FM 3-90-2

RECONNAISSANCE, SECURITY, AND TACTICAL ENABLING TASKS

Volume 2

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Reconnaissance, Security, and Tactical Enabling Tasks

Volume 2

Contents

Figures

Tables

Preface

Field Manual (FM) 3-90-2 contributes to the Army and joint community by providing guidance on the conduct of reconnaissance, security, and other tactical enabling tasks. It provides guidance in the form of combat-tested tactics and procedures for tactical enabling tasks modified to exploit emerging Army and joint offensive and defensive capabilities. FM 3-90-2 expounds on the doctrinal fundamentals established in Army Doctrine Reference Publication (ADRP) 3-90. ADRP 3-90 and FM 3-90-1 must be read before reading FM 3-90-2, since that is where the doctrine and tactics for the conduct of offensive and defensive tasks and the art and science of tactics is found. FM 3-90-2 addresses the basic tactics associated with the conduct of tactical enabling tasks.

The principal audience for FM 3-90-2 is all members of the profession of arms. Commanders and staffs of Army headquarters serving as a joint task force or multinational headquarters should also refer to applicable joint or multinational doctrine concerning the range of military operations and joint or multinational forces. Trainers and educators throughout the Army will also use this publication.

FM 3-90-2 focuses on the organization of forces, minimum essential control measures, and general planning, preparation, and execution considerations for each tactical enabling task not the subject of its own publication. It is the common reference for those tactical enabling tasks that it addresses for all students of the art and science of tactics, both in the field and the Army school system. The considerations in this publication apply to small tactical units, such as companies and battalions, even though most of the figures in this publication use the division and the brigade combat team (BCT) echelons to illustrate points in the text. Echelon-specific field manuals and Army techniques publications address the specifics of how each tactical echelon conducts these tactical enabling tasks.

FM 3-90-2 implements standardization agreement (STANAG) Allied Tactical Publication-3.2.1.

Commanders, staffs, and subordinates ensure their decisions and actions comply with applicable U.S., international, and, in some cases, host-nation laws and regulations. Commanders at all levels ensure their Soldiers operate in accordance with the law of war and the rules of engagement. (See FM 27-10.)

FM 3-90-2 uses joint terms where applicable. Selected joint and Army terms and definitions appear in both the glossary and the text. Terms for which FM 3-90-2 is the proponent publication (the authority) are marked with an asterisk (*) in the glossary. Definitions for which FM 3-90-2 is the proponent publication are boldfaced in the text. For other definitions shown in the text, the term is italicized and the number of the proponent publication follows the definition.

FM 3-90-2 applies to the Active Army, the Army National Guard/the Army National Guard of the United States, and the U.S. Army Reserve unless otherwise stated.

The proponent of FM 3-90-2 is the United States Army Combined Arms Center. The preparing agency is the Combined Arms Doctrine Directorate, U.S. Army Combined Arms Center. Send comments and recommendations on a DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, U.S. Army Combined Arms Center and Fort Leavenworth, ATTN: ATZL-MCK-D (FM 3-90-2), 300 McPherson Avenue, Fort Leavenworth, KS 66027-2337; by e-mail to usarmy.leavenworth.mccoe.mbx.cadd-org-mailbox@mail.mil; or submit an electronic DA Form 2028.

Introduction

To understand FM 3-90-2, the reader must understand the doctrinal fundamentals contained in Army Doctrine Publication (ADP) 3-0 and ADP 3-90 and Army Doctrine Reference Publication (ADRP) 3-0 and ADRP 3-90. The reader should understand how the activities described in ADPs and ADRPs 3-07 and 3-28 carry over and impact the conduct of tactical enabling tasks and vice versa. The reader should understand the operations (plan, prepare, execute, and assess) process and how that process relates to the Army's military decisionmaking process and troop-leading procedures described in ADP 5-0 and ADRP 5-0. The reader should also understand the intelligence preparation of the battlefield (IPB) process found in ADRP 2-0 and the targeting process described in ADRP 3-09.

The combined arms tactics contained in this volume are based on the Army's historical lessons learned. However, our enemies and adversaries read U.S. doctrine and tactics to learn how to best counter our combined arms team. The Army of the future must prove itself as capable of quickly adapting to new and unexpected situations as it has in the past. Implementing change in the midst of combat is a difficult process. Commanders must ensure the rapid dissemination of new tactics, techniques, and procedures developed to counter or take advantage of these new circumstances regardless of the sources of the solutions, from junior Soldiers on patrol or staff officers in Army command headquarters.

There have been several changes in the organization and contents of this publication when compared with its predecessor, the 2001 edition of FM 3-90, *Tactics*. Chapter 1, *The Art of Tactics*, and the common tactical concept half of chapter 2 of the previous edition is now found in ADRP 3-90. The graphic control measures discussion in the previous version's chapter 2 is now appendix A of FM 3-90-1. The Army branch discussion from the previous version's appendix A has been deleted as redundant with information contained in Department of the Army 600-series pamphlets. The Army tactical echelon discussion from the previous version's appendix A has been moved to chapter 2 of ADRP and expanded on down to the fire team level. Appendix C, *Airborne and Air Assault Operations*, of the 2001 version of FM 3-90 has been deleted. The Army contributions to the joint task of forcible entry by vertical envelopment are now addressed in FM 3-99. Appendix D, *Encirclement Operations*, is now chapter 6 of FM 3-90-2. Appendix E, *Rear Area and Base Security*, is now addressed in the protection series of publications (ADP 3-37, ADRP 3-37, and subordinate publications).

This volume contains six chapters. The text of FM 3-90-2 focuses on combined arms tactics used to conduct the tactical enabling tasks that units employ to win in combat. Those tactics require judgment in application. FM 3-90-2 provides a common discussion of how commanders from the battalion task force level through the division echelon conduct these tactical enabling tasks. The tactics and considerations discussed in this publication focus on the Army core competencies of employing combined arms in lethal combat operations. Their application must be tempered by the obligation to protect the civilian population in the area of operations in the conduct of the stability element of decisive action. This publication is not prescriptive, but it is authoritative.

- Chapter 1 addresses the conduct of reconnaissance.
- Chapter 2 addresses the conduct of security.
- Chapter 3 addresses the conduct of troop movement.
- Chapter 4 addresses the conduct of a relief in place.
- Chapter 5 addresses the conduct of a passage of lines.
- Chapter 6 address the conduct of encirclement operations.

The reader must understand the organizational considerations, control measures, planning, preparation, and execution considerations for the conduct of offensive and defensive tasks addressed in FM 3-90-1 for the tactics addressed in this publication to make sense. This is because the tactics and procedures discussion in FM 3-90-1 is not repeated in this volume to avoid lengthening the publication. For example, chapter 1 of

FM 3-90-1 addresses the sustainment considerations within the context of the offense. That information is not repeated in this volume.

The tactics, techniques, and procedures discussed in this publication are only examples of a way to conduct a specific tactical enabling task. Collectively they provide a set of tools that commanders employ in accordance with the exact tactical situation that they face at any one given time. The tactical situation is defined as the mission variables of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC).

The existing rules of engagement in a specific situation will control the actual application of the tactics, techniques, and procedures discussed in this publication. Readers of FM 3-90-2 should be aware that rules of engagement are constantly evolving. Criteria for allowing weapons systems employment during the conduct of major operations are significantly different than the criteria used during the conduct of irregular warfare or peace operations. Commanders must understand where they currently are on the range of military operations continuum and be able to switch quickly between different places along that continuum to protect their units and Soldiers while still accomplishing their mission. A commander should seek legal guidance concerning currently applicable U.S. and multinational rules and policies regarding the employment of lethal and non-lethal weapons before directing their employment.

This volume contains only a few historical references. Such references are important in illustrating the impact of combat on Soldiers and the art of command. Successful commanders, staff officers, and Soldiers of all ranks study military history. This study should include the experiences of other armies and precedents from classical, medieval, and recent historical periods, in addition to Army and Marine Corps recent experiences in Iraq and Afghanistan. Military professionals should also study politics, diplomacy, economics, and ways of influencing others—the other instruments of national power. While history never exactly repeats itself, on many occasions it closely parallels previous developments. In addition, war remains a human endeavor. What motivated or influenced our military forbearers will probably motivate or influence today's Soldiers to one degree or another, once adjustments are made to account for technological and social changes.

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Chapter 1
Reconnaissance

Reconnaissance primarily relies on the human dynamic rather than technical means. Reconnaissance is a focused collection effort. It is performed before, during, and after other operations to provide information used in the intelligence preparation of the battlefield (IPB) process, as well as by the commander in order to formulate, confirm, or modify a course of action (COA). Units and Soldiers need appropriately tailored detailed intelligence products to adequately plan and prepare for their offensive and defensive missions. The collection of the information needed to prepare those intelligence products by reconnaissance is the subject of this chapter. The five forms of reconnaissance are route, zone, area, reconnaissance in force, and special reconnaissance.

GENERAL CONSIDERATIONS OF RECONNAISSANCE

1-1. *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, hydrographical, or geographic characteristics of a particular area (JP 2-0). Reconnaissance 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. It also collects information about the indigenous population needed to answer intelligence requirements, primarily those related to civil considerations. Reconnaissance before unit movements and occupation of assembly areas is critical to protecting the force and preserving combat power. Reconnaissance of the indigenous population primarily results in information commanders use to conduct stability tasks. It also keeps the force free from contact as long as possible, so that it can concentrate on its decisive operation. Commanders and leaders at every echelon, during every phase of an operation, must emphasize the importance of reporting to every Soldier and rapidly updating command information systems to reflect friendly, enemy, and neutral activities.

RECONNAISSANCE OBJECTIVE

1-2. Commanders orient their reconnaissance assets by identifying a reconnaissance objective in the area of operations (AO). The *reconnaissance objective* is a terrain feature, geographic area, enemy force, adversary, or other mission or operational variable, such as specific civil considerations, about which the commander wants to obtain additional information (ADRP 3-90). The reconnaissance objective clarifies the intent of the reconnaissance effort by specifying the most important result to obtain from the reconnaissance effort. Every reconnaissance mission specifies a reconnaissance objective. The commander assigns a reconnaissance objective based on priority information requirements (PIR) resulting from the IPB process and the reconnaissance asset's capabilities and limitations. The reconnaissance objective can be information about a specific geographical location, such as the cross-country trafficability of a specific area, a specific enemy or adversary activity to be confirmed or denied, or a specific enemy or adversary unit to be located and tracked. When the reconnaissance unit does not have enough time to complete all the tasks associated with a specific form of reconnaissance, it uses the reconnaissance objective to guide it in setting priorities.

1-3. A commander may need to provide additional detailed instructions beyond the reconnaissance objective, such as the specific tasks and their priorities. The commander issues additional guidance to the reconnaissance unit or specifies these instructions in tasks to subordinate units in a warning order, fragmentary order, or the operations order. For example, if, based on all technical sensors and human intelligence (HUMINT) sources, a division assistant chief of staff, intelligence (G-2) concludes that the

may decide not to conduct a detailed area or zone reconnaissance effort before to moving subordinate brigades into that area. The commander may direct the division's attached battlefield surveillance or combat aviation brigade to conduct a zone reconnaissance mission with guidance to move rapidly and report by exception terrain obstacles that will significantly slow the movement of subordinate brigade combat teams. Alternatively, when the reconnaissance objective is to locate an enemy force, additional guidance would be to conduct only that terrain reconnaissance necessary to find the enemy and develop the situation.

RECONNAISSANCE FUNDAMENTALS

1-4. There are seven fundamentals of successful reconnaissance. Commanders—

- Ensure continuous reconnaissance.
- Do not keep reconnaissance assets in reserve.
- Orient on the reconnaissance objective.
- Report information rapidly and accurately.
- Retain freedom of maneuver.
- Gain and maintain enemy contact.
- Develop the situation rapidly.

ENSURE CONTINUOUS RECONNAISSANCE

1-5. Effective reconnaissance is continuous. The commander conducts reconnaissance before, during, and after all operations. Before an operation, reconnaissance fills gaps in information about the enemy, the terrain, and civil considerations. During an operation, reconnaissance provides the commander with updated information that verifies the enemy's composition, dispositions, and intentions as the battle progresses. This allows the commander to verify which potential COA the enemy is attempting to execute and determine if the friendly plan is still valid based on events in the AO. However, the commander may have some reconnaissance elements determine and report civilian activities in population nodes during operations. The commander may have reconnaissance elements report friendly unit locations, status, and sustainment requirements during chaotic situations, such as after a chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) event. After an operation, reconnaissance elements maintain contact with the enemy to determine the enemy's next move and collect information, including terrain and civil considerations, necessary for planning subsequent operations. When current operational information is adequate, reconnaissance elements gather information for branches and sequels to current plans. As a minimum, reconnaissance is conducted continuously as part of all security missions, including the conduct of local security for forces not in contact. As operations transition from a focus on one element of operations to another, the nature of the PIR and information requirements being collected against will change. It is important that all Soldiers act as sensors and report their observations in a timely manner to a competent authority.

1-6. Reconnaissance over extended distances and times may require pacing reconnaissance assets to maintain the effort, or rotating units to maintain continuous coverage. The human and technical assets used in the reconnaissance effort must be allowed time for rest, resupply, troop leading procedures, additional and refresher training, and preventive maintenance checks and services. The commander must determine not only where, but also when, the maximum reconnaissance effort is required and pace the commitment of available reconnaissance assets to ensure that adequate assets are available at those critical times and places.

DO NOT KEEP RECONNAISSANCE ASSETS IN RESERVE

1-7. Reconnaissance assets, like artillery assets, are never kept in reserve. When committed, reconnaissance assets use all of their resources to accomplish the mission. This does not mean that all assets are committed all the time. The commander uses available reconnaissance assets based on their capabilities and the mission variables of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC) to achieve the maximum coverage needed to answer the commander's critical information requirements (CCIR). At times, this requires the commander to withhold or position reconnaissance assets to ensure that they are available at critical times and places.

Commanders do not recover and sustain reconnaissance assets by placing them in the reserve. Commanders consider all reconnaissance assets as committed assets with specific missions at all times. Commanders may keep units with multiple roles—specifically the three types of brigade combat teams (BCTs)—that can conduct reconnaissance, security, and other combat missions in an economy-of-force role as a reserve for security or combat missions.

ORIENT ON THE RECONNAISSANCE OBJECTIVE

1-8. The commander uses the reconnaissance objective to focus reconnaissance efforts. Commanders of subordinate reconnaissance elements remain focused on achieving this objective, regardless of what their elements encounter during the mission. When time, unit limitations, or enemy action prevents a unit from accomplishing all the tasks normally associated with a particular form of reconnaissance, the unit uses the reconnaissance objective to focus the reconnaissance effort.

REPORT INFORMATION RAPIDLY AND ACCURATELY

1-9. Reconnaissance assets acquire and report accurate and timely information on the enemy, terrain, and civil considerations of the area over which operations are conducted. Information may quickly lose its value. Reconnaissance units report exactly what they see and, if appropriate, what they do not see. Seemingly unimportant information may be extremely important when combined with other information. Reports of no enemy activity are as important as reports of enemy activity. Failing to report tells the commander nothing. The echelon information management plan ensures that the echelon's reconnaissance assets have the proper communication equipment to support the echelon integrated reconnaissance and surveillance plan.

RETAIN FREEDOM OF MANEUVER

1-10. Reconnaissance assets must retain battlefield mobility to successfully complete their missions. If these assets are decisively engaged, reconnaissance stops and a battle for survival begins. Reconnaissance assets must have clear engagement criteria that support the commander's intent. They must employ proper movement and reconnaissance techniques, use overwatching fires, and follow standard operating procedures (SOPs). Initiative and knowledge of both the terrain and the enemy reduce the likelihood of decisive engagement and help maintain freedom of movement. Before initial contact, the reconnaissance unit adopts a combat formation designed to gain contact with the smallest possible friendly element. This provides the unit with the maximum opportunity for maneuver and enables it to avoid having the entire unit become decisively engaged. The IPB process can identify anticipated areas of likely contact to the commander. Using indirect fires to provide suppression and obscuration as well as destroy point targets is a method reconnaissance assets use to retain their freedom of maneuver.

GAIN AND MAINTAIN ENEMY CONTACT

1-11. Once a unit conducting reconnaissance gains contact with the enemy, it maintains that contact unless the commander directing the reconnaissance orders otherwise or the survival of the unit is at risk. This does not mean that individual scout and reconnaissance teams cannot break contact with the enemy. The commander of the unit conducting reconnaissance is responsible for maintaining contact. That contact can range from surveillance to close combat. Surveillance, combined with stealth, is often sufficient to maintain contact and is the preferred method. Units conducting reconnaissance avoid combat unless it is necessary to gain essential information, in which case the units use maneuver (fire and movement) to maintain contact while avoiding decisive engagement.

DEVELOP THE SITUATION RAPIDLY

1-12. When a reconnaissance asset encounters an enemy force or an obstacle, it 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. In

most cases, the reconnaissance unit developing the situation uses actions on contact. (See chapter 2 of FM 3-90-1, for a discussion of actions on contact.)

CHARACTERISTICS OF RECONNAISSANCE ASSETS

1-13. The responsibility for conducting reconnaissance does not reside solely with specifically organized units. Every unit has an implied mission to report information about the terrain, civilian activities, and friendly and enemy dispositions. This is regardless of its location and primary function. Troops in close combat and reconnaissance patrols of maneuver units at all echelons collect information on enemy units with which they are in contact. In echelon support areas, reserve maneuver forces, functional and multifunctional support and sustainment elements, other governmental agencies, and multinational forces observe and report civilian and enemy activity and significant changes in terrain trafficability. Although all units conduct reconnaissance, those specifically trained in reconnaissance tasks are aviation attack reconnaissance units, scouts, long-range reconnaissance units, and Special Forces. Some branches, such as the Corps of Engineers, Civil Affairs, and the Chemical Corps, have specific reconnaissance tasks to perform that complement the force's overall reconnaissance effort. However, BCT, division, and corps commanders primarily use their organic or attached reconnaissance elements—ground or air—and intelligence elements to conduct reconnaissance.

1-14. At battalion level and above, the commander assigns missions to reconnaissance and surveillance assets based on their organization, equipment, and training. The commander knows the capabilities and limitations of available reconnaissance assets to ensure the employment of these assets within their capabilities and on missions for which they have been trained and equipped. Table 1-1 shows the typical nesting of reconnaissance and surveillance assets available at different echelons.

Table 1-1. Typical reconnaissance and surveillance assets available

	Platoon	CO/TM	BN/TF	BCT	Division	Corps
Observation post	XXX	XXX	XXX	XXX	XXX	XXX
Reconnaissance patrol	XXX	XXX	XXX	XXX	XXX	XXX
Combat outpost	AAA	AAA	XXX	XXX	XXX	XXX
Scout platoon	AAA	AAA	XXX	XXX		
Reconnaissance troop		AAA	AAA	XXX	XXX	
Brigade combat team reconnaissance squadron		AAA	AAA	XXX	AAA	
Chemical reconnaissance		AAA	XXX	XXX	XXX	XXX
Artillery combat observation and lasing team	AAA	AAA	XXX	XXX		
Artillery target acquisition systems			AAA	AAA	XXX	XXX
Air defense target acquisition systems			AAA	AAA	XXX	XXX
Ground surveillance radars		AAA	XXX	XXX		
Other military intelligence collection systems			AAA	XXX	XXX	XXX
Attack reconnaissance squadron				AAA	XXX	XXX
Unmanned aircraft systems	AAA	AAA	AAA	XXX	XXX	XXX
Long-range surveillance unit					AAA*	XXX
Special forces/ranger					AAA	AAA
Battlefield surveillance brigade					XXX	XXX
Technical surveillance platforms			AAA	AAA	AAA	AAA
XXX = Echelon controls or routinely tasks the asset. AAA = Echelon can routinely expect the information from that source to be made available to it. *Found in infantry brigade combat team and battlefield surveillance brigade reconnaissance squadrons.						
CO/TM company/team **BN/TF battalion task force** **BCT brigade combat team**						

1-15. A commander primarily conducts reconnaissance with a combination of manned ground and air assets supported by technical systems. Acting in concert, these assets create a synergy, using the strengths of one system to overcome the weaknesses of another. To produce this synergy, the commander must delineate reporting procedures for all units to pass on information gathered during the conduct of reconnaissance. This facilitates rapid mission accomplishment.

1-16. Commanders can easily over task and overextend dedicated reconnaissance assets. The commander uses all available resources, not just reconnaissance units, to satisfy existing information requirements. Ground reconnaissance can involve assets not specifically tailored for the mission. Engineer reconnaissance teams collect terrain information regarding trafficability and obstacle intelligence (see Maneuver Support Center of Excellence publications addressing engineer reconnaissance). Chemical, biological, radiological, and nuclear (CBRN) reconnaissance teams can determine the presence, absence, and extent of CBRN contamination. Joint forward observers, fire support teams, and combat observation and lasing teams (COLTs) report combat information as they observe the battlefield. Any air defense units in the commander's AO observe and report enemy aircraft and air corridors in use and supplement the radars found in the division headquarters battalion.

1-17. Ground reconnaissance elements are generally limited in the depth to which they can conduct reconnaissance. However, they can operate under weather conditions that prohibit aerial reconnaissance. Reconnaissance conducted by manned and unmanned aviation platforms complements ground reconnaissance by increasing the speed and depth with which reconnaissance can be conducted over an area. Air reconnaissance operates over terrain that hinders ground operations, such as swamps, extremely rugged terrain, or deep snow. Aviation assets can operate at a considerable depth, far in advance of dedicated ground reconnaissance elements focused on the close fight. Thus, they provide the commander with additional time to react to the enemy. Attack reconnaissance helicopters use their optics, video, thermal imaging, electronic sensors, and communications capabilities to detect and report enemy activities. All types of aviation units generate pilot reports when conducting their primary missions. These reports are often a source of valuable combat information.

1-18. While several technical systems can perform reconnaissance, most of these systems are considered surveillance platforms. Surveillance complements reconnaissance by cueing the commitment of reconnaissance assets against specific locations or specially targeted enemy units.

1-19. Military intelligence (MI) units conduct both surveillance and reconnaissance missions. They provide electronic intercept, unmanned aircraft systems (UASs) sensor feeds, and HUMINT, counterintelligence (CI), and downlinks from theater of operations and national assets. Theater of operations and national reconnaissance and surveillance systems provide broadcast dissemination of information and intelligence to the commander and provide near real-time imagery as a part of an integrated intelligence effort. Artillery and air defense target acquisition radars complement MI surveillance systems as a part of that effort. HUMINT collection occurs through face-to-face interrogation of captured enemy soldiers, screening of the civilian population, and debriefing of friendly Soldiers, such as scouts and special operations forces (SOF).

FORMS OF RECONNAISSANCE

1-20. The five forms of reconnaissance are—

- Route reconnaissance.
- Zone reconnaissance.
- Area reconnaissance.
- Reconnaissance in force (RIF).
- Special reconnaissance.

1-21. Table 1-2 on page 1-6 shows what types of Army dedicated reconnaissance units are typically assigned the missions of conducting the first four forms of reconnaissance. SOF conduct special reconnaissance.

Table 1-2. Dedicated reconnaissance units and forms of reconnaissance

	Scout platoon	Troop/ company team	Air cavalry troop	Reconnaissance squadron/ battalion	Brigade combat team	Division	Special operations forces
Route	X	X	X				
Zone	X	X	X	X	X		
Area	X	X	X	X	X		
Reconnaissance in force					X	X	
Special							X

ROUTE RECONNAISSANCE

1-22. *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). That route may be a cross-country mobility corridor. It provides new or updated information on route conditions, such as obstacles and bridge classifications, and enemy and civilian activity along the route. The commander normally assigns this mission when wanting to use a specific route for friendly movement.

Organization of Forces

1-23. The commander assigns a route reconnaissance as a separate mission or as a specified task for a unit conducting a zone or area reconnaissance. A scout platoon conducts a route reconnaissance over only one route at a time. For larger organizations, the number of scout platoons available directly influences the number of routes that can be covered at one time. Integrating ground, air, and technical assets assures a faster and more complete route reconnaissance.

1-24. A ground reconnaissance effort is essential if the mission is to conduct detailed reconnaissance of the route or the mission requires clearing the enemy from an AO that includes the route and the adjacent terrain. The commander sufficiently mans and equips forces conducting ground reconnaissance to enable them to respond to enemy forces in the AO. If the commander expects them to make contact with enemy forces possessing more combat power than that typically found in enemy reconnaissance elements, the commander ensures that forces conducting ground reconnaissance have rapid access to fire support and other combat multipliers. If the commander requires detailed information on the route, engineer reconnaissance assets can determine the classification of critical points along the route more quickly and accurately than scouts can. If the commander anticipates significant obstacles, combat engineers are included as part of the force. If CBRN contamination is expected, CBRN reconnaissance assets accompany the force conducting ground reconnaissance because they can detect and determine the extent of contamination more accurately and quickly than scouts can. Air reconnaissance can be used if the reconnaissance mission must be completed quickly. However, aerial reconnaissance can rarely clear an enemy force from a location where it can affect movement on the route and aircraft cannot breach obstacles. When time is limited, air reconnaissance is essential to determine which areas are clear of enemy forces and obstacles, and to cue ground reconnaissance regarding where to focus its efforts.

Control Measures

1-25. Control measures for a route reconnaissance create an AO for the unit conducting the reconnaissance. (See figure 1-1 on page 1-7.) The commander places lateral boundaries on both sides of the route, far enough out to allow reconnaissance of all terrain from which the enemy could dominate the route. The line of departure (LD) is drawn with reference to the location on the battlefield where enemy contact is possible. Generally this falls before and perpendicular to the route being reconnoitered, allowing adequate space for the unit conducting the reconnaissance to deploy into formation. The LD creates the rear boundary of the AO. The commander places a limit of advance (LOA) far enough beyond the route's release point (RP), including any terrain from which the enemy could dominate the route. A start point (SP) and a RP define that section of the route where the unit collects detailed information. The commander may

add phase lines (PLs) and checkpoints to coordinate reconnaissance, control movement, or designate critical points. Commanders place additional control measures on terrain features identifiable from both the ground and the air to coordinate indirect and direct fire and assist in air-to-ground coordination.

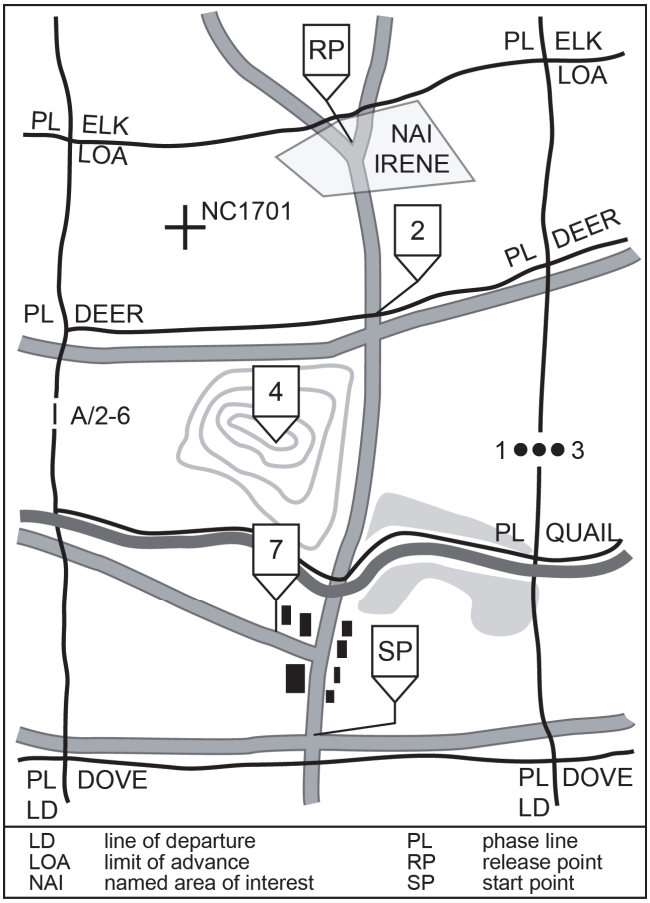

Figure 1-1. Route reconnaissance control measures

Tasks

1-26. Unless the commander orders otherwise, the unit conducting a route reconnaissance performs specific tasks. If a unit does not have the time or resources to complete all of these tasks, it must inform the commander assigning the mission. The commander then issues further guidance on which tasks the unit must complete or the priority of each task, which is usually clear from the reconnaissance objective. If, after starting the reconnaissance, the unit determines that it cannot complete an assigned task, such as clearing the enemy or reducing obstacles to create lanes to support the main body's maneuver along the route, it reports and awaits further instructions.

1-27. Route reconnaissance tasks include the following:

- Find, report, and—based on engagement criteria—clear within capabilities all enemy forces that can influence movement along the route.
- Determine the trafficability of the route; can it support the friendly force?
- Reconnoiter all terrain that the enemy can use to dominate movement along the route, such as choke points, ambush sites, and pickup zones, landing zones, and drop zones.
- Reconnoiter all built-up areas, contaminated areas, and lateral routes along the route.
- Evaluate and classify all bridges, defiles, overpasses, underpasses, and culverts along the route.
- Locate any fords, crossing sites, or bypasses for existing and reinforcing obstacles (including built-up areas) along the route.
- Locate all obstacles and create lanes as specified in execution orders.
- Report the above route information to the headquarters initiating the route reconnaissance mission, to include providing a sketch map or a route overlay.

(See FM 3-34.170 for additional information concerning route reconnaissance.)

ZONE RECONNAISSANCE

1-28. *Zone reconnaissance* is a form of reconnaissance that involves a directed effort to obtain detailed information on all routes, obstacles, terrain, and enemy forces in a zone defined by boundaries (ADRP 3-90). Obstacles include existing and reinforcing, as well as areas with CBRN contamination. The commander assigns a zone reconnaissance mission when the commander needs additional information on a zone before committing other forces in the zone. It is appropriate when the enemy situation is vague,

existing knowledge of the terrain is limited, or combat operations have altered the terrain. A zone reconnaissance may include several route or area reconnaissance missions assigned to subordinate units.

1-29. A zone reconnaissance is normally a deliberate, time-consuming process. It takes more time than any other reconnaissance mission, so the commander must allow adequate time to conduct it. A zone reconnaissance is normally conducted over an extended distance and starts from a line of departure. It requires all ground elements executing the zone reconnaissance to be employed abreast of each other. However, when the reconnaissance objective is the enemy force, a commander may forgo a detailed reconnaissance of the zone and focus assets on those named areas of interest (NAI) that would reveal enemy dispositions and intentions. A reconnaissance unit cannot disregard terrain when focusing on the enemy. However, it minimizes its terrain reconnaissance to that which may influence an NAI.

Organization of Forces

1-30. Considerations for organizing a zone reconnaissance are the same as for organizing a route reconnaissance except that several subordinate units, rather than just one unit, operate abreast during the zone reconnaissance. If the commander expects significant enemy forces in the zone, the commander provides the force conducting the zone reconnaissance with a reserve. This reserve should have adequate combat power to extract elements of the reconnaissance force from a decisive engagement. A tank company normally performs this role for a combined arms battalion of an armored brigade combat team. If a unit conducts a zone reconnaissance beyond supporting range of the main body, the commander ordering the zone reconnaissance provides the reconnaissance unit with adequate fire support assets that can move with the reconnaissance unit.

Control Measures

1-31. The commander controls a zone reconnaissance by assigning an AO to the unit conducting the reconnaissance. (See figure 1-2.) The lateral boundaries, a LD, and a LOA define this AO. Within the AO, the force conducting the zone reconnaissance further divides the AO with additional lateral boundaries to define subordinate unit AOs. Subordinate AOs are not necessarily the same size. Phase lines and contact points, located where the commander determines that it is necessary for adjacent units to make physical contact, are used to coordinate the movement of elements operating abreast. The commander may further designate the time that this physical contact takes place. Checkpoints indicate critical terrain features and help to coordinate air-ground integration. The commander may use fire support coordination measures to control direct and indirect fires and use additional control measures as necessary. In addition, the commander assigning the zone reconnaissance mission must specify the route the reconnaissance unit uses to enter the AO. All control measures are on recognizable terrain when possible.

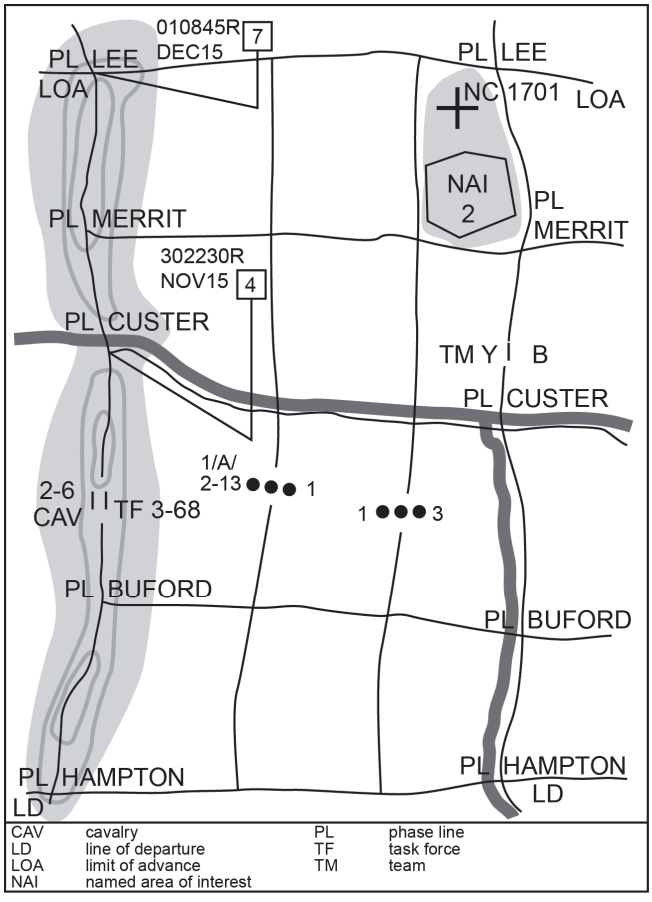

Figure 1-2. Zone reconnaissance control measures

Tasks

1-32. Unless the commander orders otherwise, a unit conducting a zone reconnaissance performs the tasks listed in paragraph 1-33. If a unit does not have the time or resources to complete all of these tasks, it informs the commander assigning the mission. The commander then issues further guidance on which tasks the unit must complete or the priority of tasks, which is usually clear from the reconnaissance objective. After starting the reconnaissance, if the unit determines that it cannot complete an assigned task, such as clear enemy or reduce obstacles in zone to create lanes as required to support the main body's maneuver, it reports and awaits further instructions.

