database for key points. During reviews within subordinate echelons, evaluators draw information from FSF subordinate leaders to form possible alternative course of actions for future activities.

Note. It is important to conduct comprehensive after- action reviews and reports, focusing on the specifics of the SFA activities, to gather information as soon as possible after execution.

Short-, Mid-, and Long-Term Success

4-276. During SFA activities, including FSF operations, success is defined within the context of three periods: short-, mid-, and long-term. In the short-term period, FSF make steady progress in fighting threats, meeting political milestones, building democratic institutions, and standing up security forces. In the mid-term period, FSF lead fighting threats and provide security, have a functioning government, and work towards achieving economic potential. In the long-term period, FSF are peaceful, united, stable, and secure; integrated into the international community; and a full partner in international security concerns.

Monitor the Current Situation

4-277. The Infantry battalion commander and subordinate advisors help foreign counterparts monitor the current situation for unanticipated successes, failures, or enemy actions. As the battalion commander assesses the progress of FSF operations, the commander looks for opportunities, threats, and acceptable progress. The commander considers, as part of the military decision-making process, the second- and third-order effects of the FSF operation. The battalion commander and subordinate advisors develop a cultural awareness and use this awareness so that operations and relationships achieve the desired end state.

Operational Success

4-278. Throughout the operation, the battalion commander assists the FSF commander in addressing changes to the operation and the feeding the assessments of the progress or regression back into the planning process. The closer SFA and FSF commanders work with trainer/advisor teams and the more they interact with local political and cultural leaders, the better the overall chances of mission success. Keys to operational success within the SFA and FSF area of operation, although not all inclusive, include the following:

- Establish MOE to provide benchmarks against which the commander assesses progress toward accomplishing the mission.
- Establish MOP to determine whether a task or action was performed to standard.
- Establish close and continuing relationships with all advisor teams, other actors operating in its area of operation, and foreign area officers with local or regional expertise.
- Establish close and continuing relationships with all foreign units (military, police, and others) operating in the area of operation.
- Establish close and continuing relationships with all political entities and actors within the area of operation.
- Establish redundant communications within the area of operation, especially when the battalion shares its area of operation with other entities that have cultural differences and lack of or degraded communications.

Appendix A

Command Post Operations and Organizations

The Infantry rifle company command post (CP) does not have a set organization. It consists of the commanding officer and other personnel and equipment required to support company mission command. The CP is located where the commander determines it is best able to support mission command. Its purpose is to provide communications with higher, lower, adjacent, and supporting units; to assist the commander in planning, coordinating, and issuing company orders, and to support continuous operations by the company. Often the CP is required to provide its own security but is able to locate with subordinate elements on the move or stationary when necessary. See ATP 6-0.5 for more information on CP operations.

COMPANY COMMAND POST

A-1. Normally the CP consists of the; radiotelephone operators, FIST headquarters, and the senior radiotelephone operator. The XO, 1SG, signal support NCO, armorer, reserve element leader, and the leaders of attached or supporting elements may also locate with the CP. When positioning the CP, the commander considers communication requirements, the security needs for the CP, and above all, the location where the commander is best able to fight the company.

A-2. CP personnel support the commander by—

- Establishing mission command systems (antennas, radios, tracking mechanisms).
- Assisting in preparation of the company OPORD.
- Providing recommendations or input during planning.
- Receiving and sending required reports and updated information to the battalion and subordinates.

A-3. The commander organizes and mans the CP to conduct continuous operations. Techniques the commander considers to ensure continuous operations include the following:

- Cross train personnel within the CP.
- Ensure the XO and 1SG are aware of critical decisions in the commander's absence.
- Establish a rest plan, and ensure compliance.
- Ensure key decision makers get rest.

PRIMARY AND ALTERNATE COMMAND POST LOCATIONS

A-4. The commander establishes a CP to exercise mission command during all operations. When the mission requires a second CP to assist mission command. The commander organizes a primary CP to control the battle, and an alternate CP that is able to assume command of the company if the primary CP is destroyed or unable to communicate. The commander considers security and communications requirements when positioning the primary and alternate CPs both on the move and stationary.

A-5. When moving the commander designates where the CP(s) is positioned in the formation. At times the commander may move away from the CP, for example to better control the company's maneuver, in this instance the commander may move with the lead platoon or during the attack locate with the main effort. In these situations, the commander may designate a part of the CP (radiotelephone operators or the FSO) to move with the commander.

A-6. In static positions (assembly areas, battle positions), a stationary CP(s) location may be designated by the commander where field expedient antennas are employed to allow communications to be established with

battalion, and subordinate units within the company. The stationary CP provides a designated location whereby messengers and leaders can report to conduct face to face interaction. The CP should be in defilade with covered, and concealed routes to and from its location. The CP should be off of natural lines of drift and key terrain features. It must be well camouflaged from ground and air observation. Local security is provided by either its relation to rifle platoons, by collocating with the company reserve element, or through the use of its own organic headquarters personnel. When the commander leaves the primary CP, the XO or the 1SG assume control of CP operations or when an alternate CP is established assumes control of CP operations from that location.

RESOURCING THE COMMAND POST

A-7. The most critical decision in organizing a company command post is committing resources. There are several options for manning an Infantry rifle company command post when 24 hour CP operations are required. The basic manning requirement is for two NCOs to serve as noncommissioned officers in charge. One NCO is in charge during the day shift and the other is in charge during the night shift. These NCOs must be able to perform their duties with little or no supervision. There are several members of the company who can meet this manning requirement. They include, but are not limited to—

- The signal support NCO.
- The fire support NCO (if available).

A-8. When conducting continuous 24 hour operations other members of the headquarters section can man needed positions in the CP, such as senior radiotelephone operator s. At a minimum, there should be two senior radiotelephone operator s. One senior radiotelephone operator supports the day shift and the other supports the night shift. The senior radiotelephone operator assists the NCO in charge as needed to accomplish the CP mission.

A-9. The Soldiers manning the company CP assist the commander by reducing the number of items the commander must personally track and report. This frees the commander to focus on and conduct troop leading procedures during planning. Key tasks performed by the Soldiers manning the CP include—

- Record incoming information such as status reports, warning order, and fragmentary orders.
- Continuously refine the situation template using the latest intelligence and distribute the updated situation template to all company elements.
- Post current guidance, timelines, and overlays.
- Pass required reports to the battalion and subordinate units.
- Track unit preparations and logistical status.
- Conduct required coordination with adjacent and flank units.
- Facilitate bottom-up refinement of planning and preparation.
- Battle track.

A-10. Attached or operational control units can use the CP as the point of contact. The units can further assist the commander in their troop leading procedures by supervising and enforcing the timeline and reproducing overlays and constructing sand tables for company and platoon rehearsals. The company CP is an information management center during the plan and preparation phase of a mission and battle tracking during mission execution.

A-11. Additional tasks performed by the Soldiers manning the CP include—

- Track and provide situational updates of current missions.
- Alert the command group or subordinate elements.
- Coordinate with higher and subordinate units to receive, send, and track daily and reoccurring information requirements.
- Track friendly unit locations.
- Track times for planned patrols or upcoming combat missions.
- Track current manning status and task organization of unit.
- Track current status of key weapons systems, vehicles, and equipment.

- Record and verify any messages needing the attention of the commanding officer, 1SG, or XO when they are not available.
- Update to the commanding officer to include tracking charts, maps, troop movements, personnel accountability and other products as specified by the commander.
- Track company significant activities in a staff journal, such as, a DA Form 1594 *(Daily Staff Journal or Duty Officer's Log),* when able.
- Act as a communications retransmitting site to higher headquarters when necessary.

INTELLIGENCE SUPPORT TEAM

A-12. Ideally, an intelligence support team (IST) is assigned to perform company-level intelligence tasks; however if not assigned, those duties and functions are performed by other personnel. The level of dedicated intelligence resources (mainly personnel) to the company command post has a direct correlation to the effectiveness of the fusion between missions and the locally developed intelligence.

A-13. The military intelligence company (K series) within the IBCT distributes intelligence support teams (ISTs) regardless of which element of decisive action (offense, defense, or stability) currently dominants. Dependent on the situation these teams can be employed down to maneuver company level. The IST mission is to provide basic analytic support, develop basic-level intelligence products, serve as a conduit for effective intelligence communications, and when resourced, manage some information collection programs. Some of those information collection programs include, friendly force debriefings, document and media exploitation, and biometric and forensic collections.

A-14. The IBCT can employ anywhere from two intelligence analysts, for example to a maneuver company, or a large team of intelligence analysts as an IST to support, based on the situation, an Infantry battalion, brigade engineer battalion, fires battalion, cavalry squadron, brigade support battalion, or to further augment the IBCT intelligence cell or brigade intelligence support element. A supported maneuver unit or element may subsequently augment the intelligence analysts with non- military intelligence Soldiers to form a larger IST. When this occurs, it is critical that the appropriate S2 section thoroughly train all non-military intelligence personnel on IST activities.

A-15. The IBCT S3 and S2 work together with the battalion S3s and S2s to determine the IST task organization, based on the mission variables of METT-TC, using standard command and support relationships as part of the overall IBCT intelligence architecture. Planning considerations for the IST includes the supported unit's—

- Commander's guidance.
- Decisive and shaping operations / main and supporting efforts.
- Specific tasks and the requirement for quick analysis at the point of action or to help manage a unit's information collection effort.
- Ability to provide transportation and logistical support.
- Communications capacity for the IST.
- Use of a specific IST to support or train with a specific unit.

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Appendix B

Planning and Preparation

The company commander is the primary planner that receives the OPORD, WARNORD, and fragmentary order from battalion and develops the company plan to support the battalion's mission. The executive officer (XO), first sergeant (1SG), fire support officer (FSO), and other personnel may assist the company commander. The company commander employs troop leading procedures to develop the plan and prepare for the mission.

SECTION I – PLANNING

B-1. Planning is the process by which the company commander translates visualization into a specific course of action (COA) for preparation and execution, focusing on the expected results. Planning helps the commander create and communicate a common vision and a shared understanding between subordinate leaders, and unified action partners. Planning results in an order that synchronizes the action of forces in time, space, and purpose to achieve objectives and accomplish missions. The commander relies on intuitive decision making and direct contact with subordinate leaders to integrate activities when circumstances are not suited for troop leading procedures.

PARALLEL, COLLABORATIVE, AND DISTRIBUTED PLANNING

B-2. Whether planning deliberately or rapidly, all planning requires the skillful use of available time to optimize planning and preparation activities. Taking more time to plan often results in greater synchronization; however, any delay in execution risks yielding the initiative—with more time to prepare and act—to the enemy. When allocating planning time to subordinate leaders, the commander must ensure subordinates have enough time to plan and prepare their own actions prior to execution. Both parallel, collaborative, and distributed planning help optimize available planning time. Parallel planning allows each echelon to make maximum use of time available. *Collaborative planning* is commanders, subordinate commanders, staffs, and other partners sharing information, knowledge, perceptions, ideas, and concepts regardless of physical location throughout the planning process (ADRP 5-0). (This is particularly important when commanders and subordinate leaders address the loads Soldiers carries during operations (see paragraph B-123 on page B-26.) Distributed planning allows the commander and staff members to execute planning from different locations. (See ATP 3-21.20 for information on collaborative and distributed planning.)

PARALLEL PLANNING

B-3. *Parallel planning* is two or more echelons planning for the same operation sharing information sequentially through warning orders from the higher headquarters prior to the higher headquarters publishing their operation plan or operation order (ADRP 5-0). Parallel planning is easiest when the battalion shares information continuously on future missions with subordinate units. Rather than waiting until the battalion commander and staff finish planning, the company commander starts to develop the company's mission as information becomes available. The commander develops an initial intent, ensuring that the commander's intent reflects the intent and concept of operation of the two higher commanders. The commander identifies tasks most likely to be assigned to the company, then develops an initial mission statement based on the information received. The commander's visualization of the initial plan will require ongoing clarification to ensure a shared understanding among subordinate leaders.

B-4. Parallel planning hinges on a shared understanding of the situation and the distribution of information as it is received or developed. The company commander cannot finalize the company order until the battalion completes its order. If each successive WARNORD contains enough information, the battalion's final order will confirm what the company commander has already analyzed and put into an initial plan. In other cases, the battalion's order may change or modify the company's tasks enough that additional planning and reconnaissance are required. As the next higher commander's concept of operation continues to mature, parallel planning continues and the company plan adjusts. Figure B-1 illustrates the parallel sequences of the military decision-making process (MDMP) of the Infantry battalion and the troop leading procedures of the rifle company and rifle platoon.

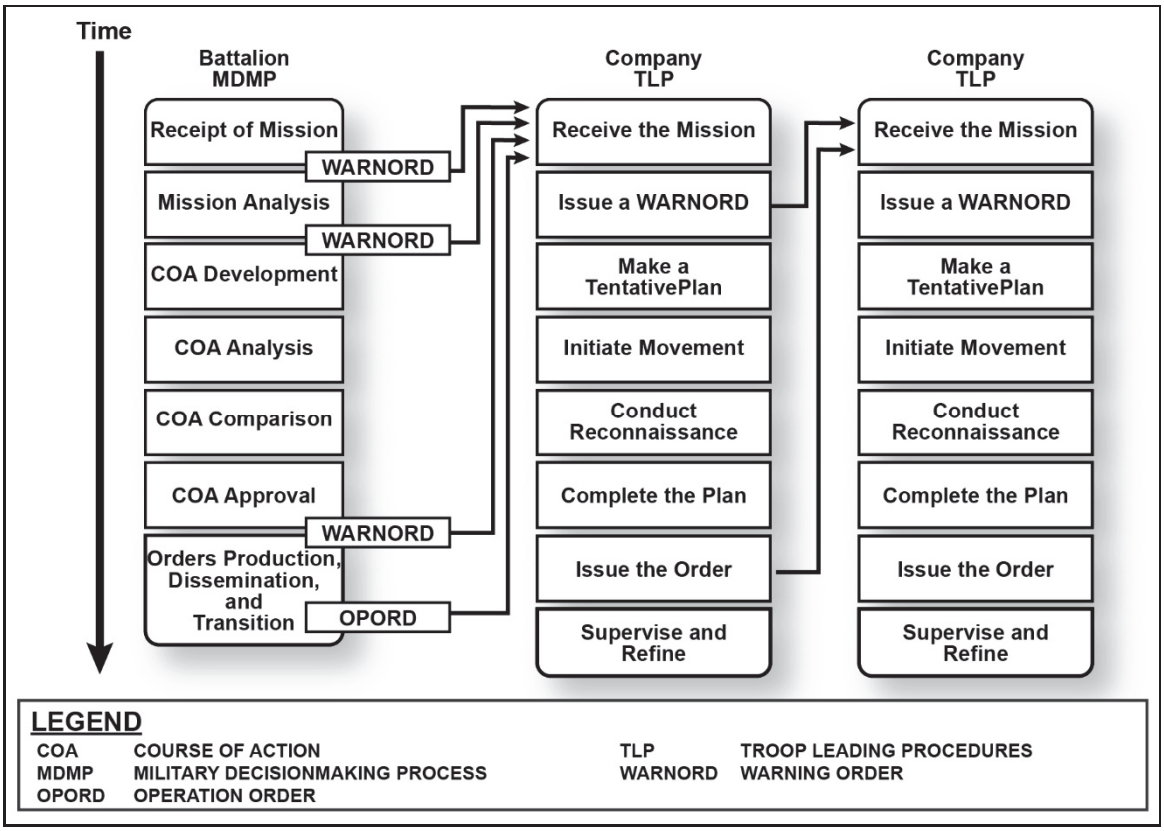

Figure B-1. Parallel planning

ROLE OF RECONNAISSANCE AND SURVEILLANCE

B-5. The company commander, when required, deploys a reconnaissance patrol(s) (see ATP 3-21.8, chapter 6) and surveillance assets early in the planning process to facilitate information collection. The commander ensures reconnaissance and surveillance (R&S) is continuous during planning, preparation, and execution of the mission. Information collected during R&S may result in initial plans or COAs being modified, or even discarded. Further, when the plan changes, the commander must modify his R&S objective to support the new plan. See ATP 3-21.20 for a detailed discussion on the role of R&S during planning.

TROOP-LEADING PROCEDURES

B-6. *Troop-leading procedures* are a dynamic process used by small-unit leaders to analyze a mission, develop a plan, and prepare for an operation (ADP 5-0). Troop leading procedures extend the MDMP conduct at battalion level with its coordinating staff to the company level. These procedures enable company level leaders to maximize available planning time while developing effective plans and preparing the company for a mission. Troop leading procedures consist of eight steps. Troop-leading procedures are also supported by risk management (see paragraph B-11 on page B-3). The troop leading procedure step sequence

is not rigid. The commander modifies the sequence to meet the mission, situation, and available time. Some steps are done concurrently while others may go on continuously throughout the mission. The troop leading procedure steps are as follows:

- Step 1. Receive the mission.
- Step 2. Issue a warning order.
- Step 3. Make a tentative plan.
- Step 4. Initiate movement.
- Step 5. Conduct reconnaissance.
- Step 6. Complete the plan.
- Step 7. Issue the order.
- Step 8. Supervise and refine.

B-7. Troop leading procedures begin when the company commander receives the first indication of an upcoming mission and continues throughout the operational process (plan, prepare, execute, and assess). Troop leading procedures comprise a sequence of actions to help the commander use available time effectively and efficiently to issue orders and execute operations. Normally, the first three steps (receive the mission, issue a WARNORD, and make a tentative plan) of troop leading procedures occur in order. The tasks involved in some actions (such as initiate movement, issue the WARNORD, and conduct reconnaissance) may recur several times during the process. The last step, supervise and refine, occurs throughout.

B-8. A tension exists between executing current missions and planning for future missions. The company commander must balance both. If the company is engaged in a current mission, there is less time for troop leading procedure. If in a lull, transition, or an assembly area, the commander has more time to conduct troop leading procedures. In some situations, time constraints or other factors may prevent the commander from performing each step of troop leading procedures as thoroughly as possible. For example, during the step, make a tentative plan; the commander often develops only one acceptable COA vice multiple courses of actions. The commander may develop, compare, and analyze several courses of actions before arriving at a decision on which one to execute, if time permits.

B-9. The commander and subordinate leaders begin troop leading procedures when they receive an initial WARNORD or receive a new mission. As each subsequent order arrives, the commander modifies assessments, updates tentative plans, and continues to supervise and assess preparations. In some situations, the commander may not receive or be issued the full sequence of WARNORDs; security considerations or tempo may make it impractical. The commander carefully considers decisions to eliminate WARNORDs. Subordinates always need to have enough information to plan and prepare for their mission. In other cases, troop leading procedures are started before receiving a WARNORD based on existing plans and orders (contingency plans or be-prepared missions) and on subordinate leader's understanding of the situation.

B-10. The commander uses troop leading procedures when working alone or with a small group to solve tactical problems. For example, the company commander may use the XO, 1SG, and FSO to assist during troop leading procedures. The type, amount, and timeliness of information passed from the battalion to the company directly impacts the company commander's troop leading procedures.

B-11. Risk management occurs continuously throughout troop leading procedures, with varying emphasis on different steps at different times. The supervision (during operations) and evaluation (during and after operations) must feed back into the system (see figure B-2 on page B-4). Through feedback, leaders ensure corrections are made during the current operation and in future operations.

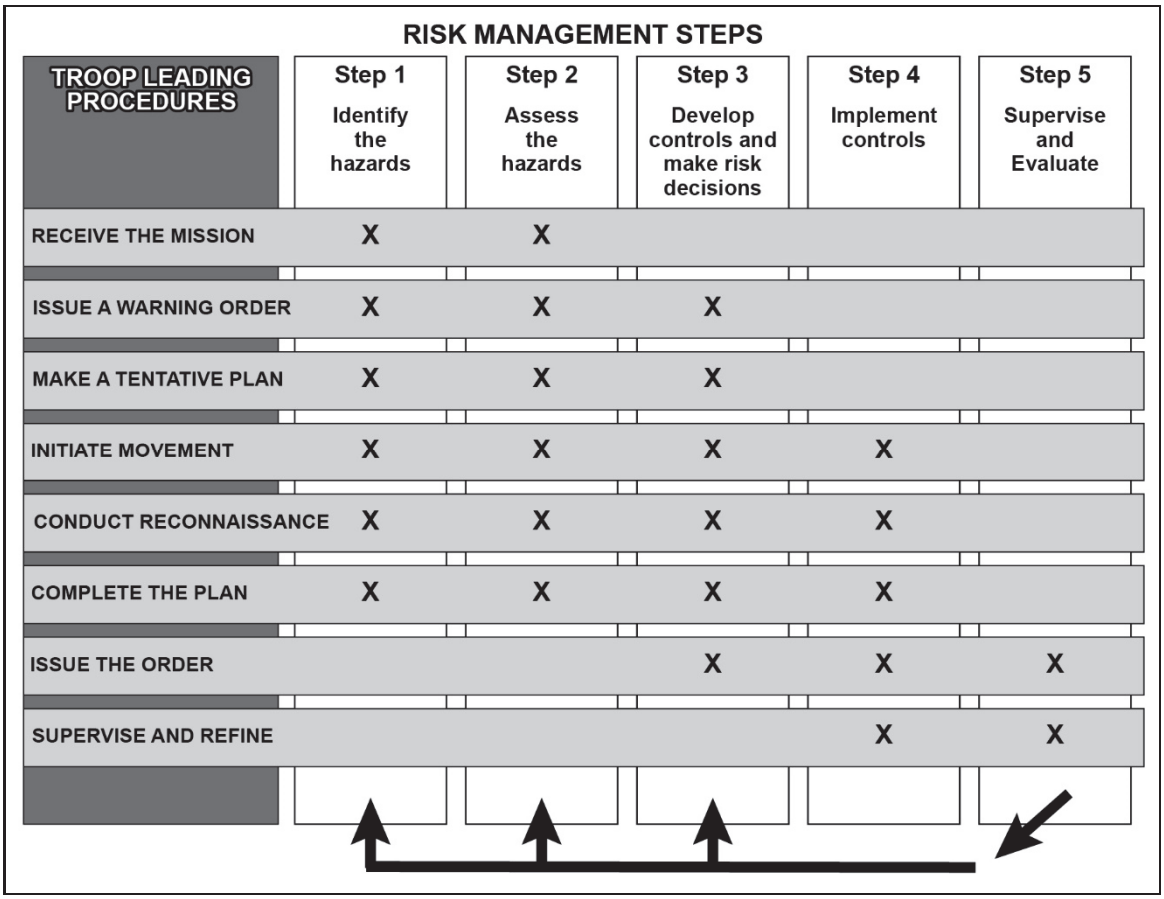

Figure B-2. Troop-leading procedures correlated with risk management steps

B-12. The type, amount, and timeliness of risk management information passed from higher to lower levels of command may have a significant effect on the level of detail used by lower unit leaders. The time between receiving the mission and initiating the WARNORD can significantly affect the time available for a subordinate unit to conduct risk assessments and implement appropriate controls. While battalion- and higher-level headquarters have specialized staff sections conducting risk assessments, companies and platoons may have only one or two individuals performing assessments. Higher-level leaders should provide subordinates sufficient time and details to conduct each of the five steps of risk management. Particular attention should be given to step 4 of risk management (implement controls). Aligning battalion and company standard operating procedures and ensuring regular use may reduce the time needed for planning at each level. Commanders and the battalion staff act on requests for information as quickly as possible to minimize planning delays at subordinate units. (Refer to ATP 5-19 for a detailed discussion on the analysis of risk.)

Notes. DD Form 2977 *(Deliberate Risk Assessment Worksheet)*, is the Army's standard form for deliberate risk assessment (ATP 5-19, appendix A). DD Form 2977 captures the information analyzed during the five steps of risk management and troop leading procedures.

DD form 2977 is a living document. Pen and pencil changes on hard copies are acceptable and encouraged since changes will occur during operations. Aviation; explosive; chemical, biological, radiological, or nuclear; and other highly technical activities may require additional specialized documentation.

Commanders and subordinate leaders use the form to track hazards and risks in a logical manner to help users in thinking through the five steps and then sharing the resulting assessment. For example, weather conditions can create specific hazards and risks during operations. Common weather hazards to assess are cold, ice, snow, rain, fog, heat, humidity, wind, dust, visibility, and illumination. (Refer to ATP 5-19 for a detailed discussion on the analysis of risk.)

B-13. Troop leading procedures are not a hard and fast set of rules. Some actions may be performed simultaneously or in an order different than shown in figure B-3. Troop leading procedures are a guide that must be applied consistently with the situation and the experience of the commander and subordinate leaders. The following information concerning the troop leading procedures assumes that the company will plan in a time-constrained environment. All steps should be done, even if done in abbreviated fashion. As such, the suggested techniques are oriented to help the commander quickly develop and issue an order. (Refer to FM 6-0 for additional information.)

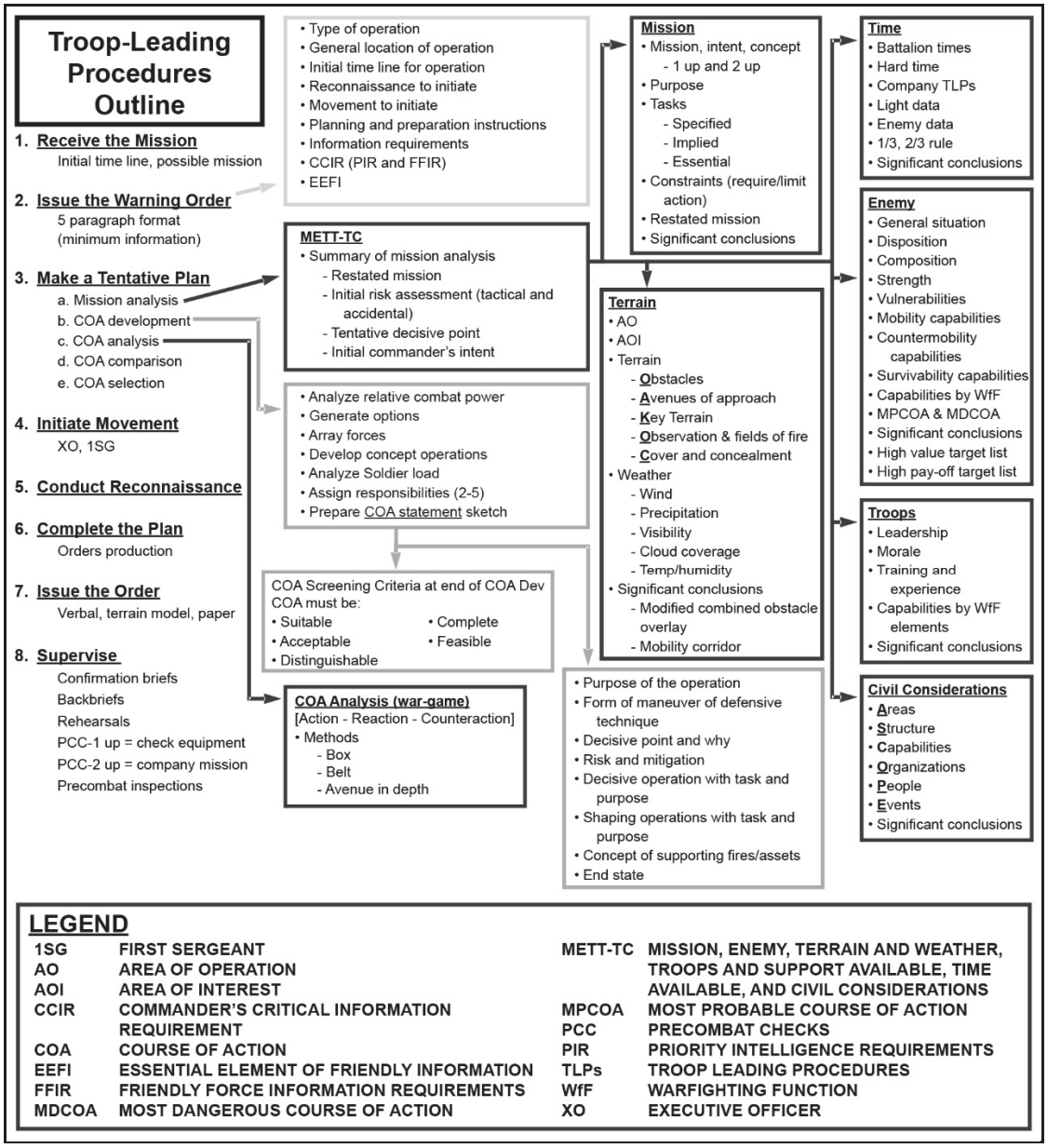

Figure B-3. Troop-leading procedures outline

STEP 1, RECEIVE THE MISSION

B-14. In Step 1 of troop leading procedures, the commander determines the company's mission and assesses the time available to accomplish the mission. The commander can conduct an initial analysis of the order using METT-TC. The commander conducts detailed METT-TC analyses only after the first WARNORD is issued (Step 2). Rarely will the company receive its missions until after the battalion issues the third WARNORD or the OPORD itself. However, in the course of parallel planning, the commander already will have deduced a tentative mission.

B-15. The company can receive the mission in several ways. The company can receive the mission in the form of WARNORDs or, if the battalion chooses to wait for more information, an actual OPORD. Sometimes the battalion chooses not to send WARNORDs, opting instead to wait and send a full OPORD. Worst case, the company receives a new mission due to situational changes occurring during the execution of a prior mission. In addition to receiving (or deducing) the mission during this step, the commander also—

- Conducts a confirmation brief to the battalion commander to verify an understanding of the battalion commander's intent, and concept of operation.
- Conducts the initial assessment of the situation using reverse planning, and ensures adherence to the one thirds two thirds rule.
- Conducts assessment to identify; time available to prepare for and execute the mission, and the initial timeline for planning and executing the mission.
- Conducts an initial planning-time analysis to identify critical times in the timeline.
- Analyzes the time the company has available.
- Prepares an initial timeline.

B-16. The most important element of the company's WARNORD is the initial timeline for planning. The WARNORD may convey other instructions or information that the commander thinks will help subordinates leaders prepare for the upcoming mission.

STEP 2, ISSUE WARNING ORDER

B-17. A *warning order* is a preliminary notice of an order or action to follow. (JP 5-0). Though less detailed than a complete *operation order*—a directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. (JP 5-0)—a WARNORD aids in parallel planning. After the commander receives the new mission and assesses the time available for planning, preparing, and executing the mission, the commander immediately issues a WARNORD to subordinates. By issuing the initial WARNORD as quickly as possible, the commander enables subordinates to begin their own planning and preparation (parallel planning) while they begin to develop OPORDs. When the commander obtains more information, the commander issues an updated WARNORD, giving subordinates a share understanding of what the commander knows.

B-18. The commander can issue a WARNORD to subordinates right after receiving the battalion's initial WARNORD. Subordinate leaders include the same elements given in the company's initial WARNORD. If practical, the commander briefs subordinate leaders within the company face-to-face. In the defense, ideally the commander briefs subordinates on the actual ground to defend. Otherwise, the commander uses a terrain model, sketch, or map. (See figure B-4 for an example of a warning order format.)

Warning Order # **to Operations Order #**
Initial Task Organization:
Effective Date/Time:

1. Situation:
General Enemy Overview:
- Area of Operation (AO)
- Area of Interest (AOI)
- Who the Company/Team is fighting
- Brigade Combat Team Mission
- Brigade Combat Team Commander Intent
- Battalion/Task Force Mission
- Battalion/Task Force Commander Intent

2. Mission:
Upcoming Task and Purpose or Type of Operational/ General Location:

3. Execution:
Movement Instructions/Movement to Initiate:
- Our Current Location
- Our Next Location:
- Objective Location:

Reconnaissance Tasks/Reconnaissance to Initiate:
- Reconnaissance Team:

Information Requirements:
Coordinated Instructions:
- Mission-Oriented Protective Posture (MOPP)
- Collection Operations Management (COM)
- Route
- Zero/Boresight
- Precombat Checks (PCC)
- Commander's Critical Information Requirement (CCIR)
- Priority Intelligence Requirement (PIR)
- Friendly Force Information Requirement (FFIR)
- Priorities of Work
- Priorities of Rehearsals

Initial Operational/Planning Timeline:
- Battalion
- Company/Platoon Planning/Operational
- Enemy
- Weather (WX)/Light Data

4. Sustainment:
Planning/Preparation Instructions:
Combat Trains Command Post (CTCP)
Unit Maintenance Collection Point (UMCP)
Logistics Release Point (LRP) Grid
Ambulance Exchange Point (AXP) Grid
Casualty Collection Point (CCP) Grid
Company Trains Grid
Class of Supply:
- Class I
- Class III
- Class IV
- Class V
- Others

5. Command and Signal:
Company Command Post (CP):
- Primary CP
- Alternate CP

Succession of Command
Battalion Grid
Tactical Command Post Grid
Main Command Post Grid

Figure B-4. Example warning order format

B-19. The commander issues the WARNORD to subordinates immediately after the initial assessment, which includes the—

- Mission or nature of the operation.
- Time and place for issuing the operation order.
- Task organize of units or elements participating in the operation.
- Reconnaissance and surveillance to initiate.
- Security missions to initiate.
- Movement to initiate.
- Information requirements.
- Commander's critical information requirement (priority intelligence requirement and friendly force information requirement)
- Essential element of friendly information.
- Planning and preparation instructions.
- Specific tasks not addressed by unit standard operating procedures (SOPs).
- Timeline for the operation.

B-20. During hasty operations, the entire intelligence collection, analysis, processing, exploitation, and dissemination process must respond rapidly to the commander's critical information requirements (CCIRs). Priority intelligence requirements (PIRs) are information the commander needs to know about terrain or enemy to make a critical decision. PIRs are best expressed in a question not answered by a yes or no response. The commander uses WARNORDs to modified PIRs based on current mission parameters. Friendly force information requirements will include information the commander needs to know about the company or about adjacent units to make critical decisions. Although essential elements of friendly information are not part of the CCIR, they still become priorities when the commander states them. Essential elements of friendly information are the critical aspects of a friendly operation, if known by the enemy, that subsequently would compromise or lead to failure of the operation. Consequently, this information must be protected from identification by the enemy.

Note. The commander issues additional WARNORDs throughout the troop leading procedure as necessary when new information is available. A technique is to use a WARNORD format like the one in example figure B-3 on page B-5 to fill in gaps and refine the plan with new information. Once the commander has delivered the WARNORD, subordinate leaders should initiate preparation to issue their WARNORDs.

STEP 3, MAKE A TENTATIVE PLAN

B-21. In a time-constrained environment, the commander typically develops only one COA. However, as time permits, the commander can develop additional courses of action for comparison purposes. The commander begins Step 3 after the issuant of the company WARNORD, and generally after receiving the battalion's third WARNORD, or until the commander has enough information to proceed. The commander does not wait for a complete OPORD before starting to develop a tentative plan. Once subordinate leaders receive the company WARNORD they begin to develop their tentative plan and make adjustments as more information becomes available.

Mission Analysis

B-22. The commander conducts mission analysis to develop *situational understanding*—the product of applying analysis and judgment to relevant information to determine the relationship among the operational and mission variables to facilitate decision-making (ADP 5-0)—and to confirm what the company must do to accomplish the mission. At lower levels, the company commander and subordinate leaders conduct mission analysis by evaluating the mission variables of METT-TC. The mission variables are mission, enemy, terrain and weather, troops and support available, time available and civil considerations. Mission analysis has no time standard. The commander takes as much time as needed within the constraints of the mission and while still adhering to the one-third, two-thirds rule.

B-23. Within mission analysis the commander makes significant deductions about the enemy, terrain, and own forces affecting the mission. These significant deductions drive the planning process, preparation activities, and the execution of the mission. During the planning process the commander conveys to subordinates the importance of these deductions, and the effects they will have on the unit's mission.

B-24. Mission analysis answers four questions that become inputs into developing a COA. These questions are—

- What is the company's mission?
- What is the current situation?
- How does the company accomplish the mission?
- What are the risks?

B-25. Analyzing the mission variables of METT-TC is a continuous process. The commander constantly receives information, from the time planning begins through execution. During execution analysis continues, enabling the commander to issue a well-developed *fragmentary order*—an abbreviated operation order issued as needed to change or modify an order or to execute a branch or sequel (JP 5-0). The commander assesses new information to determine the effect on the mission and future plans. If determined to be an effect on the

mission, the commander must decide how to adjust the plan to meet the new situation. The commander need not analyze METT-TC in a particular order. How and when to do so depends on when the information is received as well as on the experience and preferences of the commander. One technique is to parallel the troop leading procedure based on the products received from higher.

B-26. During Step 3, the commander and subordinate leaders begin their mission analysis. During mission analysis, the commander—

- Restates the mission.
- Conducts an initial risk assessment.
- Identifies a tentative decisive point.
- Develops initial commander's intent.

Coduct Initial Risk Assessment

B-27. Risk assessment is the identification and assessment of hazards allowing the commander to implement measures to control hazards (risk management, fratricide avoidance, and effects of continuous operations). The commander's risk assessment to protect the force aids in mission accomplishment. The commander considers tactical risk and accident risk during planning.

B-28. Tactical risk is associated with hazards existing due to the enemy's presence. The consequences of tactical risk take two major forms, which are described below:

- Enemy action where the commander has accepted risk such as an enemy attack where the friendly commander has chosen to conduct an economy of force.
- Lost opportunity, such as movement across terrain that severely restricts speed to traverse the terrain. This then would restrict the unit's ability to mass the effects of combat power.

B-29. Accident risk includes all operational risk other than tactical risk and can include hazards concerning friendly personnel, equipment readiness, and the environment. Fratricide is an example of an accident risk.

B-30. The commander identifies risks based on the results of mission analysis. Once identified, risk must be reduced through controls. For example, fratricide is a hazard categorized as an accident risk; surface danger zones and risk estimate distance are used to identify the controls, such as target reference point and phase lines, to reduce this accidental risk. When the commander decides what risks to accept, the commander must decide in a COA how to reduce risk to an acceptable level. (See ATP 5-19 for information on making informed decisions to reduce or offset risk.)

Identify Tentative Decisive Point

B-31. Identifying a tentative decisive point and verifying it during COA development is the most important aspect of the troop leading procedure. The commander visualizes a valid decisive point to determine how to achieve success and accomplish the mission's purpose. The commander develops the entire COA from the decisive point. Without determining a valid decisive point, the commander cannot begin to develop an appropriate COA. The commander, based on the initial analysis of METT-TC, situational awareness, visualization, and insight into how such factors can affect the unit's mission, visualizes where, when, and how the company's ability to generate combat power can overwhelm the enemy's abilities to generate combat power. The decisive point might orient on terrain, enemy, time, or a combination of these. The decisive point might be where, how, or from where the company will combine the effects of combat power against the enemy. The decisive point might be the event or action (with respect to terrain, enemy, or time, and generation of combat power) that will ultimately and irreversibly lead to the company achieving its purpose.

B-32. The decisive point does not simply restate the unit's essential task or purpose; it defines how, where, or when the unit will accomplish its purpose. The company's decisive operation always focuses at the decisive point and always accomplishes the company's purpose. Designating a decisive point is critical to the commander's visualization of how to use combat power to achieve the company's purpose, how to task organize the company and how shaping operations will support the decisive operation, and how the decisive operation will accomplish the company's purpose. This tentative decisive point forms the basis for planning and COA development; it also forms the basis of communicating the COA to subordinates. The commander clearly explains what the decisive point is to subordinate leaders and why it is decisive; this objective, in

conjunction with their commander's intent, facilitates subordinate initiative. A valid decisive point enables the commander to clearly and logically link how the application of combat power with respect to terrain, enemy, and time allows the company to accomplish its purpose. If the commander determines a tentative decisive point is not valid during COA development or analysis, the commander determines another decisive point and restarts COA development.

Develop Iniitial Commander's Intent

B-33. The commander's intent is a clear, concise statement of what the force must do to succeed with respect to the enemy, terrain and desired *end state* (a set of required conditions that defines achievement of the commander's objectives [JP 3-0]). The commander's intent provides the link between mission and concept of operation by stating essential tasks or conditions existing to achieve the stated purpose of the operation. The intent and mission statement forms the basis for subordinates to exercise disciplined initiative and judgment in the face of new opportunities, or whenever the concept of operation ceases to apply. The commander's intent continuously evolves throughout the planning and preparation for the operation as the commander becomes more attuned to what the company must do to accomplish the mission.

B-34. The essential tasks and conditions specified in the commander's intent are not tied to a specific COA. Essential tasks are not limited to tactical tasks. The operation's tempo, duration, and effect on the enemy, and terrain being controlled are examples of essential tasks or conditions.

B-35. The commander's intent does not include the method by which the force will get from its current state to the end state. The method is the concept of operation. Nor does the intent contain acceptable risk. Risk is addressed in the COA. The final commander's intent included in the OPORD is based on the sum of all of the analysis conducted during the troop leading procedure. This final intent can be provided after the commander understands the end state of the mission, only.

Analysis of the Mission

B-36. A mission is task and purpose clearly indicating the action to be taken and reason for the action. In common usage, especially when applied to the company and below, a mission is a duty or task assigned to an individual or unit. The commander analyzes the battalion's WARNORD, OPORD, and mission to determine how the company contributes to the battalion's mission.

B-37. The mission is always the first factor the commander considers and the most basic question: What has the company been told to do and why?

B-38. The commander must understand the mission, intent, and concept of operation one and two levels higher. This understanding makes it possible to exercise disciplined initiative. The commander captures understanding of what the company is to accomplish in the revised mission statement. The commander uses five steps to fully analyze the company's assigned mission as directed from—

- Higher headquarters' (one and two levels up) mission, commander's intent, and concept of operation.
- Company's purpose.
- Constraints.
- Specified, implied, and essential tasks.
- Restated mission.

Higher Headquarters' (One and Two Levels Up) Mission, Commander's Intent, and Concept of Operation

B-39. The commander understands the higher headquarters', one and two levels up, mission, commander's intent, and concepts of operation. The commander identifies the higher headquarters tasks and purposes, and how they contributing to the fight. This understanding is required for all adjacent units to the company.

Company's Purpose

B-40. The commander identifies the company's purpose from the battalions OPORD. The company's purpose generally matches or achieves the purpose of the battalion. Similarly, the purpose of shaping operations relate directly to those of the decisive operation. The purpose of sustaining operations relate

directly to those of the decisive operation and shaping operations. The commander ensures the company's purpose relates directly to the battalions purpose.

Constraints

B-41. A *constraint* is a restriction placed on the command by a higher command. A constraint dictates an action or inaction, thus restricting the freedom of action of a subordinate commander (FM 6-0). The commander determines all constraints the battalion OPORD places on the company's ability to execute the mission. Annexes to the order may also include constraints. The operation overlay, for example, may contain a restrictive fire line or a no fire area (see appendix D). Constraints may also be issued verbally, in WARNORDs, or in policy memoranda. Constraints may also be based on resource limitations within the command, such as organic fuel transport capacity, or physical characteristics of the operational environment.

Specified Tasks, Implied Tasks, and Essential Tasks

B-42. A *task* is a clearly defined action or activity specifically assigned to an individual or organization that must be done as it is imposed by an appropriate authority (JP 1). The commander must identify and understand tasks required to accomplish a given mission. The three types of tasks (specified, implied, and essential) are discussed in the following three paragraphs.

B-43. A *specified task* is a task specifically assigned to a unit by its higher headquarters (FM 6-0)—are found throughout the OPORD. Specified tasks also may be found in annexes and overlays, for example: seize Objective Fox; reconnoiter Route BLUE; assist the forward passage of First Platoon, B Company; send two Soldiers to assist in the loading of ammunition.

B-44. An *implied task* is a task that must be performed to accomplish a specified task or mission but is not stated in the higher headquarters' order (FM 6-0). Implied tasks derive from a detailed analysis of the battalion's order, from the enemy situation and COA, from the terrain, and from knowledge of doctrine and history. Analyzing the company's current location in relation to future area of operation as well as the doctrinal requirements for each specified task might reveal the implied tasks. Only those requiring resources should be used. For example, if the specified task is seize Objective Fox and new intelligence has Objective Fox surrounded by reinforcing obstacles, this intelligence would drive the implied task of breach reinforcing obstacles vicinity Objective Fox.

B-45. An *essential task* is a specified or implied task that must be executed to accomplish the mission (FM 6-0). An essential task, along with the company's purpose, is usually assigned by the battalion's OPORD in the concept of operation or tasks to subordinate units. For decisive operations, since the purposes are the same nested concept, the essential task accomplishes the battalion's purpose. For shaping operations, it accomplishes the assigned purpose, which shapes the decisive operation. For sustaining operations, it accomplishes the assigned purpose, which enables both the shaping operation and decisive operation (again, nested concept).

Restated Mission

B-46. The commander concludes mission analysis by restating the mission. A *mission statement* is a short sentence or paragraph that describes the organization's essential task(s), purpose, and action containing the elements of who, what, when, where, and why (JP 5-0). The five elements of a mission statement answer these questions, commonly referred to as the five Ws:

- Who will execute the operation (unit or organization)?
- What is the unit's essential task (tactical mission task)?
- When will the operation begin (by time or event) or what is the duration of the operation?
- Where will the operation occur (area of operations, objective, grid coordinates)?
- Why will the force conduct the operations (for what purpose)?

Analysis of Terrain and Weather

B-47. Terrain and weather are key aspects to mission analysis. When analyzing terrain, the commander considers manmade features and effects on natural terrain features and climate. The commander also

considers the effects of manmade and natural terrain in conjunction with the weather on friendly and enemy operations. In general, terrain and weather do not favor one side over the other unless one is better prepared to operate in the environment or is more familiar with it. The terrain, however, may favor defending or attacking. Analysis of terrain answers the question: What is the terrain's effect on the operation? The commander analyzes terrain using the five military aspects of terrain.

B-48. From the modified combined obstacle overlay developed by battalion, the commander already has an understanding the general nature of the ground and effects of weather. However, the commander must conduct a detailed analysis to determine how terrain and weather uniquely affects the company's mission and the enemy. The commander must go beyond merely passing along the modified combined obstacle overlay to subordinate leaders and making general observations of the terrain such as, this is high ground or this is a stream. The commander must determine how the terrain and weather will affect the enemy and their units. Additionally, the commander applies these conclusions when developing a COA(s) for both enemy forces and the company. At company level and below, the commander and subordinate leaders develop a graphic terrain analysis overlay. This product is similar to the modified combined obstacle overlay in it shows the critical military aspects of terrain. Not only does it facilitate planning, but it also aids in briefing subordinates.

B-49. The commander to have a starting point for the company's terrain analysis must first define the operational environment. The commander must understand the company's area of operation and areas of interest, which are—

- Areas of operation. The battalion commander use boundaries to define a company's area of operation. Assigning an area of operation to companies lets subordinate commanders use their initiative and supports decentralized execution.
- Area of interest. An area of interest is a geographical area, usually larger than the commander's area of operation. The area of interest includes threat forces or other elements characterizing the operational environment and greatly influencing the accomplishment of the mission.

B-50. Limited planning time forces the commander to prioritize terrain analyses. For example, in the conduct of an attack, the commander might prioritize the areas immediately around the objective for analysis, followed the lead platoon's axes leading to the objective. Given more time, the commander might analyze the remainder of the company's area of operation and area of interest.

B-51. The commander prepares a graphic depiction of terrain to help explain findings about the effects of terrain and weather on the mission. The graphic depiction of terrain can be a photograph, overlay for a map sheet, or a terrain model. In it, the commander show terrain mobility classifications, key terrain, intervisibility lines, known obstacles, avenues of approach, and mobility corridors.

Five Military Aspects of Terrain

B-52. The commander analyzes terrain using the five military aspects of terrain: obstacles, avenues of approach, key terrain, observation and fields of fire, and cover and concealment (often expressed in the Army memory aid OAKOC). See ATP 2-01.3 and ATP 3-34.80 for information on analyzing the military aspects of terrain. Military aspects of terrain are used to analyze the ground. The sequence can vary. The leader determines the effects of each aspect of terrain on both friendly and enemy forces. These effects translate directly into conclusions applying to friendly or enemy COA(s). Even if time is tight, the commander should allocate as much time as possible to factor, starting at the objective area, and analyzing other aspects of key terrain. Conclusions include at least the following:

- Template of enemy forces and essential weapon systems.
- Positioning of own assets.
- Understanding of time and space relationships of events, leading to thorough contingency plans.
- Echeloning and identifying of enemy observation and indirect fires.
- Selecting of movement techniques and formations, to include when to transition to tactical maneuver.

Obstacles

B-53. The commander identifies existing (inherent to terrain and either natural or man-made) and reinforcing (tactical or protective) obstacles that limit mobility in an area of operation. Reinforcing obstacles are constructed, emplaced, or detonated by military force as follows:

- Existing obstacles, natural include rivers; forests; mountains; ravines; gaps and ditches more than three meters wide; tree stumps and large rocks more than 18 inches high; forests with trees eight inches or more in diameter, with less than four meters between trees.
- Existing obstacles, man-made include towns; canals; railroad embankments; buildings; power lines; telephone lines.
- Reinforcing obstacles, tactical. Tactical (reinforcing) obstacles inhibit the ability of the opposing force to move, mass, and reinforce. Examples include mine fields (conventional and situational); antitank ditches; and wire obstacles.
- Reinforcing obstacles, protective (reinforcing) obstacles offer close-in protection and are important to survivability.
- Offensive considerations when analyzing obstacles and restricted terrain:
- How is the enemy using obstacles and restricted terrain features?
- What is the composition of the enemy's reinforcing obstacles?
- How will obstacles and terrain affect the movement or maneuver of the unit?
- If necessary, how can I avoid such features?
- How do I detect and, if desired, bypass the obstacles?
- Where has the enemy positioned weapons to cover the obstacles, and what type of weapons are they using?
- If I must support a breach, where is the expected breach area and where will the enemy be overwatching the obstacle?
- How will the terrain affect the employment of mortars, medium machine guns, and Javelin missiles?
- Defensive considerations when analyzing obstacles and restricted terrain:
- Where does the enemy want to go? Where can I kill the enemy? How do I get the enemy to go there?
- How will existing obstacles and restricted terrain affect the enemy?
- How can I use these features to force the enemy into its engagement area, deny them an avenue, or disrupt their movement?
- How will the terrain affect the employment of mortars, medium machine guns, and Javelin missiles?
- Categories of terrain, unrestricted— terrain free of restrictions to movement, so no actions are needed to enhance mobility. For armored forces, unrestricted terrain typically is flat or moderately sloped, with scattered or widely spaced obstacles such as trees or rocks. This terrain generally allows wide maneuver and offers unlimited travel over well-developed road networks. It allows the platoon and squads to move with little hindrance.
- Categories of terrain, restricted. Terrain hindering movement somewhat. Little effort is needed to enhance mobility, but units might have to zigzag or make frequent detours. They could have a hard time maintaining optimum speed, moving in some types of combat formations, or transitioning from one formation to another. For armored forces, restricted terrain typically means moderate to steep slopes or moderate to dense spacing of obstacles such as trees, rocks, or buildings. Swamps and rugged ground are two examples of restricted terrain for Infantry forces. Poorly developed road systems may hamper logistical or rear area movement.
- Categories of terrain, severely restricted. Terrain which severely hinders or slows movement in combat formations unless some effort is made to enhance mobility. Engineer forces might be needed to improve mobility or platoon and squads might have to deviate from doctrinal tactics. For example, they might have to move in columns rather than in lines. Or, they might have to move much more slowly than they would like. For armored forces, steep slopes, densely spaced obstacles, and absence of a developed road system characterize severely restricted terrain.

Avenues of Approach

B-54. An avenue of approach is an air or ground route leading to an objective (or to key terrain in its path) that an attacking force can use. Avenues of approach are classified by type (mounted, dismounted, air, or subterranean), formation, and speed of the largest unit traveling on it.

B-55. The commander groups mutually supporting mobility corridors to form an avenue of approach. If they have no mutually supporting mobility corridors, then a single mobility corridor might become an avenue of approach. Avenues of approach are classified the same as mobility corridors. After identifying these avenues, the commander evaluates each and determines its importance.

B-56. The commander can include the following offensive considerations in evaluation of avenues of approach:

- How can I use each avenue of approach to support the company's movement and maneuver?
- How will each avenue support movement techniques, formations and, once the company makes enemy contact, maneuver?
- Will variations in trafficability force changes in formations or movement techniques, or require clearance of restricted terrain?
- What are the advantages and disadvantages of each avenue?
- What are the enemy's likely counterattack routes?
- What lateral routes could we use to shift to other axes, and which could the enemy use to threaten the company's flanks?
- How will each avenue of approach affect the rate of movement of each type force?

B-57. The commander can include the following defensive considerations in evaluation of avenues of approach:

- What are all likely enemy avenues into the company's area of operation?
- How can the enemy use each avenue of approach?
- What lateral routes could the enemy use to threaten the company's flanks?
- What avenues would support a friendly counterattack or repositioning of forces?

Key Terrain

B-58. Key terrain is locations or areas whose seizure, retention, or control gives a marked advantage to either combatant. It is a conclusion, usually arrived at after enemy analysis and COA development, rather than an observation.

B-59. A prominent hilltop overlooking an avenue of approach might or might not be key terrain. Even if it offers clear observation and fields of fire, it offers nothing if the enemy can easily bypass it, or if the selected COA involves maneuver on a different avenue of approach. However, if it offers cover and concealment, observation, and good fields of fire on multiple avenues of approach, or on the only avenue of approach, then it offers a definite advantage to whoever controls it.

B-60. The B-14 commander must assess what terrain is essential to mission accomplishment. Another example of essential terrain for a platoon and squad in the attack is high ground overlooking the enemy's reverse-slope defense. Controlling this area could prove critical in establishing a support by fire position to protect a breach force.

B-61. Decisive terrain. Leaders also must determine if terrain is decisive. This is key terrain which seizure, retention, or control is necessary for mission accomplishment. Some situations have no decisive terrain. If the commander identifies terrain as decisive, this means seizing or retaining it is necessary to accomplish the mission.

B-62. Tactical considerations in analyzing key terrain. Terrain is important for friendly observation, both for commanding and controlling and for calling for fire? What terrain is important to the enemy and why? Is it important to the company? What terrain has higher headquarters named as key? Is this terrain also important to the enemy? Is the enemy controlling this key terrain? How do I gain or maintain control of key terrain? What terrain is essential for communications nodes dictating the employment of digital communications equipment?

Observation and Fields of Fire

B-63. The commander identifies locations along each avenue of approach providing clear observation and fields of fire for both the attacker and defender. The commander analyzes the area surrounding key terrain, objectives, engagement area, and obstacles. The commander locates intervisibility lines (ridges or horizons which can hide equipment or personnel from observation). The commander assesses the ability of the attacking force to overwatch or support movement (with direct fire). Intervisibility line analysis enables the leader to visualize the profile view of terrain when only a topographic product (map) is provided.

B-64. In analyzing fields of fire, the commander considers the friendly and enemy potential to cover avenues of approach and key terrain, in particular, with direct fires. The commander identifies positions where artillery observers can call for indirect fire. The observer must observe both the impact and effects of indirect fires. The observer analyzes if vegetation will affect the employment or trajectory of the Javelin or 60-mm mortars. Vegetation can do this by masking the target or by reducing overhead clearance. When possible, the observer conducts a ground reconnaissance from both enemy and friendly perspectives. The observer might do it personally, by map, or with their subordinate units, or they can use the assets and information provided by the battalion scout platoon. This reconnaissance helps the commander to see the ground objectively and to see how it will affect both forces.

B-65. Offensive considerations in analyzing observation and fields of fire include the following:

- Where do enemy observers and weapon systems have clear observation and fields of fire available on or near the objective?
- Where can the enemy concentrate fires?
- Where will the enemy be unable to concentrate fires?
- Where is the enemy vulnerable?
- Where can the company support the movement of a friendly force with mortar, medium machine gun, or Javelin?
- Where can friendly forces conduct support by fire or assault by fire?
- Where are the natural target registration points?
- Where does the commander position indirect fire observers?

B-66. Defensive considerations in analyzing observation and fields of fire:

- What locations have clear observation and fields of fire along enemy avenues of approach?
- Where will the enemy establish firing lines or support by fire positions?
- Where will the company be unable to mass fires?
- Where is the dead space in company's area of operation? Where is the company vulnerable?
- Where are the natural target registration points?
- Where can the commander destroy the enemy? Can the company observe and fire on enemy locations with at least two-thirds of the company's combat power?
- How obvious are these positions to the enemy?
- Where do the commander position indirect fire observers?

Cover and Concealment

B-67. The commanders looks at the terrain, foliage, structures, and other features along avenues of approach (and on objectives or key terrain) to identify sites offering cover (protection from the effects of direct and indirect fire) and concealment (protection from observation). In the defense, weapon positions must be both lethal to the enemy and survivable to the Soldier. Cover and concealment is just as vital as clear fields of fire. Cover and concealment can be either part of the environment or something brought in by the unit to create the desired effect. Both offensive and defensive considerations must be made:

- Offensive considerations include—
  - What axes afford both clear fields of fire and cover and concealment?
  - Which terrain provides bounding elements with cover and concealment while increasing lethality?

- Defensive considerations include—
  - What locations afford cover and concealment as well as good observation and fields of fire?
  - How can friendly and enemy forces use the available cover and concealment?

Conclusions from Terrain Analysis

B-68. Terrain analysis should produce several specific conclusions as listed below:

- Battle, support by fire, and assault by fire positions.
- Engagement areas and ambush sites.
- Immediate and intermediate objectives.
- Asset locations such as enemy command posts or ammunition caches.
- Assembly areas.
- Observation posts.
- Artillery firing positions.
- Air defense artillery system positions.
- Reconnaissance, surveillance, and target-acquisition positions.
- Forward area arming and refueling points.
- Landing and drop zones.
- Breach locations.
- Infiltration lanes.

Five Military Aspects of Weather

B-69. The five military aspects of weather are visibility, winds, precipitation, cloud cover, and temperature and humidity. Consideration of the weather's effects is an essential part of the commander's mission analysis. The commander goes past observing to application. The commander determines how the weather will affect the visibility, mobility, and survivability of the company and that of the enemy. The commander applies the results to the friendly and enemy COA during development. The subordinate leaders within the company review their commander's conclusions and identifies their own.

Visibility

B-70. The commander identifies critical conclusions about visibility factors such as light data, fog, and smog; and about battlefield obscurants such as smoke and dust. The commander considers light data and identifies critical conclusions about begin morning nautical twilight, sunrise, sunset, end evening nautical twilight, moonrise, moonset, and percentage of illumination. Some additional visibility considerations include:

- Will the sun rise behind the attacker or in the attacker's eyes? Will the attack be in the direction of the sunrise?
- How can the commander take advantage of the limited illumination?
- How will this affect friendly and enemy target acquisition?
- Will the current weather favor the use of obscurants during breaching?
- When are night vision devices effective?

Winds

B-71. Winds of sufficient speed can reduce the combat effectiveness of a force downwind as the result of blowing dust, obscurants, sand, or precipitation. The upwind force usually has better visibility. CBRN operations usually favor the upwind force. Windblown sand, dust, rain, or snow can reduce the effectiveness of radar and other communication systems. Strong winds also can hamper the efficiency of directional antenna systems by inducing antenna wobble. Strong winds and wind turbulence limit Airborne, air assault, and aviation operations.

B-72. Evaluation of weather in support of these operations requires information on the wind at the surface as well as at varying altitudes. Near the ground, high winds increase turbulence and may inhibit maneuver. At greater altitudes, it can increase or reduce fuel consumption. Wind always is described as from…to as in winds are from the east moving to the west. The commander must answer these questions:

- Will wind speed cause obscurants to dissipate quickly?
- Will wind speed and direction favor enemy use of obscurants?
- Will wind speed and direction affect the employment of available mortars?
- What is the potential for spread of CBRN contamination downwind?
- How will precipitation affect CBRN contamination?

Precipitation

B-73. Precipitation affects soil trafficability, visibility, and functioning of many electro-optical systems. Heavy precipitation can reduce the quality of supplies in storage. Heavy snow cover can reduce the efficiency of many communication systems as well as degrade the effects of many munitions and air operations. The commander identifies critical factors such as type, amount, and duration of precipitation. Some precipitation questions to answer include:

- How will precipitation (or lack of it) affect the mobility of the unit or of enemy forces?
- How can precipitation (or lack of it) add to the unit achieving surprise?

Cloud Cover

B-74. Cloud cover affects ground operations by limiting illumination and solar heating of targets. Heavy cloud cover can degrade many target acquisition systems, infrared guided munitions, and general aviation operations. Heavy cloud cover often canalizes aircraft within air avenues of approach and on the final approach to the target. Partial cloud cover can cause glare, a condition attacking aircraft might use to conceal their approach to the target. Some types of clouds reduce the effectiveness of radar systems. The commander identifies critical factors about cloud cover, including limits on illumination and solar heating of targets. Some cloud cover questions include the following:

- How will cloud cover affect unit operations at night? How will it affect the enemy?
- How will cloud cover affect the target acquisition of the command launch unit?
- How will cloud cover affect Army aviation (attack reconnaissance and lift) and Air Force close air support?

Temperature and Humidity

B-75. Extremes of temperature and humidity reduce personnel and equipment capabilities and may require the use of special shelter or equipment. Air density decreases as temperature and humidity increase. This can require reduced aircraft payloads. Temperature crossovers, which occur when target and background temperatures are nearly equal, degrade thermal target acquisition systems. The length of crossover time depends on air temperature, soil and vegetation types, amount of cloud cover, and other factors. The commander identifies critical factors about temperature, including high and low temperatures, infrared crossover times, and effects of obscurants and CBRN. Some temperature considerations include:

- How will temperature and humidity affect the unit's rate of march?
- How will temperature and humidity affect the Soldiers and equipment?
- Will temperatures and humidity favor the use of chemical and biological threat capabilities?

Analysis of Enemy

B-76. The commander analyzes assumptions made from battalion regarding the enemy and the enemy's doctrine, compositions, dispositions, strengths, capabilities, equipment, vulnerabilities, probable COA, and recent activities. The commander is aware the line between enemy combatants and civilian noncombatants is sometimes unclear. This requires the commander to understand the laws of war, the rules of engagement (ROE), and the local situation.

B-77. Analyzing the enemy answers the question, what is the enemy doing and why? The commander answers—

- What is the composition and strength of the enemy force?
- What are the capabilities of their weapons? Other systems?
- What is the location of current and probable enemy positions?
- What is the enemy's most probable course of action? (Defends, reinforce, attack, withdraw, or delay, known as DRAW-D).

Assumptions

B-78. The commander must understand assumptions the battalion intelligence staff officer (S-2) uses to portray the enemy's COA. Furthermore, the commander's own assumptions about the enemy must be consistent with those of their higher commander. The commander must continually improve situational understanding of the enemy and update enemy templates as new information or trends become available. Deviations or significant conclusions reached during enemy analysis could positively or negatively affect the battalion and company plans and should be shared immediately between the battalion commander and staff and the commander and subordinate leaders of the company.

B-79. In analyzing the enemy, the commander must understand the IPB. Though the company commander usually does not prepare IPB products for subordinates, the commander utilizes the IPB products from the battalion to ensure subordinates have a shared understanding of the current situation. (See paragraph 2-259 on page 2-71.)

Doctrinal Analysis (How the Enemy Will Fight)

B-80. The commander must know more than just the enemy's number and types of vehicles, troops, and weapons. The commander must understand when, where, and how the enemy prefers or tends to use assets. A situation template is a visual illustration of how the enemy force might look and act without the effects of weather and terrain. The commander looks at specific enemy actions during a given operation and uses the appropriate situation template to gain insights into how the enemy may fight. Likewise, the commander must understand enemy doctrinal objectives. In doctrinal terms, the commander asks, "Is the enemy oriented on the terrain, example, a reconnaissance force, their own force (assault force, terrorists, or insurgent forces), civilian forces or critical infrastructure (terrorist or insurgent forces, sabotage), or other supporting or adjacent friendly forces (as in a disruption zone)? What effect will this have on the way the enemy fights?"

B-81. As the global situation changes, the possibility of fighting a threat who lacks a structured doctrine increases. In such a situation, the commander must rely on information provided by battalion or higher echelon reconnaissance and surveillance assets and, most importantly, the higher headquarters' pattern analysis and deductions about the enemy in its area of operation. The commander may also make logical assumptions about the enemy, human nature, and the local culture.

Composition

B-82. The commander's analysis must determine the types of vehicles, troops, and equipment the enemy could use against the company. The commander must be familiar with the basic characteristics of the enemy units and platforms identified.

Disposition

B-83. The commander determines how the enemy is (or might be) arrayed using information from the battalion. From this information the commander determines the echelon force where the enemy originated. The commander determines the disposition of the next two higher enemy elements. From this analysis, the commander might be able to determine patterns in the enemy's employment or troops and equipment.

Strength

B-84. The commander identifies the enemy's strength by unit. The commander obtains this information by translating percentages given from the battalion to the actual numbers in each enemy element or from information provided by common operational picture.

Capabilities

B-85. Based on the battalion S-2's assessment and the enemy's doctrine and current location, the commander must determine the enemy's capabilities. This includes studying the maximum effective range for each weapon system, the doctrinal rates of march, and timelines associated with the performance of certain tasks. One technique is to use the warfighting functions as a checklist to address every significant element the enemy brings to the fight.

B-86. The commander determines the capabilities of the next higher enemy element. These capabilities should include reasonable assets the next higher element, or other higher enemy headquarters, may provide. This includes the employment of enemy reserves, CBRN weapons, artillery or mortar locations and ranges, reconnaissance and surveillance, and security operations.

Recent Activities

B-87. Gaining complete understanding of the enemy's intentions can be difficult when the enemy's situation templates, composition, and disposition are unclear. The enemy's recent activities must be understood, because they can provide insight into future activities and intentions. When time permits, the commander conducts a pattern analysis of the enemy's actions to predict future actions. In the operational environment, this might be the most important analysis the commander conducts and is likely to yield the most useful information to the commander.

Enemy Situation Template

B-88. The commander weighs the result of the analysis of terrain and weather against the battalion's situation template to identify how the enemy may potentially fight. The refined product is a platoon situation template, a graphic showing how the commander believes the enemy will fight under specific conditions. The situation template portrays one echelon lower than developed by the battalion S-2. For example, if a battalion situation template identifies a platoon-size enemy element on the company's objective and squad-size enemy elements on the platoon's objective, the commander, using knowledge of both the enemy's doctrine and terrain, develops a situation template positioning squad-size battle positions, crew-served weapons positions, or defensive trenches.

B-89. The commander includes in the situation template the likely sectors of fire of the enemy weapons and tactical and protective obstacles, either identified or merely templated, which support defensive tasks. Table B-1 (on page B-20) shows recommended situation template items. (Refer to ATP 2-01.3 for more information.)

Table B-1. Recommended enemy situation template items

DEFENSE	*OFFENSE*
Primary, alternate, subsequent positions. Engagement area(s). Individual vehicles. Crew-served weapons. Tactical and protective obstacles. Trenches. Planned indirect-fire targets. Observation posts. Command and control positions. Final protective fires and final protective line. Locations of reserves. Routes for reserve commitment. Travel time for reserve commitment. Battle positions, strong point, area of operation. Sectors of fire	Attack formations. Axes of advance. Firing lines. Objectives. Reserve force commitment. Planned indirect-fire targets. Situational obstacles. Reconnaissance objectives. Reconnaissance force routes. Phase lines. Planned point of penetration

B-90. The commander avoids developing a situation template independently of the battalion commander's guidance and S-2's products. The template reflects the results of reconnaissance and surveillance, and shared understanding. Differences between the situation templates are resolved before the commander can continue analyzing the enemy. Given the scale with which the commander often develops the situation template, on a 1:50,000 maps, the situation template is transferred to a graphic depiction of terrain for briefing purposes, as the situation allows. This is not for analysis, but to show subordinates the details of the anticipated enemy COA. Once the commander briefs the enemy analysis to subordinates, the commander must ensure a shared understanding of the differences between what is known, what is suspected, and what is just templated (estimated). Unless given the benefit of information collection, the situation template is only an estimate of how the enemy might be disposed. The commander must not take these as facts. This is why the commander develops a tactically prudent and flexible plan and clearly explains commander's intent to subordinates. A clearly understood commander's intent allows subordinates to exercise initiative and judgment to accomplish the company's purpose. Information collection (reconnaissance, surveillance, security operations, and intelligence operations) is critical in developing the best possible enemy scenario.

Initial Priority Intelligence Requirements

B-91. The commander defines PIRs as information about the enemy leading to a critical decision, and develops specific PIR for each situation. Answering the PIR questions lets the commander confirm or deny assumptions made during planning. Although doing this helps to clarify the enemy situation, it usually leads to answering the PIRs of the battalion and next higher level. The commander must understand the higher headquarters collection plan and how the company assists in answering PIRs.

