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SCOUT PLATOON

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SCOUT PLATOON

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Preface

ATP 3-20.98 provides framework and tactical employment principles and techniques for scout platoons of the Cavalry troops in the Armored brigade combat team; the Infantry brigade combat team, mounted and dismounted; the Stryker brigade combat team. ATP 3-20.98 also applies to the scout platoons of the combined arms battalion, the Infantry battalion, and the Stryker Infantry battalion.

The principal audiences for ATP 3-20.98 are platoon leaders, platoon sergeants, section sergeants, and squad leaders. It also applies to Cavalry troop and squadron commanders and staff and maneuver battalion commanders and staff responsible for the planning, execution, or support of reconnaissance and security operations as well as instructors charged with teaching reconnaissance and security operations.

Commanders, staffs, and subordinates ensure that their decisions and actions comply with applicable U.S., international, and in some cases host-nation laws and regulations. Commanders at all levels ensure that their Soldiers operate in accordance with the law of war and the rules of engagement. (See FM 6-27.)

ATP 3-20.98 uses joint terms where applicable. Selected joint and Army terms and definitions appear in both the glossary and the text. For definitions shown in the text, the term is italicized and the number of the proponent publication follows the definition. This publication is not the proponent for any Army terms.

ATP 3-20.98 applies to the Active Army, the Army National Guard/Army National Guard of the United States and the United States Army Reserve unless otherwise stated.

The proponent agency is the United States Army Training and Doctrine Command. The preparing agency is the United States Army Maneuver Center of Excellence. Send comments and recommendations on DA Form 2028, (*Recommended Changes to Publications and Blank Forms*) to Commander, Maneuver Center of Excellence, Directorate of Training and Doctrine, Doctrine and Collective Training Division, ATTN: ATZK-TDD, 1 Karker Street, Fort Benning, GA 31905-5410; by email to us.army.benning.mcoe.mbx.doctrine@mail.mil; or submit an electronic DA Form 2028.

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Introduction

To understand ATP 3-20.98, the reader should review FM 3-98 and the doctrinal principles outlined in FM 3-90-2, FM 3-55, ATP 3-20.96, and ATP 3-20.97. The reader should understand decisive action tasks, and the relation to the Army's military decision-making process, and troop leading procedures described in ADP 5-0 and FM 6-0. The reader also must understand the concepts associated with mission command as described in FM 6-0.

ATP 3-20.98 provides combined arms tactics that scout platoons use to conduct reconnaissance and security missions, which authoritative will require judgment in application.

The following summarizes each chapter of ATP 3-20.98:

- Chapter 1 discusses the role, operational environment and threat profiles that a scout platoon encounters while conducting missions. It describes leader's duties and responsibilities. The chapter also describes the organization, equipment, capabilities, and limitations found in each type of brigade combat team scout platoon.
- Chapter 2 discusses troop leading procedures, mission command principles and planning for the scout platoon.
- Chapter 3 discusses the fundamentals and basics of reconnaissance, forms of reconnaissance, passage of lines, and reconnaissance handover.
- Chapter 4 is an overview of security tasks. It discusses the fundamentals of security, the forms of security, and the considerations when conducting security tasks such as observation post planning, occupation, and engagement area development.
- Chapter 5 discusses the basic scout skills required to successfully conduct reconnaissance and security tasks during decisive action.
- Chapter 6 discusses the augmentation of combat forces that provide the scout platoon enablers, which enhance reconnaissance and security effectiveness.
- Chapter 7 discusses how the scout platoon plans and conducts sustainment. Chapter 7 also discusses the different types of logistics and the operations, maintenance, field services, and Army Health Support system available for the scout platoon.

The techniques and procedures discussed in this publication are specific examples of conducting a particular task. Collectively, they provide a set of tools that commanders use to employ tactical situations.

The existing rules of engagement and mission operational variables in a specific situation control the actual application of the techniques and procedures discussed in this publication.

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Chapter 1

Role of the Scout Platoon

The scout platoon's mission is to conduct reconnaissance and security operations to answer the commander's information requirements and provide early warning to the protected force. Specifically, it conducts tasks to satisfy the commander's critical information requirements (CCIRs) before the latest time the information is of value (LTIOV) expires. Commanders specifically assign the scout platoon missions for any given operation based on known and projected friendly operations, the range of threats, and their understanding of potential areas of operations (AO). Scouts then confirm or deny commanders' assumptions.

Scout platoons conduct reconnaissance and security missions in close contact with enemy organizations and civilian populations to allow maneuver commanders to seize, retain, and exploit the initiative and obtain a position of relative advantage.