1-33. Zone reconnaissance tasks include the following:

- Find and report all enemy forces in the zone.
- Based on engagement criteria, clear all enemy forces in the designated AO within the capability of the unit conducting reconnaissance.
- Determine the trafficability of all terrain in the zone, including built-up areas.
- Locate and determine the extent of all contaminated areas in the zone.
- Evaluate and classify all bridges, defiles, overpasses, underpasses, and culverts in the zone.
- Locate any fords, crossing sites, or bypasses for existing and reinforcing obstacles (including built-up areas) in the zone.
- Locate all obstacles and create lanes as specified in execution orders.
- Report the above information to the commander directing the zone reconnaissance, to include providing a sketch map or overlay.

AREA RECONNAISSANCE

1-34. *Area reconnaissance* is a form of reconnaissance that focuses on obtaining detailed information about the terrain or enemy activity within a prescribed area (ADRP 3-90). This area may include a town, a ridgeline, woods, an airhead, or any other critical operational feature. The area may consist of a single point, such as a bridge or an installation. The primary difference between an area reconnaissance and a zone reconnaissance is that in an area reconnaissance units conducting the reconnaissance first move to the area in which the reconnaissance will occur. In a zone reconnaissance the units conducting the reconnaissance start from a line of departure. Areas are normally smaller than zones and are not usually contiguous to other friendly areas targeted for reconnaissance. Because the area is smaller, an area reconnaissance typically takes less time to complete than a zone reconnaissance.

Organization of Forces

1-35. Considerations for the organization of forces for an area reconnaissance are the same as for organizing a zone reconnaissance. (See paragraph 1-30.)

Control Measures

1-36. The commander assigning an area reconnaissance specifies the area for reconnaissance with a single continuous line to enclose the area to reconnoiter. Alternatively, the commander may designate the area by marking lateral boundaries, a LD, and a LOA. An area reconnaissance mission specifies the route to take in moving to the area. Upon completion of the area reconnaissance, the unit normally departs the area on a different route. The commander of the unit conducting the area reconnaissance mission uses control measures for a zone reconnaissance in the AO to control subordinate element operations. (See figure 1-3 on page 1-10.)

Tasks

1-37. The tasks for an area reconnaissance are the same as for a zone reconnaissance. (See paragraph 1-33.)

RECONNAISSANCE IN FORCE

1-38. A *reconnaissance in force* is a deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information (ADRP 3-90). Battalion-sized task forces or larger organizations usually conduct a reconnaissance in force (RIF). A commander assigns a RIF when the enemy is operating in an area and the commander cannot obtain adequate intelligence by any other means. A unit may also conduct a RIF in restrictive terrain where the enemy is likely to ambush smaller reconnaissance forces. A RIF is an aggressive reconnaissance, conducted as an offensive operation with clearly stated reconnaissance objectives. The overall goal of a RIF is to determine enemy weaknesses that can be exploited. It differs from other forms of reconnaissance because it is normally conducted only to gain information about the enemy and not the terrain. The commander plans for the extrication of the force or the exploitation of success in advance.

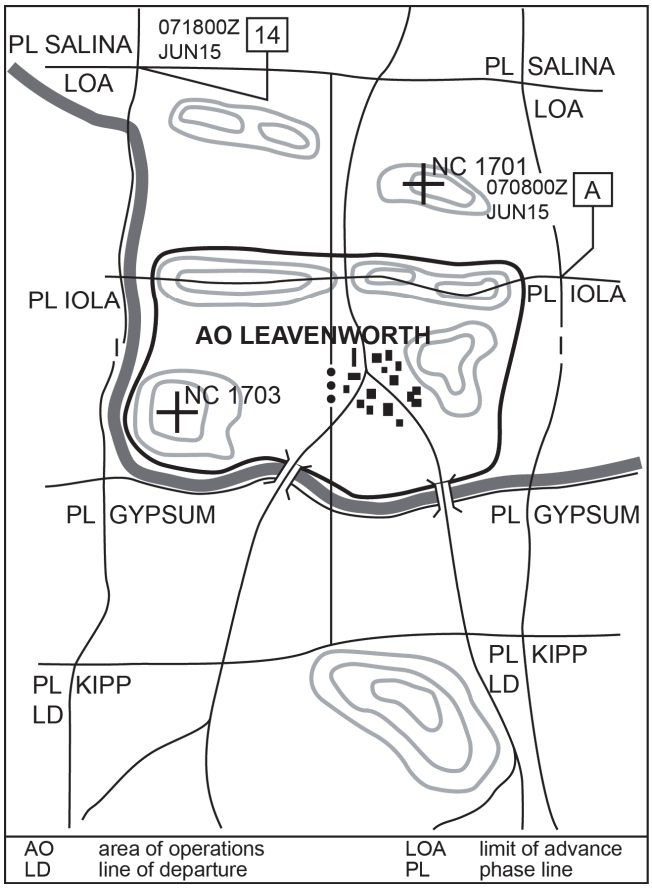

Figure 1-3. Area reconnaissance control measures

Organization of Forces

1-39. While specifically trained and equipped units usually conduct the other forms of reconnaissance, any maneuver force can conduct a RIF. The commander directing the RIF organizes the force as if it is conducting offensive operations. However, the lack of enemy information dictates that the force be large and strong enough to develop the situation, protect itself long enough to be supported by other friendly assets, cause the enemy to react, and put the enemy at some risk. The less known about the enemy, the stronger the force conducting the RIF must be. Because of the lack of information about the enemy, a commander normally conducts a RIF as a movement to contact or a series of frontal attacks across a broad frontage.

Control Measures

1-40. The control measures for a RIF are the same as for offensive operations. The operation is conducted as a movement to contact with limited objectives. (FM 3-90-1 discusses the conduct of a movement to contact.)

Tasks

1-41. A unit conducting a RIF performs the following tasks. If a unit does not have the time or resources to complete all of these tasks, it must inform the commander assigning the mission. The commander must then issue further guidance on which tasks the unit must complete or the priority of tasks, which is usually clear from the reconnaissance objective. After starting the RIF, if the unit determines that it cannot complete an assigned task, it must report and await further instructions. Reconnaissance in force tasks are—

- Penetrating the enemy's security area and determining its size and depth.
- Determining the location and disposition of enemy main positions.

- Attacking enemy main positions and attempting to cause the enemy to react by using local reserves or major counterattack forces, employing fire support assets, adjusting positions, and employing specific weapons systems.
- Determining weaknesses in the enemy's dispositions to exploit.
- Locating obstacles and creating lanes as specified in the execution order.

SPECIAL RECONNAISSANCE

1-42. *Special Reconnaissance* includes 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). These actions provide an additional capability for commanders and supplement other conventional reconnaissance and surveillance actions. Even with long-range sensors and overhead platforms, some information can be obtained only by visual observation or other collection methods in the target area. SOF capabilities for gaining access to denied and hostile areas, worldwide communications, and specialized aircraft and sensors enable them to conduct special reconnaissance against targets inaccessible to other forces or assets. The reconnaissance that determined Osama bin Laden's location in Abbotabad, Pakistan was an example of special reconnaissance. Special reconnaissance activities include—

- Environmental reconnaissance.
- Armed reconnaissance.
- Target and threat assessment.
- Post strike reconnaissance.

(For additional information on these special reconnaissance activities see JP 3-05.)

PLANNING RECONNAISSANCE

1-43. The conduct of reconnaissance contributes significantly to a commander's battlefield visualization. Reconnaissance assets support the integrated intelligence annex to the overall plan, which in turn supports the commander's decisionmaking process.

1-44. The commander must make judicious, yet aggressive, use of available reconnaissance assets. Reconnaissance planning ensures that available reconnaissance assets produce the greatest results. Because there are never enough assets to accomplish all tasks, the commander must set priorities. Generating many unfocused missions rapidly wears down assets, making them ineffective. Improperly using assets can also leave an enemy vulnerability undiscovered.

1-45. The commander ensures the coordination and synchronization of the reconnaissance effort at all subordinate echelons. Since the need for information gained by reconnaissance is integral to all elements of operations and warfighting functions, reconnaissance demands an integrated approach to planning, preparation, and execution. The two habitual participants in the reconnaissance planning process are the echelon operations and intelligence staff officers. The echelon operations staff officer (G-3/S-3) has primary staff responsibility for reconnaissance planning, allocating, and tasking resources. Normally, the echelon operations staff officer is responsible for ground and air reconnaissance assets, which includes engineers, CBRN, and artillery. The echelon intelligence staff officer (G-2/S-2) has primary responsibility for ground surveillance systems and special electronics mission aircraft. The echelon civil affairs staff officer (G-9/S-9) has primary responsibility for civil reconnaissance and integration of civil information into the common operational picture. The commander ensures these two staff elements adopt an integrated combined arms approach to planning, preparing, executing, and assessing reconnaissance.

INFORMATION COLLECTION PLAN

1-46. The commander closely integrates reconnaissance and surveillance missions with other higher and lateral reconnaissance and surveillance efforts to ensure that each asset is used effectively. The echelon staff, primarily the intelligence staff officer, identifies gaps in available intelligence, based on the initial IPB and the situationally dependent CCIR. The IPB process helps determine factors that impact on the reconnaissance effort, such as—

- Avenues of approach that support friendly movement and exploit enemy weaknesses.
- Key terrain, choke points, obstacles, and hazard areas.
- Enemy positions, especially flanks that can be exploited.
- Observation points.

The reconnaissance effort and the IPB process are interactive and iterative, each feeding the other. (See ADRP 2-0 for more information on the intelligence cycle. FM 2-01.3 addresses the IPB process.)

1-47. The intelligence staff officer develops an initial synchronization plan to acquire information to help answer those PIR based on the available reconnaissance and surveillance assets. The plan assigns specific intelligence acquisition tasks to specific units for action. It integrates surveillance and reconnaissance into the overall intelligence annex.

1-48. The echelon operations staff officer uses the synchronization plan as basis for preparing the intelligence annex to the operation order. When completed, the intelligence annex provides for the flexible execution of reconnaissance tasks, including providing for adequate mission command, indirect fires, and sustainment. (ADRP 5-0 discusses reconnaissance within the military decisionmaking process.)

1-49. The echelon assistant chief of staff, civil affairs operations (G-9/S-9) staff officer plans civil reconnaissance and does so similar to how the echelon intelligence cell plans intelligence gathering. Civil reconnaissance requires planning that considers mission variables and or operational variables. The most important consideration is to develop civil reconnaissance which updates the civil component of the common operational picture, in order to further update the civil affairs activities running estimate which informs decisionmaking in support of the commander's intent. A civil reconnaissance concept of operations will consider the quality of the area assessments and civil information databases that exist, and prioritize information gathering to support filling information gaps. (See FM 3-55 for more information on the development and use of the information collection plan. For additional information on the conduct of civil reconnaissance see FM 3-57.)

RECONNAISSANCE-PULL VERSUS RECONNAISSANCE-PUSH

1-50. ***Reconnaissance-pull*** **is reconnaissance that determines which routes are suitable for maneuver, where the enemy is strong and weak, and where gaps exist, thus pulling the main body toward and along the path of least resistance. This facilitates the commander's initiative and agility.** In reconnaissance-pull, the commander uses the products of the IPB process in an interactive and repetitive way. The commander obtains combat information from available reconnaissance assets to determine a preferred COA for the tactical situation presented by the mission variables of METT-TC. ***Reconnaissance-push*** **is reconnaissance that refines the common operational picture, enabling the commander to finalize the plan and support shaping and decisive operations. It is normally used once the commander commits to a scheme of maneuver or course of action.** In reconnaissance-push, the commander uses the products of the IPB process in an interactive way with combat information from reconnaissance assets in support of a COA. The chief reason for preferring one method over the other is the time available.

1-51. The time required to develop a COA can give the enemy enough time to recover and prepare so that taking an objective may cause higher casualties than necessary. Commanders balance the time needed to develop a COA with the need to act rapidly and decisively on the battlefield. There is no available model that a commander can use to determine how much is enough; that determination is part of the tactical art.

RECONNAISSANCE MANAGEMENT

1-52. No single reconnaissance asset can answer every intelligence requirement, and there are rarely enough reconnaissance assets to cover every requirement. The echelon staff uses as mix of reconnaissance management methods, such as cueing, mixing, redundancy, and task organizing, in an attempt to use limited assets most effectively and collect the most critical information with the fewest assets as quickly as possible.

1-53. ***Cueing*** **is the integration of one or more types of reconnaissance or surveillance systems to provide information that directs follow-on collecting of more detailed information by another system.**

Cueing helps to focus limited reconnaissance assets, especially limited ground reconnaissance assets, which can rarely examine every part of a large area closely. Electronic, thermal, visual, audio, and other technical assets with wide-area surveillance capabilities, often working from aerial platforms, can quickly determine areas of enemy concentration or areas where there is no enemy presence. These assets may cue ground and air reconnaissance assets to investigate specific areas to confirm and amplify information developed by technical assets. For example, Joint Surveillance Target Attack Radar System (JSTARS) and Guardrail-equipped aircraft can cover large areas and cue ground reconnaissance or unmanned aircraft once they identify an enemy force. The commander may dispatch ground reconnaissance or unmanned aircraft to verify the information and track the enemy for targeting purposes. Similarly, a ground reconnaissance asset can cue surveillance assets. Commanders use reconnaissance assets based on their capabilities and use the complementary capabilities of other assets to verify and expand information.

1-54. ***Mixing*** **is using two or more different assets to collect against the same intelligence requirement**. Employing a mix of systems not only increases the probability of collection, but also tends to provide more complete information. For example, a JSTARS aircraft may detect and locate a moving enemy tactical force, while the G-2 analysis and control element uses organic and supporting assets to determine its identity, organizational structure, and indications of future plans. Employing a mix of systems is always desirable if the situation and available resources permit. Mixing systems can also help uncover military deception attempts by revealing discrepancies in reports from different collectors.

1-55. ***Redundancy*** **is using two or more like assets to collect against the same intelligence requirement**. Based on the priority of the information requirement, the commander must decide which NAI justifies having more than one asset covering it. When more than one asset covers the same NAI, a backup is available in the event that one asset cannot reach the NAI in time, the first asset suffers mechanical failure, or the enemy detects and engages the first asset. Redundancy also improves the chances of information collection.

1-56. To increase the effectiveness and survivability of a reconnaissance asset, the commander may task organize it by placing additional assets under the unit's control. For example, to conduct an area reconnaissance of possible river crossing sites at extended distances from a division's current location, a ground reconnaissance troop of an attached armored brigade combat team can be task-organized with a COLT, a signal retransmission element, an engineer reconnaissance element, and a mechanized infantry platoon. The engineers provide additional technical information on proposed crossing sites; the signal retransmission elements allow the reconnaissance troop's combat net radios to reach the division main command post. The COLT provides additional observation, lazing, and fire coordination capabilities. Last, the infantry platoon provides additional combat capabilities and protection for the reconnaissance troop. (See FM 3-55 for additional information on the management of information collection assets.)

SUSTAINMENT

1-57. Sustaining reconnaissance assets before, during, and after their commitment is a vital part of maintaining reconnaissance capabilities. Because the way that a commander deploys reconnaissance assets depends on the mission variables of METT-TC, the methods employed to sustain those assets are also situationally dependent. The commander must address them as part of the planning process for each reconnaissance operation.

1-58. Reconnaissance elements frequently operate in locations distant from their sustaining base. In this event, reconnaissance elements either carry a large enough basic load or are task organized with those assets necessary to ensure their sustainment until they can be relieved. With either COA, commanders carefully plan for casualty evacuation. An alternative solution is to plan and coordinate sustainment from units near operating locations.

EXECUTING RECONNAISSANCE

1-59. Reconnaissance is characterized as either stealthy or aggressive. A key factor in executing reconnaissance is the time available to conduct the mission. The commander recognizes the increased risk to both the reconnaissance element and the main body when accelerating the pace of reconnaissance. This risk can be somewhat offset by employing air reconnaissance and technical means to cover open terrain or

areas of lower threat. Depending on how they are employed, attack reconnaissance helicopters and other aerial platforms, as well as mounted and dismounted ground reconnaissance, are characterized as either stealthy or aggressive.

1-60. Stealthy reconnaissance emphasizes avoiding enemy detection and engagement. It takes more time than aggressive reconnaissance. Stealthy reconnaissance takes maximum advantage of cover and concealment and the reduced battlefield signatures associated with units that typically conduct stealthy reconnaissance, such as dismounted scouts. However, stealth cannot be guaranteed. As a result, units attempting to conduct stealthy reconnaissance must also be drilled to react correctly once the enemy makes contact, and they must have immediate access to supporting fires.

1-61. The speed and manner in which the reconnaissance force develops the situation once it makes contact with an enemy force characterize aggressive reconnaissance. A unit conducting aggressive reconnaissance uses both direct- and indirect-fire systems and movement to rapidly develop the situation. A unit requires firepower, aggressive exploitation of actions on contact, operations security, and training to survive and accomplish its mission when conducting aggressive reconnaissance. Mounted reconnaissance is normally characterized as aggressive.

1-62. The commander considers the mission variables of METT-TC to determine whether to conduct mounted or dismounted reconnaissance. Conditions that may result in a decision to conduct mounted or aerial reconnaissance include—

- Time is limited.
- Detailed reconnaissance is not required.
- Air units are available to perform coordinated reconnaissance with the ground assets.
- The IPB process has provided detailed information on the enemy.
- Terrain is relatively open.
- Environmental conditions permit this type of reconnaissance. (Deep snow and muddy or swampy terrain greatly hinder mounted reconnaissance.)
- Dismounted reconnaissance cannot complete the mission within existing time constraints, while mounted reconnaissance can.

1-63. The following conditions may cause a commander to direct a dismounted reconnaissance effort:

- Time is available.
- Detailed reconnaissance is required.
- Stealth is required.
- The IPB process indicates close proximity to enemy positions.
- The reconnaissance force encounters danger areas.
- Restrictive terrain limits the effectiveness of mounted reconnaissance.

(Maneuver Center of Excellence publications address small tactical units, such as the infantry rifle platoons and squads, and describe dismounted patrolling in detail.)

1-64. Typically, air reconnaissance operates closely with ground reconnaissance units. (Friendly ground forces in an area offer additional security to aircrews.) Aviation units can insert surveillance teams at observation posts. Aircrews can observe and provide security on station for extended times using rotation techniques, if they have detailed requirements in advance. Dismounting an aircrew member to evaluate bridges, fords, or crossing sites is a last alternative because of the danger to the aircrew and the aircraft. Before resorting to this, the aircrew uses the observation and surveillance systems on the aircraft to avoid risk and to avoid drawing attention to the area of interest.

1-65. ***Reconnaissance by fire*** **is a technique in which a unit fires on a suspected enemy position to cause the enemy forces to disclose their presence by movement or return fire.** This technique is appropriate when time is critical and stealthy maneuver to further develop the situation is not possible. The fires may be either direct, indirect, or a combination of both. The advantage of indirect fire is that it does not give away friendly locations and usually causes the enemy to displace from the impact area. However, reconnaissance by fire may not cause a seasoned or prepared enemy force to react. Reconnaissance by fire is characterized as aggressive.

1-66. Smoke and battlefield obscuration, fog, rain, and snow produce reduced visibility. Generally, reconnaissance during limited visibility conditions takes more time than during periods of normal visibility. However, these conditions provide for better stealth and enhance the survivability of reconnaissance assets. A commander frequently employs dismounted reconnaissance patrols at night. These patrols use light amplification and thermal observation devices, electronic surveillance devices, and surveillance radars to compensate for reduced visibility conditions.

1-67. In limited visibility, mounted reconnaissance tends to focus on road networks. The enemy can detect engine and track movement noises of friendly mounted reconnaissance elements at considerable distances at night, which makes them susceptible to ambush. Strict sound and light discipline, along with masking sounds, such as artillery fires, helps mounted reconnaissance forces avoid compromise or ambush.

1-68. High winds, extreme temperature, loose topsoil, or sand may adversely affect aerial reconnaissance. Air reconnaissance units plan their missions in much the same way as ground units. They use the same type of operations graphics and consider the same critical tasks. The air reconnaissance commander organizes aviation assets to accomplish the mission by considering the same IPB aspects as ground forces. The commander focuses on air hazards to navigation and anticipated enemy air defense capabilities. (The effects of weather and atmosphere conditions are discussed in FM 2-01.3.)

RECUPERATION AND RECONSTITUTION OF RECONNAISSANCE ASSETS

1-69. When a commander employs a small unit continuously for an extended period of time, it can become ineffective. When this occurs, restoring the unit to an acceptable level of effectiveness may require either recuperation or reconstitution. Recuperation—a short break for rest, resupply, and maintenance—is often sufficient to return the unit to the desired degree of combat effectiveness. Leaders in reconnaissance units probably need more rest than their subordinates. If the commander extends the recuperation period, it can also be used to conduct refresher training, new equipment training, or any required specialized training for the next mission.

1-70. Units and systems performing reconnaissance are vulnerable to detection, engagement, and destruction by the enemy. When this occurs and the unit can no longer perform its primary mission, the commander must determine whether to reconstitute, by either regenerating or reorganizing the unit. (See Sustainment Center of Excellence publications for additional information concerning reconstitution.)

1-71. Regenerating a unit requires significant resources. The organization two echelons above the unit being regenerated directs the regeneration procedure and coordinates for the necessary personnel, equipment, and supplies from the appropriate theater sustainment command supporting organization, if that headquarters does not have organic, assigned, or attached sustainment assets. For example, a BCT can regenerate a reconnaissance troop. In the regeneration process, the BCT could use a combination of weapons systems replacement operations, battle damage assessment and repair, normal replacement operations, and medical returnees to provide the needed resources. These resources, combined with training, could be used to regenerate the degraded reconnaissance troop. Alternatively, the commander could designate a line company to perform the duties of the reconnaissance troop. This approach has significant training implications and requires adjustments to the line company's table of organization and equipment.

1-72. Unit commanders can reorganize their units with the approval of their next higher commander. For example, a mechanized infantry company commander in an armored brigade combat team could reorganize the company's three rifle platoons, each having four M-2 Bradley infantry fighting vehicles, into four platoons of three M-2's with the approval of the squadron commander, if that individual was faced with the necessity of securing four different locations. Alternatively, if combat losses included both a platoon leader and a platoon sergeant with their vehicles, the commander could temporarily reorganize the three rifle platoons into two platoons with five M-2's each. This approach to reconstitution also requires training time and other equipment resources to ensure the combat effectiveness of the resulting composite organization.

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Chapter 2

Security Operations

The ultimate goal of security operations is to protect the force from surprise and reduce the unknowns in any situation. That force being protected may be the civilian population, civil institutions, and civilian infrastructure in the unit's area of operations (AO). A commander may conduct security operations to the front, flanks, or rear of the friendly force. The main difference between the conduct of security and reconnaissance is that the conduct of security orients on the force or facility being protected, while reconnaissance is enemy and terrain oriented. Security operations are shaping operations. As a shaping operation, economy of force is often a condition of tactical security operations.

SECURITY OPERATIONS TASKS

2-1. *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). Security operations encompass five tasks—screen, guard, cover, area security, and local security.

- *Screen* is a security task that primarily provides early warning to the protected force (ADRP 3-90).
- *Guard* is a security task to protect the main body 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).
- *Cover* is a security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body (ADRP 3-90).
- *Area security* is a security task conducted to protect friendly forces, installations, routes, and actions within a specific area (ADRP 3-90).
- *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).

2-2. The screen, guard, and cover security tasks, respectively, contain increasing levels of combat power and provide increasing levels of security for the main body. However, more combat power in the security force means less for the main body. Area security preserves the commander's freedom to move reserves, position fire support means, provide for mission command, and conduct sustaining operations. Local security provides immediate protection to the friendly force.

2-3. All maneuver forces are capable of conducting security operations. All three types of Army brigade combat teams (BCTs)—armored, infantry, and Stryker—have conduct security operations as part of their mission essential task list (METL). No BCT has the cover, guard, and screen security tasks as part of their Army METL. A commander should ensure that subordinate units perform those specific security tasks required by the situation. Habitual support relationships with attachments and standard operating procedures (SOPs) are required to obtain proficiency in the conduct of these tasks.

2-4. A maneuver force commander normally designates the security area in which the security force operates. In this chapter, the force (or facility) being secured is called the main body. When discussing

security tasks, the terms stationary and moving describe the actions of the main body, not the security force.

2-5. All forces, regardless of whether they are maneuver or functional and multifunctional support and sustainment forces, are responsible for their own local security. Local security consists of observation posts (OPs), local security patrols, perimeter security, and other measures to provide close-in security for a force. The amount of training on these later tasks and the resources devoted to conducting them in an AO depends on the mission variables of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC). This chapter focuses on security tasks that are conducted by one force or a subordinate element of a force that provides security for the larger force—screen, guard, and cover. ADRP 3-37 discusses area security. Echelon-specific Army publications discuss local security.

FUNDAMENTALS OF SECURITY OPERATIONS

2-6. Successful security operations depend on properly applying five fundamentals:

- Provide early and accurate warning.
- Provide reaction time and maneuver space.
- Orient on the force or facility to be secured.
- Perform continuous reconnaissance.
- Maintain enemy contact.

PROVIDE EARLY AND ACCURATE WARNING

2-7. The security force provides early warning by detecting the enemy force quickly and reporting information accurately to the main body commander. The security force operates at varying distances from the main body based on the mission variables of METT-TC. As a minimum, it should operate far enough from the main body to prevent enemy ground forces from observing or engaging the main body with direct fires. The earlier the security force detects the enemy, the more time the main body has to assess the changing situation and react. The commander positions ground security, aerial scouts, and unmanned aircraft systems (UASs) to provide long-range observation of expected enemy avenues of approach. The commander reinforces and integrates them with available intelligence collection systems, such as unattended ground sensors (UGS), surveillance systems, and moving target indicators to maximize warning time.

PROVIDE REACTION TIME AND MANEUVER SPACE

2-8. The security force provides the main body with enough reaction time and maneuver space to effectively respond to likely enemy actions by operating at a distance from the main body and by offering resistance to enemy forces. The commander determines the amount of time and space required to effectively respond from information provided by the intelligence preparation of the battlefield (IPB) process and the main body commander's guidance regarding time the main body requires to react to enemy courses of action (COA) based on the mission variables of METT-TC. The security force that operates farthest from the main body and offers more resistance provides more time and space to the main body. It attempts to hinder the enemy's advance by acting within its capabilities and mission constraints.

ORIENT ON THE FORCE OR FACILITY TO BE SECURED

2-9. The security force focuses all its actions on protecting and providing early warning to the secured force or facility. It operates between the main body and known or suspected enemy units. The security force must move as the main body moves and orient on its movement. The security force commander must know the main body's scheme of maneuver to keep the security force between the main body and the enemy. The value of terrain occupied by the security force hinges on the protection it provides to the main body commander.

PERFORM CONTINUOUS RECONNAISSANCE

2-10. The security force aggressively and continuously seeks the enemy and reconnoiters key terrain. It conducts active area or zone reconnaissance to detect enemy movement or enemy preparations for action and to learn as much as possible about the terrain. (In stability-focused operations that terrain includes information on the civil population.) The ultimate goal is to determine the enemy's COA and assist the main body in countering it. Terrain information focuses on its possible use by the enemy or the friendly force, either for offensive or defensive operations. Stationary security forces use combinations of OPs, aviation, patrols, intelligence collection assets, and battle positions (BPs) to perform reconnaissance. Moving security forces perform zone, area, or route reconnaissance along with using OPs and BPs to detect enemy movements and preparations.

MAINTAIN ENEMY CONTACT

2-11. Once the security force makes enemy contact, it does not break contact unless the main force commander specifically directs it. However, the individual security asset that first makes contact does not have to maintain that contact, if the entire security force maintains contact with the enemy. The security force commander ensures that subordinate security assets hand off contact with the enemy from one security asset to another in this case. The security force must continuously collect information on the enemy's activities to assist the main body in determining potential and actual enemy COAs and to prevent the enemy from surprising the main body. This requires the security force to maintain continuous visual contact, to be able to use direct and indirect fires, and to freely maneuver, which requires the security force have depth in space and time.

GENERAL CONSIDERATIONS FOR SECURITY OPERATIONS

2-12. There are a number of general considerations when conducting security operations. These apply to all forms of security operations but are most applicable to screen, guard, and cover missions.

COMMON SECURITY CONTROL MEASURES

2-13. Security operations are depicted on overlays using a lightning bolt on either side of the symbol representing the unit conducting the security operation and are labeled with the letter S, G, or C to denote screen, guard, or cover. The end of the lightning bolt has arrowheads that touch the designated operational graphics, which define the left and right limits of the security operation. (See figure 2-1.)

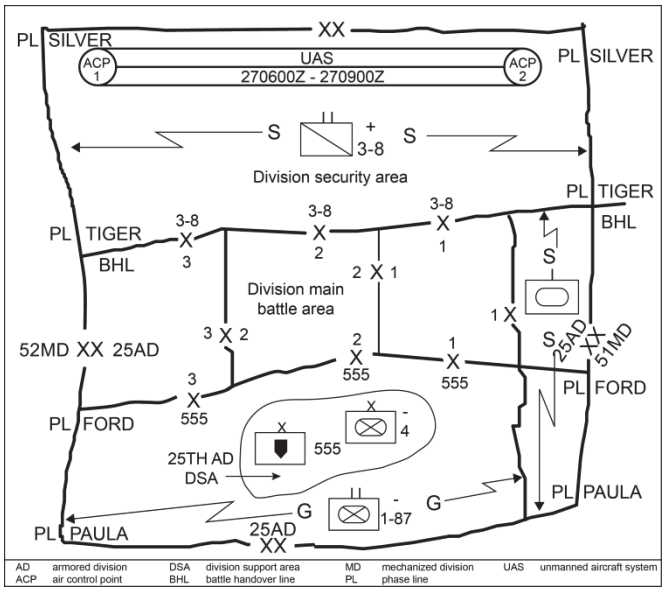

Figure 2-1. Common security control measures

2-14. The screen, guard, and cover have many common control measures, starting with boundaries defining the security area. The main body commander establishes the security area. For a security force operating to the front of the main body, the lateral boundaries of the security area are normally an extension of the lateral boundaries of the main body. The security force's rear boundary is normally the battle handover line (BHL).

2-15. To establish a screen to the rear of a force, the lateral boundaries are also an extension of the boundaries of the main body, and the screening force's rear boundary is the rear boundary of the entire

force. For a flank screen, the lateral boundaries of the security area are an extension of the rear boundary of the main body and its forward edges of the battle area (FEBA) or forward line of own troops (FLOT). The rear boundary of a flank screen is the lateral boundary of the main body. The rear boundary or another phase line (PL) may serve as a BHL between the security force and the main body to control the passing of responsibility for the enemy to the main body. Normally, the responsibility of the flank security force begins at the trail element of the advance security force or the lead combat element in the main body. It ends at the rear of the main body or the lead element of the rear security force. The main body commander clarifies responsibilities as necessary.

2-16. Either the main body or the security force commander designates additional PLs to control the operation. These PLs may serve as subsequent screen or delay lines. Each element of the security force must report when crossing or occupying them. Displacement to these subsequent PLs is event-driven. The approach of an enemy force, relief of a friendly unit, or movement of the protected force dictates the movement of the security force. The security force commander normally assigns additional lateral boundaries in the security area to delineate the AOs for subordinate units.

2-17. The commander uses checkpoints and named areas of interest (NAIs) to indicate specific areas of interest and to coordinate movement and surveillance. The commander uses contact points to facilitate coordination with flank units during front and rear security missions or between elements of a security force in the security area. Units conducting flank security for a moving force physically contact the main body at contact points. If the security force commander wants to ensure coverage of a specific NAI or avenue of approach, the security force commander establishes OPs to observe those locations.

PLANNING CONSIDERATIONS FOR SECURITY MISSIONS

2-18. In addition to the planning considerations applicable to other types of operations discussed in this publication, such as control of key terrain and avenues of approach, the commander assigning a security mission and the security force commander must address the following special considerations:

- Force to be secured.
- Location and orientation of the security area.
- Initial observation post locations.
- Types of OPs established.
- Time to establish the security force.
- Criteria for ending the security mission.
- Augmentation of security forces.
- Intelligence support to security operations.
- Special requirements or constraints.
- Fire planning.
- Integration of ground and air operations.
- Use of movement corridors.
- Planning the engineer effort.
- Reporting.
- Positioning of mission command and sustainment assets.
- Sustainment concept of support.

Force to Be Secured

2-19. The main body commander must designate the exact force to secure. This designation determines the limits of the security force's responsibilities. The security force must orient on the force it is securing. If the main body moves, the security force also moves to maintain its position in relation to the main body. Table 2-1 on page 2-5 shows the typical size of security forces at various echelons. The limited capabilities of most maneuver platoons prohibit them from having a mission separate from their parent company. Scout platoons are the exception to this rule.