Analysis of Troops and Support Available

B-92. The commander reviews the company's task organization to determine the number, type, capabilities, and condition of available friendly troops and other support. Analysis of troops follows the same logic as analyzing the enemy by identifying capabilities, vulnerabilities and strengths. The commander should know the disposition, composition, strength, and capabilities of their forces one and two levels down. This

information can be maintained in a checkbook-style matrix for use during COA development (specifically array forces). The commander maintains an understanding of subordinate readiness, including maintenance, training, strengths and weaknesses, leaders, and logistic status. Analysis of troops and support available answers the question: What assets are available to accomplish the mission? Additional questions the commander answers include:

- What are the strengths and weaknesses of subordinate leaders?
- What is the supply status of ammunition, water, fuel (if required), and other necessary items?
- What is the present physical condition of Soldiers (morale, sleep)?
- What is the condition of equipment?
- What is the unit's training status and experience relative to the mission?
- What additional Soldiers or units will accompany?
- What additional assets are required to accomplish the mission?

B-93. Perhaps the most critical aspect of mission analysis is determining the combat potential of one's own force. The commander realistically and unemotionally determines all available resources and new limitations based on level of training or recent fighting. This includes troops who are either attached to or in direct support of the company. It also includes understanding the full array of assets in support of the company. The commander must know how much indirect fire by type is available and when it will become available.

B-94. Throughout planning and preparation for an operation the commander continually assesses the company's combat effectiveness—the ability of a unit to perform its mission. Factors such as ammunition, personnel, fuel status, and weapon systems are evaluated and rated by the commander. (See ADRP 1-02.) The ratings used by the commander are—

- Fully operational - green (85 percent or greater).
- Substantially operational – amber (70 to 84 percent).
- Marginally operational – red (50 to 69 percent).
- Not operational – black (less than 50 percent).

B-95. The commander cannot be expected to think of everything during mission analysis because of the constant uncertainty present in operations at the small unit level. This fact forces the commander to determine how to get assistance when the situation exceeds the company's capabilities. Therefore, a secondary product of analysis of troops and support available should be an answer to the question, how do I get help?

Analysis of Time Available

B-96. Time available refers to many factors during the operations process (plan, prepare, execute, and assess). The four categories the commander considers include—

- Planning and preparation.
- Operations.
- Next higher echelon's timeline.
- Enemy timeline.

B-97. During all phases, the commanders consider critical times, unusable time, the time it takes to accomplish activities, the time it takes to move, priorities of work, and tempo of operations. Other critical conditions to consider include visibility and weather data, and events such as higher headquarters tasks and required rehearsals. Implied in the analysis of time is the commander's prioritization of events and sequencing of activities.

B-98. As addressed in Step 1 of the troop leading procedure, time analysis is a critical aspect to planning, preparation, and execution. Time analysis is often the first thing the commander does. The commander must not only appreciate how much time is available, but be able to appreciate the time and space aspects of preparing, moving, fighting, and sustaining. The commander must be able to see the company's tasks and enemy actions in relation to time. Most importantly, as events occur, the commander must adjust the time available to them and assess its impact on what the commander wants to accomplish.

Finally, the commander updates previous timelines for subordinates, listing all events affecting the platoon and its subordinate elements.

Analysis of Civil Considerations

B-99. Civil considerations include the influences of manmade infrastructure, civilian institutions, and attitudes, activities of civilian leaders, populations, and organizations within an area of operation, with regard to the conduct of military operations. Civil considerations generally focus on the immediate impact of civilians on operations in progress. Civil considerations of the environment can either help or hinder friendly or enemy forces; the difference lies in the commander taking time to learn the situation and its possible effects on the operation. Analysis of civil considerations answers three critical questions:

- How do civilian considerations affect the operation?
- How does the operation affect civilians?
- How does the company build national will in its area of operation?

B-100. The battalion provides the commander with civil considerations affecting the next echelon's mission. The memory aid: areas, structures, capabilities, organizations, people, and events (ASCOPE) is used to analyze and describe these civil considerations. (Refer to ATP 2-01.3 for additional information.)

Areas

B-101. The population within a prescribed area of operation comprises several different groups, both ethnically and politically. The commander must understand each group's perception about the United States, the Army, and specific units operating within that area. Population statuses overlays can best describe groups and define what feelings the group has toward American forces. This is extremely important in understanding when and where to commit combat power, what relationships can be reinforced with certain groups versus what relationships need to start or cease, and ultimately what second and third order effects our actions will have in the area of operation. Information related capabilities also can be properly focused with a healthy understanding of the perceptions of the civilian population.

B-102. The commander addresses terrain analysis from a civilian perspective and analyzes how vital civilian areas affect the mission of respective forces and how military operations affect these areas. Factors to consider include political boundaries, locations of government centers, by-type enclaves, special regions such as mining or agricultural, trade routes, and possible settlement sites.

Structures

B-103. Structures include traditional high-payoff targets, protected cultural sites, and facilities with practical applications. The commander's analysis is a comparison of how a structure's location, functions, and capabilities as compared to costs and consequences of such use.

Capabilities

B-104. The commander assesses capabilities in terms of those required to save, sustain, or enhance life, in that order. Capabilities can refer to the ability of local authorities to provide essential functions and services. These can include areas needed after combat operations and contracted resources and services.

Organizations

B-105. The commander considers all nonmilitary groups or institutions in the area of operation. These may be indigenous, come from a third country or U.S. agencies. They influence and interact with the populace, force, and each other. Current activities, capabilities, and limitations are some of the information necessary to build situational understanding. This often becomes a union of resources and specialized capabilities.

People

B-106. This consideration is a general term describing all nonmilitary personnel military forces encountered in the area of operation. This includes those personnel outside the area of operation whose actions, opinions, or political influence can affect the mission. The commander identifies the essential communicators and

formal and informal processes used to influence people. Additional the commander identifies how historical, cultural, and social factors shape public perceptions beliefs, goals, and expectations.

Events

B-107. Events are routine, cyclical, planned, or spontaneous activities which significantly affect organizations, people, and military operations, including seasons, festivals, holidays, funerals, political rallies, and agricultural crops and livestock and market cycles and paydays. Other events, such as disasters and those precipitated by military forces, stress and affect the attitudes and activities of the populace and include a moral responsibility to protect displaced civilians. The commander templates events and analyze them for their political, economic, psychological, environmental, and legal implications.

B-108. The commander identifies civil considerations affecting the mission. Civil considerations are important when conducting operations against terrorist or insurgent forces in urban areas. Most terrorists and insurgents depend on the support or neutrality of the civilian population to camouflage them. The commander must understand the impact of their actions—as well as their subordinate's actions—on the civilian population, and effects they will have on current and future operations. Considerations may include—

- Ethnic dynamics.
- Organizations of influence.
- Patterns.
- Leaders and influencers.
- Economic environment.

Ethnic Dynamics

B-109. Ethnic dynamics include religion, cultural mores, gender roles, customs, superstitions, and values certain ethnic groups hold dear which differ from other groups. The commander analyzes the ethnic dynamics within the company's area of operation to best apply combat power, shape maneuver with information related capabilities, and ultimately find the common denominator all ethnic varieties have in common. The commander then focuses the company's efforts at that common denominator. The commander gains local support by demonstrating dignity and respect to the civilian population they have been charged to protect and train.

Organizations of Influence

B-110. Organizations of influence force the commander to look beyond preexisting civilian hierarchical arrangements. By defining organizations within the community, the commander understands what groups have power and influence over their own smaller communities and what groups can assist our forces. Once the organizations are defined, the commander analyzes them to determine their contributions or resistance to friendly operations. Many Eastern cultures rely upon religious organizations as their centers of power and influence, whereas Western cultures' power comes from political institutions by elected officials. Defining other influential organizations or groups of influence enables information collection.

Patterns

B-111. Every culture, every group of people, has patterns of behavior. Whether it is set times for prayer, shopping or commuting, people follow patterns. Understanding these patterns helps the commander plan and execute information collection, combat operations, and logistical resupply. Studying the history of civic culture helps the commander understand and explain to others how and why the people have fought previous wars and conflicts. Starting with a baseline pattern and keeping an analysis on how the population is responding or have responded in the past under similar circumstances assists the commander in using patterns to the company's advantage.

Leaders and Influencers

B-112. Know who is in charge and who can influence and enable unit leaders to exercise governance and monitor security within a prescribed area. Many times, the spiritual leader is not necessarily the decision maker for a community, but the spiritual leader must approve the decision maker's actions. The

battalion provides the commander with a link-diagram of leadership including religious, political, and criminal personnel to focus planning and decentralized execution to bolsters legitimacy within the population. Using the targeting methodology of decide, detect, deliver, and assess (known as D3A) may prove useful in determining whether a leader or influencer would best facilitate an operation, when to engage them, and what to expect.

Economic Environment

B-113. Money and resources drive prosperity and stability. The commander identifies the economic production base within their area of operation that bolsters the economic welfare of the people. Economic considerations include infrastructure rebuild projects, creation of labor opportunities, and education. By focusing on the motivations for civilian labor and creating essential services and prosperity where there was none, the commander and subordinate leaders win the support of the civilian who now can feed and clothe their families and now has clean running water. This aspect of civil considerations reinforces the security of the community against poverty and other enablers to instability.

Course of Action Development

B-114. The purpose of COA development is to determine one or more ways to accomplish the mission consistent with the battalion commander's intent. A COA describes how the unit might generate the effects of overwhelming combat power against the enemy at the decisive point with the least friendly casualties. Each COA the commander develops must be detailed enough to clearly describe how they envision using all of their assets and combat multipliers to achieve the company's mission-essential task and purpose.

B-115. To develop a COA, the commander focuses on the actions the company must take at the decisive point and work backward to their start point. The commander focuses company efforts to develop at least one well synchronized COA; if time permits, additional COAs are developed. The result of the COA development process is paragraph 3 of the OPORD. A COA should position the unit for future operations and provide flexibility to meet unforeseen events during execution. COAs should give subordinates the maximum latitude for initiative. From developing a strategy to analyzing, refining, and rehearsing the plan, the commander must be knowledgeable in the following areas detailed under this subheading to construct a solid COA.

Screening Criteria

B-116. A COA should be suitable, feasible, acceptable, distinguishable, and complete. These elements are defined below:

- Suitable. If executed, the COA accomplishes the mission legally and ethically while consistent with the battalion commander's concept and intent.
- Feasible. The company has the technical and tactical skills and resources to accomplish the COA, with available time, space, resources and available capabilities.
- Acceptable. The military advantage gained by executing the COA must justify the cost in resources, especially casualties. This assessment is largely subjective and asks the following question. Is it worth the cost or risk? If it is illegal, immoral or unethical, it is not acceptable.
- Distinguishable. If more than one COA is developed, does it differ significantly from the other solutions?
- Complete. The COA covers the operational factors of who, what, when, where, and why, and must show from start to finish how the company will accomplish the mission. The COA must address the doctrinal aspects of the mission. For example, in an attack against a defending enemy, the COA must address the movement to, deployment against, assault of, and consolidation upon the objective.

Note. Leaders assess risk continuously throughout COA development.

Actions

B-117. Next, the commander analyzes relative combat power, generates options, arrays forces, develops concept of operation, analyses Soldier load, assigns responsibility, and prepares a COA statement and sketch.

Analyze Relative Combat Power

B-118. During the first step of COA development, analyzing relative combat power, leaders compare and contrast friendly combat power with the enemy. The commander determines where, when, and how friendly forces can overwhelm the enemy by reviewing the elements of combat power, specifically by warfighting function: The six functions include:

- Intelligence.
- Movement and maneuver.
- Fires.
- Sustainment.
- Protection.
- Mission command and enemy command and control.

B-119. The purpose of this step is to compare the combat power of friendly and enemy forces, by analyzing troop-to tasks to determine if the company has enough combat power to accomplish its assigned task. It is not merely a calculation and comparison of friendly and enemy weapons numbers or units with the aim of gaining a numerical advantage. Using the results of all previous analyses done during mission analysis, the commander compares the company's combat power strengths and weaknesses with those of the enemy. The commander seeks to calculate the time and manner in which the company (and enemy) can maximize the effects of maneuver, firepower, protection, leadership, and information in relation to the specific terrain, disposition, and composition of each force. The commander determines how to avoid enemy strengths or advantages in combat power. In short, the commander strives to determine where, when, and how the company's combat power can overwhelm the enemy's ability to generate combat power. An analysis of the ability to generate combat power will help the commander confirm or deny tentative decisive point. Additionally, the CCIRs (PIRs and friendly force information requirements) and essential elements of friendly information are identified.

Generate Options

B-120. Most missions and tasks can be accomplished in more than one way. The goal of this step, generating options, is to determine one or more of those ways quickly. First, commander considers tactics, techniques, and procedures from doctrine, unit SOPs, history, or other resources to determine if a solution to a similar tactical problem exists already. If it does, the commander's job is to take the existing solution and modify it to the company's unique situation. If a solution does not exist, the commander must develop one. Second, the commander confirms the mission's decisive point. Then, using doctrinal requirements as a guide, the commander assigns purposes to the tactical tasks involved. The commander adheres to the doctrinal requirement for the mission including all tactical tasks normally assigned to subordinates. By defining the decisive point, the commander understands where and when the company can mass overwhelming combat power to achieve a specific result that accomplishes the mission with respect to the enemy, terrain, time, or civil considerations. The commander considers enemy and friendly decisive and decision points that lead to the desired mission end state when generating options.

Array Forces

B-121. Using the product from generating options, the commander determines what combinations of Soldiers, weapons, and other systems are needed to accomplish each task. This is known as arraying forces or assigning troops to task. This judgment call is unique to the specific METT-TC conditions the commander faces. The commander then task organizes the company specific to the respective essential tactical tasks and purposes assigned to subordinate elements. The commander determines the specific quantity of squads, weapons (by type), and fire support necessary to accomplish each task against the enemy array of forces. The commander allocates resources required for the decisive operation's success first and determines the resources needed for shaping operations in descending order of importance.

Develop a Concept of Operations

B-122. The concept of operation describes how the commander envisions the operation unfolding, from its start to its conclusion or end state. Operations and actions consist of numerous activities, events, and tasks. The concept of operation describes the relationships between activities, events, and tasks, and explains how the tasks will lead to accomplishing the mission. The concept of operation is a framework to assist leaders, not a script. The normal cycle for an offensive mission is tactical movement, actions on the objective, and consolidation and reorganization. The normal cycle for defensive missions is engagement area development and preparation of the battle positions, actions in the engagement area, counterattack, and consolidation and reorganization. In developing the concept of operation, the commander clarifies the best ways to use the available terrain and to employ the company's strengths against the enemy's weaknesses. The commander includes the requirements of indirect fire to support the maneuver. The commander then develop the maneuver control measures necessary to convey commander's intent, enhance the understanding of the schemes of maneuver, prevent fratricide, and clarify the tasks and purposes of the decisive, shaping and sustaining operations. The commander determines the sustainment aspects of the COA(s).

Analyze Soldier Load

B-123. Soldier load is an area of concern for Infantry commanders and subordinate leaders. How much is carried, how far, and in what configuration are critical mission considerations. The commander balances the risk to Soldiers from the enemy against the risk to mission accomplishment due to excessive loads and Soldier exhaustion and injury. Soldier load is limited to mission essential equipment to sustain continuous operations. The commander accepts prudent risks to reduce Soldier load based on a through mission analysis and collaboration with the higher echelon commander and staff. (See ATP 3-21.20 and ATP 3-21.18 for information on Soldier load, to include echeloning loads and load determination.)

Assign Responsibiliities

B-124. The commander assigns responsibility for each task to a subordinate. Whenever possible and depending on the existing chain of command, the commander avoids fracturing unit integrity. The commander attempts to keep the span of control between two to five subordinate elements. The commander ensures every subordinate unit is employed, every asset is attached and adequate mission command is provided for each element. The commander must avoid unnecessary complicated mission command structures and maintain unit integrity where feasible.

Prepare a Course of Action Statement and Sketch

B-125. The company commander primarily uses the COA statement and COA sketch to describe the concept of operation. These two products are the basis for paragraph 3 of the OPORD. The COA statement specifies how the company will accomplish the mission. The first three steps of COA development provide the bulk of the COA statement. The COA statement details how the company's operation supports the battalion commander's operation, the decisive point and why it is decisive, the form of maneuver or type of defensive mission, and operational framework. The COA sketch is a drawing or series of drawings to assist the commander in describing how the operation will unfold. The sketch provides a picture of the maneuver aspects of the concept. The commander uses tactical mission task graphics and control measures (see ADRP 1-02) to convey the operation in a doctrinal context. Both the COA statement and sketch focus at the decisive point. The COA statement should identify—

- Decisive point and what makes it decisive.
- Form of maneuver or form of the defense.
- Tasks and purposes of the decisive, shaping, and sustaining operations (or main and supporting efforts).
- Reserve planning priorities.
- Purposes of critical warfighting functions.
- End state.

B-126. The COA sketch should identify how the company intends to focus the effects of overwhelming combat power at the decisive point. When integrated with terrain, the refined product becomes the company's operations overlay.

Course of Action Analysis

B-127. COA analysis begins with both friendly and enemy COA and, using a method of action-reaction-counteraction war game, results in a synchronized friendly plan, identified strengths and weaknesses, and updated risk assessment. After developing the COA, the commander analyzes it to determine its strengths and weaknesses, visualizes the flow of the battle, identifies the conditions or requirements necessary to enhance synchronization, and gains insights into actions at the decisive point of the mission. If more than one COA is developed, the commander applies the same analysis to each COA developed. The commander does this analysis through war gaming or fighting the COA against at least one enemy COA. For each COA, the commander thinks through the operation from start to finish. The commander compares the COA with the enemy's most probable COA. At small-unit level, the enemy's most probable COA is what the enemy is most likely to do. During the war game, the commander visualizes a set of enemy and friendly actions and reactions. War gaming is the process of determining "what if?" factors of the overall operations. The object is to determine what can go wrong and what decision the commander likely will have to make as a result. COA analysis allows the commander to synchronize assets, identify potential hazards, and develop a better understanding of the upcoming operation. The COA enables the commander to—

- Determine how to maximize the effects of combat power while protecting friendly forces and minimizing collateral damage.
- Anticipate events within the area of operations.
- Determine conditions and resources required for success.
- Identify additional control requirements.
- Identify friendly coordination requirements.

B-128. COA analysis (war gaming) brings together friendly and enemy forces on the actual terrain to visualize how the operation will unfold. It is a continuous cycle of action, reaction, and counteraction. This process highlights critical tasks, stimulates ideas, and provides insights rarely gained through mission analysis and COA development alone. War gaming is a critical step in the planning process and should be allocated more time than the other steps. War gaming helps the commander fully synchronize friendly actions, while considering the likely reactions of the enemy. The product of this process is the synchronization matrix. War gaming, depending on how much time is devoted to planning, provides—

- An appreciation for time, space, and triggers needed to integrate direct and indirect fire support, obscurants, engineers, air defense artillery, and CBRN activities with maneuver platoons to support the company's tasks and purposes identified in the scheme of maneuver.
- Flexibility built into the plan by gaining insights into possible branches to the basic plan.
- The need for control measures, such as checkpoints, contact points, and target registration points, aid in control, flexibility, and synchronization.
- Coordinating instructions to enhance execution and unity of effort, and to ease confusion between subordinate elements.
- Information needed to complete paragraphs 3, 4, and 5 of the OPORD. Assessments regarding on order and be-prepared missions.
- Projected sustainment expenditures, friendly casualties, and resulting medical requirements.

B-129. The best way for the commander to war game is to start at the company's current location and go through the mission from start to finish, or start at a critical point such as the objective or engagement area. Using the action-reaction method, the commander can think through the engagement beforehand. As war gaming proceeds, the commander can either record observations into a matrix or keep notes in a notebook. The most important aspect of this process is not the method but the output, meaning a more in-depth understanding of the operation. Depending on the time available and the commander's personal preference, the commander may use the following war gaming techniques—box, belt, and avenue-in-depth.

Box Technique

B-130. The box technique focuses the war game on a specific area within the area of operation. (See figure B-5.) This might be the objective area, the engagement area, or some other critical location where decisive or critical actions will take place. It should include all of the units, friendly and enemy, having a direct impact on those actions. This technique is used when time is limited and enemy situation is relatively clear. However, a disadvantage is when considering only the actions at the critical or decisive points, the leader may overlook other actions or events having a significant impact on the company's mission.

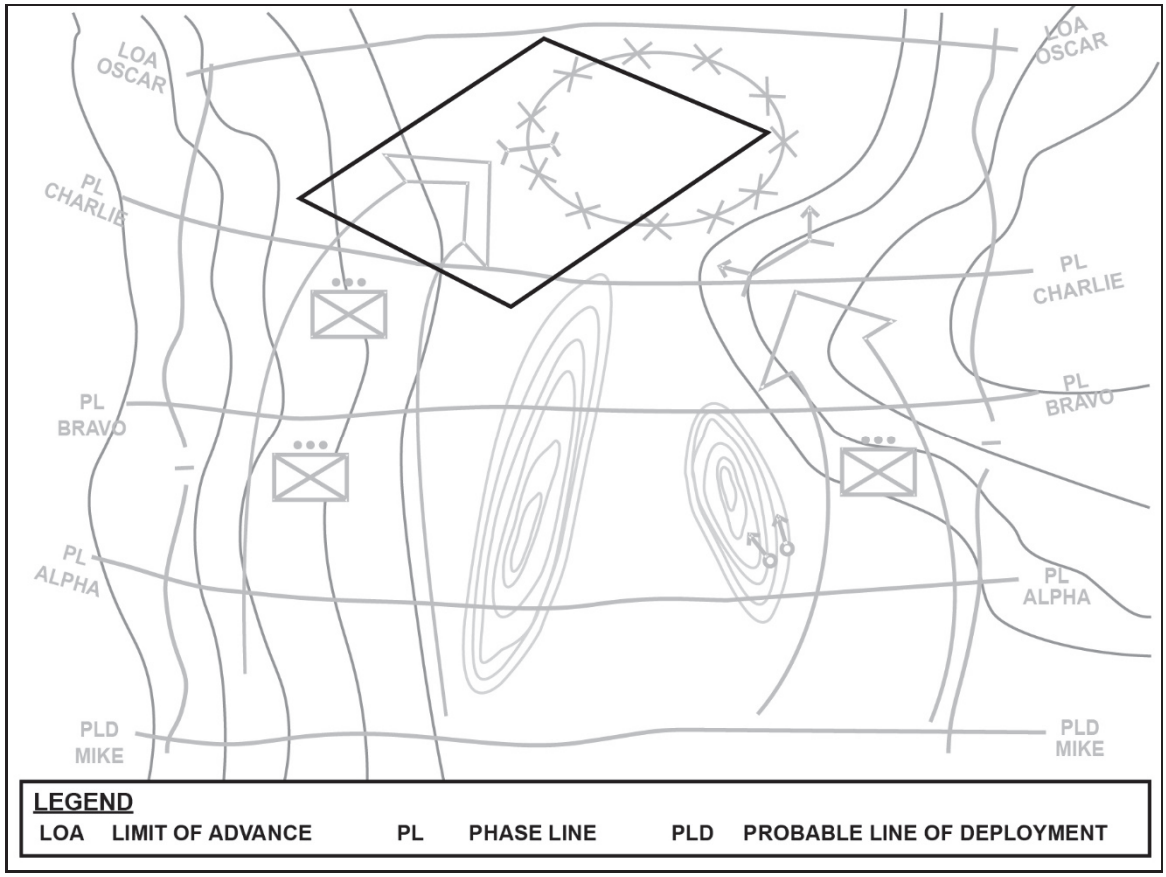

Figure B-5. Box war gaming technique

Belt Technique

B-131. The belt technique allows the commander to divide the COA into events or belts. (See figure B-6.) The commander may do this in several ways, such as from phase line to phase line or by significant event. Each step then is war gamed in sequence. This approach is most effective for offensive COA. The commander can modify this technique by dividing the area of operation into belts not necessarily adjacent or overlapping but focus on the critical actions throughout the area of operation.

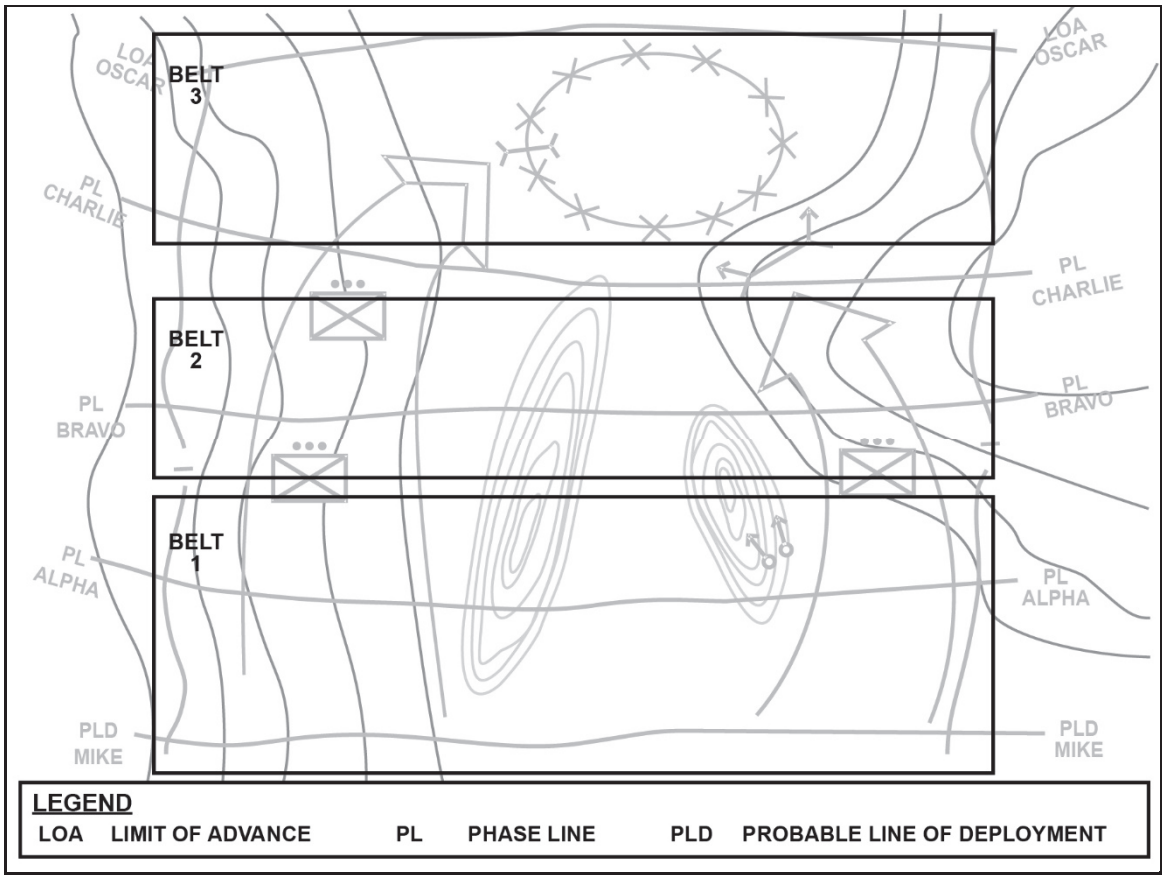

Figure B-6. Belt war gaming technique

Avenue In-Depth Technique

B-132. This method is most effective for a defensive COA, especially when there are several avenues of approach to consider. Using the enemy's most probable COA, the commander analyzes friendly and enemy actions along one avenue of approach at a time.

B-133. To gain the benefits resulting from war gaming a COA, the commander must remain objective and record the results of the war game. The commander must remember the assumptions made about the enemy, the company, and ground during the development of the tentative plan. The commander must avoid letting the enemy or the company win to justify the COA. Also, the commander must avoid drawing premature conclusions about the war game or changing the COA until the war game is complete. (See figure B-7 on page B-30.)

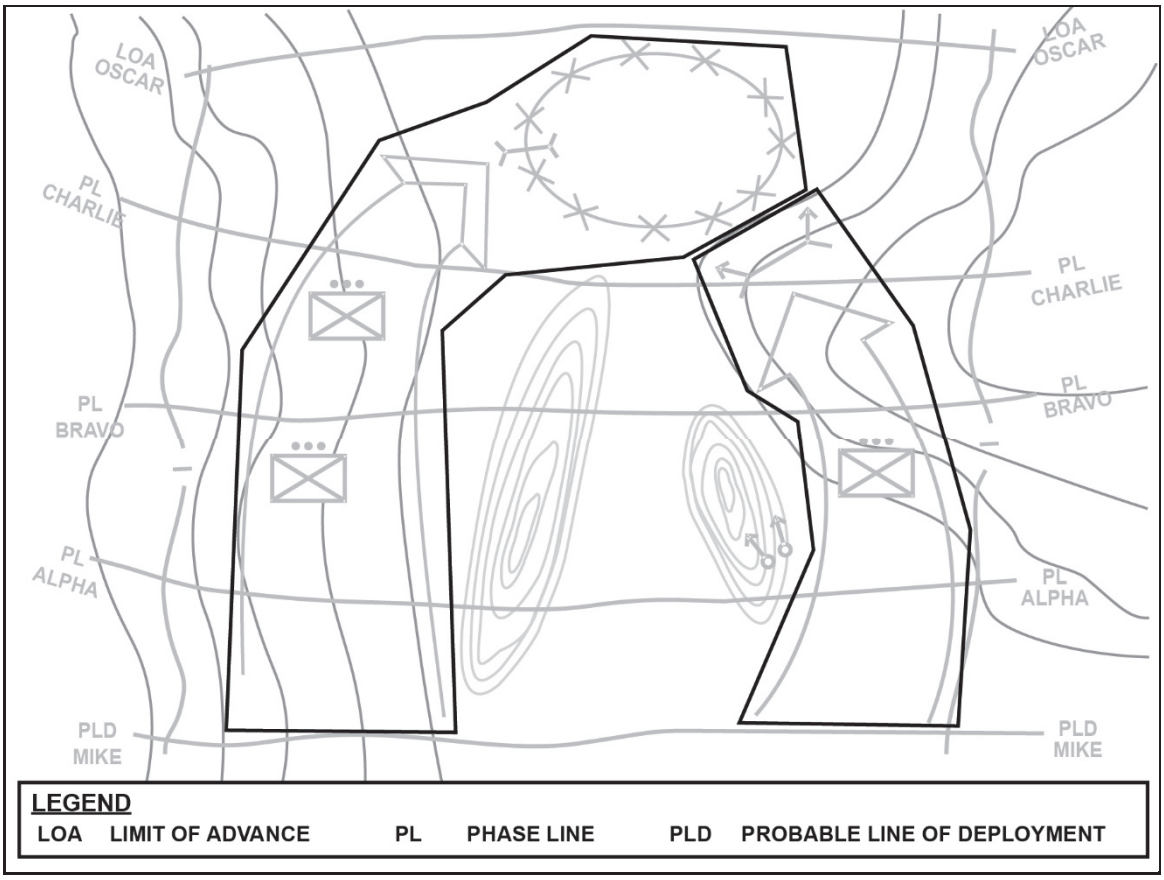

Figure B-7. Avenue in-depth war gaming technique

Course of Action Comparison and Selection

B-134. If the commander has developed more than one COA, the commander must compare them by weighing the specific advantages, disadvantages, strengths, and weaknesses of each as noted during the war game. These attributes may pertain to the accomplishment of the company's purpose, the use of terrain, the destruction of the enemy or other aspect of the operation the commander believes is important. The commander uses these factors, gained from their relational combat power analysis matrix, as the frame of reference when tentatively selecting the best COA. The commander makes the final selection of a COA based on own judgment, the start time of the operation, the area of operation, the scheme of maneuver, and subordinate unit tasks and purposes. The right decision must be ethical (consistent with the moral principles of the Army Ethic), effective (likely to accomplish its purpose), and efficient (makes the disciplined use of resources).

B-135. The CCIR identify and filter information needed by commander to support the commander's vision and to make critical decisions, especially to determine or validate COA. CCIR helps commander determine what is relevant to mission accomplishment. In one technique, the commander writes the desired question, the quantified answer, and reaction (critical decision to make). CCIR helps focus the efforts of subordinates and aids in the allocation of resources. The commander limits CCIR to essential information.

Step 4, Initiate Movement

B-136. The commander initiates movement necessary to continue mission preparation or to posture the company for starting the mission. This step can be executed anytime throughout the sequence of the troop leading procedure. The step can include movement to an assembly area, battle position, a

new area of operation, or the movement of guides or quartering parties. (See paragraph 2-38 on page 2-20 for information on troop movement.)

STEP 5, CONDUCT RECONNAISSANCE

B-137. To exploit the principles of speed and surprise, the commander weighs the advantages of reconnoitering personally against the combat multiplier in the form of supplied information from battalion information collection efforts. The commander realistically consider the dangers of reconnoitering personally, and time required to conduct them. The commander might be able to plan the company's operation using the unprecedented amount of combat information provided by the higher echelon information collection assets. However, if time permits, the commander verifies higher headquarters' intelligence by reconnoitering visually. The commander seeks to confirm the PIR supporting tentative plans. PIR usually consists of assumptions or critical facts about the enemy. This can include strength and location, especially at templated positions. It also can include information about the terrain. For example, verification of a tentative support by fire position can suppress the enemy, or an avenue of approach is useable.

B-138. If possible, the commander includes subordinate leaders in the company's reconnaissance efforts. This allows subordinates to see as much of the terrain and enemy as possible. Reconnaissance helps subordinate leaders gain insight into the commander's vision of the operation.

B-139. The commander's reconnaissance might include moving to or beyond the line of departure, reconnaissance of an area of operation, or walking from the forward edge of the battle area back to and through the platoon area of operation or battle position along likely enemy avenues of approach. If possible, the commander selects a vantage point(s) with the best possible view of the decisive point. In addition to the commander's reconnaissance efforts, subordinate units can conduct additional reconnaissance operations. Examples include surveillance of an area by subordinate elements, patrols to determine enemy locations, and establishment of observation posts to gain additional information. Subordinate leaders can incorporate Javelin CLUs as surveillance tools (day or night), based on an analysis of METT-TC.

B-140. The nature of the reconnaissance, including what it covers and how long it lasts, depends on the tactical situation and time available. The commander uses the results of the COA development process to identify information and security requirements of the company's reconnaissance missions.

B-141. The commander includes disseminating results and conclusions arrived from reconnaissance into the commander's time analysis. The commander must consider how to communicate changes in the COA to subordinates and how these changes affect the plan, actions of the subordinates, and other supporting elements.

STEP 6, COMPLETE THE PLAN

B-142. During this step, the commander expands the selected (or refined) COA into complete OPORD. The commander prepares overlays, refines the indirect fire list, completes sustainment and mission command requirements and, of course, updates the tentative plan based on the latest reconnaissance or information. The commander prepares briefing sites and other briefing materials needed to present the OPORD directly to subordinates. The commander conducts final coordination with other units and battalion staff members before issuing the order to subordinates.

B-143. Using the five-paragraph OPORD format helps the commander explain all aspects of the operation: terrain, enemy, higher and adjacent friendly units, unit mission, execution, support, and mission command. The format serves as a checklist to ensure the commander covers all relevant details of the operation and gives subordinates a smooth flow of information from beginning to end.

STEP 7, ISSUE OPERATIONS ORDER

B-144. The OPORD precisely and concisely explains both the commander's intent and concept of how the commander envisions the company accomplishing the mission. The order does not contain unnecessary information. The OPORD is delivered quickly and in a manner allowing subordinates to concentrate on understanding the commander's vision and not just copying what the commander says verbatim. The

commander must prepare adequately and deliver the OPORD confidently and quickly to build and sustain confidence in their subordinates.

B-145. When issuing the OPORD, the commander must ensure their subordinates understand and share the vision of what must be done and when and how it must be done. Subordinate leaders must understand how all platoons and elements work together to accomplish the company's mission. They also must understand how platoons and the company's mission supports the intentions of the immediate higher commander. When the commander finishes issuing the order, subordinate leaders should leave with a clear understanding of what the commander expects their elements to do. The commander is responsible for ensuring subordinate leaders understand what is to be expected.

B-146. In many respects, the commander must issue the order in a manner instilling subordinates with confidence in the plan and a commitment to do their best to achieve the plan. Whenever possible, the commander issues the order in person. The commander looks into the eyes of subordinate leaders to ensure each one understands the mission and what the element must achieve.

B-147. The commander completes the order with a confirmation brief. At a minimum, each subordinate leader should be able to back brief the company's mission and commander's intent, the immediate higher commander's intent, their own tasks and purpose, and time they will issue their unit's OPORD. Each subordinate confirms their understanding of the commander's vision and how the mission is accomplished with respect to the decisive point. This confirmation brief provides an opportunity to highlight issues or concerns.

B-148. The five-paragraph OPORD format (see figure B-8), helps the commander paint a picture of all aspects of the operation, from the terrain to the enemy, and finally to the company's own actions from higher to lower. The format helps the commander decide what relevant details are included and provides subordinates with a smooth flow of information from beginning to end. At the same time, the commander ensures the order is not only clear and complete but also as brief as possible. If the commander has already addressed an item adequately in a previous WARNORD, the commander can simply state, "No change," or provide necessary updates. The commander is free to brief the OPORD in the most effective manner to convey information to subordinate leaders.

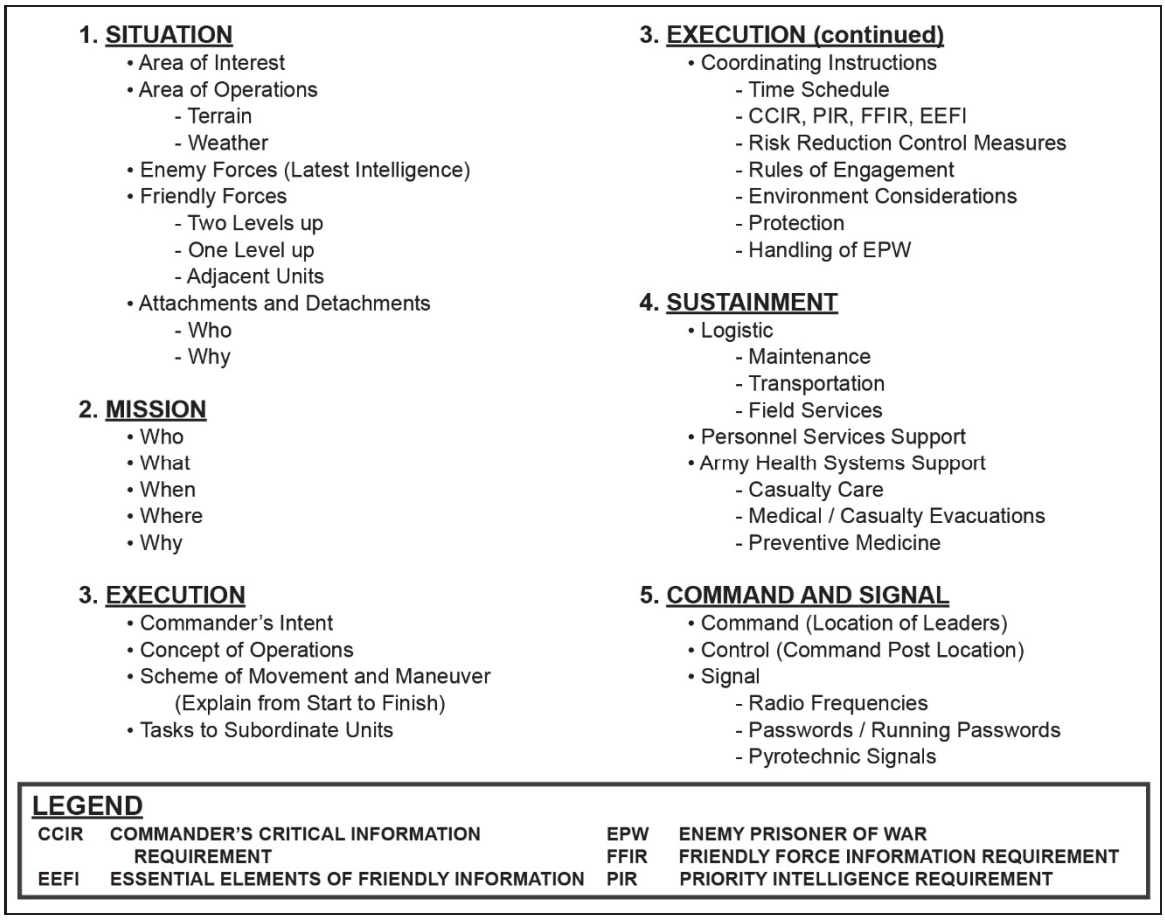

Figure B-8. Operations order format

STEP 8, SUPERVISE AND REFINE

B-149. This final step of the troop leading procedure is crucial. After issuing the OPORD, the commander and subordinate leaders ensure the required activities and tasks are completed in a timely manner prior to mission execution. Supervision is the primary responsibility of all leaders. Both officers and NCOs must check everything important for mission accomplishment. This includes, but is not limited to—

- Conducting numerous backbriefs on all aspects of the platoon and subordinate unit operations.
- Ensuring the second in command in each element is prepared to execute in their leaders' absence.
- Listening to subordinates' OPORD.
- Observing rehearsals of subordinate units.
- Checking load plans to ensure they are carrying only what is necessary for the mission or what the OPORD specified.
- Checking the status and serviceability of weapons.
- Checking on maintenance activities of subordinate units.
- Ensuring local security is maintained.

SECTION II – PREPARATIONS

B-150. Preparation consists of activities performed by the company to improve its ability to execute a mission. Preparation includes but is not limited to plan refinement, rehearsals, information collection, coordination, inspections, and movements. Thorough backbriefs and comprehensive rehearsals are important keys to refining a plan. Preparation activities play a critical role in ensuring that the company can execute its

mission effectively. These activities allow the commander, subordinate leaders, and each team or crewman to discover potential problem areas and to develop contingency plans to avoid unforeseen difficulties.

B-151. Since time is a factor in all operations, the commander conducts a time analysis early in the planning process to determine what preparation activities need to take place and when to begin those activities to ensure forces are ready and in position before execution. The plan may require the commander to direct subordinates to start necessary movements; conduct task organization changes; begin reconnaissance, surveillance, and security operations; and execute other preparation activities before completing the plan.

B-152. Commander driven key preparation activities (although not inclusive) are addressed in the following paragraphs. See ADRP 5-0 for a complete listing of preparation activities and ATP 3-21.20 for preparation activities conducted by the Infantry battalion.

SECURITY OPERATIONS

B-153. The Infantry company as a whole is often most vulnerable to surprise and enemy attack during preparation, when forces are often concentrated in assembly areas. The commander and subordinate leaders are away from their units and concentrated together during rehearsals. Parts of the company could be moving to task-organize. Required supplies may be unavailable or being repositioned. Security operations—screen, guard, area security, and local security—are essential during preparation. Subordinate elements of the company assigned security patrol missions (see ATP 3-21.8, chapter 6) protect the company while it prepares for future operations.

REHEARSALS

B-154. Rehearsals are practice sessions conducted to prepare units for an upcoming operation or event. They are essential in ensuring thorough preparation, coordination, and understanding of the commander's plan and intent. Leaders should never underestimate the value of rehearsals.

B-155. Rehearsals require subordinate leaders and, when time permits, other platoon Soldiers to perform required tasks, ideally under conditions as close as possible to those expected for the actual operation. At their best, rehearsals are interactive; participants maneuver their actual vehicles or use vehicle models or simulations while verbalizing their elements' actions. During every rehearsal, the focus is on the how element, allowing subordinates to practice the actions called for in their individual scheme of maneuver.

> ***Note***. Rehearsals are different from a discussion of what is supposed to happen during the actual event. The commander can test subordinates understanding of the plan by ensuring they push the rehearsal forward rather than waiting to dictate each step of the operation. A technique for rehearsing is send real spot reports (SPOTREPs) when reporting enemy contact, rather than just saying, "I would send a spot report now."

B-156. The commander uses well-planned, efficiently run rehearsals to accomplish the following:

- Reinforce training and increase proficiency in critical tasks.
- Reveal weaknesses or problems in the plan, leading to more refinement of the plan or development of additional branch plans.
- Integrate the actions of subordinate elements.
- Confirm coordination requirements between the platoon and adjacent units.
- Improve each Soldier's understanding of the concept of the operation, the direct fire plan, anticipated contingencies, and possible actions and reactions for various situations may arise during the operation.
- Ensure seconds-in-command are prepared to execute in their leaders' absence.

REHEARSAL TYPES

B-157. The commander may use several types of rehearsals, which include:

- Backbrief.
- Combined arms rehearsal.
- Support rehearsal.
- Battle drill or standard operating procedure rehearsal.

Backbrief

B-158. A backbrief is a briefing by subordinates to the commander to review how subordinates intend to accomplish their mission. Normally, subordinates perform backbriefs throughout preparation. These briefs allow the commander to clarify the commander's intent early in subordinate planning. The commander uses the backbrief to identify problems in the concept of operation.

Combined Arms Rehearsal

B-159. A combined arms rehearsal is a rehearsal in which subordinate units synchronize their plans with each other. A maneuver unit headquarters normally executes a combined arms rehearsal after subordinate units issue their operation order. This rehearsal type helps ensure subordinate commanders' plans achieve the higher commander's intent.

Support Rehearsal

B-160. The support rehearsal helps synchronize each warfighting function with the overall operation. This rehearsal supports the operation so units can accomplish their missions. Throughout preparation, units conduct support rehearsals within the framework of a single or limited number of warfighting functions. These rehearsals typically involve coordination and procedure drills for aviation, fires, engineer support, or casualty evacuation. Support rehearsals and combined arms rehearsals complement preparations for the operation. Units may conduct rehearsals separately and combine them into full-dress rehearsals. Although these rehearsals differ slightly by warfighting function, they achieve similar results.

Battle Drill or Standard Operating Procedure Rehearsal

B-161. A battle drill or SOP rehearsal ensures all participants understand a technique or a specific set of procedures. Throughout preparation, subordinate units and staffs rehearse battle drills and SOPs. These rehearsals do not need a completed order from higher headquarters. The commander places priority on those drills or actions they anticipate occurring during the operation. All echelons use these rehearsal types; however, they are most common for platoons, squads, and sections. They are conducted throughout preparation and are not limited to published battle drills.

REHEARSAL TECHNIQUES

B-162. Rehearsals should follow the crawl-walk-run training methodology whenever possible. This prepares the platoons and subordinate elements for increasingly difficult conditions. (Refer to FM 6-0 for additional information).Units can conduct these forms of rehearsals if mission variables permit—

- Full-dress rehearsal.
- Key leader rehearsal.
- Terrain-model rehearsal.
- Digital terrain-model rehearsal.
- Sketch-map rehearsal.
- Map rehearsal.
- Network rehearsal.

Full Dress Rehearsal

B-163. A full-dress rehearsal produces the most detailed understanding of the operation. It includes every participating Soldier and system. The commander rehearses subordinates on terrain similar to the area of operation, initially under good light conditions, and then in limited visibility. Subordinate leaders repeat small unit actions until executed to standard. Full-dress rehearsals help Soldiers clearly understand what the commander expects of them. It helps them gain confidence in their ability to accomplish the mission. Supporting elements, such as aviation crews, meet and rehearse with Soldiers to synchronize the operation.

Key Leader Rehearsal

B-164. Circumstances may prohibit a rehearsal with all members of the company. A reduced-force rehearsal involves only key leaders of the company and subordinate units. It normally takes fewer resources than a full-dress rehearsal. Terrain requirements mirror those of a full-dress rehearsal, even though fewer Soldiers participate. The commander first decides the level of leader involvement. Then selected leaders rehearse the plan while traversing actual or similar terrain. Often the commander uses this technique to rehearse fire control measures for an engagement area during defensive operations. The commander often uses a reduced-force rehearsal to prepare key leaders for a full-dress rehearsal. It may require developing a rehearsal plan mirroring the actual plan but fits the rehearsal terrain.

Terrain-Model Rehearsal

B-165. The terrain-model rehearsal is the most popular rehearsal technique. It takes less time and fewer resources than a full-dress or reduced-force rehearsal. (A terrain-model rehearsal takes a platoon between one to two hours to execute to standard.) An accurately constructed terrain model helps subordinate leaders visualize the commander's intent and concept of operation. When possible, the commander places the terrain model where it overlooks the actual terrain of the area of operation. However, if the situation requires more security, the commander places the terrain model on a reverse slope within walking distance of a point overlooking the area of operation. The model's orientation coincides with the terrain. The size of the terrain model can vary from small (using markers to represent units) to large (on which the participants can walk). A large model helps reinforce the participants' perception of unit positions on the terrain.

Digital Terrain-Model Rehearsal

B-166. With today's digital capabilities, users can construct terrain models in virtual space. Units drape high-resolution imagery over elevation data thereby creating a fly-through or walk-through. Holographic imagery produces views in three dimensions. Often, the model hot links graphics, detailed information, unmanned aircraft systems, and ground imagery to key points providing accurate insight to the plan. Digital terrain models reduce the operations security risk because they do not use real terrain. Geospatial engineers or imagery analysts from the IBCT headquarters can assist in digital model creation. Detailed city models exist for many world cities.

Sketch-Map Rehearsal

B-167. The commander can use the sketch-map technique almost anywhere, day or night. The procedures are similar to a terrain-model rehearsal except the commander uses a sketch map in place of a terrain model. Large sketches ensure all participants can see as each participant walks through execution of the operation. Participants move markers on the sketch to represent unit locations and maneuvers. Sketch-map rehearsals take less time than terrain-model rehearsals and more time than map rehearsals.

Map Rehearsal

B-168. A map rehearsal is similar to a sketch-map rehearsal except the commander uses a map and operation overlay of the same scale used to plan the operation. The map rehearsal itself consumes the most time. A map rehearsal is normally the easiest technique to set up since it requires only maps and graphics for current operations. Units gear a map rehearsal's operation overlay to the echelon conducting the rehearsal. Multi-echelon rehearsals using this technique are difficult. This rehearsal can present operations security risks if the area around the rehearsal site is not secured. This technique requires the least terrain of all rehearsals. A

good site ensures participants can easily find it yet stay concealed from the enemy. An optimal location overlooks the terrain where the unit will execute the operation.

Network Rehearsal

B-169. The company conducts network rehearsals over wide-area networks or local area networks. The commander practices these rehearsals by talking through critical portions of the operation over communications networks in a sequence the commander establishes. The company rehearses only critical parts of the operation. These rehearsals require all information systems needed to execute portions of the operation. All participants require working information systems, operation order, and overlays. Command posts, when established, can rehearse battle tracking during network rehearsals.

PRECOMBAT CHECKS AND PRECOMBAT INSPECTIONS

B-170. Precombat checks and precombat inspections are critical to the success of missions. These checks and inspections are leader tasks and cannot be delegated below the team leader level. They ensure the Soldier is prepared to execute the required individual and collective tasks supporting the mission. Checks and inspections are part of the troop leading procedure protecting against shortfalls endangering Soldiers' lives and jeopardizing the execution of a mission.

B-171. Precombat checks and precombat inspections must be tailored to the specific unit and mission requirements. Each mission and each patrol may require a separate set of checklists. Each element will have its own established set of precombat checks and precombat inspections, but each platoon within its element should have identical checklists. Weapons squads will have a different checklist than line squads, but each weapon squad within an organization should be the same.

B-172. One of the best ways to ensure precombat checks and precombat inspections are complete and thorough is with full-dress rehearsals. These rehearsals, run at combat speed with communication and full battle-equipment, allow the commander and subordinate leaders to envision minute details, as they will occur in the area of operation. If the operation is to be conducted at night, Soldiers should conduct full-dress rehearsals at night as well. Precombat checks and precombat inspections should include backbriefs on the mission, the task and purpose of the mission, and how the Soldiers' role fits into the scheme of maneuver. The Soldiers should know the latest intelligence updates, ROE, be versed in medical and casualty evacuation procedures and sustainment requirements.

B-173. Table B-2 (on page B-38) lists sensitive items, high dollar value items, issued pieces of equipment, and supplies. This table should spur thought, though it's not a final list. The company's SOP will generally provide the guidelines for precombat checks and precombat inspections.

Table B-2. Precombat checks and precombat inspection checklist, example

ID card/ID tags	T&E mechanisms	Grappling hook
Canteens/MOLLE hydration bladder	Spare barrels	Sling sets
Ammunition/magazines	Spare barrel bags	Pick-up zone marking kit
Individual weapons	Extraction tools	Radio's
Protective mask	Asbestos gloves	GPS/Laser range finder
All clothing items in packing list	Barrel changing handles	Handheld microphones
Flashlights	Headspace and timing gauges	Night vision devices
Radios and backup communications	VS-17 panel	Batteries and spare batteries
Call for fire procedures	Vehicle tools (if applicable)	Improved outer tactical vest
9-line medical evacuation procedures	Binoculars	MOLLE ruck/assault pack systems
Night vision goggles mounting plate	Earplugs	Knee and elbow pads
Poncho	Weapons cleaning kit	Ballistic spectacles
Improved rain suit top and bottom	Meals and food	Insect repellent
Litter	Flexi cuffs	Infrared strobe
Protractor/map	Visual/language translator card	Advanced combat helmet
Bayonet and scabbard	Water purification tablets	Chemical lights
Lensatic compass	Watch	Combat boots
Notebook/pen/pencil	Lip balm and sunscreen	Entrenching tool
Tripods	Concertina wire gloves	Weapon tie downs
Pintles	Equipment packed according to SOP	Combat lifesaver bags
Counterradio electronic warfare device	Camouflage stick	Pocket mirror

Appendix C

Direct Fire Planning and Control

Suppressing or destroying the enemy with direct fires is fundamental to success in close combat. Direct fire is inherent in maneuver, as is close combat. The Infantry rifle company commander focuses, distributes, and shifts the overwhelming mass of direct fire at critical locations and times to succeed in combat. Through efficient and effective direct fire planning and control, the company acquires the enemy and masses the effects of fires from all attached and organic weapons to achieve decisive results in the close fight. Appendix C provides a brief overview of the fundamental principles in planning, preparing for, and executing direct fires, but primarily focuses on the commander's role in planning and controlling direct fires within the company.

PRINCIPLES

C-1. Effective direct fire planning and control requires the company to acquire the enemy and mass the effects of fires rapidly to achieve decisive results in the close fight. The commander and subordinate leaders apply several fundamental principles when planning, preparing for, and executing direct fires. The purpose of these principles are not to restrict the actions of subordinates. Applied correctly, the principles help the rifle company to accomplish its primary goal in any direct fire engagement; that is, both to acquire first and shoot first. These principles give subordinates the freedom to act quickly upon acquisition of the enemy. This discussion focuses on the following principles:

- Mass the effects of fire.
- Destroy the greatest threat first.
- Avoid target overkill.
- Employ the best weapon for the specific target.
- Minimize exposure.
- Plan and implement fratricide and friendly fire avoidance measures.
- Plan for limited visibility conditions.
- Plan for degraded capabilities.

MASS THE EFFECTS OF FIRE

C-2. The company masses its fires to achieve decisive results. Massing entails focusing fires at critical points and distributing the effects. Random application of fires is unlikely to have a decisive effect. For example, concentrating company fires at a single target may ensure its destruction or suppression; however, that fire control technique is unlikely to achieve a decisive effect on the enemy formation or position.

DESTROY THE GREATEST THREAT FIRST

C-3. The order in which the company engages enemy forces is in direct relation to the danger they present. The enemy's threat depends on their weapons, range, and positioning. When presented with multiple targets, a unit, in almost all situations, initially concentrate fires to destroy the greatest threat, and then distribute fires over the remainder of the enemy force.

AVOID TARGET OVERKILL

C-4. Target overkill wastes ammunition and ties up weapons that are better employed acquiring and engaging other targets. The idea of having every weapon engage a different target, however, must be

tempered by the requirement to destroy the greatest threats first. Use only the amount of fire required to achieve the necessary effects.

EMPLOY THE BEST WEAPON FOR A SPECIFIC TARGET

C-5. Using the appropriate weapon for the target increases the probability of rapid enemy destruction or suppression; at the same time, it saves ammunition. Target type, range, and exposure are key factors to determine the weapon and ammunition that should be employed, as are weapons and ammunition availability and desired targets effects. The company commander considers individual crew capabilities when deciding on the employment of weapons. The commander arrays forces based on the terrain, enemy, and desired effects of fires. As an example, when an enemy dismounted assault is expected in restricted terrain, the commander employs Infantry squads, taking advantage of their ability to engage numerous fast-moving targets.

MINIMIZE EXPOSURE

C-6. The company increases its survivability by exposing Soldiers to the enemy only to the extent necessary to engage the enemy effectively. Natural or manmade defilade provides the best cover from lethal direct fire munitions. Dismounted Infantry minimize exposure by constantly seeking effective available cover, attempting to engage the enemy from the flank, remaining dispersed, firing from multiple positions, and limiting engagement times.

PLAN AND IMPLEMENT FRATRICIDE AND FRIENDLY FIRE AVOIDANCE MEASURES

C-7. The commander must be proactive in reducing the risk of fratricide, friendly fire, and noncombatant casualties. The commander has numerous tools to assist them in their effort: identification training for combat vehicles and aircraft, unit weapons safety posture, weapons control status, recognition markings, and a common operational picture to include range cards, area sketches, and rehearsals. Knowledge and employment of applicable rules of engagement are the primary means of preventing noncombatant casualties.

PLAN FOR LIMITED VISIBILITY CONDITIONS

C-8. At night, the company can engage enemy forces at nearly the same ranges as during the day due to limited visibility fire control equipment. Obscurants such as dense fog, heavy smoke, and blowing sand, however, can reduce the capabilities of thermal and infrared (IR) equipment. The commander develops contingency plans for such extreme limited visibility conditions. Although decreased acquisition capabilities have minimal effect on area fire, point target engagements can occur at decreased ranges. Typically, firing positions, whether offensive or defensive, must be adjusted closer to the area or point where the commander intends to focus fires. Another alternative is to use visual or IR illumination when there is insufficient ambient light for passive light intensification devices.

Note. Vehicles equipped with thermal sights can assist Infantry squads in detecting and engaging enemy forces in limited visibility conditions.

PLAN FOR DEGRADED CAPABILITIES

C-9. The commander initially develops a plan based on the company's maximum capabilities. The commander then makes backup plans for implementation in the event of casualties, weapon damage, or failure. While the commander cannot anticipate or plan for every situation, the commander plans for the most probable occurrences. Building redundancy into the plan, such as having two systems observe the same area, is an invaluable asset when the situation (and the number of available systems) permits. Designating alternate sectors of fire provides a means of shifting fires if adjacent elements are knocked out of action.

DIRECT FIRE PLANNING

C-10. The commander plans direct fires to distribute and control subordinate unit fires. During direct fire planning, determining where and how to mass fires is an essential step in the development the commander's concept of operation. Based on where and how the commander focuses and distributes fires, subordinates establish weapons ready postures as well as triggers for initiating fires. The commander and subordinate leaders plan for and conduct rehearsals of direct fires (and of the fire control process) based on the estimate of the situation during mission preparation. As the situation develops, the commander refines the direct fire plan.

PLANNING TECHNIQUES

C-11. The commander determines points or areas to focus combat power after identifying probable enemy locations. The commander's visualization of where and how the enemy may attack or defend enables the commander to determine the volume of fire necessary at particular points to have a decisive effect. The commander establishes the means for distributing fires effectively to mass the fires of more than one subordinate element.

C-12. The commander and subordinate leaders establish weapons ready postures for the company as well as triggers for initiating fires based on where and how they want to focus and distribute fires. The commander evaluates the risk of fratricide and friendly fire and establishes controls to prevent it. Control measures, although not inclusive, include the designation of recognition markings, weapons safety posture (see paragraph C-47 on page C-14), and weapons control status (see paragraph C-49 on page C-15).

C-13. After determining where and how to mass and distribute fires, the commander and subordinate leaders orient elements to rapidly and accurately acquire the enemy. They war game selected course of actions or concept of operation to determine probable requirements for refocusing and redistributing fires and to establish other required controls. During mission preparation, the commander and subordinate leaders plan and conduct direct fire rehearsals (and the fire control process) based on the commander's estimate of the situation.

C-14. Throughout the operations process (plan, prepare, execute, and access), the commander and subordinate leaders continue to apply techniques and considerations based on updates to the current situation. The commander combines situational awareness with the latest available intelligence to ensure a shared understanding by all subordinate elements.

STANDARD OPERATING PROCEDURES

C-15. A well-rehearsed direct fire standard operating procedures (SOPs) ensures quick, predictable actions by all members of the company. The commander bases the various provisions of the SOP on the capabilities of the company (and attachments when task organized), and on anticipated conditions and the situation. The commander adjusts SOPs whenever changes to anticipated and actual mission variables of METT-TC become apparent. When directed, company engagements follow the set procedures listed within the company's direct fire SOP. The commander uses fire commands (see paragraph C-70 on page C-19) to refocus or redistribute fires. The following paragraphs discuss specific SOP provisions for focusing fires, distributing fires, orienting forces, and preventing fratricide and friendly fire.

Focusing Fires

C-16. The commander uses TRPs, although not inclusive, to focus fires within the company. One method to establish a standard respective position for target reference points in relation to friendly elements is to consistently number the target reference points, such as from left to right. Utilizing this method allows the commander and subordinate leaders to quickly determine and communicate the location of target reference points.

Distributing Fires

C-17. Two means (although not inclusive) of distributing fires within the company include engagement priorities and target array. Engagement priorities, whether in the offense or in the defense, enable the

commander and/or subordinate leader to assign each type weapon system an engagement priority by type of enemy vehicle or weapon. For example, the Javelin Close-Combat Missile System priority may be any armored threat first, then any technical vehicle with mounted weapon system, and any mounted elements are tertiary targets. The target array means assists the commander and/or subordinate leader in distribution by assigning specific company elements to engage enemy elements of approximately similar capabilities.

Orienting Forces

C-18. A standard means within the company to orient forces is to assign a primary direction of fire using a target reference point to orient each element on a probable enemy position or likely avenue of approach. To provide all-around security, provisions of the SOP can supplement the primary direction of fire with sectors using a friendly-based quadrant. The following paragraph illustrates the use of this method.

C-19. The center (front) platoon's primary direction of fire is target reference point 2 (center). Until otherwise specified, the platoon is responsible for the front two quadrants (see paragraph C-35 on page C-11). The left flank platoon's primary direction of fire is target reference point 1 (left). Until directed differently, the platoon is responsible for the left two friendly quadrants (overlapping with the center platoon). The right flank platoon's primary direction of fire is target reference point 3 (right). Until otherwise specified, the platoon is responsible for the right two friendly quadrants (overlapping with the center platoon).

Avoiding Fratricide

C-20. A primary means of minimizing the potential for fratricide is to establish a standard weapons control status of weapons tight, which requires positive enemy identification before engagement. The most critical requirement of fratricide prevention is maintaining situational awareness. Maintaining situational awareness requires subordinate leaders to inform the commander, adjacent elements, and subordinates whenever a friendly unit is moving or preparing to move. The company SOP dictates methods of identifying friendly rifle squads and other dismounted elements. Methods include using arm bands, medical heat pads, an IR light source or detonating a smoke grenade of a designated color at the appropriate time. The commander and subordinate leaders, throughout operations continuously access and refine fratricide prevention measure.

DIRECT FIRE CONTROL

C-21. The company commander communicates to subordinates the manner, method, and time to initiate, shift, and mass fires, and when to disengage by using direct fire control measures. The commander controls company direct fires engagements against enemy systems to gain a decisive effect against the enemy. The commander uses the results of the company's intelligence preparation of the battlefield to determine the most advantageous way to use direct fire control measures to mass the effects on the enemy and reduce fratricide from direct fire systems. (Refer to ATP 2-01.3 for more information.)

FIRE CONTROL PROCESS

C-22. The company commander and subordinate leaders continuously apply the steps of the fire control process to bring direct fires against an enemy force. At the heart of this process, two critical actions: rapid and accurate target acquisition and the massing of fires achieves decisive effects on the target. *Target acquisition* is the detection, identification, and location of a target in sufficient detail to permit the ethical, effective, and efficient employment of weapons (JP 3-60). Massing entails focusing fires at critical points and then distributing the fires for optimum effect. The following discussion examines target acquisition and the massing of fires using the following steps of the fire control process:

- Identify probable enemy locations and determine the enemy scheme of maneuver.
- Determine where and how to mass fires.
- Orient forces to speed target acquisition.
- Shift fires to refocus or redistribute.

Identify Probable Enemy Locations and Enemy Scheme of Maneuver

C-23. The commander and subordinate leaders plan and execute direct fires based on their estimate of the situation. An essential part of this estimate is the analysis of the terrain and the enemy force, which aids the commander in visualizing how the enemy attacks or defends a piece of terrain. A defending enemy's defensive position or an attacking enemy's support position is normally driven by intervisibility lines (see paragraph B-63 on page B-15). Typically, there are limited points on a piece of terrain that provide both good fields of fire and adequate cover for a defender. Similarly, an attacking enemy has only a limited selection of avenues of approach that provides adequate cover and concealment.

C-24. Coupled with available intelligence, an understanding of the effects of a specific piece of terrain on maneuver (see figure C-1) assists the commander in identifying probable enemy locations and likely avenues of approach both before and during the fight. The commander may use any or all of the following products or techniques in developing and updating the analysis:

- An enemy situational template based on the analysis of terrain and enemy.
- A spot report or contact report on enemy locations and activities.
- Reconnaissance and surveillance of the area of operations.

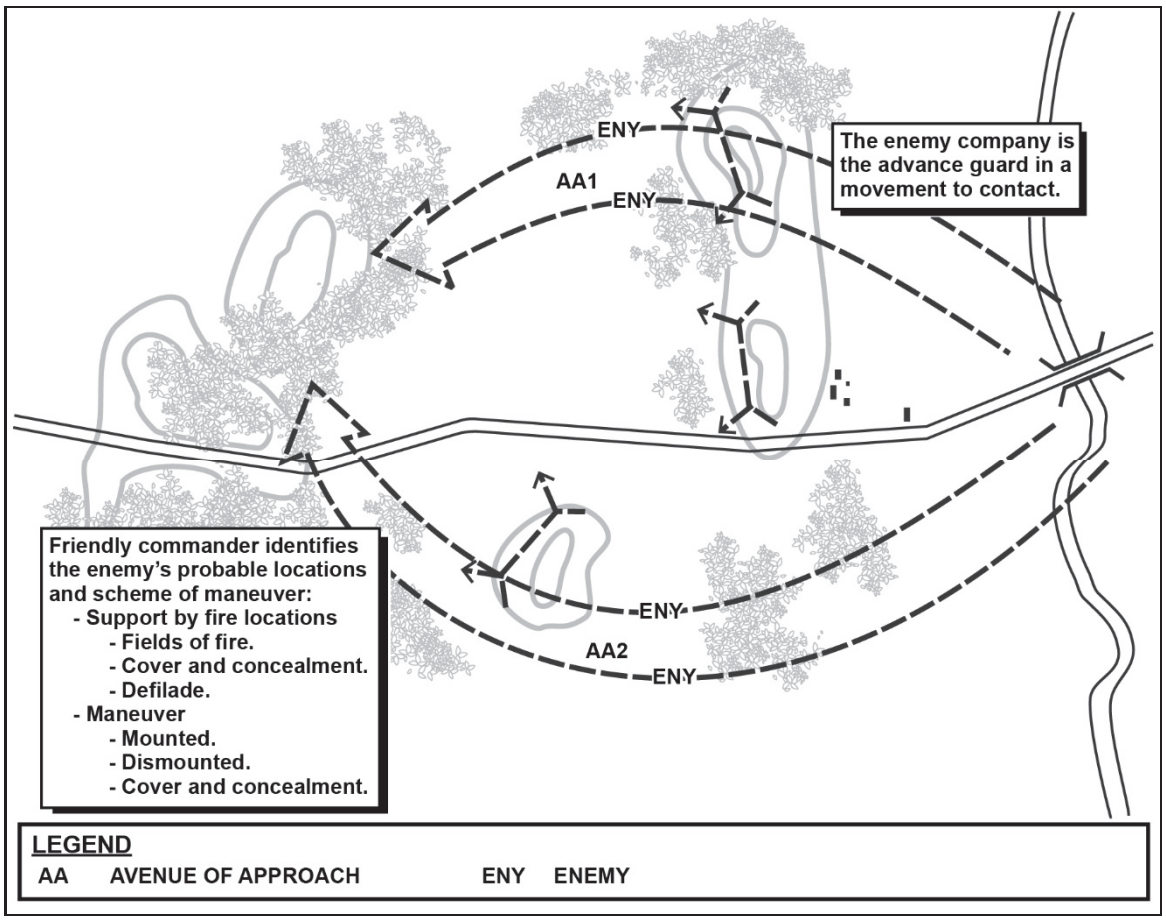

Figure C-1. Identifying probable enemy locations and scheme of maneuver, example

Determine Where and How to Mass Fires

C-25. To achieve decisive effects, friendly forces must mass their fires (see figure C-2 on page C-6). Effective massing requires the commander to focus the fires of subordinate elements and to distribute the effects of the fires. The commander identifies points where the commander wants to, or must, focus the company's fires based on the commander's estimate of the situation and concept of operation. Most often,

these are locations identified as probable enemy positions or points along likely avenues of approach where the company can mass fires. The commander issues a fire command to focus fires when subordinate elements are not initially oriented on the point where fires are to be massed. At the same time, the commander uses direct fire control measures to effectively distribute the fires of subordinate elements now focused on the same point.