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SECTION I – OVERVIEW

1-1. Scout platoons are the eyes and ears of the commander. They uniquely organize, train, and equip to conduct reconnaissance and security tasks. The role of the scout platoon is to conduct reconnaissance and security missions that satisfy information requirements to allow commanders to make decisions.

1-2. The execution of reconnaissance and security missions provides supported units information, time, and space to adjust to the changing situation, react to opportunities and danger, and enable commanders to transition to future operations. For example, scout platoons conducting reconnaissance allow commanders to transition from defense to offense. By establishing a screen, scout platoons provide the commander with early warning of enemy activities with enough time to react and space to maneuver their

forces. Scout platoons enable the commander to determine enemy intent, willingness to fight, and preserve freedom of maneuver.

1-3. Scout platoons are the primary reconnaissance asset in the Cavalry troop, and the organic reconnaissance unit available to Infantry and combined arms battalions. By providing timely and accurate information during reconnaissance and security missions, the commander can progressively build situational awareness of the operational environment. During security, the scout platoon provides commanders with reaction time and maneuver space and allows them to understand the situation more clearly. Collectively, scouts conducting reconnaissance and security missions aid the commander in decision making and directing follow-on or future operations.

1-4. Scout platoons execute missions with organic and external reconnaissance assets to identify and target enemy forces and capabilities, and provide maneuver space and reaction time for the protected force. When performing its fundamental role, the scout platoon makes the following contributions (not in order of priority)—

- Provide an effective all weather, reconnaissance capability.
- Maximize security by providing reaction time and maneuver space to preserve combat power through economy of force.
- Facilitate commander's situational awareness and understanding with timely and accurate reporting.
- Enable the operations and intelligence processes by satisfying information requirements.
- Facilitate commander's visualization of the operational environment that aids decision making to achieve or preserve the decisive operation.
- Assist in shaping the AO by providing information or directing fires to disrupt the threat.
- Facilitate tactical movement across the AO by conducting route reconnaissance.
- Detect threat cover and concealment, deception, and decoys.

1-5. The primary focus of the scout platoon is to answer supported CCIR. CCIR is an information requirement tied to a decision point and identified by the commander as being critical for facilitating timely decision making and successful execution of military operations priority intelligence requirements (PIRs). CCIR includes PIR and friendly force information requirements. PIR is an intelligence requirement, stated as a priority for reconnaissance and security tasks and intelligence collection that the commander needs to understand about a threat, enemy, or adversary or about the operational environment (for example, terrain or civil considerations) (JP 2-01). PIR identifies the information about the enemy and the operational environment that the commander considers most important. PIR, along with friendly forces information requirements, are the two essential elements of CCIR. Scout platoons conduct reconnaissance and security missions to answer PIR, which normally tie to either a named area of interest (NAI) or a target area of interest (TAI). See chapter 2 for further discussion on CCIR and decision point NAI linkage.

1-6. The scout platoon operates consistent with and guided by the fundamentals of reconnaissance and security during planning, preparation, and execution of its missions (see table 1). See chapters 3 and 4 of this publication for greater detail of these fundamentals.

Table 1-1. Reconnaissance/security fundamentals

Fundamentals of Reconnaissance	*Fundamentals of Security*
Ensure continuous reconnaissance.	Provide early and accurate warning.
Do not keep reconnaissance assets in reserve.	Provide reaction time and maneuver space.
Orient on the reconnaissance objective.	Orient on the force, area, or facility to be protected.
Report all information rapidly and accurately.	Perform continuous reconnaissance. Maintain enemy contact.
Retain freedom of maneuver.	
Gain and maintain enemy contact.	
Develop the situation rapidly.	

1-7. The scout platoon's five-core reconnaissance and security missions follow below. While not a core reconnaissance and security mission, local security is a priority task and responsibility of all Army units as a force protection measure.

- Zone reconnaissance.
- Area reconnaissance.
- Route reconnaissance.
- Screen.
- Area security.

1-8. The scout platoon operates in support of a larger force conducting a guard or cover, which may include offensive and defensive operations. The platoon may be directed to conduct screening or reconnaissance missions during the larger unit's guard or cover mission.

SCOUTS IN DECISIVE ACTION

1-9. *Unified action* is the synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort (JP 1). The Army's contribution to unified action is unified land operations. (See ADP 3-0 for more information.) The Army executes unified land operations through decisive action tasks. *Unified land operations* are the simultaneous execution of offense, defense, stability, and defense support of civil authorities across multiple domains to shape operational environments, prevent conflict, prevail in large-scale ground combat, and consolidate gains as part of unified action. (ADP 3-0). Scout platoons conduct reconnaissance and security to support their higher commanders during all decisive action tasks. Cavalry forces conduct reconnaissance to support higher commanders, especially when transitioning between decisive action tasks.