Table 2-1. Typical size of security forces for a given mission and echelon

Echelon	*Security mission*			
	Screen	***Advance guard***	***Flank/rear guard***	***Cover***
Battalion/task force	Platoon	CO/TM		
Brigade combat team	CO/TM	BN TF	CO/TM	CAB (+)/ BN TF(+)
Division	BFSB recon squadron CAB/BN TF	BFSB recon squadron (+) BCT	BFSB recon squadron (+) CAB/BN TF	BFSB recon squadron (+) BCT(+)
Corps	CBT AV BDE CAB/BN TF BCT	Division ABCT/SBCT	Division ABCT/SBCT CAB/BN TF	Division (+) ABCT (+)
Echelons above corps (joint force land component/numbered Army)	CBT AV BDE ABCT/SBCT	Division (+) corps	CBT AV BDE ABCT/SBCT	Division (+) corps
ABCT armored brigade combat team **AV aviation** **BCT brigade combat team** **BDE brigade** **BN TF battalion task force**		**BFSB battlefield surveillance brigade** **CAB combined arms battalion** **CBT combat** **CO/TM company/team** **SBCT Stryker brigade combat team**		

Location and Orientation of the Security Area

2-20. The main body commander determines the location, orientation, and depth of the security area where the security force will operate. The commander identifies specific avenues of approach and NAIs to be covered. Depth in the security area provides the main body with time to react to approaching enemy ground units. Occupying a deep security area allows the security force to destroy enemy reconnaissance assets without compromising critical OPs or positions. It also prevents the enemy from penetrating the security area too easily and prevents gaps from occurring when OPs or units displace or are lost. The wider the area to secure, the less the security force can take advantage of the increased depth because it will have fewer forces to position in depth. A very shallow security area may require the commander to resource the security force to conduct the guard task to provide needed reaction time.

2-21. The security force commander conducts a detailed analysis of the terrain in the security area. That commander establishes the security force's initial dispositions (usually a screen line) as far forward as possible on terrain that provides good observation of avenues of approach. Next, the commander assigns clear responsibility for identified avenues of approach and designated NAIs. When conducting screen or guard tasks, the initial screen line must be within supporting range of the main body, yet provide the desired amount of early warning.

Initial Observation Post Locations

2-22. **An *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.** The security force commander determines tentative initial OP locations along or behind the screen line to ensure effective surveillance of the sector and designated NAIs. The unit or asset that occupies each OP may shift its exact location to achieve the commander's intent. A commander may place more than one OP along a high-speed avenue of approach to allow an enemy contact to be tracked from one OP to another, thus

maintaining enemy contact without requiring security forces to displace. The security force commander tasks subordinate units to perform reconnaissance and combat patrols to cover gaps between OPs. To prevent fratricide, the commander places a restrictive fire support coordination measure around OP locations.

Types of Observation Posts

2-23. OPs may be either mounted or dismounted. Mounted OPs can use their vehicular optics, weapons systems, and tactical mobility to rapidly displace when necessary. However, an enemy can detect them more readily than dismounted OPs. Dismounted OPs provide maximum stealth but lack the speed of displacement, optics, and weapons of mounted OPs. It takes a minimum of two Soldiers to man an OP, and then they can only operate that OP effectively for no more than 12 hours. OPs manned for more than 12 hours require, as a minimum, an infantry squad or scout section to ensure continuous operation. The screening force patrols dead space and the area between OPs, conducts resupply operations, and rests or sustains its personnel. In addition, under limited visibility conditions, OPs can be established as listening posts (LPs) to take advantage of Soldier increased auditory acuteness when their vision is degraded under those conditions.

Time the Security Force Must Be Established

2-24. The main body commander must determine when to establish the security force. The main body commander decides this based on the activity of the main body and expected enemy activity. The main body commander must allow enough time for the security force to move into and occupy the security area to prevent enemy forces from penetrating the security area undetected. The mission variables of METT-TC influence how the security force deploys to and occupies the screen line. If the security mission is the result of a current reconnaissance mission, the security force is already positioned to begin its mission. This occurs frequently when a reconnaissance mission halts at a designated PL. Analyzing the mission variables of METT-TC determines which deployment technique meets mission requirements.

Criteria for Ending the Security Mission

2-25. Security missions are usually time- or event-driven. The criteria for ending a security mission can be an action by the main body (such as completing a specific mission), a fixed-time period (for example, not allowing enemy penetration of a PL for two hours), or criteria based on the enemy force (such as its size). To terminate its security mission, the security force commander normally requires the permission of the main body commander to withdraw behind the security area's rear boundary.

Augmentation of Security Forces

2-26. The main body commander is responsible for reinforcing the security force. When the security area is large, the main body commander may place additional maneuver and functional and multifunctional support assets under the operational control or in support of the security force commander to reinforce the security force's organic combat power. Any unique mission requirement may require assets not organic to the security force. Commanders commonly attach ground surveillance radars, engineers, and chemical reconnaissance elements at the company or troop level.

Intelligence Support to Security Operations

2-27. Intelligence assets greatly enhance security operations. These assets conduct rapid surveillance of large areas to detect enemy presence. Remote sensors, unmanned aircraft systems sensors, UGS, signals intelligence systems, and downlinks from theater of operations and national assets expand the area under surveillance and cue the security force. Advanced rotary-wing aircraft, such as the OH (observation helicopter)-58D Kiowa Warrior and the AH (attack helicopter)-64D Longbow, detect and report enemy forces at extended ranges with thermal imaging and other advanced detection equipment. This permits the security force commander to concentrate the security force on likely enemy avenues of approach, NAIs, targeted areas of interest (TAIs), and restrictive terrain that degrades sensor performance. The commander

uses reconnaissance and surveillance assets to detect enemy movements. This gains time to reposition the security force and mass other assets to counter enemy actions. The main body commander increases the capability of the security force's intelligence assets to access higher echelon intelligence systems to reduce the risk, if the main commander cannot anticipate sufficient advance warning from the security force's organic or direct support intelligence assets.

Special Requirements or Constraints

2-28. The main body commander may impose special requirements or constraints, including engagement, disengagement, and bypass criteria. The main body commander may order the security force not to become decisively engaged or fall below a certain combat strength. The main body commander may be willing to accept a lesser degree of security, which results from either the loss of more terrain or reduced preparation time by the main body, to preserve the security force for later use.

Fire Planning

2-29. The main body commander positions fire support assets to support screen and guard forces. The main body commander allocates additional artillery to support a covering force. If the security force is assigned a wide AO, the commander may have to position fire support assets to provide effective coverage of only the most likely enemy avenues of approach. This is particularly important for a screen because often the screen force relies on indirect fire to delay or disrupt the enemy. Providing adequate indirect fire support to the security force may require the main body to position its artillery well forward in its formation.

Integration of Ground and Air Operations

2-30. Integrating ground and air operations is critical to the success of many security missions. Aviation units assist in reconnaissance of the security area as the ground element of the security force moves forward. They can perform the following tasks:

- Extend the screen in front of the flank security element's screen line.
- Screen forward of the ground security force.
- Conduct reconnaissance of areas between ground maneuver units.
- Assist in maintaining contact between the security force and the main body.
- Assist in clearing the area between the flank security element and the main body during moving flank security missions.
- Assist in disengaging ground units, especially when conducting battle handover and passage of lines with the main body.
- Monitor terrain that is hard to reach or would require too much time to cover with ground reconnaissance assets.

Planning the Engineer Effort

2-31. Countermobility plays a critical role in the security area. With properly integrated obstacles, the security force can maintain a mobility advantage over the enemy. The commander may mass engineer support in the security area initially and then shift support to the main battle area (MBA) once those units are prepared to begin developing engagement areas. They also enhance the mobility of the security force by identifying repositioning routes and task organizing engineers to provide breaching capabilities. However, the senior commander must consider the impact of prioritizing the countermobility effort in the security area rather than in the MBA or at the decisive point. In the offense, a commander can employ situational obstacles, covered by fire, on the flanks of an advancing force to provide additional security.

Reporting

2-32. The security force reports enemy activities to the main body. The main body headquarters is responsible for disseminating that information to other affected friendly forces. The main body commander ensures that the security force has access to all pertinent intelligence and combat information obtained by

the main body. This supplements the security force's capabilities. By continuously exchanging information, both the security force commander and the main body commander have time to choose a suitable COA. Force digitization greatly assists commanders in maintaining a common operational picture.

Sustainment

2-33. The unit sustainment staff embeds the security element sustainment requirements in the unit's sustainment chain and sustainment orders and annexes. A key component in security element sustainment is developing, maintaining, and using standard operating procedures (SOPs). Sustainers and operators use SOPs and are involved in developing them. Commanders exercise and test SOPs during training and make changes as needed. The commander ensures that the staff includes the sustainment of these security elements in the unit's sustainment rehearsal.

2-34. The security element commander designates the individual in the security element who is responsible for sustaining the element. This is normally the senior noncommissioned officer in platoons and companies assigned security tasks. For example, the platoon sergeant of a scout platoon establishing a flank screen for a battalion task force coordinates with the first sergeant of the adjacent company team to include the scout platoon's sustainment requirements in the company team's logistics package. Likewise, the first sergeant of a reconnaissance troop accomplishing a screening mission away from the rest of the reconnaissance squadron coordinates directly with the BCT logistics staff officer (S-4), the S-4 and forward support company of the maneuver battalion closest to the troops AO, and the brigade support battalion staff for resupply and medical treatment. This individual must have access to the appropriate communication networks to coordinate logistic support and casualty evacuation.

2-35. The individual responsible for sustaining the element coordinates with the appropriate supporting sustainment points of contact as soon as possible after receiving the security mission warning order. Coordination includes such items as the mission of the security element, the AO assigned to the security element, the routes it will take to that area from its current location, and movement times. The security element commander gives the exact sustainment requirements for the security element—including any specialized items of supply required by the mission, such as cratering charges—to the supporting sustainment element. The commander of the security element ensures that the supporting sustainment element establishes communication links with the security element and receives a copy of the supported security element's sustainment overlay.

2-36. The commander places special attention on treating and evacuating casualties for security elements operating away from normal medical support because of time, terrain, or distance factors, or a need for the security element to remain undetected by the enemy. For this reason, the security element should include as many Soldiers trained as combat lifesavers as possible. The more combat lifesavers in the security element, the more prepared it is for casualties.

Positioning of Security Force Command Post and Combat Trains

2-37. The security force commander moves to where that individual can best control the operation. This is often where the security force commander can observe the most dangerous enemy avenue of approach. The security force commander positions the security force's command post to provide continuous control and reporting during initial movements. The security force's combat trains position themselves behind masking terrain but remain close enough to the combat elements of the security force to provide rapid response. Commanders position them along routes that provide good mobility laterally and in-depth.

Movement into Security Areas for Stationary Security Missions

2-38. All stationary security missions are established in a similar manner. In deploying into the security area, the security force must address competing requirements: to establish the security area quickly to meet mission requirements, and to provide the necessary level of security for itself. The security force moves into the security area using one of three methods: tactical road march, movement to contact, or zone reconnaissance.

2-39. The fastest but least secure method of deploying is a tactical road march from the rear boundary of the security area to the initial positions. The security force moves to a release point on the rear boundary. From the release point, subordinate elements deploy to occupy initial positions, moving by the quickest means possible. This method is appropriate when enemy contact is not expected, time is critical, or an aviation unit is conducting a zone reconnaissance forward of the ground element and has found no enemy in the security area.

2-40. In the second method, the security force conducts a movement to contact from a line of departure (usually the rear boundary of the security area) to the initial positions. This method is slower than a tactical road march but more secure. It is appropriate when enemy contact is likely, time is limited, terrain reconnaissance is not needed, or an aviation unit is conducting zone reconnaissance forward of the ground element and enemy forces have been detected in the security area.

2-41. The most secure method for moving to the initial positions is for the security force to conduct a zone reconnaissance from the security area rear boundary to its initial security line positions or the forward limit of the security area. Given adequate time, this method is preferred because it allows the security force to clear the security area and become familiar with the terrain that it may have to defend. The security force reconnoiters potential subsequent positions and fire support system firing positions as it moves to its initial positions. A zone reconnaissance is appropriate when time is available and information about the enemy or terrain is unknown. While this technique provides information of tactical value on the enemy and terrain in the area, it may also be time consuming. Using air reconnaissance forward of the ground units increases the speed and security of the movement.

Movement During Moving Flank Security Missions

2-42. There are three techniques of occupying and moving in a flank security area for moving security missions based on how the security force crosses the line of departure:

- Security force crosses the line of departure (LD) separately from the main body and deploys to perform the mission.
- Security force crosses the LD separately from main body; lead elements conduct a movement to contact.
- Security force crosses the LD with the main body and conducts a zone reconnaissance out to the limit of the security area.

2-43. The commander should not require the security force to make its own penetration when it faces prepared enemy defenses. This may prevent or significantly delay the security force from assuming its duties. These three techniques are often combined.

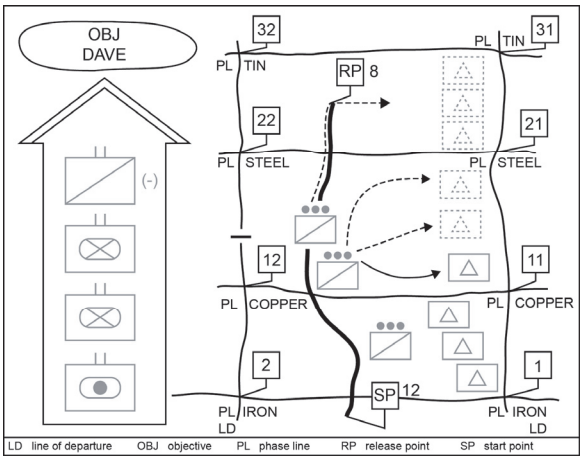

Figure 2-2. Security force crossing the LD separately from the main body to establish a flank screen

2-44. In the first technique, illustrated in figure 2-2 and figure 2-3 (on page 2-10), the security force crosses the LD separately from the main body and deploys to perform the mission. The security force then conducts a tactical road march, an approach march, or tactical movements parallel to the main body and drops off OPs or occupies BPs along the flank of the main body. This technique keeps the two forces from interfering with each other during deployment. It is appropriate when another force penetrates the line of contact, the main body is not in contact with the enemy and is moving quickly, the LD is uncontested, and the IPB process indicates that enemy contact is not likely in the area through which the security force is moving. It is the fastest but least secure technique.

2-45. In the second technique, the security force crosses the LD separately from the main body, and its lead elements conduct a movement to contact. Follow-on elements occupy positions as they reach them. (See figure 2-4.) This technique is appropriate when the main body is moving slower than in the first method, the LD is uncontested, and the IPB process indicates possible enemy contact. It is slower than the previous technique but provides better security.

2-46. Finally, in the third technique, the security force crosses the LD with the main body and conducts a zone reconnaissance out to the far limit of the security area. (See figure 2-5.) This technique is appropriate when the LD is also the line of contact, the main body makes its own penetration of the enemy defenses along the line of contact, the main body is moving slowly, and the enemy situation is not clearly understood. The security force may follow the lead element of the main body through the gap and deploy when the situation permits. This technique provides increased security for both the security force and the main body; it is also the most time-consuming.

SCREEN

2-47. A unit performing a screen observes, identifies, and reports enemy actions. Generally, a screening force engages and destroys enemy reconnaissance elements in its capabilities—augmented by indirect fires—but otherwise fights only in self-defense. The screen has the minimum combat power necessary to provide the desired early warning, which allows the commander to retain the bulk of the main body's combat power for commitment at the decisive place and time. A screen provides the least amount of protection of any security mission; it does not have the combat power to develop the situation.

2-48. A screen is appropriate to cover gaps between forces, exposed flanks, or the rear of stationary and moving forces. The commander can place a screen in front of a stationary formation when the likelihood of enemy action is small, the expected enemy force is small, or the main body needs only limited time, once it is warned, to react effectively. Designed to provide minimum security with minimum forces, a screen is usually an economy-of-force operation based on prudent risk. If a significant enemy force is expected or a significant amount of time and space is needed to provide the required degree of

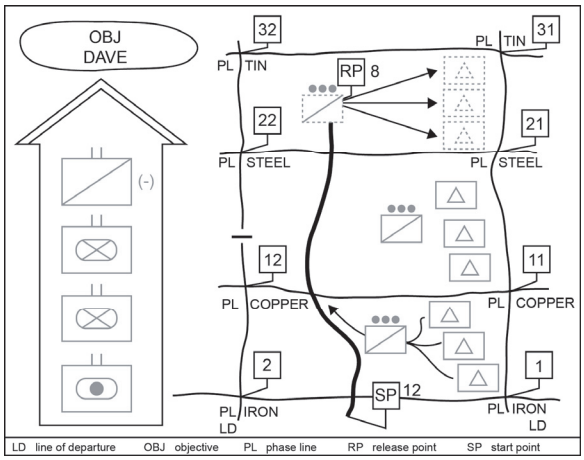

Figure 2-3. Security force continuing to cross the LD separately from the main body to establish a flank screen

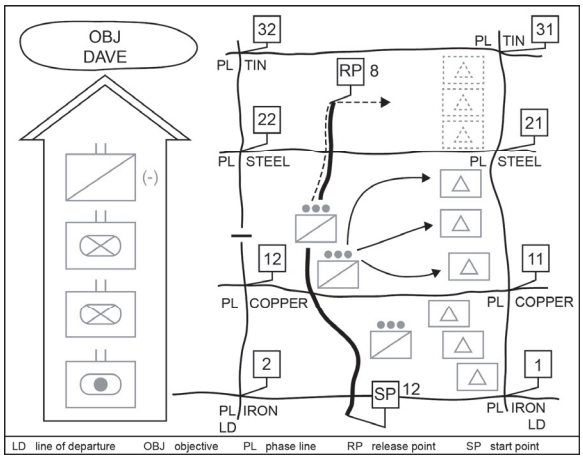

Figure 2-4. Second technique used by a moving flank security force to establish a moving flank screen

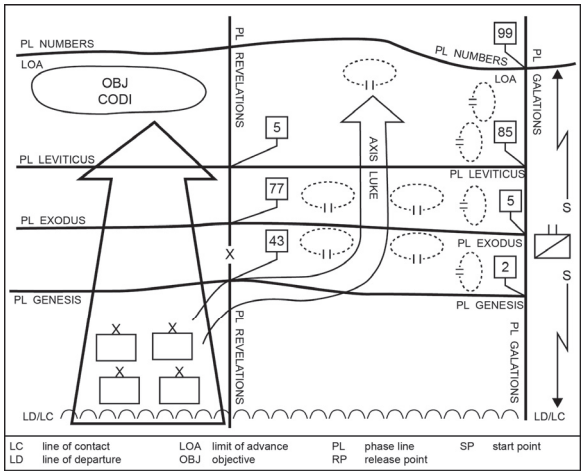

Figure 2-5. Third technique used by a moving flank security force to establish a flank guard or cover

protection, the commander assigns and resources a guard or cover mission instead of a screen. The security element forward of a moving force must conduct a guard or cover because a screen lacks the combat power to defeat or contain the lead elements of an enemy force.

2-49. A security force normally conducts a screen by establishing a series of OPs and patrols to ensure adequate surveillance of the assigned area. The commander uses reconnaissance patrols (mounted, dismounted, and aerial), relocates OPs, and employs technical assets to ensure continuous and overlapping surveillance. The commander also employs terrain data base analytical support systems to ensure the integration of friendly reconnaissance and surveillance assets to provide that necessary coverage.

CRITICAL TASKS FOR A SCREEN

2-50. Unless the commander orders otherwise, a security force conducting a screen performs certain tasks within the limits of its capabilities. A unit can normally screen an avenue of approach two echelons larger than itself, such as a battalion scout platoon screening a battalion-sized avenue of approach or a cavalry troop screening a regimental or brigade-sized avenue of approach. If a security force does not have the time or other resources to complete all of these tasks, the security force commander must inform the assigning commander of the shortfall and request guidance on which tasks must be completed and their priority. After starting the screen, if the security unit commander determines that the security unit cannot complete an assigned task, such as maintain continuous surveillance on all avenues of approach into an AO, the commander reports that fact to the main body commander and awaits further instructions. Normally, the main force commander does not place a time limit on the duration of the screen, as doing so may force the screening force to accept decisive engagement. Screen tasks are to—

- Allow no enemy ground element to pass through the screen undetected and unreported.
- Maintain continuous surveillance of all avenues of approach larger than a designated size into the area under all visibility conditions.
- Destroy or repel all enemy reconnaissance patrols within its capabilities.
- Locate the lead elements of each enemy advance guard and determine its direction of movement in a defensive screen.
- Maintain contact with enemy forces and report any activity in the AO.
- Maintain contact with the main body and any security forces operating on its flanks.
- Impede and harass the enemy within its capabilities while displacing.

ORGANIZATION OF FORCES

2-51. A screen normally requires the subordinate elements of the security force to deploy abreast. A screen force normally organizes itself into a number of OPs determined by the number of avenues of approach into the main force and any additional NAIs it must cover, as specified by the main force commander. The screening force may retain a small reaction force or reserve to extract endangered OPs.

2-52. The size of the avenue of approach kept under surveillance varies by echelon. Normally, a unit maintains observation over avenues of approach used by operationally significant enemy forces. These are normally avenues of approach used by enemy forces one echelon smaller than the friendly unit. For example, a battalion maintains surveillance over enemy company-sized avenues of approach, while the corps maintains surveillance over division-sized avenues of approach. The situation may require the unit to maintain surveillance over mobility corridors that can be used by enemy units two echelons smaller than the friendly force.

SCREEN CONTROL MEASURES

2-53. The control measures necessary to conduct a screen are in this chapter under common security control measures in paragraphs 2-13 to 2-17. (Figure 2-6 displays examples of control measures associated with a screen.)

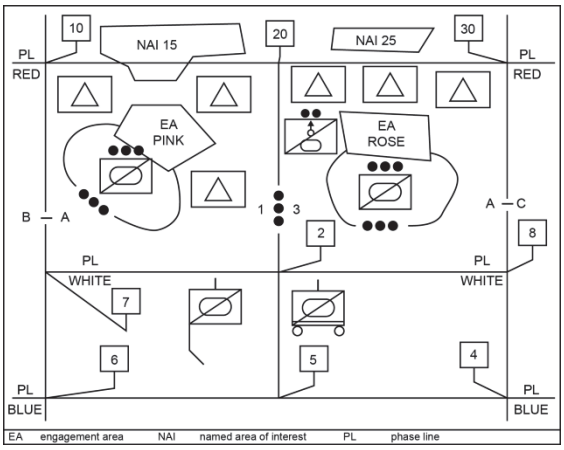

Figure 2-6. Control measures used in a screen mission

EXECUTING A STATIONARY SCREEN

2-54. In setting up the screen, the screening force establishes OPs with overlapping fields of observation. The screen commander adjusts the location of subordinate screening elements to take advantage of established links with higher-echelon sensors and collection assets. Patrols reconnoiter areas that OPs cannot observe. The force retains a small reserve, if possible. If forces are available and the depth of the security area allows, the screening force establishes OPs in-depth on high-speed avenues of approach. The commander plans routes between the initial and subsequent screen lines to facilitate rapid occupation of subsequent screen lines. The screening force reserve deploys in-depth and positions itself to react to contingencies that develop during the screen. The screening force takes advantage of its surveillance, target acquisition, and night-observation equipment and information provided by higher-level systems to expand the area and quality of security provided.

2-55. OPs remain undetected while those manning them report the presence of enemy elements. Prompt, accurate reporting is essential to keep the assets constituting the screen from being overrun or unknowingly bypassed. Once the enemy is detected, the OP uses fire support channels to direct engagement of the enemy at maximum range. This helps the OP avoid detection and prevents the enemy from penetrating the screen line. The screening force may destroy enemy reconnaissance assets with direct fire, if indirect fire cannot accomplish this task. It also attempts to slow the movement of other enemy elements, primarily using indirect fires and close air support.

2-56. As enemy pressure threatens the security of the OP, the unit reports and requests to move to the next screen line. The commander establishes criteria that allow the screening force to displace to subsequent screen lines, based on certain enemy or friendly actions. These criteria allow subordinates to use their initiative when conducting operations. When displacing from one screen line to another, the screening force emphasizes rapid movement while maintaining contact with the enemy. This ensures that any gaps that occur during movement are quickly closed. The screen's mission command elements displace as required to maintain control and keep from being overrun. The force repeats this procedure as often as necessary.

2-57. The screening force commander decides when to move from one screen line to another. However, the main body commander decides when the screening force can move behind the PL that designates the rear boundary of the security area and hand off the battle to the main body.

EXECUTING A MOVING SCREEN

2-58. The screening force may use several methods to move the screen as the protected force moves. Table 2-2 summarizes each method's advantages and disadvantages.

2-59. A screening force maintains a moving screen along the flanks and rear of the protected force. The screen movement is keyed to time and distance factors associated with the main body's movement. (See figure 2-7.) Responsibilities for a moving flank screen begin at the front of the main body's lead combat element and end at the rear of the protected force. They do not include front and rear security forces. A force executes a moving screen in the same way it conducts a stationary screen, except for the movement techniques.

Table 2-2. Screen movement methods

Method	*Characteristics*	*Advantages*	*Disadvantages*
Alternate bounds by observation posts	• Main body moves faster. • Conducted by platoon, company, or troop. • Contact is possible. • Conducted from rear to front.	• Very secure method. • Maintains maximum surveillance over the security area.	• Execution takes time. • Disrupts unit integrity.
Alternate bounds by units	• Main body moves faster. • Conducted by platoon, company, or troop. • Contact is possible. • Conducted from rear to front.	• Execution does not take a great deal of time. • Maintains good surveillance over the security area. • Maintains unit integrity.	• May leave temporary gaps in coverage.
Successive bounds	• Main body is moving slowly. • Conducted by platoon, company, or troop. • Contact is possible. • Conducted simultaneously or in succession. • Unit should maintain an air screen during ground movement.	• Most secure method. • Maintains maximum surveillance. • Maintains unit integrity.	• Execution takes the most time. • Unit is less secure when all elements are moving simultaneously. • Simultaneous movement may leave temporary gaps.
Continuous marching	• Main body is moving relatively quickly. • Performed as a route reconnaissance. • Enemy contact is not likely • Unit should maintain an air screen on the flank	• Observation posts displace quickly. • Maintains unit integrity.	• Least secure method.

2-60. The commander considers the mission variables of METT-TC when deciding which movement method to employ. Figures 2-8 and 2-9 on page 2-14 illustrate four methods of controlling movement along a screen line:

- Alternate bounds by individual OPs from the rear to the front. (This method is usually employed at the company or troop level and below.)
- Alternate bounds by subordinate units from the rear to the front.
- Successive bounds by units along the screen line.
- Continuous marching along the route of advance.

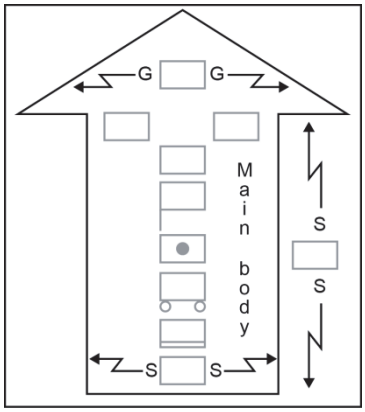

Figure 2-7. Moving flank screen

SCREENING OPERATIONS DURING LIMITED VISIBILITY

2-61. Limited visibility often affects the screening force's ground and air observation. During limited visibility, the screening force uses all available night and thermal observation devices and electronic surveillance devices. Although the screening force can use technical reconnaissance and surveillance assets to offset limited visibility, it should also adjust its techniques and procedures to the conditions. For example, the commander of a screening force may need to adjust the number and location of OPs in limited-visibility conditions. The screening force commander can establish more OPs to cover avenues of approach that become masked in these conditions. That individual plans for indirect illumination and uses it when necessary. The screening force commander closely coordinates the force's combat and reconnaissance patrols to prevent misidentification and friendly fire incidents. Rigorous noise and light discipline prevents compromise and potential bypass of OPs by enemy reconnaissance forces. Near OPs and along dismounted avenues of approach, the screening force can use trip flares, protective minefields, and mechanical devices, such as noisemakers integrated into

tanglefoot obstacles, to detect and warn of the enemy's dismounted approach. Additional OPs along enemy avenues of approach can provide depth to facilitate detecting enemy forces that may have eluded forward security elements.

GUARD

2-62. A guard differs from a screen in that a guard force contains sufficient combat power to defeat, cause the withdrawal of, or fix the lead elements of an enemy ground force before it can engage the main body with direct fire. A guard force routinely engages enemy forces with direct and indirect fires. A screening force, however, primarily uses indirect fires or close air support to destroy enemy reconnaissance elements and slow the movement of other enemy forces. A guard force uses all means at its disposal, including decisive engagement, to prevent the enemy from penetrating to a position to observe and engage the main body. It operates within the range of the main body's fire support weapons, deploying over a narrower front than a comparable-sized screening force to permit concentrating combat power.

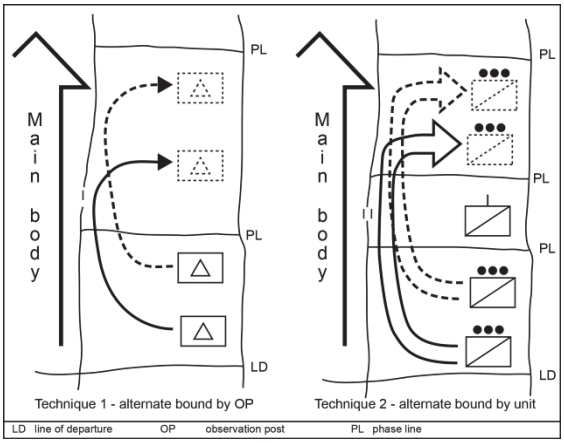

Figure 2-8. Displacement methods for a flank screen

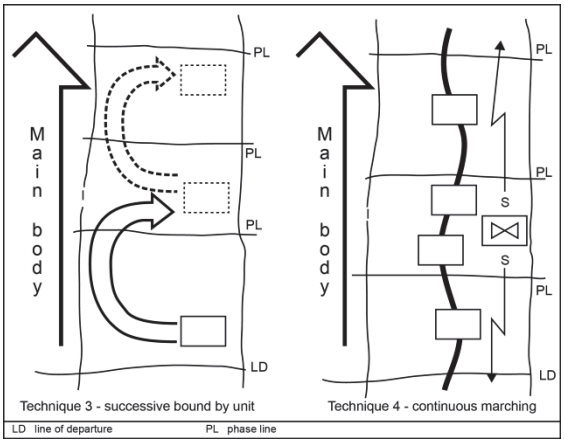

Figure 2-9. More displacement methods for a flank screen

2-63. The three types of guard operations are advance, flank, and rear guard. A commander can assign a guard mission to protect either a stationary or a moving force. (See figure 2-10.)

2-64. A unit conducting a guard performs certain tasks within its capabilities unless ordered otherwise. If a unit does not have the time or other resources to complete all of these tasks, it must inform the commander assigning the mission of the shortfall and request guidance on which tasks to complete or the priority of tasks. After starting the guard, if the unit determines that it cannot complete an assigned task, such as cause deployment of the enemy advance guard, it must report this to the commander and await further instructions. Guard tasks are to—

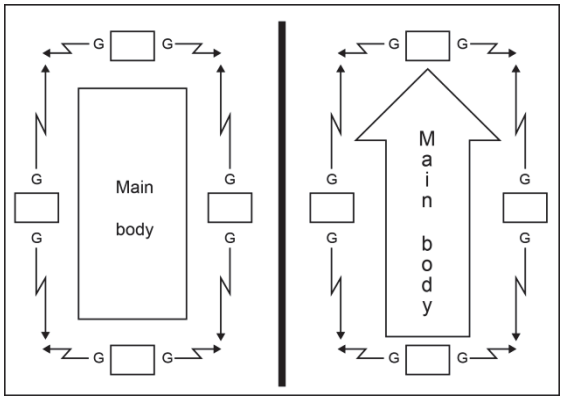

Figure 2-10. Guard locations

- Destroy the enemy advance guard.
- Maintain contact with enemy forces and report activity in the AO.
- Maintain continuous surveillance of avenues of approach into the AO under all visibility conditions.
- Impede and harass the enemy within its capabilities while displacing.
- Cause the enemy main body to deploy, and then report its direction of travel.
- Allow no enemy ground element to pass through the security area undetected and unreported.

- Destroy or cause the withdrawal of all enemy reconnaissance patrols.
- Maintain contact with its main body and any other security forces operating on its flanks.

2-65. A commander employs a guard when the expected enemy contact requires additional security beyond that provided by a screen. The multiple requirements of the guard mission are often performed simultaneously over relatively large areas. While the guard force's exact size is determined by prevailing mission variables of METT-TC, table 2-1 on page 2-5 provides general guidance on the size of an echelon's guard force.

ORGANIZATION OF A GUARD FORCE

2-66. Whether the guard is for a stationary (defending) or moving (attacking) force, the various types of guard missions and knowledge of the terrain and enemy dictate the specific task organization of the guard force. The guard force commander normally conducts the guard mission as an area defense (see chapter 7 of FM 3-90-1), a delay (see chapter 9 of FM 3-90-1), a zone reconnaissance (see chapter 1), or a movement to contact (see chapter 2 of FM 3-90-1) mission in the security area.

CONTROL MEASURES

2-67. The commander uses control measures to control the operations of the guard force in the security area. The mission also influences the size of the AO the commander gives to subordinate elements. For example, a movement to contact normally occurs across a narrower unit frontage than a zone reconnaissance to allow adequate concentration of combat power.

2-68. The guard force commander may task subordinate elements to conduct screen missions to the front and flanks of the guard force. This provides early warning of enemy forces and helps maintain contact with flank forces and any higher-echelon security force. An example of the latter is a corps covering force operating in front of a division advance guard. The presence of a higher-echelon security force also influences how the guard force commander organizes available forces and conducts operations. It specifically impacts the areas of fire support and sustainment.

ADVANCE GUARD

2-69. An advance guard for a stationary force operates defensively. It defends or delays in accordance with the main body commander's intent. An advance guard for a moving force operates offensively. (See figure 2-11.) The advance guard develops the situation, so the main body can use its combat power to the greatest effect. The commander does not dissipate the main body's combat power through piecemeal commitment. The full combat power of the main body must be available immediately to defeat the main enemy force.