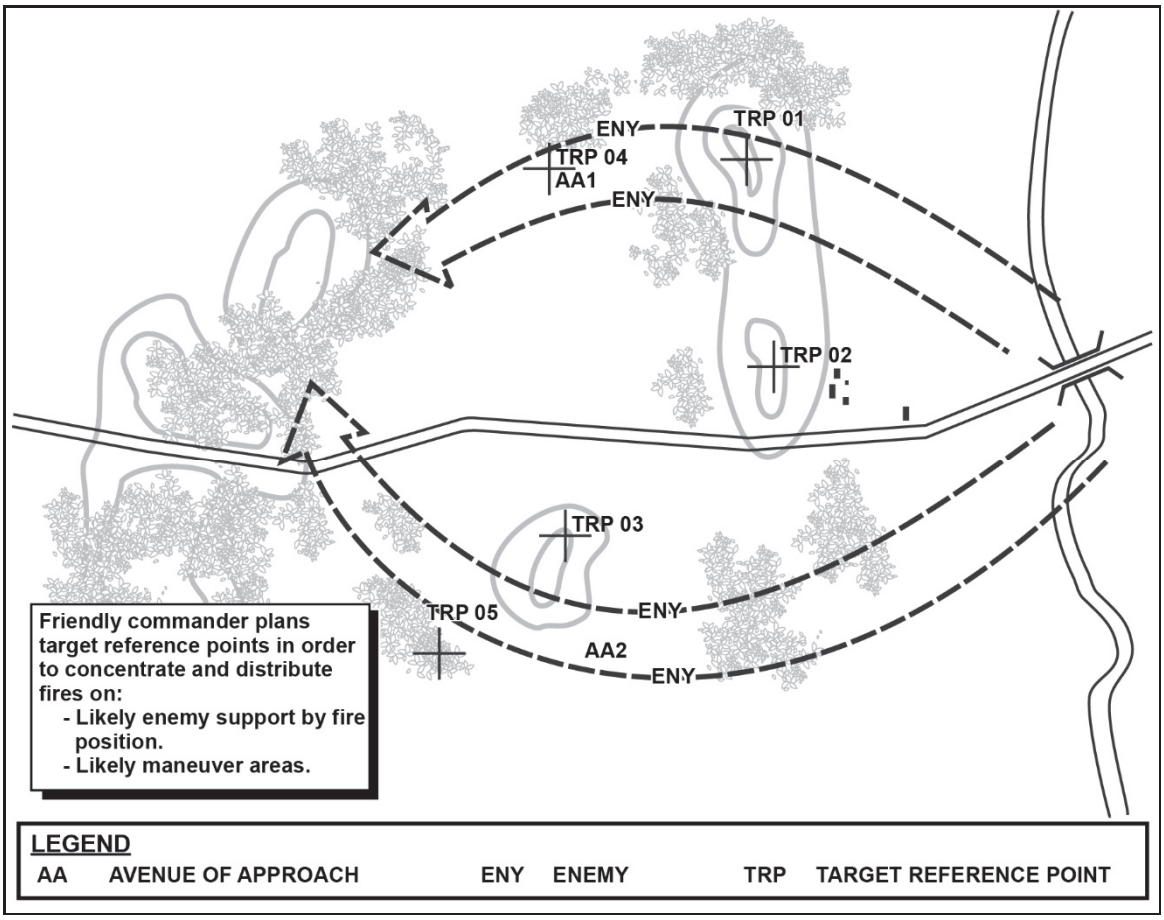

Figure C-2. Determining where and how to mass fires, example

Orient Forces to Speed Target Acquisition

C-26. To effectively engage the enemy with direct fires, friendly forces must rapidly and accurately acquire enemy elements (see figure C-3). Orienting friendly forces on probable enemy locations and on likely avenues of approach speeds target acquisition. Conversely, failure to orient subordinate elements results in slower acquisition, greatly increases the likelihood that enemy forces are able to engage first. The clock direction orientation method, which is prescribed in most unit SOPs, is good for achieving all-around security; however, it does not ensure that friendly forces are most effectively oriented to detect the enemy. To achieve this critical orientation, the commander typically designates target reference points on or near probable enemy locations and avenues of approach; the commander orients subordinate elements using directions of fire or sectors of fire. Normally, the gunner on crew-served weapons scan the designated direction or area while other crewmen observe alternate areas to provide all-around security.

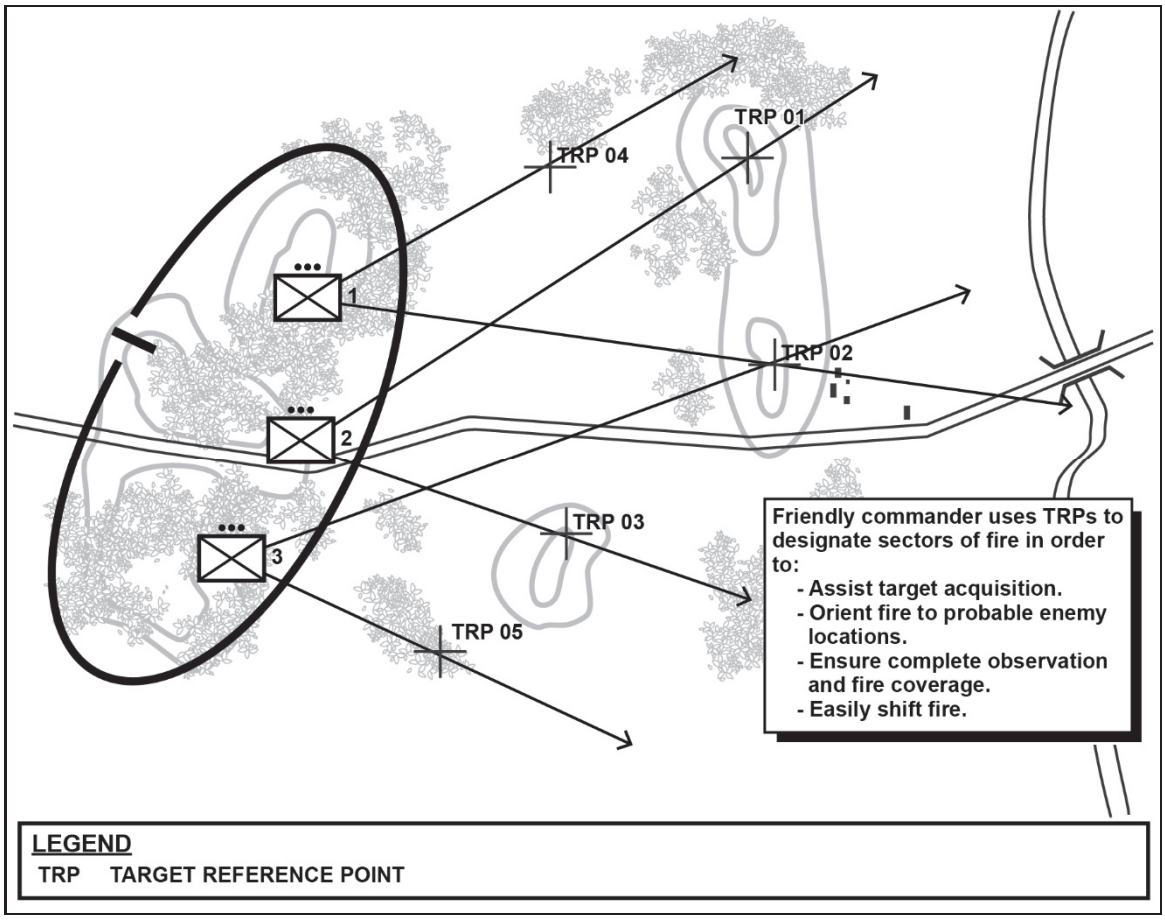

Figure C-3. Orienting forces to speed target acquisition, example

Shift Fires to Refocus and Redistribute

C-27. The commander shifts fires to refocus and redistribute the effects based on the evolving estimate of the situation as the engagement proceeds. Situational awareness becomes an essential part of the fire control process at this point. The commander and subordinate leaders apply the same techniques and considerations, including fire control measures that they used earlier to focus and distribute fires (see figure C-4 on page C-8). A variety of situations will dictate shifting of fires, including the following:

- Appearance of an enemy force posing a greater threat than the one currently being engaged.
- Extensive attrition of the enemy force being engaged, creating the possibility of target overkill.
- Attrition of friendly elements that are engaging the enemy force.
- Change in the ammunition status of the friendly elements that are engaging the enemy force.
- Maneuver of enemy or friendly forces resulting in terrain masking.
- Increased fratricide and friendly fire risk.

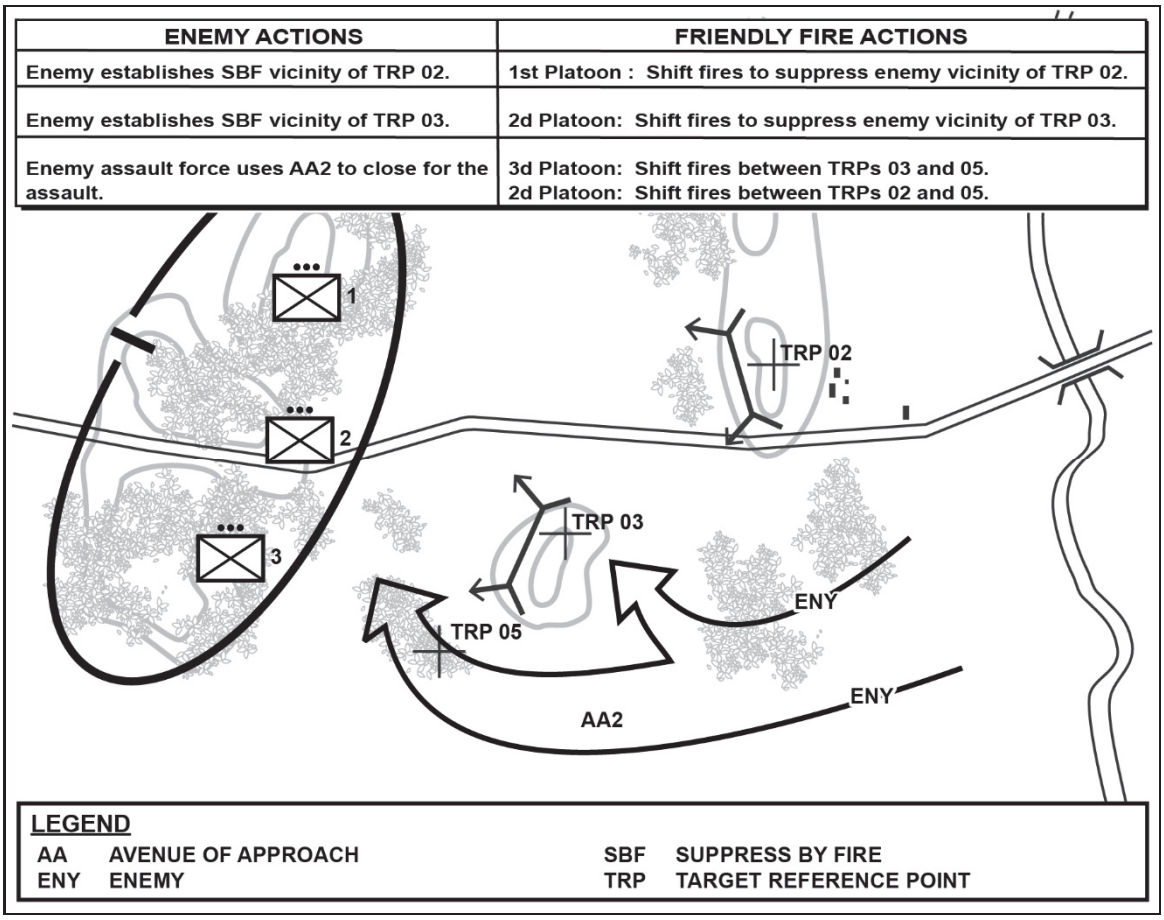

Figure C-4. Common fire control measures

Fire Control Measures

C-28. Fire control measures are the means by which the commander or subordinate leaders control fires. Application of these concepts, procedures, and techniques assists the company in acquiring the enemy, focusing fires on them, distributing the effects of the fires, and preventing fratricide. No single measure is sufficient to effectively control fires. Fire control measures are effective only if the entire company has a common understanding of what is meant and how to employ them. The following discussion focuses on the various fire control measures employed by the Infantry rifle company. Table C-1 lists common fire control measures. The table is organized by whether the control measures are terrain based or threat-based. (Refer to FM 3-90-1 for additional information.)

Table C-1. Common fire control measures

TERRAIN-BASED FIRE CONTROL MEASURES	*THREAT-BASED FIRE CONTROL MEASURES*
Target reference point	Rules of engagement
Engagement area	Weapons ready posture
Sector of fire	Weapons safety posture
Direction of fire	Weapons control status
Terrain-based quadrant	Engagement priorities
Friendly-based quadrant	Trigger
Maximum engagement line; restrictive fire line; final protective line	Engagement techniques; fire patterns; target array

Terrain-Based Fire Control Measures

C-29. The rifle company commander uses terrain-based fire control measures to focus and control fires on a particular point, line, or area rather than on a specific enemy element. The following paragraphs describe the tactics, techniques, and procedures associated with this type of control measure.

Target Reference Point

C-30. A TRP is a recognizable point on the ground that the commander and subordinate leaders use to orient the company, and to focus and control direct fires. When the commander designates TRPs as indirect fire targets, the same TRPs can be used to call for and adjust indirect fires. The commander designates TRPs at probable enemy locations and along likely avenues of approach. These points can be natural or man-made. A TRP can be an established site (for example, a hill or a building), or an impromptu feature designated as a TRP on the spot (for example, a burning enemy vehicle or smoke generated by an artillery round). The company can construct markers to serve as TRPs (see figure C-5 on page C-10). Ideally, TRPs should be visible in three observation modes (unaided, passive-IR, and thermal) so that all forces can see them. Examples of TRPs include the following features and objects:

- Prominent hill mass.
- Distinctive building.
- Observable enemy position.
- Destroyed vehicle.
- Ground-burst illumination.
- Smoke round for immediate engagements only; this is the least preferred method.

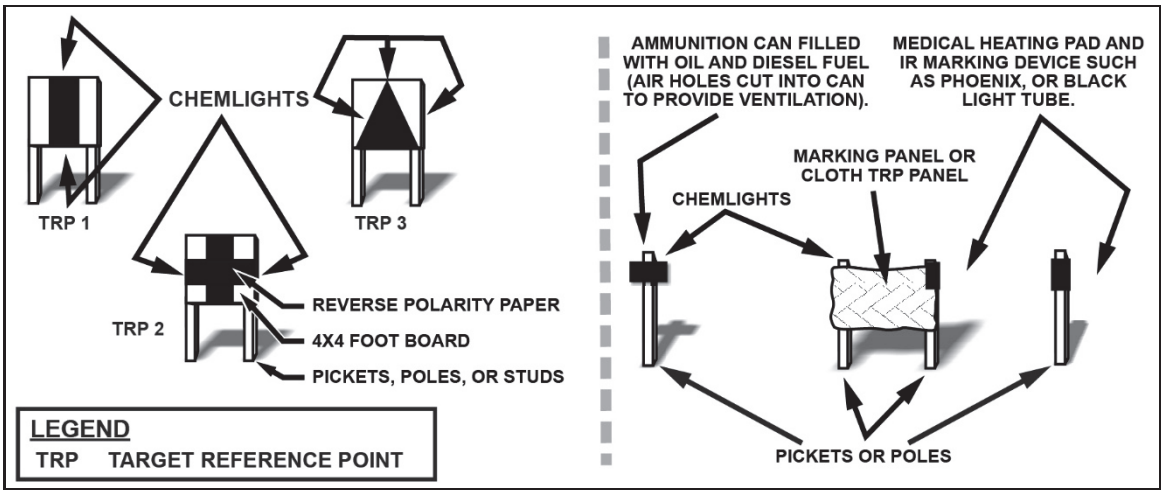

Figure C-5. Constructed target reference point markers, examples

Engagement Area

C-31. An engagement area (EA) is a control measure along an enemy avenue of approach where the commander intends to mass the fires of available weapons to destroy an enemy force. The size and shape of the EA is determined by the degree of relatively unobstructed intervisibility available to the company's weapons systems in their firing positions and by the maximum range of those weapons. Typically, the commander delineates responsibility within the EA by assigning each platoon a sector of fire or direction of fire.

Sector of Fire

C-32. A *sector of fire* is that area assigned to a unit, crew-served weapon, or an individual weapon within which it will engage targets as they appear in accordance with established engagement priorities (FM 3-90-1). A sector of fire is an area that must be covered by direct fire. The company commander and subordinate leaders assign sectors of fire to subordinate elements and individual Soldiers to ensure coverage of an area of responsibility; they may also limit the sector of fire of an element or weapon to prevent accidental engagement of an adjacent unit. In assigning sectors of fire, commanders and subordinate leaders consider the number and types of weapons available. In addition, they must consider acquisition system type and field of view in determining the width of a sector of fire. For example, while unaided vision has a wide field of view, its ability to detect and identify targets at range and in limited visibility conditions is restricted. Conversely, most fire control acquisitions systems have greater detection and identification ranges than the unaided eye, but their field of view is narrow. Means of designating sectors of fire include the following:

- Target reference Points.
- Clock direction.
- Terrain-based quadrants.
- Friendly-based quadrants.
- Azimuth or cardinal direction.

Direction of Fire

C-33. A direction of fire is an orientation or point used to assign responsibility for a particular area on the battlefield that must be covered by direct fire. The commander and subordinate leaders designate directions of fire for the purpose of acquisition or engagement by subordinate elements, crew-served weapons, or individual Soldiers. Direction of fire is most commonly employed when assigning sectors of fire would be difficult or impossible because of limited time or insufficient reference points. Means of designating a direction of fire include the following:

- Closest target reference point.
- Clock direction.
- Azimuth or cardinal direction.
- Tracer on target.
- Infrared laser pointer.
- M-203 smoke round.

Quadrants

C-34. Quadrants are subdivisions of an area created by superimposing an imaginary pair of perpendicular axes over the terrain to create four separate areas. Establish quadrants on the terrain, friendly forces, or on the enemy formation.

> ***Note***. The technique in which quadrants are based on the enemy formation is usually referred to as the target array; it is covered in the discussion of threat-based fire control measures.

C-35. The method of quadrant numbering is established in the company SOP; however, care must be taken to avoid confusion when quadrants based on terrain, friendly forces, and the enemy formations are used simultaneously.

Terrain-Based Quadrant

C-36. A terrain-based quadrant entails use of a TRP, either existing or constructed, to designate the center point of the axes that divide the area into four quadrants. This technique can be employed in both the offense and defense. In the offense, the commander designates the center of the quadrant using an existing feature or by creating a reference point (for example, using a ground burst illumination round, a smoke marking round, or a fire ignited by incendiary or tracer rounds). The axes delineating the quadrants run parallel and perpendicular to the direction of movement. In the defense, the commander designates the center of the quadrant using an existing or constructed TRP.

C-37. In the examples shown in figure C-6 (on page C-12), quadrants are marked using the letter “Q” and a number (Q1 to Q4); quadrant numbers are in the same relative positions as on military map sheets (from Q1 as the upper left-hand quadrant clockwise to Q4 as the lower left-hand quadrant).

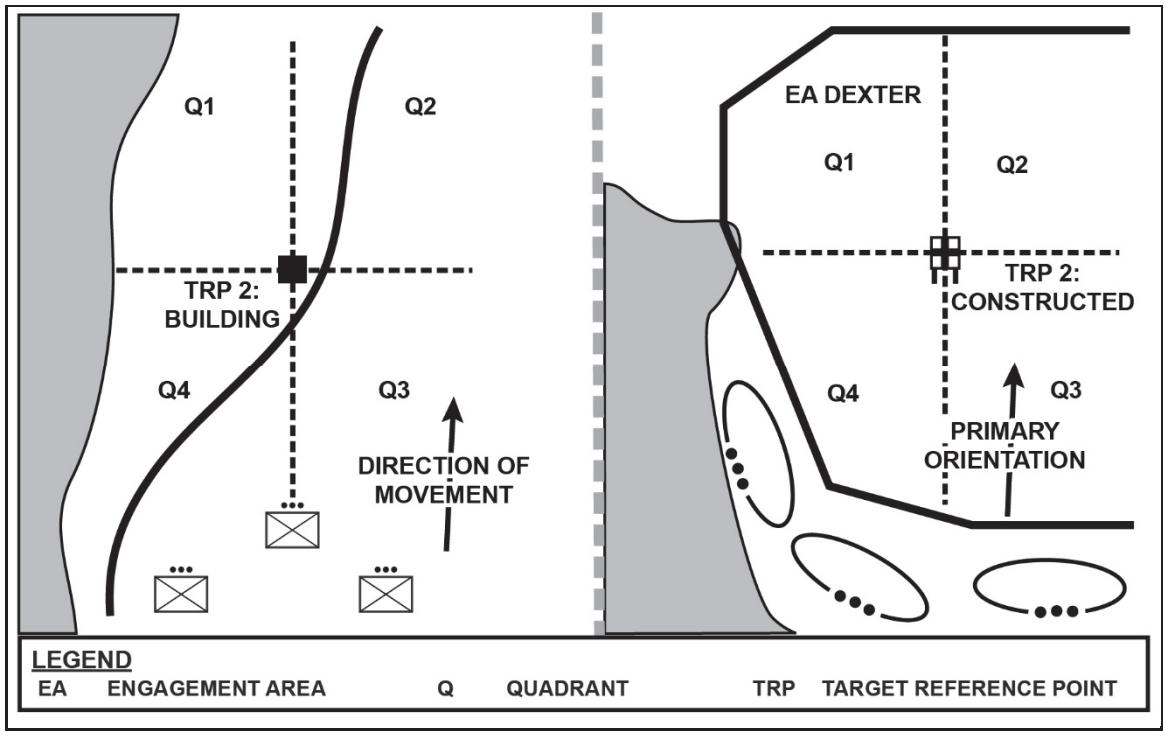

Figure C-6. Terrain-based quadrants, example

Friendly-Based Quadrant

C-38. The friendly-based quadrant technique entails superimposing quadrants over the unit's formation. The center point is based on the center of the formation, and the axes run parallel and perpendicular to the general direction of travel. For rapid orientation, the friendly quadrant technique may be better than the clock direction method; this is because different elements of a large formation are rarely oriented in the same exact direction and because the relative dispersion of friendly forces causes parallax to the target. Figure C-7 illustrates use of friendly-based quadrants.

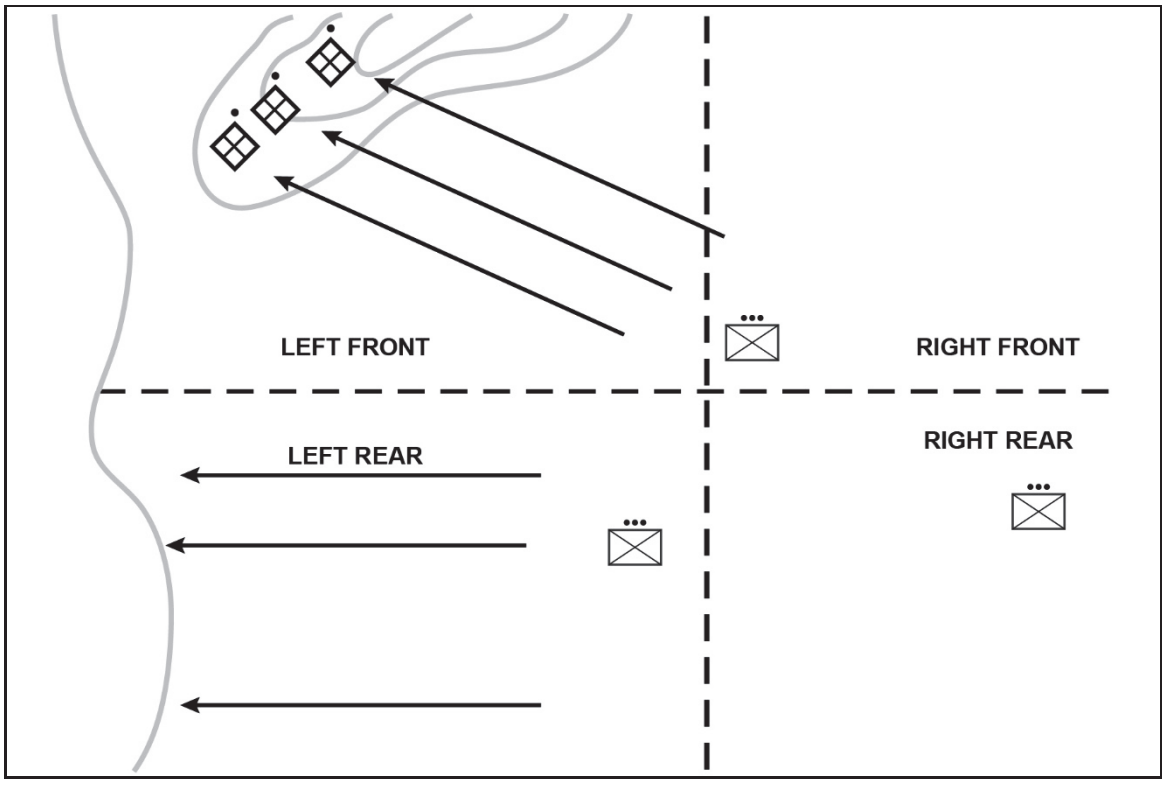

Figure C-7. Friendly-based quadrants, example

Maximum Engagement Line

C-39. A maximum engagement line (MEL) is the linear depiction of the farthest limit of effective fire for a weapon or unit. This line is determined by both the weapon's or unit's maximum effective range and by the effects of terrain. For example, slope, vegetation, structures, and other features provide cover and concealment that may prevent the weapon from engaging to the maximum effective range. An MEL serves several purposes. The commander can use it to prevent crews from engaging beyond the maximum effective range, to define criteria for the establishment of triggers, and to delineate the maximum extent of AOs on the sketch.

Restrictive Fire Line

C-40. A *restrictive fire line* (DOD) is a line established between converging friendly surface forces that prohibits fires or their effects across that line. (JP 3-09). An RFL is a linear fire control measure beyond which engagement is prohibited without coordination. In the offense, the commander can designate an RFL to prevent a base of fire element from firing into the area where an assaulting element is maneuvering. This technique is particularly important when armored vehicles support the maneuver of Infantry squads. In the defense, the commander may establish a RFL to prevent the company from engaging a friendly rifle squad positioned in restricted terrain on the flank of an avenue of approach.

Final Protective Line

C-41. The ***final protective line*** **is a selected line of fire where an enemy assault is to be checked by interlocking fire from all available weapons and obstacles.** The company reinforces this line with protective obstacles and with FPFs whenever possible. Initiation of the FPF is the signal for elements, crews, and individual Soldiers to shift fires to their assigned portion of the FPL. They spare no ammunition in repelling the enemy assault, a particular concern for machine guns and other automatic weapons.

Threat-Based Fire Control Measures

C-42. The Infantry rifle company commander uses threat-based fire control measures to focus and control fires by directing the company to engage a specific enemy element rather than to fire on a point or area. The following paragraphs describe the tactics, techniques, and procedures associated with this type of control measure.

Rules of Engagement

C-43. Rules of engagement (ROE) specify the circumstances and limitations under which forces may engage; they include definitions of combatant and noncombatant elements and prescribe the treatment of noncombatants. Factors influencing ROE are national command policy, the mission and commander's intent, the OE, and the law of war. ROE always recognize a Soldier's right of self-defense; at the same time, they clearly define circumstances in which they may fire.

C-44. Soldiers must operate as trusted Army professionals who adhere to and uphold the moral principles of the Army Ethic, which guide their decisions in applications of force (or exercise of restraint). Subordinate leaders and Soldiers of character follow the Law of Armed Conflict principles: military necessity, distinction (discrimination between combatants and noncombatants), proportionality, and avoiding unnecessary suffering (harm to people or damage to property beyond that which is necessary to accomplish the mission). See the Army Ethic and "The Soldier's Rules" reference ADRP 1 and FM 27-10 for more information.

Weapons Ready Posture

C-45. Weapons ready posture is the selected ammunition and range for individual and crew-served weapons in Infantry squads. It is a means by which the commander and subordinate leaders use their estimate of the situation to specify the ammunition and range for the most probable anticipated engagement. Ammunition selection depends on the target type, but the commander or subordinate leader may adjust it based on engagement priorities, desired effects, and effective range. Range selection depends on the anticipated engagement range; it is affected by terrain intervisibility, weather, and light conditions. Within the company, weapons ready posture affects the types and quantities of ammunition loaded in ready boxes, stowed in ready racks, and carried by rifle squads. The following considerations apply:

C-46. Examples of weapons ready posture are—

- An M203 grenadier, who's, most likely engagement is to cover dead space at 200 meters from their position, might load high-explosive dual purpose ammunition and set 200 meters on their quadrant sight.
- A Javelin gunner might be equipped with an AT4 instead of a Javelin to prepare for an engagement in a wooded area where engagement ranges are extremely short.

Weapons Safety Posture

C-47. Weapons safety posture is an ammunition handling instruction that enables the commander to control the safety of the company's weapons precisely. Subordinate leaders' supervision of the weapons safety posture, as well as Soldiers' adherence to it, minimizes the risk of accidental discharge and fratricide and friendly fire. Table C-2 outlines procedures and considerations for the Infantry rifle company when using the four weapons safety postures, listed below in ascending order of restrictiveness:

- AMMUNITION LOADED.
- AMMUNITION LOCKED.
- AMMUNITION PREPARED.
- WEAPONS CLEARED.

C-48. When setting and adjusting the weapons safety posture, the commander must weigh the desire to prevent accidental discharges against the requirement for immediate action based on the enemy threat. If the threat of direct contact is high, for example, the commander could establish the weapons safety posture as AMMUNITION LOADED. If the requirement for action is less immediate, they might lower the posture to AMMUNITION LOCKED or AMMUNITION PREPARED. Additionally, the commander can designate different weapons safety postures for different elements of the company.

Table C-2. Weapons safety posture levels

WEAPONS SAFETY POSTURE	*INFANTRY SQUAD WEAPONS AND AMMUNITION*
Ammunition Loaded	Rifle rounds chambered. Machine gun and squad automatic weapon ammunition on feed tray; bolt locked to rear. Grenade launcher loaded. Weapons on manual safe.
Ammunition Locked	Magazines locked into rifles. Machine gun and SAW ammunition on feed tray; bolt locked forward. Grenade launcher unloaded.
Ammunition Prepared	Magazines, ammunition boxes, launcher grenades, and hand grenades prepared but stowed in pouches/vests.
Weapons Cleared	Magazine, ammunition boxes, and launcher grenades removed; weapons cleared.

Weapons Control Status

C-49. The three levels of weapons control status (WCS) outline the conditions, based on target identification criteria, under which friendly elements can engage. The commander sets and adjusts the WCS based on friendly and enemy disposition, and the clarity of the situation. Generally speaking, the higher the potential of fratricide, the more restrictive the WCS. The three levels, in descending order of restrictiveness, are:

- WEAPONS HOLD. Engage only if engaged or ordered to engage.
- WEAPONS TIGHT. Engage only targets that are positively identified as enemy.
- WEAPONS FREE. Engage any targets that are not positively identified as friendly.

C-50. As an example, the commander may establish the WCS as WEAPONS HOLD when friendly forces are conducting a passage of lines. By maintaining situational understanding of their own elements and adjacent friendly forces, however, they may be able to lower the WCS. In such a case, the commander may be able to set a WEAPONS FREE status when they know there are no friendly elements in the vicinity of the engagement. This permits their elements to engage targets at extended ranges even though it is difficult to distinguish targets accurately at ranges beyond 2000 meters under battlefield conditions. Another consideration is that the WCS is extremely important for forces using combat identification systems. Establishing the WCS as WEAPONS FREE permits leaders to engage an unknown target when they fail to get a friendly response.

Engagement Priorities

C-51. Engagement priorities, which entail the sequential ordering of targets to be engaged, can serve one or more of the following critical fire control functions:

Prioritize High-Payoff Targets

C-52. In concert with their concept of the operation, the commander determines which target types provide the greatest payoff; they can then set these as a unit engagement priority. For example, they may decide that destroying enemy engineer assets is the best way to prevent the enemy from breaching an obstacle.

Employ Best Weapons for the Target

C-53. Establishing engagement priorities for specific friendly systems increases the effectiveness with which the unit employs its weapons. As an example, the engagement priority for the Javelin could be enemy tanks first, then enemy personnel carriers; this would decrease the chance that the company's lighter systems will have to engage enemy armored vehicles.

Distribute the Company Fires

C-54. Establishing different priorities for similar friendly systems helps to prevent overkill and achieve effective distribution of fires. For example, the commander may designate the enemy's tanks as the initial

priority for one rifle platoon, while making the enemy's personnel carriers the priority for another platoon. This would decrease the chances of units launching multiple tube launched, optically tracked, wire guided missiles against two enemy tanks, while ignoring the dangers posed by the personnel carriers.

Trigger

C-55. A trigger is a specific set of conditions that dictates initiation of fires. Often referred to as engagement criteria, a trigger specifies the circumstances in which subordinate elements should engage. The circumstances can be based on a friendly or enemy event. For example, the trigger for a friendly platoon to initiate engagement could be three or more enemy combat vehicles passing or crossing a given point or line. This line can be any natural or man-made linear feature, such as a road, ridge line, or stream. It may also be a line perpendicular to the unit's orientation, delineated by one or more reference points.

Engagement Techniques

C-56. Engagement techniques are effects-oriented fire distribution measures. The most common engagement techniques in Infantry rifle company operations are—

- Point fire.
- Area fire.
- Simultaneous.
- Alternating fire.
- Observed fire.
- Sequential fire.
- Time of suppression.
- Reconnaissance by fire.

Point Fire

C-57. Point fire entails concentrating the effects of a company's fire against a specific, identified target such as a vehicle, machine gun bunker, or antitank guided missile position. When subordinate leaders direct point fire, all of the company's weapons engage the target, firing until it is destroyed or the required time of suppression has expired. Employing converging fires from dispersed positions makes point fire more effective because the target is engaged from multiple directions. The company may initiate an engagement using point fire against the most dangerous threat, and then revert to area fire against other, less threatening point targets.

Note. Use of point fire is fairly rare because a unit seldom encounters a single, clearly identified enemy weapon.

Area Fire

C-58. Area fire involves distributing the effects of company fires over an area in which enemy positions are numerous or are not obvious. If the area is large, subordinate leaders assign sectors of fire to subordinate elements using a terrain-based distribution method such as the quadrant technique. Typically, the primary purpose of the area fire is suppression; however, sustaining effective suppression requires judicious control of the rate of fire.

Simultaneous Fire

C-59. The company employs simultaneous fire, to rapidly mass the effects of their fires or to gain fire superiority. For example, the commander may initiate an SBF operation with simultaneous fire, then, revert to alternating or sequential fire to maintain suppression. Simultaneous fire is also employed to negate the low probability of the hit and kill of certain anti-armor weapons. As an example, a rifle squad may employ simultaneous fire with its AT4s to ensure rapid destruction of an enemy armored fighting vehicle that is engaging a friendly position.

Alternating Fire

C-60. In alternating fire, pairs of elements continuously engage the same point or area target one at a time. For example, the company may alternate fires of two platoons; a platoon may alternate the fires of its squads; or a platoon may alternate the fires of a pair of machine guns. Alternating fire permits the unit to maintain suppression for a longer duration than does volley fire; it also forces the enemy to acquire and engage alternating points of fire.

Observed Fire

C-61. Observed fire is usually used when the company is in protected defensive positions with engagement ranges in excess of 2500 meters. It can be employed between elements of the company, such as a platoon lasing and observing while the machinegun section fires, or between machineguns in the section of a platoon. The commander or platoon leader directs one element or section to engage. The remaining elements or sections observe fires and prepare to engage on order in case the engaging element consistently misses its targets, experiences a malfunction, or runs low on ammunition. Observed fire allows for mutual observation and assistance while protecting the location of the observing elements.

Sequential Fire

C-62. Sequential fire entails the subordinate elements of the company engaging the same point or area target one after another in an arranged sequence. Sequential fire can also help to prevent the waste of ammunition, as when a platoon waits to see the effects of the first Javelin before firing another. Additionally, sequential fire permits elements that have already fired to pass on information they have learned from the engagement. An example would be a Soldier who missed an enemy armored fighting vehicle with AT4 fires passing range and lead information to the next Soldier preparing to engage the enemy armored fighting vehicle with an AT4.

Time of Suppression

C-63. Time of suppression is the period, specified by the commander, during which an enemy position or force is required to be suppressed. Suppression time is typically dependent on the time it will take a supported element to maneuver. Usually, the company suppresses an enemy position using the sustained rate of fire of its automatic weapons. In planning for sustained suppression, subordinate leaders must consider several factors: the estimated time of suppression, the size of the area being suppressed, the type of enemy force to be suppressed, range to the target, rates of fire, and available ammunition quantities.

Reconnaissance by Fire

C-64. Reconnaissance by fire is the process of engaging possible enemy locations to elicit a tactical response, such as return fire or movement. This response permits the commander and subordinate leaders to make target acquisition and then to mass fires against the enemy element. Typically, the commander directs a subordinate element to conduct the reconnaissance by fire. For example, they may direct an overwatching platoon to conduct the reconnaissance by fire against a probable enemy position before initiating movement by a bounding element.

Fire Patterns

C-65. Fire patterns are a threat-based measure designed to distribute the fires of the company simultaneously among multiple, similar targets. Platoons use those most often to distribute fires across an enemy formation. Subordinate leaders designate and adjust fire patterns based on terrain and the anticipated enemy formation. The basic fire patterns, illustrated in figure C-8 (on page C-18), are—

- Frontal.
- Cross.
- Depth.

Frontal Fire

C-66. Subordinate leaders may initiate frontal fire when targets are arrayed in front of the company in a lateral configuration. Weapons systems engage targets to their respective fronts. For example, the left flank weapon engages the left-most target; the right flank weapon engages the right-most target. As weapons systems destroy targets, weapons shift fires toward the center of the enemy formation from near too far.

Cross Fire

C-67. Subordinate leaders initiate cross fire when targets are arrayed laterally across the company's front in a manner that permits diagonal fires at the enemy's flank, or when obstructions prevent unit weapons from firing frontally. Right flank weapons engage the left-most targets; left flank weapons engage the right-most targets. Firing diagonally across an EA provides more flank shots, thus increasing the chance of kills; it also reduces the possibility of the enemy detecting friendly elements should the enemy continue to move forward. As friendly elements destroy targets, weapons shift fires toward the center of the enemy formation.

Depth Fire

C-68. Subordinate leaders initiate depth fire when enemy targets disperse in-depth, perpendicular to the company. Center weapons engage the closest targets; flank weapons engage deeper targets. As the company destroys targets, weapons shift fires toward the center of the enemy formation.

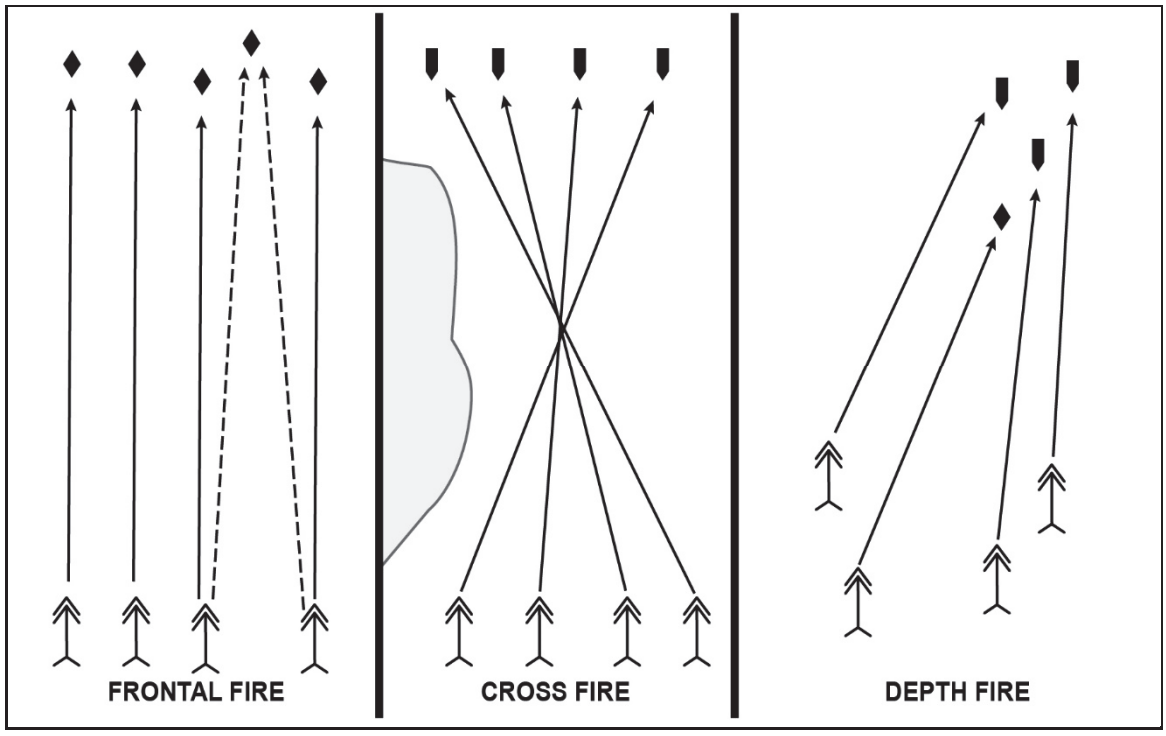

Figure C-8. Fire pattern, examples

Target Array

C-69. Target array enables the commander to distribute fires when the enemy force is concentrated and terrain-based controls are inadequate. The commander creates this threat-based distribution measure by superimposing a quadrant pattern on the enemy formation. Soldiers center the pattern the enemy formation, with the axes running parallel and perpendicular to the enemy's direction of travel. The target array fire control measure is effective against an enemy with a well-structured organization and standardized doctrine. However, it may prove less effective against an enemy that presents few organized formations, or does not

follow strict prescribed tactics. Leaders describe quadrants using the quadrants' relative locations. The examples in figure C-9 illustrate the target array technique.

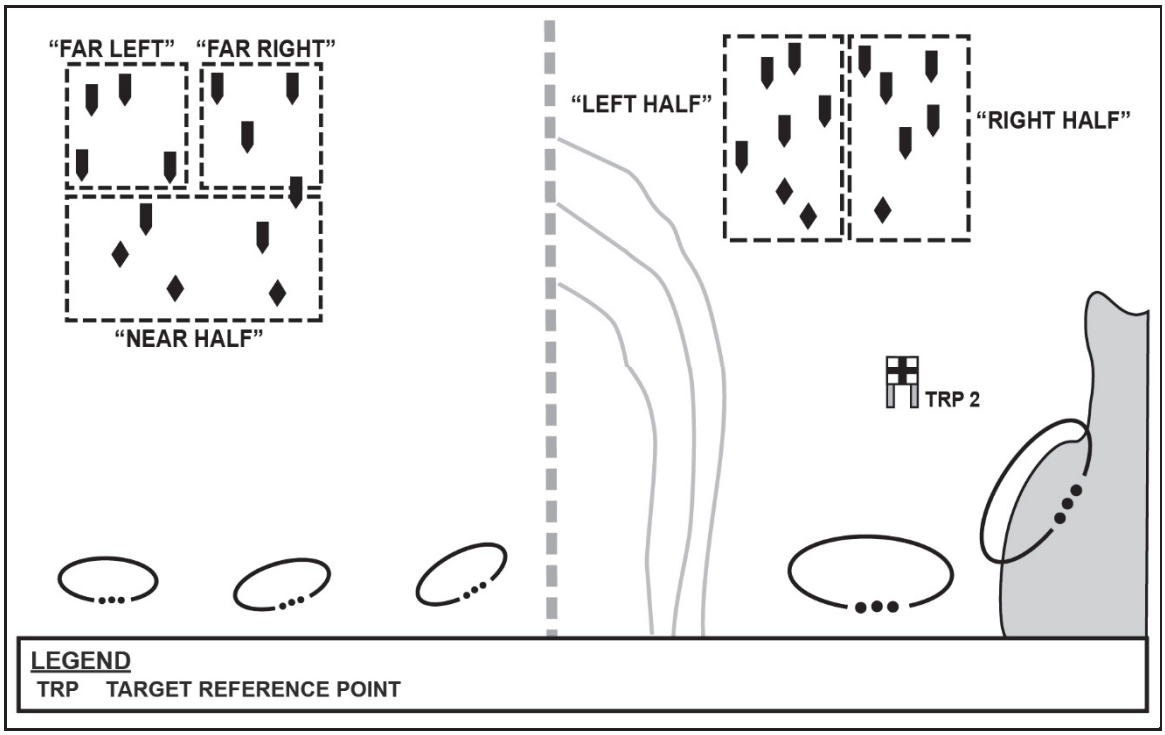

Figure C-9. Target array, example

FIRE COMMANDS

C-70. Fire commands are oral orders issued by subordinate leaders to focus and distribute fires as required to achieve decisive effects against the enemy. Fire commands allow subordinate leaders to rapidly and concisely articulate their firing instructions using a standard format. Fire commands include these elements, which are discussed in the following paragraphs:

- Alert.
- Weapon or ammunition (optional).
- Target description.
- Direction.
- Range (optional).
- Control (optional).
- Execution

Alert

C-71. The alert specifies the elements that are directed to fire. The alert does not require the leader initiating the command to identify himself. Examples of the alert element (call signs and code words based on company SOP) include the following:

- GUIDONS (all subordinate elements).
- RED (First Platoon only).

Weapon or Ammunition (Optional)

C-72. Weapons or ammunition identifies the weapon and ammunition to be employed by the alerted elements. Subordinate leaders may designate the type and number of rounds to limit expenditure of ammunition. Examples include the following:

- TOW.
- TWO ROUNDS SABOT.

Target Description

C-73. Target description designates which enemy elements are to be engaged. Subordinate leaders may use the description to focus fires or achieve distribution. Examples of target description include the following:

- TROOPS IN TRENCH.
- BUNKER.
- PERSONNEL CARRIER.

Direction

C-74. Direction identifies the location of the target. Example ways to designate the location of the target, including the following:

- Closest TRP. Example: TRP 13.
- Clock direction. Example: ONE O'CLOCK.
- Terrain quadrant. Example: QUADRANT ONE.
- Friendly quadrant. Example: LEFT FRONT.
- Target array. Example: FRONT HALF.
- Tracer on target. Example: ON MY TRACER.
- Laser pointer. Example: ON MY POINTER.

Range (Optional)

C-75. Range identifies the distance to the target. Announcing range is not necessary for systems that are range finder-equipped or that employ command-guided or self-guided munitions. For systems that require manual range settings, leaders have a variety of means for determining range, including the following:

- Predetermined ranges to TRPs or phase lines.
- Hand-held range finders.
- Range stadia.
- Mil reticle.

Control (Optional)

C-76. The commander may use control to direct desired target effects, distribution methods, or engagement techniques. Subordinate leaders may include the control to supplement the commander's instructions and achieve effective distribution. Examples of information specified in control include the following:

- Target array. Example: "FRONT HALF."
- Fire pattern. Example: "FRONTAL."
- Terrain quadrant. Example: "QUADRANT ONE."
- Engagement priorities. Example: "M203 ENGAGE BUNKERS; MACHINE GUNS ENGAGE TROOPS."
- Engagement technique. Example: "VOLLEY."
- Target effect. Example: "AREA."

Execution

C-77. Execution specifies when fires will be initiated. The commander can engage immediately, delay initiation, or delegate authority to engage. Execution examples include the following:

- "FIRE."
- "AT MY COMMAND."
- "AT YOUR COMMAND."
- "AT PHASE LINE ORANGE.

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Appendix D
Fires

Fires are the use of weapon systems or other actions to create specific lethal or nonlethal effects on a target (JP 3-09). Lethal fire support comes from IBCT organic indirect fires assets, Army artillery and aviation assets, and joint and multinational artillery and aviation assets. Nonlethal effects can come from a wide range of military and civilian, joint and multinational partners. This appendix provides a brief overview on fire support for IBCT operations, but primarily focuses on the organization and employment of fires in support of the Infantry rifle company.

FIRE SUPPORT

D-1. *Fire support* is the fires that directly support land, maritime, amphibious, and special operations forces to engage enemy forces, combat formations, and facilities in pursuit of tactical and operational objectives (JP 3-09). Fire support is the collective and coordinated use of indirect fire weapons and armed aircraft in support of the commander's scheme of maneuver. Fire support planning is the process of analyzing, allocating, and scheduling fire support assets. Fire support assets available, dependent upon the mission variables of METT-TC, to the IBCT include mortars, field artillery cannons and rockets, Army attack aviation, CAS, naval gunfire, and electronic attacks.

FIRE SUPPORT SYSTEM

D-2. The fire support system acquires and tracks targets, delivers timely and accurate lethal fires, provides counterfire, and plans, coordinates, and orchestrates fire support. The fire support system achieves desired effects (lethal and nonlethal means) through a combination of fire support assets. The integration of fire support assets is critical regardless of which element of decisive action currently dominants. For example in the defense, fire support systems support security forces by using both precision and area munitions to destroy enemy reconnaissance and high-payoff targets, and by delivering on-call fires at appropriate times and places. Fire support facilitates the withdrawal of security forces at the completion of their mission. Fire support systems cover barriers, gaps, and open areas within the defense. Disruptive means to temporarily deny, degrade, deceive, delay, or neutralize enemy aircraft systems can include electronic attack during an area defense.

PLANNING PRINCIPLES

D-3. In advising commanders on the application of fire support, fire support officers (FSOs) review fire support requirements against basic fire support planning principle during the development of the fire support plan. (Refer to FM 3-09 for additional information on planning principles.) Fire support principles include the following:

- Plan early and continuously.
- Ensure the continuous flow of targeting information.
- Consider the use of all capabilities.
- Use the lowest echelon capable of furnishing effective support.
- Furnish the type of support requested.
- Use the most effective fire support means.
- Avoid unnecessary duplication.
- Coordinate airspace.

- Provide adequate support.
- Provide for rapid coordination.
- Protect the force.
- Provide for flexibility.
- Use fire support coordination measures.

PLANNING AND THE INTEGRATION OF FIRES

D-4. *Fire support planning* is the continuing process of analyzing, allocating, and scheduling fires to describe how fires are used to facilitate the actions of the maneuver force (FM 3-09). Fire support planning is focused on using the timely and effective delivery of fires to enhance the actions of the maneuver force. Fire support planning involves the assignment of command or support relationships and positioning of fire support systems. Planning identifies the types of targets to attack and the collection assets that acquire and track the targets, specifies the fire support assets to attack each identified target, and establishes the criteria for target defeat. Fire support planning considers existing limitations on the employment of fires, such as rules of engagement and positive identification requirements, weather effects on fires assets, the presence of special operations forces within the area of operations, desired conditions of subsequent phases, and requirements for collateral damage avoidance.

D-5. Fire support planning includes developing fire plans. A *fire plan* is a tactical plan for using the weapons of a unit or formation so that their fire will be coordinated (FM 3-09), for example target lists and overlays. Fire support planning determines forward observer control options to ensure fire support is integrated into the commander's scheme of maneuver and can be executed in a timely manner. (Refer to ATP 3-09.42 for additional information.)

Fire Support Plan

D-6. The *fire support plan* is a plan that addresses each means of fire support available and describes how Army indirect fires, joint fires, and target acquisition are integrated with maneuver to facilitate operational success (FM 3-09). An effective fire support plan clearly defines fire support requirements, focuses on the tasks and their resulting effects, uses all available acquisition and attack assets, and applies the best combination of fire support assets against high-payoff targets. The fire support plan identifies critical times and places where the commander anticipates the need to maximize effects from fire support assets. (Refer to ATP 3-09.42 for additional information.)

Commander's Guidance

D-7. The purpose of commander's guidance is to focus staff activities in planning an operation. The IBCT commander's guidance for fires provides subordinates with the general guidelines and restrictions for the employment of fires and their desired effects. The guidance emphasizes in broad terms when, where, and how the commander intends to synchronize the effects of fires with the other elements of combat power to accomplish the mission. Commander's guidance should include priorities and how the commander envisions the operation unfolding and the impact that fires will have on its success. Priority of fires is the commander's guidance to the subordinate commanders, fires planners, and supporting agencies to organize and employ fires in accordance with the relative importance of the unit's mission. (Refer to FM 3-96 for additional information.)

D-8. The Infantry battalion typically uses top-down fire support planning, with bottom-up refinement of the plans. The battalion commander develops guidance for fire support in terms of task, purpose, and effect. In turn, the battalion FSO, in conjunction with the S-3, determines the method used to accomplish each task. Subordinate Infantry rifle companies then incorporate assigned tasks into their fire support plans. Units tasked to initiate fires refine and rehearse their assigned tasks. The battalion commander refines the battalion's fire support plan, ensuring that designated targets achieve the intended purpose. The commander conducts rehearsals to prepare for the mission and, as specified in the plan, directs subordinate units to rehearse their assigned targets. (Refer to ATP 3-21.20 for additional information.)

Fire Support Task

D-9. A fire support task is a task that a fire support team, fire support unit, or organization must accomplish in order to support a combined-arms operation. Failure to achieve a fire support task may require the commander to alter the unit's scheme of maneuver. A fully developed fire support task must be clear, concise, and include the elements of task, purpose, and effect. The task describes what targeting objective fires, such as delay, disrupt, limit, or destroy, must achieve on an enemy formation's function or capability. The purpose describes why the task contributes to maneuver. The effect quantifies successful accomplishment of the task. (Refer to ATP 3-09.42 for additional information.)

COMPANY FIRE SUPPORT

D-10. The Infantry rifle company FSO is with the commander when the commander develops the company's maneuver plan. The FSO plans company fire support, and the commander approves the plan. The FSO coordinates, synchronizes, and executes fire support in the plan. The FSO identifies observer (including joint fires observer) requirements in the commander's observation plan (see paragraph D-59 on page D-15) and integrates them into the company rehearsal.

Note. The battalion fire support platoon is found in the headquarters battery of IBCT field artillery battalion and includes FISTs, normally with joint fires observers. During operations, the number and composition of FISTs allocated to company level varies based upon the mission variables of METT-TC. Normally, FISTs have a habitual support relationship with a specific maneuver battalion and ideally each FIST has a habitual relationship with a specific company.

ROLE OF THE COMMANDER AND FIRE SUPPORT OFFICER

D-11. The company commander ensures the FSO clearly understands the intent and desired effects for the company's scheme of fires and scheme of movement and maneuver. The scheme of fires paragraph (subparagraph 3e of the OPORD) together with the scheme of movement and maneuver, describes how the company as a whole will accomplish the mission and meet the battalion commander's intent. The scheme of fires provides the sequence of fire support tasks and outlines the who, what, where, when, and why for each fire support task needed for the operation.

D-12. While the company commander develops and refines the tactical plan, the commander and FSO concurrently develops and refines the fire support plan. Once determined, fire support task are placed in the fire support planning channels as soon as possible to be processed at the battalion fire support cell or field artillery battalion fire direction center. Regardless of the planning method used, the company fire support plan includes—

- Target number and location.
- Description of the expected target.
- Primary and alternate persons responsible for shooting each target.
- Amount of effect required and purpose.
- Radio frequency and call sign to use in requesting fires.
- When to engage the target.
- Priority of fires and shifting of priority.
- Size, location, code word, and emergency signal to begin final protective fires.

D-13. The FSO does most of the technical aspects of the company's fire support plan; however, the FSO may receive targets and target information from platoon leaders and the battalion FSO. The company commander and FSO should not plan too many targets. The number of targets planned by the company and included in the formal fire support plan depends upon the company's priority for fire support and the number of targets allocated to them. The total number of targets in the fire support plan or the battalion and company mortar plan might be constrained. An excessive number of targets tends to dilute the focus of fire planning and can lead to increases in response time.

D-14. Informal planning continues with target locations being recorded on terrain sketches or the FSO's map or being stored in Advanced Field Artillery Tactical Data System for quick reference and transmission. Fire planning for the company mortars complements these plans; the primary constraint is normally ammunition availability and the ability to resupply mortar assets. Care must be taken to ensure that planning focuses on the critical fire support requirements identified by the company commander.

D-15. The company FSO completes the indirect fire plan and briefs the company commander on any updates. The company commander may alter the plan or approve it as is, but the commander makes the final decision. After the company commander approves the plan, the FSO makes sure the targets are passed to the battalion fire support cell where the fire plans are integrated into the battalion scheme of fires.

D-16. The commander and the FSO ensure platoon leaders are thoroughly familiar with the indirect fire plan. The FSO provides target overlays to the platoon leaders, FOs, and the commander. The FSO may disseminate the company fire support plan as a target list and a fire support execution matrix (see paragraph D-60 on page D-15). The FSO does this in sufficient time to allow subordinates to brief their platoons and sections. A good plan given with the company order is better than a perfect plan handed out at the line of departure.

PLANNING

D-17. The company FSO (as does the battalion FSO) uses fire support planning questions (see paragraph D-18 on page D-4) to determine the commander's intent. The answers to these questions help the FSO prepare fire support plans and briefings. The FSO assists the commander in estimating the situation and in war gaming to develop the commander's concept of the operation. The FSO aggressively inputs fire planning as the scheme of maneuver is being developed to help achieve synchronization. The FSO does this by mentally employing all fire support assets along a proposed course of action in concert with the company commander's other resources. While the commander fights through each action in the war gaming process to determine factors critical to success, the FSO, in coordination with the battalion FSO, mentally considers the following factors:

- Attack emerging targets with the most effective system.
- Determine the tasks and requirements for all fire support resources.
- Consider proper distribution of assets (focused mainly at IBCT and battalion echelon) for close support of maneuver elements, for counterfire, for interdiction, and for suppression of enemy air defenses.
- Visualize fire support unit movements required to follow the battle flow.
- Consider fire support sustainment needs and their impact on the battle.
- Consider the use of fire support coordination measures and airspace coordinating measures.

Fire Support Planning Questions

D-18. Fire support planning questions are answered to ensure that fire support is coordinated with maneuver. Some questions are answered by the commander, however, most of the information will come from the battalion staff, the field artillery or mortar unit in support or the FSO's own expertise and experience. The following are some questions to determine the commander's intent for fire support:

Note. Many of the questions should be submitted to the commander in the form of recommendations for his approval.

- What is the task, for example, offensive defensive, or stability task?
- What is the commander's concept of operation and intent?
- What is the company/battalion's area of operation?
- How are firing units to maneuver within the supported unit's area of operation?
- What is the enemy situation?
- Where are the known and suspected enemy locations?
- What is the most likely avenue(s) of approach?
- Where are the designated engagement areas?

- What are the priority of fires?
- What fire support assets provide the priority fires?
- Is there a shift in priority of fires planned?
- What are the priority targets?
- When is priority shifted to the next priority target?
- Where are special fires to be planned (obscurant, illumination, and scatterable mines)?
- Is there a requirement to adjust obscurant or illumination targets?
- Is there a requirement to register fire support assets?
- How are fire support vehicles (if available) to be used?
- What are the laser locator range finder and designator codes?
- What are the signals or events to commence special fires?
- What maneuver control measures have been established?
- Are any restrictive fire support coordination measures required?
- What additional fire support assets have been allocated (attached or in support) such as close air support, naval gunfire, or Army aviation?
- Are there any peculiar communications requirements?
- Are security forces forward? What are the fire support requirements for security forces?
- What are the future fire support plans?
- What is the succession of command?
- How much time is available?
- When and where is the rehearsal(s)?
- What type and how much mortar ammunition is available?
- What is the plan for ammunition resupply?
- For automated fire directions systems, what are the defeat criteria for different targets?
- What are the high-payoff target priorities for fire support?
- Where are the obstacles? How are they to be covered?
- What is the breaching plan?
- Have final protective fires been allocated? Where are they to be planned? Are they to be adjusted?
- What are the primary and alternate signals to fire the final protective fires?
- How will logistical support for mortars be accomplished?
- Who will control and position mortars?

Fire Support Plan

D-19. The battalion scheme of fires states the fire support tasks and the purpose of each task, and the priorities for, allocation of, and the restrictions on these fires to subordinate units. The scheme of fires paragraph should include a subparagraph for each type of fire support involved. Appropriate fire support liaison representatives (if available) prepare their respective paragraphs in the battalion order. Refer to Annex D (Fires), if published, as required. The scheme of fires paragraphs and the supporting annex (if any), target lists, schedules, matrices, or other documents within the battalion OPORD (or overlay with written instructions, a fire support execution matrix, and a target list) make up the fire support plan for the battalion.

Note. At brigade and higher levels, annexes, appendixes, and tabs are normally written to give more details concerning information in the OPORD. (See FM 6-0.) At battalion and lower, a formal written OPORD is often not produced. A fire support plan at battalion level may be an operation overlay with written instructions, a fire support execution matrix, and a target list.

D-20. The company FSO extracts information from the battalion's fire support plan to develop the company's fire support plan in accordance with the commander's concept of the operation and intent. During planning and the refinement of the company fire support plan the FSO:

- Begins fire planning on receipt of the company's mission and before the FSO's briefing to the platoon FOs or the submission of targets by the platoon FOs.
- Plans targets in depth and other targets that were not planned by platoons but are required and within the company's area of operation.
- Coordinates with the battalion FSO and S-2 on all known, suspected, or likely enemy locations; and advises the commander on enemy indirect fire support capabilities and limitations.
- Consolidates target lists from the platoon FOs, resolves duplications, and forwards the target lists to the battalion FSO. (Note. The target lists from the company should consist of not more than three to five targets. When the number of targets is limited, the fire support plan is more manageable and can be better supported than a fire support plan with a lengthy target list.)
- Distributes the consolidated target list to all FOs.
- Coordinates requests for additional fire support when the fire support means available at company level are inadequate.
- Develops the company fire support plan, and briefs the commander to obtain approval or further planning guidance.
- Keeps the fire support plan current. Adjusts the fire support plan as required when intelligence and spot reports are received.
- Keeps the commander informed of the capabilities and limitations of all fire support assets that may be made available to the company, and advises the commander on all fire support matters.
- Serves as both the field artillery liaison officer from the company and the representative to the battalion FSO and fire support cell. (Note: the absence of other liaison or staff officers does not relieve the FSO of his responsibility to keep the maneuver commander informed of all available fire support assets and to keep the field artillery units informed of the battalion plans and requirements.)
- Advises and consults with other FO representatives, for example joint fire observers. Supervises the operation of the company mortar section.
- Collects information from the various liaison officers, correlates that information, and informs the commander. (Note: as a minimum, this information should include the availability of fire support assets [command or support relationship], suitability, response time, and assigned priorities.)

Quick Fire Plan

D-21. In fire support planning and integration either through the Advanced Field Artillery Tactical Data System or manually, a quick fire plan contains all the necessary elements for the rapid execution of fires. The company FSO, in coordination with the battalion FSO, uses standardized but flexible techniques to quickly prepare the fire support plan for a maneuver tactical task. The company commander must approve the quick fire plan. The FSO develops targets and assigns target numbers to them. In quick fire planning the FSO assigns targets (and possibly a schedule of fires) to the most appropriate fire support means available to support the operation. In fast-moving situations, targets may be developed or planned by the battalion FSO and passed to the company FSO. The battalion FSO coordinates fires, while the company FSO orchestrates the fire plan. In this type of fire support planning, the available time usually does not permit evaluation of targets on the target list and consolidation with targets from related fire support coordination agencies. In a task using a quick fire plan, a field artillery may be directed to provide fire support to the maneuver company. This direct relationship simplifies planning and coordination between FSOs and the battery commander and the fire direction center. See chapter 6, ATP 3-09.42 for a detailed discussion of quick fire planning.

Observer Positions

D-22. To ensure that indirect fire can be called on a specific target, observers are designated and in the proper position. As the company plans indirect fire targets to support the mission and passes these down to the platoon, specific observers are positioned to observe the target and the associated trigger line or target reference point. Any Soldier can perform this function as long as they understand the mission and has the communications capability and training. Once the target has been passed to the platoon or included by the platoon in the fire support plan, the platoon leader must position the observer and make sure they understand the following:

- The nature and description of the target they are expected to engage.
- The terminal effects required (destroy, delay, disrupt, limit, and so on) and purpose.
- The communications means, radio net, call signs, and fire direction center to be called.
- When or under what circumstances targets are to be engaged.
- The relative priority of targets.
- The method of engagement and method of control to be used in the call for fire.
- Purpose and location of target; observers (primary and alternate); trigger; communications; and the resource providing the fires.

Linking Tasks to Purpose

D-23. A clearly defined purpose enables the company commander to articulate precisely how fires are to affect the enemy during different phases of the battle. This, in turn, allows the FSO to develop a fire support plan that effectively supports the intended purpose. The FSO can determine each required task (in terms of effects on target), the best method for accomplishing each task (in terms of a fire support asset and its fire capabilities), and a means of quantifying accomplishment. A carefully developed method of fire is equally valuable during execution of the fire support mission; it helps not only the firing elements but also the observers who are responsible for monitoring the effects of the indirect fires. With a clear understanding of the intended target effects, fire support assets and observers can work together effectively, planning and adjusting the fires as necessary to achieve the desired effects on the enemy. The following paragraphs describe several types of targeting objectives associated with fire support tasks and provide examples of how the company commander might link a target task to a specific maneuver purpose in their order.

- Delay. Friendly forces use indirect fires to cause a function or action to occur later than the enemy desires
- Disrupt. Disrupting fires are employed to break apart the enemy's formation; to interrupt or delay their tempo and operational timetable; to cause premature commitment of their forces; or to force them to stage their attack piecemeal.
- Limit. Indirect fires help prevent the enemy from executing an action or function where they want it to occur.
- Destroy. Friendly forces use indirect fires to render an enemy formation ineffective.
- Divert. Diverting fires are used to cause the enemy to modify their course or route of attack.
- Screen. Screening fires entail the use of smoke to mask friendly installations, positions, or maneuver.
- Obscure. Obscurant is placed between enemy forces and friendly forces or directly on enemy positions to confuse and disorient the enemy's direct fire gunners and artillery forward observers.

Final Protective Fire

D-24. *Final protective fire* is an immediately available prearranged barrier of fire designed to impede enemy movement across defensive lines or areas. (JP 3-09.3). An FPF is a special type of priority target. Normally, an FPF target is assigned to the company or platoon that is covering the most dangerous avenue of dismounted approach or covering the most vital area. Most often this company or platoon also has priority of fire. This prevents conflict of missions. In some situations, however, one commander may have priority of fires while another has the FPF. This could occur when a security force has priority of fires initially, but the FPF target is assigned to a defending company. This requires close coordination between maneuver commanders,

battalion and company FSOs, and the field artillery or mortar unit responsible for the fires. A specific amount of ammunition is always designated, prepared, and set aside for use with the FPF target. FPF ammunition may not be used on any other mission without specific authorization from the commander.

Field Artillery and Mortar Fires

D-25. In the fire support plan, an FPF is continuous artillery or mortar fires:

- Fired on a predetermined target.
- Fired at the maximum rate of fire until the firing unit is requested to stop, ammunition is exhausted, or the firing unit is forced to move.
- Allocated, field artillery FPF, normally from the IBCT to the battalion level, which may allocate to company level.
- Allocated, battalion mortar FPF, normally from battalion to company level.
- Authorized to shoot at the lowest maneuver commander level in whose area the FPF is placed or that commander's authorized representative.

D-26. The FIST has the responsibility to adjust in the FPF when the tactical situation dictates. The FIST may adjust one gun or all guns designated to fire the FPF and cancel the FPF when it is no longer needed.

D-27. The IBCT and battalion mortar platoons normally have a single four-mortar FPF, but commanders may direct the platoons to prepare two two-mortar FPFs. This should be done only if terrain dictates the need for more FPFs than has been allocated and only after seeking additional field artillery allocations.

D-28. Table D-1 provides fire planning data for field artillery and mortar FPFs. The FPF approximate widths in the table are neither precise nor restrictive. The sheaf can be opened or closed to cover the specific terrain on which the FPF is located. The FPF approximate depths in the table are derived from data on the bursting diameter of rounds, see ATP 3-09.32. The bursting diameter of a high explosive (HE) round is generally considered to be twice the distance from the point of impact at which the round will reliably place one lethal fragment per square meter of target.

Table D-1. Field artillery and mortar final protective fire planning data

SIZE	*NUMBER OF MORTARS OR GUNS*	**APPROXIMATE WIDTH (METERS)*	**APPROXIMATE DEPTH (METERS)*
120 mm	4	280	70
120 mm	2	140	70
81 mm	4	150	40
81 mm	2	80	40
60 mm	2	60	30
105 mm	3	105	35
105 mm	6	210	35
155 mm	3	150	50
155 mm	6	300	50
LEGEND mm – millimeter *measurements are approximate			

Priorty Target Versus Final Protective Fire

D-29. FPF differ from standard a *priority target*—a target, based on either time or importance, on which delivery of fires takes precedence over all the fires for the designated firing unit or element (FM 3-09)—in

that an FPF is fired at the maximum rate of fire until mortars are ordered to stop or until all ammunition is expended. The risk estimate distance for a given delivery system (see ATP 3-09.32) is a factor in how close the FPF can be placed in front of friendly front lines. Closer FPFs are easier to integrate into direct-fire FPLs. The high rate of fire achievable by mortars creates effective barriers of fire. The normal allocation of FPFs is identical to the allocation of priority targets (one for each battery/platoon and one for each mortar platoon). While firing FPFs, mortar sections are not normally allowed to cease fire and displace. Due to countermortar fires, they must take precautions to avoid or withstand countermortar fire when firing an FPF.

Integration with the Final Protective Line

D-30. The company commander assigned an FPF is responsible for the positioning of the FPF and its integration with the final protective line (when established). The final protective line is a selected line of fire where an enemy assault is to be checked by interlocking fire from all available weapons and obstacles. During preparation the FDC responsible for fires plots, precomputes, and saves all firing data in support of the final protective line as early as possible.

Integration with Direct Fire Weapons and Obstacles

D-31. When an FPF is allocated to a company, the commander designates the precise FPF location to best augment direct-fire weapons and obstacles. Figure D-1 shows how mortar FPFs (battalion and company) are positioned to integrate them into the direct-fire weapons and obstacles final protective lines of the defender.

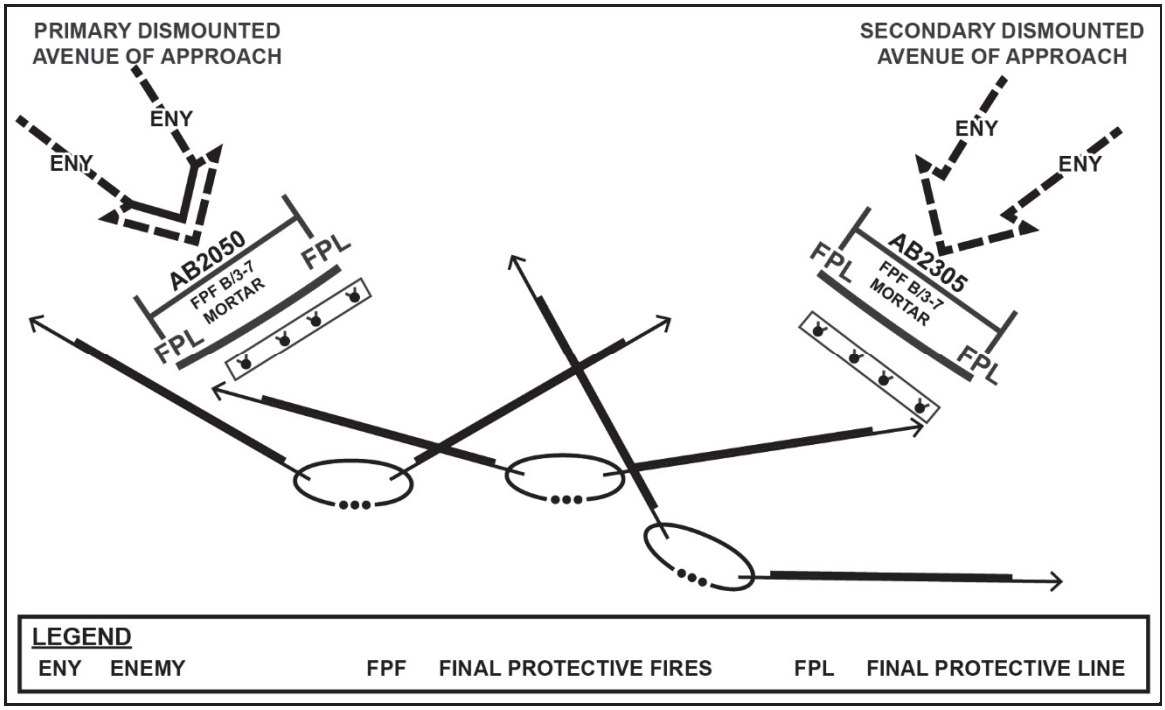

Figure D-1. Final protective line integration of fires and obstacles

D-32. As illustrated above, mortar FPFs are normally targeted on an avenue of likely dismounted attack. FPFs can be any distance from the friendly position that fits into the commander's subordinate form of the defense (for example, a defense of a linear obstacle, perimeter defense, or reverse-slope defense) but are always within the range of organic direct-fire weapons, normally within 100 to 400 meters of friendly troops. The importance of accurate defensive fires and the proximity of friendly troops means that each mortar firing an FPF should be individually adjusted into place, normally using delay fuze settings and the creeping method of adjustment.

D-33. The company commander retains the authority to call for the mortar FPF to be fired or may delegate it to a subordinate. If the decision is delegated to a forward platoon leader, the leader directs the platoon's

forward observer to transmit the request to fire the FPF directly to the FDC or through the company FSO. When the request is transmitted directly to the FDC, the platoon leader must inform the company commander that the FPF is initiated. The mortar section or platoon leader always informs the commander when the firing of the FPF is initiated.

D-34. As with any operation, the commander ensures alternate means of communication are established to support the execution of FPFs. Alternate means are established in addition to standard voice messages such as wire, runner, or visual signal. Once begun, FPFs are fired until ordered to terminate or until all mortar ammunition is gone.

D-35. High explosive ammunition with point detonating fuzes is normally used in firing the FPF. When planning FPFs the mortar section leader, in coordination with the FSO, decides how many rounds to prepare, based on ammunition available and the control supply rate and sets them aside for immediate use. This allows mortars to quickly begin the FPF and maintain it without pausing to prepare rounds when the call for fire is received. Additional rounds can be prepared during the firing of FPFs if the ammunition requirement exceeds the quantity prepared.

Target Refinement

D-36. The commander is responsible for the employment of indirect fires within the company's assigned area of operation. A critical aspect of this responsibility is target refinement, in which the commander makes necessary changes to the fire support plan to ensure that targets accomplish the commander's intended battlefield purpose. Rather than merely executing targets without regard to the actual enemy situation, the company commander and FSO adjust existing targets or nominate new targets that allow engagement of specific enemy forces.

D-37. Necessary refinements usually emerge when the commander war games as part of Step 6 (complete the plan) of the troop leading procedure. The war gaming process enables the commander to identify required additions, deletions, and adjustments to the battalion fire support plan. The company FSO then submits refinements to the battalion FSO for inclusion in the scheme of fires for the mission. (This is normally only the first step of target refinement, with the commander and FSO making further adjustments as the enemy situation becomes clearer.)

D-38. As a specific requirement in defensive planning, the commander focuses on target refinement for within the company's area of operation. This usually takes place as part of engagement area development. The commander makes appropriate adjustments to the targets based on refinements to the situation template such as the actual positions of obstacles and enemy direct fire systems.

D-39. Because fire support is planned from the top down, cutoff times for target nomination and target refinement are normally specified in the battalion OPORD. Commanders must ensure that nominations and refinements meet these deadlines to provide fire support planners with sufficient time to develop execution plans.

Tactical and Technical Triggers

D-40. The two types of triggers associated with a target are tactical and technical. The commander develops a tactical trigger for each target, then develops (or the FSO develops) the technical trigger. A tactical trigger is the maneuver related event or action that causes the commander to initiate fires. This event can be friendly or enemy based. The tactical trigger is usually determined during course of action development. The technical trigger is the mathematically derived solution for firing the indirect fires based on the tactical trigger to ensure that the indirect fires arrive at the correct time and location to achieve the desired effects.

Note. Triggers can be marked using techniques similar to those for marking target reference points.

D-41. When selecting the tactical trigger, the commander, or designated observer, must be able to observe the enemy force or the event that is the tactical trigger if it is enemy driven; for example, when enemy forces occupy their defensive positions via Objective Brown. The tactical trigger may also be friendly event or time driven; for example, when Company C crosses Phase Line Bowen.

D-42. Several factors govern the selection and positioning of the technical trigger. Critical factors are the enemy's likely locations or rate of travel, and the time required for the enemy force to move from the technical trigger to the target area. Using this information, the commander can then select the technical trigger location based on the following considerations:

- The amount of time required to initiate the call for fire.
- The time needed by the fire support element to prepare for and fire the mission.
- The time required to clear the fires.
- Any built-in or planned delays in the firing sequence.
- The time of flight of the indirect fire rounds.
- Possible adjustment times.

D-43. The commander can use an estimated rate of enemy movement, along with the information in Table D-2, to complete the process of determining the location of the technical trigger in relation to the target area. Table D-2 lists the response time required by field artillery assets to prepare for and fire various types of support missions. Trigger lines or points (used in this method) are usually employed as technical triggers to synchronize the effects of direct fires, countermobility efforts, and indirect fires in time and space, rather than try to engage moving targets based on mathematical calculations. (See ATP 3-09.42.)

Table D-2. Artillery response times

SUPPORT MISSION	**RESPONSE TIME*
Grid or polar mission (unplanned)	5-to-7 minutes
Preplanned mission	3 minutes
Planned priority mission	1-to-2 minutes
*These are approximate times needed to process and execute calls for fire on normal artillery targets. Special missions may take longer.	

Ceasing or Shifting Fires

D-44. The commander establishes triggers for ceasing or shifting fires based on battlefield events such as the movement of enemy or friendly forces. One technique is the use of a minimum safe line when a friendly element, such as a breach force, is moving toward an area of indirect fires. As the element approaches the minimum safe line, observers call for fires shift or cease, allowing the friendly force to move safely in the danger area.

Clearance of Fire

D-45. The commander is responsibility to approve (clear) fires and their effects within the company's area of operation. Although the commander may delegate authority to coordinate and clear fires to the FSO, the ultimate responsibility belongs to the commander. Normally, the FSO helps the commander by making recommendations on the clearance of fires.

D-46. When the higher commander establishes rules of engagement within the company's area of operation, the commander ensures they are followed through the operations process. Rules of engagement, especially during stability, often place limitations or prohibit the firing of certain types of indirect fires within the company's area of operation.

PREPARATION

D-47. Although the battalion and brigade commanders normally establish the majority of target tasks, purposes, and effects, and allocate appropriate fire support assets, the company commander is responsible to ensure assigned targets are executed successfully. In turn, successful execution demands thorough preparation at the company level. (See appendix B for a detailed discussion of preparation activities.) The commander's fire support preparation responsibilities, although not inclusive, include:

- Involving company FIST in company- and battalion level rehearsals.
- Making the company available for any separate fire support rehearsals.
- Rehearsing the company's FOs in the execution of targets.
- Using rehearsals to ensure primary and backup communications systems adequately support the plan.

D-48. Once the company develops and coordinates the fire support plan, it rehearses the plan. As the company rehearses the maneuver, it rehearses the fire plan. The target list is executed as the maneuver is conducted during rehearsal; fires are requested (though not actually executed by the firing units) just as they would be during the mission. Addition considerations include:

- If time or conditions do not permit full-scale rehearsals, key leaders can meet, preferably at a good vantage point, and briefback the plan.
- Rehearsals on like terrain can reveal any problems in visibility, communications, and coordination of the fire support plan.
- Under ideal circumstances, an FPF can be adjusted during the rehearsal.
- Conduct rehearsals under degraded conditions (for example at night, in MOPP4, with degraded or no communications) to make sure the company can execute the plan under different conditions.
- Conduct a rock drill or use a sand table to:
  - Show the plan with each participant, to include the FSO, explaining what they do, where they do it, and how they plan to overcome key-leader casualties.
  - Execute the fire plan as the company walks through/conducts the mission.
  - Fire targets as required and make adjustments based on the anticipated enemy reactions.
  - Cancel targets as friendly units pass them or they are no longer relevant to the maneuver.

SCHEME OF FIRES SUBPARAGRAPH

D-49. The scheme of fires subparagraph describes what fire support must accomplish to support the company's operation. The fires subparagraph clearly describes the logical sequence of fire support tasks and how each task contributes to the execution of the operation. The overall subparagraph organization mirrors that of the scheme of move and maneuver subparagraph. When the scheme of movement and maneuver is phased or otherwise organized, the scheme of fires takes on the same organization.

Company Fire Support Tasks

D-50. A company fire support task is a task given to a fire support unit or organization that supports the commander's scheme of movement and maneuver. One or more fire support tasks may be developed for each phase of an OPORD. Taken together and considered sequentially the fire support tasks represent a summary of the scheme of fires supporting the OPORD. The scheme of fires paragraph (subparagraph 3e) in the OPORD must be concise but specific enough to clearly state what fires are to accomplish in the operation.

Internal Format for the Scheme of Fires

D-51. The internal format for the scheme of fires subparagraph include the elements of task, purpose, and effect. (See table D-3.) The task states the supported company task and the type(s) of effects the firing unit must provide for that phase of the operation. The task describes what fire support must accomplish to support the mission. The effect identifies the desired result or outcome the delivered fires are to achieve (see ATP 3-60). The purpose states the supported company commander's purpose and the desired end state for the targeted enemy formation, function, or capability. The purpose describes the why of the fire support task. In

this case why is in order to disrupt the enemy's ability to effect the breach force. See appendix E for a detail discussion on breaching operations.

Table D-3. Internal format for the scheme of fires subparagraph, example

EXAMPLE, COMPANY TASK			
When	**Who**	**Where**	**What/Task and Desired Effect, When**
0400	Company A	AB00054	Disrupt the ability of the enemy motorized Infantry platoon at point of penetration to place effective direct fire against the breach force.
Why/Purpose			
To allow an Infantry rifle company to breach the obstacle without becoming decisively engaged by the motorized Infantry platoon at the point of penetration.			

Fire Support Task Worksheet (Phase II—Preparation Fires), Example

D-52. Fire support planning detail typically increases as the responsibility for task execution is refined at each echelon. As a tool in fires support planning and execution, the company commander and FSO may develop a graphic summary outlining the critical elements of the fire support plan and the company's role. For example, an assigned fire support task worksheet (see table D-4 on page D-14) enables detailed planning and the execution of the company's fire support plan. There is no prescribed format for these planning worksheets but items for consideration, particularly for a fire support or field artillery task, might include the Target description, Trigger time or event, Location of the target (may be exact or general), Observers, Delivery system, Attack guidance, and Communications. These considerations may be remembered through the memory aid TTLODAC. A task may also require identification of various control measures (such as fire support coordination measures, airspace coordinating measures, and maneuver control measures) and any other considerations. The commander adjusts the worksheet format as necessary. (Refer to ATP 3-09.42 for additional information.)

Table D-4. Company TTLODAC—completed worksheet for fire support tasks, example

PHASE II: PREPARATION FIRES—POINT OF PENETRATION OBJECTIVE COPPER							
Task/purpose: -Fire Support Task 1. Provide obscuration fires to disrupt the enemy's ability to observe the route to and the point of penetration for the breach operation. -Purpose Task 1. Conceal breach force movement to and at point of penetration. -Fire Support Task 2. Provide suppressive fires to disrupt the enemy mechanized Infantry platoons' ability to place effective direct fire on the point of penetration. -Purpose 2. Enable breaching operation at the point of penetration.							
Priority of Fires: Battalion mortar platoon – First Platoon, Company B. Company mortars – Second Platoon, Company B.							
Allocations: Company B 1 x critical friendly zone (breaching site); Company B 1 x field artillery priority target.							
Positioning Guidance: Battalion mortars move along Route BLUE and occupy mortar firing position 1 (azimuth of fire 1600); in place ready to fire not later than H+ 30 minutes. -Company mortars move along Route RED and occupy mortar firing position 2 (azimuth of fire 1900); in place ready to fire not later than H-hour+ 20 minutes.							
Restriction/Fire Support Coordination Measures: -Coordinated fire line is Phase Line GREEN. -No-fire areas 1 & 2 in effect.							
Task	**(T) Target**	**(T) Trigger**	**(L) Location**	**(O) Observer(s)**	**(D) Delivery System(s)**	**(A) Attack Guidance**	**I Communications**
Fire support task 1	AB1000	Company B lead element crosses Phase Line Blue	NG12344567	Primary First Platoon; alternate company fire support team	Primary battalion mortars; alternate company mortars	20 minutes X 200 meters length smoke	Battalion mortar net FH800
Fire support task 2	AB1005	When support by fire position 1 is set	NG45671234	Primary, alternate Company B	Primary battalion mortars; alternate company mortars	Battalion six rounds high explosive, variable time	Primary battalion fire support net FH600; alternate fire direction net FH700
LEGEND FH – frequency hopping							

D-53. The fire support task worksheet describes how the task, purpose, and effects will be achieved. The task worksheet ties the detect function to the deliver function in time and space and describes how to accomplish the task. The worksheet describes the task in terms of priority of fire, allocation, positioning guidance, and restriction as follows:

D-54. Priority of fire. State the priority of fire to subordinate units for all fires assets under the unit's command or control. Detection assets, assigns priorities for named areas of interest, target areas of interest, engagement areas, or high-payoff targets.

D-55. Allocation. Detection and deliver assets, describes the allocation of assets to accomplish the fire support task. List any additional assets assigned to subordinates for planning. Examples are priority targets, radar zones, attack aviation.

D-56. Positioning guidance. Provide positioning guidance to assets such as mortars or observers required for execution.

D-57. Restriction. Describes constraints, either requiring or prohibiting a particular action. Considerations include ammunition restrictions and fire support coordination measures.

D-58. Additional fire support task worksheet information can include:

- Observers (primary and alternate).
- Triggers (tactical and technical).
- Target allocation.
- Priority targets.
- Close air support allocations.
- Final protective fires.
- Special munitions.
- Surveillance assets.
- Intelligence operations assets
- Electronic warfare assets.
- Any other special instructions.

Observation Plan

D-59. In developing the observation plan to support the scheme of fires, the company commander and FSO ensures that both primary and alternate observers cover all targets and determine whether the desired target effects have been achieved. The plan provides clear, precise guidance for the observers. Perhaps the most important aspect of the plan is positioning. An observer's positions must allow them to see the trigger for initiating fires as well as the target area and the enemy force on which the target is oriented; this is done to help the observer determine if the target effects have been achieved. The commander must also consider the observer capabilities, including any available systems. The observation plan must also include contingency plans that cover limited visibility conditions and backup communications.

Note. In addition to providing the specific guidance outlined in the observation plan, the commander ensures that each observer understands the target task and purpose for which they are responsible. For example, observers must understand that once the first round impacts, the original target location is of no consequence; rather, they must orient on the targeted enemy force to ensure that fires achieve the intended battlefield purpose.

FIRES SUPPORT EXECUTION MATRIX

D-60. The fire support execution matrix (FSEM) is a concise planning and execution tool that shows the many factors of a sometimes complex fire support plan. The matrix graphically communicates the details of the fires paragraph and ties executors to targets relative to time or events of the scheme of maneuver. The format for the matrix and techniques for its development and use varies according to individual unit tactical standard operating procedures. As a general rule, don't make the matrix any more complicated than circumstances warrant.

Battalion Fire Support Execution Matrix

D-61. The FSEM explains what aspects of the fire support plan each FSO within the battalion is responsible for and at what phase during the battle these aspects apply. When approved, the matrix becomes the primary execution tool. A technique is to set up the matrix with the maneuver elements or target executors along the left side and the maneuver control measures (phase lines, events, or times) of the mission along the

top. Phases should correspond to phases established on maneuver execution matrices. Format of and information in FSEMs will vary from unit to unit. Standard operating procedures should standardize FSEM preparation to ensure synchronization with maneuver matrices. For an example of a battalion level FSEM refer to ATP 3-09.42.

Company Fire Support Execution Matrix

D-62. The FSEM for a company may be as simple as a hand-drawn matrix listing the platoons, phase lines, and minimal necessary information. Figures D-2 and D-3 (on page D-17) are two examples of FSEMs for a company. Using these types of format, the FSO can depict fire-support-related information for an operation together with the matrix. A format of these type might be used if a formal written OPORD or separate fire support annex were not prepared. The FSEM examples in figures D-2 and D-3 (on page D-17) are illustrative only. Tailor the matrix preparation, format, and content to unit needs. Identify the FSEM preparation steps in local standard operating procedures.

Event / Support Data/ Considerations	Event I	Event II	Event III	Event IV
	LD to 3d Platoon SBF 01	LD to 3d Platoon SBF 01	LD to 3d Platoon SBF 01	LD to 3d Platoon SBF 01
TARGET/GRID	AE0001 (PK10184938)	AE0002 (PK09005031)	O/O shift AE0001 to AE0003 (PK10204810) and lift AE0002.	O/O lift AE0003.
DELIVERY SYSTEM	120-mm HE	60-mm obscurant	120-mm	120-mm
OBSERVER/BACKUP	3d platoon will initially call for and adjust fires; FSO adjusts upon arrival at SBF; 3d platoon leader is backup.	FSO (primary)/ 3d platoon leader (backup).	AE0003: FSO (primary)/ 3d platoon leader (backup).	FSO (primary)/ 3d platoon leader (backup).
TRIGGER	Weapons company crosses PL Lynx.	On-call at SBF.	1st platoon crosses PL Lion.	2d platoon completes consolidation on OBJ Bob.
COMMUNICATIONS	Primary: Battalion FS NET FH800 Alternate: IBCT FS NET FH700	Primary: Company fire control NET FH800 Alternate: IBCT FS NET FH800	Primary: Battalion FS NET FH800 Alternate: IBCT FS NET FH700	Primary: Battalion FS NET FH800 Alternate: IBCT FS NET FH700
PURPOSE	Disrupt enemy on OBJ Bob to facilitate maneuver of 3d platoon to SBF position.	Obscure enemy to prevent interference with 1st platoon's breach.	Disrupt MRB reserve to protect the assault force (2d platoon).	Protect the assault force (2d platoon).

LEGEND

FS	FIRE SUPPORT	LD	LINE OF DEPARTURE	OBJ	OBJECTIVE
FSO	FIRE SUPPORT OFFICER	MM	MILLIMETER	O/O	ON-ORDER
HE	HIGH EXPLOSIVE	MRB	MOTORIZED RIFLE BATTALION	PL	PHASE LINE
IBCT	INFANTRY BRIGADE COMBAT TEAM	NET	NETWORK	SBF	SUPPORT BY FIRE

Figure D-2. Fire support execution matrix for a company combined arms breach, example

D-63. The advantage of the matrix is that it reduces the plan to one page and simplifies execution. The company FSEM also directs execution responsibilities and reduces the possibility that planned fires will not be executed. The company commander is responsible for disseminating the FSEM. The commander and

key subordinate leaders must understand the categories of targets, and how to engage those targets to create the desired result.

D-64. Figure D-3 shows an example completed FSEM for a company deliberate attack. In the assembly area, a field artillery FPF is allocated for First and Second Platoons; Third Platoon has been allocated a mortar FPF; Second Platoon has priority of mortar fires from the LD to Checkpoint 7. From Checkpoint 7 to Objective Green, Third Platoon has been allocated a mortar priority target and has designated it as CA3017; Second Platoon is backup for execution. First Platoon has been allocated a mortar FPF; Second and Third Platoons have been allocated field artillery FPFs. At company level, information in each box of the matrix includes the following:

- Priorities of indirect fire support to a platoon appear in the upper left corner of the appropriate box.
- If a unit is allocated an FPF, the type of indirect fire means responsible for firing appears next to the indicator (field artillery FPF or MORT FPF).
- The target number of priority targets allocated to a platoon appear in the box preceded by the target, followed by the target number (MORT PRI TGT CA3014).
- If the company FSO is responsible for initiating specific fires, the target number, group, or series designation is listed in the box for the FSO (CA3012). Specific guidelines concerning fires not included on the target list are included in that box.
- Alternate element responsible for the execution of specific fires is listed in the lower right hand corner of the box (Second Platoon). If fires have not been initiated when they were supposed to have been, that unit initiates them (unless ordered not to).
- Each fire support measure to be placed in effect, followed by a word designated for the measure, is shown in the box (cease fire line CHUCK). For airspace coordination areas, the time for the arrival of the planned CAS or attack helicopters is listed (ACA 1400Z).
- Other factors that apply to a certain platoon during a specific time might be included in the appropriate box. General guidance is issued in the written portion of the operation order.

	Assembly Area	Line of Departure	Check Point 7	Objective GREEN
Fire Support Officer	INITIAL PREP / 1st PLT	FIRE CA 3012 CFL CHUCK / 2d PLT	FIRE C1A GROUP / 3d PLT	ACS (CAS) 1400Z
1st Platoon	FA FPF	CFL CHUCK		MORTAR FPF
2d Platoon	FA FPF	MORTAR PRI TGT CA 3014 CFL CHUCK		FA FPF
3d Platoon	MORTAR FPF	CFL CHUCK	MORTAR PRI TGT CA 3107 / 2d PLT	FA FPF

LEGEND

ACS	AIRSPACE CONTROL SYSTEM	FA	FIELD ARTILLERY	PRI TGT	PRIORITY TARGET
CAS	CLOSE AIR SUPPORT	FPF	FINAL PROTECTIVE FIRE		
CFL	COORDINATED FIRE LINE	PLT	PLATOON		

Figure D-3. Fire support execution matrix for company deliberate attack, example

MORTARS

D-65. Mortars are high-angle, relatively short-range, high rate-of-fire, area fire weapons. Their mobility makes them well suited for close support of maneuver and can rapidly be brought into action. Mortars are ideal weapons for attacking targets on reverse slopes, in gullies, in ditches, in built up areas, and in other areas that are difficult to reach with low-angle fire. The proliferation of handheld Global Positioning System devices and the fielding of the new mortar fire control system partially compensate for the fact that mortar positions are seldom surveyed. The commander may specify mortar support for subordinate units by changing the command or support relationship, by assigning priority of fires or by assigning priority targets such as FPFs.

MORTAR EMPLOYMENT

D-66. Mortars provide close, immediate responsive fire support for the committed battalion and maneuver companies. Mortar fires can deceive, delay, destroy, disrupt, divert, neutralize, and suppress enemy attack formations and defenses, obscure the enemy's vision, or otherwise inhibit the ability to acquire friendly targets. Mortars can be used to deliver obscurants and illumination. Because mortars are fire support assets, the fire support coordinator (field artillery battalion commander), fire support officers, fire support cell planners, and targeting officers within the IBCT provide advice and make recommendations on mortar employment at the IBCT, battalion, and company levels. The amount of control the fire support coordinator and the fires support cell planners have over the employment of available mortars is a matter for the supported or owning unit commander to decide.

D-67. Mortars, located in both the battalion and company level, act as both a killer of enemy forces and as an enhancer of friendly mobility. They provide commanders with responsive, organic indirect fire support at a higher rate of fire than field artillery units. Using mortars to suppress the enemy inhibits their fire and movement while allowing friendly forces to gain a tactical mobility advantage. The battalion mortar platoon and company section leaders work closely with their commanders and their FSOs to maximize mortar fires and ensure the mortars are integrated into the echelonment of fires (see paragraph D-132 on page D-34). Additional employment considerations include:

- Mortars provide the maneuver commander with immediately available, responsive indirect fires in support of combat missions, and reinforce direct fires during close combat.
- Mortars are integrated with field artillery assets in an echelonment of fires.
- In the offense, mortars establish conditions for the maneuver elements in conducting their combat missions by:
  - Assisting in suppressing and fixing the enemy and providing close support fires during the assault.
  - Providing obscurants for screening and friendly movements.
  - Using heavy mortars to penetrate buildings and destroy enemy field fortifications.
- In the defense, mortars can—
  - Force the enemy in armored vehicles to button up.
  - Obscure their ability to employ supporting fires.
  - Deny use of defilade terrain.
  - Break up enemy concentrations and formations.
  - Separate enemy dismounted Infantry from their armored personnel carriers and accompanying tanks.
  - Destroy synchronization, reduce enemy mobility, and canalize enemy units into engagement areas.

FIRES IN CLOSE SUPPORT

D-68. Effective fire support often requires mortar, and to a lesser extent artillery, fires near friendly Infantry Soldiers. A safe integration of fires and maneuver this close demands careful planning, coordination, and knowledge of the supporting weapons. These close supporting fires are most commonly FPFs in

a defense or suppression or obscuration fires to support an assault on an enemy position. When planning these fires, the company commander considers effects, accuracy, protection, integration of suppressive fires, and times and control.

Effects

D-69. In the defense, this might be to destroy enemy Soldiers and to degrade the effectiveness of enemy vehicles by causing them to fight buttoned-up. In the attack, the suppression and obscuration of enemy positions to allow the breach and seizure of a foothold on the objective is probably the desired effect.

Accuracy

D-70. Many variables affect the accuracy of the weapon. The FSO has the technical knowledge to assist the company commander. Mortars are area weapons systems, which means that every round fired from the same tube impacts in an area around the target or aiming point. This dispersion is greater in length than in width. The weather conditions (wind, temperature, and humidity), the condition of the weapon, and the proficiency of the crew also affect the accuracy.

Protection

D-71. If the unit is in well-prepared defensive positions with overhead cover, an FPF can be adjusted very close, just beyond bursting range. If required, the company commander can even call for artillery fires right on their company position using proximity or time fuzes for airbursts. Calling for close indirect fires is more dangerous during an attack. The commander considers the terrain, the breach area, and the enemy positions to determine how close to adjust their supporting indirect fires.

Integration of Suppressive Fires

D-72. When integrating indirect suppressive fires to support the breach and assault, the following points are key:

- Use artillery to isolate the objective.
- Use mortars on enemy positions away from the breach area.
- Use the 60-mm mortars in conjunction with M203 grenade launchers and direct fire weapons for close suppression.
- Assault perpendicular to the gun target decreases the likelihood of fratricide.
- Company mortars firing direct alignment or direct lay (see paragraphs D-90 and D91 on page D-22) are the safest and most responsive system because they can observe the rounds' impact and adjust accordingly.
- The safest method to fire the 60-mm mortar is with a bipod.
- Ideally, the firing units register prior to firing close-support missions.

Times and Control

D-73. Integration of suppressive fires, during employment, requires the establishment of times and control to ensure targets are initiated, adjusted, and shifted properly. When possible, the company FSO locates where best to observe assigned targets (possibly with the support element). The company FSEM (see paragraph D-62 on page D-16) assigns responsibility for each target to the leader or observer who is in the best position to control fires. The leader or observer must know when each target, series, or group is fired. In addition, they must know the desired effect on the enemy positions and when to lift or shift the fires. They should establish primary and alternate means of communications.

Obscuration Fires

D-74. Obscuration fires use smoke and white phosphorous (WP) ammunition to degrade the enemy by obscuring their view of the battlefield. (High explosive ammunition may also obscure their view with dust and fires, but the unit should not rely on it as the primary means.) Mortars only have WP or red phosphorous while artillery has smoke, WP, and red phosphorous. Obscurants (smoke) are subject to changes in wind

direction and terrain contours; therefore, its use must be coordinated with other friendly units affected by the mission. Used properly, obscuration fires can—

- Slow enemy vehicles to blackout speeds.
- Obscure the vision of enemy direct fire weapon crews.
- Reduce accuracy of enemy-observed fires by obscuring observation posts and command posts (CPs).
- Cause confusion and apprehension among enemy Soldiers.
- Limit the effectiveness of the enemy's visual command and control signals.

D-75. Screening fires are closely related to obscuration fires; they also involve the use of smoke and WP. However, screening fires mask friendly maneuver elements to disguise the nature of their missions. Screening fires may assist in consolidation by placing smoke in areas beyond the objective. They may also be used to deceive the enemy to believe that a unit is maneuvering when it is not. Screening fires require the same precautions as obscuration fires.

COMPANY MORTAR SECTION

D-76. The Infantry rifle company mortar section provides the commander with responsive, mobile, and lethal indirect fire. The mortar section's high-angle fires are invaluable against dug-in enemy troops and targets in defilade which are not vulnerable to attack by direct fires. The commander coordinates mortar fires with direct fire and other indirect fire weapons to defeat enemy forces. Mortar fires destroy an enemy, suppress their fire, reveal their movements, and obscure their ability to observe.

Organization, Equipment, Capabilities, and Limitations

D-77. The company mortar section consists of two, three-Soldier light mortar squads. Each squad mans a single 60-mm (light) mortar. The senior squad leader is also the section leader and acts as the fire direction center point of contact with the second squad leader also acting as the fire direction center point of contact during split missions. The gunner and ammunition bearer completes the crew. Each squad is equipped with M224 or M224A1 mortar and fire control equipment. (Refer to ATTP 3-21.90 for additional information.)

Note. Ammunition-carrying capacity limits periods of firing for 60-mm (light) mortars organic to the Infantry rifle company. The capabilities of mortars and mortar munitions are summarized in ATP 3-09.32. See ATTP 3-21.90 for additional information on mortars and their capabilities.

D-78. Company 60-mm mortar ammunition usually has to be carried to the firing point by Soldiers. The mortar section can only carry a very limited amount and therefore most ammunition is carried and dropped off by Soldiers in the rifle platoons. A key responsibility of the FIST and mortar section leader is to estimate the number of mortar rounds required for a mission. The section cannot expend all of its rounds prior to the mission's completion. Ammunition restrictions often have to be imposed for each target.

D-79. The company mortar section can be positioned between buildings, in confined areas, and on rough terrain. Light mortars are easy to conceal, can accompany raiding and counterattacking forces, can remain in position until the last moment, and can be moved with stealth. The location of a mortar section near rifle platoons makes communications by alternate means possible when conditions prevent radio contact with field artillery. The maneuverability of light mortars allows for sustained close fire support over the distances expected in close combat.

D-80. Obscuration, used at company level for illumination, may be scheduled or on-call. The commander may use friendly direct fire weapons and adjustment of indirect fires to illuminate areas of suspected enemy movement or to orient moving units. Within the company, internal smoke capabilities consist of mortars, M203 grenade launcher, and smoke pots. Smoke pots are the commander's primary means of producing small-area screening smoke. External smoke capabilities are required for long-term, large-area obscuration.

D-81. The mortar section can provide only limited security and when it does, the security requirement reduces its effectiveness. The mortar section usually has to establish fire points within a secured area provided by one of the rifle platoons or have security elements assigned to it.

Communications

D-82. The company FSO can monitor three of four possible radio voice nets and three digital nets. The company's mission and priority determine the specific nets. For example:

D-83. **Company Command Net (Voice and Digital).** Platoon leaders, company XO, and attachments use this net to send reports, receive instructions, and request fires. Any Stryker's, Bradley's, or tanks attached to the company monitor this net. This net also allows the FIST to monitor company missions and links it to the company commander, platoon leaders, and observers for planning and coordination. The company headquarters is the net control station.

D-84. **Battalion Mortar Fire Direction Net (Voice).** Observers may use this net to request fires of the battalion mortar platoon. Other stations on the net include the FIST headquarters and the battalion FIST. The battalion mortar platoon is the net control station.

D-85. **Battalion Mortar Fire Direction Net (Digital).** As necessary, the FIST sends fire missions to the supporting mortar platoon or section using this net.

D-86. **Company Mortar Net (Voice).** Observers or the company FSO use this net to request fire from the company mortars.

D-87. **Direct Support Battalion Fire Direction Net (Voice and Digital).** Digital and voice nets are used for field artillery fire direction. The FIST uses this net to relay calls for fire through the battalion FIST to supporting artillery assets. The direct field artillery fire direction center is the net control center. The battery level fire direction control and battalion FIST are also on this net.

Note. A quickfire channel is established to link an observer (or other target executor) directly with a weapon system. Quickfire channels might be either voice or digital nets. Quickfire channels within an IBCT are normally established on field artillery or mortar nets. (See paragraph D-21 on page D-6.) These channels are designed to expedite calls for fire against high-payoff targets or to trigger preplanned fires. Quickfire channels may also be used to execute fires for critical missions or phases of the mission and to link an observer with a battery or platoon fire direction center for counter-reconnaissance fires. The FSO for the mission establishes a quickfire channel and procedures based on the commander's intent and concept of operation.

Engagement Methods

D-88. Engagement methods include: conventional indirect fire, direct lay and direct alignment (no FDC required), and hip shoot. Conventional indirect fire is the standard method and maximizes the mortars capabilities. (See artillery and mortar call for fire outlined in table D-9 on page D-26.) Direct lay, direct alignment, and hip shoot methods are effective in a given situation. All mortars use these methods but light mortars, because of their proximity to the fight and ability to rapidly respond to combat situations, may use the conventional mode less often than medium (81-mm) and heavy (120-mm) mortar platoons.

Conventional Indirect Fire

D-89. The conventional indirect fire method is used when the mortars have been laid for direction and an FDC established with positions plotted on the light hand-held mortar ballistic computer or the plotting board. The section leader, and the squad leader if operating by squads, operates the light hand-held mortar ballistic computer or the plotting board and the radio as the FDC. Table D-5 on page D-22 identifies conventional indirect fire method advantages and disadvantages.

Table D-5. Advantages and disadvantages of conventional indirect fire

ADVANTAGES OF CONVENTIONAL INDIRECT FIRE	*DISADVANTAGES OF CONVENTIONAL INDIRECT FIRE*
Can fire accurately at any target within range as long as an observer who can communicate with the fire direction center observes the target. Can accurately engage plotted targets in limited visibility. Can locate well away from enemy direct fires.	Requires a fire direction center (there is no designated fire direction center in the Infantry mortar section). Is not as responsive as direct lay.

Direct Alignment

D-90. The direct alignment method allows the mortar crew to fire from full defilade positions without an FDC. It requires that an observer be within 100 meters of the gun-target line and, if possible, within 100 meters of the guns. Direct alignment can be used in either the handheld or bipod-mounted mode, although bipod-mounted is much more accurate. Table D-6 identifies direct alignment method advantages and disadvantages.

Table D-6. Advantages and disadvantages of direct alignment

ADVANTAGES OF DIRECT ALIGNMENT	*DISADVANTAGES OF DIRECT ALIGNMENT*
Can engage target more quickly than the methods requiring a fire direction control. Allows crew more protection than direct lay. Does not require a fire direction control.	Is slightly slower than direct lay. Requires the mortar crew to be relatively close to the enemy and therefore vulnerable to indirect fires or assault. Requires a well-trained observer to be within 100 meters of the gun-target line (preferably within 100 meters of the guns). Requires observers to be in direct communication with the gun crew by voice, arm-and-hand signal, landline, or radio. Requires gun to be re-laid to engage each different target.

Direct Lay

D-91. The direct lay method is used when the gunner can see the target. The mortar might be handheld or bipod-mounted. An initial fire command is required to designate the target and (if desired) specify the shell-fuze combination and number of rounds. The gunner then adjusts fire and fires for effect without additional instructions. Table D-7 identifies direct lay method advantages and disadvantages.

Table D-7. Advantages and disadvantages of direct lay

ADVANTAGES OF DIRECT LAY	*DISADVANTAGES OF DIRECT LAY*
Can engage target immediately in handheld mode (the mortar weighs only 18 pounds and is therefore highly portable). Can be used by relatively untrained gunners such as cross-trained Infantrymen. Does not require a fire direction center.	Requires the mortar crew to be relatively close to the enemy and therefore susceptible to direct and indirect fires. Is less effective at night (the gunner cannot engage when they cannot see).

Hip Shoot

D-92. When a call for fire is received during movement and the target cannot be engaged by either the direct lay or direct alignment method, a hip shoot is initiated. A hip shoot is a hasty occupation of a firing position; it requires both an FDC and an observer. The section leader acts as the FDC and corrections may be sent over the radio or by a wire net. The section leader determines an azimuth of fire by map inspection. The leader then gives this direction to the mortar squads. The second squad leader uses the M2 compass to lay the base mortar. The section leader uses the light hand-held mortar ballistic computer, the graphical firing scale, or the firing tables to determine the appropriate elevation and charge. The section leader uses either the light hand-held mortar ballistic computer or the M19 plotting board to refine the firing data based on the observer's corrections. The section leader may use the aiming-point deflection method, depending upon the terrain. The second mortar is laid either by sight-to-sight or M2 compass. Table D-8 identifies hip shoot method advantages and disadvantages.

Table D-8. Advantages and disadvantages of hip shoot

ADVANTAGES OF HIP SHOOT	*DISADVANTAGES OF HIP SHOOT*
Allows fire support when other methods of engagement are not usable. Is able to move at the same time as the unit and still provide adequate fires.	Requires a fire direction control center (there is no designated fire direction control in the Infantry mortar section). Is the slowest method of fire and the least accurate?

AIR-GROUND OPERATIONS

D-93. *Air-ground operations* are the simultaneous or synchronized employment of ground forces with aviation maneuver and fires to seize, retain, and exploit the initiative. (FM 3-04). Employing the combined and complimentary effects of air and ground maneuver and fires through air-ground operations presents the enemy with multiple dilemmas and ensures that aviation assets are position to support ground maneuver. Air-ground operations increase the overall combat power, mission effectiveness, agility, flexibility, and survivability of the entire combined arms team. Air-ground operations ensure that all members of the combined arms team, whether on the ground or in the air, work toward common and mutually supporting objectives to meet the higher commander's intent.

D-94. Air action by fixed- and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces require detailed integration of each air mission with the fire and movement of ground forces. This section focuses on mortar and artillery, Army attack aviation, and CAS fires in support of the ground maneuver force, and the request processes. Refer to ATP 3-04.64 for discussion on unmanned aircraft system operations to provide surveillance capabilities and to enhance situational awareness during planning, coordination, and execution of combat operations.

FUNDAMENTAL CONSIDERATIONS

D-95. Air and ground forces must integrate effectively to conduct operations and to minimize the potential for fratricide and civilian casualties. *Integration*—the arrangement of military forces and their actions to create a force that operates by engaging as a whole (JP 1)—maximizes combat power through synergy of both forces. The integration of air operations into the ground commander's scheme of maneuver may also require integration of other services or multinational partners. Integration continues through planning, preparation, execution, and assessment. The IBCT and Infantry battalion commander and staffs, and subordinate unit commanders and leaders consider the following framework fundamentals to ensure effective integration of air and ground maneuver forces:

- Understanding capabilities and limitations of each force.
- Standard operating procedures.
- Habitual relationships.
- Regular training events.
- Airspace control.
- Maximizing and concentrating effects of available assets.
- Employment methods.
- Synchronization.

ORGANIZATION FOR FIRE SUPPORT COORDINATION

D-96. Fire support coordination organizations within the IBCT ensure responsive and effective fire support is provided to their respective maneuver commanders. See FM 3-96 for detailed information on the IBCT main CP fire support cell, generally organized with an FSO and assistants, an air defense airspace management/brigade aviation element, an electronic warfare element, a targeting element, and digital systems operators. See ATP 3-21.20 for detailed information on the battalion fire support cell, organized with an FSO and NCO, an electronic warfare NCO, and digital systems operators.

Note. The fire support personnel manning the battalion's main CP fire support cell, company FISTs, and platoon forward observers are assigned to the IBCT's cannon field artillery battalion. These fire support personnel habitually associate with supported battalions and companies or platoons for training, but for combat operations will be deployed by the IBCT commander and the fire support coordinator when and where needed based on the mission variables of METT-TC. The fire support cell may also have an Air Force TACP attached to the battalion. (Refer to ATP 3-09.42 for additional information.)

Fire Support Team and Observers

D-97. Company fire support team headquarters personnel and platoon forward observers provide support to the Infantry rifle company to plan and coordinate all available supporting fires, including mortars, field artillery, naval surface fire support, Army attack aviation, and Air Force CAS integration. Attached FISTs provide maneuver companies with fire support coordination, precision targeting, type 2 and 3 terminal attack control (see paragraph D-131 on page D-33), and effects assessment capabilities. The use of precision target location tools is the preferred method of establishing accurate target location. These tools include a targeting device or a precision targeting device, a forward entry device, and imagery based mensuration tools. The observer may have an optical device using a laser range finder for distance and an Azimuth Vertical Angle Module to acquire direction and vertical angle. Each FIST's fire support vehicle, if provided, possesses a target acquisition and communications suite with the capability for laser range finding and designation for laser-guided munitions. (Refer to ATP 3-09.42 for additional information.)

Qualified Observers

D-98. Effective fires require qualified observers to call for and adjust fires on located targets. Forward observers, forward air controllers (FACs), naval gunfire spotter teams, joint fires observers, and joint

terminal attack controllers (JTACs) train together and work effectively as a team to request, plan, coordinate, and place accurate fires on targets that create the effects desired by the commander. (Refer to JP 3-09 for additional information.)

Forward Observer

D-99. A *forward observer* is an observer operating with front line troops trained to adjust ground or naval gunfire and pass back battlefield information. (JP 3-09). In the absence of *a forward air controller*—an officer (aviator/pilot) member of the tactical air control party who, from a forward ground or Airborne position, controls aircraft in close air support of ground troops. (JP 3-09.3)—the observer may control CAS strikes. Platoon FOs are assigned to the FIST supporting each rifle company in the Infantry battalion. Forward air controllers (Airborne), JTACs, and naval gunfire spotter teams may not always be available when and where their support is required. Field artillery observer teams must be proficient in planning and executing CAS when a JTAC is not available. With additional training and certification, the FO can qualify as a joint fires observer. (Refer ATP 3-09.42 for additional information.)

Joint Fires Observer

D-100. A *joint fires observer* is a trained service member who can request, adjust, and control surface-to-surface fires, provide targeting information in support of Type 2 and 3 close air support terminal attack controls, and perform autonomous terminal guidance operations. (JP 3-09.3). The joint fires observer is not an additional Soldier in the Army fire support organization, but rather an individual who has received the necessary training and certification to be awarded the joint fires observer's additional skill identifier. A joint fires observer is not a certified JTAC.

- *Terminal attack control* is the authority to control the maneuver of and grant weapons release clearance to attacking aircraft (JP 3-09.3).
- *Terminal guidance operations* are actions using electronic, mechanical, voice or visual communications that provide approaching aircraft and/or weapons additional information regarding a specific target location. (JP 3-09).
- *Joint terminal attack controller* is a qualified (certified) Service member who, from a forward position, directs the action of combat aircraft engaged in CAS and other offensive air operations. (JP 3-09.3). A qualified and current joint terminal attack controller is recognized across the Department of Defense as capable and authorized to perform terminal attack control.

D-101. Air Force JTACs, if available from the battalion Air Force TACP can deploy forward with a maneuver company and position where they can best support the operation. Tactical air control party JTACs provide the commander and the subordinate and supporting units with recommendations on the use of CAS and its integration with ground maneuver and other attack resources. JTACs also perform terminal attack control of individual CAS missions.

D-102. A *forward air controller (airborne)* (FAC [A]) is a specifically trained and qualified aviation officer, normally an Airborne extension of the tactical air control party, who exercises control from the air of aircraft engaged in close air support of ground troops. (JP 3-09.3). A qualified and current FAC (A) is recognized across the Department of Defense as capable and authorized to perform terminal attack control. (Refer to JP 3-09.3 for additional information.)

Untrained Observers

D-103. Occasionally the cannon field artillery battalion of the IBCT may need to process fire missions from untrained observers. An untrained observer is anyone not military occupational specialty qualified in requesting and adjusting indirect fire. Often these are critical requests where the requestor is under fire. Field artillery battalion and battery fire direction centers should be identified as the primary handlers of untrained observer missions. For more information on untrained observer procedures, see TC 3-09.81. For more on observers see the ATP 3-09.42 and in ATP 3-09.30.

SCHEME OF FIRES

D-104. *Scheme of fires* is the detailed, logical sequence of targets and fire support events to find and engage targets to accomplish the supported commander's intent (FM 3-09). The company commander integrates and synchronizes indirect fires, Army attack aviation, and CAS to operations. The commander ensures targets and fire support events are planned for subordinate units to counter likely enemy obstacles and ambushes and support planned engagement areas. To increase counterfire responsiveness, radars can be linked digitally and via voice directly to dedicated firing units or given quick-fire channels. Depending on what other mission is being supported, the company may not have priority of fires during operations. Internal fire support means are always planned for regardless of external fire support. The scheme of fires is rehearsed to ensure coverage throughout the operation.

Indirect Fire

D-105. The majority of fire support to a company is provided by indirect fire support systems. Indirect fire support systems include mortars and field artillery cannon and rocket systems. (See ATP 3-09.32 for a detailed listing of indirect fire system capabilities and characteristics). Indirect fire support systems may be under direct command of the maneuver battalion/company or may be in a supporting role. Indirect fire targets during movement are planned on probable locations of enemy attempts to attack the movement. Call for fire (see table D-9) is the request for fire containing data necessary for obtaining the required mortar and artillery fire on a target. The ability for mortars and artillery to engage targets from reverse-slopes and areas of defilade is a tremendous advantage, especially in adverse terrain. As with other operations, employing indirect fires in adverse terrain and climate does have its challenges. (Refer to FM 3-09 for additional information.) Unique challenges include—

- Unpredictable weather conditions affecting accuracy of rounds.
- Targets located on peaks and steep terrain making adjustments difficult.
- Intervening crests requiring placement of observers on dominating heights for overwatch.
- Limited terrain suitable for firing positions to cover a particular movement.
- Mortar and artillery locations ideal for range and coverage unsuitable due to intervening adverse terrain features.
- Locations tactically positioned but in an area with difficult or limited access.
- Shifting mortar and artillery assets to alternate locations requiring significant time and engineering and logistical efforts.

Table D-9. Artillery and mortar call for fire

FIRST TRANSMISSION	*THIRD TRANSMISSION*
1. Observers Identification (call signs) **2. Warning Order** Adjust fire Fire for effect Suppress Immediate suppression/immediate smoke	**4. Target Description** Type Activity Number Degree of protection Size and shape (length/width or radius) **5. Method of Engagement** Type of adjustment Danger close Mark Ammunition Distribution **6. Method of Fire and Control** Method of fire Method of control
SECOND TRANSMISSION	
3. Target Location Grid coordinate Shift from a known point Polar plot	

D-106. Mortar indirect fires are organic to the Infantry rifle company. The company mortar section provides the most responsive indirect fire available to the company. These assets provide the commander with close

and immediate responsive fires in support of the maneuver companies. These fires harass, suppress, neutralize, or destroy enemy attack formations and defenses; obscure the enemy's vision; or otherwise inhibit their ability to acquire friendly targets. See paragraph D-76 on page D-20 for information on the mortar section within the Infantry rifle company.

D-107. The three primary types of mortar fires are high explosive, obscuration, and illumination (visible and infrared). Mortars also can be used for FPFs and smoke. (Refer to ATTP 3-21.90 for more information.)

D-108. On the battlefield, mortars act as both a killer of enemy forces and as an enhancer of friendly mobility. Mortar fires inhibit enemy fire and movements and allow friendly forces to maneuver to a position of tactical advantage. Effective integration of mortar fires with the overall fire support plan and with maneuver units is critical to successful combat. Listed below are some of the key capabilities of mortar units:

- Mortar sections are organic to Infantry rifle companies that make them always available and responsive regardless of whether or not the battalion has allocated supporting battalion mortars or field artillery.
- Organic mortar fires do not have to be externally cleared when firing missions inside the company area of operation.
- Mortars provide obscuration and suppression to protect the company during the attack or to support it while breaking contact with the enemy in the defense or movement to contact.
- Mortars provide the commander with responsive fires to support subordinate unit infiltration and exfiltration and counterreconnaissance missions during security operations.
- The commander can continue to use mortars for indirect fire support in one part of the battle and divert field artillery fires to assist in the critical fight elsewhere.
- Mortars contribute to the company's direct fire fight by forcing the enemy to button up, by obscuring their ability to employ supporting fires, and by separating their dismounted Infantry from its armored personnel carriers and accompanying tanks.
- Heavy mortars, at battalion level, penetrate buildings and destroy enemy field fortifications, preparing the way for the dismounted assault force. Precision guided mortar munitions can destroy selected high payoff targets.
- Mortars provide the company commander with the ability to cover friendly obstacles with indirect fire, regardless of the increasing calls for artillery fire against deep targets or elsewhere on the battlefield.
- Mortar fires combine with the FPFs of company machine guns to repulse the enemy's dismounted assault. Frees artillery to attack and destroy follow-on echelons, which are forced to slow down and deploy, as the ground assault is committed.
- Mortars can use the protection of defilade to continue indirect fires and effects even when subjected to intense counterfire.

Army Attack Aviation

D-109. During the planning process, Army aviation attack and reconnaissance units are integrated into the company's scheme of maneuver to ensure responsiveness, synergy and agility during actions on the objective or upon contact with the enemy. Pre-mission development of control measures provides a foundation for the successful integration of Army aviation into company operations. Among these control measures are engagement criteria; the triggers and conditions for execution; fire support coordination measures, such as target reference points; engagement areas and target reference points; and airspace coordinating measures, such as aerial ingress and egress routes and *restricted operations zone*, which is airspace reserved for specific activities in which the operations of one or more airspace users is restricted. (JP 3-52).

Call for Fire

D-110. *Call for fire* is a request for fire containing data necessary for obtaining the required fire on a target (FM 3-09). Army attack aviation targets are planned on probable enemy locations. Army attack aviation call for fire is a coordinated attack by Army attack aircraft against enemy forces in close proximity to friendly units. Army attack aviation call for fire (table D-10) is not synonymous with CAS flown by Joint and multinational aircraft. Terminal control from ground units or controllers is not required due to aircraft

capabilities and enhanced situational understanding of the aircrew. Depending on the enemy situation, Army attack aviation can be on station during times when contact is most likely to occur. Air-ground integration ensures frequencies are known and markings are standardized to prevent fratricide. (Refer to ATP 3-04.1 for additional information.)

Table D-10. Army attack aviation call for fire format

1. Observer and Warning Order
"J27 (aircraft call sign), this is 041 (observer call sign), fire mission, over"

2. Friendly Location and Mark
"My position AL78241638 (TRP, grid, etc.), marked by Strobe (strobe, beacon, IR strobe, etc.)"

3. Target Location
"Target Location AL82781942 (bearing [magnetic] and range [meters], TRP, grid, etc.)"

4. Target Description and Mark
"Dismounted Infantry (target description), marked by Tracer (IR pointer, tracer, etc.)"

5. Remarks: "At my command (threats, danger close clearance, restriction, at my command, etc.), over"

Notes:
1. Clearance: If airspace has been cleared between the employing aircraft and the target, transmission of this brief is clearance to fire unless "**danger close**" or "**at my command**" is stated.
2. Danger Close: For danger close fire, the observer or commander must accept responsibility for increased risk. State "**cleared danger close**" in line 5 and pass the initials of the on-scene ground commander. This clearance may be preplanned.
3. At My Command: For positive control of the aircraft, state "**at my command**" on line 5. The aircraft will call "**ready to fire**" when ready.

LEGEND
IR INFRARED **TRP** TARGET REFERENCE POINT

SAMPLE

D-111. During call for fire, the flight lead must have direct communication with the on-scene ground commander to provide direct fire support. After receiving the call for fire brief from ground forces, pilots must be able to positively identify friendly location before engagement. Once the crew has identified both enemy and friendly locations, flight leads formulate an attack plan and brief the supported commander and their other attack team members.

Note. Army attack aviation may be used as a show of force to discourage enemy forces from performing offensive actions. Coordination can be made with aircraft conducting nearby operations to simply fly over or near a planned unit movement to deter aggressive actions by the enemy.

Limitations

D-112. Major limitations for use of attack aircraft include—

- Number of aircraft available. Sorties are often limited and in high demand in combat operations.
- Time needed to get aircraft on station. Available aircraft may be too far away or have to take a lengthy indirect route to be effective.
- Weather conditions. Current or pending adverse weather conditions may ground aircraft.
- Elevation restrictions. High mountain ridges may be at an elevation restricting movement of rotary-wing aircraft across them. Simply getting aircraft to target areas may be restricted if available aircraft are on the other side of mountains with ridges above certain altitudes.
- Rearming and refueling. Travel time to locations may be lengthy and use substantial amounts of fuel. This reduces time on station for the aircraft and requires refueling. Locations for rearming and refueling may be some distance away.

Marking and Identifying Locations and Targets

D-113. Ground units must ensure aircraft have positive identification of friendly unit locations and enemy targets. There are various ways to mark locations or targets. The effectiveness of vision systems on helicopters compared to those found on ground vehicles may differ. During day, vision systems of the AH 64 allow accurate identification of targets.

D-114. During periods of limited visibility, resolution is greatly degraded, requiring additional methods of verification. This situation requires extra efforts from both ground units and aviation elements. Thermal, optical, and radar acquisition devices enable positive identification. Both aviation and ground forces might become overloaded with tasks in battle. Simple, positive identification must be established and known to all.

Marking of Friendly Forces

D-115. A method of target identification is direction and distance from friendly forces. Friendly forces can mark their own positions with infrared strobes, infrared tape, night vision goggle lights, smoke, signal panels, body position, meal, ready to eat heaters, chemical lights, and mirrors. Marking friendly positions is the least desirable method of target location information because it can reveal friendly positions to the enemy.

Marking of Enemy Targets

D-116. Target marking aids aircrews in locating targets the unit in contact desires to attack. The ground commander provides target marking whenever possible. Methods for marking targets include, but are not limited to laser handover, tracer fire, marking rounds (flares or mortars), or laser target marker. To be effective, marking must be timely, accurate, and easily identifiable. Target markings might be confused with other fires on the battlefield, suppression rounds, detonations, and marks on other targets. Although marking is not mandatory, it improves aircrew accuracy, enhances situational awareness, and reduces risk of fratricide.

Target Handover

D-117. The rapid and accurate marking of a target is essential to a positive target handover. Aircraft conducting attacks develop an attack plan that is METT-TC dependent and meets the ground commander's task and purpose. The aircrew generally has an extremely limited amount of time to acquire both the friendly and enemy locations. It is essential that the ground unit has the marking ready and turned on when requested by the aircrew. Attack reconnaissance aircrews use both thermal sight and night vision goggles to fly with and acquire targets. After initially engaging the target, the aircrew generally approaches from a different angle for survivability reasons if another attack is required. The observer makes adjustments using the eight cardinal directions and distance (meters) in relation to the last round's impact and the actual target. At the conclusion of the attack, the aircrew provides its best estimate of battle damage assessment to the unit in contact.

Battle Damage Assessment and Reattack

D-118. After the attack aircraft complete the requested attack mission, the aircrew provides a battle damage assessment to the ground commander. Based on the assessment, the ground maneuver commander determines if another attack is required to achieve the desired end state. The Army attack aviation operation can continue until the aircraft have expended all available munitions or fuel. However, if the air mission commander receives a request for another attack, he must carefully evaluate the unit's ability to extend the operation. If not able, the air mission commander calls for relief on station by another attack team if available. It is unlikely that the original team has enough time to refuel, rearm, and return to station.

Clearance of Fires

D-119. During close combat with numerous aircraft in the vicinity of an area of operation, it is critical to deconflict airspace between aircraft and established indirect fires, to include the following:

- Ensure aircrews have the current and planned indirect fire positions (to include mortars) supporting the ground tactical plan.
- Plan for informal airspace coordination areas and check firing procedures and communications to ensure artillery and mortars firing from within the area of operation do not endanger subsequent serials landing or departing, Army attack aviation, or CAS.
- Ensure that at least one of the aviation team members monitors the fire support net for situational awareness.
- Advise the aviation element if the location of indirect fire units changes from that planned.
- Ensure all participating units are briefed daily on current airspace control order or air tasking order changes and updates that may affect air mission planning and execution.
- Ensure all units update firing unit locations, firing point origins, and final protective fire lines as they change for inclusion in current airspace control order.

D-120. The commander can establish an airspace coordination area. For example, the commander can designate that all indirect fires be south of and all aviation stay north of a specified gridline for a specific period. This is one method for deconflicting airspace while allowing indirect fires and attack aviation to attack the same target. The ground commander then can deactivate the informal airspace coordination area when the situation permits.

Close Air Support

D-121. Infantry battalions' allocated CAS sorties may allocate assets to individual rifle companies. *Close air support* is air action by manned or unmanned fixed-wing and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces. (JP 3-0). CAS can be employed to blunt an enemy attack; to support the momentum of the ground attack; to help set conditions for battalion and IBCT operations as part of the overall counterfire fight; to disrupt, delay and destroy enemy second echelon forces and reserves; and to provide cover for friendly movements. The effectiveness of CAS is related directly to the degree of local air superiority attained. Until air superiority is achieved, competing demands between CAS and counterair operations may limit sorties apportioned for the CAS role. CAS is the primary support given to committed battalions and IBCT by Air Force, Navy, and Marine aircraft. IBCTs and battalions can request air reconnaissance and battlefield air interdiction missions through the next higher headquarters, but these missions normally are planned and executed at that higher unit level, with the results provided to the Infantry battalion commander and staff.

Missions

D-122. The IBCT normally plans and controls CAS. However, this does not preclude the battalion from requesting CAS, receiving immediate CAS to support company level operation, or accepting execution responsibility for a planned CAS mission. CAS is another means of indirect fire support available to the battalion. In planning CAS missions, the commander must understand the capabilities and limitations of CAS and synchronize CAS missions with both the battalion fire plan and scheme of maneuver. CAS capabilities and limitations such as windows for use, targets, observers, and airspace coordination present some unique

challenges, but the commander must plan CAS with maneuver the same way indirect artillery and mortar fires are planned. When executing a CAS mission, the battalion must have a plan that synchronizes CAS with maneuver and the scheme of fires of maneuver companies.

Note. In developing situations where time is critical, having a quick-fire plan can enable the battalion commander, FSO, and fire support cell to quickly execute fire support for an impending mission. Subordinate company FSOs develop quick-fire plans to support their respective commander's mission. Like all fire support plans, the maneuver commander approves the quick-fire plan. In quick-fire planning the FSO assigns targets (and possibly a schedule of fires) to the most appropriate fire support means available to support the mission. In this type of fire support planning, the available time usually does not permit evaluation of targets on the target list and consolidation with targets from related fire support agencies. See to ATP 3-09.42 for a detail discussion of quick-fire planning.

Preplanned Close Air Support

D-123. Battalion planners, in coordination with maneuver companies forward CAS requests as soon as they can be forecasted. These requests for CAS normally do not include detailed timing information because of the lead time involved. Preplanned CAS requests involve any information about planned subordinate schemes of maneuver, even general information, which can be used in the apportionment, allocation, and distribution cycle. This includes estimates of weapons effects needed by percentage, such as 60 percent anti-armor and 40 percent antipersonnel; sortie time flows; peak need times; and anticipated distribution patterns. All are vital to preparing the air tasking order. Air liaison officers (ALOs) and S-3s, in coordination with FSOs at all planning staffs and company echelons must ensure that this information is forwarded through higher echelons according to the air tasking order cycle. Preplanned CAS may be categorized as either scheduled or on-call missions.

- A scheduled mission is a CAS strike on a planned target at a planned time.
- An on-call mission is a CAS strike on a planned target or target area executed when requested by the supported unit. Usually, this mission is launched from a ground on-call, but it may be flown from an airborne on-call status. On-call CAS allows the ground commander to designate a general target area within which targets may need to be attacked. The ground commander designates a conditional period within which he later determines specific times for attacking the targets.1

Note. There are specific request channels for preplanned and immediate CAS. See appendix C, ATP 3-21.20 for detail information on these specific request channels.

Immediate Close Air Support

D-124. Immediate requests are used for air support mission requirements identified too late to be included in the current air tasking order. Those requests initiated below battalion level are forwarded to the battalion main CP by the most rapid means available. At battalion level, the commander, FSO, air liaison officer, and S-3 consider each request. Approved immediate CAS requests are transmitted by the TACP over the Air Force air request net directly to the air support operations center collocated with the corps or separate division tactical operations center.

D-125. The TACP at each intermediate headquarters monitors and acknowledges receipt of the request. Silence by an intermediate TACP indicates approval by the associated headquarters unless disapproval is transmitted.

D-126. The air support operations center coordinates with the G-3 Air at echelons above the IBCT for all air support requests initiated by that unit. Meanwhile, intermediate TACPs pass the request to the associated headquarters G 3 or S-3 for action and coordination.

D-127. All echelons coordinate simultaneously. If any Army echelon above the initiating level disapproves a request or substitutes another support means, such as Army aviation, or field artillery, the TACP at that

headquarters notifies the air support operations center at the coordinating unit and the originating TACP, which notifies the requestor.

D-128. When the coordinating unit commander or their representative approves the request, the air support operations center initiates the necessary action to satisfy the request. If all distributed sorties are committed, the coordinating unit commander can request additional sorties from the next higher echelon, when appropriate. If the air support operations center has no CAS missions available, it can, with Army concurrence, divert sorties from lower priority targets or request support from lateral or higher commands.

Note. There are specific request channels for preplanned and immediate CAS. See appendix C, ATP 3-21.20 for detail information on these specific request channels.

Executing Close Air Support

D-129. Units having a reasonable expectation of conducting terminal attack control need to have certified JTAC available. In rare circumstances, the ground movement commander might require CAS when a JTAC or FAC (A) is not available, but detailed integration with friendly forces fire and movement is still required. Aircrews executing CAS under these circumstances must be in contact with the ground commander (or the commander's designated representative) and bear increased responsibility for the detailed integration required to minimize fratricide normally done by a JTAC/FAC (A). In these circumstances, the CAS aircrew assist the ground movement commander to the greatest extent possible to bring fires to bear.

Note. Although Army aviation does not consider its aircraft a CAS system, they can conduct attacks employing CAS joint tactics, techniques, and procedures when operating in support of non-U.S. Army forces.

D-130. The flow and prosecution of CAS targets normally begins with a check-in briefing, a situation update briefing followed by a CAS 9-Line and ending with a battle damage assessment report. (See ATP 3-09.32 for example check-in brief, situation update briefing, and battle damage assessment report.) A game plan is a concise situational awareness-enhancing tool to inform all players of the flow of the following attack (table D-11). At a minimum, the game plan will contain the type of control and method of attack. The method of attack and type of terminal attack control are separate and independent constructs. Method of attack conveys the JTACs/FAC (As) intent for the aircraft prosecution of the target; either the aircraft will be required to acquire the target (bomb on target) or not (bomb on coordinate). The method of attack is broken down into two categories, bomb on target and bomb on coordinate. These two categories define how the aircraft will acquire the target or mark the target. Any type of control can be utilized with either method of attack and no type of control is attached to one particular method of attack.

Table D-11. Game plan and 9-line close air support brief

Do not transmit the numbers. Units of measure are standard unless briefed. Lines 4, 6 and any restrictions are mandatory readbacks.The joint terminal attack controller (JTAC) may request an additional readback.

JTAC: "J27 , **advise when ready for game plan."** JTAC "**Type (1,2,3) control (method of attack, effects desired or ordnance, interval). Advise when ready for 9-line."**

1. Initial Point / Battle Position "AL78241638 "
2. Heading: "280 DEGREES "
   (degrees magnetic, initial point or battle position-to-target) Offset: "LEFT ."
   (left or right, when requested)
3. Distance: "4000 METERS "
   (initial point-to-target in nautical miles, battle position-to-target in meters)
4. Target elevation: "794 FEET "
   (in feet, mean sea level)
5. Target description "DISMOUNTED INFANTRY "
6. Target location: "AL82781942 "
   (latitude and longitude or grid coordinates, or offsets or visual)
7. Type mark / terminal guidance: "VIPER 27, CODE 888 "
   (description of the mark, if laser handoff, call sign of lasing platform and code)
8. Location of friendlies: "4000 METERS EAST OF TARGET "
   (from target, cardinal direction and distance in meters) Position marked by: "SMOKE"
9. **" Egress** SOUTHWEST **"**

Remarks / *Restriction:
- Laser to target line (LTL) / pointer target line (PTL).
- Desired type and number of ordnance or weapons effects (if not previously coordinated).
- Surface-to-air threat, location, and type of suppression of enemy air defense (SEAD).
- Additional remarks (e.g., gun-to-target line, weather. hazards, friendly marks).
- Additional calls requested.
- *Final attack headings or attack direction.
- *Airspace coordination areas (ACAs).
- *Danger close and initials (if applicable).
- *Time on target (TOT) / time to target (TTT).
- *Post launch abort restriction (if applicable).

NOTE: For off-axis weapons, the weapons final attack heading may differ from the aircraft heading at the time of release. The aircrew should inform JTAC when this occurs and ensure weapon final attack headings comply with given restrictions.

SAMPLE

D-131. In accordance with JP 3-09.3 and as stated earlier in the appendix, terminal attack control is the authority to control the maneuver of and grant weapons release clearance to attacking aircraft. A certified and qualified JTAC or FAC (A) is recognized across the Department of Defense as capable and authorized to perform terminal attack control. There are three types of terminal attack control: Type 1, 2, and 3. The commander considers the situation and issues guidance to the JTAC/FAC (A) based on recommendations from the staff and associated risks identified in the tactical risk assessment. The intent is to offer the lowest-level supported commander, within the constraints established during risk assessment, the latitude to determine which type of terminal attack control best accomplishes the mission. (Refer to JP 3-09.3 for additional information.) The three types of control are not ordnance specific, but are based on the following factors:

- Type 1 control is used when the JTAC/FAC (A) requires control of individual attacks and the situation requires the JTAC/FAC (A) to visually acquire the attacking aircraft and visually acquire the target for each attack.
- Type 2 control is used when the JTAC/FAC (A) requires control of individual attacks and any or all of the conditions below exist:
- JTAC/FAC (A) is unable to visually acquire the attacking aircraft at weapons release.
- JTAC/FAC (A) is unable to visually acquire the target.