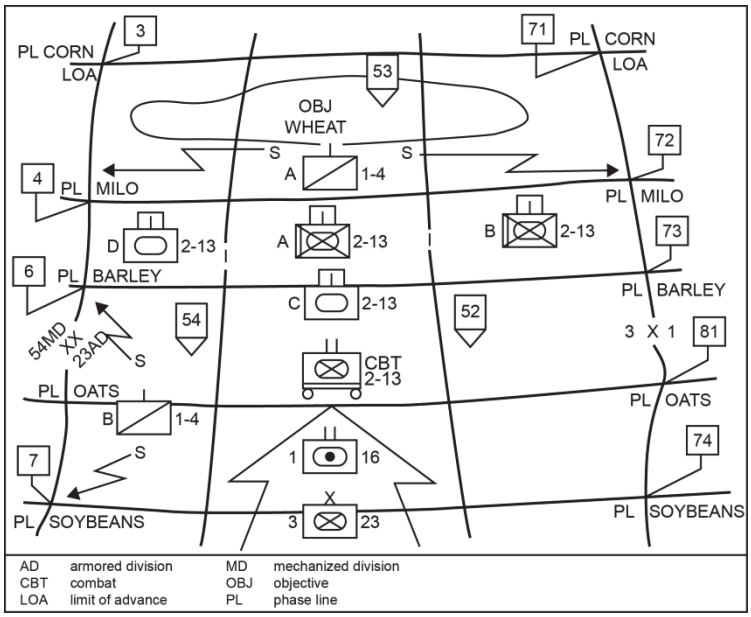

Figure 2-11. Advance guard for a division shaping attack

2-70. An advance guard for a moving force normally conducts a movement to contact. It organizes and uses the control measures typically associated with the conduct of a movement to contact. (See chapter 2 of

FM 3-90-1.) Ground subordinate elements of a guard are normally deployed abreast to cover the axis of advance or the main body's AO.

2-71. The advance guard clears the axis of advance or designated portions of the AO of enemy elements. This allows the main body to move unimpeded, prevents the unnecessary delay of the main body, and defers the deployment of the main body for as long as possible.

2-72. The advance guard may operate behind the security force of a higher echelon. For example, a division may use a heavily reinforced reconnaissance squadron from its attached battlefield surveillance brigade (BFSB) as an offensive covering force, while each subordinate brigade column organizes one of its combined arms battalions or battalion task forces into an advance guard. (See figure 2-12.) In these situations, the higher-echelon security force will initially develop the situation. A commander may task the advance guard to—

- Coordinate and conduct the rearward passage of lines of the covering force.
- Reduce obstacles to create lanes or improve existing lanes as required to support the movement and maneuver of the main body.
- Eliminate enemy forces bypassed by the covering force.
- Coordinate and conduct a forward passage of lines through the covering force and fix enemy forces in the enemy's main defensive positions to allow the friendly main body to maneuver.

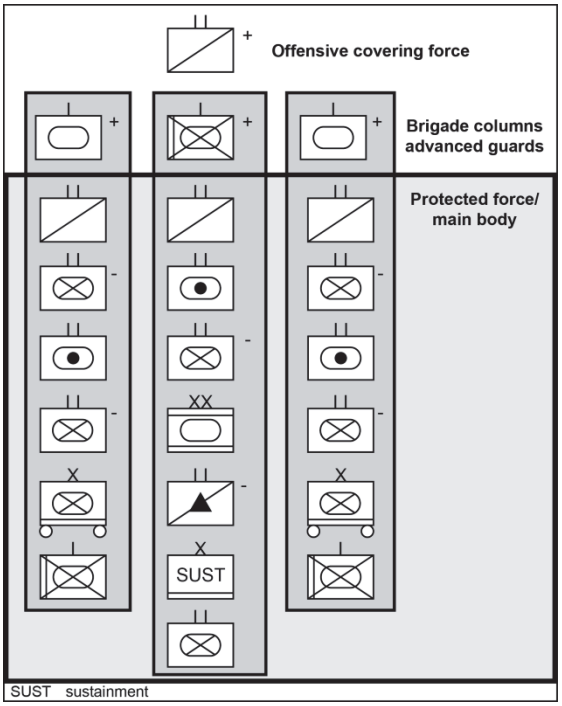

Figure 2-12. Multiple security forces

2-73. The movement of multiple security forces and the handoff of a detected enemy force from the higher-echelon security force to the lower-echelon security force are controlled using checkpoints, contact points, PLs, BHLs, and disengagement criteria, in addition to other graphic control measures. As a minimum, the covering force has a rear boundary that is also the forward boundary of the advance guard.

2-74. The advance guard engages in offensive operations when necessary to accomplish the mission. After the guard makes enemy contact, the commander determines whether the guard mission requires an attack, a defense, or a delay based on the mission variables of METT-TC. For example, if the guard force has sufficient combat power to defeat an enemy, it conducts a hasty attack or defends from its current location. The guard force will not assault strong enemy positions from the front if it can avoid this. The advance guard then destroys the withdrawing enemy force as it exposes itself by moving to other positions. If the advance guard encounters an enemy force that it cannot stop from interfering with the movement of the main body, the security force reports its presence to the main body. It then establishes a defense, continues conducting reconnaissance, and prepares to pass elements of the main body forward while facilitating the deployment of the main body.

2-75. If the guard force does not have enough combat power to defeat an approaching enemy, and the depth of the security area permits, the commander can delay rearward one or more positions before becoming decisively engaged. This reduces the enemy's combat power. Unless the commander relieves the security force of the guard mission, it accepts decisive engagement to prevent enemy ground forces from using direct fires to engage the main body.

FLANK GUARD

2-76. A flank guard protects an exposed flank of the main body. A flank guard is similar to a flank screen except that the commander plans defensive positions in addition to OPs.

2-77. The commander of the main body designates the general location of the flank guard's positions. The commander assigns an AO to each flank guard that is sufficiently deep to provide early warning and reaction time. However, each flank guard must remain in supporting range of the main body. To determine the guard force's exact initial positions, the flank guard commander considers the front and rear of the flank of the main body, the axis taken by the main body, the enemy's capabilities, and the available avenues of approach.

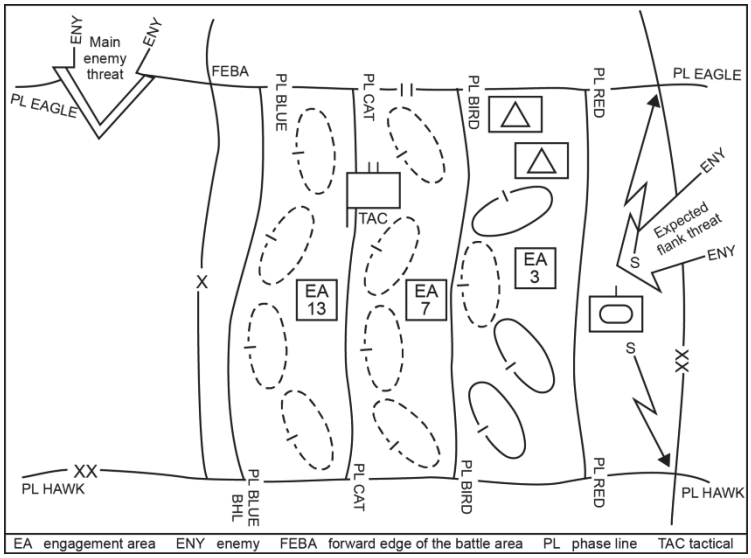

Figure 2-13. Stationary flank guard

2-78. The flank guard moves to its initial positions using one of the movement techniques previously discussed in this chapter. On reaching its initial positions, the flank guard establishes defensive positions in assigned BPs or in its assigned AO and establishes a screening element forward of these positions. (See figure 2-13.) In situations where knowledge about the enemy is vague, the flank guard maintains a larger reserve than in situations where the enemy's actions are more predictable.

2-79. Once the flank guard makes contact with the enemy, it can attack, defend to defeat, or fix enemy ground forces in their current positions before they can engage the main body or conduct a delay as the situation requires.

2-80. When conducting a moving flank guard, a commander addresses additional considerations beyond those applying to a moving flank screen. Instead of occupying a series of OPs, the security force plans a series of BPs. The tasks associated with a guard mission apply to a moving flank guard. However, the number and location of echelon-specific avenues of approach over which the security force maintains continuous surveillance change as the main body moves. The security force monitors potential enemy avenues of approach for as long as they threaten the main body.

2-81. The lead element of a moving flank guard must perform three tasks. It maintains contact with the protected force's main body, reconnoiters the area between that main body and the flank guard's routes of advance, and reconnoiters the flank guard's route. It performs these tasks by conducting a zone reconnaissance. The speed of the main body determines how thoroughly it can carry out the reconnaissance. The exact size of the AO for any unit conducting a guard depends on the mission variables of METT-TC. For example, on typical central European terrain, a commander does not assign an AO wider than 10 kilometers from the guard line to the boundary of the main body to a company or troop. This size organization cannot match the movement of the main body. When the distance from the guard line to the main body boundary exceeds 10 kilometers, the commander of the flank security element uses two or more company-sized elements abreast. This ensures that the element making contact with the main body is not over tasked and can match the tempo of the main body. An attack reconnaissance troop may maintain contact with the main body, or a following ground element may perform route reconnaissance along the

flank guard's route of advance. Under these conditions, the lead security element does not reconnoiter BPs or occupy them unless required when making contact.

2-82. The rest of the flank guard marches along the route of advance and occupies BPs as necessary. The criteria for the route is the same as in a moving flank screen. The commander designates company-sized BPs parallel to the axis of the main body. The flank guard commander places these BPs outside the flank guard's route of advance and along avenues of approach into the flank guard. The flank guard occupies OPs along a screen line forward of these BPs.

2-83. Since the flank guard is moving in one direction and orienting on providing protection to the secured force in another direction, the flank guard commander plans control measures to facilitate this dual orientation. These control measures are normally associated with the moving screen, as well as PLs that run parallel to the direction of movement of the main body. The commander uses these PLs to control the delay or defense, if the enemy attacks from the protected flank. (See figure 2-14.) The main body commander may also assign the flank guard an objective that secures the flank for the main body's objective or otherwise serves to orient its security efforts.

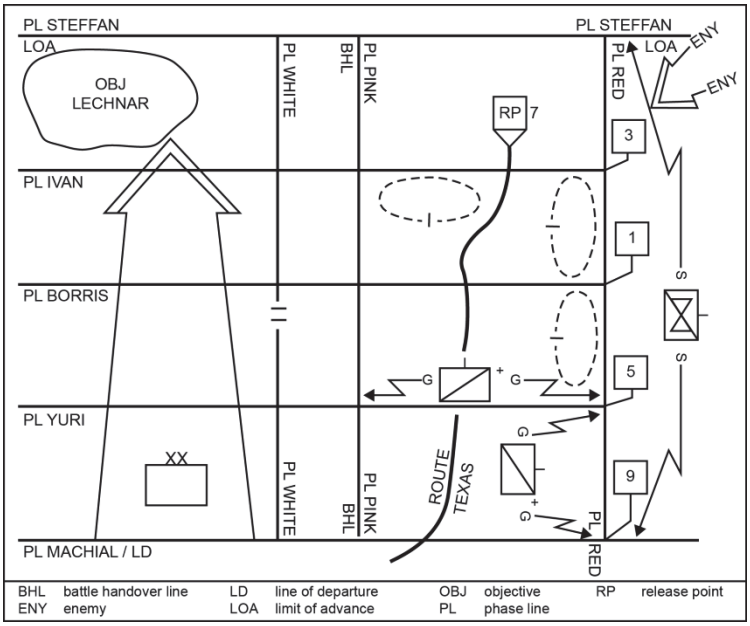

Figure 2-14. Moving flank guard control measures

2-84. The flank guard regulates its movement along the route of advance by the pace of the main body, the distance to the objective, and the enemy situation. The three methods of movement are successive bounds, alternate bounds, or continuous marching. (See chapter 3.) If the main body stops, the flank guard occupies blocking positions. As the speed of the main body changes, the flank guard changes its movement methods. The guard commander must not allow the force to fall behind the main body or present a lucrative target by remaining stationary along the route.

2-85. If the flank guard becomes overextended, the guard commander informs the main body commander and recommends one of the following COAs:

- Reinforce the flank guard.
- Reduce the size of the flank guard's AO.
- Screen a portion of the area and guard the rest.

REAR GUARD

2-86. The rear guard protects the exposed rear of the main body. This occurs during offensive operations when the main body breaks contact with flanking forces or during a retrograde. The commander may deploy a rear guard behind both moving and stationary main bodies. The rear guard for a moving force displaces to successive BPs along PLs or delay lines in depth as the main body moves. The nature of enemy contact determines the exact movement method or combination of methods used in the displacement (successive bounds, alternate bounds, and continuous marching).

2-87. During a retrograde, the rear guard normally deploys its ground maneuver elements abreast, behind the main body's forward maneuver units, generally across the entire AO. After the main body conducts a rearward passage of lines, the rear guard accepts battle handover and then defends or delays. Alternatively, the rear guard may conduct a relief in place as part of a military deception plan or to take advantage of the best defensive terrain. In both cases, the rear guard establishes passage points and assists the rearward passage of the main body, if necessary. The rear guard accomplishes its defensive mission in the same way as any other guard operation after the main body clears the security area. As the main body moves, the rear guard moves to subsequent PLs in depth. Contact with the enemy force may eventually be lost if it does not follow the retrograding friendly force. Fighting a defense or a delay is necessary if the enemy detects the movement and attacks. (Chapter 9 of FM 3-90-1 discusses retrograde operations.)

COVER

2-88. The covering force's distance forward of the main body depends on the main body commander's intentions and instructions, the terrain, the enemy location and strength, and the main body and covering force's rates of march. The width of the covering force area is the same as the AO of the main body. **The *covering force area* is the area forward of the forward edge of the battle area out to the forward positions initially assigned to the covering force. It is here that the covering force executes assigned tasks.**

2-89. In Army doctrine, **a *covering force* is a self-contained force capable of operating independently of the main body, unlike a screening or guard force, to conduct the cover task.** A covering force, or portions of it, often becomes decisively engaged with enemy forces. Therefore, the covering force must have substantial combat power to engage the enemy and accomplish its mission. A covering force develops the situation earlier than a screen or a guard force. It fights longer and more often and defeats larger enemy forces.

2-90. While a covering force provides more security than a screen or guard force, it also requires more resources. Before assigning a cover mission, the main body commander determines if there is sufficient combat power to resource a covering force and the decisive operation. When the commander lacks the resources to support both, the main body commander must assign the security force a less resource-intensive security mission, either a screen or a guard.

2-91. A covering force performs all the tasks of screening and guard forces. A covering force for a stationary force performs a defensive mission, while a covering force for a moving force generally conducts offensive actions. A covering force normally operates forward of the main body in the offense or defense, or to the rear for a retrograde operation. Unusual circumstances could dictate a flank covering force, but this is normally a screen or guard mission.

ORGANIZATION OF A COVERING FORCE

2-92. Whether the cover is for a stationary (defending) or moving (attacking) force, the various types of cover missions, as well as knowledge of the terrain and enemy, dictate the specific task organization of the covering force. The covering force commander normally plans to conduct the cover mission as an area defense (see chapter 7 of FM 3-90-1). The covering force will also normally employ tactics associated with the conduct of a delay (see chapter 9 of FM 3-90-1), a zone reconnaissance (see chapter 1), and a movement to contact (see chapter 2 of FM 3-90-1).

2-93. The commander normally assigns subordinate units one of these missions or the mission of screen or guard. The covering force uses those organizations and control measures associated with these missions. In addition, the commander establishes those control measures necessary for conducting the covering force's passage of lines (forward and rearward). (See chapter 5.)

2-94. Although the commander can deploy any mobile force as a covering force, the corps covering force is normally built around an armored BCT or a division. Both have the control structures necessary for the forces involved and the capability to cover the geographical area typically required in a cover security mission. The corps commander tailors this unit to be self-contained by reinforcing it with assets such as

available joint fires, attack helicopters, field artillery, engineers, air defense, tank, and infantry units with appropriate sustainment to sustain the resulting force. A covering force is usually allocated additional artillery and engineer support beyond that normally given to a force of its size because it is operating beyond the main body's supporting range. The covering force commander normally maintains a sizable reserve to conduct counterattacks in the defense and to defeat enemy counterattacks in the offense.

2-95. A division covering force is normally a reinforced BCT, and it performs reconnaissance or other security missions. If the division AO is narrow enough, an adequately reinforced combined arms battalion, reconnaissance battalion, or Stryker battalion may perform a cover mission. At both corps and division echelons, the amount of reinforcement provided to the covering force determines the distance and time it can operate away from the main body. These reinforcements typically revert to their parent organizations on passage of the covering force. BCTs and battalions typically organize a guard force instead of a covering force because their resources are limited.

2-96. Since one task of the covering force is to deceive the enemy commander into thinking that enemy forces have found the main body, the commander should supply the covering force with combat systems that are representative of the main body. For example, if the main body has organic or reinforcing systems, such as the M270 multiple launch rocket system, available to it, the commander should organize the covering force with the same systems.

OFFENSIVE COVER

2-97. An offensive covering force seizes the initiative early for the main body commander, allowing the main body commander to attack decisively. Figure 2-15 shows an attacking main body with an advance covering force and a flank guard.

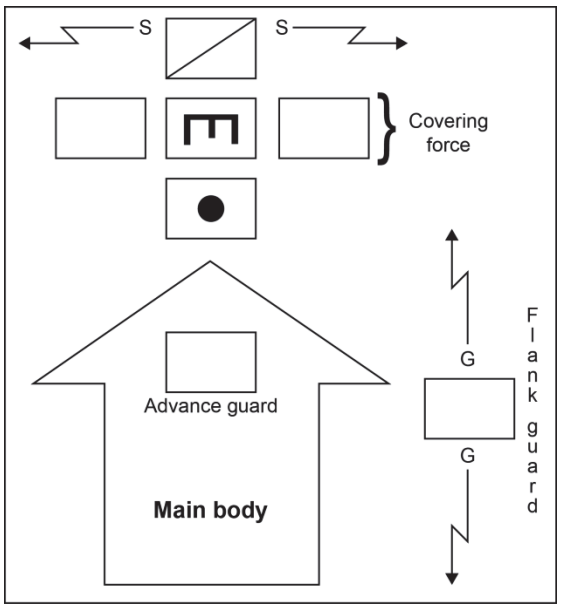

Figure 2-15. Attack using a covering force

2-98. Unless the commander orders otherwise, an offensive covering force performs specific tasks within its capabilities. If a unit does not have the time or other resources to complete all of these tasks, it must inform the commander assigning the mission of the shortfall and request guidance on which tasks to complete or the priority of tasks. After starting the mission, if the unit determines that it cannot complete an assigned task, such as destroying or repelling enemy reconnaissance and security forces in the enemy security area, it must report this to the commander and await further instructions. Offensive covering force tasks include—

- Performing zone reconnaissance along the main body's axis of advance or in the AO.
- Clearing or bypassing enemy forces in the AO in accordance with bypass criteria.
- Denying the enemy information about the strength, composition, and objective of the main body.

2-99. Covering tasks against a defending enemy include—

- Penetrating the enemy's security area to locate enemy main defensive positions.
- Determining enemy strengths and dispositions.
- Locating gaps or weaknesses in the enemy's defensive scheme.
- Defeating or repelling enemy forces as directed by the higher commander.

- Deceiving the enemy into thinking the main body has been committed and causing the enemy to launch counterattacks prematurely.
- Fixing enemy forces to allow the main body to maneuver around enemy strengths or through weaknesses.

2-100. In a meeting engagement, covering tasks include–

- Destroying enemy reconnaissance, the advance guard, and the lead elements of the main body.
- Determining the location of enemy assailable flanks.
- Fixing enemy forces to allow the main body to maneuver around enemy strengths or through weaknesses.

2-101. Planning for offensive covering force operations is similar to planning for zone reconnaissance or movement to contact. Mission analysis using the products of the IPB process helps determine the width of the area to cover and areas (NAIs and TAIs) or routes of special importance. The commander determines specific missions for subordinate elements and assigns boundaries. The covering force commander retains a reserve that is ready to deploy anywhere in the covering force area. This reserve may be centrally located; the commander typically locates it on the most dangerous or critical avenue of approach in the security area.

2-102. The covering force advances on a broad front, normally with its subordinate ground maneuver elements abreast (except for the reserve). This force clears the enemy's security area of small combat elements while penetrating the enemy's main defenses. Attack reconnaissance aircraft normally reconnoiter forward of advancing ground covering force elements. On enemy contact, the attack reconnaissance aircrews report the enemy's location to the appropriate ground unit and maintain contact. Once attack reconnaissance aircraft make contact, the covering force rapidly develops the situation. It reports enemy dispositions immediately to the main body commander, so that the main body can exploit enemy weaknesses. The covering force fixes encountered enemy forces and destroys them using fire and movement. The covering force does not bypass enemy forces without the permission of the main body commander.

2-103. If the covering force discovers a gap in the enemy's defenses, it prepares to exploit the weakness and disrupt the integrity of that defense. The covering force commander immediately reports this to the main body commander, so the main body commander can divert main body follow-on forces to support the penetration. The main body commander synchronizes the covering force's penetration with the other arriving maneuver units, functional and multifunctional support units, and sustainment units to prevent counterattacking enemy forces from isolating and destroying the penetrating elements of the covering force.

2-104. When the covering force cannot advance, it defends and prepares to assist the forward passage of lines of main body units. It continues to perform reconnaissance of enemy positions to locate gaps or assailable flanks. The covering force may guide main body units as they attack through or around the covering force. If the covering force has accomplished its mission, the main body commander attacks the enemy's weak point with previously uncommitted main body forces at the appropriate time.

FLANK COVER

2-105. When the main body commander perceives a significant threat to a flank, the main body commander normally establishes a flank covering force. That force conducts its mission in much the same way as a flank guard performs its mission. The main differences between the two missions are the scope of operations and the distance the covering force operates away from the main body.

2-106. Just as in a flank guard, the flank covering force must clear the area between its route of advance and the main body. It must also maintain contact with an element of the main body specified by the main body commander. This element is normally part of the advance guard for the flank unit of the main body.

DEFENSIVE COVER

2-107. A defensive covering force prevents the enemy from attacking at the time, place, and combat strength of the enemy's choosing. (See figure 2-16 on page 2-22.) Defensive cover gains time for the main body, enabling it to deploy, move, or prepare defenses in the MBA. It accomplishes this by disrupting the enemy's attack, contesting the enemy's possession of the initiative, and establishing the conditions for friendly decisive operations. The covering force makes the enemy deploy repeatedly to fight through the covering force and commit the enemy's reserve or follow-on forces to sustain momentum.

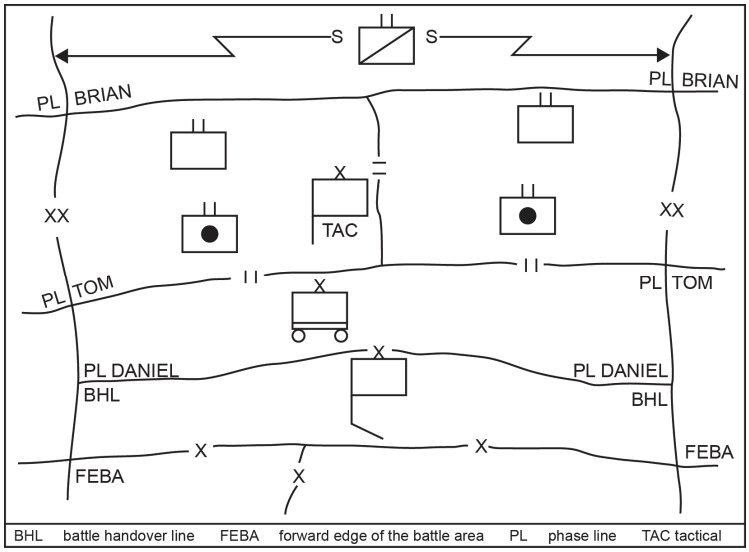

Figure 2-16. Depiction of defensive cover

2-108. Unless the commander orders otherwise, a defensive covering force performs certain tasks within its capabilities. If a unit does not have the time or other resources to complete all of these tasks, it must inform the commander assigning the mission of the shortfall and request guidance on which tasks to complete or the priority of tasks. After starting the mission, if the unit determines that it cannot complete an assigned task, such as defeat enemy advance guard formations, it must report this to the commander and await further instructions. A defensive covering force emphasizes the following tasks:

- Prevent the main body from being surprised and becoming engaged by direct-fire weapons.
- Defeat enemy advance guard formations.
- Maintain continuous surveillance of high-speed avenues of approach into the security area.
- Defeat all enemy reconnaissance formations before they can observe the main body.
- Cause the deployment of the enemy main body.
- Determine the size, strength, composition, and direction of the enemy's main effort.
- Destroy, defeat, or attrit enemy forces within its capacity.
- Deprive the enemy of fire support and air defense umbrellas, or require the enemy to displace these systems before attacking into the friendly MBA.
- Deceive the enemy regarding the location of main body and main defensive positions.
- Avoid being bypassed.

2-109. The defensive covering force may be required to defend, delay, or counterattack. If the covering force area is not occupied, the force may have to reconnoiter and clear the area before establishing the cover. As in offensive operations, aerial reconnaissance is necessary to extend the covered area. Aviation units can screen less threatened areas and rapidly reinforce with their fires when other elements of the covering force are heavily engaged.

2-110. Whatever the command relationships are at the outset, as the defensive covering force battle progresses, the covering force will be forced back toward the MBA. At this time, some or all of the covering force units fall under the control of the brigades charged with defending the MBA. Once the defensive covering force completes its mission, ground maneuver task forces reinforcing the covering force can do one of three things, separately or in combination. They can take up positions in the MBA, undergo reconstitution, or become part of the echelon reserve. The commander may use reconnaissance elements

from the covering force as flank or rear security forces. Alternatively, the commander may use them to locate and follow the movement of the enemy's follow-on forces. They only establish BPs in the MBA as a last resort.

2-111. The conduct of a rearward passage of lines is part of a defensive cover with its associated requirement to transfer responsibility for the battle between units. The commander thoroughly plans this complex task as an integral part of the covering force mission. Passage of lines may not occur simultaneously for all covering force units. As some units begin passage, others may still be taking advantage of offensive opportunities in other parts of the security area. The covering force commander prepares to continue fighting in those portions of the security area where friendly subordinate forces are successful to set up offensive opportunities for the main body.

2-112. The covering force commander exercises caution when issuing orders within the covering force. Commanders at each echelon will have a different perspective of the battle. This is never truer than in a covering force action. For example, while the covering force commander may be told to delay forward of a river line for 72 hours, the covering force commander may tell subordinate task force commanders to defend in certain BPs, perhaps for a specified period of time. Once the period expires, the covering force should not automatically retire from the covering force area. It must create enough resistance to force the enemy commander to deploy the enemy's main forces. Commanders at each echelon must precisely state the mission to their subordinate commanders without telling them how to do it. (See ADRP 6-0 for doctrine on mission command.) All too often, a small-unit commander, when told to delay, yields to an urge to shoot too little, pull back too early, and move back too far. Thus, it is imperative that each commander conveys to subordinates precisely what their mission is in the context of the overall mission.

AREA SECURITY

2-113. Area security operations occur regardless of which element of operations is currently dominant. They focus on the protected force, installation, route, or area. Protected forces range from echelon headquarters through artillery and echelon reserves to the sustaining base. Protected installations can also be part of the sustaining base, or they can constitute part of the area's infrastructure. Areas to secure range from specific points (bridges and defiles) and terrain features (ridge lines and hills) to large civilian population centers and their adjacent areas. Population-centric area security missions are common across the range of military operations, but are almost a fixture during irregular warfare. These population-centric area security operations typically combine aspects of the area defense and offensive tasks to eliminate the efficacy of internal defense threats.

2-114. Operations in noncontiguous AOs require commanders to emphasize area security. During offensive and retrograde operations, the speed at which the main body moves provides some measure of security. Rapidly moving units in open terrain rely on technical assets to provide advance warning of enemy forces. In restrictive terrain, security forces focus on key terrain such as potential choke points.

2-115. A commander executes echelon support area and base security as part of an echelon's sustaining operations responsibilities. (Base security and route and convoy security operations are the subject of ADRP 3-37.) During conventional operations, area security operations are normally economy-of-force measures ensuring the continued conduct of sustaining operations to support the echelon's decisive and shaping operations. All area security operations take advantage of the local security measures performed by all units regardless of their location in the AO.

2-116. Since civilians are normally present in the AO, a unit restrains its use of force when conducting area security operations. However, a commander remains responsible for protecting the force and considers this responsibility when establishing rules of engagement. Restrictions on conducting operations and using force must be clearly explained and understood by everyone. Soldiers must understand that their actions, no matter how minor, may have far-reaching positive or negative effects. They must realize that media (either hostile or neutral) and adversaries can quickly exploit their actions, especially the way they treat the civilian population.

2-117. Sometimes area security forces must retain readiness over long periods of time without contact with the enemy. This occurs most often during area security operations, when the enemy commander knows that enemy special purpose forces or insurgents are seriously overmatched in available combat power. In this case, the enemy commander normally tries to avoid engaging friendly forces unless it is on terms favorable to the enemy. These favorable terms include the use of mines and booby traps. Forces conducting area security should 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 small-unit leaders to maintain vigilance and discipline in their Soldiers to preclude that opportunity from developing.

LOCAL SECURITY

2-118. Local security includes any local measure taken by units against enemy actions. It involves avoiding enemy detection or deceiving the enemy about friendly positions and intentions. It also includes 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 it is an important part of maintaining the initiative. The requirement for maintaining local security is an inherent part of all operations. Units perform local security when conducting all operations, including tactical enabling operations.

2-119. Units use both active and passive measures to provide local security. Active measures include—

- Using OPs and patrols.
- Establishing specific levels of alert in the unit. The commander adjusts those levels based on the mission variables of METT-TC.
- Establishing stand-to times. (A unit's SOPs detail its activities during the conduct of a stand-to.)

2-120. Passive local security measures include using camouflage, movement control, noise and light discipline, and proper communications procedures. They also include employing available sensors, night-vision devices, and daylight sights to maintain surveillance over the area immediately around the unit.

COMBAT OUTPOSTS

2-121. **A *combat outpost* is a reinforced observation post capable of conducting limited combat operations.** (See figure 2-17.) Using combat out-posts is a technique for employing security forces in restrictive terrain that precludes mounted security forces from covering the area. They are also used when smaller OPs are in danger of being overrun by enemy forces infiltrating into and through the security area. The commander uses a combat outpost to extend the depth of the security area, to keep friendly forward OPs in place until they can observe the enemy's main body, or to secure friendly forward OPs that will be encircled by enemy forces. Both mounted and dismounted forces can employ combat outposts.

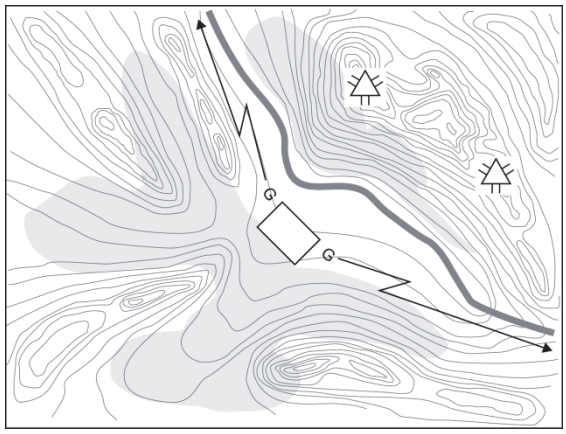

Figure 2-17. Combat outposts

2-122. 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, but not so much as to seriously deplete the strength of the main body. It is usually located far enough forward of the protected force to preclude enemy ground reconnaissance elements from observing the actions of the protected force.

2-123. The commander organizes a combat outpost to provide an all-around defense to withstand a superior enemy force. When the enemy has significant armored capability, the commander may give a combat outpost more than the standard allocation of antitank weapons. Forces manning combat outposts can conduct aggressive patrolling, engage and destroy enemy reconnaissance elements, and engage the enemy main body before their extraction. The commander plans to extract friendly forces from the outpost before the enemy overruns them.

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Chapter 3
Troop Movement

The ability of a commander to posture friendly forces for a decisive or shaping operation depends on the commander's ability to move that force. The essence of battlefield agility is the capability to conduct rapid and orderly movement to concentrate combat power at decisive points and times. Successful movement places troops and equipment at their destination at the proper time, ready for combat. The three types of troop movement are administrative movement, tactical road march, and approach march.

GENERAL CONSIDERATIONS OF TROOP MOVEMENT

3-1. *Troop movement* is the movement of troops from one place to another by any available means (ADRP 3-90). 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. The method employed depends on the situation, the size and composition of the moving unit, the distance the unit must cover, the urgency of execution, and the condition of the troops. It also depends on the availability, suitability, and capacity of the different means of transportation. Troop movements over extended distances have extensive sustainment considerations. When necessary, dismounted and mounted marches can be hurried by conducting a forced march.

DISMOUNTED MARCHES

3-2. **A *dismounted marches* are movements of troops and equipment, mainly by foot, with limited support by vehicles. Also called foot march.** Dismounted marches increase the commander's maneuver options. Their positive characteristics include combat readiness (all Soldiers can immediately respond to enemy attack without the need to dismount), ease of control, adaptability to terrain, and independence from the existing road network. Their limitations include a slow movement rate and increased personnel fatigue. Soldiers carrying heavy loads over long distances or large changes in elevation get tired. A unit conducts a dismounted march when the situation requires stealth, the distance to travel is short, transport or fuel is limited, or the situation or terrain precludes using a large number of vehicles. (FM 21-18 has more information on the techniques and procedures for conducting dismounted marches.)