- Type 3 control is used when the JTAC/FAC (A) requires the ability to provide clearance for multiple attacks within a single engagement subject to specific attack restrictions, and any or all of the following conditions exist:
- JTAC is unable to visually acquire the attacking aircraft at weapons release.
- JTAC is unable to visually acquire the target.
- The attacking aircraft is unable to acquire the mark/target prior to weapons release.
- The JTAC/FAC (A) requires the ability to provide clearance for multiple attacks within a single engagement subject to specific attack restrictions.

Note. CAS mission success directly relates to thorough mission planning and understanding the duties and responsibilities necessary for the control and application of tactical air power. See appendix C, ATP 3-21.20 for detail information on the control and application of tactical air power.

ECHELONMENT OF FIRES

D-132. Understanding echelonment of fires is critical for the fire support plan to be synchronized effectively with the maneuver plan. The purpose of echeloning fires is to maintain constant and overlapping fires on an objective while using the optimum delivery system up to the point of its risk estimate distance (RED) in combat operations or minimum safe distance in training. Echeloning fires provides protection for friendly forces as they move to and assault an objective, which allows them to get in close with minimal casualties. It prevents the enemy from observing and engaging the assault by forcing the enemy to take cover, which allows the friendly force to continue the advance unimpeded.

Concept of Echeloning Fires

D-133. The concept of echeloning fires begins with attacking targets on or around the objective using the weapons system with the largest RED. As the maneuver unit closes the distance en route to the objective, the fires cease or shift. This triggers the engagement of the targets by the delivery system with the next largest RED. The length of time to engage the targets is based on the rate of the friendly force's movement between the RED trigger lines. The process continues until the system with the smallest RED ceases or shifts fires and the maneuver unit is close enough to eliminate the enemy with direct fires or make its final assault and clear the objective.

D-134. The RED takes into account the bursting radius of particular munitions and the characteristics of the delivery system and associates this combination with a percentage for the probability of incapacitation of Soldiers at a given range. The munitions delivery systems include mortars, field artillery, helicopter, and fixed wing aircraft. The RED is defined as the minimum distance friendly soldiers can approach the effects of friendly fires without suffering appreciable casualties of 0.1 percent or higher probability of incapacitation. Commanders may maneuver their units within the RED area based on the mission; however, in doing so, they are making a deliberate decision to accept the additional risk to friendly forces. Before the commander accepts this risk, he should try to mitigate the probability of incapacitation. For example, maneuvering units in a defilade that provides some protection from the effects of exploding munitions.

WARNING

Risk estimate distances are for combat use and do not represent the maximum fragmentation envelopes of the weapons listed. Risk estimate distances are not minimum safe distances for peacetime training use.

D-135. The casualty criterion is the five-minute assault criterion for a prone Soldier in winter clothing and helmet. Physical incapacitation means that a Soldier is physically unable to function in an assault within a

five-minute period after an attack. A probability of incapacitation value of less than 0.1 percent can be interpreted as being less than or equal to one chance in one thousand.

D-136. Using echelonment of fires within the specified RED for a delivery system requires the unit to assume some risks. The maneuver commander determines, by delivery system, how close fire will be delivered in proximity to forces. The maneuver commander makes the decision for this risk level, but relies heavily on the FSO's expertise. While this planning normally is accomplished at the battalion level, the company FSO has input and should be familiar with the process because the FSO must execute the same process with the company mortars. (Refer to ATP 3-09.32 appendix H for information on risk estimate distances and Appendix I for information on minimum safe distances.)

Echeloning a Preparation

D-137. Echelonment of fires is accomplished when the maneuver commander wishes to conduct preparation fires on an objective. *Preparation fire* is normally a high-volume of fires delivered over a short period of time to maximize surprise and shock effect. Preparation fire can include electronic attack and should be synchronized with other electronic warfare activities (FM 3-09). Not all maneuver tasks warrant preparation fires. Some considerations for conducting preparation fires are—

- Will the loss of surprise from the preparation be offset by the damage done to the enemy?
- Are there enough targets and means to warrant a preparation?
- Can the enemy recover before the preparation fires can be exploited?

D-138. Echeloning a preparation is a 9-step process. The process is outlined and described in detail in ATP 3-09.42. The outline follow the following nine steps for echeloning a preparation:

- Determine what assets, to include ammunition, are required and what assets are currently available or allocated.
- Verify risk estimate distances and attack criteria with the commander.
- Plan targets.
- Develop a communications plan.
- Determine what the rate of movement will be.
- Develop the schedule of fires and decide how the preparation schedule will be initiated.
- Brief the plan and confirm the method with the commander.
- Complete the scheduling worksheet(s) within the Advanced Field Artillery Tactical Data System or manually using DA Form 4656 *(Scheduling Worksheet)*.
- Rehearse and refine the plan.

Echelonment of Fires, Example

D-139. When the lead elements of the lead companies approach designated phase lines en route to the objective, the battalion FSO begins the preparation. Lead element observers and company fire support teams track movement rates and confirm them for the battalion FSO. The battalion FSO adjusts the plan during execution based on unforeseen changes to anticipated movement rates. (See figure D-4 through D-8 on pages D-36 through D-40.)

D-140. As lead elements continue movement toward the objective, the first delivery system engages its targets. It maintains fires on the targets until the unit crosses the next phase line that corresponds to the RED (in combat) of the weapon.

D-141. To maintain constant fires on the targets, the unit starts the next asset before the previous asset ceases or shifts. This ensures no break in fires, enabling the friendly forces' approach to continue unimpeded. However, if the unit rate of march changes, the fire support system must remain flexible to the changes.

D-142. The FSO shifts and engages with each asset at the prescribed triggers, initiating the fires from the system with the largest RED to the smallest. Once the maneuver element reaches the final phase line to cease all fires on the objective, the FSO shifts to targets beyond the objective.

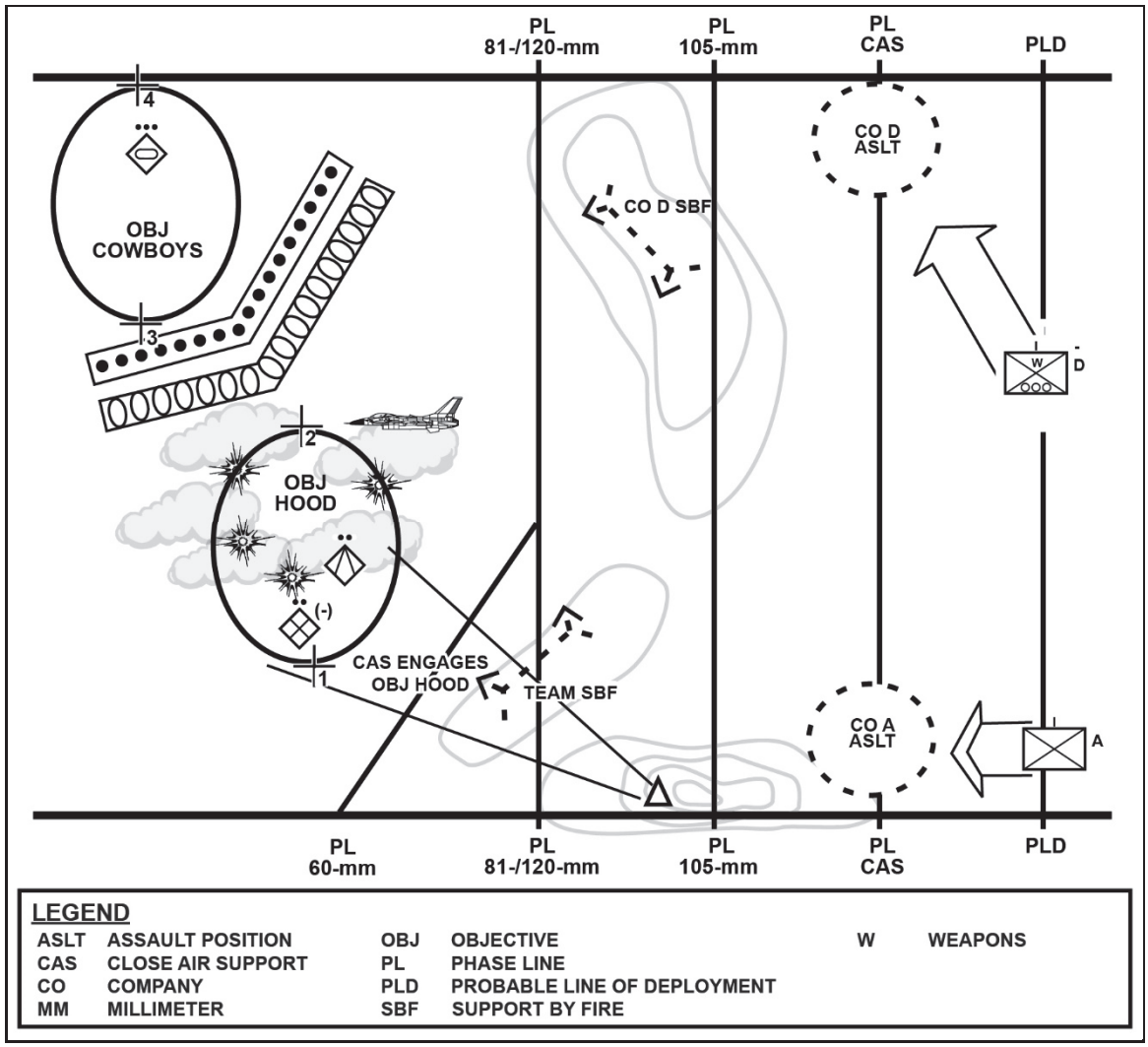

Figure D-4. Beginning of close air support

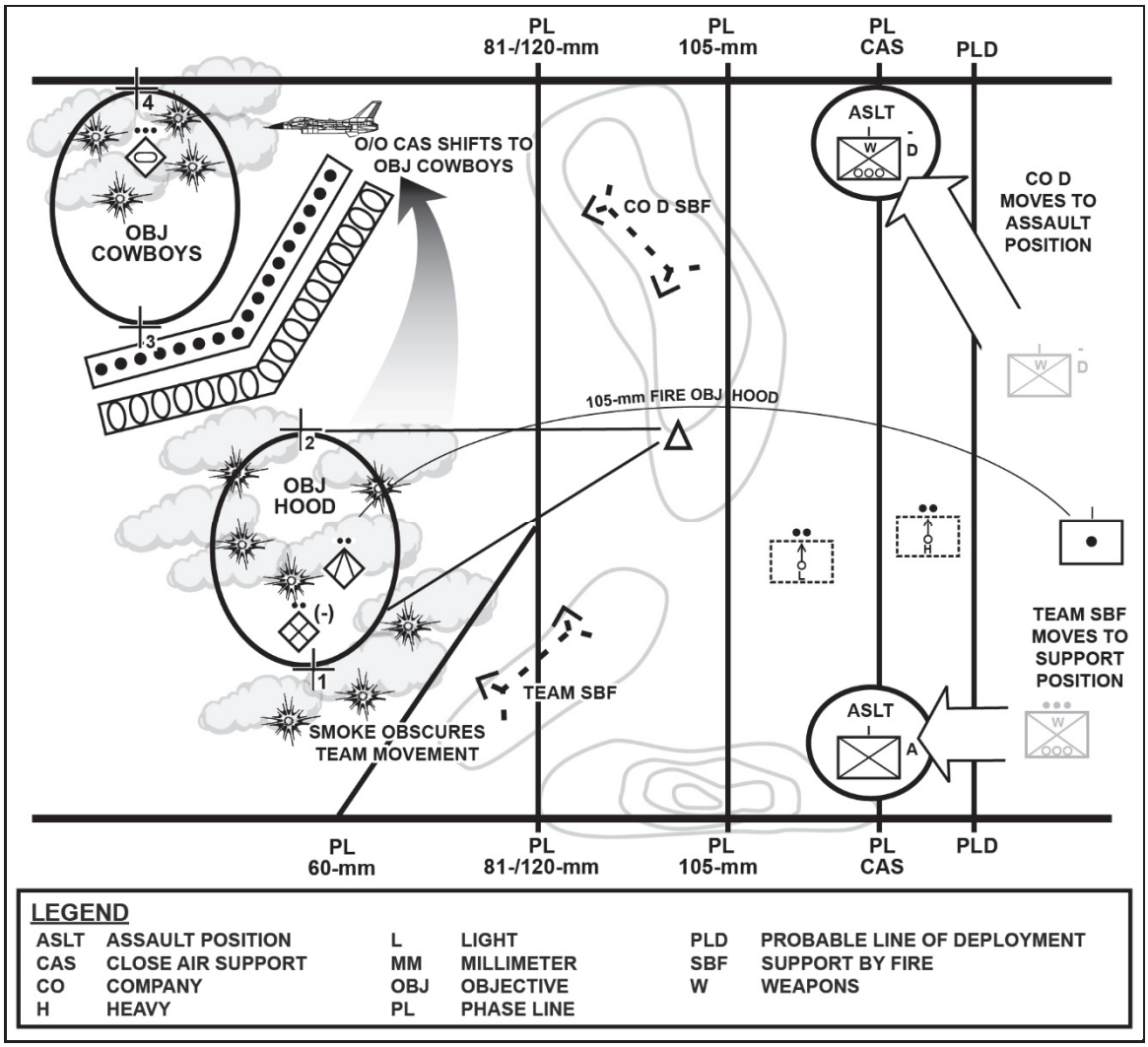

Figure D-5. Execution of 105-mm shaping fires; shifting of close air support

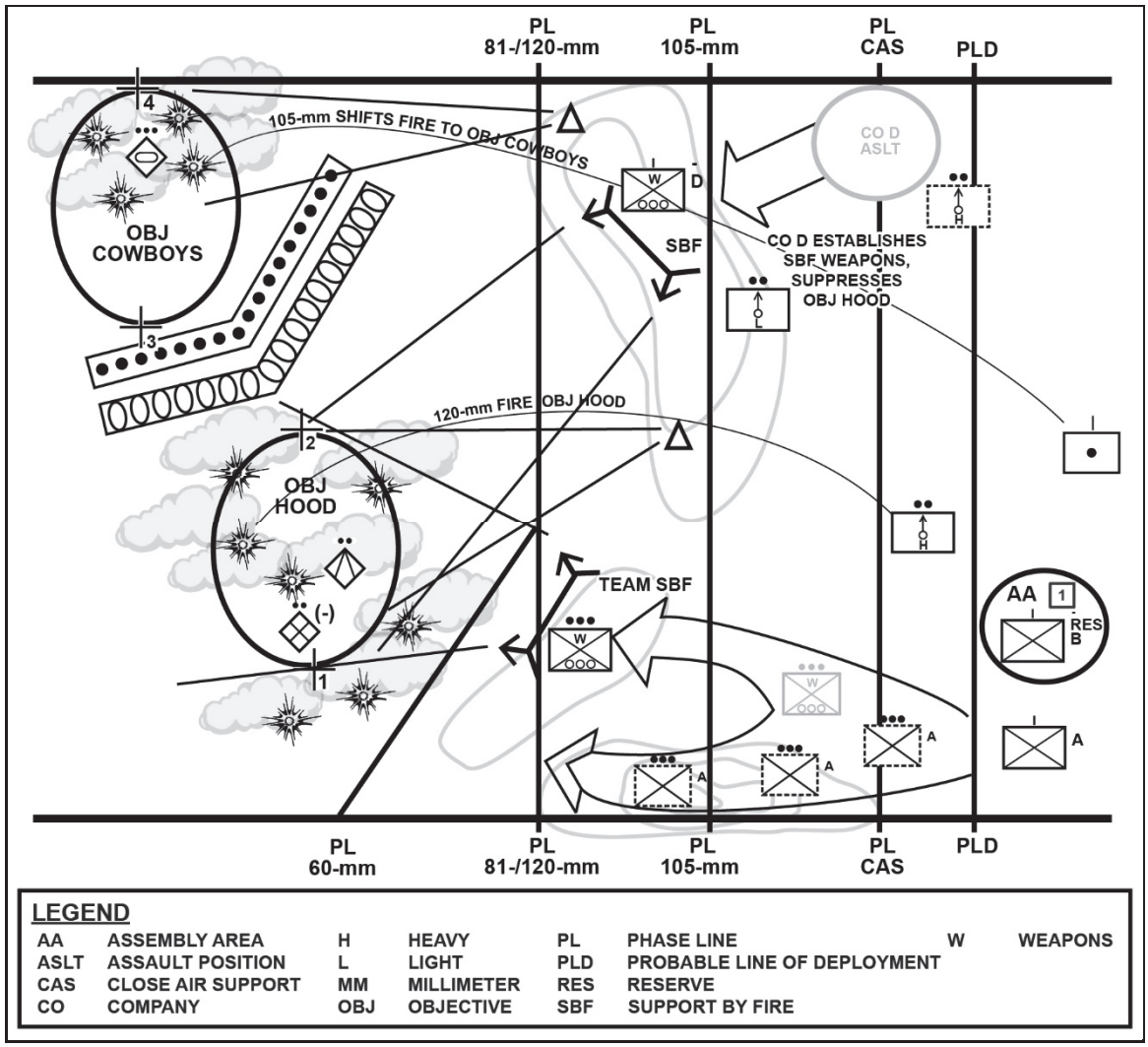

Figure D-6. Beginning of 120-mm and supporting fires; shifting of 105-mm fires

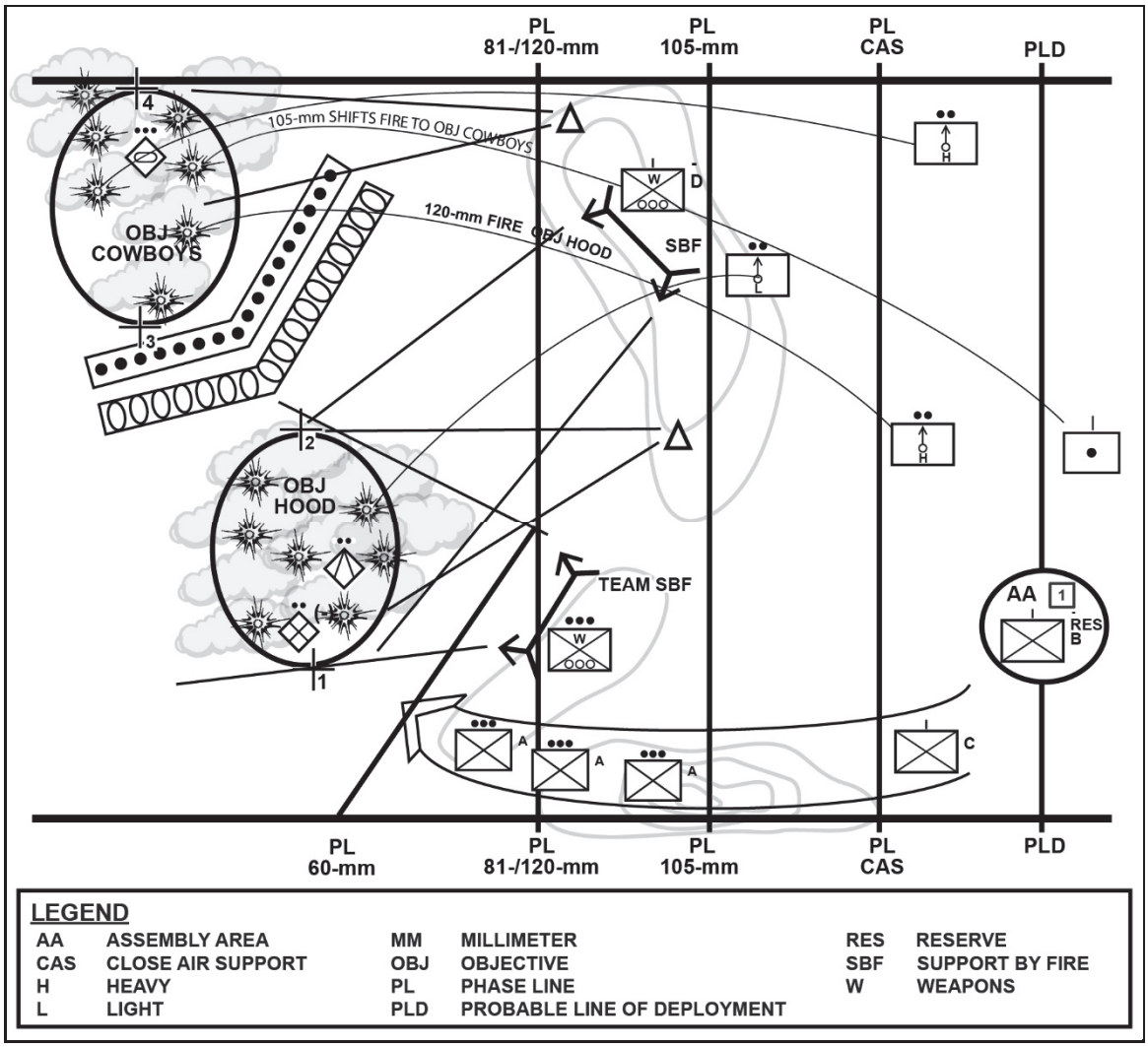

Figure D-7. Beginning of 60-mm fires; shifting of 120-mm fires

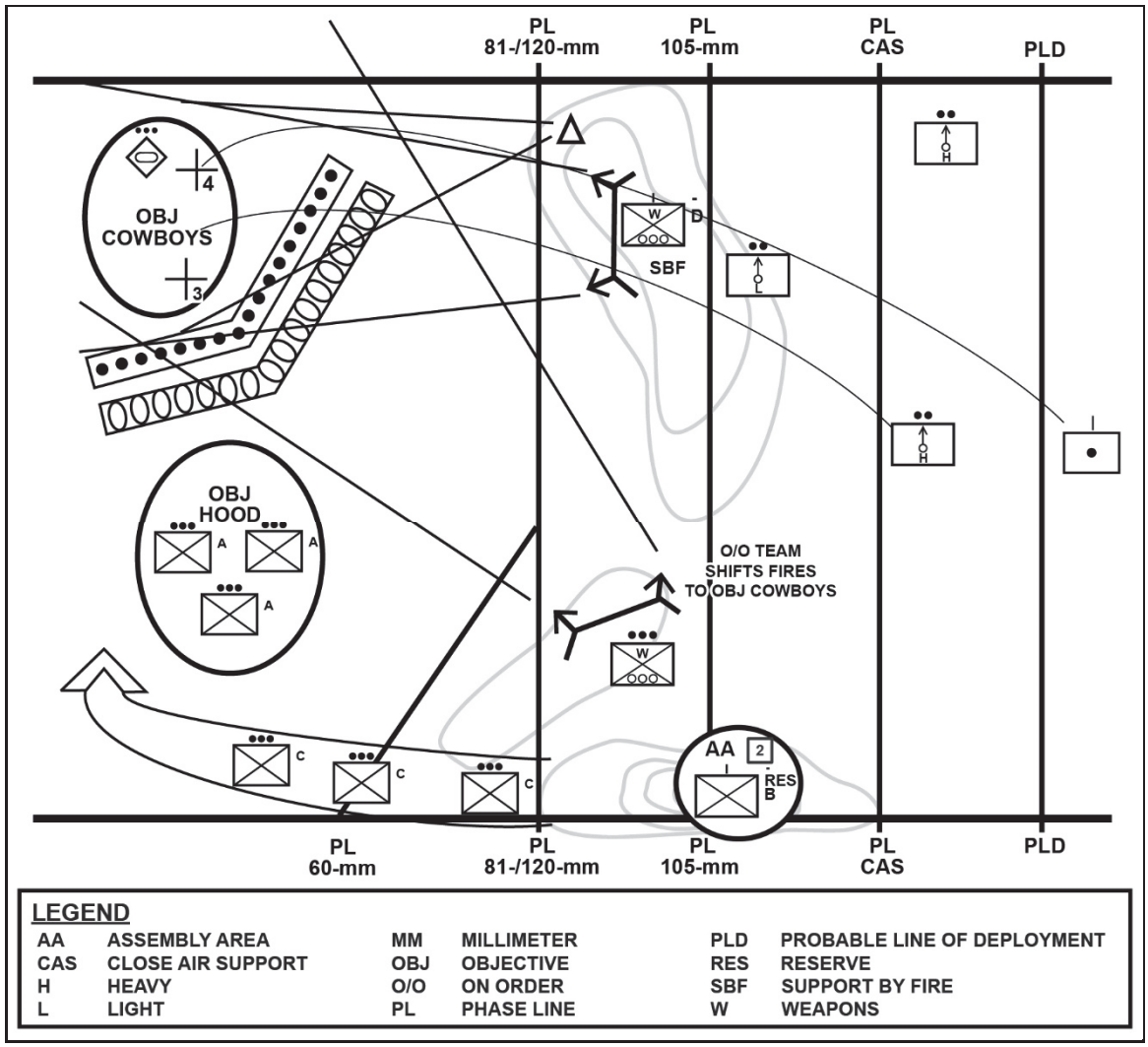

Figure D-8. Cessation of 60-mm fires; shifting of supporting fires

Appendix E

Close Combat Missile and Acquisition System Employment

Close-combat missile and acquisition systems available to the Infantry rifle company include the Javelin Missile System (medium), as well as the Tube-launched, Optically-tracked, Wire-guided/Wireless (TOW) missile system (heavy) and the ITAS. This appendix provides a brief discussion on the organization of close combat missile systems within the Infantry battalion, though primarily focuses on the tactical employment of available close combat missile systems by the Infantry rifle company commander.

Note. Though organization of forces may require the employment of the Infantry weapons company fighting as a pure company or combined arms team under the command of an Infantry weapons company commander, this appendix covers detailed operations of detached platoons in support of the Infantry rifle company and rifle platoons. Chapters 2, 3, and 4 of this publication and ATP 3-21.20 cover detailed operations of pure company or combined arms team under the command of an Infantry weapons company commander.

ORGANIZATION

E-1. The organization of Javelin close-combat missile systems within the Infantry rifle company includes two Javelins teams within each rifle platoon located within the Infantry weapons squad of each platoon. The TOW-equipped Infantry weapons company of the Infantry battalion is often task-organized to provide Infantry rifle companies with antitank and other hard-target destruction combat power during operations. The organization of TOW close-combat missile systems within the Infantry weapons company includes two TOWs within each of the four assault platoons in the weapons company. Current TOW missile systems available to the Infantry rifle company include the TOW 2A, TOW 2B Aero, and TOW Bunker Buster. Target acquisition systems include the ITAS, two per assault platoon in the Infantry weapons company (see TC 3-22.32). This section addresses the organization of close-combat missile systems within the Infantry weapons squads and assault platoons of the Infantry battalion, to include missile system capabilities and limitations.

Note. Shoulder launched munitions such as the M136 AT4, the M72A7 light antitank weapon, and the M141 bunker-defeat munition (BDM) supplement and reinforce these close combat missile fires at close ranges. (Refer to ATP 3-21.8 for additional information.)

INFANTRY WEAPONS SQUAD

E-2. The Infantry weapons squads (see figure E-1 on page E-2), of the Infantry rifle platoon, provides the primary base of fire for the Infantry rifle company's maneuver. The weapons squad is comprised of two Javelin missile teams, two medium machine gun teams, and a weapons squad leader. The two-man missile team is comprised of a gunner and an ammunition handler. The Javelin missile teams are assigned Javelins based on the mission and can carry two missiles. This system provides the platoon with an extremely lethal fire-and-forget, man portable, direct- and top-attack capability to defeat enemy armored vehicles and destroy fortified positions at ranges up to 2000 meters. The Javelin has proven effective during day, night, and adverse weather conditions. The two-man medium machine gun teams consist of a gunner and an assistant

gunner. Machine gun teams provide the platoon with medium-range area suppression at ranges up to 1000 meters during day, night, and adverse weather conditions. The weapons squad leader generally integrates the action of both systems to ensure mutual support. The weapons squad leader is generally the senior squad leader in the platoon. See ATP 3-21.8 for additional information, specifically Javelin system and munition characteristics and engagement and safety considerations during operations.

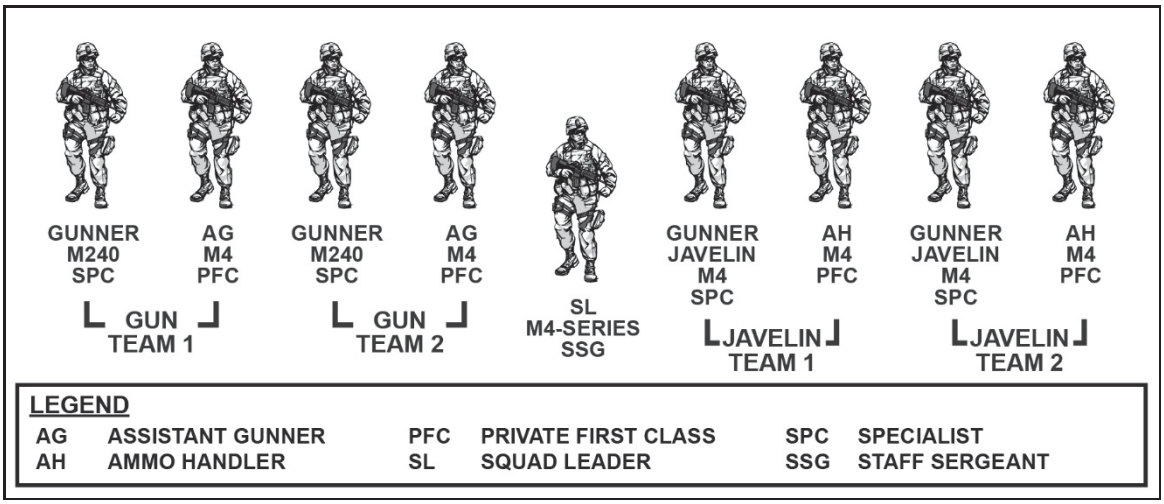

Figure E-1. Infantry weapons squad

ASSAULT PLATOONS OF THE INFANTRY WEAPONS COMPANY

E-3. Assault platoons of the Infantry weapons company (see figure E-2) are uniquely equipped to provide the Infantry rifle company with additional combat power. For example, each assault platoon's organizational structure and equipment provide the rifle company with heavy weapons firepower, maneuverability, and long range communications. Each assault platoon has two sections consisting of two squads each and a leader's vehicle. Each squad contains four Soldiers and a vehicle mounting the heavy weapons. The assault platoon is a fully mobile unit consisting of weapons carrier vehicles and a variety of heavy weapons systems. The heavy weapons contained in the assault platoon include a mix that can be tailored to a particular mission based on the mission variables of METT TC. Assault platoons are equipped with the following weapons: two TOWs, two Improved Target Acquisition Systems (ITASs), two MK 19 40-mm grenade machine guns, two M2 series heavy machine guns, and the two M240 series medium machine guns. Each vehicle-mounted system is equipped with a tripod for ground mount operations. Only one of these systems can be mounted on each vehicle at a time. While all of the weapons vehicles can mount the MK 19 and the M2, only two vehicles per platoon are equipped to mount the ITAS. See TC 3-22.32 for additional information, specifically TOW system and munition characteristics, engagement techniques, and surface danger zone considerations during operations.

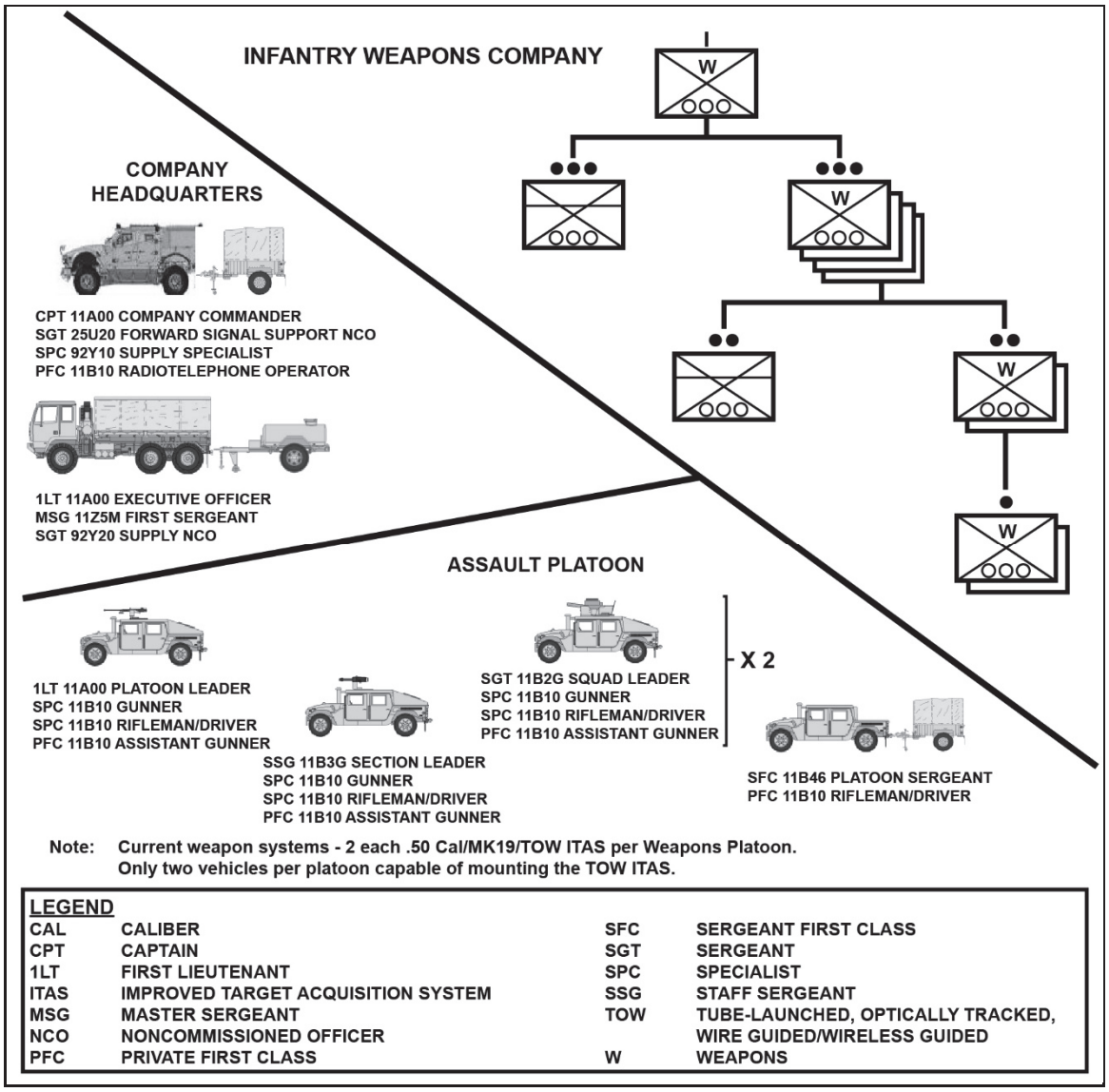

Figure E-2. Assault platoon organization and equipment

CAPABILITIES

E-4. In the offense, close-combat missile systems (Javelin and TOW) initially provides the base of fire for the Infantry rifle company in an attack to suppress, fix, or destroy the enemy in position. Missile systems can also be employed in the offense to engage enemy in planned engagement areas, to isolate objectives, destroy enemy counterattacks or withdrawing enemy forces, protect flanks, or to fix enemy in place for destruction by Infantry or Armor companies. An individual assault platoon can be used in a reconnaissance role, though are usually more effective when combined with the scout platoon. Working together provides for greater security, survivability, and firepower, and additional night vision capabilities. Javelin and TOW optical and target-acquisition systems augment observation.

E-5. In the defense, close-combat missiles systems can be positioned forward of the defensive area of operation to participate in security operations or to overwatch reconnaissance forces and surveillance assets, or obstacles. Missile systems are best employed in conjunction with the reconnaissance assets in a manner similar to that of the offense. As the enemy closes, the missile systems displace to positions that provide good observation and fires into an engagement area. Close-combat missile systems, often are positioned

throughout the depth of the area of operation to cover likely mounted avenues of approach. During counterattacks, missile systems provide overwatching fires for the maneuvering element of the rifle company.

LIMITATIONS

E-6. Close-combat missiles systems have limitations that apply to both offensive and defensive situations. Javelins are heavy and bulky. Infantry weapons company vehicles lack protection against direct and indirect fires. An assault platoon squad (four Soldiers) cannot adequately defend itself when confronted with a dismounted threat for an extended period. Normally, the squad is able to dismount only one Soldier for any extended amount of time for security when halted. TOW missiles are accurate, but missile flight time is long. The slow rate of fire and the visible launch signature of the TOW missile increase the assault platoon squad's vulnerability, especially if a high mobility multi-purpose wheeled vehicle-mounted TOW engages within an enemy's effective direct-fire range (no standoff).

E-7. Assault platoon squads reduce vulnerability by displacing often and by integrating their fires with those of other weapon systems (M2 and MK 19) within the assault platoon, with other Javelin and shoulder launched munitions within the rifle company, with obstacles, and with indirect fires. Integrated direct and indirect fires with obstacles complicate the enemy's target-acquisition process. Sustainment is limited for units conducting security missions. Additional security forces should be coordinated for when an anti-armor unit participates in a security mission.

TACTICAL EMPLOYMENT

E-8. Close-combat missile systems, Javelin and TOW are the primary precision, direct fire, long-range weapon organically available to the Infantry rifle company commander. Either one is able to destroy the most advanced main battle tank available to an enemy. These systems provide direct fire against personnel, vehicles, armored, or other hard targets to support the maneuver of the Infantry rifle company. Dependent on METT-TC, the commander positions missile systems throughout the depth of the company's area of operation to cover likely armor avenues of approach.

E-9. Close-combat missile systems allow the commander to fix the enemy force effectively, while maintaining sufficient combat power for a decisive maneuver, and sufficient depth to reduce risk and exploit success. During counterattacks, missile systems provide overwatching support-by-fire positions for the maneuvering element or accompany the assaulting elements to destroy point targets and provide protection against enemy armor during reorganization and consolidation. When conducting operations in support of stability tasks, assault platoons provide transportation, mobility, enhanced optics, and communications capabilities. In some instances missile systems provide long-range precise fires.

E-10. The following are key principles for close-combat missile systems (Javelin and TOW) employment to increase the probability of destroying targets and to increase survivability. Refer to ATP 3-21.8 and ATP 3-21.20, respectively, for additional information.

MUTUAL SUPPORT

E-11. Mutual support generates combat power by maximizing unit capabilities and minimizing limitations. Generally, missile systems are employed in pairs with overlapping primary and secondary sectors of fire. When one team or squad is suppressed or forced to displace, the other squad continues covering the assigned area. Missile systems achieve this effect by positioning far enough apart so that fires directed at one element can suppress only that element.

SECURITY

E-12. Missile systems, when possible, position where they can gain security from adjacent Infantry units for protection against possible attack by a dismounted enemy. Infantry units, when not collocate with missile systems, cover dismounted enemy avenues of approach into positions occupied by these systems. Infantry weapons company assault platoon's moving as a unit provide their own local security. During halts, the driver or loader dismounts to provide local security. Normally, Javelin teams move within the Infantry rifle platoon or are attached to a rifle squad.

FLANK ENGAGEMENTS

E-13. Missile systems, when possible, are positioned to engage enemy vehicles from the flank. Frontal engagements are less desirable because—

- An armored vehicle's protection is stronger to the flank.
- An armored vehicle's firepower and crew normally oriented to the front.
- An armored vehicle can immediately fire on the missile system's launch signature.
- An armored vehicle provides a larger target from the flank than it does from the front.

STANDOFF

E-14. Standoff is the difference between a friendly weapon's maximum effective range and an enemy weapon's maximum effective range. For example, the TOW missile's maximum range of 3750 meters provides it with a standoff advantage over modern, western-built tanks with maximum effective ranges of 2800 meters and older, non-modernized tanks with maximum effective ranges of 2000 meters. Despite this advantage, engaging enemy armored vehicles within the standoff range (2000 to 3750 meters) may not always be tactically feasible. The additional tracking time required to fire a TOW missile beyond 2000 meters increases the likelihood of gunner error. This possibility gives a frontal target more time to maneuver against the friendly position and provides a flanking target more time to reach cover. Also, the terrain may not provide the fields of fire to support standoff distance engagements.

Note. The T-55 (modernized), T-64B, T-72S, T-80, T-80U, and T-90 main battle tanks and the Soviet infantry fighting vehicle 3 can fire antitank guided missiles through their main gun tubes up to a range of 4000 meters, which means the TOW weapon system loses the standoff advantage against them. Some of the tank-launched antitank guided missiles can be fired while the vehicle is on the move. Also, threat armored vehicles can fire HE fragmentation rounds to suppress TOW gunners up to a range of 9750 meters.

COVER AND CONCEALMENT

E-15. Cover and concealment are critical to the survival of close-combat missile systems and must be analyzed with the mission variables of METT-TC. Missile system elements must take full advantage of all natural and man-made cover and concealment to effectively survive and overcome the following inherent weaknesses.

- Javelin and TOW systems expose crews during firing.
- TOW systems expose the gunner and crew during reloading.
- TOW systems long flight time, distinctive firing signature, time to track, and slow rate of fire.

E-16. When capable, the enemy commander will suppress likely friendly anti-armor positions with indirect and direct fires to include smoke. The commander will also have enemy units in overwatch positions whose mission is to detect and destroy friendly units. The Infantry rifle company commander therefore choose inconspicuous positions and avoids silhouetting vehicles or weapon systems against the skyline. Individual Javelin and tow crews avoid unnecessary movement, use all available concealment such as vegetation, terrain and buildings. They establish positions in defilade, expose nothing that shines, keep from altering familiar outlines, and maintain light and noises discipline during occupation.

MASS AND DEPTH

E-17. The Infantry company commander concentrates the effects of combat power at the most advantageous place and time to produce decisive results. Massing and arraying close-combat missile systems in-depth throughout the company's area of operation exploits the initiative to achieve decisive results. Integration of combat power allows for simultaneous and sequential operations to enable the massing of effects in-depth against the enemy.

EMPLOYMENT AS PART OF A COMBINED ARMS TEAM

E-18. Skillful integration of close-combat missile systems with Infantry squads and crew-served weapons, armored vehicles, combat engineers, indirect fire, close air support, and Army attack aviation improves combat effectiveness and the survivability of the team as a whole. Infantry rifle squads provide local security and engage enemy Infantry moving along covered and concealed routes. Missile systems support maneuver of tanks and Infantry fighting vehicles by destroying the enemy's lightly armored vehicles and crew-served weapons at long range. Tanks and Infantry fighting vehicles are then allowed to engage enemy forces with the freedom to move where their fires will be most effective. Combat engineers shape the battlefield, creating and reinforcing obstacles that hold the enemy in position longer or force the enemy to take more exposed routes, allowing missile systems to have more time to engage and destroy them. Artillery and mortar fires suppress enemy counterfire and separate enemy Infantry from accompanying armored vehicles, and thus becoming more vulnerable to destruction by concealed missile systems within the rifle company.

E-19. When employing missile systems as part of a combined arms team, the Infantry company commander and subordinate leaders avoid conspicuous terrain and disperse weapons laterally and in-depth so that no single enemy weapon can suppress two elements. They disperse assault platoon (TOW) squads to reduce casualties and equipment damage that could result from enemy mortar and artillery fires. (See figure E-3.) These same considerations for missile systems employment during combine arms operations apply to route selection and movement prior to and during operations.

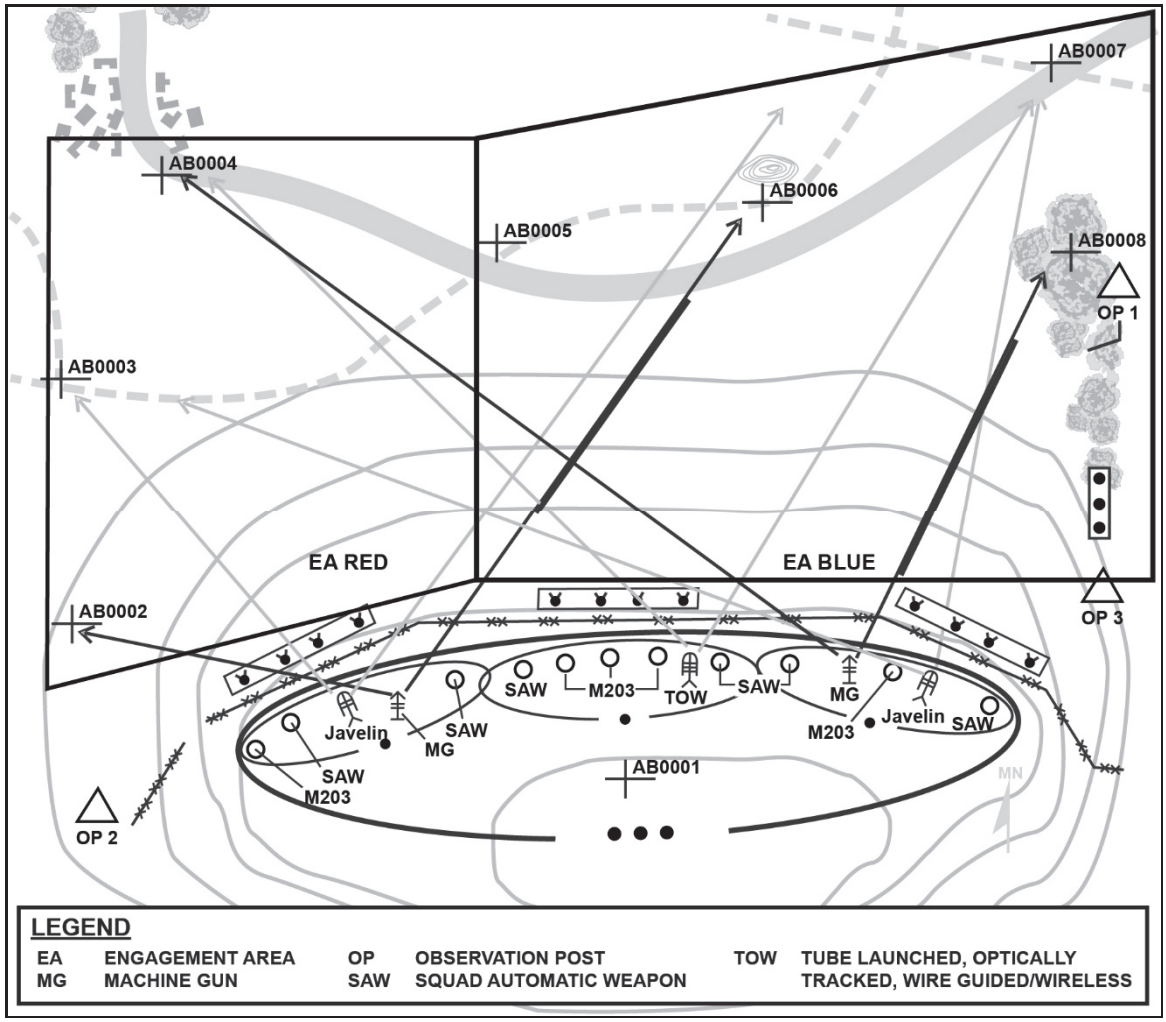

Figure E-3. Javelin and TOW employment as part of a combined arms team

E-20. The employment considerations as part of a combined arms team, as address above, are key to the success of the Infantry rifle company regardless of which element of decisive action (offense, defense, or stability) currently dominants. In offense, the commander determines routes where cover and concealment are good, identifies areas along the approach(s) to the objective where cover and concealment are poor, considers the use obscurants, or conducts missions in limited visibility to provide concealment. In the defense, the commander focuses on locations with good fields of fire and determines how the enemy can use the available cover and concealment. The commander looks at it from the enemy commander's point of view, both in daylight and at night. During company operations in support of stability tasks, the commander uses Javelin and TOW optical and target-acquisition systems to augment observation during operations employing more restrictive rules of engagement.

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Appendix F

Armored, Stryker, and Mounted Employment

Throughout history, success in battle has gone to the commander who can build and effectively fight combat organizations with the right blend of mobility, firepower, and protection. Dependent on the mission variables of METT-TC, the Infantry rifle company may be tasked organized with armored (tank and BFV) or Stryker (Infantry carrier vehicle) elements, or be tasked organized within the ABCT or SBCT. The tactical situation in these cases determine the mixture and command relationship (attached versus operational control). In a different situation the Infantry rifle company commander might have to conduct mounted operations in various environments to increase the company's tactical mobility, or to increase the company's firepower or protection.

ARMORED AND STRYKER VEHICLES

F-1. The Infantry rifle company within the Infantry battalion can be task-organized as part of, or with elements of an ABCT and SBCT. To employ any unit effectively, commanders and subordinate leaders must understand the specific capabilities and limitations of the armored or Stryker force and its equipment. The most important considerations for the Infantry rifle commander are an appreciation for the differences in the perspective, with which the force views the battlefield, and how the Infantry force communicates effectively with the armor or Stryker force. Most armored and Stryker vehicles are equipped with the same types of radios employed by an Infantry force but only leaders' combat vehicles have more than one radio. Careful consideration must be given to how Infantry forces communicate with the armored or Stryker force. (Refer to ATP 3-21.8 (BFV and Stryker) and ATP 3-20.15 (tank) for additional information on combat vehicle characteristics and capabilities.)

TANKS

F-2. Tanks provide rapid mobility combined with excellent protection and highly lethal, accurate fires. They are generally more effective in open terrain with extended fields of fire. However, they can be very effective in restricted terrain, such as in urban terrain, when combined with Infantry forces. The following paragraphs address the capabilities, limitations, fire power, and protection of the tank.

Capabilities

F-3. The tank's mobility comes from its capability to move at high speed both on and off road. The ability to cross ditches, ford streams, and shallow rivers and to push through small trees, vegetation, and limited obstructions allows effective movement in various types of terrain.

Limitations

F-4. The tank requires Infantry forces for close in and rear security in restricted and urban terrain. Tanks consume large quantities of fuel. The tank requires dedicated Class III sustainment, most often from the tank's parent battalion, if missions will exceed eight hours. Tanks are noisy and must be started periodically in cold weather or when using the thermal nightsight and radios to ensure the batteries stay charged. The noise, smoke, and dust generated by tanks make it difficult for the Infantry to capitalize on stealth to achieve surprise. Tanks cannot cross bodies of water deeper than four feet without deep water fording kits or bridging equipment. When fighting with the hatches closed, tank crew visibility in the immediate vicinity of the

vehicle is severely limited. This presents an accident and fratricide risk to Infantry operating in the immediate vicinity of the tank. Infantry Soldiers must take precautions when operating in close proximity to tanks.

Firepower

F-5. The tank's main gun is extremely accurate and lethal at ranges out to 2500 meters. Tanks with stabilized main guns can fire effectively even when moving at high speeds cross-country. The tank is the best antitank weapon on the battlefield. The various machine guns (tank commander's caliber .50 and 7.62-mm coax, and the loader's 7.62-mm machine gun provide a high volume of supporting fires for the Infantry. The target-acquisition capabilities of the tank exceed the capability of all systems in the Infantry battalion. The thermal sight provides a significant capability for observation, and R&S. It can also be used during the day to identify heat sources (personnel and vehicles) even through light vegetation. The laser range finder provides an increased capability for the Infantry force to establish fire control measures, such as trigger lines and target reference points (TRPs), and determine exact locations. The normal, basic load for the tank's main gun is armor-piercing discarding SABOT antitank, high-explosive antitank, and multipurpose antitank (MPAT) rounds. Two other rounds available are an obstacle-reducing round and a canister antipersonnel round. The armor-piercing discarding SABOT round presents a safety problem when fired over the heads of exposed Infantrymen due to the discarded SABOT petals. (See figure F-1 on page F-4.) Sustainment support for Armor units is usually provided when these units are detached from their parent combined arms battalion (see ATP 3-90.5) of the ABCT.

Protection

F-6. Generally, the tank armor provides excellent protection to the crew. Across the frontal 60-degree arc, the tank is impervious to all weapons except heavy antitank missiles or guns, and the main gun on enemy tanks. When fighting with the hatches closed, the crew is impervious to all small arms fire, artillery rounds (except a direct hit), and antipersonnel mines. The tank's smoke grenade launcher and on-board smoke generator provide rapid concealment from all but thermal observation. However, the tank is also vulnerable to lighter antitank weapons from the flanks, top, and rear. The top is especially vulnerable to precision-guided munitions (artillery or air delivered). Antitank mines can also destroy and disable the vehicle. When fighting with hatches closed, the tank crew's ability to see, acquire, and engage targets (especially close-in Infantry) is greatly reduced.

BRADLEY FIGHTING VEHICLE

F-7. The BFV provides good protection and mobility combined with excellent firepower. It operates best on the same terrain as the tank; however, its reduced protection (when compared to the tank) is a major employment consideration. The following paragraphs address the capabilities, limitations, firepower, and protection of the BFV. (Refer to ATP 3-21.8 for additional information.)

Capabilities

F-8. The mobility of the BFV is comparable to the tank. In addition to the three-Soldier crew, the vehicle is designed to carry six to seven (depending on equipment load) additional Infantrymen.

Limitations

F-9. The BFV uses a lot of fuel, is louder than the tank, and must be started periodically in cold weather or when using the thermal nightsight and radios to ensure the batteries stay charged. The noise, smoke, and dust generated by armored forces make it difficult for the Infantry to capitalize on their ability to move with stealth and avoid detection when moving on the same approach.

Firepower

F-10. The primary weapon on the BFV is the 25-mm chain gun that fires two versions of armor piercing fin stabilized discarding SABOT with tracer and high explosive incendiary with tracer (HEI T). This weapon is extremely accurate and lethal against lightly armored vehicles, bunkers, trench lines, and personnel at ranges out to 3000 meters. The stabilized gun allows effective fires even when moving cross-country. The tube-

launched, optically-tracked, wire guided/wireless guided (TOW) provides an effective weapon for destroying enemy tanks or other point targets at ranges to 3750 meters. The 7.62-mm coax provides a high volume of suppressive fires for self-defense and supporting fires for the Infantry at ranges to 900 meters (in some cases the coax can engage targets past 900 meters). The combination of the stabilized turret, thermal sight, high volume of fire, and mix of weapons and ammunition (TOW, 25 mm, and 7.62 mm), makes the BFV an excellent suppression asset supporting Infantry assaults. The target-acquisition capabilities of the BFV exceeds that of the other systems in the Infantry battalion. The thermal sight provides a significant capability for observation and reconnaissance. It can also be used during the day to identify heat sources (personnel and vehicles) even through light vegetation. However, the resupply of 25-mm ammunition is generally beyond the capability of the Infantry battalion and normally requires additional sustainment support from the combined arms battalion (see ATP 3-90.5) of the ABCT.

Protection

F-11. Overall, the BFV provides good protection. When fighting with the hatches closed, the crew is well protected from small-arms fire, fragmentation munitions, and antipersonnel mines. The BFV smoke-grenade launcher provides rapid concealment from all but thermal observation. Though the BFV retains the ability to produce on board smoke, this feature is seldom used, because the JP-8 fuel does not produce billowing smoke like diesel fuel. Second, smoke reveals the vehicle's exact location to the enemy. The vehicle is also vulnerable from all directions to any antitank weapons and especially enemy tanks. Antitank mines can destroy or at least disable the vehicle. When the crew is operating the vehicle with the hatches open, they are vulnerable to small-arms fire.

STRYKER INFANTRY CARRIER VEHICLE

F-12. The Stryker family of vehicles meet the requirements of key battlefield operations and warfighting functions. In addition to the ICV, vehicles are designed for mission command, transport, reconnaissance, fire support, mortars, antitank guided missiles or mobile guns, engineers, medical support, and CBRN reconnaissance (see ATP 3-21.21 and FM 3-96). This section focuses primarily on the Stryker ICV and selected weapons systems. The following paragraphs address the capabilities, limitations, firepower, and protection of the Stryker ICV.

Capabilities

F-13. The Stryker family of vehicles includes the ICV, a fully mobile system that provides protected transport for an Infantry squad and direct fire support during dismounted assault. The ICV carries a nine-man rifle squad plus a two-Soldier crew (vehicle commander and driver) that operates the vehicle; or a five-Soldier weapons squad. General design characteristics and features include— air-transportable, four to eight wheel drive, remote weapon station, driver vision enhancer, commander periscopes, and thermal imager display with video camera, and reduced acoustic signature. Under optimal conditions the top speed is over 60 mph and range over 300 miles.

Limitations

F-14. The Stryker lacks shoot-on-the-move capability. Also, due to its air transport weight and space restrictions, it might not roll off fully fueled, with ammunition, or with add-on, retrofitted anti-armor protection. Off-road, the Stryker must operate at greatly reduced speeds. In urban terrain, their large turning radius can affect their agility.

Firepower

F-15. The ICV local defensive armament consists of a remote weapon station that mounts either an M2 50 caliber machine gun with 2000 rounds stowed ammunition, or the MK 19 40-mm grenade launcher with 430 rounds stowed ammunition, and four smoke grenade launchers. Antitank armament includes the mobile gun system M68A1 105-mm cannon and the antitank guided missile system employing the elevated TOW 2B. The mortar carrier gives the Stryker company very responsive, high-angle, indirect fire using either the 120-mm or 60-mm mortars. However, the Stryker rifle platoon ICV has limited onboard armament that can

only defeat enemy thin-skinned vehicles and dismounted troops. Also, it can neither suppress nor kill armored vehicles or tanks. Nor does it have a laser range finder or gun stabilizer, of which would enhance the Stryker's lethality.

Protection

F-16. The ICV standard armor provides all-round protection against artillery airburst fragmentation and up to medium caliber ballistics projectiles. Add-on reactive armor and slatted/ bar armor kits can be installed to provide enhanced protection. Use of CBRN detection packages and individual crew respirators increases survivability. However, although it bridges the gap between the armored and Infantry forces from the IBCT, Stryker armor cannot withstand engagements by tanks, heavy assault weapons, or other anti-armor weapons.

SAFETY

F-17. Infantry company personnel may not be familiar with the hazards that may arise during missions with tanks, BFVs, and other armored vehicles. The most obvious of these include the dangers associated with main-gun fire and the inability of armored vehicle crews to see people and objects near their vehicles. Leaders of mounted and dismounted units alike must ensure that their troops understand the following safety points.

Discarding Sabot

F-18. Tank 120-mm sabot rounds and 25-mm BFV rounds discard stabilizing petals when fired, posing a downrange hazard for Infantry Soldiers. The aluminum petals of the tank rounds are discarded in an area extending 300 meters to the left and right of the gun target line out to a range of 1300 meters. (See figure F-1.) Sabot petals create a hazard area extending 70 meters on each side of the gun target line, out to a range of one kilometer (See figure F-2 for the Stryker family of vehicles, mobile gun system.) The danger zone for plastic debris from BFV rounds extends 60 degrees to the left and right of the gun-target line, and out to 100 meters from the vehicle. (See figure F-3 on page F-6.) Infantry Soldiers should not be in or near the direct line of fire of the tank main gun or BFV cannon unless they are under adequate overhead cover.

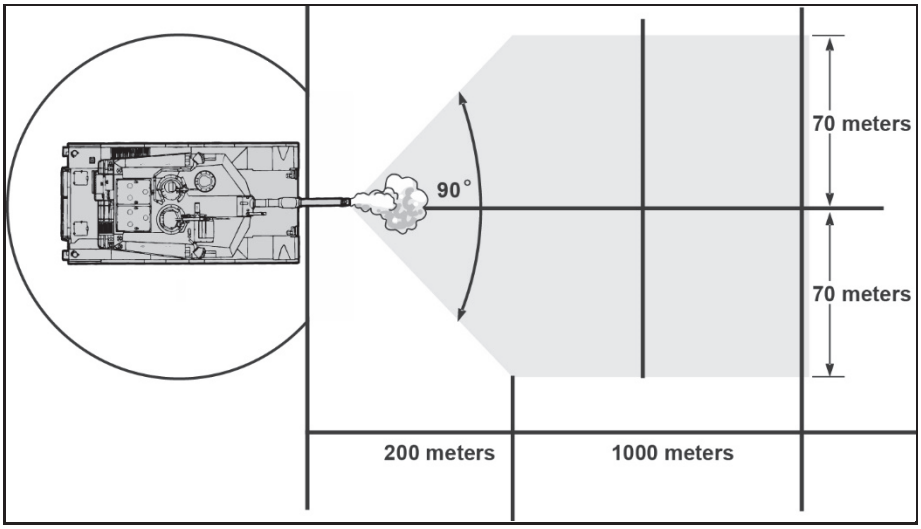

Figure F-1. Abrams tank danger zone

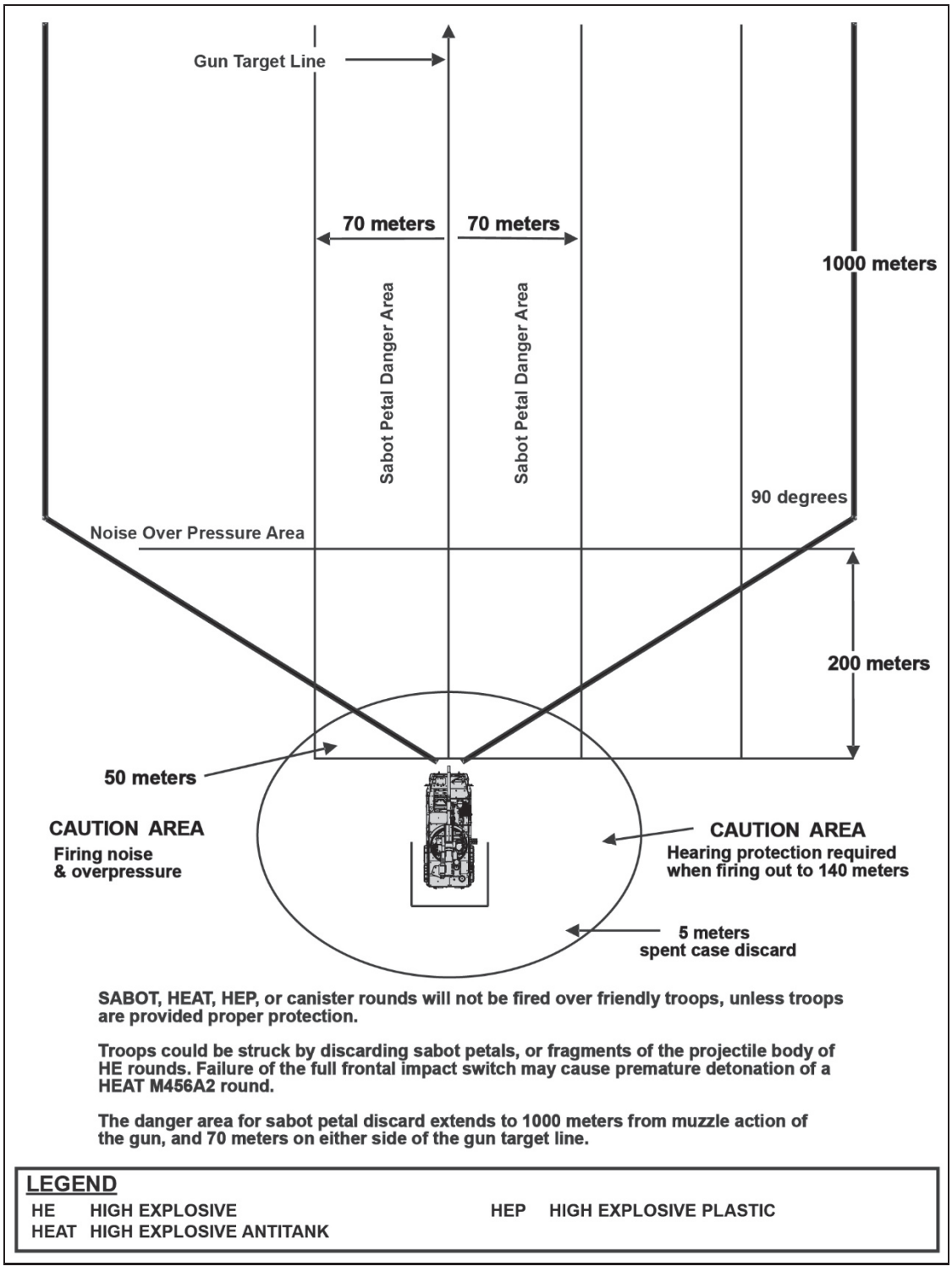

Figure F-2. Mobile gun system danger zone

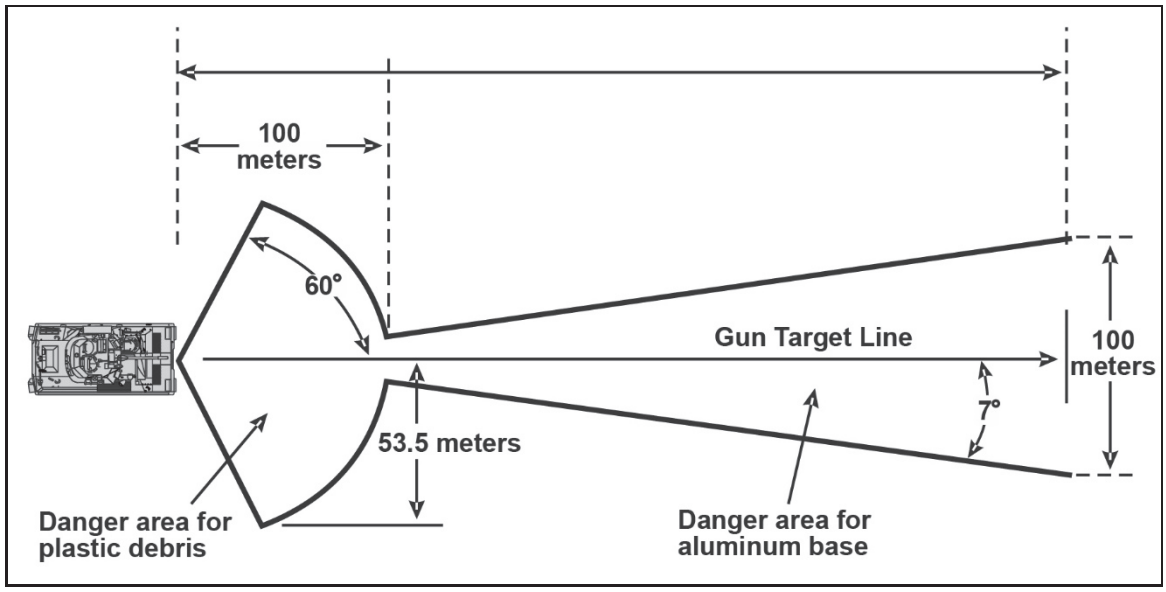

Figure F-3. Bradley fighting vehicle danger zone

F-19. Tank main guns create noise in excess of 140 decibels. Repeated exposure to this level of noise can cause severe hearing loss and even deafness. In addition, dangerous noise levels may extend more than 600 meters from the tank. Single-layer hearing protection, such as earplugs, allows Infantrymen to work within 25 meters of the side or rear of the tank without significant hazard.

Ground Movement Hazards

F-20. Crewmembers on combat vehicles have limited abilities to see anyone on the ground to the side or rear of the vehicle. As a result, vehicle crews and dismounted Infantry Soldiers share responsibility for avoiding the hazards this may create. Infantry Soldiers must maintain a safe distance from heavy vehicles at all times. In addition, when they work close to heavy vehicles, Infantry Soldiers must ensure the vehicle commander knows their location at all times, by establishing communication.

Note. The Abrams tank is deceptively quiet and may be difficult for mounted Infantry Soldiers to hear as they approach. As noted, vehicle crews and Infantry Soldiers share the responsibility of eliminating potential dangers in this situation.

Abrams Tank Exhaust Plume Hazard

F-21. Abrams tanks have an extremely hot exhaust plume exiting from the rear of the tank and angles downward. This exhaust is hot enough to burn skin and clothing. Infantry Soldiers should avoid the rear exhaust of the Abrams tank.

TOW Missile System

F-22. The TOW missile system can be employed on the BFV, the armament carrier high mobility multi-purpose wheeled vehicle (HMMWV), and Stryker. The system has a dangerous area extending 75 meters to the rear of the vehicle in a 90-degree “cone.” The area is divided into a 50-meter danger zone and a 25-meter caution zone. (See figure F-4.) In the 50-meter zone, serious casualties or fatalities are likely to occur from the blast and flying debris. Soldiers are safe in the 25-meter zone, provided they do not face the aft end of the launcher.

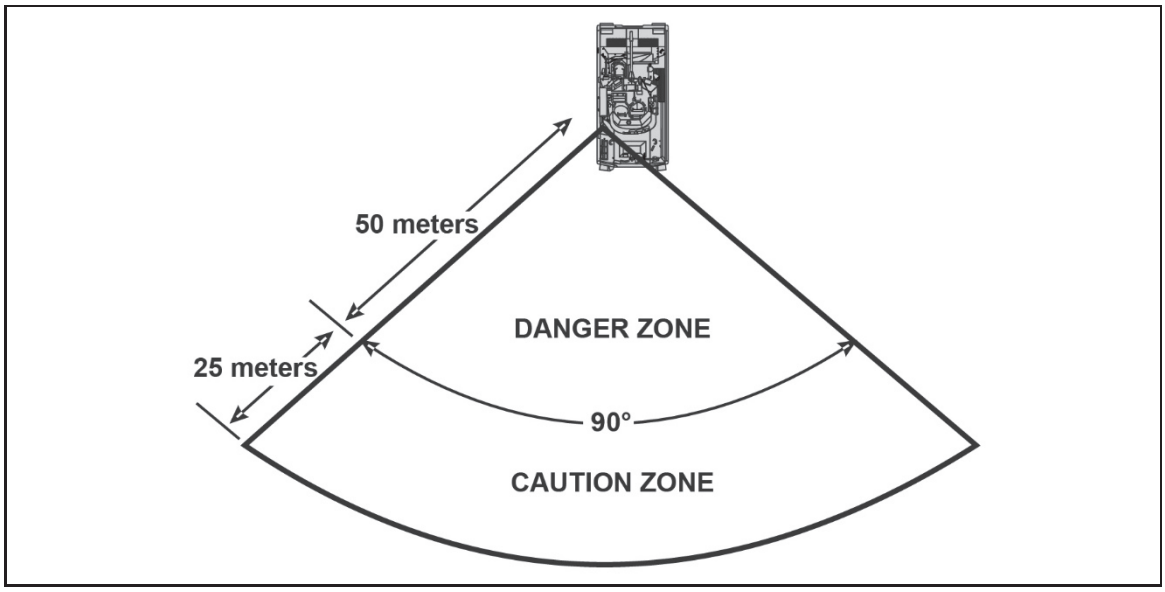

Figure F-4. Bradley fighting vehicle TOW backblast danger zone

LIGHT WHEELED VEHICLES

F-23. Two major considerations for employing light wheeled vehicles during tactical missions are first, the risks associated with the reduced protection and firepower of more heavily armored and armed systems; and second, the benefits of vehicle speed and maneuverability, crew observation and agility, and weapon engagement reaction times. When employed the commander balances these risks and benefits to build an effective Infantry force with the right blend of mobility, firepower, and protection.

VEHICLE CONSIDERATIONS AND CHARACTERISTICS

F-24. The balance between mobility, firepower, and protection is critical to the mission success of the mounted Infantry force. The following paragraphs address vehicle considerations and characteristics for effectively fighting mounted Infantry formations.

Protection

F-25. Protection is irrevocably linked to mission success. Consequently, protection must always be an important consideration in the planning, preparation, and execution of missions that employ a lightly armored mounted Infantry force. The balance between the protection of vehicles and crews, observation, and the employment of weapons is critical. Normally, heavily armored wheeled vehicles, such as the up-armored HMMWV, severely limit crew and passenger observation in restrictive and urban terrain. They can also limit weapons employment at close ranges. Rocket propelled grenades and IEDs can defeat many armored vehicles, and will likely defeat any wheeled vehicle at the point of detonation, with or without an armor package. At times, insurgent enemy forces target vehicles with poor protection, because they seem easier to destroy and less likely to respond effectively. Commanders must analyze enemy trends and events in their area of operation before deciding on the appropriate levels of protection versus offensive capabilities and mission demands. Other considerations might include—

- Can the vehicle suspension support additional armor and still carry the payload?
- Can the vehicle crew and passengers provide all-round security for themselves?
- Can the vehicle crew secure itself if the passengers dismount?
- Will additional armor affect vehicle mobility over rough terrain or in restrictive urban areas?
- Can the vehicle crew and passengers quickly and safely mount or dismount? Can they do so under fire?

- If the vehicle has a turret-mounted weapon system, does the gunner have enough protection including their legs and lower body?
- How well does the vehicle protect against the primary enemy threats within the area of operation?
- While the gunner's upper body is protected, is the gunner's lower torso exposed through the middle of the vehicle.
- Can windows or other openings be screened to prevent items from being thrown into the vehicle?

F-26. A technique used in balancing protection is to install armored half doors rather than a full doors or no doors. Benefits include protection against either 5.56-mm or 7.62-mm rounds, depending on armor thickness; protection for crewmembers' legs, groins, and sides (areas not covered by conventional body armor); increased observation, mounting and dismounting capabilities and speed; the ability to effectively employ personal or crew-served weapons; and reduced vehicle weight. Limitations include less upper body protection for the vehicle crew than if fully armored doors and windows were installed. In the door-mounted and running board-mounted ammunition storage areas crews can sandbag all or portions of vehicles, or they can construct effective vehicle armor using on-hand or captured materials. This can include armor from destroyed friendly and enemy vehicles.

Firepower and Observation

F-27. In combination with previous protection considerations and characteristics, the following modifications can enhance the firepower and observation capabilities of the crew and on-board personnel:

- Consider removing any non-ballistic glass from vehicles.
- Install armor plates for crew-served weapons on roof-mounted gun rings.
- Consider adding armor beneath the gun ring to protect the gunner's lower torso.
- Consider constructing field-expedient roof mounts if operating vehicles without roof-mounted gun rings.
- Consider removing any unarmored vehicle roofs or cutting away sections of the vehicle roof not required to support roof-mounted gun rings.
- Remove all tarpaulins and bows to allow full visibility and security for the passengers if transporting troops in the cargo area of vehicles.
- Replace all conventional passenger and cargo area seating with outboard facing, center-mounted seats.
- Install seats from destroyed or disabled vehicles in the cargo areas of HMMWVs (BFV seats or HMMWV seats).

Communications

F-28. Vehicle crew communications is paramount to smooth vehicle operation. The commander must consider how dismounts will communicate with the mounted or dismounted crew. Drivers and vehicle commanders can normally communicate by voice in most wheeled vehicles, but might not be able to do so if in contact. Passengers and gunners have a hard time communicating with the driver or vehicle commander under normal operating conditions, and most likely cannot do so during contact. Once passengers dismount, voice communications is nearly impossible. Commanders should consider the following:

- The driver, vehicle commander, and gunner (if applicable) are equipped with headset radios for internal communication.
- All passengers and dismounted elements have some form of effective internal communication with the crew while mounted and dismounted.

Crew and Passenger Designated Vehicle Positions

F-29. The company's tactical standard operating procedures (SOPs) typically dictates positions for the crew and passengers. The commander adjusts them as needed based on METT-TC. When moving to a tactical objective area, the commander employs principles similar to those used in load planning for air assaults. That is, based on the ground tactical plan, the commander assigns positions in addition to the crewmembers based on unit integrity, the bump plan, and the cross-leveling of personnel and equipment.

F-30. Commanders balance vehicle and crew survivability; vehicle weight and payload; the offensive capabilities of the crew and passengers; and their ability to quickly and efficiently mount and dismount the vehicle. Vehicle crews normally remain with the vehicles while passengers dismount. This allows them to operate the vehicles and any mounted weapon systems. The actual vehicle and crew manning configuration employed by the Infantry rifle company is dependent on the mission variables of METT-TC. Additional manning and seating considerations include—

- What types and mix of vehicles are available?
- Are the vehicles used primarily for transportation with the mission focused on dismounted actions?
- Does the commander anticipate using the vehicles' crew-served weapons as a base of fire or as a support-by-fire element?
- Will the vehicles have dedicated operators and crews, or will the Infantry platoon or company provide drivers and crews?
- Will the unit maintain team and squad integrity within vehicles and vehicle sections or will the unit dedicate an element to vehicle crews and maintain squad and team integrity only when dismounted?
- Will assistant gunners travel with their gunners in the same vehicle?
- Will the vehicles mount M2 or MK 19s, or will the Infantry platoon or company use it's organic, vehicle-mounted, automatic or crew-served weapons?
- Does the commander anticipate dismounting the crew-served or automatic weapons from the vehicles at the objective or if contact is made?
- Do the vehicles have roof-mounted gun rings designed to support crew-served weapons?

F-31. An armored HMMWV is not designed for quick-dismount as are the Stryker or BFV. Commanders should consider this when planning their use in the urban environment. All passengers in the cargo bed or rear of any vehicle must face outwards. Seats must be modified to allow for this. Each passenger sits facing outboard, which improves their observation and their ability to employ a personal or crew-served weapon. All-round security and observation—coupled with an aggressive crew and passenger security and weapons posture-is normally the biggest enemy deterrent.

VEHICLE EQUIPMENT LOAD PLANS

F-32. Vehicle commanders ensure that any externally stowed items are secured from theft and not a fire hazard. The vehicle external stowage is minimized to lessen the threat of vehicle fire or the restriction observation and fields of fire. Loose items stored inside the vehicle should be secured to prevent theft or becoming projectiles in the event of a mine or IED strike or a roll over. Vehicle commanders consider stowing mission essential flammable items inside the vehicle and behind armored portions of the vehicle while securing non–mission-essential and nonflammable items outside the vehicles. Other considerations follow:

- Lash pioneer tools and weapon tripods to the front hoods of vehicles.
- Extend weapons tripods before lashing them down; this eases employment.
- Use on-board ammunition storage containers such as 60-mm mortar ammunition cans to save the crew time in switching weapons.
- Carry complete spare wheel and tire assemblies rather than just spare tires to reduce the time needed to make repairs.
- Equip every vehicle or every other vehicle with wheeled vehicle tow bars, so that vehicles can be recovered and not require a driver in the towed vehicle.
- Emplace fire extinguishers in fixed positions inside the vehicle and positioned to protect the crew rather than the vehicle.
- Carry portable fire extinguishers to fight vehicle fires. (Never use a halon fire extinguisher inside the crew compartment.)

F-33. The company establishes load plan SOPs for sensitive items. Vehicle commanders account for ammunition and additional special equipment such as breach kits, demolitions, and first aid equipment. They should also account for any additional weapons, such as rifles, in case no automatic or crew-served weapons are required after dismounting.

MAINTENANCE

F-34. Vehicle maintenance is critical to mission accomplishment. Poorly maintained vehicles will fail. As they do so, the operating tempo for functional vehicles increases dramatically. Potential adverse effects can result in:

- Reduced cargo- or personnel-carrying capacity, which reduces the combat power in the field.
- Vehicles breaking down during operations require security and recovery vehicle operations.
- Increased maintenance requirements.

MINE RESISTANT AMBUSH PROTECTED VEHICLES

F-35. Since their fielding in 2007, mine resistant ambush protected (MRAP) vehicles have provided a significant increase in protection and boosted the confidence of Soldiers engaging the enemy. In many documented cases, Soldiers have survived attacks that would have otherwise completely destroyed another armored vehicle. This improvement in protection should not lead to overconfidence where needless chances are taken—the MRAP vehicle is not a "silver bullet." Units that successfully employ these vehicles against the enemy do so by understanding the vehicle's capabilities and limitations while integrating its protection with training to standard, detailed planning, smart tactics, and well-rehearsed drills.

F-36. The tactics, techniques, and procedures involved in employing MRAP vehicles are similar to those employed with existing vehicles, the aim of this section is to identify the basic capabilities and limitations of MRAP vehicles and how equipping the company with the vehicles may influence the planning and execution of tactical tasks. MRAP vehicle employ considerations follow:

VEHICLE ALLOCATIONS AND TRAINING

F-37. Given the inherent complex and uncertain nature of operations dominated by stability and that, the company's area of operation is generally large in nature. The MRAP vehicle is often a combat power enabler during the conduct of operations in support of stability. One method of allocating MRAPs is to equip the Infantry rifle company from equipment pools or prepositioned stocks. The scope of this equipping is based on the assigned mission, threat, and terrain found in the area of operations. Mine resistant ambush protected sets are maintained by the Army except when issued. The operational sets are intended to fully outfit an organization for combat missions whereas the training sets are sized to support individual and small unit collective training. Operational allocation will be dependent upon the mission variables of METT-TC within an operational environment.

Note. The MRAP training strategy is based on regional training locations having MRAP vehicles available for training. This allows flexibility for selective training use of MRAP variants for new equipment training, mobilization, and unit sustainment training at the regional predeployment training site prior to collective force-on-force training at training centers. The training strategy is supported by a mobile new equipment training team and reach-back field service representatives.

CATEGORIES

F-38. The acronym "MRAP" does not mean a specific vehicle. It is a generic term intended to apply to vehicles from different manufacturers that meet a common set of capabilities. There are several manufacturers, each providing unique variants of the MRAP vehicle. The four variants of MRAP vehicles are:

F-39. The MRAP all-terrain vehicle (M-ATV) is the smallest category of the MRAP family of vehicles and carries five Soldiers, including the gunner. It combines increased mobility with the current MRAP vehicle level of protection. It will support decisive action (offense, defense, and stability) in highly restricted rural, mountainous, and urban terrain.

F-40. Category (CAT) I MRAP vehicles are fire team-size vehicles designed to hold up to seven occupants, including the driver, vehicle commander, and gunner. CAT I MRAP vehicles provide units with a protected

maneuver capability in urban areas and other restricted terrain. They primarily serve as armored personnel carriers for fire teams and weapons carriers for medium and heavy machine guns. Reconnaissance units use CAT I MRAP vehicles to conduct mounted reconnaissance.

F-41. The CAT II MRAP vehicle is considered a multi-mission vehicle and provides units with protected transport for missions such as, convoy lead, troop transport, ambulance, and utility vehicle. Sapper and rifle squads use the CAT II MRAP vehicle for protected maneuver and movement when it is necessary to mass Soldiers rapidly for a mission such as a quick reaction force. The purpose-built armored ambulance used by medical evacuation squads conducting ground medical evacuation is a CAT II vehicle.

F-42. CAT III vehicles are equipped for mine and improvised explosive device clearance operations and explosive ordnance disposal. The vehicles transport no less than six personnel, five with additional equipment installed.

CAPABILITIES AND LIMITATIONS

F-43. The key to the successful employment of MRAPs is to understand their capabilities and limitations. They can operate under the all types of weather and terrain conditions and have limited off-road capability across firm soil and obstacles such as debris. Their effectiveness is increased through:

- Training.
- Planning.
- Correct tactical employment.
- Drills.

F-44. In general, MRAPs:

- Have increased ballistic survivability compared to the up-armored high mobility multipurpose wheeled vehicle.
- Operate safely on hard surfaces and most secondary roads.
- Have a 300-mile range, dependent on the variant and other factors.
- Require a bridge classification of 30 tons or greater.
- Are capable of operating on side slopes of up to 30 percent (16 degrees from horizontal).
- Have an objective gunner protection kit (OGPK) that mounts on the M-114 turret and can mount the M2 heavy machine gun, M240B medium machine gun, MK 19 40-mm grenade machine gun, and M249 SAW.
- Have blast-attenuating seats.
- Have additional blast mitigation provided by anti-spall liners and energy absorbing floor panels.
- Can survive a CBRN attack and subsequent decontamination with current fielded decontaminants.

F-45. The Common Remotely Operated Weapon Station is similar to the remote weapons system mounted on the Stryker. Its capabilities include—

- Remotely controlled from inside the vehicle.
- Stabilization.
- Optics with digital magnification and zoom capabilities.
- Forward looking infrared sight.
- Mounts the M2, MK 19, M240B, or the M249.

F-46. The MRAP has several limitations, many of which are due to the vehicles' weight and high center of gravity. The weight and center of gravity may cause—

- Limited maneuverability.
- Soft soil issues or sides of roads to collapse.
- Limited self-recovery and tow capability.
- Reduction in dismounted strength of vehicle crews.
- Blind spots and overall poor visibility.
- Overheating especially if towing another MRAP vehicle.

- Vehicle–mounted winch to fail.
- Tight turn difficulties.
- Reduced cross-country speeds.
- Limited fields of fire.
- Limited interior storage space.
- Difficulty exiting the vehicle in emergencies.

MANNING

F-47. The MRAP seating capacity is five passengers, including the gunner. The MRAP CAT I seating capacity is seven passengers, and the CAT II seating capacity is 11 passengers. Units may opt to make seat configuration adjustments based on mission, model, and manufacturer of the MRAP vehicle they are operating.

F-48. Figure F-5 illustrates an example of cross-loading a 39-man rifle platoon and a medic into eight MRAP CAT I vehicles. It leaves 17 open seats for other attachments such as the FO team, interpreter, dog team, and/or equipment. Modifications must be made to fit each unit's specific task organization, fielding, and mission.

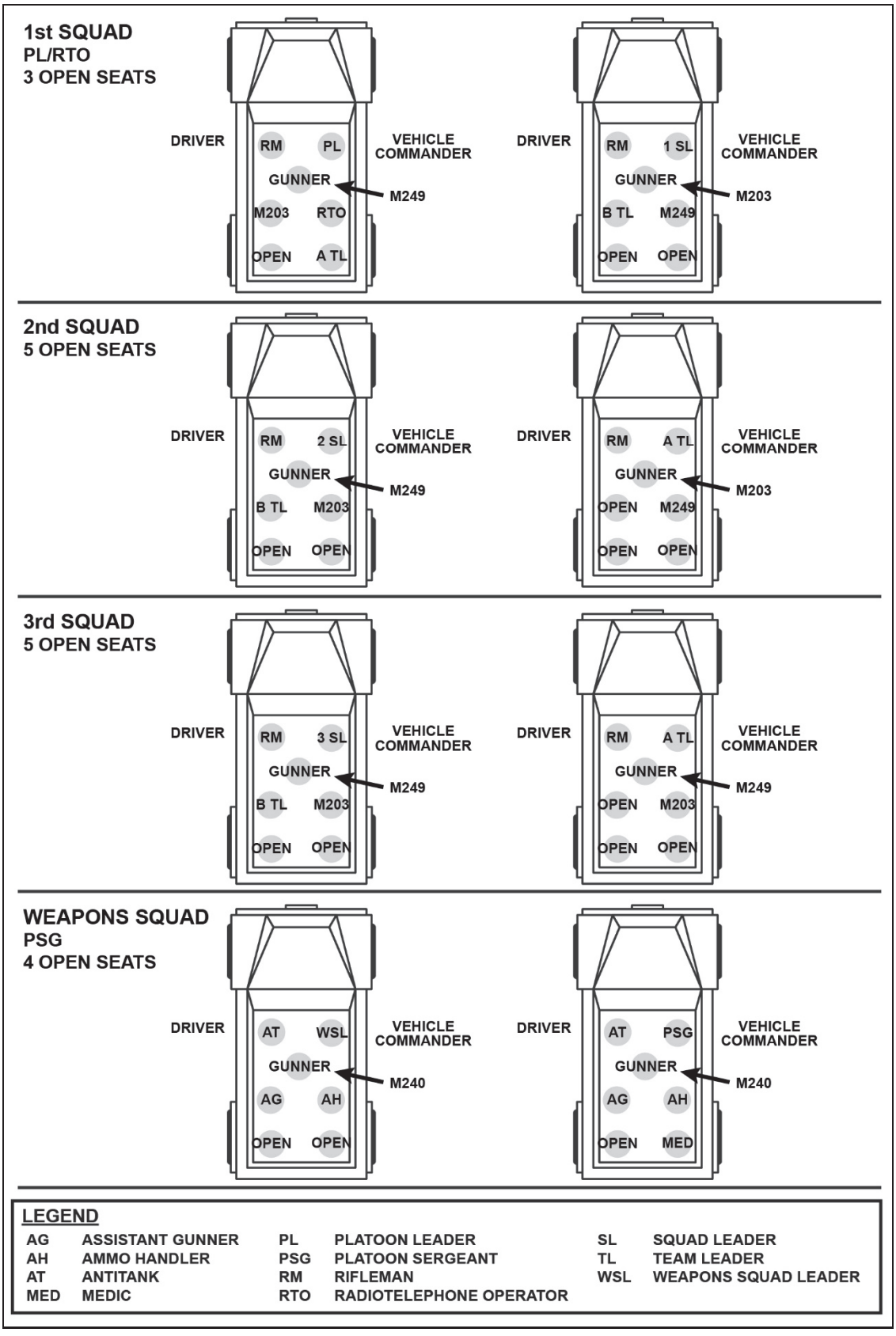

Figure F-5. MRAP vehicle loading of one Infantry rifle platoon, example

EMPLOYMENT OF MOUNTED PLATFORMS

F-49. The Infantry rifle company fights as part of a combined arms team, which often includes armored and Stryker elements. Armored and Stryker employment provide unique capabilities to the Infantry rifle company and must be considered during the planning and preparation. Keys to the employment of these mounted platforms include the following:

CAPABILITIES

F-50. Generally, armored and Stryker vehicles can contribute to the dismounted battle by—

- Providing suppressive fires and a mobile base of fire for dismounted Infantry.
- Using their stabilized gun systems (armored only) to provide accurate direct fires while moving.
- Assisting the Infantry in executing an assault with their speed and shock effect.
- Providing effective antitank fires.
- Providing limited mobility to the dismounted force.
- Using their technical assets to aid in target acquisition and ranging at long distances, day or night.
- Providing additional communication assets.
- Maneuvering rapidly to counter threats

LIMITATIONS

F-51. Armored and Stryker vehicles have the following limitations and vulnerabilities that affect their employment:

- Vulnerable to antitank guided missiles, guns, mines, tanks, and aircraft.
- Require daily resupply of petroleum, oil, and lubricant products in large quantities.
- Require extensive maintenance, skilled operators, and mechanics.
- Movement may be restricted by obstacles and soft ground.
- Observation restricted when buttoned-up.
- Restricted turret traverse in close terrain.
- Limited amount and type of ammunition.

COMBINED ARMS MISSIONS

F-52. Armored and Stryker elements are normally employed under the battalion's scheme of maneuver. They may work with the company to concentrate combat power, isolate enemy positions, or attack enemy base camps. They may also escort convoys through terrain occupied by enemy forces. Leaders must know what mounted and Infantry forces can do for each other. They must know how to communicate by radio, phone, and visual signals.

- Infantry help armored and Stryker forces by—
  - Finding, breaching, or marking antitank obstacles.
  - Detecting, destroying, or suppressing enemy antitank weapons.
  - Designating targets.
  - Protecting armored forces in close terrain.
- Armored and Stryker forces help Infantry by—
  - Leading Infantry in open terrain.
  - Providing a protected and fast-moving assault weapons system.
  - Suppressing and destroying enemy weapons, bunkers, and tanks.
  - Providing transportation when the situation permits.

Movement to Contact

F-53. The Infantry rifle company team uses standard movement techniques (traveling, traveling overwatch, and bounding overwatch). When conducting a movement to contact with armored and Stryker forces—

- Mounted forces may follow and provide overwatch for the Infantry rifle platoons in traveling or traveling overwatch at a distance determined by the terrain and visibility.
- Mounted forces may lead in traveling or traveling overwatch when speed is required and when in open terrain.
- Mounted forces normally use (platoon) bounding overwatch when they lead.
- Infantry units may ride with the overwatching mounted vehicle section to provide security at halts, and to clear danger areas when mounted forces lead.
- Mounted forces are normally part of the overwatch element when the unit conducts bounding overwatch.
- Vehicles, especially tanks, maybe the bounding element in open terrain.

Attacks

F-54. All attacks involving armored and Stryker forces and dismounted Infantry must be well-planned, thoroughly coordinated, and fully rehearsed. The communications procedures require special considerations to ensure mutual support and flexibility.

Attack on Converging Routes

F-55. In this method, the armored force and dismounted Infantry move on separate routes that meet on the objective. Armored forces may first support the Infantry by fire, then close on the objective in time to assault it with the Infantry (see figure F-6). This may require the Infantry to breach obstacles and destroy certain anti-armor systems to help the armored force reach the objective. Tanks are the only armored forces that should assault on to the objective unless the enemy has no anti-armor capability.

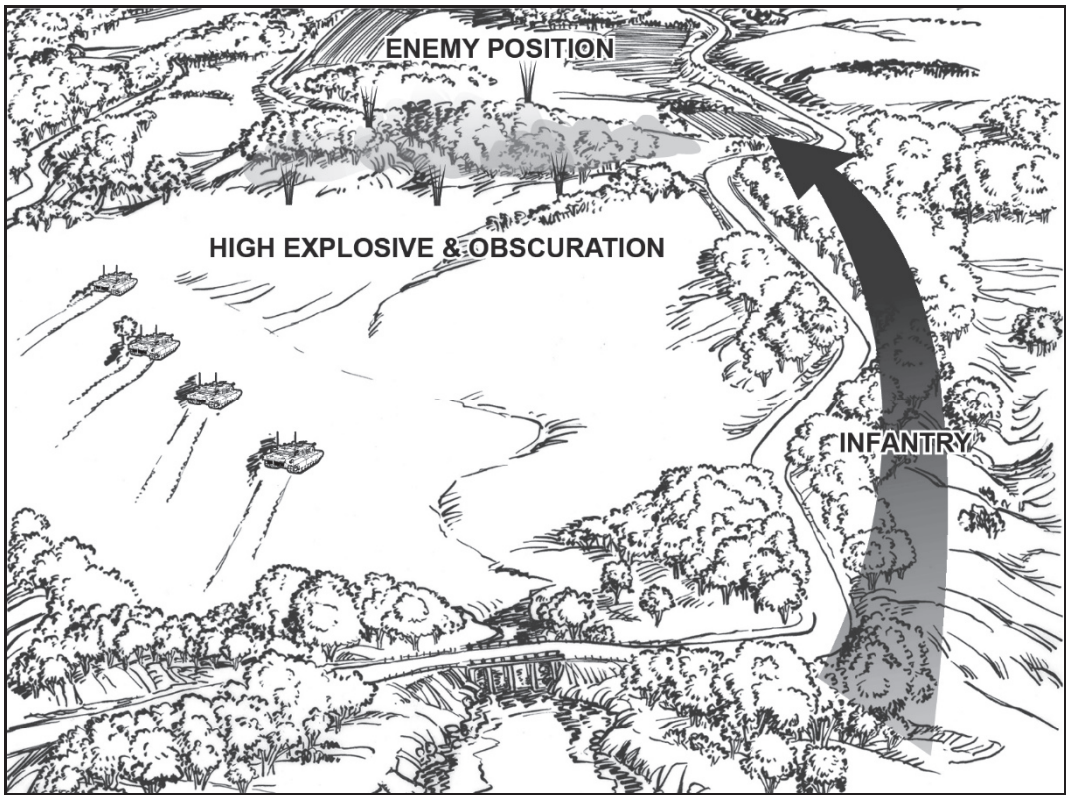

Figure F-6. Attacks along converging routes

Attack on Same Route

F-56. When mounted forces and dismounted Infantry attack on the same route, the two elements may move at the same speed or at different speeds. The two elements use the same speed when there are no good overwatch positions or when there is a need for close mutual support. This method should be avoided except in close terrain where mounted vehicles need close-in security and the Infantry require close support, such as moving in urban terrain. Otherwise, both the armored and Infantry are extremely vulnerable.

Mounted Force Support by Fire

F-57. This method is used when obstacles prevent the mounted force from closing on the objective. The mounted forces occupy positions where they can support the attacking dismounted Infantry (see figure F-7). As soon as the obstacles are breached or a suitable bypass is found, the mounted force rejoins the Infantry.

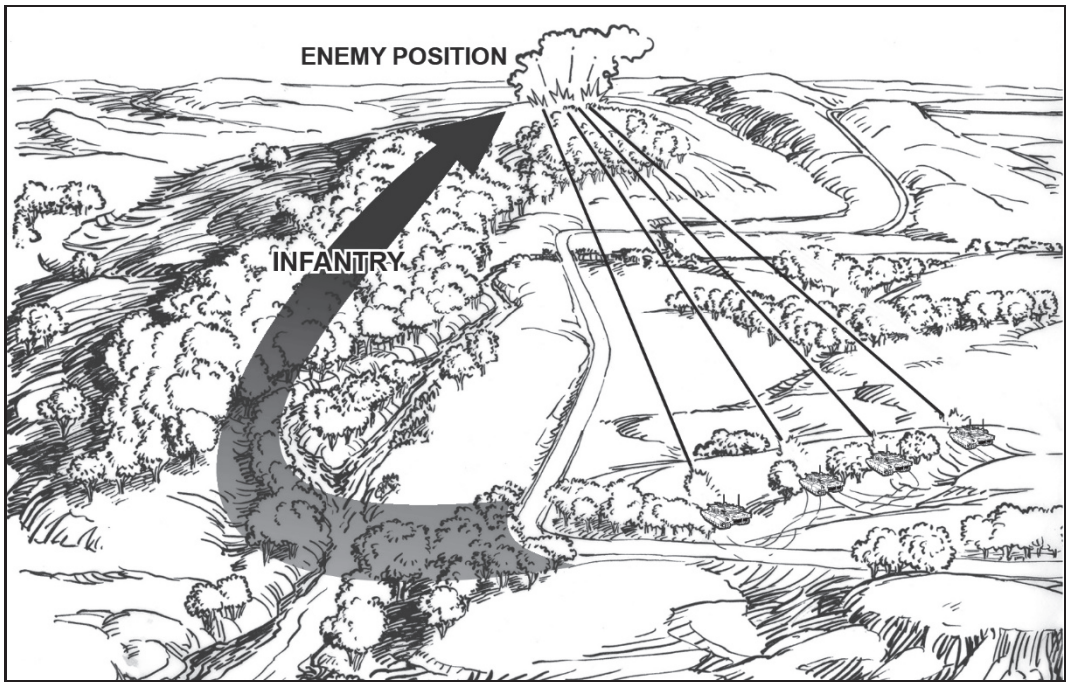

Figure F-7. Mounted forces support by fire

Consolidation and Reorganization

F-58. When a company team has seized an objective, the team consolidates. Either the company commander directs the mounted forces leader to position their vehicle in overwatch positions behind the Infantry so they are ready to move forwarded when needed, or they direct them to hull-down positions with the Infantry to block armor counterattack approaches. If the withdrawing enemy can be seen and is still in range, the mounted forces continue to fire. Throughout the attack, the team reorganizes and replaces any lost leaders.

Area Defense or Mobile Defense

F-59. Mounted forces add strength, depth, and mobility to the defense. The company commander may initially position them forward to engage the enemy at long ranges and then move them back to cover armor approaches. However, the commander must move the vehicles where needed to concentrate fire against an enemy attack. (See chapter 3, area defense illustration for an example.) The commander should also use them to add strength to the counterattack force.

F-60. The commander may temporarily position their mounted forces (with Infantry for security) forward of the company's defensive positions. When so deployed, they can force the enemy to deploy early. This forward deployment may deceive the enemy as to the location of the company's defensive positions. As soon

as the enemy is close enough to threaten them, the mounted force must withdraw to their defensive positions. Smoke might be used to screen their withdrawal.

F-61. There are two basic ways for the defending Infantry company commander to employ mounted forces. In both, the commander selects their general positions and sectors of fire. The mounted forces leader advises the commander and selects the exact positions and controls fire and movement.

F-62. The first method is to integrate the mounted force throughout the company defense, both laterally and in depth, to cover armor assembly areas (see figure F-8 on page F-17). This might be done when there are only a few good firing positions or when the terrain restricts fast vehicle movement. Each vehicle should have mutual support with at least one other vehicle. The mounted force remains under control of the mounted force leader.

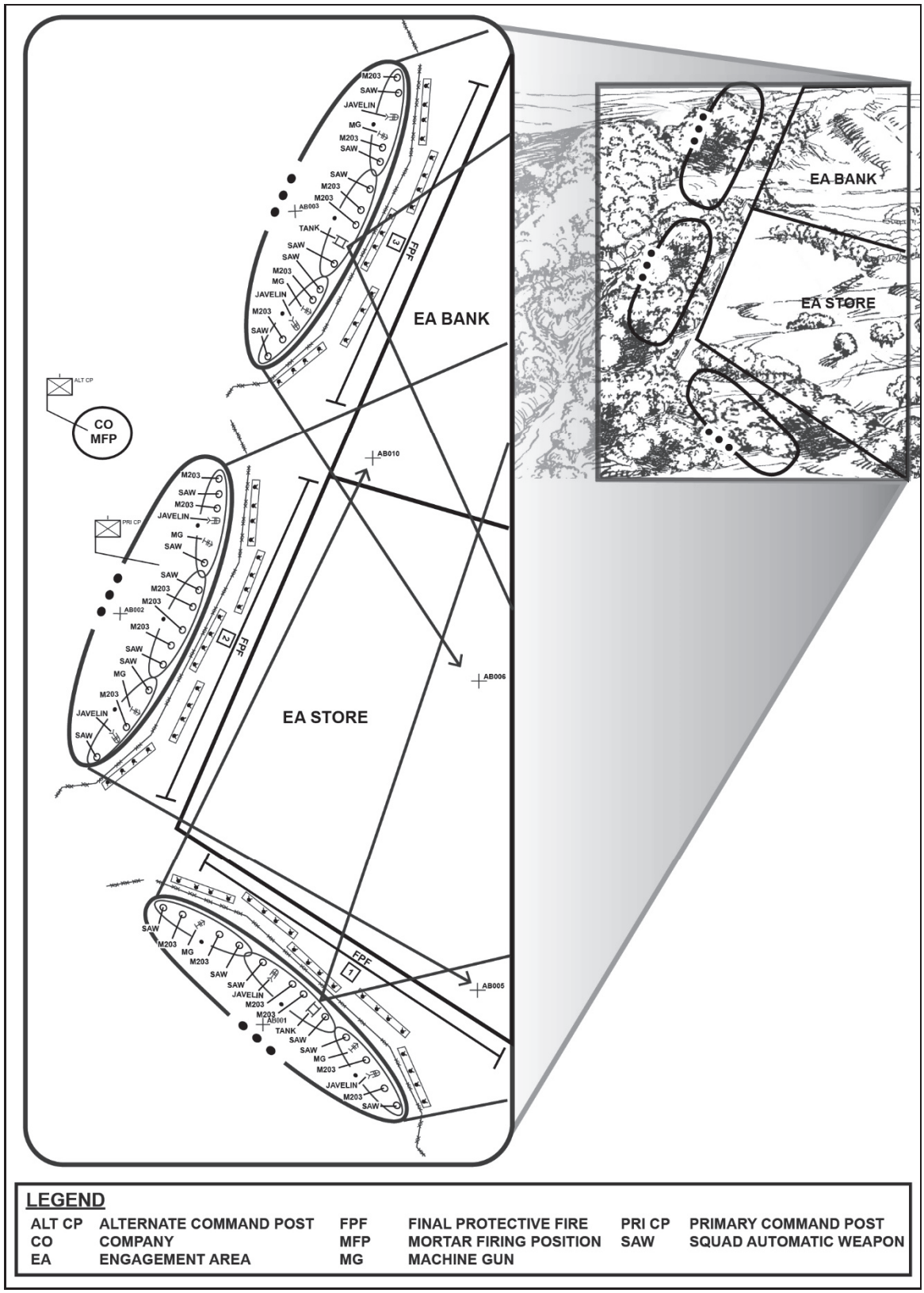

Figure F-8. Mounted forces integrated throughout position

F-63. The second method of employing the mounted force is to hold them in a position behind the forward Infantry platoons (see figure F-9). This might be done when there are several armor assembly areas into the company area of operations. However, there must, be sufficient vehicle firing positions and routes to them. When the enemy appears, the mounted force moves to forward or flank firing positions. This allows quick concentration of the vehicles at a critical point to repel an attack. The commander should determine their decision points and criteria for initiating the mounted unit's move. The leader of the mounted unit must know when to move in case communication is not possible.

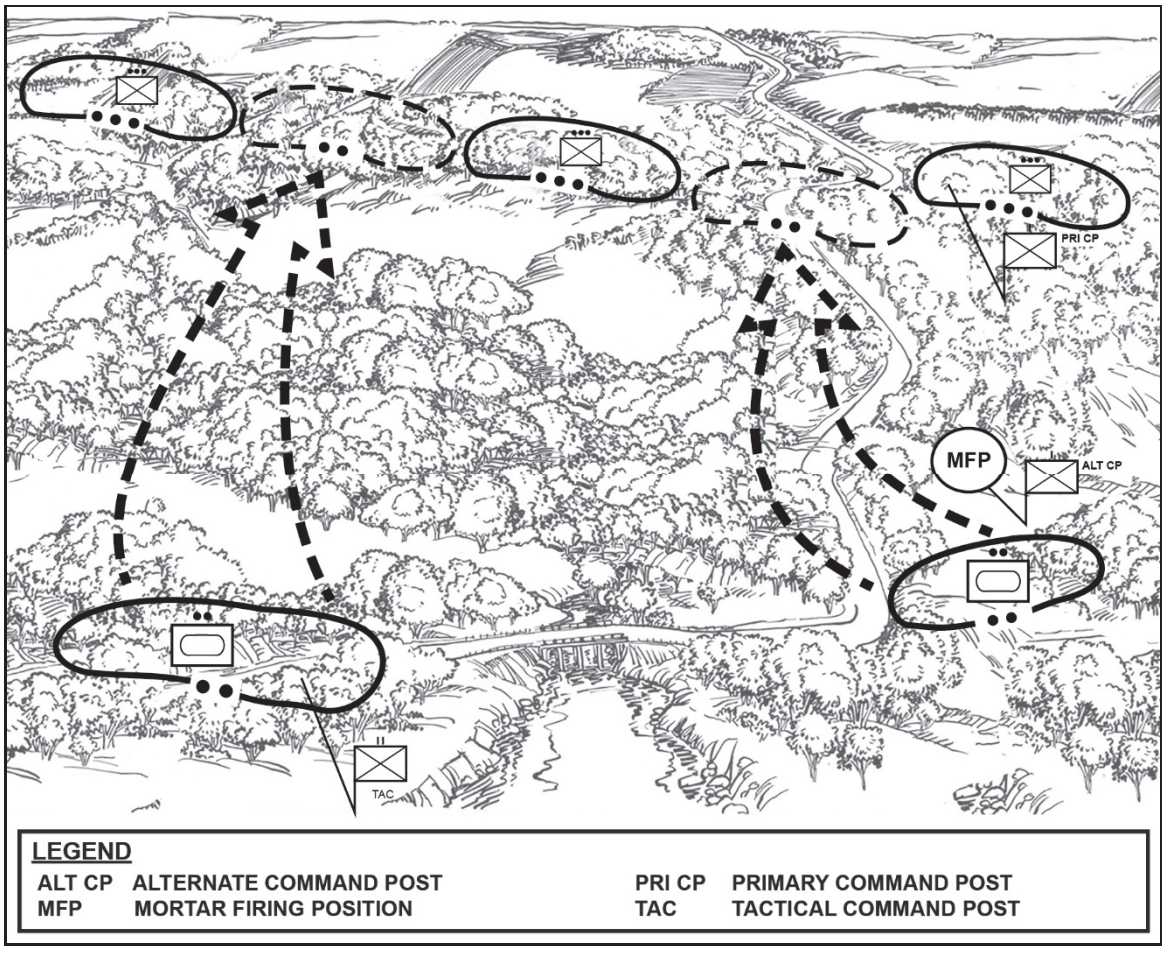

Figure F-9. Mounted force positioned as a counterattack force

F-64. With either employment method, the mounted force leader selects covered (hull-down), primary, alternate, subsequent, and supplementary firing positions for each vehicle. If covered firing positions are not available, they may assign them hide positions.

Retrograde

F-65. During a retrograde, a mounted force might be used to support the Infantry when the terrain or the enemy force makes it primarily an Infantry fight. In other situations, the Infantry may protect the mounted unit or the two might be employed separately on different assembly areas. When fighting together on the same assembly area, the Infantry may first disengage to a nearby covered position. The mounted force can then disengage and move to overwatch positions where they continue to cover the Infantry's withdrawal. If the retrograde mission is conducted when visibility is poor, some Infantry may stay with the mounted unit to provide security if they do not have their own Infantry.

ADDITIONAL EMPLOYMENT CONSIDERATIONS

F-66. During combined arms operations, additional employment considerations for mounted and dismounted forces include:

INFANTRY MOUNTED ON TANKS

F-67. On occasion there may be times when tanks and Infantry must move quickly from one place to another to accomplish their mission. In such cases (and providing that there is little likelihood of making enemy contact) Soldiers may ride on the turret and decks of the tank.

F-68. Riding on the outside of the tanks is hazardous. Infantry should only ride on tanks when the need for speed is great. By riding on the tank, the Infantry yields its best protection–the ability to move with stealth and to avoid detection. Soldiers on tanks are vulnerable to all types of fire. Also, Soldiers must watch out for obstacles, which could cause the tanks to turn suddenly; for tree limbs, which could knock the limbs off; and for the traverse of the turret gun, which could also knock them off.

F-69. The primary advantage the Infantry gains is speed of movement and increased haul capability. Other considerations when riding on the outside of vehicles include:

- Prior to the mission, prepare and rehearse contingency plans for chance contact or danger areas.
- Avoid riding on the lead tank of a section or platoon in case of contact.
- Position the Infantry leaders with the tank unit leaders – to the right of the turret.
- Infantry should dismount and clear choke points or other danger areas.
- Assign air guards and areas of responsibility for observation.
- Ensure all personnel remain alert and are prepared to dismount immediately.
- When in contact, vehicles will immediately react as required for their own protection and mounted Infantry are responsible for their own safety.
- Rehearse a rapid dismount of the vehicle.
- Consider putting rucksacks, ammunition, and other equipment on the vehicles; Infantry moves on a separate avenue of approach.
- Riding on tanks reduces tank maneuverability, may restrict firepower, and may injure mounted Infantrymen if the tank must slew its turret to return fire on a target.
- Stay out of the danger areas of the cannon blast and peddles from discarding sabot.

COMMUNICATIONS

F-70. Before a mission, Infantry and mounted unit leaders coordinate communications means. This includes the use of radios, phones, and visual signals such as arm-and-hand signals, panels, lights, flags, and pyrotechnics.

- The Abrams tank has external telephones at the right rear of the vehicle.
- The Infantry Soldier can run communication wire to the vehicle commander through the turret on the tank.
- There are WD-1 wire hook-ups for external communications on some versions of the BFV.
- There are WD-1 wire hook-ups for external communications on all variants of the Stryker vehicles.

PATROLLING IN URBAN ENVIRONMENTS

F-71. Infantry companies and platoons may conduct mounted patrols in urban terrain. The basic planning considerations for both mounted and dismounted patrolling are almost identical. Although wheeled vehicles typically have the advantage of mobility and firepower over dismounted elements, as previously noted, communications and protection pose difficulties. The more heavily armored vehicles might be at greater risk in the urban terrain unless closely supported by dismounted forces. Therefore, this terrain calls for integrating dismounted with mounted patrol elements. The combination of the two capabilities enhances conditions for successful missions in urban terrain.

Note. Sometimes, a psychological dimension exists in the employment of armored fighting vehicles (M1 Abrams tank and M2 Bradley) in urban operations. To avoid antagonizing noncombatants, even when they think using armored vehicles would help, leaders should carefully consider whether to do so.

TACTICAL VEHICLE EMPLOYMENT

F-72. Vehicles operating as part of a patrol should always operate in sections of at least two vehicles. The commander should consider employing vehicles to augment dismounted patrolling. The mobility allows greater and faster area of operation saturation and expansion of control. Integrating vehicles with foot patrols also allows for increased sustainment loads. Lighter, faster Infantry forces have a greater chance of capturing or killing lightly armed insurgents; mounted firepower provides support or moves to block escaping or flanking enemy. Mounted elements increase patrol flexibility and versatility. Other considerations for missions in urban terrain include—

- Tie down vehicle antennas to avoid overhead power lines.
- Avoidance of streets and alleys that are too narrow for particular vehicles.
- Consideration of civilian vehicle and pedestrian traffic flow when planning patrol routes.
- Carefully planning the use of tracked vehicles because they can damage roads.
- Avoidance of night vision devices or blackout driving around civilian traffic using white lights.

MOUNTED HASTY CHECKPOINT MISSION

F-73. This hasty checkpoint mission (see figure F-10) is an example technique for discussion purposes and is just one way to conduct this mission. Leaders must always consider METT-TC when performing mounted hasty checkpoint missions. (Refer to ATP 3-21.8 for additional information.)

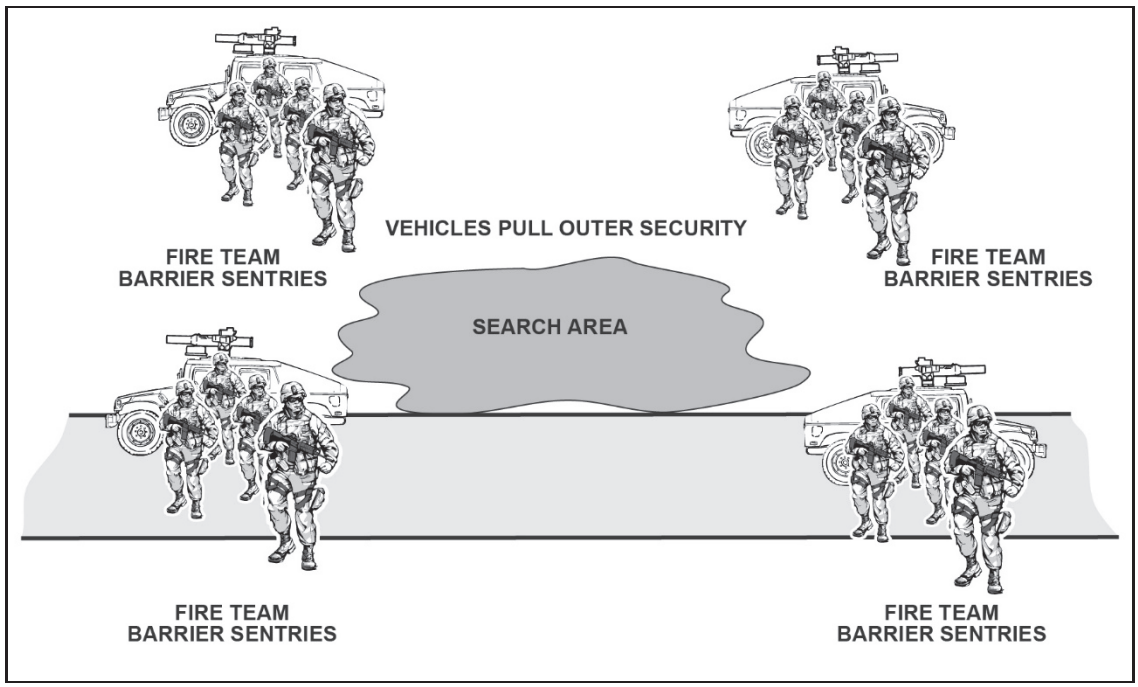

Figure F-10. Hasty checkpoints

ACTIONS ON CONTACT

F-74. Actions on contact (see paragraph 2-235 on page 2-66 for a detailed discussion) for mounted and dismounted forces are normally the same. Dismounting troops should occur in a covered or concealed position when possible, but the speed of dismounting and the need to get Infantry on the ground quickly once in contact must also be considered. Once in contact, based on the enemy situation, the vehicles may or may not maneuver to dismount troops or form a base of fire. The commander must consider the following:

- Rehearse unwieldy dismounting and remounting procedures before mission execution.
- Avoid dismounting troops directly into the line of fire.
- Take measures to prevent troops from becoming casualties while mounted.

F-75. Vehicles can maneuver quickly with troops (mounted or dismounted) either to occupy covered and concealed positions or to form a base of fire. The vehicles might be required to form an immediate cordon while the Infantry clears or searches the area.

F-76. Vehicles might be required to maneuver immediately, with or without support, to take advantage of speed and shock action, or to move to a position to gain a tactical advantage.

F-77. When troops dismount, or when the vehicle maneuvers away from immediate troops, the vehicle crew must remain vigilant and protect the vehicle from further enemy actions or isolation.

LONG-RANGE MOUNTED MOVEMENT

F-78. When the Infantry rifle company conducts long-range movements or patrols using wheeled vehicles, the commander utilizes the distance and expected time of the mission to estimate logistics support accurately. The logistical resources required to support long-range vehicular missions will drive many aspects of the mission, specifically class III. (Refer to ATP 4-01.45 for additional information.)Additional considerations for long-range mounted movement include the following:

- Mission range (mileage), duration, and expected vehicle fuel consumption.
- Availability of resupply or support during missions.
- Planned vehicle loads (personnel and equipment).
- Expected enemy situation.
- Terrain considerations such as—
  - Road conditions.
  - Off-road travel conditions.
  - River crossings.
  - Expected rainfall or snowfall.
- Presence of civilian vehicles in area—are vehicles normally encountered in the area of operation.
- Communications ranges.
- Navigational considerations.
- Movement times.
- Day or night movement.
  - White light or night vision devices.
  - Road or cross-country.
- Recovery.
  - Can unit self-recover?
  - How will unit deal with non-recoverable or disabled vehicles?
- Load plan for casualties or additional personnel in case vehicles are destroyed or disabled.
- Fuel cans, five or ten gallon, with long fuel lines to attach directly to engine intakes, to allow the vehicle to operate even if the fuel tank is punctured.

ROUGH TERRAIN DRIVING

F-79. Using good off-road driving techniques is the best way to limit broken vehicle parts and getting stuck. All drivers and vehicle commanders must be well trained in judging terrain and negotiating various ground conditions. Many missions and movements are at night, so driver's training should focus on using night vision devices. In addition, drivers should develop the following skills:

- Selecting proper gear ratio and shifting.
- Using momentum and understanding the effects of vehicle speed.
- Knowing the vehicle's capabilities and the impact of the on board payload.
- Estimating and using proper speeds for the appropriate terrain conditions.
- Avoiding sudden forward and braking thrusts.
- Applying traction theory.

F-80. Drivers must become familiar with the various terrain conditions in the area of operation and considerations for crossing the conditions encountered.

SUSTAINMENT

F-81. Armored and Stryker elements, under the operational control of the Infantry rifle company, receives fuel, maintenance, and recovery support as well as ammunition from its parent unit. This mounted force normally comes to the Infantry rifle company with its own fuel tanker and ammunition vehicle. If the parent unit cannot provide recovery assets to the mounted unit, the unit must perform self-recovery. The mounted force leader can communicate with their commander for support; however, they must coordinate with the Infantry rifle company commander for a place and time to conduct their logistical activities.

VEHICLE RECOVERY

F-82. Many recovery tasks consist of self-recovery methods, either when the vehicle becomes stuck, or when it has a mechanical or enemy caused breakdown. Vehicle recovery is easiest when the tires still have traction and when crewmembers can help the vehicle move through the original tire tracks. When the vehicle is stuck in snow, sand, or mud, the crew can lower tire pressure to increase traction. Using a second vehicle to help winch or pull a stuck vehicle is normally the quickest recovery method. However, winches are used only to assist in recovery. They are never used as the sole source of power for vehicle recovery.

F-83. The company should always carry tow straps or chains. Braided rope (three 12-foot long by 5/16 inch diameter pieces) or a heavy 20-foot chain works well. They should have hooks or clevises attached to both ends for anchoring to the vehicles. If possible, the company carries at least one tow bar for each vehicle section to assist in long-range recovery or to tow a vehicle at high speed.

F-84. When a vehicle is stuck in mud or sand, the unit uses pioneer tools to emplace dry or solid matter under the tires for traction. Sandbags or other materials can be dug into and under the wheels to assist traction. Vehicles normally carry empty sandbags for this purpose. When conducting recovery, one section provides security while the other vehicle makes the recovery. The recovery section decides before making the recovery where the vehicle can go after it breaks loose. When they use a military winch, they should remember the following do's and don'ts:

- DO—
  - Use the stuck vehicle's wheel power to help the winch.
  - Carefully prepare the winching operation.
  - Position personnel where they will not be injured should the cable snap or unhook.
  - Ensure the anchor points are solid.
  - Use artificial surfaces for traction when the vehicle is stuck in water or soft sand.
- DO NOT—
  - Overtake the cable.
  - Exceed the maximum angle of pull.

F-85. The commander should make contingency plans for vehicles that cannot be repaired or recovered. The company will make every attempt to recover the vehicle and return it where it can be repaired, if needed. However, if the company cannot recover the vehicle, then they may destroy it in place to prevent the enemy from capturing it.

Appendix G

Combined Arms Breaching Operations

A combined arms breach is a complex operation with many moving parts. Breaching operations require detailed planning, preparation, and execution, and continuous assessment throughout the operations process. Effective breaching operations allow the company to maneuver in the face of obstacles. This appendix provides a brief overview of combined arms breaching operation types, areas, and tenets, and includes a discussion on deliberate and hasty breaching operations. (Refer to ATP 3-90.4 for additional information).

OVERVIEW

G-1. A *breach* is a tactical mission task in which the unit employs all available means to break through or establish a passage through an enemy defense, obstacle, minefield, or fortification (FM 3-90-1). As a tactical mission task, a breach is an action by a friendly force conducted to allow maneuver despite the presence of obstacles. During maneuver, the commander attempts to bypass and avoid obstacles and enemy defensive positions to the maximum extent possible to maintain tempo and momentum. Breaching enemy defenses and obstacle systems is normally the last choice. A breach is a synchronized operation under the control of the maneuver commander in contact with the obstacle or enemy defense. The breach begins when friendly forces detect an obstacle and begin to apply the breaching fundamentals (see paragraph G-17 on page G-5) and ends when battle handover has occurred between follow-on forces and a unit conducting the breach. Refer to ATP 3-21.8 for information on Battle Drill 8-Breach a Mined Wire Obstacle (07-3-D9412).

Note. A *tactical mission task* is the specific activity performed by a unit while executing a form of tactical operation or form of maneuver. It may be expressed in terms of either actions by a friendly force or effects on an enemy force (FM 3-90-1). A breach as defined as a tactical mission task is an action by a friendly force.

G-2. As defined in ATP 3-90.4, a *breach* is a synchronized combined arms activity under the control of the maneuver commander conducted to allow maneuver through an obstacle (ATP 3-90.4). A breach is a synchronized combined arms mission under the control of the maneuver commander. When breaching operations are required to support an attack along the continuum from a deliberate to a hasty attack, regardless of where the attack falls along the continuum, the breaching tenets (see paragraph G-14 on page G-4) apply when conducting breaching operations in support of an attack. Breaching activities include the reduction of minefields, other explosive hazards, and other obstacles. Breaching at battalion and above (and to a lesser degree at company level) require significant combat engineering support to accomplish. See paragraphs 2-460 through 2-504 on pages 2-123 through 2-132 for information on a company-level attack with a required breach.

G-3. Reduction is the creation of lanes through a minefield or obstacle to allow passage of the attacking ground force. A *lane* is a route through, over, or around an enemy or friendly obstacle that provides passage of a force (ATP 3-90.4). The route may be reduced and proofed as part of breaching, constructed as part of the obstacle, or marked as a bypass. The number and width of lanes vary depending on the enemy situation, the size and composition of the assaulting force and the scheme of movement and maneuver.

G-4. *Proof* is the verification that a lane is free of mines or explosive hazards and that the width and trafficability at the point of breach (POB) are suitable for the passing force (ATP 3-90.4). Proofing can be conducted visually, electronically, or mechanically. Some mines are resistant to reduction assets and may require a combination of breaching techniques; for example, magnetic and double impulse mines may resist

a mine clearing line charge (known as a MICLIC) blast. Proofing is an important component of breaching considering the wide variety of explosive obstacle threats in use today.

G-5. Most combined arms breaching is conducted by an IBCT or a battalion-size task force as a tactical mission, but higher echelons may also execute operational-level combined arms breaching tasks. Significant engineer augmentation from echelons above brigade is typically required to enable an IBCT breach or a battalion task force deliberate or hasty breach. (Refer to ATP 3-90.4 for additional information.)

TYPES OF BREACH

G-6. Maneuver forces are task organized specifically for an operation to provide a fully synchronized combined arms team. Most operations lie somewhere along a continuum between two extremes—deliberate operations and hasty operations. (See paragraph 1-35 on page 1-6.) Attacks take place along this continuum (commonly referred to as a—deliberate attack or hasty attack) based on the knowledge of enemy capability and disposition and the intentions and details of friendly force planning and preparation. Deliberate attack and hasty attack refer to the opposite ends of that continuum and describe characteristics of the attack. As breaching may be required to support an attack anywhere along this continuum. Breaching activities must be adapted to exploit the situation. The level and type of planning distinguish which of the three general types of breaching (deliberate, hasty, and covert) are used to meet mission variables.

DELIBERATE BREACH

G-7. A deliberate breach is the creation of a lane through a minefield or a clear route through a barrier or fortification, which is systematically planned and carried out. A deliberate breach is used against a strong defense or complex obstacle system. It is similar to a deliberate attack, requiring detailed knowledge of the defense and obstacle systems. It is characterized by the planning, preparation, and buildup of combat power on the near side of obstacles. Subordinates are task-organized to accomplish the breach. The breach often requires securing the far side of the obstacle with an assault force before or during reduction. Amphibious breaching is an adaptation of the deliberate breach intended to overcome antilanding defenses to allow a successful amphibious landing.

HASTY BREACH

G-8. *Hasty breach* (land mine warfare) is the creation of lanes through enemy minefields by expedient methods such as blasting with demolitions, pushing rollers or disabled vehicles through the minefields when the time factor does not permit detailed reconnaissance, deliberate breaching, or bypassing the obstacle (JP 3-15). A hasty breach is an adaptation to the deliberate breach and is conducted when less time is available. It may be conducted during a deliberate or hasty attack (see paragraphs 2-606 through 2-610 on pages 2-154 through 2-158 for an example illustration) due to lack of clarity on enemy obstacles or changing enemy situations, to include the emplacement of scatterable mines.

G-9. An in-stride breach is a type of hasty breach used to describe the situation when a subordinate unit is expected to be able to organize for and conduct a hasty breach with its organic or task-organized assets, without affecting the higher unit scheme of movement and maneuver or commander's intent. For example, an IBCT is considered to be conducting an in-stride breach when a subordinate battalion is able to organize for the breach (support, breach, assault forces) and breach an obstacle without affecting the IBCT scheme of movement and maneuver or the commander's intent. In-stride breach is generally not used below the company level.

COVERT

G-10. A covert breach is the creation of lanes through minefields or other obstacles that is planned and intended to be executed without detection by an adversary. Its primary purpose is to reduce obstacles in an undetected fashion to facilitate the passage of maneuver forces. A covert breach is conducted when surprise is necessary or desirable and when limited visibility and terrain present the opportunity to reduce enemy obstacles without being seen. A covert breach uses elements of deliberate and hasty breaching, as required.

G-11. A covert breach is characterized by using stealth to reduce obstacles, with support and assault forces executing their mission only if reduction is detected. Through surprise, the commander conceals their capabilities and intentions and creates the opportunity to position support and assault forces to strike the enemy while unaware or unprepared. The support force does not usually provide suppressive fire until the initiation of the assault or in the event that the breach force is detected. Covert breaches are usually conducted during periods of limited visibility. A battalion is the principal unit to conduct a covert breach. The covert breach requires a level of detailed planning, information collection, and mission command that is normally beyond the capability of a company. The IBCT is usually too large to maintain the level of stealth necessary to conduct a covert breach. The covert breach is ideally suited for foot-mobile forces.

BREACH AREA

G-12. The *breach area* is a defined area where a breach occurs (ATP 3-90.4). It is established and fully defined by the higher headquarters of the unit conducting the breach. Within the breach area is the POB, the reduction area, the far side objective, and the point of penetration. Their definitions follow:

- *Point of breach* is the location at an obstacle where the creation of a lane is being attempted (ATP 3-90.4). Initially, POBs are planned locations only. Normally, the breach force determines the actual POBs during the breach.
- *Reduction area* is a number of adjacent points of breach that are under the control of the breaching commander (ATP 3-90.4). The commander conducting the attack determines the size and location of the reduction area that supports the seizure of a point of penetration. The reduction area is indicated by the area located between the arms of the control graphic for breach. (See figure G-1 on page G-4.) The length and width of the arms extend to include the entire depth of the area that must be reduced.
- *Far side objective* is a defined location oriented on the terrain or on an enemy force that an assaulting force seizes to eliminate enemy direct fires to prevent the enemy from interfering with the reduction of obstacles and allows follow-on forces to move securely through created lanes (ATP 3-90.4). A far side objective can be oriented on the terrain or on an enemy force. The higher headquarters assigns the objective; however, the attacking unit normally subdivides the objective into smaller objectives to assign responsibilities and to control and focus the assault of subordinate forces. When breaching as part of a larger force, seizing the far side objective provides the necessary maneuver space for the higher unit follow-on forces to move securely through the lanes, assemble or deploy, and continue the attack without enemy interference.
- *Point of penetration* is the location, identified on the ground, where the commander concentrates their efforts at the enemy's weakest point to seize a foothold on the far side objective (ATP 3-90.4). This is achieved along a narrow front through maneuver and direct and indirect fires that are accurately placed against enemy forces. A commander conducting a breach establishes a point of penetration that supports planning locations for the reduction area and the seizure of the far side objective.

G-13. The breach area must be large enough to allow the attacking unit to deploy its support force and extend far enough on the far side of the obstacle to allow follow-on forces to deploy before leaving the breach area. One technique is to establish the breach area using phase lines (PLs) or unit boundaries. The PL defining the far side of the breach area may be established as a BHL (figure G-1 on page G-4).

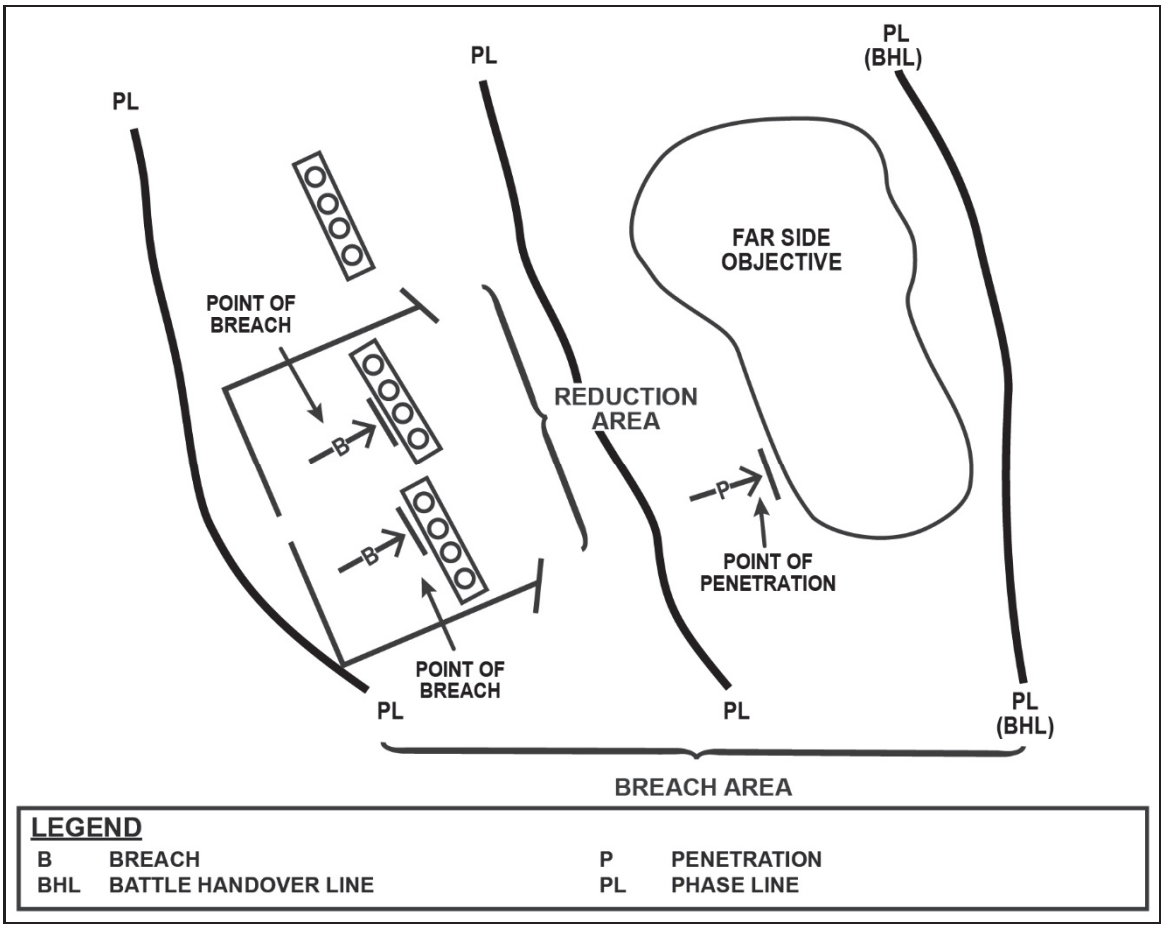

Figure G-1. Breach area

BREACHING TENETS

G-14. Breaching missions are characterized by applying breaching tenets. Breaching tenets apply whenever an obstacle is encountered, whether friendly forces are conducting an attack or route clearance operations. These tenets are integrated during planning. (ATP 3-90.4, table 3-1 provides a detailed listing of planning actions within each breaching tenet.) The tenets are—

- Intelligence.
- Breaching fundamentals (SOSRA).
- Breaching organization.
- Mass.
- Synchronization.

INTELLIGENCE

G-15. When the Infantry rifle company conducts a breach as part of a battalion attack, the ability to identify how the enemy applies obstacles to the terrain is critical to the company's success. To assist the company commander's intelligence preparation of the battlefield (IPB), the battalion conducts its IPB to develop initial situational templates and priority intelligence requirements. Intelligence gathered by battalion reconnaissance forces, and surveillance assets above the battalion, is essential to developing a finalized situational template and final POB locations. Unverified enemy situational templates may cause the company to deploy to reduce obstacles early, waste time trying to locate nonexistent obstacles, develop courses of action using ineffective

obstacle reduction methods, and fail to locate bypasses or become surprised by an obstacle. Templated enemy obstacles on the situational templates provided to the company are based on—

- Threat patterns based on past operations and emerging tactics, techniques, and procedures.
- Enemy countermobility capabilities (based on manpower, equipment, materials, and time available), including scatterable mines.
- Terrain and weather effects.
- The range of enemy weapon systems covering obstacles and emplacing scatterable mines.

G-16. Augmentation of reconnaissance forces by engineer squads or sections may be used as part of the battalion's information collection effort. Examples of information used to produce obstacle intelligence products for subordinate companies within the battalion include—

- Location of existing or reinforcing obstacles.
- Orientation and depth of obstacles.
- Soil conditions. (Determines ability to use mine plows, if available.)
- Lanes or bypass locations.
- Composition of minefields (buried or surface laid antitank and antipersonnel mines).
- Types of mines and fuses. (Determines effectiveness of mechanical or explosive reduction techniques.)
- Composition of complex obstacles.
- Location of direct and indirect fire systems overwatching obstacle.

BREACHING FUNDAMENTALS

G-17. Breaching fundamentals are integrated into the planning process and always apply when reducing a defended obstacle. This includes breaching, gap crossing, and route clearance missions. The breach fundamentals: suppress, obscure, secure, reduce, and assault are described by the memory aid SOSRA.

Suppress

G-18. Suppress is a tactical mission task that results in the temporary degradation of the performance of a force or weapons system below the level needed to accomplish its mission. Suppression protects friendly forces reducing and maneuvering through an obstacle. Successful suppression generally triggers the rest of the actions at the POB. Fire control measures ensure that all fires are synchronized with other actions at the POB. The mission of the support force is to suppress the enemy overwatching the obstacle. The breach force also provides additional suppressive fires as the situation dictates; however, its primary focus is on reducing the obstacle. In many situations, the Infantry weapons company may be ideal to provide suppression, under different conditions suppression may be provided by a weapons company assault platoon, Infantry rifle platoon or weapons squad, or an entire rifle company.

Obscure

G-19. Obscuration degrades observation and target acquisition of the enemy forces while concealing friendly force reduction and assault activities. Obscuration planning factors include wind direction, type of obscuration systems available (mechanical smoke, artillery delivered, mortar delivered, smoke pots), and the capabilities and limitations of these systems. In urban areas, indirect delivered obscuration and suppressive fires will be more restricted. In some situations, using mortars (because of the ability to fire high-level trajectory), smoke pots, and smoke grenades rather than artillery-fired obscurants may be more effective. Normally, obscuration starts with smoke delivered by indirect fire that builds quickly, followed by mechanical or smoke pots that have a longer duration but take more time to place and build. Typically, the most effective placement of obscuration is between the obstacle and the overwatching enemy forces. (See ATP 3-11.50 for additional information on obscuration.)

Secure

G-20. *Secure* is a tactical mission task that involves preventing a unit, facility, or geographical location from being damaged or destroyed as a result of enemy action (FM 3-90-1). Identifying the extent of the enemy defense is critical in selecting the appropriate technique to secure the POB. The POB must be secured before reducing the obstacle. Friendly forces secure the POB to prevent enemy forces from interfering with the reduction of lanes and passage of assault forces. The breach force must be resourced with sufficient maneuver assets to provide local security against the enemy that the support force cannot adequately engage. Elements within the breach force that secure the reduction area may also be used to suppress the enemy once reduction is complete.