MOUNTED MARCHES

3-3. **A *mounted march* is the movement of troops and equipment by combat and tactical vehicles.** Armored and mechanized units routinely conduct mounted marches. The speed of the march and the increased amounts of supplies that can accompany the unit characterize this march method. Armored and Stryker maneuver units are normally self-sufficient to conduct mounted marches over short distances. Light infantry maneuver units and most functional and multifunctional support and sustainment units are not one hundred percent mobile with organic truck assets and need assistance from transportation elements to conduct mounted marches. Considerations for mounted marches over extended distances include—

- The ability of the route network to support the numbers, sizes, and weights of the tactical and combat vehicles assigned to or supporting the unit making the move.
- Available refueling and maintenance sites and crew-rest areas.
- The need for recovery and evacuation assets.
- Available spill kits, personal protective equipment, and spill cleanup waste disposal equipment.

(FM 4-01.30 discusses route synchronization and movement planning.)

ARMY AIR MOVEMENTS

3-4. Army ***air movements*** **are operations involving the use of utility and cargo rotary-wing assets for other than air assaults**. The commander conducts air movements to move troops and equipment, to emplace systems, and to transport ammunition, fuel, and other high-value supplies. The commander may employ air movements as a substitute for ground tactical movements. Air movements are generally faster than ground tactical movements. The same general considerations that apply to air assault operations also apply to Army air movements. (See FM 3-04.113 for additional information concerning air movement.)

ARMY RAIL AND WATER MOVEMENTS

3-5. Operating forces can use rail and water modes to conduct troop movement, if they are available in an area of operations (AO). Their use can provide flexibility by freeing other modes of transport for other missions. Their use normally involves a mixture of military and commercial assets, such as defense freight railway interchange railcars pulled by privately owned diesel-electric engines to transport tanks along railroad right of ways from one rail terminus to another. Responsibility for coordinating the use of railroads and waterways resides in the Army forces (ARFOR) headquarters in the theater of operations. (Transportation publications produced by the Sustainment Center of Excellence provide additional information concerning these two transportation modes.)

FORCED MARCHES

3-6. In cases of tactical necessity, a unit can accelerate its rate of movement by conducting a forced march so that it arrives at its destination quickly. Armored, Stryker, and infantry units can conduct a forced march. Forced marches require speed, exertion, and an increase in the number of hours marched or traveled by vehicles each day beyond normal standards. Soldiers cannot sustain forced marches for more than a short period. In a forced march, a unit may not halt as often or for as long as recommended for maintenance, rest, feeding, and fuel. The commander must understand that immediately following a long and fast march, Soldiers and combat vehicles experience a temporary deterioration in their physical condition. The combat effectiveness and cohesion of the unit also temporarily decreases. The plan must accommodate the presence of stragglers and address increased maintenance failures.

ADMINISTRATIVE MOVEMENT

3-7. ***Administrative movement*** **is a movement in which troops and vehicles are arranged to expedite their movement and conserve time and energy when no enemy ground interference is anticipated.** The commander only conducts administrative movements in secure areas. Examples of administrative movements include rail and highway movement in the continental United States. Once units deploy into a theater of war, commanders normally do not employ administrative movements. Since these types of moves are nontactical, the echelon assistant chief of staff, logistics (G-4/S-4) usually supervises them. (FM 4-01.30 discusses route synchronization planning.)

TACTICAL ROAD MARCH

3-8. 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). Units maintain security against enemy air attack and prepare to take immediate action against an enemy ambush, although they do not expect contact with enemy ground

forces. (If the moving unit anticipates making contact with significant enemy ground forces then it will use a mix of combat formations and movement techniques.)

3-9. The primary consideration of the tactical road march is rapid movement. However, the moving force employs security measures, even when contact with enemy ground forces is not expected. Units conducting road marches may or may not be organized into a combined arms formation. During a tactical road march, the commander is always prepared to take immediate action if the enemy attacks. (See figure 3-1.)

ORGANIZATION FOR A TACTICAL ROAD MARCH

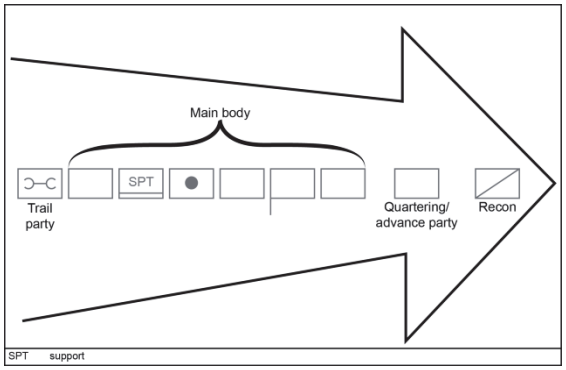

Figure 3-1. Tactical road march

3-10. 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**. The commander organizes a march column into four elements: reconnaissance, quartering party, main body, and trail party. A brigade conducting a tactical road march is an example of a march column. The subordinate elements of a march column are a march serial and a march unit. **A *march serial* is a major subdivision of a march column that is organized under one commander who plans, regulates, and controls the serial**. 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**. An example of a march unit is a company from a battalion-sized march serial.

3-11. A march column provides excellent speed, control, and flexibility, but sacrifices flank security. It provides the ability to deploy forces to the front of the column. The commander uses a march column when speed is essential and enemy contact is unlikely. However, the commander spaces functional and multifunctional support elements, such as air defense and engineers, throughout the column to protect and support the movement. Reconnaissance elements augmented by engineer, chemical, biological, radiological, and nuclear reconnaissance, and other functional and multifunctional support assets, as appropriate, conduct a route reconnaissance of the march routes. This reconnaissance confirms and supplements the data obtained from map studies and other headquarters.

3-12. **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.** The main body is the principal part of a tactical command or formation. It does not include detached elements of the command, such as advance guards, flank guards, covering forces, or a tactical command post displacing to a location from which it can assume control of current operations while the main command post displaces. A unit quartering party usually accompanies the route reconnaissance effort to the designated assembly area (AA). Unit standing operating procedures (SOPs) establish the exact composition of the quartering party and its transportation, security, communications equipment needs, and specific duties. However, it is small enough to move quickly while still maintaining a significant self-defense capability. The leader of the quartering party is empowered by the commander of the main body to make tactical decisions. The quartering party secures, reconnoiters, and organizes an area for the main body's arrival and occupation. It typically reconnoiters and confirms the tentative locations selected by the commander of its parent element, based on a map reconnaissance. When necessary, the quartering party changes previously assigned unit locations in the AA. The quartering party guides the main body into position from the release point (RP) to precise locations in the AA. (Some organizations use the term "advance party" interchangeably with the term "quartering party." However, the term "advance party" is primarily used in the operational and strategic deployment process.)

3-13. The main body of the march column consists of the remainder of the unit, including attachments minus the trail party. **The *trail party* is the last march unit in a march column and normally consists of primarily maintenance elements in a mounted march.** It maintains communications with the main body. The function of the trail party is to recover disabled vehicles or control stragglers in a dismounted march. If the trail party cannot repair a disabled vehicle immediately, it tows the disabled vehicle and moves its crew and passengers to a unit maintenance collection point located at a secure area near the movement route.

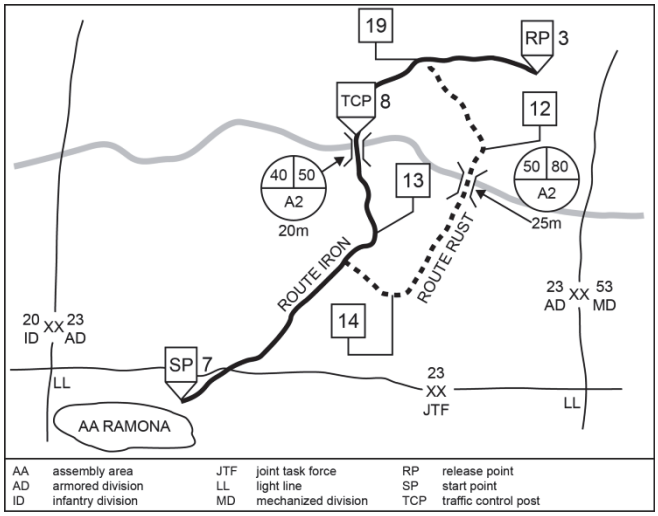

Figure 3-2. Example overlay with route control measures

GRAPHIC CONTROL MEASURES

3-14. The commander directing a tactical road march often uses a strip map or overlay to graphically depict critical information about the route to subordinates. The overlay or strip map should show the route of march, start points (SPs), RPs, checkpoints, critical points (such as bridges), light line, and traffic control points (TCPs). (Figure 3-2 shows an example overlay. Figure 3-3 shows an example strip map.) Other graphic control measures include AAs and phase lines.

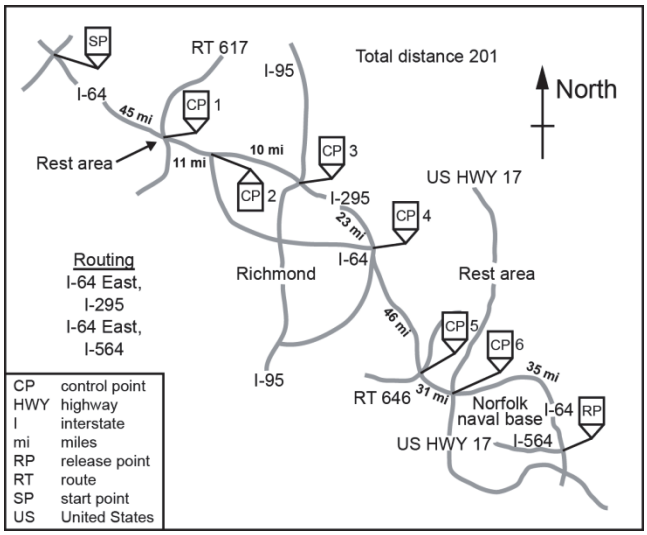

Figure 3-3. Example strip map

3-15. **The *start point* is a location on a route where the marching elements fall under the control of a designated march commander.** Figure 3-4 shows SP 7. All routes have a designated SP, and it is easily recognizable on the map and on the ground, such as a road junction. It is far enough from the AA to allow units to organize and move at the prescribed speed and interval when they reach the SP.

3-16. **A *release point* is a location on a route where marching elements are released from centralized control.** Figure 3-5 on page 3-5 shows RP 3. Each SP must have a corresponding RP, which must also be easy to recognize on the ground. Marching units do not stop at the RP; instead, as they move through the RP, unit guides meet each march unit and lead it to AAs.

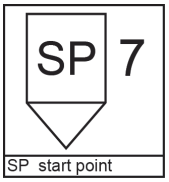

Figure 3-4. Start point

3-17. The commander designates checkpoints along the route to assist marching units in complying with the timetable. Also, the movement overlay identifies critical points along the route where interference with movement might occur. The commander positions TCPs along the route to prevent congestion and confusion. They may be manned by military police (MP) or unit personnel. These Soldiers report to the appropriate area movement control organization when each convoy, march column, and march serial arrives at and completes passage of their location.

3-18. A *light line* is a designated line forward of which vehicles are required to use blackout lights during periods of limited visibility (ADRP 1-02). Commanders at either corps or division echelon establish it based on the risk that the enemy will be able to detect moving vehicles using white light. Figure 3-6 depicts the light line for the 2nd Armored Division as the division rear boundary. (FM 3-34.170 prescribes the format of signs posted at bridges and key locations along routes.)

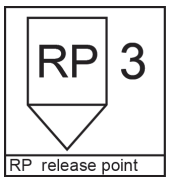

Figure 3-5. Release point

3-19. A *movement corridor* is a designated area established to protect and enable ground movement along a route (FM 3-90.31). Units establish a movement corridor to set the conditions to protect and enable movement of traffic along a designated surface route. Units conduct synchronized operations in the movement corridor such as reconnaissance, security, mobility, and inform and influence activities for forces that require additional mission command, protection, and support to enable their movement. A commander may establish a movement corridor to facilitate the movement of a single element or for a longer period of time to facilitate the movement of a number of elements along a route. The commander of an AO may establish a movement corridor in an AO along an established main supply route (MSR) or a route designated for a unit's movement. The movement corridor typically includes the airspace above it to allow the establishing unit to conduct aerial reconnaissance and fires. (Appendix A of FM 3-90-1 contains an example of a movement corridor.)

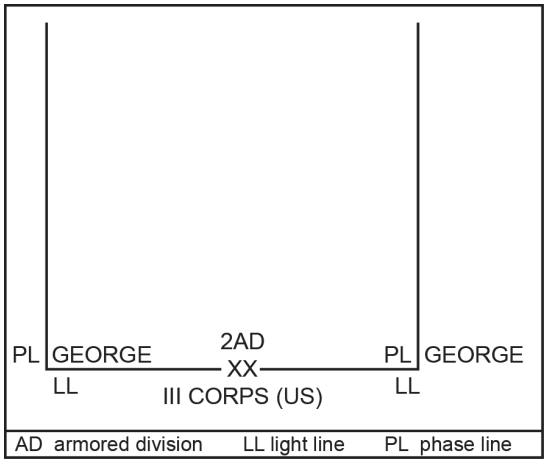

Figure 3-6. Light line

TACTICAL MARCH TECHNIQUES

3-20. Units conducting tactical road marches employ three tactical march techniques: open column, close column, and infiltration. Each of these techniques uses scheduled halts to control and sustain the road march. The mission variables of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC) require adjustments in the standard distances between vehicles and dismounted Soldiers. During movement, elements in a column may encounter many different types of routes and obstacles simultaneously. Consequently, parts of the column may be moving at different speeds, which can produce an undesirable accordion effect. The movement order establishes the order of march, rate of march, interval or time gaps between units, column gap, and maximum catch-up speed. Unless the commander directs them not to do so for security reasons, march units report when they have crossed each control point. Throughout the move, the commander maintains air and ground security.

Open Column

3-21. In an open column, the commander increases the distance between vehicles and dismounted Soldiers for greater dispersion. The vehicle distance varies from 50 to 100 meters, and may be greater if required. The distance between dismounted Soldiers varies from two to five meters to allow for dispersion and space for marching comfort. Any distance that exceeds five meters between dismounted Soldiers increases the length of the column and hinders control. 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, vehicle density varies from 15 to 20 vehicles per

kilometer. A single light infantry company, with intervals between its platoons, occupies roughly a kilometer of road or trail.

Close Column

3-22. 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.

3-23. The dismounted equivalent to the close column 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.

Infiltration

3-24. The commander dispatches 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 vehicle arrives at the destination, complicating the unit's onward deployment. Infiltration during troop movement should not be confused with infiltration as a form of maneuver as discussed in FM 3-90-1.

3-25. During extended road marches, halts are necessary to rest personnel, service vehicles, and adjust movement schedules. The march order or unit SOP regulates when to take halts. In motor movements, 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 AA to prevent route congestion and avoid being a lucrative target. Units establish security and take other measures to protect the force. Unit leaders promptly notify commanders of the time and approximate length of unscheduled halts.

3-26. The commander emphasizes security during halts. 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 the SOP unit actions for various types of halts, such as maintenance halts, security halts, and unexpected halts.

APPROACH MARCH

3-27. An *approach march* is the advance of a combat unit when direct contact with the enemy is intended (ADRP 3-90). (See figure 3-7.) However, it emphasizes speed over tactical deployment. Both armored, Stryker, and infantry forces conduct tactical road marches and approach marches.

3-28. The commander employs an approach march when the enemy's approximate location is

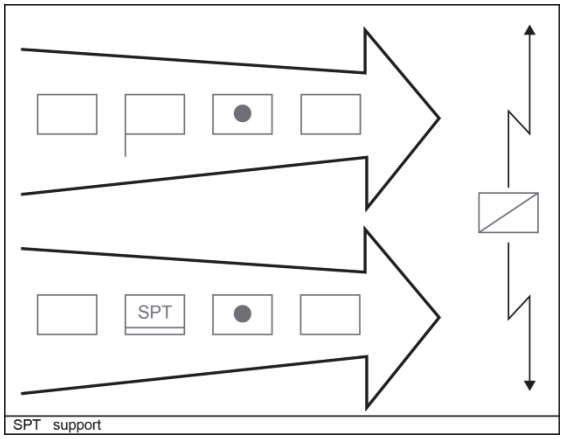

Figure 3-7. Approach march

known, since it allows the force to move with greater speed and less physical security or dispersion. Commanders task-organize units conducting an approach march before the march begins to allow them to transition to an on-order or a be-prepared mission without making major organizational adjustments. For example, artillery units march in their supported unit's columns, while engineer units are well forward to facilitate mobility. The approach march terminates in a march objective, such as an attack position, AA, or assault position, or it can be used to transition to an attack. Follow-and-assume and reserve forces may also conduct an approach march forward of a line of departure (LD).

3-29. Based on the products of the intelligence preparation of the battlefield (IPB) process, the overall commander assigns an AO or an axis of advance in combination with routes to a unit conducting an approach march. These routes, AOs, or axes facilitate the force's movement and maximize its use of concealment. Within the approach march, the commander assigns the force conducting the decisive operation and forces conducting each shaping operation separate routes, AOs, or axes of advance unless an individual sub-unit has the task of either follow-and-assume or follow-and-support.

3-30. As the approach march nears areas of likely enemy interference, the commander divides the unit's main body into smaller, less vulnerable columns that move on additional multiple routes or cross-country while continuing to employ security elements. The commander takes advantage of successful reconnaissance and security operations to increase the distance traveled before the main body transitions to a tactical formation. As discussed in chapter 2, the advance and any flank guards remain within supporting distance of the main body, which stays in these smaller columns to facilitate rapid movement.

3-31. Commanders use tactical road marches and approach marches in a theater of war when contact with the enemy is possible or anticipated. This style of movement emphasizes tactical considerations such as security and de-emphasizes efficiency and ease of movement. The commander organizes the unit to conduct combat operations in a tactical movement. A unit generally maintains unit integrity throughout its movement. It plans for enemy interference either en route to or shortly after arrival at its destination. Units conducting either a tactical road march or an approach march use formations and techniques consistent with the mission variables of METT-TC. The unit may conduct them over unsecured routes, if there are no friendly forces between the foremost elements of the moving force and the enemy. The echelon assistant chief of staff, operations (G-3/S-3) is the primary staff officer responsible for planning these tactical movements, with input from other staff members.

3-32. There are several differences between an approach march and a tactical road march. A force conducting an approach march employs larger security forces because of its greater exposure to enemy attack. Commanders arrange units conducting approach marches into combined arms organizations. An approach march allows the commander to disperse the task-organized force into a tactical formation without being constrained to existing roads and trails. On the other hand, road marches can organize their columns for administrative convenience; for example, vehicles of similar type, speed, and cross-country capabilities move together. Units conducting an approach march establish appropriate tactical intervals between vehicles; they do not normally employ a close column. They also use more routes than units conducting road marches.

MOVEMENT TECHNIQUES

3-33. The commander uses the combat formations described FM 3-90-1 in conjunction with three movement techniques: traveling, traveling overwatch, and bounding overwatch. Figure 3-8 illustrates when a unit is most likely to use each technique.

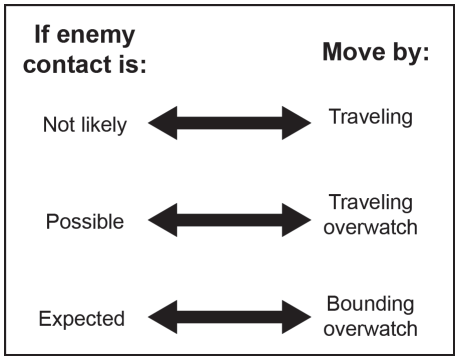

Figure 3-8. Movement Techniques

3-34. Movement techniques limit the unit's exposure to enemy fire and position it to react to enemy contact. The commander selects the appropriate movement technique based on the chance of enemy contact. While moving, individual Soldiers and vehicles use the terrain to protect themselves when enemy contact is possible or expected.

They use natural cover and concealment to avoid enemy fires. The following rules apply to Soldiers and vehicle crews using terrain for protection:

- Do not silhouette yourself against the skyline.
- Cross open areas quickly.
- Do not move directly forward from a concealed firing position.
- Avoid possible kill zones because it is easier to cross difficult terrain than fight the enemy on unfavorable terms.
- Avoid large, open areas, especially when they are dominated by high ground or by terrain that can cover and conceal the enemy.
- Take active countermeasures, such as using smoke and direct and indirect fire, to suppress or obscure suspected enemy positions.

TRAVELING

3-35. The commander uses the traveling movement technique 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 is located where that individual can best control the situation. Trailing elements may move in parallel columns to shorten the column and reaction time. (See figure 3-9.)

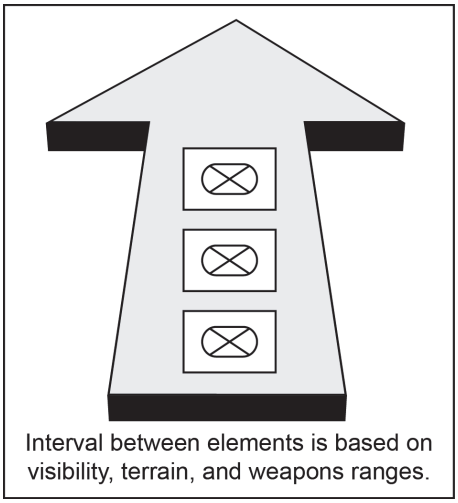

Figure 3-9. Traveling

TRAVELING OVERWATCH

3-36. The commander uses the traveling overwatch movement technique when contact with enemy forces is possible, but speed is important. **The *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.** (See figure 3-10.)

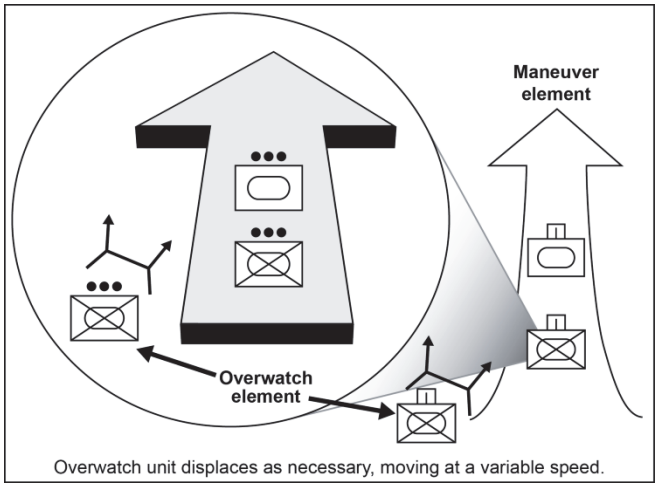

Figure 3-10. Traveling overwatch

BOUNDING OVERWATCH

3-37. ***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.** The commander uses the bounding overwatch movement technique when expecting to make contact with enemy forces. There are two variations of this technique: alternate bounds and successive bounds. In both cases, the overwatching elements cover the bounding elements from covered, concealed positions with good observation and fields of fire against

possible enemy positions. They can immediately support the bounding elements with maneuver or 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. The commander can use the uncommitted part of the force whenever it is needed as part of an immediate and controlled reaction to any threat to the bounding force. In bounding overwatch, movement is based on the next support by fire position, which offers at least some of the following advantages:

- Cover and concealment.
- Good observation and fields of fire.
- Protection for stationary weapon platforms.

3-38. If the unit uses alternate bounds, the lead element moves forward, halts, and occupies a support by fire position that is covered at all times by the rear overwatching element. That former rear overwatching element advances past the former lead element and takes an overwatch position. The initial lead element then advances past the initial trail element and occupies a new support by fire position. One element moves at a time. This method is usually more rapid than successive bounds. (See figure 3-11.)

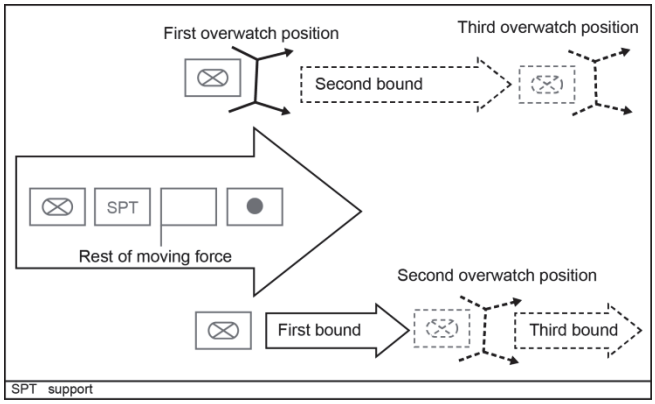

Figure 3-11. Bounding overwatch using alternate bounds

3-39. If the unit uses successive bounds, the lead element, covered by the trail element, advances and occupies a support by fire position. The trail element advances to a support by fire position abreast of the lead element and halts. The lead element moves to the next position and the move continues. Only one element moves at a time, and the trail element avoids advancing beyond the lead element. (See figure 3-12.)

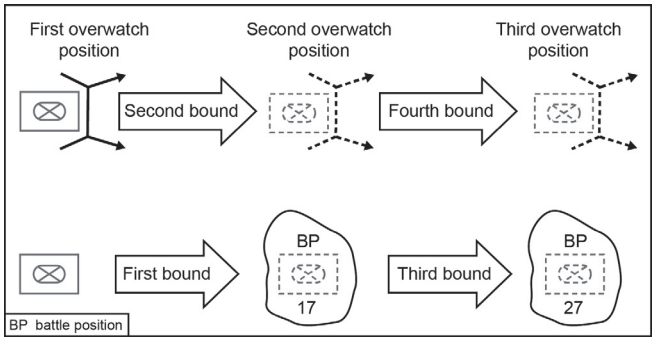

Figure 3-12. Bounding overwatch using successive bounds

PLANNING A TROOP MOVEMENT

3-40. The commander plans, prepares, executes, and assesses troop movements to ensure the organized and uninterrupted flow of tactical units throughout the AO. The objective of a successful move is for the unit to arrive at its destination in a condition suitable to its probable employment. The goal of all movement planning is to retain flexibility to execute a variety of plans to meet ever-changing conditions. The commander ensures that the unit's movement SOP contain specifics, and the commander conducts rehearsals to ensure that the unit's Soldiers and subordinate leaders understand them. The SOP uses a standard task organization to simplify planning, provide flexibility, and allow greater responsiveness. Such SOPs allow for smoother cooperation by establishing habitual relationships between the unit's subordinate elements and outside supporting elements.

3-41. The movement order is the end result of the commander's planning process. The Army movement order is prepared as Tab C-Transportation, of Annex F-Sustainment to an operations order (OPORD) or as a separate OPORD. Prepared in five-paragraph format, Tab C provides critical information needed by a unit to plan and execute movement. Information normally found in Tab C includes the destination, routes,

orders of march, rates of march, times that each serial (or march element for serial movement orders) will arrive and clear its SP, intervals, speeds, scheduled maintenance halts, communications, and location of the commander. The commander also identifies logistics sites and services in Tab C. Information and procedures contained in the unit's movement SOP are not included. The movement order should include a strip map or overlay.

3-42. The movement order discusses procedures for succession of command in the march unit, march serial, and march column, if those procedures vary from the unit's established SOP. It addresses the procedures for disseminating succession information throughout the organization. It also addresses how changes in command location are communicated, including the activation of alternate mission command nodes. It addresses alternate means of communications within and external to each march unit, such as hand and arm signals and pyrotechnics where they vary from established SOPs. It also addresses who has the authority to activate alternative routes.

3-43. The commander bases the movement order on the best available information on the mission variables of METT-TC. This plan establishes how the unit will move from its current location to the desired location. The integration of and support from maneuver and functional and multifunctional support—such as artillery, intelligence, military police, and engineers—are critical for a successful tactical movement. The commander's operations staff develops the detailed movement order, with the assistance of the commander's sustainment staff, in accordance with established priorities.

3-44. The movement order and unit SOP address the possibility of ambushes, indirect fires, and air attacks. A small-unit SOP includes drills for reacting to these circumstances. Passive measures mitigating an air attack include route selection, vehicle intervals, and movement during limited visibility. In case of attack, the commander has a casualty evacuation plan. This plan takes into account SOP items, such as using combat lifesavers and dispersing medical evacuation assets throughout the convoy.

3-45. For units that are not completely mobile with organic vehicles, such as an Army division headquarters and many sustainment units, the commander can either conduct a shuttle with organic vehicles or request assistance from transportation units. Shuttling requires transporting troops, equipment, and supplies by a series of round trips with the same vehicles. Units may also shuttle by carrying successive parts of a load for short distances while the remaining Soldiers continue on foot.

3-46. The higher headquarters sustainment staff normally coordinates the provision of sustainment to moving units, although units carry sufficient fuel and lubricants in their unit trains to conduct local movements. In coordination with the engineers, the sustainment staff ensures that routes are adequate for the types and numbers of vehicles and supplies projected. The commander knows the load-carrying capability of each route and the distances over which forces can be supported. Sustainment operators determine if any sustainment assets displace to support the mission. The commander also establishes halts for refueling as part of the movement plan. Halt times should be long enough and locations large enough to allow the entire march unit to refuel.

3-47. The simplest troop movement scenario to plan and conduct is one where the commander directing the movement controls the entire AO. In this situation, the commander can use the unit's normal mission command system. The headquarters ordering the tactical road march schedules the movement times and approves the routes, while its movements control organization allocates the required space and time on the approved routes. If the movement results in a unit going outside its parent headquarters' AO, coordination through various movement control centers is required. Otherwise, a higher headquarters must plan and control the movement.

3-48. Whenever possible, the commander should use multiple routes to move the unit. This reduces the length of columns, the vulnerability to enemy air attack, and the amount of time the routes are unavailable to other units. Multiple routes provide the commander with the flexibility to react to unexpected situations and permit more rapid concentration of combat power. The two primary disadvantages of using multiple routes are difficulty in exercising mission command, and the unit may not have enough resources to provide logistic and maintenance support on all routes.

3-49. The echelon transportation officer uses route classification components, such as route widths, route types, military load classifications, overhead clearance, route obstructions and special conditions, to determine the traffic circulation plan. A supporting geospatial engineer team provides most of this information. Engineer reconnaissance obtains necessary information not contained in existing geospatial databases.

3-50. The staff depicts the echelon traffic circulation plan on overlays using transportation control measures. The traffic circulation plan considers—

- The most restrictive route features and route designations.
- Direction of movement over each route.
- Location of boundaries, units, highway regulation points, TCPs, and principal supply points.
- Major geographic features and light lines, if applicable.
- Routes designated for one-way traffic.
- Separate routes for sustainment and tactical units.
- Current data on traffic regulation and control restrictions, obstructions, detours, defiles, capacities, surface conditions, and enemy activities that affect the highway net.

3-51. From information contained in the traffic circulation plan, a traffic control plan is prepared—usually by the provost marshal—from information contained in the traffic circulation plan. The traffic control plan normally is prepared in the form of an overlay. The commander primarily uses available aviation, movement regulating teams, and MP units to assist in traffic control, but the commander can assign this mission to other units, such as battalion scout platoons.

PREPARING A TROOP MOVEMENT

3-52. Reconnaissance precedes unit movement. Before a unit starts any march, a reconnaissance element from that unit reconnoiters the route from its current location to the SP and determines how long it will take the unit to reach the SP. This reconnaissance element continues beyond the start point and carefully examines the route's trafficability, including the impact of weather, such as ice, snow, and rain. This reconnaissance also includes alternative routes and choke points, such as defiles, bridges, and fords, which could slow the march. This reconnaissance element complements map and technical reconnaissance and provides the commander with important information about the terrain, obstacles, and potential enemy forces in the AO. The commander then establishes TCPs at critical locations along the route or marks the route where it becomes confusing.

3-53. A quartering party often accompanies reconnaissance elements to mark routes and battle positions. The party may also secure new positions with observation posts or limited forces until the unit conducting the movement arrives.

3-54. The unit begins a tactical movement, such as a road march, fully supplied. The unit refuels at every opportunity, such as at halts and on arrival at the final destination. The transportation of fuel and the security of existing stockpiles are major factors in any mounted road march. The commander may choose to conduct a refuel on the move to extend the range of the unit's vehicles. Refuel on the move is a technique in which the commander positions tankers just off the route of the march to refuel combat and tactical vehicles rapidly, but only in the previously established quantities necessary to extend their range to the desired length.

3-55. Based on the form of movement selected and the march and movement techniques adopted, the commander may have to pre-position sustainment assets to conduct rapid and efficient refueling and resupply. Generally, a column formation is the easiest movement technique to support. Any other formation requires increased sustainment planning. Night movements require special preparation because not all Soldiers have night vision devices. These special preparations include marking vehicles and equipment for easy identification by friendly forces and repositioning vehicles and Soldiers closer together so they can detect each others' movement.

EXECUTING A TROOP MOVEMENT

3-56. A unit's ability to move depends on its march discipline and ability to maintain required movement standards and procedures as prescribed by its movement SOP and movement order. This includes staying on the route and maintaining start, passage, and clear times. March discipline is absolutely essential throughout the movement. Any deviation from the movement order may interfere with the movements of other units and may have serious consequences. However, march discipline can only be maintained when the plan matches conditions and the unit's ability to move.

3-57. The strength and composition of the moving unit's security elements vary, depending on the mission variables of METT-TC. The commander employs organic assets and any supporting security assets to protect subordinate forces from enemy activities. The commander positions them to the front, rear, and flanks of subordinates' formations while moving and at the halt to provide all-around security for the main body. The commander can also enhance security by adopting a march formation and movement technique that facilitate applying combat power in the direction from which enemy contact is expected.

3-58. Higher echelon sustainment organizations may support some tactical movements. When the situation permits, sustainment organizations establish maintenance, ambulance exchange, and supply points along the movement route of a support tactical maneuver unit. While procedures, amounts, and types of external support vary among major commands, each sustainment organization ensures that these sites are operational at the designated times and locations. External sustainment along the route may include aeromedical evacuation, maintenance, water, and petroleum, oils, and lubricants (POL). Maintenance sites generally consist of unit maintenance collection points where disabled vehicles can be moved for limited maintenance and Class IX supplies. Vehicles unable to continue the movement remain at a unit maintenance collection point and join their parent organization when repaired. The troop movement is complete when the last march unit clears the RP.