Reduce

G-21. *Reduce* is a mobility task to create and mark lanes through, over, or around an obstacle to allow the attacking force to accomplish its mission (ATP 3-90.4). Reduction cannot be accomplished until effective suppression and obscuration is achieved and the POB secured. The breach force will reduce, proof, and mark the required number of lanes to pass the assault force through the obstacle. The number and width of lanes needed depend on the enemy situation, terrain, size and composition of the assault force, and scheme of movement and maneuver. Follow-on forces will continue to improve and reduce the obstacle when required. When possible, the breach force also should try to secure a foothold to assist in the passage of the assault force.

Note. See ATP 3-21.8 for information on the types and reduction of enemy obstacles.

Assault

G-22. The assault force's primary mission is to seize terrain on the far side of the obstacle in order to prevent the enemy from placing or observing direct and indirect fires on the reduction area. If planned, the battle handover with follow-on forces occurs.

BREACHING ORGANIZATION

G-23. Establishing the breach organization facilitates the application of the breaching fundamentals. Commanders develop course of actions that organize friendly forces into a support force, a breach force, and an assault force to quickly, and effectively execute the breach fundamentals. Table G-1 shows the relationship between the breach organization as well as the responsibilities of each force.

Table G-1. Breaching organization and responsibilities

BREACH ORGANIZATION	*RESPONSIBILITIES*
Support Force	Suppress an enemy capable of placing direct fires on the reduction area to protect the breach force as it reduces the obstacle and the assault force as it passes through the created lane. Fix enemy forces to isolate the reduction area. Control obscuration.
Breach Force	Reduce, proof, and mark the necessary number of lanes through the obstacle. Report the status and location of created lanes. Provide local security on the near side and far side of the obstacle. Provide additional suppression of enemy overwatching the obstacle. Provide additional obscuration in the reduction area. Assist the passage of the assault force through created lanes.
Assault Force	Seize the far side objective. Reduce the enemy protective obstacles. Provide clear routes from the reduction area to the battle handover line for follow-on forces. Prevent the enemy from placing direct fires on follow-on forces as they pass through the created lanes. Conduct battle handover with follow-on forces. Provide reinforcing fires for the support force. Destroy the enemy on the obstacle far side that is capable of placing direct fires on the reduction area.

Support Force

G-24. Support force responsibilities are to isolate the reduction area with direct and indirect fires and suppress enemy's direct and indirect fire at the POB. The support force controls friendly direct and indirect fires and obscuration within the breach area.

Breach Force

G-25. The breach force must have sufficient combat power to secure the POB as well as sufficient reduction assets to reduce required number of lanes through the obstacle. Critical friendly zones should be activated at the POB before commitment of the breach force to protect it from enemy indirect fires.

Assault Force

G-26. The assault force's primary mission is the destruction of enemy forces on the far side of the obstacle to prevent the enemy from placing direct fires on the breach lanes. In complex or restrictive terrain, the assault force may be constrained to a single lane and the assault force commander must ensure that the sequencing of forces through the lane is appropriate to achieve the mission.

Reverse Planning

G-27. The size and composition of the support, breach, and assault forces (breach organization) are determined during course of action development using reverse planning. Reverse planning begins with actions on the objective and moves backward to the line of departure, since seizing an objective is typically the decisive point and directly tied to mission accomplishment. Using reverse planning and force ratios, the commander determines the size and composition of the force(s) that will perform the tasks that support the decisive and shaping operations and/or main and supporting efforts for each course of action. Reverse planning for breaching is performed using the following steps:

- Step 1. Identify available reduction assets.

- Step 2. Template enemy obstacles.
- Step 3. Understand the scheme of movement and maneuver.
- Step 4. Identify the number of required breach lanes.
- Step 5. Identify the assets required to reduce, proof, and mark lanes.
- Step 6. Task-organize reduction assets within the maneuver force.

G-28. When the company is part of the battalion's combined arms breaching operation, detailed reverse planning initiates during the IPB and the development of enemy situational template. The scheme of maneuver, engineer operations, fires, air defense, and actions at the obstacle are based upon this common situational template. The situation template, developed by the intelligence staff officer (S-2) depicting enemy direct- and indirect-fire coverage of templated enemy obstacles, determines the size and composition of the support forces.

G-29. The enemy's ability to interfere with the breach force at the POB determines size and composition of the security element within the breach force. The enemy's ability to mass fires on the POB determines the amount of suppression required as well as the size and composition of the breach force. Lane requirements and the composition of obstacles drive the amount and type of reduction assets needed by the breach force. The engineer staff planner focuses on the allocation of reduction assets.

G-30. Actions on the objective drive the size and composition of the force that conducts the final assault onto the objective as part of an attack, which dictates lane requirements (the number and location of required lanes). The engineer staff planner for the battalion and other planners determine how best to allocate reduction assets within the arrayed forces to facilitate the scheme of movement and maneuver for each course of action. (See figure G-2.) See paragraphs 2-460 through 2-504 on pages 2-123 through 2-132 for information on a company-level attack with a required breach.

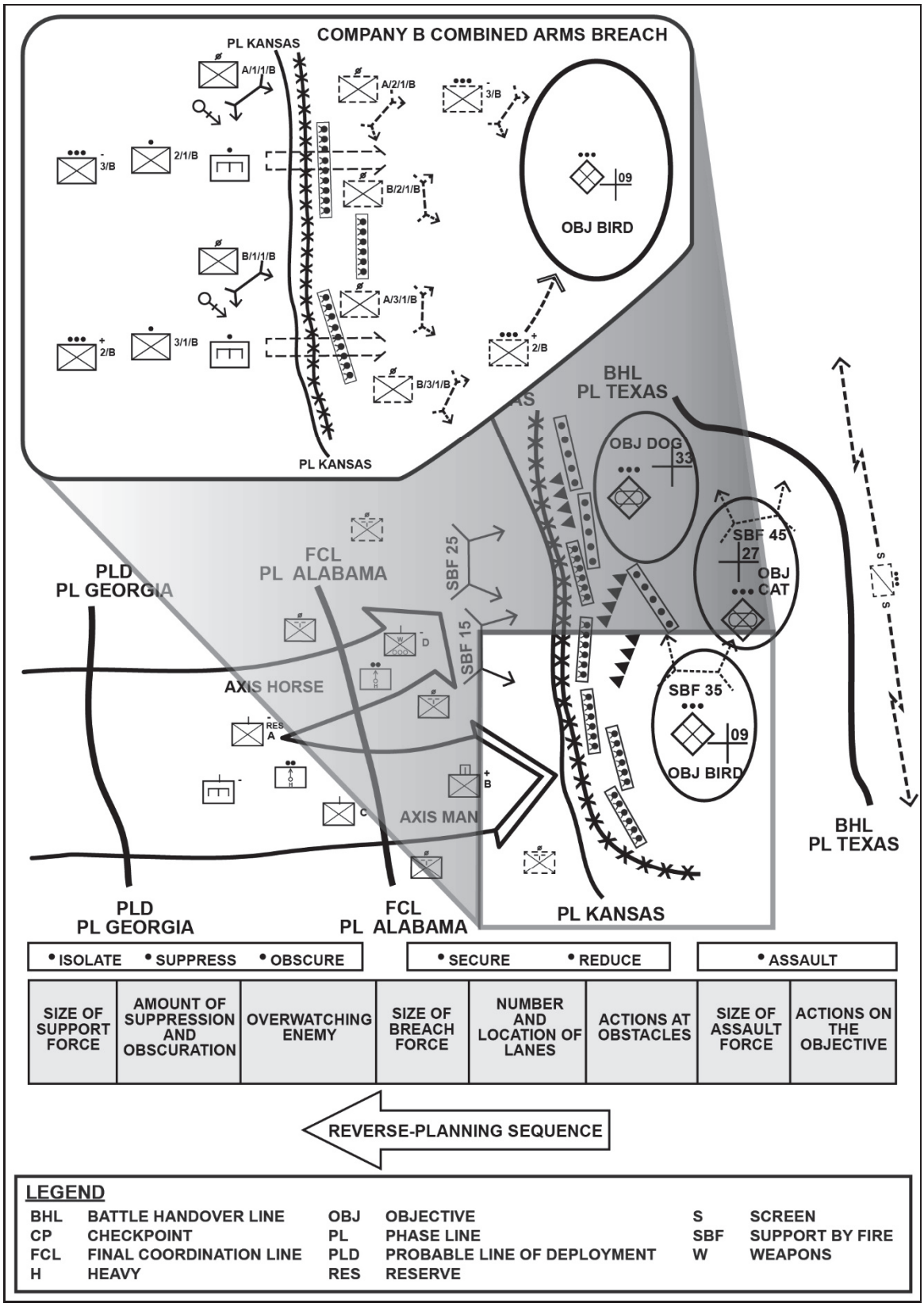

Figure G-2. Breach organization course of action, example

MASSED COMBAT POWER

G-31. Breaching is conducted by rapidly applying concentrated efforts at a POB to reduce the obstacle and penetrate the defense. A POB is planned where the enemy can be isolated, fixed, or disrupted. The location selected for breaching depends largely on enemy weakness, where its covering fires are minimized. If friendly forces cannot find a natural weakness, they create one by fixing most of the enemy force and isolating a small portion of it for attack. Denying the enemy's ability to mass combat power against the breach is achieved by isolating, fixing, or disrupting the defending forces; synchronizing the application of friendly combat power; and simultaneously breaching at separate locations to prevent the enemy from concentrating fires and defeating a breaching force in detail.

SYNCHRONIZATION

G-32. Synchronization of combined-arms elements to achieve the breach fundamentals is essential. The commander achieves synchronization through detailed reverse planning of offensive tasks from the objective back to the assembly area, by issuing clear subordinate unit instructions, planning effective mission command, and ensuring their forces are well rehearsed. The commander may use an execution matrix to synchronize forces. An execution matrix lists subunit instructions sequentially in relation to key events or the sequence of the attack. It provides subordinate commanders and leaders with an understanding of how the mission and those of adjacent units fit into the overall plan. It allows subordinates to better track the battle and coordinate their own maneuver with that of adjacent units. See ATP 3-90.4 for a sample execution matrix for a breaching mission.

BREACHING ACTIVITIES

G-33. Breaching activities are planned by incorporating the breaching tenets (see paragraph G-14 on page G-4) within the planning steps of troop leading procedures (TLPs). The need to conduct a breach is determined based on the identification of specified, implied, and essential tasks for mobility as part of mission analysis, within Step 3-Make a Tentative Plan of TLPs (see appendix B) at the company level (Step 2-Mission Analysis, of the military decision-making process [MDMP] at battalion level). The company may be tasked to conduct a breach in support of the battalion's mission, the commander's intent, and the scheme of movement and maneuver; or it may be implied based on the enemy situation, the terrain (mobility corridors), and the commander's intent. ATP 3-90.4, table 3-4 provides a detailed listing of breach planning considerations in relation to the MDMP. Table G-2 provides a listing of breach planning considerations in relation to TLPs at the company level.

Table G-2. Breaching considerations within troop leading procedures

STEPS TO TROOP LEADING PROCEDURES	*BREACH PLANNING CONSIDERATIONS*
Step 1 – Receive the Mission	Gather geospatial information and products (mobility corridors and combined obstacle overlays) for the area operation. Gather intelligence products on threat countermobility capabilities and patterns. Determine the availability of information on obstacles within the company propose area of operation. Determine status of breaching assets available to the company.

Table G-2. Breaching considerations within troop leading procedures (continued)

STEPS TO TROOP LEADING PROCEDURES	*BREACH PLANNING CONSIDERATIONS*	
***Step 2 – Issue a Warning**		
Step 3 – Make a Tentative Plan	**Mission Analysis**	Understand the mission, commander's intent, and scheme of movement and maneuver (two levels up). Complete the following as part of the initial intelligence preparation of the battlefield— Develop terrain products (mobility corridor and combined obstacle overlay). Evaluate the effects of terrain and weather on friendly mobility and enemy countermobility and survivability capabilities. Assess enemy countermobility capabilities (manpower, equipment, and materials), and template enemy obstacles based on threat patterns, terrain, and time available. Identify specified and implied mobility (breaching) tasks and determine any obvious shortfalls in breaching assets engineer forces and special equipment and initiate requests for augmentation as early as possible. Develop information requirements related to breaching (terrain restrictions and mobility restraints, necessary or desired obstacle information, enemy countermobility and survivability capabilities), and recommend draft requirements as possible commander's critical information requirements. Integrate information collection tasks and engineer or other necessary specialized reconnaissance capabilities into the information collection plan.
	COA Development	Identify the need to conduct a breach for each course of action based on mobility corridors and template enemy obstacles. Allocate reduction assets (engineer units and breaching equipment) based on the results of reverse planning. Develop tasks that implement the breaching fundamentals suppress, obscure, secure, reduce, and assault. Determine breach organization requirements (support, breach, assault force) and ensure that arrayed forces have been adequately resourced.

Table G-2. Breaching considerations within troop leading procedures (continued)

STEPS TO TROOP LEADING PROCEDURES	*BREACH PLANNING CONSIDERATIONS*	
Step 3 – Make a Tentative Plan (continued)	**COA Analysis**	War game the breach organization— Force ratios against variances in the enemy disposition. Array of breach assets based on losses or variances in the composition of obstacles. War-game changes in the planned point of breach, locations of support by fire positions, and wind effects on obscuration. War game friendly reactions to enemy counterattacks within the breach area and enemy use of scatterable mines to isolate forces and repair breached obstacles. Refine the plan based on results of war gaming.
	COA Comparison	Analyze and evaluate the advantages and disadvantages for each course of action in relation to the ability to execute the breaching: Ability (time-distance) to shift breaching assets between units beyond the line of departure. Ability to reinforce the breaching forces or respond to enemy counterattacks within the breach area (use of a reserve).
	COA Selection	Gain approval for any changes to the essential tasks for mobility. Gain approval for recommended priorities of effort and support. Gain approval for requests for engineer augmentation to be sent to higher headquarters.
***Step 4 – Initiate Movement**		
***Step 5 – Conduct Reconnaissance**		
***Step 6 – Complete the Plan**		
Step 7 – Issue the Order	Ensure that the task organization of engineer forces and critical breach equipment is accurate and clear, to include the necessary instructions for effecting linkup (linkup should be as early as possible in the planning process). Ensure the quality and completeness of subunit instructions for performing breaching.	
***Step 8 – Supervise and Refine**		
***See appendix B**		

Appendix H

CBRN Defense and Countering Weapons of Mass Destruction

Chemical, biological, radiological, and nuclear defense are measures taken to minimize or negate the vulnerabilities to, and effects of, a chemical, biological, radiological, or nuclear hazard or incident (JP 3-11). The commander integrates chemical, biological, radiological, and nuclear (CBRN) defense considerations into mission planning depending on the CBRN threat. This includes CBRN defense activities, such as contamination avoidance, individual and collective protection, and decontamination. CBRN protection may slow the tempo, degrade combat power, and increase logistics requirements. CBRN reconnaissance and surveillance (R&S) consumes resources, especially time. Personnel wearing individual protective equipment find it difficult to work or fight for an extended period. (Refer to FM 3-11 and ATP 3-11.37 for additional information.)

Countering weapons of mass destruction (CWMD) is the efforts against actors of concern to curtail the conceptualization, development, possession, proliferation, use, and effects of weapons of mass destruction, related expertise, materials, technologies, and means of delivery (JP 3-40). At the tactical level combined arms teams conduct specialized activities to understand the environment, threats, and vulnerabilities; control, defeat, disable, and dispose of WMD; and safeguard the force and manage consequence. (Refer to JP 3-40 for additional information.)

This appendix provides an overview of CBRN defense and CWMD activities. See ATP 3-21.20, appendix G for a fictional scenario, used as a discussion vehicle, illustrating one of many ways the Infantry battalion and subordinate companies support CWMD activities.

OVERVIEW

H-1. The use of WMD in future conflict is inevitable. Many threat organizations already possess WMD, (chemical, biological, radiological, or nuclear weapons) and their delivery systems (for example, rockets and artillery). Enemies employ these WMD to obtain a relative advantage over United States forces to achieve their objectives. Threat organizations that do not currently possess WMD consistently seek opportunities to acquire them.

H-2. The possibility of the use of improvised chemical, biological, and nuclear as well as radiological dispersal devices by terrorist groups cannot be overlooked. Planning must routinely address the use of each of these as well as protective measures against conventional CBRN weapons. The potential catastrophic effects associated with the threat or use of WMD adds greater uncertainty to an already complex environment.

H-3. The intentional or unintentional release of CBRN material, including toxic industrial materials, and nontraditional agents can seriously challenge military operations. Chemical weapons could be used early in an operation or from its onset to hinder U.S. and partner nation's movement; disrupt its command, control, and communications; produce casualties; destroy or disable equipment; and disrupt operations. Biological weapons could target rear area objectives such as food supplies, water sources, troop concentrations, convoys, and urban and rural population centers, rather than frontline forces. Any of these materials may be employed

separately or together and may supplement conventional weapons. The commander must anticipate and plan for CBRN defense and CWMD activities.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR ENVIRONMENT

H-4. *Chemical, biological, radiological, and nuclear environment* is an operational environment that includes chemical, biological, radiological, and nuclear threats and hazards and their potential resulting effects (JP 3-11). CBRN environment conditions can be the result of deliberate enemy or terrorist actions or the result of an industrial accident. CBRN threats include the intentional employment of, or intent to employ, weapons or improvised devices to produce CBRN hazards. CBRN hazards include those created from accidental or intentional releases of toxic industrial materials, biological pathogens, or radioactive matter. Toxic industrial material is a generic term for toxic or radioactive substances in solid, liquid, aerosolized, or gaseous form that may be used or stored for industrial, commercial, medical, military, or domestic purposes. Toxic industrial material may be chemical, biological, or radiological. (Refer to FM 3-11 for more information on CBRN hazards.)

H-5. A *chemical, biological, radiological, and nuclear hazard* is chemical, biological, radiological, and nuclear elements that could create adverse effects due to an accidental or deliberate release and dissemination (JP 3-11). CBRN hazards may result from WMD employment. The key distinction between WMD and CBRN hazards is that WMD refers to the actual weapon, while CBRN refers to the contamination or effects resulting from the employment of WMD and from the dispersal of CBRN materials. When Department of Defense capabilities are called upon to conduct CBRN response activities, they essentially will be responding to CBRN hazards or contamination. Such as—

- The deposit, absorption, or adsorption of radioactive material or a biological or chemical agent on or near a structure, area, person, or object.
- Food or water that is unfit for consumption.

Chemical Hazards

H-6. A *chemical hazard* is any chemical manufactured, used, transported, or stored that can cause death or other harm through toxic properties of those materials, including chemical agents and chemical weapons prohibited under the Chemical Weapons Convention as well as toxic industrial chemicals (JP 3-11). This includes—

- Chemical weapons, toxic chemicals specifically designed as a weapon.
- Chemical agents, chemical substance that is intended for use in military operations to kill, seriously injure, or incapacitate, mainly through physiological effects.
- Toxic industrial chemicals, chemicals that are developed or manufactured for use in industrial operations or research.

H-7. A chemical weapon is a munition or device, specifically designed to cause death or other harm through the toxic properties of specified chemicals. Chemicals are released as a result of the employment of such munition or device; and any equipment specifically designed for use directly in connection with the employment of munitions or devices.

H-8. A *chemical agent* is a chemical substance that is intended for use in military operations to kill, seriously injure, or incapacitate mainly through its physiological effects (JP 3-11). Chemical agents (see FM 3-11), cause casualties, degrade performance, slow maneuver, restrict terrain, and disrupt operations (table H-1). They can cover large areas and may be delivered as liquid, vapor, or aerosol. Chemical agents can be delivered by artillery, mortars, rockets, missiles, aircraft spray, bombs, land mines, and covert means.

Table H-1. Characteristics of chemical agents

AGENT	*NERVE*	*BLISTER*	*BLOOD*	*CHOKING*
Protection	Mask and IPE	Mask and IPE	Mask	Mask
Detection	JCAD, M256A2, CAM, and M8 and M9 paper	JCAD, M256A2, CAM, and M8 and M9 paper	JCAD, M256A2	Odor (freshly mowed hay)
Symptoms	Difficulty breathing, drooling, nausea, vomiting, convulsions, and blurred vision	Burning eyes, stinging skin, irritated nose	Convulsions and coma	Coughing, nausea, choking, headache, and tight chest
Effects	Incapacitates	Blisters skin, damages respiratory tract	Incapacitates	Floods and damages lungs
First Aid	ATBAA and CANA DECON	As for second and third degree burns	None	Keep warm and avoid movement
Decontamination	RSDL and flush eyes with water	RSDL and flush eyes with water	RSDL	RSDL
Legend ATNAA – antidote treatment nerve agent auto-injector; CAM – chemical agent monitor; CANA – convulsive antidote nerve agent; DECON – decontamination; IPE – individual protective equipment; JCAD – joint chemical agent detector; RSDL – reactive skin decontamination lotion				

Biological Hazards

H-9. *Biological hazard*—an organism, or substance derived from an organism, that poses a threat to human or animal health. (JP 3-11). This can include medical waste or samples of a microorganism, virus, or toxin from a biological source that can impact human health. Biological agents (see FM 3-11) are microorganisms that can spread disease through humans and agriculture. They are categorized as pathogens, disease producing microorganisms, or toxins. A *biological agent* is a microorganism (or a toxin derived from it) that causes disease in personnel, plants, or animals or causes the deterioration of materiel (JP 3-11).

Radiological Hazards

H-10. Radiological hazards include any electromagnetic or particulate radiation that is capable of producing ions to cause damage, injury, or destruction. Radiological hazards also include toxic industrial materials. Enemies could disperse radioactive material in a number of ways, such as—

- Arming the warhead of a missile with radioactive material from a nuclear reactor.
- Releasing low-level radioactive material intended for use in industry or medicine.
- Disseminating material from a research or power-generating nuclear reactor.

Nuclear Hazards

H-11. Nuclear weapon effects are qualitatively different from biological or chemical weapon effects. The nature and intensity of nuclear detonation effects are determined by the type of weapon, its yield, and the physical medium in which the detonation occurs. The effects of a nuclear detonation include—

- Blast produces shockwaves that can cause critical injuries to personnel and destroy material.
- Thermal radiation causes severe burns and secondary fires.
- Electromagnetic pulse can cause widespread disruption or electrical and electronic equipment.
- Ionizing radiation is a significant threat to personnel and materiel.
- Fallout is residual radiation and may be a lingering, widespread hazard that limits military operations.

H-12. Cover and shielding offer the best protection from the immediate effects of a nuclear detonation; this includes cover in fighting positions with 18 inches overhead cover, culverts, and ditches. Soldiers should cover exposed skin and stay down until the blast wave passes and debris stops falling. Immediately after a nuclear detonation, continuous radiation monitoring should begin.

H-13. Operations in a nuclear environment are complicated by the necessity to control exposure of personnel to nuclear radiation. An operation exposure guide determines the maximum radiation dose to which units may be exposed and still accomplish a mission. Determination of this dose is based on the accumulated dose or radiation history of the unit.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR PASSIVE DEFENSE

H-14. Operationally, CBRN passive defense maintains the commander's ability to continue military operations in a CBRN environment while minimizing or eliminating the vulnerability of the force to the degrading effects of those CBRN threats and hazards. Tactical-level doctrine has traditionally segregated CBRN passive defense into the distinct principles of contamination avoidance, protection, and decontamination. While these principles remain valid, they are now recognized to be components of the more expansive concepts of hazard awareness and understanding and contamination mitigation. Since hazard awareness and understanding largely focuses strategic aspects of operations in a CBRN environment, tactical level doctrine is organized around the key activities (figure H-1) of CBRN protection and contamination mitigation.

- *Chemical biological, radiological, and nuclear protection* is measures taken to keep chemical, biological, radiological, and nuclear threats and hazards from having an adverse effect on personnel, equipment, and facilities (ATP 3-11.32). CBRN protection encompasses the following activities: protect personnel, equipment, and facilities.
- *Contamination mitigation* is the planning and actions taken to prepare for, respond to, and recover from contamination associated with all chemical, biological, radiological, and nuclear threats and hazards in order to continue military operations (JP 3-11). The two subsets of contamination mitigation are contamination control and decontamination. (Refer to ATP 3-11.32 a detailed discussion of CBRN passive defense activities.)

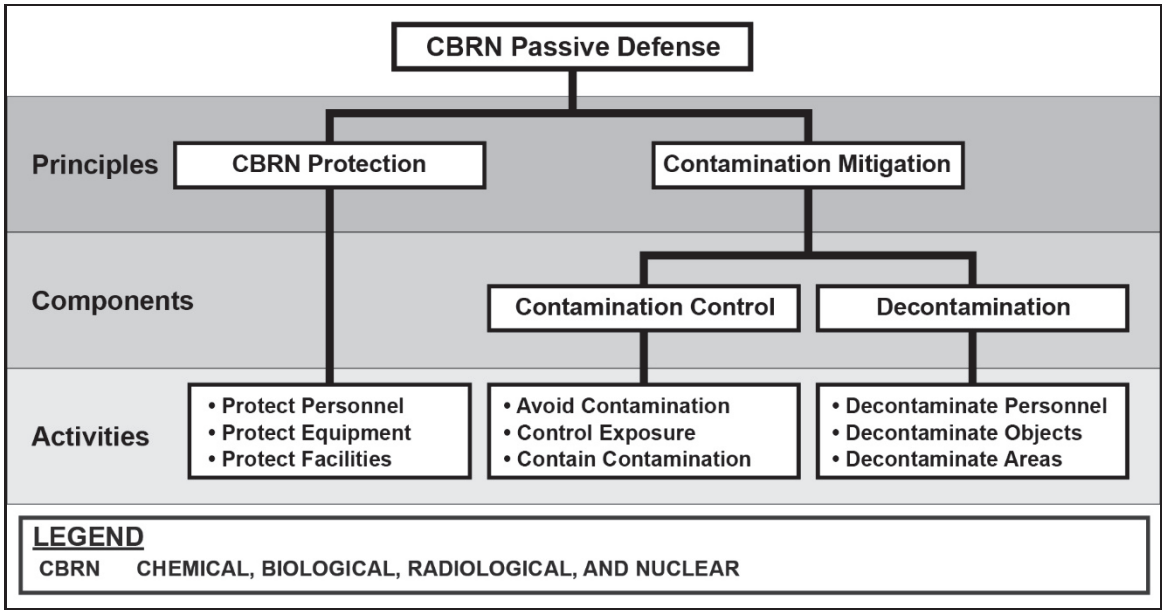

Figure H-1. Chemical, biological, radiological, and nuclear passive defense architecture

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR DEFENSE TASKS

H-15. CBRN passive defense includes measures taken to minimize or negate the vulnerability to, and effects of, CBRN attacks. (See ATP 3-11.32.) Passive defense focuses on maintaining the company's ability to continue operations in a CBRN environment. Success depends on the effective integration of equipment; CBRN training; and CBRN tactics, techniques, and procedures. Passive defense measures by the company designed to mitigate the immediate effects of a CBRN incident enable and protect the force conducting the operation. The application of CBRN defense task address the hazards created by CBRN incidents or accidents and help minimize vulnerabilities, protect friendly forces, and maintain the company's operational tempo.

CBRN PROTECTION

H-16. CBRN protection measures are taken to keep chemical, biological, radiological, and nuclear threats and hazards from having an adverse effect on personnel, equipment and facilities. Tasks that enable CBRN protection include the following:

- Employ individual protective equipment and other CBRN protective equipment.
- Establish CBRN alarm conditions.
- Exercise personal hygiene and force health protection programs.
- Utilizing shielding or protective cover.

H-17. CBRN protection is an integral part of all operations. Techniques that work for avoidance also work for protection such as shielding Soldiers and units and shaping the battlefield. Other forms of protection involve sealing or hardening positions, protecting Soldiers, assuming appropriate mission-oriented protective posture levels (table H-2), reacting to attack, and using collective protection. Individual protective items include the protective mask, joint service lightweight integrated suit technology, overboots, and gloves. The higher-level commander above the IBCT establishes the minimum level of protection. Subordinate units may increase this level as necessary but may not decrease it. The joint service lightweight integrated suit technology may be worn for 45 days with up to six launderings or up to 120 days with no launderings. The joint service lightweight integrated suit technology can be worn for 24 hours once contaminated. The overboots provide 60 days of durability and 24 hours of protection against liquid chemical agents.

Table H-2. Mission oriented protective posture levels

LEVEL/ EQUIPMENT	*MOPP READY*	*MOPP0*	*MOPP1*	*MOPP2*	*MOPP3*	*MOPP4*	*MASK ONLY*
Mask	Carried	Carried	Carried	Carried	Worn	Worn	***Worn
JSLIST	*Ready	**Available	Worn	Worn	Worn	Worn	
Overboots	*Ready	**Available	**Available	Worn	Worn	Worn	
Gloves	*Ready	**Available	**Available	**Available	**Available	Worn	
Helmet Cover	*Ready	**Available	**Available	Worn	Worn	Worn	

Legend
* Items available to the Soldier within two hours with replacement available within six hours
** Items must be positioned within arms-reach of the Soldier
*** Never "mask only" if nerve or blister agent is used in the area of operation
JSLIST – joint service lightweight integrated suit technology; MOPP – mission-oriented protective posture

H-18. Passive measures can be used to monitor for the presence of CBRN hazards. Depending on the threat and probability of use, periodic or continuous techniques are used. An area array of CBRN detectors and/or monitors can be positioned within a given area for detection and early warning of a CBRN incident. ATP 3-11.32 describes specific techniques for monitoring radiological exposure including determining correlation factor data, radiation exposure status and recording exposure. All units initiate continuous monitoring when they receive a fallout warning, when a unit is on an administrative or tactical move, when

a nuclear burst occurs, when radiation levels above one centigray per hour are detected by periodic monitoring, and on order of the commander. Except for units on the move, continuous monitoring stops on instructions from the commander or higher headquarters or when the dose rate falls below one centigray per hour.

CONTAMINATION MITIGATION

H-19. Contamination mitigation describes how the commander should conduct mitigation of hazardous contamination in support of operations to achieve assigned objectives. Contamination mitigation provides the framework for the commander and staff to estimate the proficiency and sufficiency of future contamination mitigation capabilities for passive defense and CBRN response. The commander can control contamination by avoiding contaminated areas, controlling exposure, and containing contamination. Example tasks for contamination control include—

- Marking contaminated areas.
- Establishing control zones.
- Controlling run off contamination.
- Implementing warning and reporting.
- Documenting exposures.

H-20. Use of CBRN weapons creates unique residual hazards that may require decontamination. In addition to the deliberate use of these weapons, collateral damage, natural disasters, and industrial emitters may require decontamination. Contamination forces units into protective equipment that degrades performance of individual and collective tasks. Decontamination restores combat power and reduces casualties that may result from exposure, allowing the commander to sustain combat operations. Use the three principles of decontamination listed below when planning decontamination operations:

- Decontaminate as soon as possible.
- Decontaminate only what is necessary.
- Decontaminate as far forward as possible, which is METT-TC dependent.

H-21. When a CBRN incident occurs, the battalion quickly responds to and initially mitigates the effects of contamination. The company performs only those actions required to allow continuation of the mission and, within mission constraints, save lives. To recover, the commander decides whether decontamination is required to restore combat power, and if so, what level of decontamination is required. The levels of decontamination are immediate, operational, thorough, and clearance. (Refer to ATP 3-11.32 for a detailed discussion of decontamination levels.)

H-22. Immediate decontamination minimizes casualties and limits the spread or transfer of contamination. The contaminated individual to save lives and reduce penetration of agent into surfaces carries out immediate decontamination. This may include decontamination of personnel, clothing, and equipment. Immediate decontamination should help prevent casualties and permit the use of individual equipment and key systems.

H-23. Operational decontamination sustains operations by reducing the contact hazard, limiting the spread of contamination, and eliminating or reducing the duration that mission-oriented protective posture equipment should be used. The contaminated unit carries out operational decontamination with possible assistance from an organic decontamination organization. Operational decontamination is restricted to the specific parts of contaminated, operationally essential equipment, material, and work areas to minimize contact and transfer hazards and to sustain operations. This may include individual decontamination beyond the scope of immediate decontamination, decontamination of mission-essential equipment, and limited terrain decontamination. Operational decontamination reduces the level of contamination, thus lessening the chance of spread and transfer.

H-24. Thorough decontamination reduces contamination to the lowest detectable level by the use of tactical-level capabilities. The intent of thorough decontamination is to reduce or eliminate the level of mission-oriented protective posture. This is accomplished by units (with or without external support) when operations and resources permit. Detailed equipment decontamination, detailed troop decontamination and detailed aircraft decontamination are conducted as part of a reconstitution effort during breaks in combat operations. These operations require immense logistic support and are manpower-intensive. Thorough decontamination

is carried out to reduce contamination on personnel, equipment, materiel, and work areas. This permits the partial or total removal of individual protective equipment and maintains operations with minimum degradation. While conducting thorough decontamination, contaminated units are non-mission capable. The resulting decrease in mission-oriented protective posture should allow the unit to operate with restored effectiveness.

H-25. Clearance decontamination provides decontamination to a level that allows unrestricted transportation, maintenance, employment, and disposal. Clearance decontamination of equipment and personnel allows the operation to continue unrestricted. Decontamination at this level will probably be conducted at or near a shipyard, advanced base, or other industrial facility. Clearance decontamination involves factors such as suspending normal activities, withdrawing personnel, and having materials and facilities not normally present. During clearance decontamination, resource expenditures are documented, force health protection measures are conducted, and after action reviews are prepared.

H-26. Additional decontamination considerations include the following:

- Plan decontamination sites throughout the width and depth of the area of operation.
- Tie decontamination sites to the scheme of maneuver and templated CBRN incidents.
- Plan for contaminated routes.
- Plan logistics and resupply of mission-oriented protective posture, mask parts, water, and decontamination supplies.
- Consider medical concerns, including treatment and evacuation of contaminated casualties.
- Plan for site security.

CBRN Reconnaissance and Surveillance

H-27. CBRN R&S is the detection, identification, reporting, and marking of CBRN hazards. CBRN reconnaissance consists of search, survey, surveillance, and sampling operations. Due to limited availability and number of the CBRN reconnaissance vehicles within the IBCT, consider alternate means of conducting CBRN reconnaissance such as reconnaissance elements, engineers, and maneuver units. (See ATP 3-11.37.) At a minimum, consider the following actions when planning and preparing for CBRN reconnaissance:

- Use the intelligence preparation of the battlefield process to orient on CBRN enemy named areas of interest.
- Pre-position R&S assets to support requirements.
- Establish command and support relationships.
- Assess the time and distance factors for the conduct of CBRN R&S.
- Report all information rapidly and accurately.
- Plan for resupply activities to sustain CBRN R&S operations.
- Determine possible locations for post-mission decontamination.
- Plan for fire support requirements.
- Plan fratricide prevention measures.
- Establish medical evacuation procedures.
- Identify CBRN warning and reporting system procedures and frequencies.

COUNTERING WEAPONS OF MASS DESTRUCTION TASKS

H-28. CWMD is described as actions undertaken in a hostile or uncertain environment to systematically locate, characterize, secure, and disable, or destroy WMD programs and related capabilities. Collecting forensic evidence from the WMD program during CWMD is a priority for ascertaining the scope of a WMD program and for follow-on attribution. Many technical CBRN and explosives forces have the capability to conduct some activities within CWMD; however, no single technical CBRN and explosives force can accomplish the entire CWMD mission alone. Chemical, biological, radiological, nuclear, and explosives response teams conduct exploitation and destruction. They also have the capability to provide field confirmatory identification of CBRN hazards. Nuclear disablement teams (specialized forces) perform site

exploitation and disable critical radiological and nuclear infrastructure during CWMD. (Refer to ATP 3-11.24 for additional information.)

H-29. CWMD missions require extensive collaborative planning, coordination, and execution oversight by IBCT commander and staff, and subordinate commanders. CWMD will likely involve teams of experts to include both technical forces (but are not limited to, CBRN reconnaissance teams, hazardous response teams, CBRN dual-purpose teams, and explosive ordnance disposal elements) and specialized forces (but are not limited to, technical escort units, nuclear disablement teams, and chemical analytical remediation activity elements). Associated planning will begin at echelons above the IBCT characterized by centralized planning and decentralized execution of CWMD missions to ensure that the right assets are provided. (Refer to FM 3-94, ATP 3-91, and ATP 4-32.2 for additional information.)

H-30. CWMD operations may be lethal or nonlethal as indicators are identified that meet the commander's critical information requirements and priority intelligence requirements suggesting that a site contains sensitive information. CWMD operations may develop intelligence that feeds back into the planning process to include the intelligence preparation of the battlefield and targeting process. The priority for CWMD activities is to reduce or eliminate the threat. CWMD operations may be conducted under two circumstances—planned and opportunity. While planned operations are preferred, some operations involving WMD sensitive sites may occur because the opportunity presents itself during operations to accomplish another mission. Not every operation requires destruction tasks—tactical isolation or exploitation may be the only elements executed. Nonetheless, the IBCT commander and staff, and subordinate commanders always consider each element of CWMD operations (isolation, exploitation, destruction, and monitoring and redirection) and its relevance to the situation. A particular element may be unnecessary, but making that judgment is the appropriate level commander's responsibility. (Refer to ATP 3-11.23 for additional information.)

H-31. An explosive ordnance disposal company, when tasked, provides explosive ordnance disposal, protection planning, and operations support to the IBCT, its subordinate battalions and companies. The explosive ordnance disposal company supporting the IBCT may provide an operations officer and noncommissioned officer to the IBCT to provide appropriate explosive ordnance disposal planning and to perform liaison officer duties that include facilitating cooperation and understanding among the IBCT commander, staff, subordinate battalions and companies, and explosive ordnance disposal battalion and company commanders. The explosive ordnance disposal company coordinates tactical matters to achieve mutual purpose, support, and action. In addition, the company ensures precise understanding of stated or implied coordination measures to achieve synchronized results. (Refer to ATP 4-32.3 for additional information.)

H-32. Explosive ordnance disposal elements supporting subordinate companies within the battalion can neutralize hazards from conventional unexploded ordnance, explosives and associated materials, improvised explosive devices, booby traps containing both conventional explosives and CBRN explosives that present a threat to those companies. These elements may dispose of hazardous foreign or U.S. ammunition, unexploded ordnance, individual mines, booby-trapped mines, and chemical mines. Breaching and clearance of minefields is primarily an engineer responsibility. (Refer to ATP 4-32.2 for additional information about unexploded ordnance procedures.)

TASKS AND ACTIVITIES WITHIN A CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR ENVIRONMENT

H-33. Effective mission command requires the integration with hazards planning, preparation, and execution—along with continuous assessment activities—to prevent CBRN incidents from occurring; to protect personnel, equipment, and information during a CBRN incident response; and to mitigate/recover from a CBRN incident that involves casualties and/or contamination. The company commander characterizes and manages through understanding the CBRN threats and hazards in a particular operational environment. (See ATP 3-11.36.) The commander applies this situational understand during troop leading procedures to shape the operational environment involving CBRN threats and hazards and to better understand where and when to expect CBRN hazards. The commander ensures subordinate units and Soldiers

prepare to operate in a CBRN environment. To do this, the commander ensures the company takes the proper protective measures including—

- CBRN vulnerability analysis and assessment.
- Dispersion and use of terrain as shielding.
- Continuous CBRN monitoring with detection equipment.
- Assumption of the appropriate mission-oriented protective posture level.

Notes. ATP 3-21.20 addresses key CBRN process and assessment tasks and activities the battalion commander and staff use to measure performance and the measures of effectiveness for activities at the battalion level.

FM 3-96 addresses the CBRN working group, generally established at the IBCT main command post and led by the IBCT CBRN officer. It includes members from the protection-working group, higher headquarters elements, host-nation agencies, unified action partners, and other representatives (CBRN representatives specifically) from subordinate battalions and other units. The CBRN working group—disseminates CBRN operations information, including trend analysis, defense best practices and mitigating measures, operations, the status of equipment and training issues, CBRN logistics, and management consequence and remediation efforts and refines the CBRN threat, hazard, and vulnerability assessments. The working group helps to develop, train, and rehearse a CBRN defense plan to protect personnel and equipment from an attack or incident involving CBRN threats or hazards. CBRN threat and hazard assessments made by the working group help determine initial, individual protective equipment levels and the positioning of decontaminants. Force health personnel maintain the medical surveillance of personnel strength information for indications of force contamination, epidemic, or other anomalies apparent in force health trend data.

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Appendix I
Sustainment

Sustainment is the provision of the logistics, personnel services, and health service support necessary to maintain operations until successful mission accomplishment (ADP 4-0). Sustainment operations provide support and services to ensure freedom of action, extend operational reach, and prolong endurance. This appendix describes sustainment operations in support of the Infantry rifle company, specifically the roles and responsibilities, functions, tasks, and activities, and unit relationships throughout high operating tempo decentralized operations. (Refer to ATP 3-21.20 and FM 3-96 for additional information.)

ROLES AND RESPONSIBILITIES

I-1. In the Infantry rifle company, the commander has the ultimate responsibility for sustainment. The executive officer and the first sergeant are the commander's primary sustainment operators; they work closely with the Infantry battalion staff to ensure they receive the required support for the company's assigned missions. The Infantry rifle company plans, prepares, and executes its portion of the Infantry battalion sustainment plan.

I-2. The company develops, concurrent with other planning, its sustainment plan during the mission analysis and refines it in the war gaming portion of the troop-leading process (see appendix B). Planning is continuous and concurrent with ongoing support preparation, execution, and assessment. Sustainment plan rehearsals are normally conducted at both Infantry battalion and Infantry rifle company levels to ensure the company receives a smooth, continuous flow of support and services.

I-3. The Infantry rifle company's basic sustainment responsibilities are to report and/or request support requirements through the battalion S4 and to ensure that sustainment is properly executed when support elements arrive in the company area. The XO and 1SG are normally in charge of these functions, with guidance and oversight provided by the commander. Additional sustainment operators include the company supply sergeant, signal support NCO, armorer, and senior combat medic. Maintenance teams from the forward support company (FSC) may be included.

EXECUTIVE OFFICER

I-4. The XO is the Infantry rifle company's primary sustainment planner and coordinator, reporting directly to the commander. During preparations for the mission, the XO works closely with the 1SG to determine specific support requirements of the tactical plan. The XO ensures that proper arrangements are made to provide those support requirements. Additional functions, tasks, and activities normally include:

- Leads the Infantry rifle company sustainment rehearsal in cooperation with the company first sergeant.
- Determines requirements and conducts close coordination with the battalion S-4 and S-3 for planning and to resource company missions.
- Compiles reports from subordinate elements and completes the unit's logistics status report to be submitted to the battalion S-4 daily but may be required more frequently during periods of increased intensity.
- Determines the location of the company's resupply point based on data developed during planning and the war gaming process.
- Compiles DA Forms 2404 *(Equipment Inspection and Maintenance Worksheet)* from the platoon leaders, platoon sergeants, and the first sergeant.

- Uses DA Form 2404 (*Equipment Inspection and Maintenance Worksheet),* to provide updates to the commander, as required.
- Ensures that the Infantry rifle company executes sustainment according to the Infantry battalion plan (along with the first sergeant).
- Assists the commander to develop sustainment priorities and guidance and enforces those priorities.
- Manages all of the company commander's property books.

FIRST SERGEANT

I-5. The 1SG is the Infantry rifle company's primary sustainment operator. The 1SG executes the company's logistical plan, relying heavily on company and Infantry battalion SOPs. The 1SG directly supervises and controls the company trains. Additional functions, tasks, and activities normally include:

- Leads Infantry rifle company sustainment rehearsals with the executive officer and/or integrates sustainment into the company's maneuver rehearsals.
- Coordinates and synchronizes human resources support with the battalion S-1. This includes personnel accountability reports, casualty reports, replacement operations, personnel readiness management, mail operations, essential personnel services, and other administrative or personnel requirements.
- Directs and supervises the collection, initial identification, and evacuation of human remains to the company casualty collection point (CCP). Directs and supervises casualty evacuation ensuring medical assets remain flexible and responsive to tactical missions.
- Tracks changes in expenditure rates, CLI and CLV and gives to the XO for further reporting to battalion S-4 via logistics status report and expenditure reports.
- Establishes and organizes the Infantry rifle company resupply point.
- Meets the logistics package at the logistics release point; guides it to the Infantry rifle company resupply point; supervises resupply operations there; and if necessary, guides the logistics package to its subsequent destination.
- Provides an Infantry rifle company orientation for new personnel and, in consultation with the commander, assigns replacements to the company's subordinate elements.
- Supervises evacuation of enemy prisoners of war, detainees, and damaged equipment.
- Maintains the Infantry rifle company battle roster.

SUPPLY SERGEANT

I-6. The supply sergeant is the Infantry rifle company's representative in the Infantry battalion's field trains. The supply sergeant coordinates with the forward support company for resupply of Class I, III, and V. The supply sergeant maintains individual supply and clothing records, and requisitions Class II resupply as needed. Additional functions, tasks, and activities normally include:

- Requisitions Class IV and Class VII equipment and supplies.
- Picks up replacement personnel and, as necessary, delivers them to the first sergeant.
- Receives and evacuates human remains to the military affairs collection point in the brigade support area.
- Transports, guards, or transfers enemy prisoners of war and detainees as required.
- Guides the logistics package, along with enemy prisoners of war, detainees, and damaged vehicles (if applicable), back to the brigade support area.
- Coordinates with the Infantry battalion S-1 section to turn in or pick up mail and personnel action documents.
- Collects bagged contaminated soil and transports it to collection points as part of logistics package procedures.
- Maintains and provides supplies for company field sanitation activities.
- Manages commander's property book and prepares financial liability investigations of property loss.

SIGNAL SUPPORT NONCOMMISSIONED OFFICER

I-7. The signal support NCO supervises the maintenance and installation of organic digital, wire, and frequency modulation communications. During missions, the signal support NCO usually travels with the company maintenance team when established and/or locates within the battalion combat or field trains, company trains, or positions to conduct movement with a march unit within the main body. The signal support NCO—

- Performs limited troubleshooting of the company's organic communications equipment.
- Provides link between company and battalion for maintenance of communications equipment.
- Supervises all maintenance activities for the company's communications security equipment.
- Supervises or assists command post operations.

ARMORER

I-8. The armorer is a supply specialist whose duties focus on organizational maintenance and repair of the company's small arms weapons. Normally, the armorer helps the supply sergeant in the field trains, but may operate forward within the company CP to support continuous CP operations.

COMBAT MEDICS

I-9. Combat medics are assigned to the medical platoon tasked to support the Infantry battalion. Combat medics are allocated to the Infantry companies on the basis of one combat medic per platoon, and one senior combat medic per company. The location of the combat medic is of extreme importance for rapid medical treatment of casualties.

I-10. The Infantry platoon combat medic usually locates with, or near, the element leader. When the platoon moves on foot in the platoon column formation, the combat medic positions himself near the element leader. If the platoon is mounted, the combat medic usually rides in the same vehicle as the platoon sergeant.

I-11. The company senior combat medic collocates with the company trains. When a casualty occurs, the combat lifesaver renders first aid, or first aid is provided through self-aid or buddy aid. The platoon combat medic or the company senior combat medic then goes to the location of the casualty, or the casualty is brought to the combat medic at the CCP. The CCP combat medic makes their assessment; administers initial medical care; initiates a DD Form 1380 *(Tactical Combat Casualty Care [TCCC] Card)*, and then requests evacuation or returns the individual to duty. (See Chapter 2 for additional responsibilities of Infantry rifle company combat medics.)

SUSTAINING THE INFANTRY RIFLE COMPANY

I-12. Sustaining the Infantry rifle company in austere environments, often at the ends of extended lines of communications, requires a logistics network capable of projecting and providing the support and services necessary to ensure freedom of action, extend operational reach, and prolong endurance. Success will require deployment and distribution systems capable of delivering and sustaining the company from bases to points of employment within and throughout the area of operation at the precise place and time of need. The following paragraphs discuss the functional elements, tasks, and activities normally applicable to the Infantry rifle company.

SUPPLY

I-13. The Infantry rifle company normally deploys with 72 hours of supplies specific to its assigned mission. Supply commodities are used in support of missions and are separated into ten supply classes:

Class I—Perishable and Semi-Perishable Subsistence Items, Water, and Gratuitous Health and Comfort Items

I-14. Class I includes rations that are packaged as individual or group meals. There are three categories of meals, Meals-Ready-to-Eat, unitized group rations – A Option, or unitized group rations-heat option. Ration

cycle and issue cycle will be provided in the brigade order. To simplify, the headcount X Ration Cycle X Issue Cycle = the number of meals needed for the battalion. Bulk water planning is calculated on a per-person, per-day cycle and water for drinking, personal hygiene, heat injury treatment and field feeding must be potable.

Class II—Individual Equipment and General Supplies

I-15. Class II items consists of common consumable items such as clothing, individual equipment, tentage, tool sets and kits, maps, administrative/housekeeping supplies, and chemical, biological radiological and nuclear protective equipment. The battalion typically deploys with a minimum load of Class II. The company supply sergeant must keep up with company shortages to ensure shortages are order in enough time to receive prior to mission.

Class III—Packaged Fuel – Petroleum, Oils, and Lubricants

I-16. Class III packaged consists of packaged petroleum, oils and lubricants that can be handled similarly to dry cargo. The company XO must anticipate requirements based of the mission and coordinate with supporting maintenance from FSC for Class IIIP forecasting assistance. Environmental conditions such as dust, snow, and rain affect the consumption rates of Class III packaged and should also be taken into consideration.

Class III—Bulk Fuel – Gasoline, Diesel, and Aviation Fuel

I-17. Class III bulk fuel is gasoline, diesel and aviation fuel. The company XO, in coordination with the S-4, should know how to determine the consumption rate of bulk fuel as well as be able to forecast requirements based off of the mission assigned and requires a detailed analysis of the maneuver concept of the operation. To calculate the estimated fuel usage, take the vehicle or number of vehicles and multiply consumption rate stated in gallons per hour, multiplied by the number of hours that the equipment will be in operation. Cross-country or traveling across roads (or idle) conditions will affect consumption rates.

Note. Consumption rates of Class III packaged and bulk are especially important when the Infantry rifle company is attached with armored or Stryker vehicles.

Class IV—Construction and Barrier Materials

I-18. Class IV consists of fortifications, barrier and constructions materials. Typically, a company will not have a requirement for Class IV materials unless in the defense. In the defense, sustainment units at higher levels consider prepositioning Class IV as far forward as the mission variables of METT-TC allow. The supply sergeant, under the supervision of the 1SG takes into consideration all materials needed to handle Class IV material. For example, gloves and picket pounders for handling of concertina wire and placement of pickets.

Class V—Ammunition

I-19. Unit basic load is determined by the weapon density, number of soldiers, and specific mission requirements over time. The planning factor for unit basic loads for a battalion is one with the company, one with the FSC, and one stored at the brigade's ammunition transfer and holding point. The battalion S4 will account for the basic loads and the FSC and battalion should be able to transport all combat configured loads with organic assets. The S4 will determine how additional ammunition will be replenished and will ensure units are submitting accurate expenditure reports daily through the logistics status report. (Refer to ATP 3-21.20 for additional information.)

Class VI—Sundry, Personal Demand Items

I-20. Class VI supplies are personal demand items such as toiletry, hygiene, and small recreational items. In most cases, a Soldier deploys with a 30 day supply of health and comfort items. After the first

30 days, health and comfort packages are provided at 30-day intervals through Class I channels at the request of the unit commander.

Class VII Major End Items

I-21. Class VII Supplies include major end items. This class of supply is intensely managed and controlled through higher command channels. Detail planning at all echelons include recovery operations and battle loss/battle damage replacement operations. This is particularly import to the rifle company when attached with mounted assets.

Class VIII Medical Supplies

I-22. Typically, the medical platoon of the Infantry Battalion will deploy with a three-day supply of Class VIII to support the battalion. When forecasting Class VIII requirements, the mission, location, projected casualty rates and available medical assets is taken into consideration.

Class IX Repair Parts

I-23. Class IX repair parts include individual repair parts and major assemblies such as engines, transmissions, and final drives which are required to maintain equipment and operational readiness. The company supply sergeant and when attached with a field maintenance team, with oversight by the company XO keep track of all repair parts ordered and received and ensure equipment is repaired in a timely manner.

TRANSPORTATION

I-24. As all Infantry companies within the IBCT are comprised of foot-mobile Soldiers, the company requires supporting unit vehicles or air assets to increase the mobility of its troops. The movement of supplies, equipment, and personnel requires careful planning, preparation, and execution. When vehicle support is provided to the company, vehicles must be employed to capitalize on their capability to execute the mission requirement, and they must be returned for follow-on company or parent-unit missions. This will often result in trade-offs. For example, the company commander must ensure that the asset is being employed to accomplish the most important mission. Time is critical and the company must reduce on-station time so that all company requirements can be met.

I-25. During a tactical convoy operations, each vehicle has a vehicle commander with a radio. The vehicle commander is the senior rifle company member on that vehicle. Company land navigation training, marked routes, overlays, and strip maps referenced to landmarks aid in navigation. See ATP 4-01.45 for information on tactical convoy operations.

I-26. Ground transportation limitations within the IBCT requires company personnel to be well trained in air movement operations. (See FM 3-99.) Understanding pickup zone and landing zone operations and selection, allowable cargo loads, and resupply aerial delivery is critical when planning company air movements. (See FM 3-21.38 and ATP 3-21.20.)

MAINTENANCE

I-27. The maintenance of weapons and equipment within the Infantry rifle company is continuous. Every Soldier must know how to maintain their weapon and equipment according to the related technical manual. This section addresses the Army's tiered two-level maintenance system and company level maintenance considerations and requirements.

Two-Level Maintenance System

I-28. The Army utilizes a two-level maintenance system comprised of field maintenance and sustainment maintenance to preserve combat power and to enable mission accomplishment. Field maintenance is on-system maintenance, repair and return to the user, including maintenance actions performed by operators and crews. Sustainment maintenance is off-system component repair and/or end item repair and return to the supply system or by exception to the owning unit, performed by national level maintenance providers. (Refer to ATP 4-33 for additional information.)

Company Level Maintenance Considerations and Requirements

I-29. Proper maintenance is the key to keeping weapons, equipment, vehicles, and other materials in serviceable condition. This continuous process starts when operators of each piece of equipment or vehicle take preventive measures and continue through repair and recovery of the equipment. Proper maintenance also includes inspecting, testing, servicing, repairing, requisitioning, recovering, and evacuating equipment.

I-30. Maintenance functions begin with preventative maintenance checks and services, a daily responsibility for each piece of equipment to include inspection and maintenance forms DA Form 2404 or DA Form 5988-E, *Equipment Maintenance and Inspection Worksheet (EGA),* when required. These forms are the primary means through which the company obtains maintenance support or repair parts. The forms follow a pathway from individual and crew level to the higher level of maintenance and back. Per unit SOP, the company XO or 1SG supervises the flow of these critical maintenance documents and parts.

I-31. The unit SOP should detail when maintenance is performed (at least once a day in the field), to what standards, and who inspects it. The squad leader is often the one who inspects maintenance work whereas the platoon sergeant, platoon leader, 1SG, XO, and commander conduct spot-checks. A technique is for the 1SG or CO to spot check equipment at the company's routine resupply time to ensure equipment is clean and the proper maintenance forms are complete before receiving Class I. Another technique is for each to spot-check a different platoon; whereas another is for each to check a single type of weapon or piece of equipment in all platoons daily. These instructions must be integrated into the SOP for patrol bases, assembly areas, defenses, and reorganization. They help ensure that Soldiers make a habit of maintenance and that they perform it without jeopardizing unit security. In addition to operator maintenance, selected Soldiers are trained to perform limited maintenance on damaged weapons and battle damage assessment and repair.

I-32. Inoperative equipment is fixed as far forward as possible. When a piece of equipment is damaged, it is inspected to see if it can be repaired on the spot. The company armorer keeps a small-arms repair kit in the company trains or on a company vehicle. If equipment cannot be repaired forward, it is evacuated immediately or returned on the next available means of transportation. Even if the item cannot be evacuated at once, the sustainment system is alerted to prepare for repair or replacement. If a replacement is available from an evacuated Soldier or inoperative equipment, it is sent forward. If not, the leader works around it by prioritizing the use of remaining equipment, for example, he might use a squad radio for the company frequency modulation voice command net if the platoon radio is broken.

I-33. As maintenance applies to all equipment, items such as magazines, ammunition, and batteries are also maintained and inspected. While test firing in an assembly area, mark the magazines of weapons that have stoppages. If a magazine is marked more than twice, the magazine might be causing the stoppages. Inspect the ammunition belts for crew-served weapons along with the weapons. Dirty or corroded ammunition may also cause weapon malfunctions.

I-34. When a vehicle or piece of equipment cannot be recovered or is damaged beyond repair, the platoon reports the situation to the company commander. The commander, in coordination with higher, gives permission for destruction of the materiel if that is the only way to prevent enemy capture. Operators remove all salvageable equipment and parts and take all classified materials or paperwork that could be of intelligence value to the enemy. The platoon then destroys the vehicle or equipment in accordance with established procedures.

RESUPPLY OPERATIONS

I-35. The company XO is responsible for synchronizing resupply operations for subordinate platoons and other units assigned or attached to the company. The XO identifies requirements through daily logistic status report and sustainment planning conducted during TLP. The following paragraphs discuss resupply techniques and delivery methods to sustain the company during operations. (Refer to ATP 3-21.20 for additional information.)

Routine Resupply

I-36. Whenever possible, routine resupply by logistics package (LOGPAC) is conducted on a regular basis and is the preferred method for the distribution of supplies. Routine resupply, conducted ideally during hours

of limited visibility, through LOGPAC covers all classes of supply, mail, and any other items usually requested. The LOGPAC, a grouping of multiple classes of supply and supply vehicles under the control of a single ground convoy commander (see ATP 4-01.45) or through aerial delivery under certain situations (see ATP 4-48), is an efficient method to accomplish routine resupply operations. The key feature is a centrally organized resupply operation carrying all items needed to sustain the force for a specific period, usually 24 hours or until the next scheduled logistics package. The FSC distribution platoon leader oversees LOGPAC operations and manages the distribution of supplies within the FSC to individual company logistics release points.

Immediate Resupply

I-37. Immediate resupply also referred to as emergency or urgent resupply is the least preferred method for the distribution of supplies. While resupply may be required when combat losses occur, requests for immediate resupply not related to combat loss indicates a breakdown in coordination and collaboration between sustaining and operating forces. Immediate resupply that extends beyond the Infantry battalion's echelons of support capabilities requires immediate intervention of the brigade support battalion or next higher sustainment echelon capable of executing the support mission. When a unit has an immediate need for resupply that cannot wait for a routine logistics package an immediate resupply may involve Class III (petroleum, oils, and lubricants), Class V (ammunition), and Class VIII (medical), and, on occasion, Class I (rations). An immediate resupply, by aerial delivery (see below) is dependent the availability of aviation assets. The fastest and most appropriate means of delivery is normally used, although, procedures may have to be adjusted when in contact with the enemy.

Contingency Resupply

I-38. Contingency resupply is the on call delivery of prepackaged supplies during the execution phase of an operation. This type of on call delivery of a prepackaged resupply is generally used to support an operation of limited duration, such as an Airborne or air assault or other limited engagement of short duration. Contingency resupply operations for the company are identified during the TLP, normally during war gaming as each course of action is analyzed. Contingency resupply differs from a routine logistics package or immediate resupply, in that, prior to execution, triggers for delivery are developed to tie contingency resupply operations to the ground tactical plan. During the planning and preparation phases of the operations process units develop menus for prepackaged classes of supply to ensure their availability for expedited delivery as needed. A contingency resupply package can be as simple as a container or bag filled with a small amount of supplies or a unit basic load prepackaged for delivery when needed. Delivery methods vary between rotary wing, fixed wing, and ground delivery assets.

Aerial Delivery

I-39. Aerial delivery, by airland, airdrop, and sling-load operations, provides additional capability to resupply the Infantry rifle company when the terrain or enemy situation limits access by ground transportation. Aerial delivery of routine, (resupply by logistics package), immediate resupply (emergency or urgent resupply), and contingency resupply, provides an effective means to by-pass enemy activities and reduces the need for route clearance of ground lines of communications. When planning aerial delivery operations, the commander considers the enemy's ability to locate the delivery and receiving unit by observing the delivery aircraft. Drop zones and landing zones are located away from the main unit in an area that can be defended for a short time unless the resupply is conducted in an area under friendly control and away from direct enemy observation. When delivered, supplies are immediately transported away from the drop zone or landing zone. Six aerial delivery means, common to company resupply operations, include internal and external (sling) loading, speedball, kicker box, Container Delivery System, Low Cost Low Altitude, and Joint Precision Airdrop System. (Refer to ATP 3-21.20 for additional information.)

Note. In order for aerial delivery to be effective, friendly forces must control the airspace and neutralize enemy ground-based air defenses along the aerial delivery route. FM 3-99 addresses planning considerations for the suppression of enemy air defenses along aerial routes and guidance for selecting landing zones and drop zones. ATP 4-48 describes the planning, preparation, execution process for aerial delivery; and identifies responsibilities in the conduct of aerial delivery.

Prepositioned

I-40. Prepositioning of supplies must be carefully planned and executed at every level when utilized. All leaders must know the exact locations of prepositioned sites, which they verify during reconnaissance and rehearsals. The commander take measures to ensure survivability. These measures may include digging in prepositioned supplies and selecting covered and concealed positions. The commander must also have a plan to remove or destroy prepositioned supplies if required.

Cache

I-41. A cache is a prepositioned and concealed supply point. Caches are an excellent tool for reducing the Soldier‘s load and can be set up for a specific mission or as a contingency measure. Cache sites have the same characteristics as an objective rally point or patrol base, with the supplies concealed above or below ground. An above ground cache is easier to get to but is more likely to be discovered by the enemy, civilians, or animals. A security risk always exists when returning to a cache. A cache site should be observed for signs of enemy presence and secured before being used as it may have been booby-trapped and may be under enemy observation.

Logistics Package

I-42. The LOGPAC technique is a simple, efficient way to accomplish routine resupply operations. The key feature is a centrally organized resupply convoy originating at the Infantry battalion trains. It carries all items needed to sustain the Infantry rifle company for a specific period, usually 24 hours or until the next scheduled LOGPAC. Infantry rifle company and Infantry battalion SOPs specify the exact composition and march order of the LOGPAC.

Preparations

I-43. The Infantry rifle company supply sergeant first compiles and coordinates all of the company’s supply requests. Based on the requests, the supply sergeant then assembles the LOGPAC. Example LOGPAC for the company may include the following:

- Class I, Class III (bulk and packaged products), and Class V supplies from the forward support company.
- Class II, Class IV (basic load resupply only), Class VI, and Class VII supplies from Infantry battalion S4 personnel in the field trains.
- Routine Class IX supplies and maintenance documents (as required) from the prescribed load list section in the field trains.
- Replacement personnel and Soldiers returning from a medical treatment facility.
- Weapons and equipment returning to the rifle company area from maintenance.
- Mail and personnel action documents (including awards and finance and legal documents) from the battalion S-1 section and servicing legal office.

I-44. When LOGPAC preparations are completed, the supply sergeant initiates tactical movement to the logistics release point under the supervision of the distribution platoon leader. The supply sergeant and LOGPAC linkup with the first sergeant at the logistics release point.

Actions at the Logistics Release Point

I-45. When the first sergeant, executive officer, or a representative arrives at the logistics release point to pick up the Infantry rifle company LOGPAC, they update all personnel and logistical reports and is briefed by the field trains officer in charge on any changes to the tactical or support situation. They then escort the convoy to the rifle company resupply point, providing security during movement from the logistics release point.

Resupply Methods

I-46. As directed by the commander or XO, the 1SG establishes the Infantry rifle company's logistics resupply point using the service station method and the tailgate method. The 1SG briefs each LOGPAC driver on which method or methods to use. When the resupply point is ready, the first sergeant informs the commander, who in turn directs each platoon or element to conduct resupply based on the tactical situation.

Service Station Resupply

I-47. With the service station method, vehicles move individually or in small groups to a centrally located resupply point. Depending on the tactical situation, one team or squad (one element within the squad or platoon may be utilized to pick-up the resupply for the whole unit to save time), or even an entire platoon moves out of its position, conducts resupply operations, and then moves back into position. When using this method, Soldiers enter the resupply point following a one-way flow; only requiring immediate maintenance stop at the maintenance holding area. This process continues until the entire Infantry rifle company has been resupplied (see figure I-1 on page I-10).

I-48. When mounted, vehicles move through each supply location, with individuals and crews rotating 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, where, time permitting, the platoon leader and platoon sergeant conduct a precombat inspection. Whether mounted or dismounted, the company command group (rifle company commander, XO, and first sergeant) can take this opportunity to conduct precombat inspections of each platoon as they pass through the resupply point.

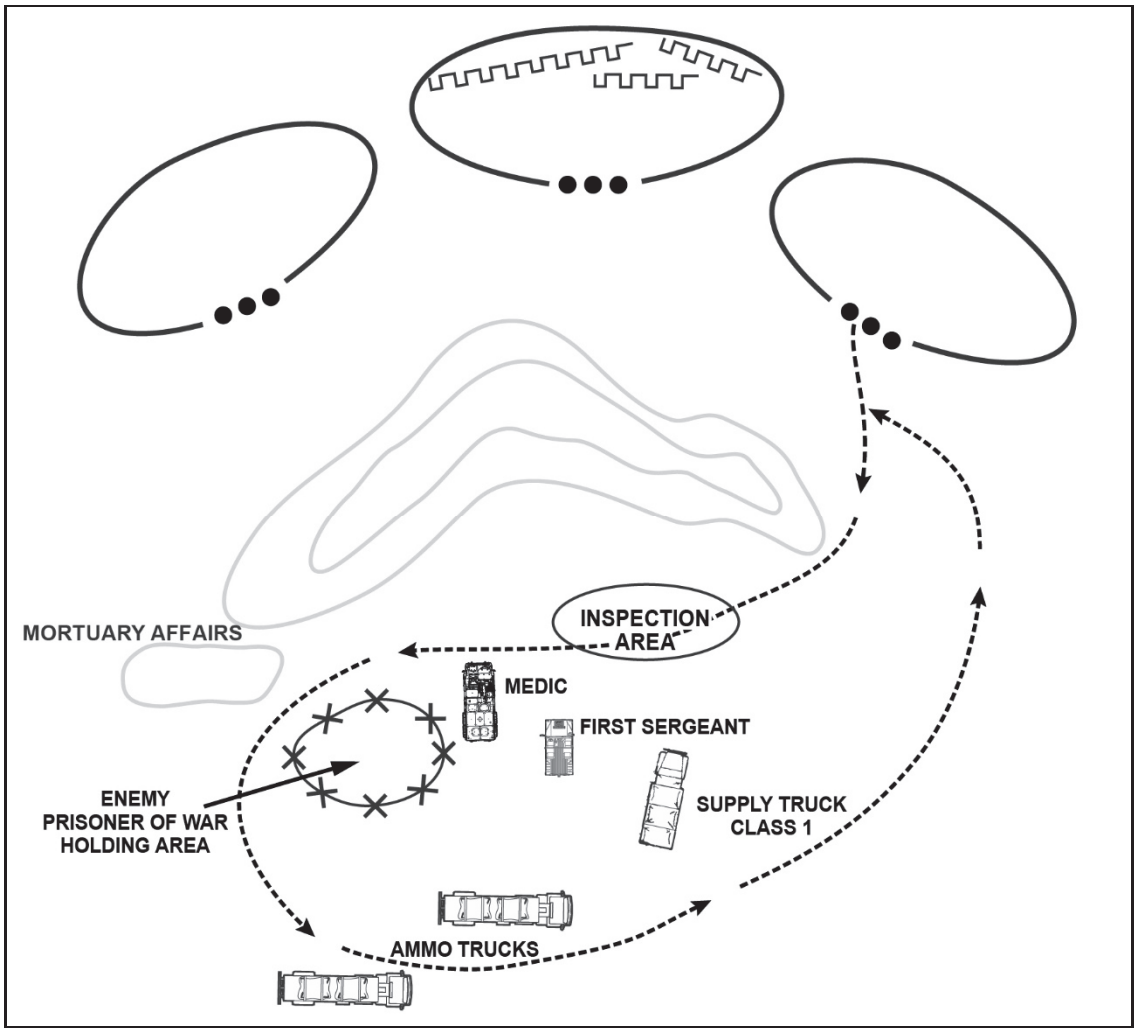

Figure I-1. Service station method

Tailgate Resupply

I-49. Tailgate resupply usually requires significantly more time than do service station operations. Usually, units use the tailgate method only when the tactical situation allows or dictates. Subordinate units remain in their positions or pull back a short distance to allow trucks carrying Class III and Class V supplies to reach them. Individuals and crewmen rotate through the feeding area, pick up mail and sundries, and fill or exchange water containers. Any EPWs and detainees are centralized and guarded. Soldiers killed in action and their personal effects are brought to the holding area, where the first sergeant takes charge of them (see figure I-2).