MOVEMENT CONTROL

3-59. *Movement control* is the planning, routing, scheduling, and control of personnel and cargo movements over lines of communications (JP 4-01.5). It is a continuum that involves coordinating and integrating logistics, movement information, and programs that span the strategic, operational, and tactical levels of war. The balancing of requirements against capabilities and assigning resources based on the commander's priorities guides the conduct of movement control. Movement control gives the commander the ability to deconflict the movement of units—troop movement—and the distribution of supplies and services inherent in sustainment. It is a complicated system as figure 3-13 shows by the number of different agencies involved in corps movement control.

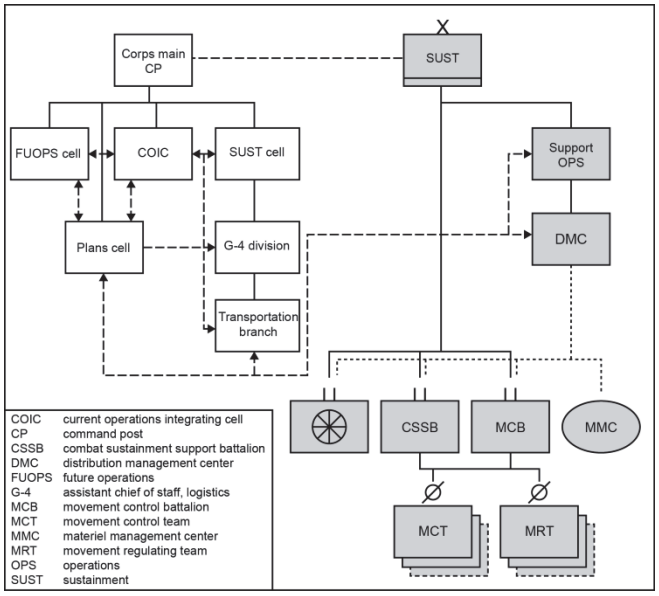

Figure 3-13. Corps movement control

3-60. Units may not move across boundaries into another unit's area of operations without receiving clearance from the unit owning the AO. The designation, maintenance, route security, and control of movement along routes in an AO are the responsibility of the owning unit unless the higher echelon's coordinating instructions otherwise direct. An example is that one or more routes will be reserved for the exclusive use

of a combined arms battalion operating forward of a brigade combat team as a guard force. A reserved route is a control measure, and it is used to facilitate the conduct of an operation. There are five control measure designations: open route, supervised route, dispatch route, prohibited route and reserved route. Each route's designation will vary based on the factors of METT-TC. (See FM 4-01.30 for a more detailed discussion on movement control and the establishment of route synchronization measures.)

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Chapter 4

Relief in Place

A commander conducts a relief in place as part of a larger operation, primarily to maintain the combat effectiveness of committed units. The higher headquarters directs when and where to conduct the relief and establishes the appropriate control measures. Normally, during the conduct of major combat operations, the unit relieved is defending. However, a relief may set the stage for resuming offensive operations. A relief may also serve to free the relieved unit for other tasks, such as decontamination, reconstitution, routine rest, resupply, maintenance, or specialized training. Sometimes, as part of a larger operation, a commander wants the enemy force to discover the relief, because that discovery might cause it to do something in response that is prejudicial to its interest, such as move reserves from an area where the friendly commander wants to conduct a penetration.

GENERAL CONSIDERATIONS OF A RELIEF IN PLACE

4-1. 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 are transferred to the incoming unit. (JP 3-07.3) There are three techniques for conducting a relief: sequentially, simultaneously, or staggered. 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. A simultaneous relief occurs when all elements are relieved at the same time. A staggered relief occurs when the commander relieves each element in a sequence determined by the tactical situation, not its geographical orientation. Simultaneous relief takes the least time to execute, but is more easily detected by the enemy. Sequential or staggered reliefs can occur over a significant amount of time. These three relief techniques can occur regardless of the operational theme in which the unit is participating.

4-2. A relief can be characterized as either deliberate or hasty, depending on the amount of planning and preparations associated with the relief. 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 they are needed. The tactical mission graphic for a relief in place is depicted in figure 4-1.

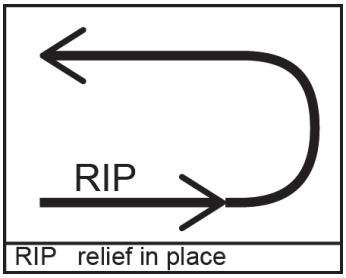

Figure 4-1. Tactical mission graphic for a relief in place

ORGANIZATION OF FORCES FOR A RELIEF IN PLACE

4-3. Both 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 (OPSEC). The relieving unit usually assumes as

closely as possible the same task organization as the unit being relieved. It assigns responsibilities and deploys in a configuration similar to the relieved unit.

4-4. The relieving unit establishes advance parties to conduct detailed coordination and preparations for the operation, down to the company level and possibly to the platoon level. These advance parties infiltrate forward to avoid detection. They normally include the echelon's tactical command post, which co-locates with the main command post of the unit being relieved. The commander may also attach additional liaison personnel to subordinate units to ensure a smooth changeover between subordinate units.

CONTROL MEASURES FOR A RELIEF IN PLACE

4-5. 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 (AO) with its associated boundaries, battle positions, contact points, start points, routes, release points, assembly areas (AAs), fire support coordination measures, and defensive direct fire control measures, such as target reference points and engagement areas. (See figure 4-2.) Expanded discussions of all these control measures appear elsewhere in this publication. A commander may use any control measure necessary to conduct the relief in place.

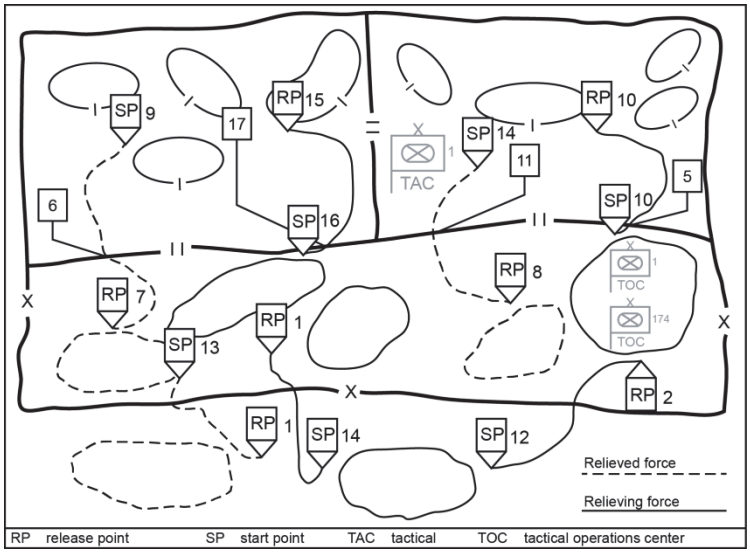

Figure 4-2. Overlay of a brigade relief in place

PLANNING A RELIEF IN PLACE

4-6. Once ordered to conduct a relief in place, the commander of the relieving unit contacts the commander of the unit to be relieved. The co-location of unit command posts also helps achieve the level of coordination required. If the relieved unit's forward elements can defend the AO, the relieving unit executes the relief in place from the rear to the front. This facilitates movement and terrain management.

4-7. 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. In both cases, the relieved unit designates liaison personnel from its combat, functional, and multifunctional support and sustainment elements to remain with the relieving unit until completing the necessary plans. The relieving unit receives current intelligence, operations, and sustainment information from the unit being relieved, as well as from common higher headquarters, adjacent units, and subordinate elements. The complexity of a relief in place requires extensive liaison and reconnaissance. Exchanging information about the enemy and civilian situations, friendly dispositions, terrain analysis, and fire support and obstacle plans, coupled with reconnaissance, helps the relieving commander plan and execute the mission.

4-8. The relief is a tactically vulnerable operation. The units 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 typically plan reliefs for execution during periods of reduced visibility, such as night or fog. Concealment of the relief from the enemy is a primary concern when the unit is conducting the relief as part of an economy of force measure to free forces for other

operations. The enemy should perceive only one unit's command structure in operation—that of the unit being relieved—until the operation is complete. This 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.

4-9. Generally, as soon as the mutual higher headquarters issues the warning order, the commander of the relieving unit co-locates a command post—main or tactical—with the main command post of the unit being relieved. As a minimum, the relieving unit establishes communications and liaison with the unit being relieved. The warning order designates the time of relief, relieving and relieved units, and sequence of events. It 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.

4-10. During a relief, commanders and leaders from the relieving unit conduct a reconnaissance of the area for which they will assume responsibility. This leaders' reconnaissance includes the lowest-echelon leader allowed by the tactical 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 troop movement.

4-11. The two commanders must decide on a time or an event that initiates the passage of command. This allows the smooth transition of mission command from one commander to another. Normally, this occurs when the frontline subordinate commanders have assumed responsibility for their respective AOs and the incoming commander has sufficient communication facilities in operation to control the operation. Regardless of their parent organization, all units in the AO come under the operational control of the AO commander, if the AO comes under attack or when a specified event occurs during the relief.

4-12. The fire support coordinators coordinate fire support coordination measures and identify those artillery and other fire support units that are available to support the relief. The relieving unit adopts the fire plan of the unit being relieved. The fire support assets of both units support the relief. This maintains fire support if the enemy detects the relief and tries to exploit the situation. Units plan their fires to deceive the enemy and expedite the relief. Units maintain normal activity patterns. For example, a unit continues to expend the same average number of artillery rounds per day during the relief that it expended before the initiation of the relief. The commander does not relieve fire support and functional and multifunctional support and sustainment units at the same time as the maneuver units they support. The commander relieves these organizations at other times.

4-13. The relief plan specifies the method used in relieving artillery units. If terrain allows, relieving artillery units do not occupy previously used firing positions. Instead, relieving firing units establish firing positions near those firing positions of the relieved unit and carefully integrate their fire with that of the relieved unit. Occupying firing positions at night or during periods of poor visibility enhances OPSEC.

4-14. Units conducting a relief in place coordinate with the area air defense commander, normally through the Army forces (ARFOR) headquarters to obtain air and missile defense protection of identified choke points, battle positions, routes to conduct the operation, and AAs. The commander coordinates with the air and missile defense unit providing area coverage of the relieving force to obtain air intelligence preparation of the battlefield information, rules of engagement, current air activity, present air and missile defense fire unit positions, airspace command and control information, and the area air and missile defense operation plan. Obtaining local air superiority reduces the vulnerability of the forces during the relief in place when the units involved cannot avoid congestion on the ground.

4-15. 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 AO. It focuses on those routes and lanes leading into the AO. 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.

4-16. Force intermingling, which is inherent in a relief, places an increased burden on mission command information systems. The consequences of mutual interference between the units and the complexity associated with such areas as traffic control, fire support coordination, obstacle plans, and communications

require close coordination between all headquarters involved. Commanders establish early liaison between the stationary and the relieving forces. The relief plan also addresses the relief in place of these mission command information systems.

4-17. The relieving unit is responsible for all sustainment operations. As the support elements of the unit being relieved displace, they leave the relieving unit supply stocks according to previously coordinated arrangements. If the units conducting the relief have different modified tables of organization and equipment (MTOEs), the commander must conduct mission analysis to determine how the relieving unit will meet all of its responsibilities and what weapons systems will be used. The unit staff must determine any special support requirements the relieving unit will have and address supporting those requirements with the available supporting sustainment organizations. The unit sustainment staff ensures that both commanders know of any sustainment constraints that might affect the relieving unit. The headquarters of the relieved unit coordinates traffic movement into and out of the AO.

PREPARING A RELIEF IN PLACE

4-18. The commander conceals the relief from the enemy for as long as possible. At the first indication that a relief is necessary, which is usually the warning order for the relieving unit, both the relieved unit and the relieving unit review their OPSEC plans and procedures. Commanders may use military deception measures when conducting a relief in place to maintain secrecy. To maintain security during the relief in place, 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.

4-19. To enhance security, commanders impose light and noise discipline and electromagnetic emission control measures, such as radio silence or radio-listening silence. In joint and multinational operations, the senior commander specifies the frequency bands and equipment types affected. Radio silence is a condition when the commander turns off all or specific radio equipment. Radio-listening silence is a situation in which combat net radios remain turned on and monitored, with strict criteria governing when a station on the radio network is allowed to break silence. An example of radio-listening silence would be, "Maintain radio-listening silence until physical contact with the enemy is made."

4-20. The 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.

4-21. Reconnaissance elements of the relieving unit precede its movement with a route reconnaissance to the AA. They conduct reconnaissance of the routes leading from the AAs to the positions of the unit being relieved. The commander of the relieving unit normally conducts a leader's reconnaissance before starting the operation.

4-22. The commander allocates time to construct individual vehicle fighting positions, if an armored or Stryker unit is relieving an infantry unit. In a similar fashion, preparations for a tank company to relieve a mechanized infantry company must include expanding individual vehicle fighting positions to accommodate the larger tanks.

4-23. While the units involved plan, prepare, and execute the relief in place, their common higher headquarters and other units continue actions to mask the relief. These include using demonstrations, feints, smoke, and harassing and interdiction fires. The common higher headquarters executes operations to attack and disrupt the enemy's uncommitted and reserve forces during the relief. Its intent is to fix or distract the enemy, so that the enemy does not detect or interfere with the relief.

EXECUTING A RELIEF IN PLACE

4-24. 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. Friendly information collection systems attempt to detect if the enemy can discover the relief before its completion.

4-25. The enemy usually detects a relief effort from the increased activity resulting from the movement of Soldiers and equipment out of position by the relieved unit and into position by the relieving unit. Additionally, after any period of combat, there are differences in the types and amount of equipment between the relieving unit and the relieved unit, even if they have the same MTOEs. These differences can also reveal the relief to the enemy. The two units establish guidelines for exchanging compatible equipment and supplies to limit these differences. In addition, it may be necessary to exchange certain weapons, supplies, equipment, and occasionally, vehicles between units. When major differences in the number of combat systems between the units exist—for example, a tank-heavy task force relieves a mechanized infantry-heavy task force—inoperable equipment or visual simulators may assist in hiding the change of units.

4-26. In a simultaneous relief, the relieving unit begins moving from its current location to AAs in the AO of the unit being relieved. Once the relief begins, all elements involved execute the relief as quickly as possible. Both units 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. All units in the AO come under the operational control of the relieving unit commander at the time or triggering event previously established by the plan for the operation.

4-27. As the first relieving element arrives from the AA to assume the position, it establishes a screen 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.

4-28. 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 AAs. Crew-served weapons 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 functional and multifunctional support and sustainment assets assist both the relieved unit and the relieving unit during this period.

4-29. A relief does not normally require artillery units to relieve weapon system for weapon system, unless the terrain limits the number of firing positions available. Generally, the relieved unit's artillery and other fire support assets remain in place until all other relieved elements displace and are available to reinforce the fires of the relieving unit in case the enemy tries to interfere. If the purpose of the relief is to continue the attack, the artillery of both forces generally remains in place to support the subsequent operation.

4-30. Multiple main supply routes that allow only one-way traffic can simplify the forward and rearward movement of both units. The relieving unit's rear command post controls both units' military police and any other traffic management assets. (The main command post performs these functions if the echelon does not have a rear command post.) The commander uses these assets to help control unit and convoy movement on lines of communications, main supply routes, and movement routes throughout the AO.

4-31. In the future, it is likely that conflicts will involve the relief of an allied or coalition multinational force. The commander should consider the following additional points when such reliefs occur:

- Dissimilar unit organizations may require special adjustments in assigned areas.
- Control of fire support may require special liaison.
- Language difficulties may require an increased use of guides and translators.
- Using relieved unit communications requires special signal arrangements and additional operators.

- Ammunition and equipment incompatibility may make exchanging assets more difficult.
- Impact of civilians on the operations.

4-32. Reliefs in place during the conduct of operations centering on the stability element or defense support of civil authorities element of decisive action involve many of the planning, preparation, and execution considerations mentioned above. This is often the case in the current operational environment. 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.

Chapter 5

Passage of Lines

A commander conducts a passage of lines to continue an attack or conduct a counterattack, retrograde security or main battle forces, and any time one unit cannot bypass another unit's position. The conduct of a passage of lines potentially involves close combat. It involves transferring the responsibility for an area of operations (AO) between two commanders. That transfer of authority usually occurs when roughly two-thirds of the passing force has moved through the passage point. If not directed by higher authority, the unit commanders determine—by mutual agreement—the time to pass command. They disseminate this information to the lowest levels of both organizations.

GENERAL CONSIDERATIONS OF A PASSAGE OF LINES

5-1. *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. A passage may be designated as a forward or rearward passage of lines (JP 1-02).The commander's reasons for conducting a passage of lines are to—

- Sustain the tempo of an offensive operation.
- Maintain the viability of the defense by transferring responsibility from one unit to another.
- Transition from a delay or security operation by one force to a defense.
- Free a unit for another mission or task.

The headquarters directing the passage of lines is responsible for determining when the passage starts and finishes.

5-2. A passage of lines occurs under two conditions. A *forward passage of lines* occurs when a unit passes through another unit's positions while moving toward the enemy (ADRP 3-90). A *rearward passage of lines* occurs when a unit passes through another unit's positions while moving away from the enemy (ADRP 3-90). Ideally, a passage of lines does not interfere with conducting the stationary unit's operations. Figure 5-1 shows the tactical mission graphic for both a forward and a rearward passage of lines. The arrow goes in the direction the passing unit is moving.

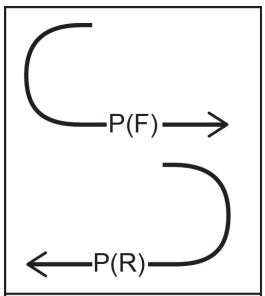

Figure 5-1. Forward and rearward passage of lines tactical mission graphic

ORGANIZATION OF FORCES FOR A PASSAGE OF LINES

5-3. A unit may participate in a passage of lines as either the passing or stationary force. Except for co-locating command posts and providing for guides by the stationary force, conducting a passage of lines does not require a special task organization. Both the passing force and the stationary force maintain their previous combat organization during the passage. Usually, if the stationary unit has the capability, it is responsible for conducting operations against uncommitted enemy forces. However, operations directed against uncommitted enemy forces may be the responsibility of a higher echelon, depending on the echelon at which the passage takes place.

5-4. A forward passing unit's order of march is generally reconnaissance and security elements first. The ground combat force moves next, followed by functional and multifunctional support and sustainment units. The commander integrates artillery and engineers into the order of march in accordance with the mission variables of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC). The passing unit reverses this order of march in a rearward passage of lines. The stationary unit normally provides the moving unit with guides to expedite the passage. Attack reconnaissance helicopters and armed unmanned aerial systems (UASs) are useful in providing security.

CONTROL MEASURES FOR A PASSAGE OF LINES

5-5. Control measures associated with a passage of lines are generally restrictive to prevent friendly fire incidents. As a minimum, they include the AO, assembly areas (AAs), attack positions, battle handover line (BHL), contact points, passage points, passage lanes, routes, gaps, phase lines, and recognition signals. The headquarters directing the passage designates or recommends contact points, passage lanes, AAs, routes, and start and end times for the passage. The commander may also use start points, release points, fire support coordination measures, such as coordinated fire lines (CFLs), and other control measures as necessary to conduct this task. (See figure 5-2.) Unless the higher headquarters of the two units establishes the necessary graphic control measures, the stationary unit establishes them for the passage. However, the stationary unit commander coordinates them with the passing unit commander. The stationary unit establishes these measures because it controls the terrain, it knows where the obstacles are, and it knows the tactical plan. If the control measures dictated by the higher headquarters are not sufficient—because they do not contain enough passage points, lanes, and so forth—the two units can agree to add the necessary measures.

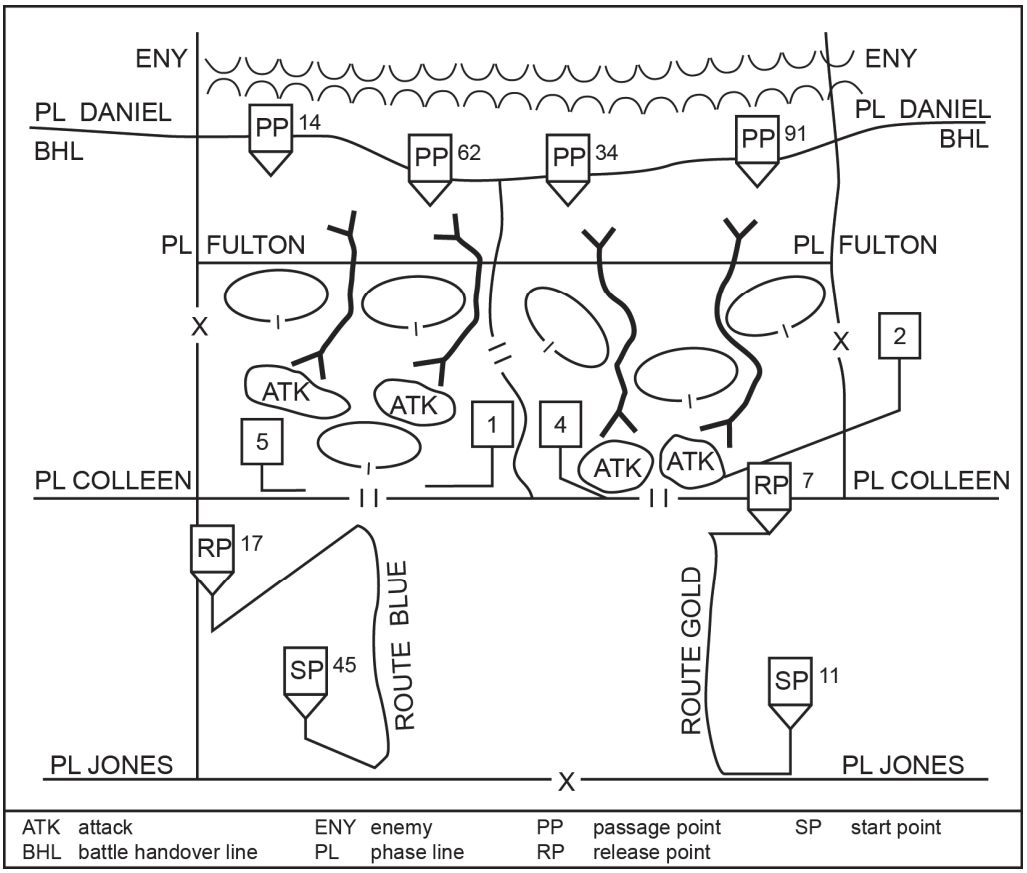

Figure 5-2. Control measures associated with a forward passage of lines

5-6. **A *passage point* is a specifically designated place where the passing units pass through the stationary unit.** The location of this point is where the commander wants subordinate units to physically execute a passage of lines. In a forward passage of lines, the passage point marks the location where the passing unit is no longer bound by the restrictions placed on it by the stationary force. On the other hand, in a rearward passage of lines, the passage point marks the location where the stationary unit can restrict the movement and maneuver of the passing force. Between the contact point and the passage point, the stationary unit controls the passing force's movement. Figure 5-3 depicts the graphic control measure for passage point 7.

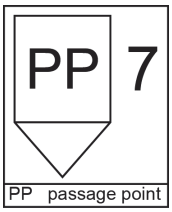

Figure 5-3. Passage point 7

5-7. **A *passage lane* is a lane through an enemy or friendly obstacle that provides safe passage for a passing force.** The lane may be cleared, including being reduced and proofed, as part of a breach operation, or it may be included as part of the design of a friendly obstacle. It is a clear route all the way through an obstacle. Passage lanes normally end where a route begins. That route should allow the passing unit to move rapidly through the stationary unit's area. Figure 5-4 depicts the graphic control measure for a lane.

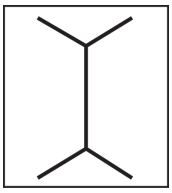

Figure 5-4. Passage lane

5-8. A *gap* is an area free of armed mines or obstacles whose width and direction allow a friendly force to pass through the area containing obstacles while dispersed in a tactical formation (ADRP 1-02). The presence of gaps prevents inadvertent concentrations of Soldiers and equipment around the entry points of lanes. Figure 5-5 depicts the graphic control measure for a gap.

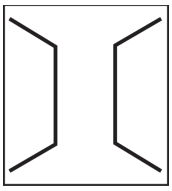

Figure 5-5. Gap

PLANNING A PASSAGE OF LINES

5-9. As with any activity involving transferring combat responsibility from one unit to another, the complex nature of a passage of lines involves risk. As with other operations, a passage of lines may be categorized as deliberate or hasty. During a passage of lines, the commander normally maintains the established tempo. Sustaining that established tempo requires detailed planning and preparations for a deliberate passage of lines. In this case, both the stationary and moving force have time to—

- Publish written orders.
- Exchange plans, intelligence information, databases, and liaison personnel.
- Conduct briefings and detailed reconnaissance.
- Conduct rehearsals.

The commander uses oral and fragmentary orders to conduct a hasty passage of lines.

5-10. In a passage of lines, the headquarters directing the passage is responsible for designating—

- Subsequent missions for both forces.
- When and under what conditions passage of command takes place.
- Start and finish times for the passage.
- Contact points between the units involved.
- Common maneuver control measures and graphics.

The directing headquarters normally establishes this information in either the warning order or the order directing the passage. In the absence of higher-echelon guidance, close coordination and understanding between the commanders and staffs of the two units are essential to a smooth passage.

5-11. The unit commanders plan the passage of lines to maintain enemy contact and provide constant fires on the enemy. Commanders reduce risk and ensure synchronization through detailed planning and decentralized execution. With forces intermingling during the passage, the need for positive control increases. The passage requires close coordination, clearly understood control measures, liaison between all headquarters and echelons involved in the passage, and clear identification of the moment or event that causes one force to assume responsibility for the AO from another.

5-12. After receiving the warning order that directs a passage of lines, the passing unit's commander and key staff representatives generally co-locate with the command post of the stationary unit to facilitate in planning the passage and establishing common situational understanding. If the passing unit cannot co-locate one of its command posts to help plan the passage, it conducts extensive liaison with the stationary unit. The planning focus for both the passing unit and the stationary unit is on operations following the passage. While this occurs, the two units involved coordinate the following:

- The exchange of intelligence and combat information.
- Current friendly dispositions and tactical plans, especially military deception and obstacle plans.
- Direct and indirect fires and close air support plans.
- Any necessary maneuver control measures and graphics not directed by the higher headquarters, such as boundary changes, the BHL, emergency sustainment points, and AA and firing positions for artillery, air defense, and other units.
- Long-range and short-range recognition symbols and vehicle markings to reduce the probability of fratricide.
- When and under what conditions control of the AO transfers from one headquarters to the other.
- Provisions for movement control, including contact points, start and release points, primary and alternate routes, route selection, priorities for using routes and facilities, passage points, and provision for guides.
- Reconnaissance by elements of the passing unit.
- Signal operating instruction details, such as call signs, frequencies, and recognition signals.
- Populate icons in blue force tracker to reduce the probability of friendly fire incidents.
- Security measures during the passage, including nuclear, biological, and chemical reconnaissance or biological detection systems.
- Fires, obscurants, and any other maneuver and functional and multifunctional support, and sustainment provided by the stationary unit.
- Measures to reduce both units' vulnerability to attack by enemy weapons of mass destruction.
- Operations security measures required before or during the passage.
- Allocation of terrain for use by the passing force.
- Air defense cover—up to and forward of the BHL.
- Logistics support for the passing unit provided by the stationary unit, especially fuel, maintenance, and medical treatment.

5-13. The fires cell of both the stationary and the passing unit agree on allocating firing positions. The AO commander controls the allocation of firing positions in case of disagreement. These positions must be far enough forward to support the operation without having to redeploy during critical stages of the battle. The fire support elements normally position in areas not identified by the enemy.

5-14. Detailed air defense planning is essential for a passage of lines. Moving units tend to move slowly and often in some type of column formation during the passage. Vehicle congestion presents lucrative targets to enemy aircraft. In most cases, the echelon above corps stationary air and missile defense elements protect the passing force. Dissemination of early warning and airspace command and control information reduces the risk of fratricide to friendly aviation assets while increasing the probability of the timely detection of enemy aircraft. Strict adherence to identification and friend-or-foe procedures among pilots and air defense fire units is critical, especially during periods of limited visibility. Local air superiority also reduces the vulnerability of the two forces when they cannot avoid congestion on the ground.

5-15. Once a passage of lines begins, it occurs quickly. Where possible, the operation takes place when the enemy has the least capability to detect it, such as at night or during periods of reduced visibility. In any passage of lines, the commander considers using smoke to screen friendly movement, even at night.

5-16. The passing unit prefers to conduct the passage through a gap in the stationary unit's positions rather than through a lane or a route that traverses those positions. This reduces the vulnerability that results from

concentrating forces when one unit passes directly through the occupied positions of another unit. It also avoids the danger of concentrating the passing unit into passage lanes.

5-17. In a forward passage of lines, when there are no gaps through the stationary unit's positions, each battalion task force normally needs at least two passage lanes. In a rearward passage of lines, each battalion needs at least one passage lane. In both cases, a brigade combat team (BCT) needs at least one additional lane for its tactical vehicles. The routes and lanes provide cover, concealment, and rapid movement of the passing force. The commander may designate alternative routes and lanes for elements of the moving force that are contaminated. They do not disrupt the combat capability of the stationary unit. The commander seeks additional lanes to speed the process, if the terrain and enemy situation allow.

5-18. The passing unit normally has priority of route use to and in the stationary unit's AO. Clearing and maintaining passage routes up to the BHL are responsibilities of the stationary force. The stationary force provides an obstacle overlay of its obstacles. The passing unit prepares to help maintain these routes, and it positions its engineer equipment accordingly. The stationary unit controls traffic in its AO, until the passing unit assumes control. During the passage, the passing unit augments the traffic control capability of the stationary unit as required.

5-19. Based on the commander's concept and intent, the passing force focuses its planning effort on two general areas: coordination with the stationary force and guidance to subordinate units conducting the passage. These planning efforts occur simultaneously. If the enemy attacks during the passage, the plan probably requires modification to prevent hampering friendly maneuver.

5-20. Executing a passage of lines successfully requires effective communication between the two units. The commanders build redundancy of communication signals and means into their passage plans, such as using blue force tracker, enhanced position location and reporting system, and other mission command systems. The commanders also designate contact points to ensure effective communication between the two forces at the lowest tactical level.

FORWARD PASSAGE OF LINES

5-21. The purpose of a forward passage of lines is to move forces forward to conduct operations. It ensures the maintenance of enemy contact while allowing the relief of previously committed forces. The stationary force controls and secures the AO far enough to its front that the moving force can pass through the stationary force and reform into a combat formation before contact with an enemy force. Generally, the stationary unit supports the passing unit, until the passing unit masks the stationary unit's direct fires. The stationary unit continues to support the passing force with its fire support systems, until the passing unit moves beyond the supporting range of the stationary force. The stationary unit is also responsible for the security of the line of departure of the forward passing unit, until it is able to assume that responsibility. The boundaries of the forward passing force after it completes its passage do not have to coincide with the boundaries of the stationary force. (See figure 5-6 on page 5-6.)

PREPARING A FORWARD PASSAGE

5-22. The passing unit conducts reconnaissance from its current location to its designated AAs, which are generally located to the rear of the stationary unit. After completing its reconnaissance, the passing unit occupies these AAs.

5-23. The commander organizes the passing force for its subsequent mission before initiating the forward passage of lines. The passing force avoids regrouping in forward AAs or attack positions.

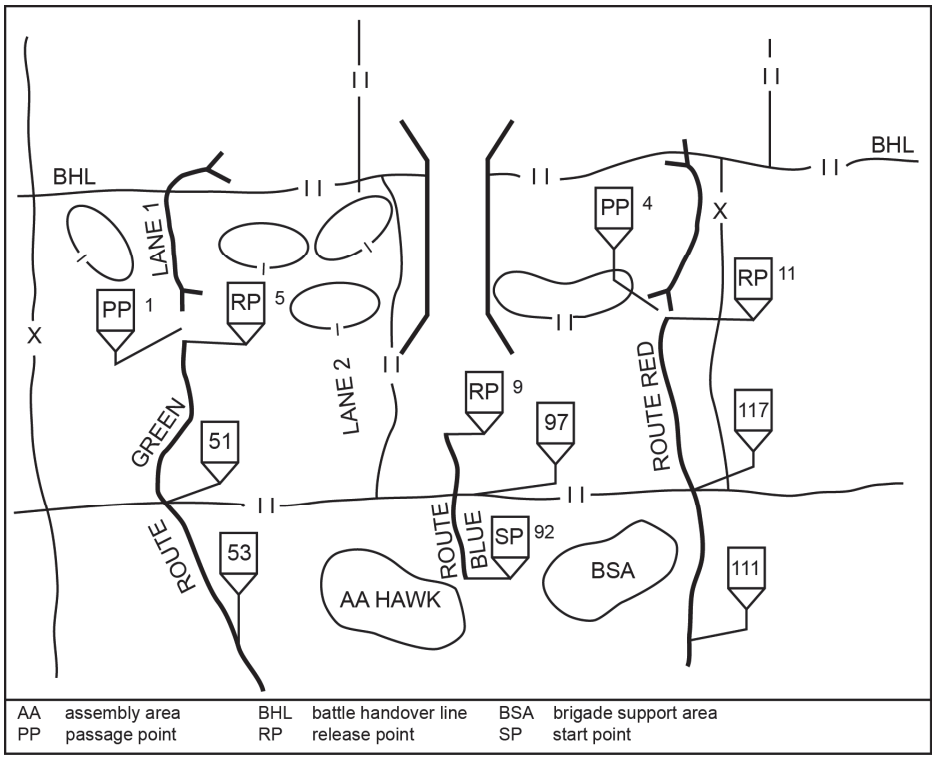

Figure 5-6. Forward passage of lines

EXECUTING A FORWARD PASSAGE

5-24. When the passing force moves forward, it moves without a halt through the stationary unit while deployed in a combat formation. That minimizes the time the two forces are concentrated in the forward area, making them less vulnerable to enemy attack.