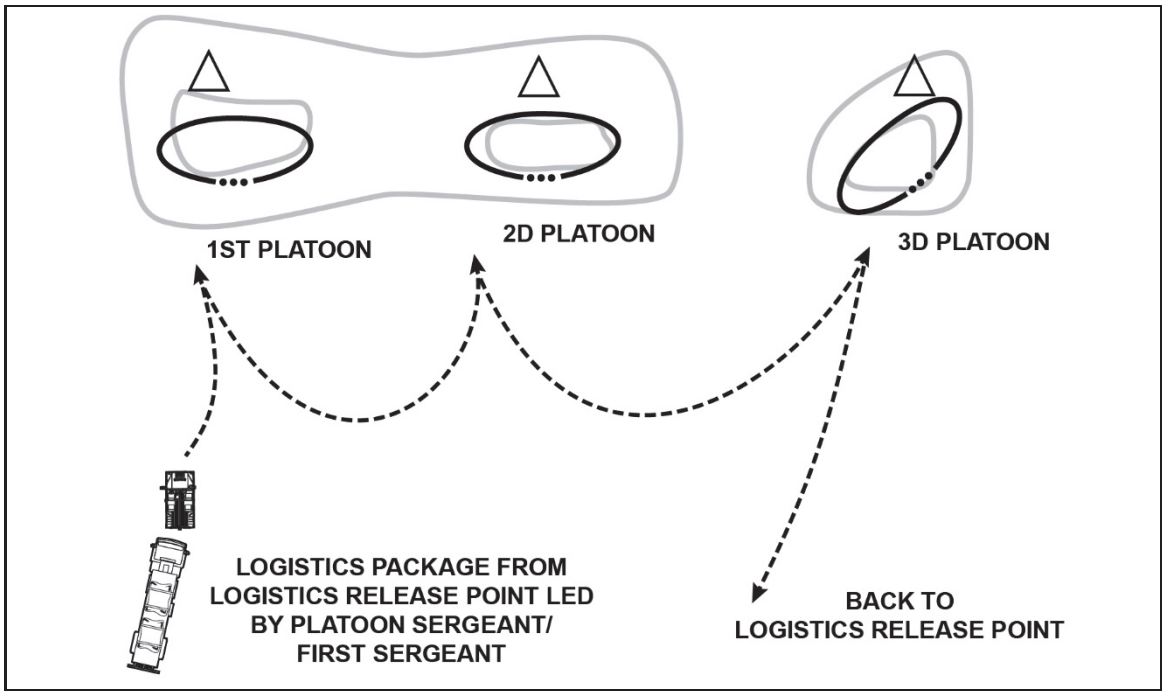

Figure I-2. Tailgate resupply method

Combination of Service Station and Tailgate Resupply

I-50. The company may select to employ the tailgate resupply method, but selected platoons may have to use the service station resupply method. Selected platoon(s) may use the service station resupply method and some sections may have to use the tailgate resupply method.

HUMAN RESOURCES SUPPORT

I-51. Human resources support all functions that affect the Soldier's status, readiness, and welfare. It includes essential personnel services such as evaluations, leaves and passes, awards and decorations, rest and recuperation, postal, personnel accountability, casualty operations, strength reporting, retention operations, and personnel information management.

Postal Services

I-52. The battalion mail clerk receives and distributes Soldier mail to the company mail clerk, usually the supply sergeant, who delivers it to the first sergeant, platoon sergeant, or to the Soldier. All outgoing and returned mail is given to the supply sergeant or first sergeant during resupply, and is turned over to the S-1 section when the LOGPAC returns to the field trains.

Personnel Management and Strength Reporting

I-53. Personnel accounting is the process of recording by-name data on Soldiers when they arrive, depart, change duty location, or change duty status. Strength reporting is the numerical end product of the by-name accounting process. First sergeants are critical participants in this process. They must be very sensitive to the accuracy and timeliness of all personnel accounting reports. They should pay special attention to Soldiers who have changed status in the medical treatment process and task organization changes when they submit their reports.

Casualty Operations

I-54. Casualty operations include production, dissemination, coordination, validation and synchronization of information regarding each casualty. This information includes casualty reporting, casualty notification, casualty assistance, line-of-duty determination, disposition of remains, and disposition of personal effects, military burial honors, and casualty mail coordination.

Unit Reporting

I-55. As casualties occur, the nearest observer informs the company first sergeant via the most expedient method available (for example, free text, and frequency modulation voice). The first sergeant submits a personnel status report to the Infantry battalion S-1 section. This report documents duty status changes on all casualties. Casualties are taken to CCP for classification of injury type (routine, urgent, return to duty), evacuation, and integration into the medical treatment system. The 1SG ensures completed DA Form 1156 *(Casualty Feeder Card),* are forwarded to the Infantry battalion S-1, who then enters the data into the defense casualty information processing system.

I-56. Commanders and their first sergeants must establish procedures to ensure that the Soldier's next of kin are notified properly and according to procedure. The potential for unofficial communications that exist with killed in action operations also exists in casualty operations. That is, the use of cell phones and computers in proximity to the area of operation enables many Soldiers to contact their home station regarding the casualty. Such communication is unofficial and unacceptable. The next of kin for Soldiers wounded or killed in action should not receive notification through unofficial means. There usually is a communication blackout until the next of kin is notified. No internet or phone calls home are permitted.

Medical and Personnel Accounting

I-57. When a Soldier becomes a casualty, the platoon combat medic or senior combat medic records the medical treatment the Soldier receives on the Soldier's DD Form 1380. The battalion aid station and brigade support medical company read the Soldier's DD Form 1380 when they treat the Soldier. The Infantry battalion S-1 should electronically receive a notification message to update the Soldier's patient tracking status. In turn, this message should be forwarded to the company. In this manner, a casualty's location can be determined and Soldiers properly accounted for by the company.

ARMY HEALTH SYSTEM

I-58. The Army Health System is the Army component of the military health system. Its capabilities are focused on delivering health care across the range of military operations, from the point of injury or wounding, through the joint operations area, to the continental United States support base. The two missions of the Army Health System are to provide health service support (casualty care, medical evacuation, and medical logistics) and force health protection (preventive medicine, veterinary services, combat and operational stress control, dental services and laboratory services). The Army Health System is focused on promoting wellness, preventing casualties due to disease and nonbattle injuries, and providing timely and effective casualty care and management. (Refer to FM 4-02 for additional information.)

Note. Health service support is aligned under the sustainment warfighting function. The force health protection mission is aligned under the protection warfighting function.

I-59. The Army Health System resources are arrayed across the battlefield in successive levels of support. These successive levels have increased medical care capabilities at each higher level. Medical evacuation and the provision of en route medical care ensures an uninterrupted continuum of care is maintained while Soldiers are moved through the roles of medical care to the medical treatment facilities best suited to treat the patient's specific injuries. See FM 3-96 and ATP 3-21.20 for information on the levels of medical care within the BCT and Infantry battalion in support of the Infantry rifle company.

Medical Evacuation Versus Casualty Evacuation

I-60. *Medical evacuation* is the process of moving any person who is wounded, injured, or ill to and/or between medical treatment facilities while providing en route medical care (FM 4-02). Medical evacuation is the key factor to ensuring the continuity of care provided to our soldiers by providing en route medical care during evacuation, facilitating the transfer of patients between medical treatment facilities to receive the appropriate specialty care. This ensures that scarce medical resources (personnel, equipment, and supplies [to include blood]) can be rapidly transported to areas of critical need on the battlefield.

I-61. Medical evacuation, commonly called medical evacuation, is not the same as casualty evacuation. *Casualty evacuation*—nonmedical units use this to refer to the movement of casualties aboard nonmedical vehicles or aircraft without en route medical care (FM 4-02). Casualty evacuation is the transport/movement of casualties by nonmedical assets without specialized trauma care. For the purposes of this discussion, casualty evacuation will mean that which is done when moving casualties from the point of injury (commonly called POI) to the CCP or company CCP. Ideally, casualties are transferred from a CCP to a medical evacuation asset. When this is not possible, the casualty is moved from the CCP, when required to move, aboard a nonmedical asset to a medical evacuation asset or medical treatment facility.

Casualty Care

I-62. Effective casualty care has a positive impact on the morale of a unit. Casualties are cared for at the POI (or under nearby cover and concealment) and receive self- or buddy aid, advanced first aid from the combat lifesaver, or emergency medical treatment from the trauma specialist (platoon or company medic).

I-63. During the fight, casualties should remain under cover where they received initial treatment (self- or buddy aid). As soon as the situation allows, casualties are moved to the platoon CCP. From the platoon area, casualties are normally evacuated to the company CCP and then back to the battalion aid station or other facility in the battalion or brigade support area. Unit SOPs addresses these activities, to include the marking of casualties in limited visibility operations. Small, standard, or IR chemical lights work well for this purpose. Once the casualties are collected, evaluated, and treated, they are prioritized for evacuation back to the company CCP. Once they arrive at the company CCP, the above process is repeated while awaiting their evacuation back to the support area(s).

I-64. An effective technique, particularly during an attack, is to task-organize a logistics team under the 1SG. These Soldiers carry additional ammunition forward to the platoons and evacuate casualties to either the company or the battalion CCP. The commander determines the size of the team during mission analysis.

I-65. When the company is widely dispersed, the casualties might be evacuated directly from the platoon CCP by vehicle or helicopter. Helicopter evacuation might be restricted due to the threat of enemy ground to air small arms, shoulder fired or other air defense weapons. In some cases, the casualties must be moved to the company CCP before evacuation. If the capacity of the battalion's organic ambulances is exceeded, unit leaders may re-role supply or other vehicles to backhaul or otherwise transport non-urgent casualties to the battalion aid station. In other cases, the platoon sergeant may direct platoon litter teams to carry the casualties to the rear.

I-66. Leaders minimize the number of Soldiers required to evacuate casualties. Casualties with minor wounds can walk or even assist with carrying the more seriously wounded. Soldiers can make field-expedient litters by cutting small trees and putting the poles through the sleeves of buttoned uniform blouses. A travois, or skid, might be used for casualty evacuation. Wounded are strapped on this type of litter, then one person can pull it. It can be made locally from durable, rollable plastic. Tie-down straps are fastened to it. In rough terrain, or on patrols, litter teams can evacuate casualties to the battalion aid station. Then, they are carried with the unit either until transportation can reach them or until they are left at a position for later pickup.

I-67. Unit SOPs and OPORDs address casualty treatment and evacuation in detail. They cover the duties and responsibilities of key personnel, the evacuation of chemically contaminated casualties (on separate routes from noncontaminated casualties), and the priority for operating key weapons and positions. They specify preferred and alternate methods of evacuation and make provisions for retrieving and safeguarding the weapons, ammunition, and equipment of casualties. Slightly wounded personnel are treated and returned

to duty by the lowest echelon possible. Platoon medics evaluate sick Soldiers and either treat or evacuate them as necessary. Casualty evacuation is rehearsed like any other critical part of an operation.

I-68. Before casualties are evacuated to the CCP or beyond, leaders should remove all key operational or sensitive items and equipment, including communications security devices or signal operating instructions (commonly called SOIs), maps, position location devices. Every unit should establish an SOP for handling the weapons and ammunition of its wounded or killed in action. Protective masks must stay with the individual. For procedures in the use of the casualty feeder report, DA Form 1156 see paragraph I-55 on page I-12.

I-69. At the CCP, the senior trauma specialist conducts triage of all casualties, takes the necessary steps to stabilize their condition, and initiates the process of evacuating them to the rear for further treatment. The senior trauma specialist helps the 1SG arrange evacuation via ground or air ambulance, or by nonstandard means.

I-70. When possible, the battalion medical platoon ambulances provide evacuation and en route care from the Soldier's point of injury or the company's CCP to the battalion aid station. The ambulance team supporting the company works in coordination with the senior trauma specialist supporting the rifle platoons. In mass casualty situations, nonmedical vehicles can be used to assist in casualty evacuation as directed by the commander. Plans for the use of nonmedical vehicles to perform casualty evacuation should be included in the unit SOP. Ground ambulances from the brigade support medical company or other supporting ambulances evacuate patients from the battalion aid station back to the brigade support medical company medical treatment facility located in the brigade support area.

Note. During entry operations, aeromedical evacuation might be unavailable for the first 96 hours.

OPERATIONS PROCESS

I-71. Sustainment planning is fully integrated throughout the operations process of the Infantry rifle company. Planning is continuous and concurrent with ongoing support preparation, execution, and assessment. Sustainment planning, generally conducted by the company XO, is a key activity conducted during company TLP, to include war gaming. The sustainment plan is continually assessed to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable. (Refer to FM 3-96 and ATP 3-21.20 for additional information.)

PLANNING CONSIDERATIONS

I-72. The company XO, under the supervision of the commander and in coordination with the 1SG, develops the sustainment plan by first determining exactly what supplies the company has on hand. Only then can the XO accurately estimate support requirements for the company. The XO uses available information gathered during mission analysis and from war gaming to aid in the development of the sustainment plan. This process, used by the XO, is important not only in confirming the validity of the sustainment plan but also in ensuring that the company's support requests are submitted as early as possible.

I-73. The XO formulates the sustainment execution plan and submits support requests based on the results of COA analysis, and the war gaming and refinement of the commander's maneuver plan. The sustainment plan should answer a variety of questions, such as—

- What types of support will the Infantry rifle company need based on the nature of the mission and specific tactical factors?
- In which quantities will this support be required?
  - Will routine, immediate, or contingency resupply or some combination of resupply technique be required during the mission?
  - Does this mission require a prepositioned or cache supply point(s)?
- What are the composition, disposition, and capabilities of the expected enemy threat and how will this affect sustainment during the mission?
  - Where and when will the expected contact occur?

  - What are the company's expected casualties based on the nature and location of expected contact?
  - How many CCPs (if any) will the company require and at what echelon will they locate?
  - What impact will the enemy's weapons capabilities have on the mission and on expected sustainment requirements?
  - How many enemy prisoners of war or detainees are expected and where?
- How will terrain and weather affect sustainment operations during the mission?
  - What ground will provide optimum security for the company trains?
  - What ground will provide optimum security for maintenance and casualty collection points?
  - What are the company's casualty evacuation means and routes?
  - What are the company's "dirty" routes for evacuation of contaminated personnel and equipment?
- When and where will the company need to be resupplied?
  - Which sites are the best for the maintenance collection points based on the nature and location of expected contact?
  - Which sites are the best for the casualty collection points based on the nature and location of expected contact?
  - Where will the enemy prisoner of war and detainee collection points be located and how will they be handled?
  - Which logistic release points will be active during the mission?
  - When will the logistics release points be active?
- What are the criteria and triggers for the movement of the combat trains?
- What are the support priorities (by element and type of support)? The discussion should answer these questions:
  - Which platoon has priority for immediate Class III resupply?
  - Which platoon has priority for immediate Class V resupply?
- Will there be lulls in the mission that will permit support elements to conduct resupply operations in relative safety?
- How can the company best minimize the danger to support elements if no lulls are expected?
- Which resupply method (tailgate or service station) or combination is best to use based on the information developed during sustainment planning?

PREPARATION

I-74. Preparation for the sustainment consists of activities performed by the company to improve its ability to execute a mission. Preparation includes but is not limited to plan refinement, rehearsals, information collection, coordination, inspections, and movements. Sustainment preparation of the operational environment identifies friendly resources (host nation support, contractible, or accessible assets) or environmental factors (endemic diseases, climate) that affect sustainment.

I-75. Thorough backbriefs and comprehensive rehearsals are important keys to effective sustainment planning. These activities play a critical role in ensuring that the company can execute its sustainment plan efficiently. These activities allow the commander, subordinate leaders, and each team or crewman to discover potential problem areas and to develop contingency plans to avoid unforeseen difficulties.

I-76. The commander has several options for conducting sustainment rehearsals. One is to integrate the sustainment rehearsal into the unit's larger maneuver rehearsals. Another alternative is for the unit's sustainment operators to conduct a separate rehearsal. The commander may direct the XO and 1SG to rehearse sustainment operations with platoon sergeants and the senior combat medic. An explosive ordnance disposal personnel leader, for example, or other attachment leader are included in rehearsals as required by the mission.

EXECUTION

I-77. Sustainment is generally executed through the company trains. Company trains members are METT-TC dependent and identified by the commander as the mission requires to meet company sustainment requirements. As the commander's primary sustainment operators, the XO and 1SG work closely with the Infantry battalion staff before and during execution to ensure the company receives the required support for the assigned mission(s). Failure to sustain the company can cause a pause or the culmination of the operation resulting in the loss of the initiative. The company trains can consist of the executive officer or the first sergeant, supply sergeant, and medic. Maintenance teams from the FSC may be included.

ECHELON SUPPORT

I-78. How the Infantry battalion, including external and attached organizations and the brigade support battalion, array in echelon varies widely based upon the mission variables of METT TC. The FSC, in support of the Infantry battalion's concept of support, plans and synchronizes *echelon support*—the method of supporting an organization arrayed within an area of operation (ATP 4-90). *Area support*—is the method of logistics, medical support, and personnel services in which support relationships are determined by the location of the units requiring support. Sustainment units provide support to units located in or passing through their assigned areas (ATP 4-90). Current mission, task organization, mission command, concept of support, capability and capacity, and terrain influence how support is echeloned.

I-79. Echeloning support within the Infantry battalion is a carefully planned and executed process. The method employed to echelon support is a deliberate, collaborative decision based upon a thorough mission analysis within the military decision-making process. During this analysis, there must be an understanding at all levels of the capabilities of the support organization within and supporting the Infantry battalion. As the Infantry battalion's primary sustainment organization, the FSC's organization facilitates echeloned support. Common echelon of support at the lowest level of sustainment is executed at the battalion, and company echelons. (Refer to ATP 3-21.20 and FM 3-96 for additional information.)

BATTALION ECHELON

I-80. As addressed earlier, a FSC from the brigade support battalion supports the Infantry battalion. The FSC performs the logistics function within the battalion echelon of support, referred to as unit trains in one location, or echeloned trains within an area of operation. Unit trains at the battalion level are appropriate when the unit is consolidated in an assembly area, during reconstitution, major movements, or when terrain or distances restrict movement causing the unit to depend on aerial resupply and evacuation for support. The battalion normally operates in echeloned trains (field, combat, and company trains) where subordinate unit trains employ into multiple locations.

COMPANY TRAINS

I-81. Company trains provide sustainment for a company during combat missions. Company trains usually include the 1SG, supply sergeant, and the armorer, the medical evacuation teams maybe collocated in the company trains. The supply sergeant can collocate in the combat trains, if it facilitates LOGPAC operations. The 1SG usually directs movement and employment of the company trains to ensure its operational responsiveness and survivability; although the company commander may assign the responsibility to the company XO. The distance of the company trains from the company's combat mission is METT-TC dependent. By placing at least one terrain feature between it and the enemy, the company trains will be out of the enemy's direct fire weapons.

Note. METT-TC ultimately dictate the actual distance at which the trains operate. In some instances the company trains can be collocated with the battalion combat trains or even the field trains. Figure I-1 on page I-10 illustrates the notional battalion concept of support in relation to the companies.

I-82. Configuring the company trains with the assets described above gives the company virtually immediate access to essential logistical functions while allowing the trains to remain in a covered and concealed position out of enemy contact.

I-83. Because the security of sustainment elements is critical to the success of the Infantry rifle company and Infantry battalion missions, the company and Infantry battalion trains develop plans for continuous security. Where feasible, they plan and execute a perimeter defense. The trains, however, can lack the personnel and combat power to conduct a major security effort. In such situations, they implement passive security measures to provide protection from enemy forces. (See figure I-3.)

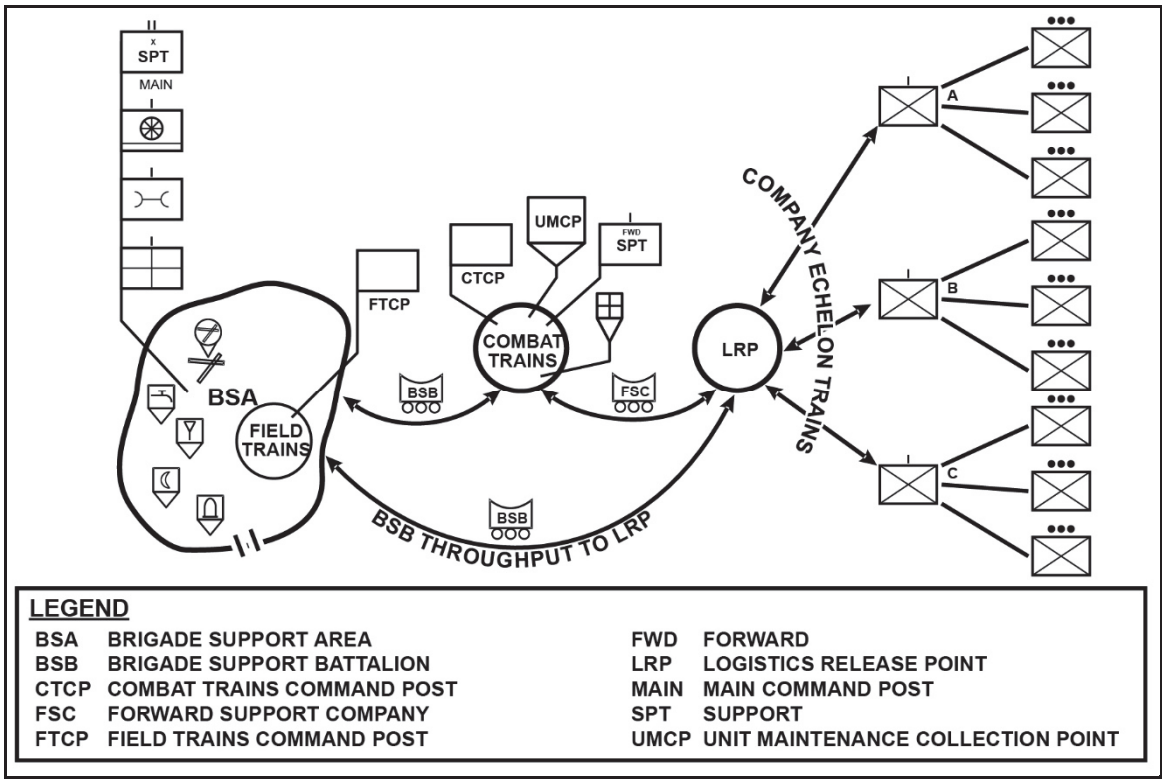

Figure I-3. Battalion and company concept of support, example

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Glossary

The glossary lists acronyms and terms with Army or joint definitions. Where Army and joint definitions differ, (Army) precedes the definition. Terms and acronyms for which ATP 3-21.10 is the proponent are marked with an asterisk (*). The proponent publication for other terms is listed in parentheses after the definition.

SECTION I – ACRONYMS AND ABBREVIATIONS

Acronym	Definition
1SG	first sergeant
	A
ABCT	armored brigade combat team
ADP	Army doctrine publication
ADRP	Army doctrine reference publication
ATP	Army techniques publication
ATTP	Army tactics, techniques, and procedures publication
	B
BCT	brigade combat team
BDZ	base defense zone
BFV	Bradley fighting vehicle
BHL	battle handover line
	C
CAS	close air support
CAT	category
CBRN	chemical, biological, radiological, and nuclear
CCIR	commander's critical information requirements
CCP	casualty collection point
CJCSM	Chairman of the Joint Chiefs of Staff Manual
COA	course of action
CP	command post
CWMD	countering weapons of mass destruction
	D
DA	Department of the Army
DLIC	detachment left in contact
	E
EA	engagement area
EPW	enemy prisoner of war
	F
FAC	forward air controller
FAC (A)	forward air controllers (Airborne)

FDC	fire direction center
FIST	fire support team
FO	forward observer
FOB	forward operating base
FPF	final protective fire
FPL	final protective line
FSC	forward support company
FSEM	fire support execution matrix
FSF	foreign security forces
FSO	fire support officer

H

HMMWV	high mobility multi-purpose wheeled vehicle
HUMINT	human intelligence

I

IBCT	Infantry brigade combat team
ICV	Infantry carrier vehicle
IED	improvised explosive device
IO	information operations
IPB	intelligence preparation of the battlefield
IR	infrared
IST	intelligence support team
ITAS	Integrated Target Acquisition System

J

JP	joint publication
JTAC	joint terminal air controller

L

LOGPAC	logistics package
LZ	landing zone

M

METT-TC	mission, enemy, terrain and weather, troops and support available, time available, civil considerations (mission variables)
MRAP	mine resistant ambush protected
mm	millimeter

N

NAI	named area of interest
NCO	noncommissioned officer

O

OE	operational environment
OPORD	operations order
OTERA-A	organize, train, equip, rebuild and build, advise and assist, and assess

P

PIR	priority intelligence requirement
PL	phase line
POB	point of breach
PSG	platoon sergeant
PZ	pickup zone

R

R&S	reconnaissance and surveillance
RED	risk estimate distance
RFL	restrictive fire lines
ROE	rule of engagement
	S
SBCT	Stryker brigade combat team
SC	security cooperation
SFA	security force assistance
SOP	standard operating procedure
SOSRA	suppress, obscure, secure, reduce, and assault
S-1	battalion or brigade personnel staff officer
S-2	battalion or brigade intelligence staff officer
S-3	battalion or brigade operations staff officer
S-4	battalion logistics staff officer
S-6	battalion or brigade signal staff officer
	T
TLP	troop leading procedures
TOW	tube-launched, optically tracked, wire guided/wireless guided
TRP	target reference point
	U
U.S.	United States
UAS	unmanned aircraft system
	W
WARNORD	warning order
WCS	weapons control status
WMD	weapons of mass destruction
WP	white phosphorous
	X
XO	executive officer

SECTION II – TERMS

actions on contact

A series of combat actions, often conducted nearly simultaneously, taken on contact with the enemy to develop the situation. (ADRP 3-90)

administrative movement

A movement in which troops and vehicles are arranged to expedite their movement and conserve time and energy when no enemy interference is anticipated. (FM 3-90-2)

adversary

A party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged. (JP 3-0)

air-ground operations

The simultaneous or synchronized employment of ground forces with aviation maneuver and fires to seize, retain, and exploit the initiative. Also called AGO. (FM 3-04)

alternate position

A defensive position that the commander assigns to a unit or weapon system for occupation when the primary position becomes untenable or unsuitable for carrying out the assigned task. (ADRP 3-90)

ambush

An attack by fire or other destructive means from concealed positions on a moving or temporarily halted enemy. (FM 3-90-1)

approach march

The advance of a combat unit when direct contact with the enemy is intended. (ADRP 3-90)

area defense

A defensive task that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright. (ADRP 3-90)

area of influence

A geographical area wherein a commander is directly capable of influencing operations by maneuver or fire support systems normally under the commander's command or control. (JP 3-0)

area of interest

That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory. Also called AOI. (JP 3-0)

area of operations

An operational area defined by the joint force commander for land and maritime forces that should be large enough to accomplish their missions and protect their forces (JP 3-0)

area reconnaissance

A form of reconnaissance that focuses on obtaining detailed information about the terrain or enemy activity within a prescribed area. (ADRP 3-90)

area security

A security task conducted to protect friendly forces, installations, routes, and actions within a specific area. (ADRP 3-90)

area support

The method of logistics, medical support, and personnel services in which support relationships are determined by the location of the units requiring support. Sustainment units provide support to units located in or passing through their assigned areas. (ATP 4-90)

assault position

A covered and concealed position short of the objective, from which final preparations are made to assault the objective. (ADRP 3-90)

assembly area

An area a unit occupies to prepare for an operation. (FM 3-90-1)

assured mobility

A framework—of processes, actions, and capabilities—that assures the ability of a force to deploy, move, and maneuver where and when desired, to achieve the commander's intent. (ATP 3-90.4)

assessment

The determination of the progress toward accomplishing a task, creating a condition, or achieving an objective. (JP 3-0)

attack

An offensive task that destroys or defeats enemy forces, seizes and secures terrain, or both. (ADRP 3-90)

attack by fire

A tactical mission task in which a commander uses direct fires, supported by indirect fires, to engage an enemy force without closing with the enemy to destroy, suppress, fix, or deceive that enemy. (FM 3-90-1

attack position

The last position an attacking force occupies or passes through before crossing the line of departure. (ADRP 3-90)

avenue of approach

(Army) The air or ground route leading to an objective (or to key terrain in its path) that an attacking force can use. (ADRP 3-90)

battle handover line

A designated phase line on the ground where responsibility transitions from the stationary force to the moving force and vice versa. (ADRP 3-90)

battle position

A defensive location oriented on a likely enemy avenue of approach. (ADRP 3-90)

biological hazard

An organism, or substance derived from an organism, that poses a threat to human or animal health. (JP 3-11)

biological agent

A microorganism (or a toxin derived from it) that causes disease in personnel, plants, or animals or causes the deterioration of materiel. (JP 3-11)

block

A tactical mission task that denies the enemy access to an area or prevents the enemy's advance in a direction or along an avenue of approach. Block is also an obstacle effect that integrates fire planning and obstacle effort to stop an attacker along a specific avenue of approach or prevent the attacking force from passing through an engagement area. (FM 3-90-1)

bounding overwatch

A movement technique used when contact with enemy forces is expected. The unit moves by bounds. One element is always halted in position to overwatch another element while it moves. The overwatching element is positioned to support the moving unit by fire or fire and movement. (FM 3-90-2)

breach

1. A tactical mission task in which the unit employs all available means to break through or establish a passage through an enemy defense, obstacle, minefield, or fortification. (FM 3-90-1)

2. A synchronized combined arms activity under the control of the maneuver commander conducted to allow maneuver through an obstacle. (ATP 3-90.4)

breach area

A defined area where a breach occurs. (ATP 3-90.4)

breakout

An operation conducted by an encircled force to regain freedom of movement or contact with friendly units. It differs from other attacks only in that a simultaneous defense in other areas of the perimeter must be maintained. (ADRP 3-90)

bypass criteria

Measures during the conduct of an offensive operation established by higher headquarters that specify the conditions and size under which enemy units and contact may be avoided. (ADRP 3-90)

call for fire

A request for fire containing data necessary for obtaining the required fire on a target. (FM 3-09)

canalize

A tactical mission task in which the commander restricts enemy movement to a narrow zone by exploiting terrain coupled with the use of obstacles, fires, or friendly maneuver. (FM 3-90-1)

casualty evacuation

(Army) Nonmedical units use this to refer to the movement of casualties aboard nonmedical vehicles or aircraft without en route medical care. (FM 4-02)

checkpoint

A predetermined point on the ground used to control movement, tactical maneuver, and orientation. Also called a CP. (ATP 3-21.20)

chemical agent

A chemical substance that is intended for use in military operations to kill, seriously injure, or incapacitate mainly through its physiological effects. (JP 3-11)

chemical, biological, radiological, and nuclear defense

Measures taken to minimize or negate the vulnerabilities to, and effects of, a chemical, biological, radiological, or nuclear hazard or incident. (JP 3-11)

chemical, biological, radiological, and nuclear environment

An operational environment that includes chemical, biological, radiological, and nuclear threats and hazards and their potential resulting effects. (JP 3-11)

chemical, biological, radiological, and nuclear hazard

Chemical, biological, radiological, and nuclear elements that could create adverse effects due to an accidental or deliberate release and dissemination. (JP 3-11)

chemical biological, radiological, and nuclear protection

Measures taken to keep chemical, biological, radiological, and nuclear threats and hazards from having an adverse effect on personnel, equipment, and facilities. (ATP 3-11.32)

chemical hazard

Any chemical manufactured, used, transported, or stored that can cause death or other harm through toxic properties of those materials, including chemical agents and chemical weapons prohibited under the Chemical Weapons Convention as well as toxic industrial chemicals. (JP 3-11)

clear

A tactical mission task that requires the commander to remove all enemy forces and eliminate organized resistance within an assigned area. (FM 3-90-1)

close air support

Air action by manned or unmanned fixed-wing and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces. Also called CAS. (JP 3-0)

close area

The portion of a commander's area of operations assigned to subordinate maneuver forces. (ADRP 3-0)

close combat

That part of warfare carried out on land in a direct-fire fight, supported by direct and indirect fires and other assets. (ADRP 3-0)

collaborative planning

Commanders, subordinate commanders, staffs, and other partners sharing information, knowledge, perceptions, ideas, and concepts regardless of physical location throughout the planning process. (ADRP 5-0)

collateral damage

The unintentional or incidental injury or damage to persons or objects that would not be lawful military targets in the circumstances ruling at the time. (JP 3-60)

combat formation

A combat formation is an ordered arrangement of forces for a specific purpose and describes the general configuration of a unit on the ground. (ADRP 3-90)

combat identification

The process of attaining an accurate characterization of detected objects in the operational environment sufficient to support an engagement decision. (JP 3-09)

combat information

Unevaluated data, gathered by or provided directly to the tactical commander which, due to its highly perishable nature or the criticality of the situation, cannot be processed into tactical intelligence in time to satisfy the user's tactical intelligence requirements. (JP 2-01)

combat outpost

A reinforced observation post capable of conducting limited combat operations. (FM 3-90-2)

combat power

(Army) the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time. (ADRP 3-0)

combined arms

The synchronized and simultaneous application of all elements of combat power that together achieve an effect greater than if each element was used separately or sequentially. (ADRP 3-0)

commander's critical information requirements

An information requirement identified by the commander as being critical to facilitating timely decision-making. Also called CCIR. (JP 3-0)

commander's intent

A clear and concise expression of the purpose of the operation and the desired military end state that supports mission command, provides focus to the staff, and helps subordinate and supporting commanders act to achieve the commander's desired results without further orders, even when the operation does not unfold as planned. (JP 3-0)

company

A unit consisting of two or more platoons, usually of the same type, with a headquarters and a limited capacity for self-support. (ADRP 3-90)

company team

A combined arms organization formed by attaching one or more nonorganic armor, mechanized Infantry, Stryker, or Infantry platoons to an armor tank, mechanized Infantry, Stryker, or Infantry company, either in exchange for, or in addition to, its organic platoons. (ADRP 3-90)

complex terrain

A geographical area consisting of an urban center larger than a village and/or of two or more types of restrictive terrain or environmental conditions occupying the same space. (ATP 3-34.80)

concealment

Protection from observation or surveillance. (FM 3-96)

concept of operations

(Army) A statement that directs the manner in which subordinate units cooperate to accomplish the mission and establishes the sequence of actions the force will use to achieve the end state. (ADRP 5-0)

consolidate gains

The activities to make enduring any temporary operational success and set the conditions for a stable environment allowing for a transition of control to legitimate authorities. (ADRP 3-0)

consolidation

The organizing and strengthening a newly captured position so that it can be used against the enemy. (FM 3-90-1)

consolidation area

The portion of the commander's area of operations that is designated to facilitate the security and stability tasks necessary for freedom of action in the close area and to support the continuous consolidation of gains. (ADRP 3-0)

constraint

(Army) A restriction placed on the command by a higher command. A constraint dictates an action or inaction, thus restricting the freedom of action of a subordinate commander. (FM 6-0)

contain

A tactical mission task that requires the commander to stop, hold, or surround enemy forces or to cause them to center their activity on a given front and prevent them from withdrawing any part of their forces for use elsewhere. (FM 3-90-1)

contamination mitigation

The planning and actions taken to prepare for, respond to, and recover from contamination associated with all chemical, biological, radiological, and nuclear threats and hazards in order to continue military operations. (JP 3-11)

contiguous area of operations

Where all subordinate forces' areas of operations share one or more common boundaries. (FM 3-90-1)

control measures

A means of regulating forces or warfighting functions. (ADRP 6-0)

cordon and search

A technique of conducting a movement to contact that involves isolating a target area and searching suspected locations within that target area to capture or destroy possible enemy forces and contraband. (FM 3-90-1)

counterattack

An attack by part or all of a defending force against an enemy attacking force, for such specific purposes as regaining ground lost or cutting off, or destroying enemy advance units, with the general objective of denying to the enemy the attainment of the enemy's purpose in attacking. In sustained defensive actions, it is undertaken to restore the battle position and is directed at limited objectives. (FM 3-90-1)

countering weapons of mass destruction (CWMD)

The efforts against actors of concern to curtail the conceptualization, development, possession, proliferation, use, and effects of weapons of mass destruction, related expertise, materials, technologies, and means of delivery. (JP 3-40)

countermobility operations

(Army) Those combined arms activities that use or enhance the effects of natural and man-made obstacles to deny enemy freedom of movement and maneuver. (ATP 3-90.8)

counterreconnaissance

A tactical mission task that encompasses all measures taken by a commander to counter enemy reconnaissance and surveillance efforts. Counterreconnaissance is not a distinct mission, but a component of all forms of security operations. (FM 3-90-1)

cover

Protection from the effects of fires. (FM 3-96)

decision point

A point in space and time when the commander or staff anticipates making a key decision concerning a specific course of action. (JP 5-0)

decisive action

The continuous, simultaneous combinations of offensive, defensive, and stability or defense support of civil authorities tasks. (ADRP 3-0)

decisive operation

The operation that directly accomplishes the mission. (ADRP 3-0)

decisive terrain

Key terrain whose seizure and retention is mandatory for successful mission accomplishment. (FM 3-90-1)

deep area

The portion of the commander's area of operations that is not assigned to subordinate units. (ADRP 3-0)

defeat

A tactical mission task that occurs when an enemy force has temporarily or permanently lost the physical means or the will to fight. The defeated force's commander is unwilling or unable to pursue that individual's adopted course of action, thereby yielding to the friendly commander's will and can no longer interfere to a significant degree with the actions of friendly forces. Defeat can result from the use of force or the threat of its use. (FM 3-90-1)

defeat mechanism

A method through which friendly forces accomplish their mission against enemy opposition. (ADRP 3-0)

defensive tasks

Tasks conducted to defeat an enemy attack, gain time, economize forces, and develop conditions favorable for offensive or stability tasks. (ADRP 3-0)

delay line

A phase line where the date and time before which the enemy is not allowed to cross the phase line is depicted as part of the graphic control measure. (FM 3-90-1)

delaying operation

An operation in which a force under pressure trades space for time by slowing down the enemy's momentum and inflicting maximum damage on the enemy without, in principle, becoming decisively engaged. (JP 3-04)

deliberate operation

An operation in which the tactical situation allows the development and coordination of detailed plans, including multiple branches and sequels. (ADRP 3-90)

demonstration

In military deception, a show of force similar to a feint without actual contact with the adversary, in an area where a decision is not sought that is made to deceive an adversary. (JP 3-13.4)

denial operations

Actions to hinder or deny the enemy the use of space, personnel, supplies, or facilities. (FM 3-90-1)

deny

A task to hinder or prevent the enemy from using terrain, space, personnel, supplies, or facilities. (ATP 3-21.20)

depth

The extension of operations in time, space, or purpose to achieve definitive results. (ADRP 3-0)

destroy

A tactical mission task that physically renders an enemy force combat-ineffective until it is reconstituted. Alternatively, to destroy a combat system is to damage it so badly that it cannot perform any function or be restored to a usable condition without being entirely rebuilt. (FM 3-90-1)

detachment left in contact

An element left in contact as part of the previously designated (usually rear) security force while the main body conducts its withdrawal. (FM 3-90-1)

direct fire

Fire delivered on a target using the target itself as a point of aim for either the weapon or the director. (JP 3-09.3)

directed obstacle

An obstacle directed by a higher commander as a specified task to a subordinate unit. (ATP 3-90.8)

disengage

A tactical mission task where a commander has the unit break contact with the enemy to allow the conduct of another mission or to avoid decisive engagement. (FM 3-90-1)

disengagement line

A phase line located on identifiable terrain that, when crossed by the enemy, signals to defending elements that it is time to displace to their next positions. (ADRP 3-90)

dismounted march

The movement of troops and equipment, mainly by foot, with limited support by vehicles. Also called foot march. (FM 3-90-2)

double envelopment

Results from simultaneously maneuvering around both flanks of a designated enemy force. (FM 3-90-1)

echelon support

The method of supporting an organization arrayed within an area of operation. (ATP 4-90)

encirclement operations

Operations where one force loses its freedom of maneuver because an opposing force is able to isolate it by controlling all ground lines of communication and reinforcement. (ADRP 3-90)

end state

The set of required conditions that defines achievement of the commander's objectives. (JP 3-0)

enemy

A party identified as hostile against which the use of force is authorized. (ADRP 3-0)

engagement area

An area where the commander intends to contain and destroy an enemy force with the massed effects of all available weapons and supporting systems. Also called EA. (FM 3-90-1)

engagement criteria

Protocols that specify those circumstances for initiating engagement with an enemy force. (FM 3-90-1)

engagement priority

The order in which the unit engages enemy systems or functions. (FM 3-90-1)

envelopment

A form of maneuver in which an attacking force seeks to avoid the principal enemy defenses by seizing objectives behind those defenses that allow the targeted enemy force to be destroyed in their current positions. (FM 3-90-1)

essential element of friendly information

A critical aspect of a friendly operation that, if known by the enemy, would subsequently compromise, lead to failure, or limit success of the operation and therefore should be protected from enemy detection. Also called EEFI. (ADRP 5-0)

essential task

(Army) A specified or implied task that must be executed to accomplish the mission. (FM 6-0)

execution

Putting a plan into action by applying combat power to accomplish the mission. (ADP 5-0)

exfiltrate

A tactical mission task where a commander removes Soldiers or units from areas under enemy control by stealth, deception, surprise, or clandestine means. (FM 3-90-1)

exfiltration

The removal of personnel or units from areas under enemy control by stealth, deception, surprise, or clandestine means. See also special operations; unconventional warfare. (JP 3-50)

exploitation

An offensive task that usually follows a successful attack and is designed to disorganize the enemy in-depth. (ADRP 3-90)

far side objective

A defined location oriented on the terrain or on an enemy force that an assaulting force seizes to eliminate enemy direct fires to prevent the enemy from interfering with the reduction of obstacles and allows follow-on forces to move securely through created lanes. (ATP 3-90.4)

feint

An offensive action involving contact with the adversary conducted for the purpose of deceiving the adversary as to the location and time of the actual main offensive action. (JP 3-13.4)

final coordination line

A phase line close to the enemy position used to coordinate the lifting or shifting of supporting fires with the final deployment of maneuver elements. (ADRP 3-90)

final protective fire

An immediately available prearranged barrier of fire designed to impede enemy movement across defensive lines or areas. Also called FPF. (JP 3-09.3)

***final protective line**

A selected line of fire where an enemy assault is to be checked by interlocking fire from all available weapons and obstacles. Also called FPL.

fire and movement

The concept of applying fires from all sources to suppress, neutralize, or destroy the enemy, and the tactical movement of combat forces in relation to the enemy (as components of maneuver, applicable at all echelons). At the squad level, it entails a team placing suppressive fire on the enemy as another team moves against or around the enemy. (FM 3-96)

fire plan

A tactical plan for using the weapons of a unit or formation so that their fire will be coordinated. (FM 3-09)

fire superiority

That degree of dominance in the fires of one force over another that permits that force to conduct maneuver at a given time and place without prohibitive interference by the enemy. (FM 3-90-1)

fire support

Fires that directly support land, maritime, amphibious, and special operations forces to engage enemy forces, combat formations, and facilities in pursuit of tactical and operational objectives. (JP 3-09)

fire support plan

A plan that addresses each means of fire support available and describes how Army indirect fires, joint fires, and target acquisition are integrated with maneuver to facilitate operational success. (FM 3-09)

fire support planning

The continuing process of analyzing, allocating, and scheduling fires to describe how fires are used to facilitate the actions of the maneuver force. (FM 3-09)

fires

The use of weapon systems or other actions to create specific lethal or nonlethal effects on a target. (JP 3-09)

fires warfighting function

The related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process. (ADRP 3-0)

fix

A tactical mission task where a commander prevents the enemy force from moving any part of that force from a specific location for a specific period. Fix is also an obstacle effect that focuses fire planning and obstacle effort to slow an attacker's movement within a specified area, normally an engagement area. (FM 3-90-1)

flank attack

A form of offensive maneuver directed at the flank of an enemy. (FM 3-90-1)

follow and assume

A tactical mission task in which a second committed force follows a force conducting an offensive task and is prepared to continue the mission if the lead force is fixed, attrit, or unable to continue. (FM 3-90-1)

follow and support

A tactical mission task in which a committed force follows and supports a lead force conducting an offensive task. (FM 3-90-1)

force tailoring

The process of determining the right mix of forces and the sequence of their deployment in support of a joint force commander. (ADRP 3-0)

forms of maneuver

Distinct tactical combinations of fire and movement with a unique set of doctrinal characteristics that differ primarily in the relationship between the maneuvering force and the enemy. (ADRP 3-90)

forward observer

An observer operating with front line troops and trained to adjust ground or naval gunfire and pass back battlefield information. Also called FO. (JP 3-09)

forward air controller

An officer (aviator/pilot) member of the tactical air control party who, from a forward ground or airborne position, controls aircraft in close air support of ground troops. Also called FAC. (JP 3-09.3)

forward air controller (airborne)

A specifically trained and qualified aviation officer, normally an airborne extension of the tactical air control party, who exercises control from the air of aircraft engaged in close air support of ground troops. Also called FAC (A). (JP 3-09.3)

forward operating base

An airfield used to support tactical operations without establishing full support facilities. Also called FOB. (JP 3-09.3)

fragmentary order

An abbreviated operation order issued as needed to change or modify an order or to execute a branch or sequel. Also called FRAGORD. (JP 5-0)

friendly force information requirement

Information the commander and staff need to understand the status of friendly and supporting capabilities. Also called FFIR. (JP 3-0)

frontal attack

A form of maneuver in which an attacking force seeks to destroy a weaker enemy force or fix a larger enemy force in place over a broad front. (FM 3-90-1)

guard

A security task to protect the main force by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. Units conducting a guard mission cannot operate independently because they rely upon fires and functional and multifunctional support assets of the main body. (ADRP 3-90)

hasty breach

The creation of lanes through enemy minefields by expedient methods such as blasting with demolitions, pushing rollers or disabled vehicles through the minefields when the time factor does not permit detailed reconnaissance, deliberate breaching, or bypassing the obstacle. (JP 3-15)

hasty operation

An operation in which a commander directs immediately available forces, using fragmentary orders, to perform activities with minimal preparation, trading planning and preparation time for speed of execution. (ADRP 3-90)

hazard

A condition with the potential to cause injury, illness, or death of personnel; damage to or loss of equipment or property; or mission degradation. (JP 3-33)

high-value target

A target the enemy commander requires for the successful completion of the mission. (JP 3-60)

hybrid threat

The diverse and dynamic combination of regular forces, irregular forces, terrorist forces, or criminal elements unified to achieve mutually benefitting threat effects. (ADRP 3-0)

implied task

(Army) A task that must be performed to accomplish a specified task or mission but is not stated in the higher headquarters' order. (FM 6-0)

indirect fire

Fire delivered at a target not visible to the firing unit. Fire delivered to a target that is not itself used as a point of aim for the weapons or the director. (TC 3-09.81)

infiltration

A form of maneuver in which an attacking force conducts undetected movement through or into an area occupied by enemy forces to occupy a position of advantage behind those enemy positions while exposing only small elements to enemy defensive fires. (FM 3-90-1)

infiltration lane

A control measure that coordinates forward and lateral movement of infiltrating units and fixes fire planning responsibilities. (FM 3-90-1)

information operations

The integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own. Also called IO. (JP 3-13)

integration

The arrangement of military forces and their actions to create a force that operates by engaging as a whole. (JP 1)

interdict

A tactical mission task where the commander prevents, disrupts, or delays the enemy's use of an area or route. (FM 3-90-1)

interdiction

An action to divert, disrupt, delay, or destroy the enemy's military surface capability before it can be used effectively against friendly forces, or to achieve enemy objectives. (JP 3-03)

intelligence analysis

The process by which collected information is evaluated and integrated with existing information to facilitate intelligence production. (ADRP 2-0)

intelligence operations

(Army) The tasks undertaken by military intelligence units and Soldiers to obtain information to satisfy validated requirements. (ADRP 2-0)

intelligence warfighting function

The related tasks and systems that facilitate understanding the enemy, terrain, weather, civil considerations and other significant aspects of the operational environment. (ADRP 3-0)

joint fires observer

A trained service member who can request, adjust, and control surface-to-surface fires, provide targeting information in support of Type 2 and 3 close air support terminal attack controls, and perform autonomous terminal guidance operations. Also called JFO. (JP 3-09.3)

joint terminal attack controller

A qualified (certified) Service member who, from a forward position, directs the action of combat aircraft engaged in CAS and other offensive air operations. Also called JTAC. (JP 3-09.3)

key terrain

As any locality, or area, the seizure or retention of which affords a marked advantage to either combatant. (JP 2-01.3)

kill zone

That part of an ambush site where fires are concentrated to isolate, fix, and destroy the enemy. (FM 3-90-1)

land mine

A munition on or near the ground or other surface area that is designed to be exploded by the presence, proximity, or contact of a person or vehicle. (ATP 3-90.8)

lane

A route through, over, or around an enemy or friendly obstacle that provides passage of a force. (ATP 3-90.4)

leadership

The process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization. (ADP 6-22)

limit of advance

A phase line used to control forward progress of the attack. The attacking unit does not advance any of its elements or assets beyond the limit of advance, but the attacking unit can push its security forces to that limit. (ADRP 3-90)

line of contact

A general trace delineating the locations where friendly and enemy forces are engaged. (FM 3-90-1)

linkup

A meeting of friendly ground forces, which occurs in a variety of circumstances. (ADRP 3-90)

linkup point

A point where two infiltrating elements in the same or different infiltration lanes are scheduled to meet to consolidate before proceeding on with their missions. (FM 3-90-1)

local security

A security task that includes low-level security activities conducted near a unit to prevent surprise by the enemy. (ADRP 3-90)

main battle area

The area where the commander intends to deploy the bulk of the unit's combat power and conduct decisive operations to defeat an attacking enemy. (ADRP 3-90)

main effort

A designated subordinate unit whose mission at a given point in time is critical to overall mission success. (ADRP 3-0)

maneuver

Employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy. (JP 3-0)

manned-unmanned teaming

The integrated maneuver of Army aviation rotary wing and unmanned aircraft systems to conduct movement to contact, attack, reconnaissance, and security tasks. (FM 3-04)

march column

A march column consists of all elements using the same route for a single movement under control of a single commander. (FM 3-90-2)

march serial

A major subdivision of a march column that is organized under one commander who plans, regulates, and controls the serial. (FM 3-90-2)

march unit

A subdivision of a march serial. It moves and halts under the control of a single commander who uses voice and visual signals. (FM 3-90-2)

medical evacuation

The process of moving any person who is wounded, injured, or ill to and/or between medical treatment facilities while providing en route medical care. (FM 4-02)

meeting engagement

A combat action that occurs when a moving force, incompletely deployed for battle, engages an enemy at an unexpected time and place. (FM 3-90-1)

mission

The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore. (JP 3-0)

mission command

(Army) The exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations. (ADP 6-0)

mission command warfighting function

The related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions. (ADRP 3-0)

mission statement

A short sentence or paragraph that describes the organization's essential task(s), purpose, and action containing the elements of who, what, when, where, and why. (JP 5-0)

mission variables

The categories of specific information needed to conduct operations. (ADP 1-01)

mobile defense

A defensive task that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force. (ADRP 3-90)

mobility

A quality or capability of military forces which permits them to move from place to place while retaining the ability to fulfill their primary mission. (JP 3-17)

mounted march

The movement of troops and equipment by combat and tactical vehicles. (FM 3-90-2)

movement and maneuver warfighting function

The related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats. (ADRP 3-0)

movement to contact

An offensive task designed to develop the situation and establish or regain contact. (ADRP 3-90)

mutual support

That support which units render each other against an enemy, because of their assigned tasks, their position relative to each other and to the enemy, and their inherent capabilities. (JP 3-31)

named area of interest

A geospatial area or systems node or link against which information that will satisfy a specific information requirement can be collected, usually to capture indications of adversary courses of action. Also called NAI. (JP 2-01.3)

networked munitions

A remotely controlled, interconnected, weapons system designed to provide rapidly emplaced ground-based countermobility and protection capability through scalable application of lethal and nonlethal means. (JP 3-15)

neutralize

A tactical mission task that results in rendering enemy personnel or materiel incapable of interfering with a particular operation. (FM 3-90-1)

noncontiguous area of operations

Where one or more of the commander's subordinate force's areas of operation do not share a common boundary. (FM 3-90-1)

objective area

A geographical area, defined by competent authority, within which is located an objective to be captured or reached by the military forces. (JP 3-06)

objective rally point

A rally point established on an easily identifiable point on the ground where all elements of the infiltrating unit assemble and prepare to attack the objective. (ADRP 3-90)

observation post

A position from which military observations are made, or fire directed and adjusted, and which possesses appropriate communications. While aerial observers and sensor systems are extremely useful, those systems do not constitute aerial observation posts. (FM 3-90-2)

obstacle

Any natural or man-made obstruction designed or employed to disrupt, fix, turn, or block the movement of an opposing force, and to impose additional losses in personnel, time, and equipment on the opposing force. (JP 3-15)

obstacle belt

A brigade-level command and control measure, normally depicted graphically, to show where within an obstacle zone the ground tactical commander plans to limit friendly obstacle employment and focus the defense. (JP 3-15)

obstacle control measures

Specific measures that simplify the granting of obstacle-emplacing authority while providing obstacle control. (FM 3-90-1)

obstacle groups

One or more individual obstacles grouped to provide a specific obstacle effect. (FM 3-90-1)

obstacle restricted area

A command and control measure used to limit the type or number of obstacles within an area. (JP 3-15)

obstacle zone

A division-level command and control measure, normally done graphically, to designate specific land areas where lower echelons are allowed to employ tactical obstacles. (JP 3-15)

offensive tasks

A tasks conducted to defeat and destroy enemy forces and seize terrain, resources, and population centers. (ADRP 3-0)

operation order

A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. Also called OPORD. (JP 5-0)

operational approach

A broad description of the mission, operational concepts, tasks, and actions required to accomplish the mission. (JP 5-0)

operational area security

A form of security operations conducted to protect friendly forces, installations, routes, and actions within an area of operations. (ADRP 3-37)

operational environment

A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. Also called OE. (JP 3-0)

operational framework

A cognitive tool used to assist commanders and staffs in clearly visualizing and describing the application of combat power in time, space, purpose, and resources in the concept of operations. (ADP 1-01)

operational variables

A comprehensive set of information categories used to define an operational environment. (ADP 1-01)

operations process

The major mission command activities performed during operations: planning, preparing, executing, and continuously assessing the operation. (ADP 5-0)

***overwatch**

A task that positions an element to support the movement of another element with immediate fire.

parallel planning

Two or more echelons planning for the same operation sharing information sequentially through warning orders from the higher headquarters prior to the higher headquarters publishing their operation plan or operation order. (ADRP 5-0)

passage of lines

An operation in which a force moves forward or rearward through another force's combat positions with the intention of moving into or out of contact with the enemy. (JP 3-18)

penetration

A form of maneuver in which an attacking force seeks to rupture enemy defenses on a narrow front to disrupt the defensive system. (FM 3-90-1)

personnel recovery

The sum of military, diplomatic, and civil efforts to prepare for and execute the recovery and reintegration of isolated personnel. Also called PR. (JP 3-50)

phase

A planning and execution tool used to divide an operation in duration or activity. (ADRP 3-0)

planning

The art and science of understanding a situation, envisioning a desired future, and laying out effective ways of bringing that future about. (ADP 5-0)

planning horizon

A point in time commanders use to focus the organization's planning efforts to shape future events. (ADRP 5-0)

point of breach

The location at an obstacle where the creation of a lane is being attempted. (ATP 3-90.4)

point of departure

The point where the unit crosses the line of departure and begins moving along a direction of attack. (ADRP 3-90)

point of penetration

The location, identified on the ground, where the commander concentrates their efforts at the enemy's weakest point to seize a foothold on the far side objective. (ATP 3-90.4)

position of relative advantage

A location or the establishment of a favorable condition within the area of operations that provides the commander with temporary freedom of action to enhance combat power over an enemy or influence the enemy to accept risk and move to a position of disadvantage. (ADRP 3-0)

preparation

Those activities performed by units and Soldiers to improve their ability to execute an operation. (ADP 5-0)

preparation fire

Normally a high-volume of fires delivered over a short period of time to maximize surprise and shock effect. Preparation fire can include electronic attack and should be synchronized with other electronic warfare activities. (FM 3-09)

primary position

The position that covers the enemy's most likely avenue of approach into the area of operations. (ADRP 3-90)

priority intelligence requirement

An intelligence requirement, stated as a priority for intelligence support, that the commander and staff need to understand the adversary or other aspects of the operational environment. Also called PIR. (JP 2-01)

priority target

A target, based on either time or importance, on which delivery of fires takes precedence over all the fires for the designated firing unit or element. (FM 3-09)

probable line of deployment

A phase line that designates the location where the commander intends to deploy the unit into assault formation before beginning the assault. (ADRP 3-90)

procedures

Standard, detailed steps that prescribe how to perform specific tasks. (CJCSM 5120.01A)

proof

The verification that a lane is free of mines or explosive hazards and that the width and trafficability at the point of breach are suitable for the passing force. (ATP 3-90.4)

protection warfighting function

The related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission. (ADRP 3-0)

pursuit

An offensive task designed to catch or cut off a hostile force attempting to escape, with the aim of destroying it. (ADRP 3-90)

quartering party

A group of unit representatives dispatched to a probable new site of operations in advance of the main body to secure, reconnoiter, and organize an area before the main body's arrival and occupation. (FM 3-90-2)

raid

An operation to temporarily seize an area in order to secure information, confuse an enemy, capture personnel or equipment, or to destroy a capability culminating in a planned withdrawal. (JP 3-0)

rally point

An easily identifiable point on the ground at which units can reassemble and reorganize if they become dispersed. (ATP 3-21.20)

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 meteorological, hydrographic, or geographic characteristics of a particular area. (JP 2-0)

reconstitution

Actions that commanders plan and implement to restore units to a desired level of combat effectiveness commensurate with mission requirements and available resources. (ATP 3-21.20)

reduce

A mobility task to create and mark lanes through, over, or around an obstacle to allow the attacking force to accomplish its mission. (ATP 3-90.4)

reduction

The creation of lanes through a minefield or obstacle to allow passage of the attacking ground force. (JP 3-15)

reduction area

A number of adjacent points of breach that are under the control of the breaching commander. (ATP 3-90.4)

release point

A location on a route where marching elements are released from centralized control. (FM 3-90-2)

relief in place

An operation in which, by direction of higher authority, all or part of a unit is replaced in an area by the incoming unit and the responsibilities of the replaced elements for the mission and the assigned

zone of operations (Army uses the term, area of operations) are transferred to the incoming unit. (JP 3-07.3)

reorganization

All measures taken by the commander to maintain unit combat effectiveness or return it to a specified level of combat capability. (FM 3-90-1)

reserve

That portion of a body of troops, which is withheld from action at the beginning of an engagement, in order to be available for a decisive movement. (ADRP 3-90)

reserved obstacle

An obstacle of any type, for which the commander restricts execution authority. (ATP 3-90.8)

restricted operations zone

Airspace reserved for specific activities in which the operations of one or more airspace users is restricted. Also called ROZ. (JP 3-52)

restrictive fire line

A line established between converging friendly surface forces that prohibits fires or their effects across that line. Also called RFL. (JP 3-09)

retirement

A form of retrograde in which a force out of contact moves away from the enemy. (ADRP 3-90)

retrograde

A defensive task that involves organized movement away from the enemy. (ADRP 3-90)

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. (ADRP 3-90)

scheme of fires

The detailed, logical sequence of targets and fire support events to find and engage targets to accomplish the supported commander's intent. (FM 3-09)

screen

A security task that primarily provides early warning to the protected force. (ADRP 3-90)

search

A systematic reconnaissance of a defined area, so that all parts of the area have passed within visibility. (JP 3-50)

search and attack

A technique for conducting a movement to contact that shares many of the characteristics of an area security mission. (FM 3-90-1)

sector of fire

That area assigned to an element, crew-served weapon, or an individual weapon within which it will engage targets as they appear in accordance with established engagement priorities. (FM 3-90-1)

secure

A tactical mission task that involves preventing a unit, facility, or geographical location from being damaged or destroyed as a result of enemy action. (FM 3-90-1)

security

Measures taken by a military unit, activity, or installation to protect itself against all acts designed to, or which may, impair its effectiveness. (JP 3-10)

security area

That area that begins at the forward area of the battlefield and extends as far to the front and flanks as security forces are deployed. Forces in the security area furnish information on the enemy and delay, deceive, and disrupt the enemy and conduct counterreconnaissance. (ADRP 3-90)

security operations

Those operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force. (ADRP 3-90)

security sector reform

A comprehensive set of programs and activities undertaken by a host nation to improve the way it provides safety, security, and justice. Also called SSR. (JP 3-07)

seize

A tactical mission task that involves taking possession of a designated area by using overwhelming force. (FM 3-90-1)

shaping operation

An operation that establishes conditions for the decisive operation through effects on the enemy, other actors, and the terrain. (ADRP 3-0)

single envelopment

A form of maneuver that results from maneuvering around one assailable flank of a designated enemy force. (FM 3-90-1)

site exploitation

(DOD) A series of activities to recognize, collect, process, preserve, and analyze information, personnel, and/or materiel found during the conduct of operations. Also called SE. (JP 3-31) (Army) The synchronized and integrated application of scientific and technological capabilities and enablers to answer information requirements, facilitate subsequent operations, and support host-nation rule of law. (ATP 3-90.15)

situational obstacles

An obstacle that a unit plans and possibly prepares prior to starting an operation, but does not execute unless specific criteria are met. (ATP 3-90.8)

situational understanding

The product of applying analysis and judgment to relevant information to determine the relationship among the operational and mission variables to facilitate decisionmaking. (ADP 5-0)

specified task

(Army) A task specifically assigned to a unit by its higher headquarters. (FM 6-0)

special reconnaissance

Reconnaissance and surveillance actions conducted as a special operation in hostile, denied, or politically sensitive environments to collect or verify information of strategic or operational significance, employing military capabilities not normally found in conventional forces. Also called SR. (JP 3-05)

spoiling attack

A tactical maneuver employed to seriously impair a hostile attack while the enemy is in the process of forming or assembling for an attack. (FM 3-90-1)

stability mechanism

The primary method through which friendly forces affect civilians in order to attain conditions that support establishing a lasting, stable peace. (ADRP 3-0)

stability tasks

Tasks conducted as part of operations outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief. (ADRP 3-07)

start point

A location on a route where the marching elements fall under the control of a designated march commander. (FM 3-90-2)

stay-behind operation

An operation in which the commander leaves a unit in position to conduct a specified mission while the remainder of the forces withdraw or retire from an area. (FM 3-90-1)

striking force

A dedicated counterattack force in a mobile defense constituted with the bulk of available combat power. (ADRP 3-90)

strong point

A heavily fortified battle position tied to a natural or reinforcing obstacle to create an anchor for the defense or to deny the enemy decisive or key terrain. (ADRP 3-90)

subsequent position

A position that a unit expects to move to during the course of battle. (ADRP 3-90)

supplementary position

A defensive position located within a unit's assigned area of operations that provides the best sectors of fire and defensive terrain along an avenue of approach that is not the primary avenue where the enemy is expected to attack. (ADRP 3-90)

support area

The portion of the commander's area of operations that is designated to facilitate the positioning, employment, and protection of base sustainment assets required to sustain, enable, and control operations. (ADRP 3-0)

support by fire

A tactical mission task in which a maneuver force moves to a position where it can engage the enemy by direct fire in support of another maneuvering force. (FM 3-90-1)

supporting effort

A designated subordinate unit with a mission that supports the success of the main effort. (ADRP 3-0)

supporting distance

The distance between two units that can be traveled in time for one to come to the aid of the other and prevent its defeat by an enemy or ensure it regains control of a civil situation. (ADRP 3-0)

supporting range

The distance one unit may be geographically separated from a second unit yet remain within the maximum range of the second unit's weapons systems. (ADRP 3-0)

suppress

A tactical mission task that results in the temporary degradation of the performance of a force or weapon system below the level needed to accomplish its mission. (FM 3-90-1)

suppression

The temporary or transient degradation by an opposing force of the performance of a weapons system below the level needed to fulfill its mission objectives. (JP 3-01)

surveillance

The systematic observation of aerospace, surface, or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means. (JP 3-0)

survivability

A quality or capability of military forces which permits them to avoid or withstand hostile actions or environmental conditions while retaining the ability to fulfill their primary mission. (ATP 3-37.34)

survivability operations

Those military activities that alter the physical environment to provide or improve cover, concealment, and camouflage. (ATP 3-37.34)

sustaining operation

An operation at any echelon that enables the decisive operation or shaping operations by generating and maintaining combat power. (ADRP 3-0)

sustainment

(Army) The provision of the logistics, personnel services, and health service support necessary to maintain operations until successful mission accomplishment. (ADP 4-0)

sustainment warfighting function

The related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance. (ADRP 3-0)

tactical mission task

The specific activity performed by a unit while executing a form of tactical operation or form of maneuver. It may be expressed in terms of either actions by a friendly force or effects on an enemy force. (FM 3-90-1)

tactical road march

A rapid movement used to relocate units within an area of operations to prepare for combat operations. (ADRP 3-90)

tactics

The employment and ordered arrangement of forces in relation to each other. (CJCSM 5120.01A)

target

An entity or object that performs a function for the adversary considered for possible engagement or other action. (JP 3-60)

target acquisition

The detection, identification, and location of a target in sufficient detail to permit the effective employment of weapons. (JP 3-60)

target area of interest

The geographical area where high-value targets can be acquired and engaged by friendly forces. Also called TAI. (JP 2-01.3)

target reference point

A predetermined point of reference, normally a permanent structure or terrain feature that can be used when describing a target location. Also called TRP. (JP 3-09.3)

task

A clearly defined action or activity specifically assigned to an individual or organization that must be done as it is imposed by an appropriate authority. (JP 1)

task organization

A temporary grouping of forces designed to accomplish a particular mission. (ADRP 5-0)

task-organizing

The act of designing a force, support staff, or sustainment package of specific size and composition to meet a unique task or mission. (ADRP 3-0)

techniques

Nonprescriptive ways or methods used to perform missions, functions, or tasks. (CJCSM 5120.01A)

tempo

The relative speed and rhythm of military operations over time with respect to the enemy. (ADRP 3-0)

terminal attack control

The authority to control the maneuver of and grant weapons release clearance to attacking aircraft. (JP 3-09.3)

terminal guidance operations

Actions using electronic, mechanical, voice or visual communications that provide approaching aircraft and/or weapons additional information regarding a specific target location. Also called TGO. (JP 3-09)

terrain management

The process of allocating terrain by establishing areas of operation, designating assembly areas, and specifying locations for units and activities to deconflict activities that might interfere with each other. (ADRP 5-0)

threat

Any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland. (ADRP 3-0)

traffic control post

A manned post that is used to preclude the interruption of traffic flow or movement along a designated route. (FM 3-39)

trail party

The last march unit in a march column and normally consists of primarily maintenance elements in a mounted march. (FM 3-90-2)

traveling

A movement technique used when speed is necessary and contact with enemy forces is not likely. All elements of the unit move simultaneously. The commander or small-unit leader locates where best to control the situation. Trailing elements may move in parallel columns to shorten the column and reaction time. (ATP 3-21.20)

traveling overwatch

A movement technique used when contact with enemy forces is possible. The lead element and trailing element are separated by a short distance which varies with the terrain. The trailing element moves at variable speeds and may pause for short periods to overwatch the lead element. It keys its movement to terrain and the lead element. The trailing element overwatches at such a distance that, should the enemy engage the lead element, it will not prevent the trailing element from firing or moving to support the lead element. (FM 3-90-2)

trigger line

A phase line located on identifiable terrain that crosses the engagement area that is used to initiate and mass fires into an engagement area at a predetermined range for all or like weapon systems. (ATP 3-21.20)

troop leading procedures

A dynamic process used by small-unit leaders to analyze a mission, develop a plan, and prepare for an operation. (ADP 5-0)

troop movement

The movement of troops from one place to another by any available means. (ADRP 3-90)

turning movement

A form of maneuver in which the attacking force seeks to avoid the enemy‘s principle defensive positions by seizing objectives behind the enemy‘s current positions thereby causing the enemy force to move out of its current positions or divert major forces to meet the threat. (FM 3-90-1)

unified action

The synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort. (JP 1)

unity of effort

The coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization, which is the product of successful unified action. (JP 1)

vehicle distance

The clearance between vehicles in a column which is measured from the rear of one vehicle to the front of the following vehicle. (ATP 3-21.20)

warfighting function

A group of tasks and systems (people, organizations, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives. (ADRP 3-0)

warning order

A preliminary notice of an order or action to follow. Also called WARNORD. (JP 5-0)

withdrawal operation

A planned retrograde operation in which a force in contact disengages from an enemy force and moves in a direction away from the enemy. (JP 3-17)

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. (ADRP 3-90)

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