5-25. Support by the stationary force ends when the combat elements of the moving force, including the reserve, have moved beyond direct-fire range. However, artillery, air defense, and other long-range systems may remain to support the passing unit until a previously designated event occurs or a higher headquarters directs another mission.

5-26. When executing the forward passage, the passing unit's reconnaissance elements operate forward of the release points and establish a screen in front of the passing unit. The stationary unit conducts aggressive security operations throughout the passage of lines. The movement of main body forces begins from their AAs to attack positions, where the passing unit conducts its final preparations for the passage of lines and the attack. The passing unit moves to and occupies attack positions when enemy observation is unlikely. The stationary unit clears any obstacles from designated passage gaps, lanes, or routes, and guides elements of the passing unit from the contact point through the passage points.

5-27. The direct and indirect-fire assets of the stationary unit normally support the movement of the passing unit. Electronic warfare—especially electronic attack—directed against enemy command and control nodes disrupt the enemy's dissemination of information and ability to react effectively to friendly operations. Any preparatory or covering fires coincide with the passing unit's movement from the attack position to the passage lanes. After the forward moving unit commander assumes responsibility for the AO, that commander coordinates all fire support. Depending on the situation, the passing commander may continue to use only the fire support assets of the stationary force until the passage of lines is complete. This allows the passing unit's fire support assets to move forward, in the case of artillery, or remain

available to support the passing unit's forward movement, in the case of attack helicopters conducting close combat attack and close air support. On passage of command, the passing commander also assumes control of fires forward of the BHL. For example, the passing commander moves the CFL forward to conform to the movement of forward security elements.

5-28. The superior headquarters of the forces involved exercises overall mission command of the passage. In a forward passage, the commander of the passing force normally assumes responsibility for conducting operations beyond the BHL once the attack begins. In practice, however, it is useful to complete the transfer of responsibility, including fire support, just before starting the operation. During the passage, two parallel chains of command are operating in one area simultaneously, and the possibility of confusion exists. A successful passage of lines requires clear mission command responsibilities. The passing unit's command post passes through the lines as soon as possible after the lead elements complete their passage and locates where it can best control operations.

5-29. The stationary unit furnishes the passing unit with any previously coordinated or emergency logistics assistance within its capabilities. These typically include—

- Evacuating casualties and enemy prisoners of war.
- Controlling dislocated civilians.
- Using areas and facilities such as water points and medical facilities.
- Controlling routes and traffic management.
- Recovering disabled vehicles and equipment.

The passing force normally assumes full responsibility for its sustainment forward of the BHL.

5-30. When dissimilar units, such as light infantry and mounted forces, are involved in a passage of lines, the principles involved are the same; however, the execution is different. For example, the type and amount of support provided by the stationary unit will change. In some cases, the higher headquarters ordering the passage needs to provide assets to support the passage.

REARWARD PASSAGE OF LINES

5-31. A rearward passage of lines is similar in concept to a forward passage of lines. It continues the defense or retrograde operation, maintaining enemy contact while allowing for recovery of security or other forward forces. This operation may or may not be conducted under enemy pressure. Counterintelligence analysis provides an assessment of enemy collection against friendly forces, specified by gaps and vulnerabilities, and countermeasures to enemy collection. Additionally, that analysis provides the commander with a view into the enemy's decisionmaking and intelligence cycles and the time period in which the enemy may discover the movement.

PLANNING A REARWARD PASSAGE

5-32. Planning procedures for a rearward passage of lines closely resemble the planning procedures for a forward passage of lines. However, rearward movement is likely to be more difficult because of the following:

- The enemy probably has the initiative, which tends to reduce the time available to conduct liaison and reconnaissance and make detailed plans.
- If the rearward moving force has been in action, its Soldiers are tired and possibly disorganized.
- The enemy may be applying pressure on the passing force.
- Friendly forces may be more difficult to recognize because enemy forces may be intermixed with them.

5-33. Close coordination between the two commanders is crucial to successfully executing the rearward passage and subsequent transfer of responsibility. This requirement for close coordination is even more critical when the tactical situation results in a staggered or incremental rearward passage across an AO. The passing commander relinquishes control of subordinate elements remaining in contact at the time of the

transfer of responsibility to the stationary commander. Generally, the stationary unit assumes control of the AO forward of the BHL after two-thirds of the passing force's combat elements move through the passage points.

5-34. After receiving the warning order, the passing unit begins coordination and establishes communication with the stationary unit. The commanders of these units coordinate the same details as those outlined for a forward passage of lines. For example, the stationary commander coordinates for fires to support the rearward passing force. The two staffs coordinate those control measures necessary to support retrograde operations and their associated rearward passage of lines. (See paragraphs 5-5 through 5-8.) The commanders establish a probable time to initiate passage. The stationary commander assigns responsibility for closing and executing obstacles.

5-35. The stationary unit identifies multiple routes through its AO and across its rear boundary to AAs. The passing unit begins reconnaissance of these routes as soon as possible. The stationary unit must physically show all obstacles and routes and gaps through them to the passing unit. It provides guides for the passing unit—especially through obstacles—and mans contact points and passage points. The passing unit begins to reconnoiter its routes to the established contact points with the stationary unit's troops. The stationary unit establishes a security area in which responsibility transitions from the moving force to the stationary force. Normally, a BHL designates the forward edge of this area. The BHL is in direct-fire range and observed indirect-fire range of the stationary force.

Preparing a Rearward Passage

5-36. The command posts of both units involved move to a position where they can co-locate as part of the preparations for the rearward passage. This co-location reduces the risk associated with a passage because it makes it easier to coordinate between the two units. If circumstances prevent the units' command posts from co-locating, they exchange liaison teams to ensure thorough coordination. If necessary, fire support assets from the stationary force occupy positions forward of their primary positions to give maximum coverage of forces to the rearward moving unit.

EXECUTING A REARWARD PASSAGE

5-37. The passing unit maintains command of its subordinate elements throughout the retrograde and rearward passage. The normal order of march in a rearward passage of lines is sustainment elements, main command post, functional and multifunctional support elements, tactical command post, and combat units. The passage point marks the location where the passing unit comes under the control of restrictions placed by the stationary unit. (See figure 5-7.) The unit on the far right does not have a passage point because of the gap existing at that location. If the enemy force continues to press its attack during the passage, the passing unit controls the battle from collocated command posts while the stationary unit monitors and controls the passage of lines until battle handover occurs. The passing unit's command post passes through the lines as soon as possible after the lead elements complete their passage. On passage of command, the stationary unit assumes the defense of the AO.

5-38. The stationary unit provides the passing unit with as much assistance as possible. The stationary unit's providing indirect and direct fire support to the passing unit is crucial for the success of the passage. This is especially important in covering the withdrawal of elements left in contact during a delay. The stationary unit's fire support assets answer calls for fire from the passing unit until battle handover occurs. The passing unit's fire support assets echelon rearward to provide continuous fire support for the passing unit until it successfully disengages. Once the passing unit hands over control of the battle to the stationary unit, the stationary unit initiates and clears calls for all fires forward of its location. The same procedure applies to the dedicated air defense assets of the passing and stationary units.

5-39. The stationary unit's engineer assets provide support to prepare the defense and execute the passage. The commander ensures that the passing unit is able to move through passage lanes around the stationary unit's defensive positions. The commander shifts forces to close these passage lanes once the passing unit and any security elements disengage and withdraw through the security area and obstacles.

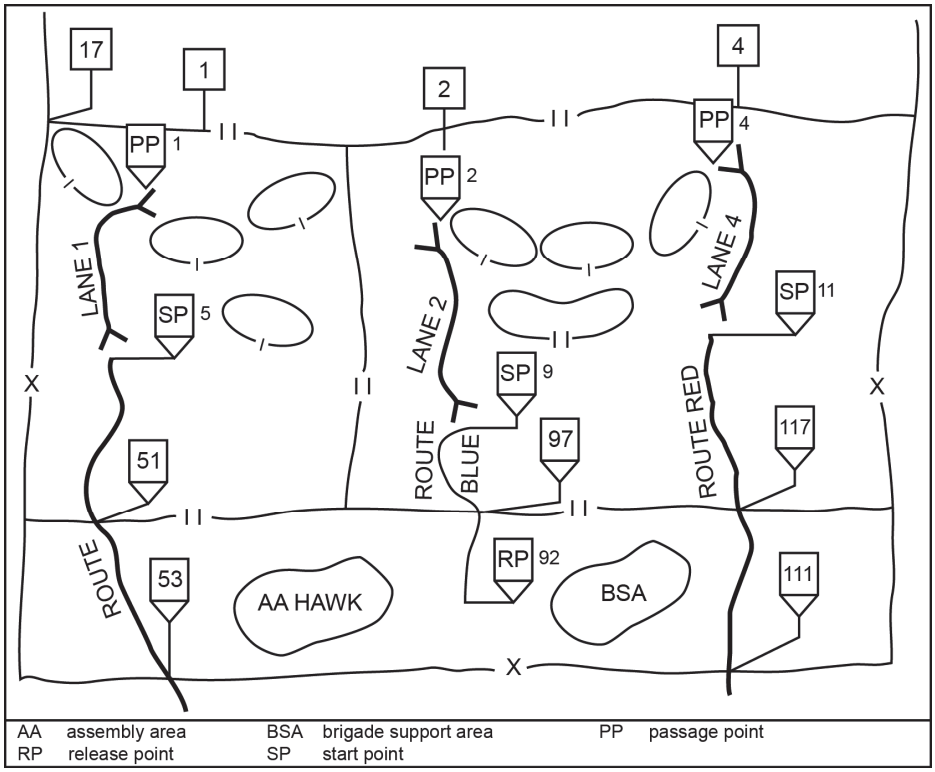

Figure 5-7. Rearward passage of lines

5-40. The stationary unit provides the passing unit with the previously coordinated sustainment as far forward as possible. The stationary unit concentrates on providing the passing unit with emergency medical, recovery, and fuel supplies to enable the passing unit to rapidly move through the stationary unit's positions.

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Chapter 6
Encirclement Operations

A unit can conduct offensive encirclement operations designed to isolate an enemy force or conduct defensive encirclement operations as a result of the unit's isolation by the actions of an enemy force. Encirclement operations occur because combat operations involving modernized forces are likely to be chaotic, intense, and highly destructive, extending across large areas containing relatively few units as each side maneuvers against the other to obtain positional advantage.

OFFENSIVE ENCIRCLEMENT OPERATIONS

6-1. *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 communications and reinforcement (ADRP 3-90).The commander conducts offensive encirclements to isolate an enemy force. Typically, encirclements result from penetrations and envelopments, or are extensions of exploitation and pursuit operations. As such, they are not a separate form of offensive operations but an extension of an ongoing operation. They may be planned sequels or result from exploiting an unforeseen opportunity. They usually result from the linkup of two encircling arms conducting a double envelopment. However, they can occur in situations where the attacking commander uses a major obstacle, such as a shoreline, as a second encircling force. Although a commander may designate terrain objectives in an encirclement, isolating and defeating enemy forces are the primary goals. Ideally, an encirclement results in the surrender of the encircled force. This minimizes friendly force losses and resource expenditures.

ORGANIZATION OF FORCES FOR AN OFFENSIVE ENCIRCLEMENT

6-2. An encirclement operation usually has at least two phases—the actual encirclement and actions taken against the isolated enemy. The commander considers adjusting subordinate units' task organizations between phases to maximize unit effectiveness in each phase. The first phase is the actual encirclement that results in the enemy force's isolation. The organization of forces for an encirclement is similar to that of a movement to contact or an envelopment. The commander executing an encirclement operation organizes encircling forces into a direct pressure force and one or more encircling arms. Armor, mechanized and motorized infantry, aviation, air assault, and airborne units are especially well suited for use as an encircling arm since they have the tactical mobility to reach positions that cut enemy lines of communications (LOCs). Bypassed and encircled enemy forces on the flanks and rear of advancing friendly forces require all-around security, which includes local security measures and security forces.

6-3. One commander should direct the encirclement effort. However, there must also be unity of command for each encircling arm. The encircling force headquarters may name one of its subordinate units as the headquarters for an encircling arm. Alternatively, that force headquarters may create a temporary command post from organic assets, such as its tactical command post, to control one or more arms of the encirclement. If that encircling arm has subordinate inner and outer arms, each of them also requires separate subordinate commanders. The missions and spatial orientation between the inner and outer encircling arms are sufficiently different; therefore, one force cannot act in both directions at once. (See figure 6-1 on page 6-2.)

6-4. The commander organizes only an inner encircling arm if there is no possibility of the encircled forces receiving relief from enemy forces outside the encirclement. If there is danger of an enemy relief force reaching the encircled enemy force, the commander organizes both inner and outer encircling arms. The commander assigns the outer encircling arm a security mission, an offensive mission to drive away any

enemy relief force, or a defensive mission to prevent the enemy relief force from making contact with the encircled enemy force. Once the encirclement is complete, these inner or outer encircling arms form a perimeter.

6-5. The second phase of an encirclement operation involves actions taken against an isolated enemy. The commander's decision to fix, contain, or destroy isolated enemy forces affects the task organization of subordinate units, as do enemy attempts to break out from the encirclement or linkup with the encircled force. All these possible outcomes require resources in terms of units and supplies, but some require more resources than others do. If the commander's mission is to contain or fix an isolated enemy, the commander organizes subordinate forces for defensive action and arranges them around the enemy's perimeter. If the commander's mission is to reduce or destroy that same enemy, subordinate forces are organized for offensive action. A higher commander often assigns either mission to the commander of a follow-and-support force.

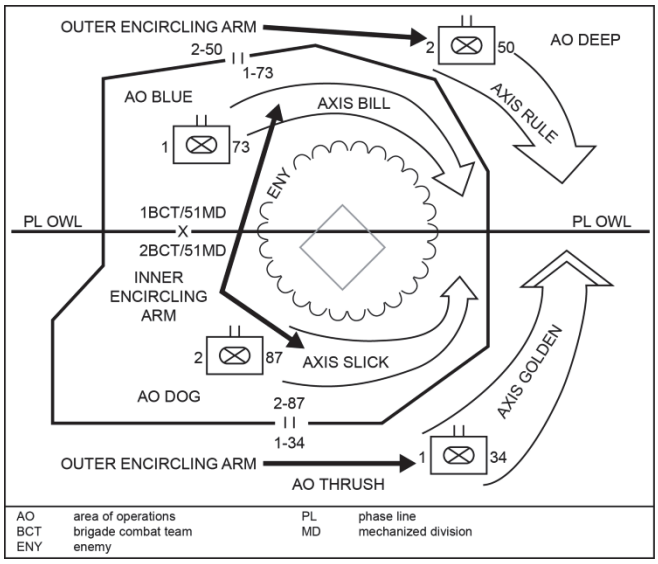

Figure 6-1. Inner and outer arms of an encirclement

6-6. Regardless of whether the commander decides to fix, contain, or destroy the enemy, the unit conducts reconnaissance to maintain contact and monitor enemy actions in response to the encirclement. This allows the commander to respond effectively to any enemy movement. The most effective reconnaissance combines ground, aerial, and surveillance systems to provide constant coverage and multiple assessments of enemy activities throughout the encircled area.

OFFENSIVE ENCIRCLEMENT CONTROL MEASURES

6-7. Control measures for an encirclement are similar to those of other offensive operations, especially an envelopment, but with a few additional considerations. (See figure 6-2.) If the commander uses both an inner and an outer encircling arm, the commander must establish a boundary between them. The commander places the boundary so that each element has enough space to accomplish the mission. The inner force requires enough space to fight a defensive battle to prevent the encircled force from breaking out. The outer force requires adequate terrain and depth to its area of operations (AO) to defeat any attempt to relieve the encircled force.

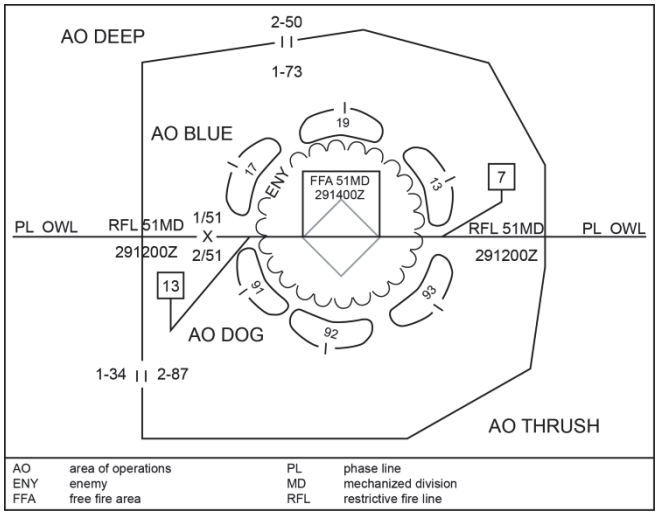

Figure 6-2. Encirclement control measures

6-8. The commander who controls both converging forces establishes a restrictive fire line (RFL) between them. The commander may also establish a free fire area (FFA), which encloses the

area occupied by a bypassed or encircled enemy forces. (Appendix A of FM 3-90-1 discusses the use of RFLs, FFAs, and other fire support coordination measures.) The commander may also establish contact points.

PLANNING AN ENCIRCLEMENT

6-9. Encirclement operations may require allocating large forces and significant resources. They take a great deal of time and usually slow an advance. If the mission of the encircling force is to maintain contact with a bypassed enemy force, the following general planning considerations apply:

- Determine the best available assets that gain and maintain contact with the enemy.
- Keep the enemy isolated and incapable of receiving intelligence, logistics, and fire support from enemy formations outside of the encirclement.
- Use reconnaissance and surveillance assets so that the commander knows the capabilities of the encircled force and, as much as possible, its commander's intentions.
- Retain freedom of maneuver.
- Control of fires and fields of fire to avoid fratricide.

6-10. The commander applies the general defensive planning considerations outlined in chapter 6 of FM 3-90-1 if the mission is to contain or fix the encircled enemy force in a specific location. If the mission is to attack and destroy the encircled enemy force, the commander applies the planning considerations outlined in chapters 1 and 3 of FM 3-90-1. Commanders plan to rotate the forces involved in reducing the encircled pocket to maintain constant pressure on the enemy.

6-11. Every encircled enemy unit reacts differently. Initially, some become demoralized and cannot offer any serious resistance. However, if left undisturbed, most enemy units recover and attempt to break out and regain contact with their main force or attack the flank and rear of advancing friendly units. The encircling force must plan for the enemy's most probable reactions.

6-12. If the enemy force is not reduced, and it can be resupplied, or it has access to considerable supply stocks, it continues to be a serious threat to the commander in future operations. The encircling force must be approximately equal in size to this type of encircled force to fix or contain it. This situation occurred when German forces occupied various fortified French ports after Allied armies liberated the rest of France in 1944. Each encircled German division took approximately one Allied division to maintain its isolation. Conversely, an enemy force isolated without adequate supplies either surrenders or faces containment by considerably smaller forces. This situation occurred in Egypt during the 1973 Arab-Israeli War when an Israeli division isolated the Egyptian 3rd Army. Planning considerations for the linkup of encircling forces, such as command and support relationships, are outlined in paragraphs 6-76 through 6-82.

EXECUTING AN ENCIRCLEMENT

6-13. When feasible, the encircling force advances parallel to the enemy's direction of movement. It attempts to reach defiles, bridges, and other critical points before the main enemy force reaches them. When the encircling force cannot outdistance the enemy, it engages the enemy force's flanks to force the enemy to fight under the most unfavorable conditions possible, ultimately in two or more directions simultaneously. Engineer units rapidly breach obstacles in the path of the encircling force. Friendly forces emplace obstacle complexes, supported by fires, to block probable avenues of escape, as they counter attempted enemy breakouts from encirclement. The commander may use air assault and airborne forces to seize defiles or other critical terrain objectives to cut enemy LOCs. The encircling force completes the encirclement when all enemy ground LOCs are cut. This generally occurs when the two arms of a double envelopment complete their linkup.

6-14. A commander usually creates intervals between the advancing units of an enveloping force to provide protection from enemy chemical, biological, radiological, and nuclear (CBRN) weapons. They can also occur during combat operations as the result of different rates of advance by combat formations that face dissimilar degrees of enemy resistance and different terrain. The encircled enemy attempts to discover intervals and take advantage of them as the encircled enemy force tries to escape from or breakout of the

encirclement. Once the enveloping force completes the linkup that actually creates the encirclement, it must close these intervals as quickly as possible to prevent the enemy from exploiting them.

6-15. The enemy force may attempt to cut off the encircling force and extend its flank beyond the area of the friendly attack. If the commander attempts to outflank such a hostile extension, it may lead to the overextension of the enveloping force or to a dangerous separation of the enveloping force from support. It is usually better to take advantage of the enemy's extension and subsequent weakness by penetrating the thinly held front of an enemy force rather than risk the overextension of the enveloping force in an effort to completely outflank the enemy's positions. Alternatively—in response to the unfolding encirclement—the enemy may attempt a frontal, spoiling attack. In this case, the friendly force in contact defends itself or engages in a delaying operation, while the enveloping force continues the envelopment or moves directly toward the enemy force in a counterattack.

6-16. The commander of a highly mobile force forming the inner encircling arm may choose not to establish a continuous series of positions around an encircled enemy. The commander may order subordinate forces to occupy only key terrain from which they can strike at the encircled enemy forces to prevent them from concentrating forces and to further isolate them. To effectively isolate the enemy, a commander who adopts this technique must be able to detect enemy attempts to breakout and concentrate sufficient combat power against these attempts to thwart them. The commander of the outer encircling arm prevents additional enemy forces from reinforcing the isolated enemy force or interfering with the activities of the inner encircling arm.

6-17. Other operations may result in the encirclement of enemy forces. These include offensive operations that bypass large enemy forces to maintain the momentum of the force. Reconnaissance and security missions conducted by the main body must focus on detecting and reporting bypassed units. The main body conducts these missions not only to its flanks, but also to its rear to discover if enemy forces move in behind it. Unit reconnaissance and surveillance assets watch for measures taken by the enemy's main body to relieve or assist its bypassed or encircled forces.

6-18. Once the commander decides to destroy an encircled enemy force, that enemy force is reduced as rapidly as possible to free resources for use elsewhere. The reduction of an encircled enemy force continues without interruption, using the maximum concentration of forces and fires, until the encircled enemy force's complete destruction or surrender. A commander may destroy encircled enemy forces by fires alone or by a combination of fire and movement. The five main methods for reducing an encircled enemy are fire strike, squeeze, hammer and anvil, wedge, and escape route.

6-19. **A *fire strike* is the massed, synchronized, and nearly simultaneous delivery of primarily terminally guided indirect fire and area munitions.** It is the preferred method for destroying an encircled enemy force. These fires may engage both point and area targets. Terminally guided munitions, such as the global positioning system (GPS)-enabled Excalibur 155mm round and the guided multiple launch rocket system munitions are used against well-located targets; laser-guided rounds are used against both well located targets and moving targets that present the greatest danger to the encircling force, such as the enemy's CBRN weapons, command posts, fire support and air defense systems, and field fortifications. However, the commander's ability to use terminally-guided munitions in mass may be limited by the ability of the sustainment system to supply them. Indirect fire weapons typically engage poorly located or area targets with area munitions that are unable to correct for unanticipated ballistic conditions en route to the target or dispense point. Fixed-wing, rotary-wing, and tilt-rotor aircraft play an important role in the destruction of encircled forces by close air support (CAS), close combat attack (CCA), and forming joint air attack teams (JAAT) to locate and attack high-payoff targets and targets of opportunity. Fire strikes by indirect fires and CAS, CCA, and JAAT may occur alone or concurrently during the destruction of the enemy force.

6-20. The commander also conducts Army information tasks—such as electronic warfare—against the encircled enemy force. In some situations, fire strikes result in the rapid destruction of the encircled enemy. However, destruction is not guaranteed. In most cases, reducing the enemy pocket requires using ground maneuver forces.

6-21. The squeeze technique uses simultaneous, coordinated blows on the enemy from various directions. (See figure 6-3.) Following the initial encirclement, the capture or destruction of the enemy force is methodical and thorough. The commander uses fire and movement together in a controlled contraction of the encirclement. As the enemy's perimeter contracts, the commander removes units from the inner perimeter and adds them to the reserve depending on the terrain and other mission variables of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC). This technique is effective against battalion or smaller groups of encircled enemy forces.

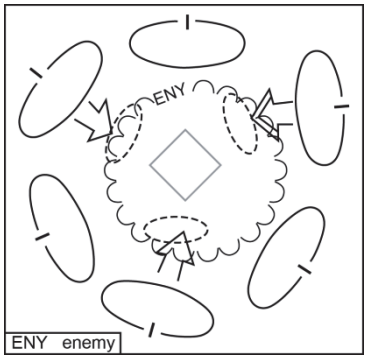

Figure 6-3. Squeeze technique

6-22. The squeeze technique promotes the enemy's confusion and rapid dispersion of combat power and prevents the enemy commander from using the enemy's reserves in a decisive manner. The commander shapes the operation by initially concentrating on destroying enemy command nodes, air defense systems, artillery systems, and sustainment capabilities. These sustainment capabilities include any drop zones, landing zones, or airstrips available to the enemy that would allow the enemy to receive support from outside the encirclement.

6-23. The hammer and anvil technique employs a stationary blocking force as an anvil on one or more sides of the inner perimeter, while other elements of the encircling force use offensive action as a hammer to force the encircled enemy force against the blocking force. (See figure 6-4.) Either the anvil or the hammer can destroy the enemy. Usually the hammer, as the attacking element, accomplishes this task. This technique is most effective when the blocking force is located on or to the rear of a natural terrain obstacle. On favorable terrain, an airborne or air assault force can be used as an anvil or a blocking element.

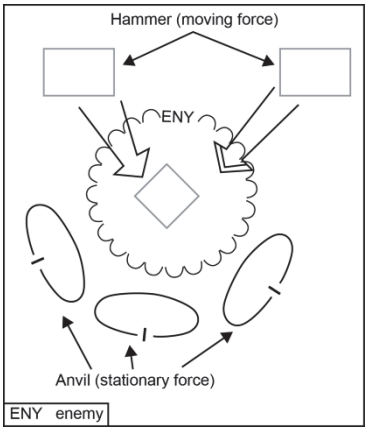

Figure 6-4. Hammer and anvil technique

6-24. The wedge technique uses a unit to divide enemy forces in the pocket while the rest of the encircling force remains in place. (See figure 6-5.) This technique allows the commander to concentrate against a small portion of the encircled enemy. However, the encircling force maintains pressure on other encircled enemy forces to prevent them from reinforcing or supporting the threatened area. The unit dividing the pocket conducts sudden and swift attacks immediately after the end of supporting preparatory fires.

6-25. The escape route technique involves leaving one or more gaps in the inner encircling arm to entice the enemy to attempt a breakout. Once the enemy force starts moving, and is no longer sheltered in defensive positions, that moving enemy force is more vulnerable to acquisition, attack, and destruction. A commander using this technique should use military information support operations (MISO) and constant offensive action to demoralize the escaping enemy force.

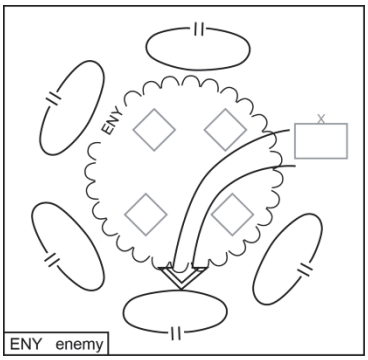

Figure 6-5. Wedge technique

6-26. The negative aspect of these techniques is that they require considerable forces and supplies, which are not always available. Therefore, at times the encircling force has to limit itself to less decisive measures. These include temporarily containing or fixing bypassed enemy forces until resources become available to enable the encircling force to destroy the enemy. Continued isolation of the encircled force can only be guaranteed when the enemy cannot strengthen its forces by inserting additional units and supplies by air. Even total, long-term isolation does

not necessarily lead to decisive defeat of the encircled enemy. It is a temporary measure designed to provide the attacking force additional time.

DEFENDING ENCIRCLED

6-27. An encircled force can continue to defend encircled, conduct a breakout, exfiltrate toward other friendly forces, or attack deeper into enemy-controlled territory. The commander's form of maneuver once becoming encircled depends on the senior commander's intent and the mission variables of METT-TC, including the—

- Availability of defensible terrain.
- Relative combat power of friendly and enemy forces.
- Sustainment status of the encircled force and its ability to be resupplied, including the ability to treat and evacuate wounded Soldiers.
- Morale and fighting capacity of the Soldiers.

6-28. Encirclement of a friendly force is likely to occur during highly mobile and fluid operations, or when operating in restrictive terrain. A unit may find itself encircled as a result of its offensive actions, as a detachment left in contact, when defending a strong point, when occupying a combat outpost, or when defending an isolated defensive position. The commander anticipates becoming encircled when assigned a stay-behind force mission, or when occupying either a strong point or a combat outpost. The commander then makes the necessary preparations.

6-29. The senior commander in an encirclement assumes command over all encircled forces and takes immediate action to protect them. In the confusion leading to an encirclement, it may be difficult to even determine what units are being encircled, let alone identify the senior commander. However, the senior commander must be determined as quickly as possible. When that commander determines the commander's unit is about to be encircled, the commander must decide quickly what assets stay and what assets leave. The commander immediately informs higher headquarters of the situation. Simultaneously, the commander directs the accomplishment of the following tasks:

- Establish security.
- Reestablish a chain of command.
- Establish a viable defense.
- Maintain morale.

6-30. The commander positions security elements as far forward as possible to reestablish contact with the enemy and provide early warning. Vigorous patrolling begins immediately. Each unit clears its position to ensure that there are no enemy forces in the perimeter. Technical assets, such as Joint Surveillance Target Attack Radar System (JSTARS) and electronic warfare (EW) systems, augment local security and locate those areas along the perimeter where the enemy is deploying additional forces.

6-31. The commander reestablishes unity of command. The commander reorganizes any fragmented units and places Soldiers separated from their parent units under the control of other units. The commander establishes a clear chain of command throughout the encircled force, reestablishes communications with units outside the encirclement, and adjusts support relationships to reflect the new organization.

ORGANIZATION OF FORCES FOR AN ENCIRCLED DEFENDER

6-32. The commander of the encircled force establishes a perimeter defense. (Chapter 6 of FM 3-90-1 discusses the conduct of a perimeter defense.) The commander knows the specific capabilities and limitations of the different friendly units isolated in the encirclement. Therefore, the commander designs the defense to maximize the capabilities of available forces. Forward units establish mutually supporting positions around the perimeter and in depth along principal avenues of approach. Units occupy the best available defensible terrain. It may be necessary to attack to seize key or decisive terrain so that it is incorporated into the perimeter defense. Once the commander assigns defensive AOs and battle positions, preparations are the same as in the defense. (See figure 6-6.) Encircled units make their defensive positions

as strong as possible given time and resource constraints. The commander anticipates that the enemy will attempt to split the defenses of the encircled force and defeat it in detail.

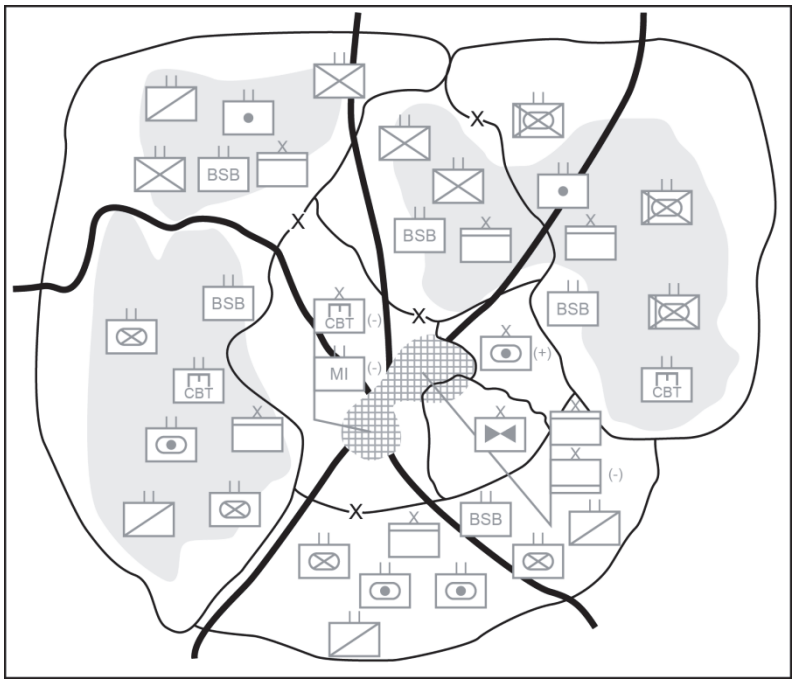

Figure 6-6. Encircled division's perimeter defense

6-33. The encircled force commander establishes a reserve that is mobile enough to react quickly to events anywhere along the perimeter. Therefore, given the availability of sufficient fuel, the commander constitutes a reserve using some of any available armored, mechanized, and Stryker units. The commander centrally positions this mobile reserve to take advantage of interior lines, which exist if the encircled force commander can maneuver the reserve or reinforce threatened positions on the perimeter faster than the enemy can shift location or reinforce. The commander can achieve interior lines through a central position (with operations diverging from a central point), from superior lateral LOCs, or greater tactical mobility. If only dismounted infantry forces are available, the commander establishes small local reserves to react to potential threats. The commander organizes a mobile anti-armor element from the best available anti-armor systems. If possible, subordinate echelons also retain a reserve.

6-34. While defending encircled, the commander may use the reserve to limit penetrations along the perimeter. It may conduct spoiling attacks or vigorous counterattacks. The commander initiates a counterattack at the decisive moment and location as the enemy force attempts to penetrate the defensive positions.

WARFIGHTING FUNCTIONAL CONSIDERATIONS FOR AN ENCIRCLED DEFENDER

6-35. Divisions and corps may consider relocating aviation systems from any attached combat aviation brigades to locations that are not in danger of being encircled. Aviation assets can rapidly bring additional firepower to bear on the encircling enemy force or rapidly move reaction forces to threatened locations along the defensive perimeter. Generally, aviation assets fly out of the encirclement when it becomes small enough to allow the enemy's artillery to range throughout the area.

6-36. The commander centrally controls fire support systems, such as artillery, to provide support at numerous points along the perimeter and mass fires. The commander designates the senior field artillery staff officer, such as the chief of fires or brigade fire support officer, to control fire support. At the brigade combat team (BCT), the fires battalion commander also advises the commander. At lower levels,

commanders my collocate mortars from various units under centralized control, especially if there are insufficient artillery assets.

6-37. Generally, engineers concentrate first on countermobility, then survivability, and then mobility. An encircled force is particularly vulnerable to the enemy's use of CBRN weapons. Dispersal is difficult in a perimeter-type defense; therefore, the next best alternative is position hardening by constructing field fortifications.

6-38. Encircled units must closely monitor their sustainment assets, especially if they cannot be resupplied for an extended period. Commanders conserve and centrally control available resources. The commander may force units on the perimeter to cease all vehicle movement to allocate remaining fuel assets to the reserve. The commander retains essential sustainment capabilities to sustain defensive operations. They fall under the control of a senior sustainment operator or commander. When possible, the commander positions these units and their assets out of the reach of potential penetrations in protected and concealed locations. The commander may incorporate other sustainment units into defensive positions in depth or around key facilities. The commander may choose to use Soldiers from sustainment units as fillers for combat units, although this action may affect the sustainment capabilities of the encircled force.

6-39. Casualty evacuation and mortuary affairs pose particular challenges for the encircled force. The commander evacuates wounded from the encirclement whenever possible for humanitarian reasons. This also reduces the logistic burden of providing long-term medical care to wounded Soldiers.

6-40. Soldiers have an inherent fear of being encircled by the enemy. Unchecked, this fear can lead to a degradation in morale and discipline. When encircled, Soldiers under the firm control of their leaders can withstand the mental strain. Discipline can disintegrate rapidly in an encirclement. Officers and noncommissioned officers must uphold the highest standards of discipline. Their personal conduct sets the example. The commander must be seen frequently by Soldiers and display a calm and confident manner.

6-41. Soldiers in the encirclement must not regard their situation as desperate or hopeless. Commanders and leaders at all levels maintain the confidence of Soldiers by resolute action and a positive attitude. They must keep their Soldiers informed to suppress rumors and counter enemy propaganda.

BREAKOUT FROM AN ENCIRCLEMENT

6-42. 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 operation. An encircled force normally attempts to conduct breakout operations 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.

ORGANIZATION OF FORCES FOR A BREAKOUT

6-43. Units typically task organize to conduct rupture, follow-and-assume, main body, and rear guard missions to conduct a breakout attack. (See figure 6-7). If sufficient forces exist in the encirclement, the commander organizes a reserve and a separate diversionary force. Some encircled units will be weakened, and if sufficient combat power does not exist to resource each of these forces, the commander must prioritize which ones to resource. Normally, the commander's first priority is to resource the force with the rupture mission. The commander typically assigns multiple missions to subordinate forces because there are not typically enough forces in the encirclement to have separate forces for each required mission. For

example, the follow-and-assume force could receive a be-prepared mission to help extract the rear guard, a mission generally given to the reserve. Forces located outside the encirclement assist the breakout by conducting shaping operations. Above all, the encircled force maintains the momentum of the breakout attack; otherwise, it is more vulnerable to destruction than it was before the breakout attempt.

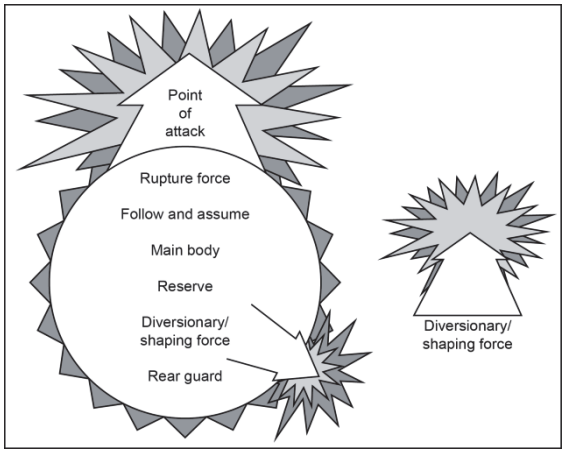

Figure 6-7. Organization of forces for a breakout operation.

6-44. The force reorganizes based on available resources to conduct the breakout. Without resupply, armored, mechanized, and motorized infantry units may not be able to move all of their vehicles during the breakout attack. Priority of support may be limited to the rupture force and the rear guard, with the remaining force keeping only sufficient transportation assets to move the wounded and critical assets and supplies. The breakout plan outlines the commander's destruction criteria for equipment or supplies left behind. All vehicles, critical munitions, supplies, and equipment (except medical supplies) that cannot be moved should be destroyed as soon as possible.

6-45. An encircled force attacks using the rupture force to penetrate the enemy defensive positions in at least one location. The commander produces overwhelming combat power at each breakout point. The commander assigns the rupture force, which varies in size from one-third to two-thirds of the total encircled force, the mission to penetrate the enemy's encircling position, widen the gap, and hold the shoulders of the gap until all other encircled forces can move through. The rupture force must have sufficient strength to penetrate the enemy line. This force must use surprise, mobility, and firepower to achieve a favorable combat power ratio over the enemy at the point of attack. (Chapter 1 of FM 3-90-1 discusses the penetration as a form of maneuver.)

6-46. Initially, the rupture force is the decisive operation. The attack occurs where the commander anticipates a successful rupture of the enemy's inner ring, which facilitates subsequent operations by enabling the commander to attack enemy units from their flanks and rear. The rupture force commander probably has additional attached assets, such as additional maneuver forces and engineers. The commander should integrate these assets to achieve the rupture.

6-47. The follow-and-assume force follows the rupture attack and is committed to maintain the momentum of the attack and seize objectives past the rupture. After the rupture force seizes a gap in the enemy encirclement, the follow-and-assume force normally conducts the decisive operation until completing linkup operations with another friendly force. When a unit receives a follow and assume mission in a breakout, its commander must coordinate closely with the rupture force commander regarding the location of the gap, the enemy situation at the rupture point, and the enemy situation, if known, along the direction of attack past the rupture point. The commander does not assign this force supporting shaping tasks, such as clear routes and fix bypassed enemy forces, if those tasks dissipate its available combat power. If executing these support tasks is vital to the success of the breakout and resources permit, the commander designates a separate follow and support force to perform these tasks.

6-48. The main body consists of the main command post, the bulk of encircled sustainment assets, the unit's casualties, and some functional and multifunctional support assets. It contains combat forces not required for other missions and has sufficient combat power to protect itself. The commander places one individual in charge of the various elements of the main body to ensure orderly movement. Typically, the main body establishes a flank security force that deploys once the main body passes through the point of penetration and performs flank screen or a guard mission for the main body.

6-49. The rear guard consists of Soldiers and equipment left on the perimeter to provide protection for the rupture attack and any shaping operations, such as diversionary forces. Forces left in contact must conduct a vigorous delaying operation on the perimeter, so that no portion of the rear guard gets cut off. Under a single commander, the rear guard protects the main body from attack, while it moves from the area. In addition to providing security, the rear guard deceives the enemy about the intentions of the encircled force, simulating its activities until the main body clears the gap.

6-50. The primary purpose of a reserve is to retain flexibility through offensive action. The commander makes every attempt to keep a small portion of the encircled force uncommitted, so it can be employed at the decisive moment to ensure the breakout's success. The commander may be unable to establish a separate reserve force because of the need to resource either the rupture force, the follow-and-assume force, or the rear guard. In this event, the commander assigns and prioritizes various be-prepared missions to the follow-and-assume force.

6-51. A successful diversion is important to the success of any breakout operation. If the diversion fails to deceive the enemy commander regarding the intentions of the encircled force, the enemy commander could direct the enemy's full combat power at the rupture point. On the other hand, the diversionary force may rupture the enemy's lines. If a rupture occurs, the diversion force commander follows the intent of the commander of the encircled force. The encircled force commander may choose to exploit the success of forces conducting a diversion, or the commander may have to disengage them for use elsewhere in the breakout attempt.

CONTROL MEASURES FOR A BREAKOUT

6-52. As a minimum, a commander uses boundaries; a line of departure (LD) or line of contact; time of the attack; phase lines; axis of advance or direction of attack; objectives; and a limit of advance (LOA) to control and synchronize the breakout. (Appendix A of FM 3-90-1 discusses the use of boundaries, phase lines, axis of advance, direction of attack, objectives, line of departure or line of contact, LOA, and time of attack.) The commander only imposes the control measures necessary to synchronize operations.

PLANNING A BREAKOUT

6-53. The commander initiates a breakout attack as quickly as possible after the enemy encircles the force. While detailed combat information about the enemy's disposition is probably not available, the enemy is normally disorganized at that time and is least likely to respond in a coordinated manner. The enemy has not yet brought in sufficient combat power to encircle the friendly force in strength, and weak points exist in the enemy's perimeter. However, sometimes the commander will not attempt a breakout until all other options fail.

6-54. Early in an encirclement, there are gaps between or weaknesses in the enemy's encircling forces. The commander uses available reconnaissance and surveillance assets, including available joint systems, to provide information that increases the accuracy of the commander's situational understanding and determines enemy weak points. The commander's plans for the breakout attack will capitalize on those identified weak points. Although the resulting attack may be along a less direct route or over less favorable terrain, it is the best course of action (COA) because it avoids enemy strength and increases the chance for surprise.

6-55. An encircled force may be operating under adverse conditions and may not have all of its normal suite of intelligence systems. This forces the commander to operate with low levels of intelligence regarding enemy strengths, weaknesses, and intentions. Within this environment, the encircled commander conducts aggressive reconnaissance to gather information on the enemy. The commander also obtains information from joint assets, long-range surveillance units, stay behind units, and special operations forces in the area. If the enemy is in close contact, the commander may be forced to conduct a reconnaissance in force to ascertain enemy strengths. In any case, the commander quickly selects a COA and develops a plan accordingly.

6-56. A shaping operation, such as a diversionary attack, assists a breakout by diverting enemy attention and resources away from the rupture effort. The force conducting shaping operations may be located either inside or outside the encirclement area. The enemy must regard the efforts of this force as credible and a threat to the continuity of the enemy's maneuver plan. The commander directs the force's efforts to a point where the enemy might expect a breakout or relief effort. The diversionary force is as mobile as available vehicles, fuel stocks, and trafficability allow, so it can reposition to take part in the breakout or maneuver elsewhere to support the breakout. Mobile, self-propelled weapons systems suit the needs of forces conducting shaping operations. Additionally, the probability of a successful breakout increases measurably if another friendly force attacks toward the encircled force as it attempts to breakout.

6-57. The commander conducts Army inform and influence and cyber electromagnetic activities tasks to assist the breakout attempt. Military deception operations mislead the enemy about the intentions of the encircled force, especially the location of the breakout attempt. For example, unmanned aircraft can concentrate their activities in an area away from where the rupture effort will occur to deceive the enemy as to the exact location of the rupture. If it is not possible to breakout immediately, the commander attempts to deceive the enemy regarding the time and place of the breakout by concealing friendly breakout preparations and changing positions. The commander can also make it appear that the encircled force will make a resolute stand and await relief.

6-58. The commander can use dummy radio traffic for the enemy to monitor or landlines that the enemy might be able tap to convey false information. The breakout should not be along the obvious route toward friendly lines, unless there is no other alternative. In this respect, the preparations for a breakout mirror the preparations for any other offensive task. As in other offensive actions, secrecy, military deception, and surprise allow for success. The other planning considerations for the breakout are the same as for any other attack.

EXECUTING A BREAKOUT

6-59. The commander exploits darkness and limited visibility during a breakout, if friendly encircled forces have superior night-vision capabilities. The concealment provided by darkness, fog, smoke, or severe weather conditions favor the breakout because the encircling enemy weapons are normally less effective then. The enemy has difficulty following the movements of the breakout force during conditions of limited visibility. However, if the encircled force commander waits for darkness or limited visibility, the encircling enemy may have time to consolidate containment positions. If friendly forces have air superiority, they may initiate a daylight breakout attack to fully exploit the capabilities of close air support.

6-60. The unit takes all possible precautions to deceive the enemy about the location of the decisive operation. The rupture force minimizes occupation of attack positions before starting the breakout. A commander may require one or more shaping operations to assist the rupture force in penetrating enemy positions and expanding the shoulders. The encircled commander may use feints and demonstrations to deceive the enemy concerning the location and time of the decisive operation. However, diversionary attacks need not always occur first.

6-61. The commander organizes and controls the rupture force in the same manner as during an attack or movement to contact. (See figure 6-8.) The rupture force generates overwhelming combat power at the point of penetration and rapidly overwhelms enemy positions and expands the penetration. A commander unable to generate sufficient combat power for both the rupture force and the perimeter defense can thin the defensive perimeter in certain areas by using a detachment left in contact in conjunction

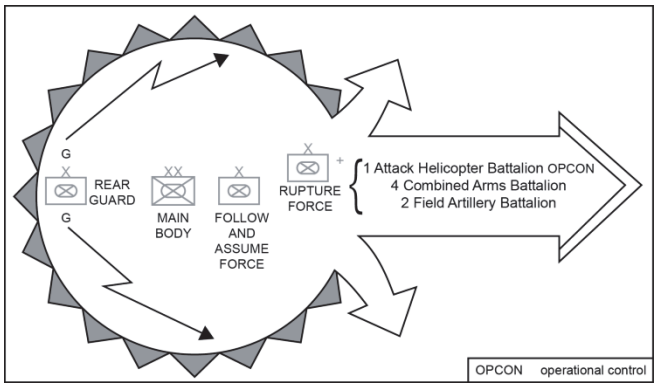

Figure 6-8. Breakout by an encircled division

with a withdrawal before executing the attack. The commander may also shorten the perimeter's length, which reduces the size of the area occupied by the encircled force.

6-62. The rupture forces applies the breaching fundamentals of suppress, obscure, secure, reduce, and assault to ensure its success at the point of penetration. These fundamentals always apply, but their application will vary based on the prevailing mission variables of METT-TC.

6-63. The commander orders the rupture force to hold the shoulders of the penetration while the follow-and-assume force moves forward, if enemy forces at the penetration point have roughly the same combat power as the rupture force. The actions of the follow-and-assume force then become the decisive operation. (See figure 6-9.) The commander may have the rupture force continue its attack, if the enemy is not strong. If there are no identified enemy forces beyond the penetration, the rupture force may transition to a movement to contact. After the encircled friendly force breaks out, it moves toward other friendly forces and links up with them. Paragraphs 6-76 through 6-82 address considerations associated with conducting a linkup.

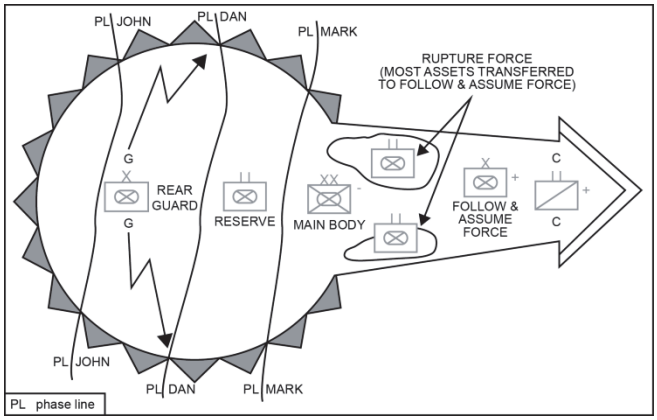

Figure 6-9. Continued breakout by an encircled division

6-64. Initially, the follow-and-assume force passes through the gap created by the rupture force. This force continues to move rapidly from the encircled area toward its final objective. If the follow-and-assume force becomes the encircled commander's decisive operation, it cannot allow itself to become bogged down. Preparatory fires by artillery, Army aviation, close air support, and air interdiction help the follow-and-assume force in maintaining momentum out of the encircled area.

6-65. Once the breakout attack starts, the rear guard and any diversion forces disengage or delay toward the area of the rupture. Perimeter forces integrate smoothly into the rear of the breakout column. Once the breakout succeeds, the commander shifts priority of fires as required by the mission variables of METT-TC.

6-66. As other encircled units support or move through the area of penetration, the rear guard commander must spread forces over an extended area. The rear guard requires flexibility and mobility. The rear guard maintains the perimeter against enemy pressure. If the enemy succeeds in destroying or encircling the original rear guard in the breakout process, the commander must reconstitute a new rear guard.

6-67. The main body follows the follow-and-assume force. It moves rapidly on multiple routes in an approach march or road march formation immediately behind the follow-and-assume force, protected on its flanks by security elements. It contains sufficient combat power to protect itself and reinforce the flank or rear security forces, if they come under attack.

6-68. Normally, the rear guard initially conducts a withdrawal to break contact with the enemy forces around the perimeter. It contracts the perimeter as it delays behind the main body. If the enemy closely pursues the breakout force, the efforts of the rear guard may become the decisive operation for the encircled force. The commander should position the reserve where it can also support the rear guard.

6-69. Initially, the priority for fire support is with the rupture force and should focus on suppressing and obscuring the point of penetration. Fire support assets move as part of the main body and rear guard so security forces have adequate fire support. Target identification difficulties resulting from close proximity and intermixing of forces, as well as the rapidly changing ground situation during the execution of a breakout, make close air support difficult.

6-70. Engineers with the rupture force focus on mobility operations. Engineers with the follow-and-assume force or the reserve improve routes as necessary. Engineers supporting flank security elements focus on conducting countermobility operations. The rear guard must also have enough engineers to conduct countermobility operations.

6-71. The commander prioritizes supporting air and missile defense assets to protect the rupture force, the rear guard, and the main body. This support may come from outside the encircled perimeter. The rear guard is second in priority of protection to help prevent it from being overrun by an enemy targeting the main body.

6-72. The commander can relieve sustainment shortfalls by using aerial resupply, ordering external forces to establish support areas, and by using captured supplies. All units and vehicles carry the maximum supplies possible, with emphasis on carrying petroleum, oils, and lubricants (POL) and ammunition. The encircled force only takes vehicles it can support. It may be possible for the higher headquarters of the encircled force to establish an intermediate staging base as the breakout attack moves toward a linkup.

EXFILTRATION

6-73. If the success of a breakout attack appears questionable, or if it fails and a relief operation is not planned, one way to preserve a portion of the force is through organized exfiltration. (Appendix B of FM 3-90-1 describes exfiltration as a tactical mission task.)

ATTACKING DEEPER INTO ENEMY TERRITORY

6-74. A COA that the enemy is not likely to expect from an encircled force is to attack deeper to seize key terrain. It involves great risk, but it may offer the only feasible COA under some circumstances. Attacking may allow the encircled unit to move to a location where it can be extracted by other ground, naval, or air forces. It is only feasible if a unit can sustain itself while isolated, although that sustainment can come from aerial resupply and enemy supply stocks.

6-75. When the enemy is attacking, an encircled friendly force that attacks deeper into the enemy rear may disrupt the enemy's offense and provide an opportunity for linkup from another direction. If the enemy is defending and the attacking force finds itself isolated through its own offensive action, it may continue the attack toward its assigned objective or a new objective located on more favorable defensive terrain.

LINKUP

6-76. A *linkup* is a meeting of friendly ground forces, which occurs in a variety of circumstances (ADRP 3-90). It happens when an advancing force reaches an objective area previously seized by an airborne or air assault, when an encircled element breaks out to rejoin friendly forces, or when a force comes to the relief of an encircled force, and when converging maneuver forces meet. 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.

6-77. 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.

LINKUP CONTROL MEASURES

6-78. The commander establishes minimum control measures for units conducting a linkup. The commander assigns each unit an AO defined by lateral boundaries and a RFL that also acts as a LOA. The commander establishes a no-fire area around one or both forces and establishes 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 RFL or a boundary and impact friendly forces. The coordinated fire line allows available joint fires to expeditiously attack enemy targets approaching the area where the linkup is to occur. The linkup forces use the linkup points established by the commander to initiate physical contact. The commander designates alternate linkup points, since enemy action may interfere with the primary linkup points. Such control measures are adjusted during the operation to provide for freedom of action as well as control of moving units and employment of fires.

LINKUP EXECUTION

6-79. There are two linkup methods. The preferred method is when the moving force has an assigned LOA near the other force and conducts the linkup at predetermined contact points. Units then coordinate further operations. The commander uses the other method during highly fluid mobile 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.

6-80. When one of the units involved is stationary, the commander usually locates the linkup points near the RFL or LOA. (See figure 6-10.) The linkup points are also located near the stationary force's security elements. Stationary forces assist in the linkup by opening lanes in minefields, breaching or removing selected obstacles, furnishing guides, and designating assembly areas. When a moving force is coming to relieve an encircled force, it brings additional sustainment assets to restore the encircled unit's combat effectiveness.

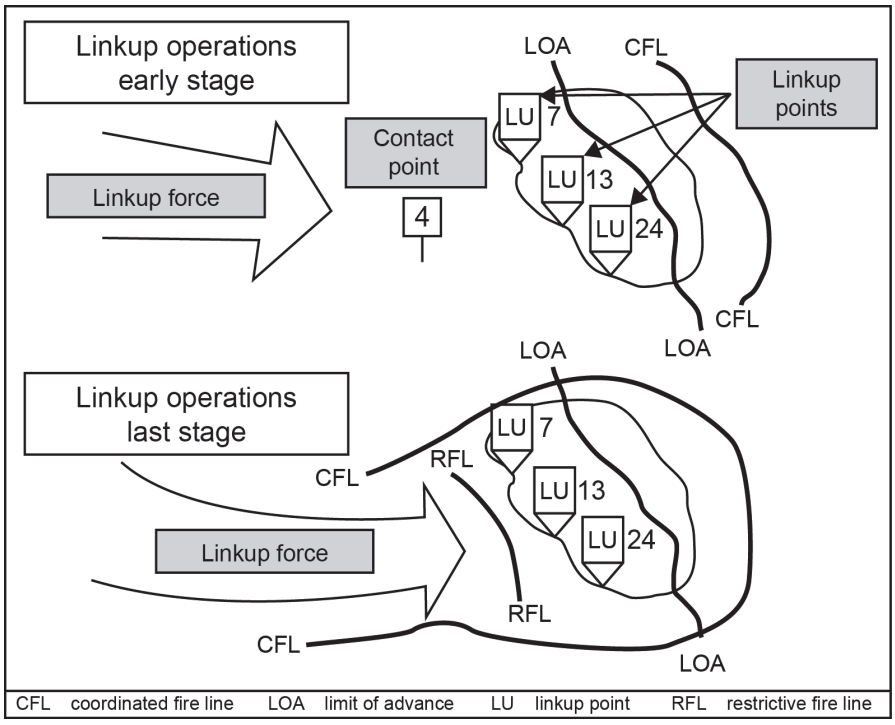

Figure 6-10. Linkup of a moving force and a stationary force

6-81. Linkup between moving units is one of the most difficult operations. The commander establishes a LOA to prevent friendly fire incidents. Primary and alternate linkup points are established for the moving forces near the LOA. Fire support considerations are similar to when a stationary and moving force linkup. Leading elements of each force exchange liaison teams and communicate on a common radio net. (See figure 6-11.)

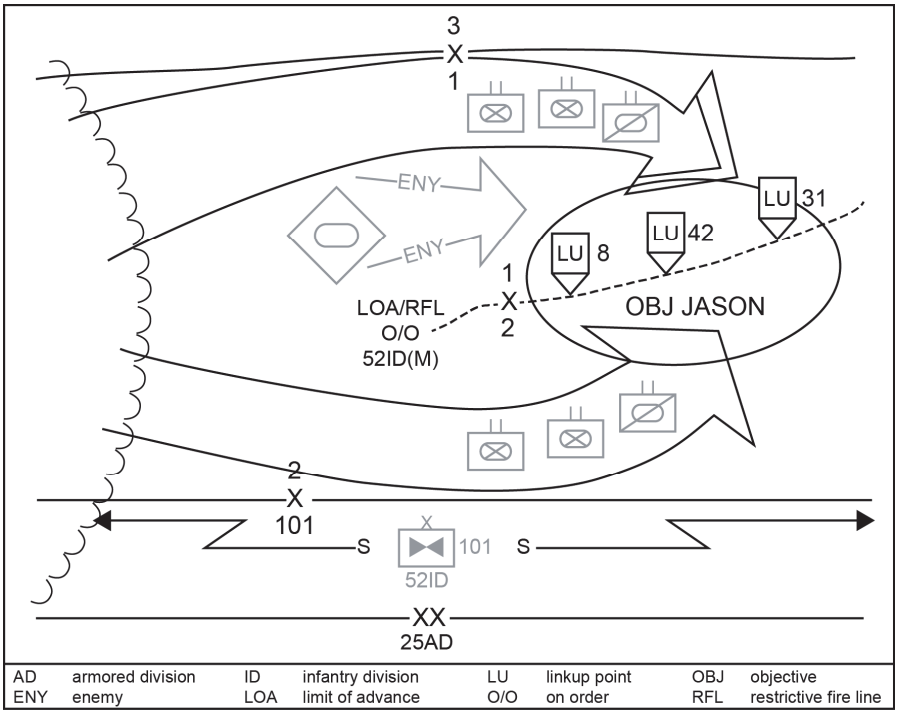

Figure 6-11. Linkup of two moving forces

6-82. The commander carefully coordinates linkup operations with forces of other nations. This is especially true if the two armies are not both members of an alliance with established internationally standardized procedures, or if the units involved have not previously established the necessary procedures.

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Glossary

The glossary lists acronyms and terms with Army, multi-Service, or joint definitions, and other selected terms. Where Army and joint definitions are different, *(Army)* follows the term. Terms for which FM 3-90 is the proponent publication (the authority) are marked with an asterisk (*). The proponent publication for other terms is listed in parentheses after the definition.

SECTION I – ACRONYMS AND ABBREVIATIONS

AA	assembly area
ADP	Army doctrine publication
ADRP	Army doctrine reference publication
AO	area of operations
ARFOR	Army forces
ATP	Army techniques publication
ATTP	Army tactics and techniques publication
BCT	brigade combat team
BFSB	battlefield surveillance brigade
BHL	battle handover line
BP	battle position
CAS	close air support
CBRN	chemical, biological radiological, and nuclear
CBRNE	chemical, biological, radiological, nuclear, and high-yield explosives
CCA	close combat attack
CCIR	commander's critical information requirement
CFL	coordinated fire line
CI	counterintelligence
COA	course of action
COLT	combat observation and lasing team
EW	electronic warfare
FEBA	forward edge of the battle area
FFA	free-fire area
FLOT	forward line of own troops
FM	field manual
G-2	assistant chief of staff, intelligence
G-3	assistant chief of staff, operations
G-4	assistant chief of staff, logistics
G-9	assistant chief of staff, civil affairs operations
GPS	global positioning system
HUMINT	human intelligence
IPB	intelligence preparation of the battlefield

JAAT	joint air attack team
JP	joint publication
JSTARS	Joint Surveillance Target Attack Radar System
LD	line of departure
LP	listening post
LOA	limit of advance
LOC	line of communication
MBA	main battle area
METL	mission-essential task list
METT-TC	mission, enemy, terrain and weather, troops and support available, time available, and civil considerations
MI	military intelligence
MISO	military information support operations
MSR	main supply route
MTOE	modified table of organization and equipment
NAI	named area of interest
OP	observation post
OPORD	operations order
OPSEC	operations security
PIR	priority information requirements
PL	phase line
POL	petroleum, oils, and lubricants
RFL	restrictive fire line
RIF	reconnaissance in force
RP	release point
S-2	intelligence staff officer
S-3	operations staff officer
S-4	logistics staff officer
S-9	civil-military operations officer
SOF	special operations forces
SOP	standard operating procedure
SP	start point
TAI	targeted area of interest
TCP	trafic control point
UAS	unmanned aircraft system
UGS	unattended ground sensors

SECTION II – TERMS

***administrative movement**

A movement in which troops and vehicles are arranged to expedite their movement and conserve time and energy when no enemy ground interference is anticipated.

***air movements**

(Army) Operations involving the use of utility and cargo rotary-wing assets for other than air assaults.

approach march

The advance of a combat unit when direct contact with the enemy is intended. (ADRP 3-90)

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)

***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.

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)

***combat outpost**

A reinforced observation post capable of conducting limited combat operations.

cover

(Army) 1. Protection from the effects of fires. (ADRP 1-02) 2. A security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. (ADRP 3-90)

***covering force**

(Army) A self-contained force capable of operating independently of the main body, unlike a screening or guard force to conduct the cover task.

***covering force area**

The area forward of the forward edge of the battle area out to the forward positions initially assigned to the covering force. It is here that the covering force executes assigned tasks.

***cueing**

The integration of one or more types of reconnaissance or surveillance systems to provide information that directs follow-on collecting of more detailed information by another system.

***dismounted march**

Movement of troops and equipment mainly by foot, with limited support by vehicles. Also called foot march.

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)

***fire strike**

The massed, synchronized, and nearly simultaneous delivery of primarily terminally guided indirect fire and area munitions.

forward passage of lines

Occurs when a unit passes through another unit's positions while moving toward the enemy. (ADRP 3-90)

gap

(Army) An area free of armed mines or obstacles whose width and direction allow a friendly force to pass through the area containing obstacles while dispersed in a tactical formation. (ADRP 1-02)

guard

(Army) A security task to protect the main body 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)

light line

A designated line forward of which vehicles are required to use blackout lights during periods of limited visibility. (ADRP 1-02)

linkup

A meeting of friendly ground forces, which occurs in a variety of circumstances. (ADRP 3-90)

local security

A security task that includes low-level security activities conducted near a unit to prevent surprise by the enemy. (ADRP 3-90)

***march column**

A march column consists of all elements using the same route for a single movement under control of a single commander.

***march serial**

A major subdivision of a march column that is organized under one commander who plans, regulates, and controls the serial.

***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.

***mixing**

Using two or more different assets to collect against the same intelligence requirement.

movement control

The planning, routing, scheduling, and control of personnel and cargo movements over lines of communications; includes maintaining in-transit visibility of forces and material through the deployment and/or redeployment process. (JP 4-01.5)

movement corridor

A designated area established to protect and enable ground movement along a route. (FM 3-90.31)

***mounted march**

The movement of troops and equipment by combat and tactical vehicles.

***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.

***passage lane**

A lane through an enemy or friendly obstacle that provides safe passage for a passing force.

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. A passage may be designated as a forward or rearward passage of lines. (JP 1-02)

***passage point**

A specifically designated place where the passing units pass through the stationary unit.

***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.

rearward passage of lines

Occurs when a unit passes through another unit's positions while moving away from the enemy. (ADRP 3-90)

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)

*** reconnaissance by fire**

A technique in which a unit fires on a suspected enemy position to cause the enemy forces to disclose their presence by movement or return fire.

reconnaissance in force

(Army) A deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information. (ADRP 3-90)

reconnaissance objective

A terrain feature, geographic area, enemy force, adversary, or other mission or operational variable, such as specific civil considerations, about which the commander wants to obtain additional information. (ADRP 3-90)

***reconnaissance-pull**

Reconnaissance that determines which routes are suitable for maneuver, where the enemy is strong and weak, and where gaps exist, thus pulling the main body toward and along the path of least resistance. This facilitates the commander's initiative and agility.

***reconnaissance-push**

Reconnaissance that refines the common operational picture, enabling the commander to finalize the plan and support shaping and decisive operations. It is normally used once the commander commits to a scheme of maneuver or course of action.

***redundancy**

Using two or more like assets to collect against the same intelligence requirement.

***release point**

A location on a route where marching elements are released from centralized control.

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 are transferred to the incoming unit. (JP 3-07.3)

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)

screen

A security task that primarily provides early warning to the protected force. (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)

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. (JP 3-05)

***start point**

A location on a route where the marching elements fall under the control of a designated march commander.

tactical road march

A rapid movement used to relocate units within an area of operations to prepare for combat operations. (ADRP 3-90)

***trail party**

The last march unit in a march column and normally consists of primarily maintenance elements in a mounted march.

***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 over-watches 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.

troop movement

The movement of troops from one place to another by any available means. (ADRP 3-90)

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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Index

Entries are by paragraph number

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22 March 2013

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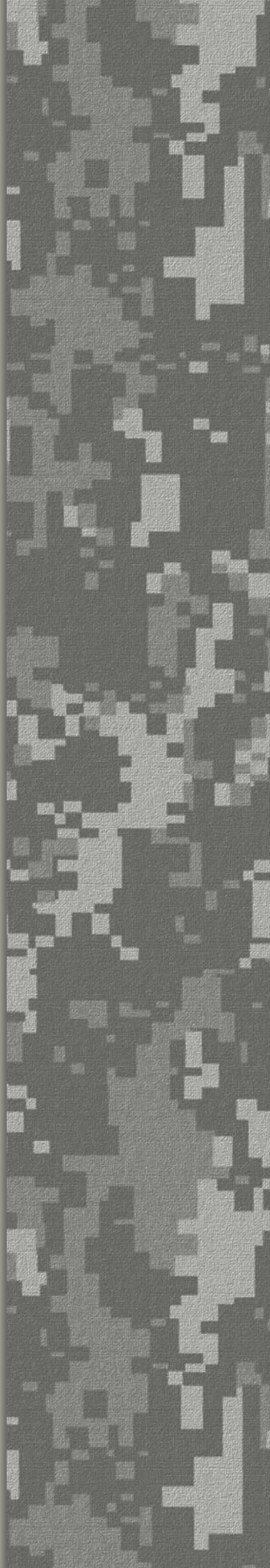

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