1-10. Both brigade combat team (BCT) and maneuver battalion commanders task scout platoons against their decisive point where scouts conduct zone, area, and route reconnaissance missions, to confirm or deny assumptions, or provide the commander more information on enemy, terrain, or civilian populations.

1-11. The commander provides guidance to the battalion/squadron or brigade operations staff officer (S-3) and battalion or brigade intelligence staff officer (S-2) to develop CCIR for their decision points. They task scout platoons to gather the required information as expressed as indicators to inform their actions. For example, a Stryker battalion commander may task their scout platoon to conduct an area reconnaissance mission for a suitable area to deploy their companies for an attack. An Infantry battalion commander might employ their scout platoon in a screen to their front during the defense to provide reaction time and maneuver space allowing a company to reposition based on reported approaching enemy formations.

VARIABLES OF THE OPERATIONAL ENVIRONMENT

1-12. The operational environment evolves as each operation progresses. The two types of variables are operational and mission. Army leaders use operational variables to analyze and understand a specific operational environment and use mission variables to focus on specific elements during mission analysis (see ADP 3-0 for more information). The operational variables are political, military, economic, social, information, infrastructure, physical environment, and time. (Refer to ADP 5-0 for more information.)

1-13. The second type of variable is mission variables, which describes characteristics of the AO focusing on how they affect a mission. The mission variables are mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC). (Refer to ADP 5-0 for more information.)

SECTION II – THREAT

1-14. A *threat* is any combination of actors, entities, or forces that have the capability and intent to harm U.S. forces, U.S. national interests, or the homeland (ADP 3-0). Threats may include individuals, groups of individuals, paramilitary or military forces, nation-states, or national alliances. In general, threats are an enemy or an adversary:

- An *enemy* is a party identified as hostile against which the use of force is authorized (ADP 3-0).
- An enemy is also called a combatant and is treated as such under the law of war.
- An *adversary* is a party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged (JP 3-0).

REGULAR AND IRREGULAR THREAT DESCRIPTION

1-15. Regular. These include peer and near-peer threats that train, equip, and organize to conduct combined arms maneuver. They employ modern and modernized weapons systems capable of defeating or competing with like U.S. systems.

1-16. Irregular. These include insurgent, guerilla, terrorist, paramilitary, and criminal organizations. These threats attempt to win by exhausting U.S. national will by inflicting long-term expenditure of American lives and treasure. (See FM 3-24 for more information.) A hybrid threat employs a combination of regular and irregular forces. See TC 7-100 series and supporting products for more information on hybrid warfare, threat equipment, and potential future operating environments.

THREAT IMPACT ON SCOUTS

1-17. Scout platoons face an elusive, diverse, flexible, and adaptive enemy. The enemy is capable of combining a wide array of lethal and nonlethal weapons, including modern peer, near-peer, hybrid threats, and improvised systems, presenting a complex enemy situation for friendly reconnaissance and security forces. Scouts may face combined arms organizations that outnumber the scout platoon and overmatch the weapons of friendly scout platoons and sections. The enemy uses traditional, unconventional, and hybrid tactics to present numerous challenges for friendly forces by combining electronic warfare (EW) and cyber weapons with the following capabilities—

- Infantry.
- Armed vehicle equipped insurgents, either individually or in groups.
- Mechanized forces.
- Antiarmor systems.
- Indirect fires.
- Unmanned aircraft systems (individual and massed).
- Cyber/EW attacks.

1-18. During reconnaissance missions, the enemy seeks to disrupt, deter, defeat, or destroy information-collection effort. The enemy may employ stationary observation posts integrated with insurgents operating individually or in teams among the population. They may also use unmanned aircraft system (UAS) to identify and target friendly reconnaissance units or to pass information to highly mobile, counterreconnaissance forces. Conventional and unconventional counterreconnaissance forces conduct complex ambushes to defeat or destroy scout platoons to prevent collection and reporting of information.

1-19. During security missions, the enemy will attempt infiltration through the security force with the intent to identify friendly strengths, weaknesses, key command communications elements, or influence the protected population. The enemy endeavors to identify and target key communication nodes or critical capabilities that disrupt our ability to maintain security and limit our freedom of maneuver. They will continue to employ EW to affect positioning, navigation, and timing. Simultaneously, the enemy may employ insurgents or criminal elements within the population to collect

information. They then transmit the information through messengers using inconspicuous visual signals (tire fires, animal flock movements, flags, flyers, and posters), and various electronic means. Insurgents employ terrorist tactics to disrupt and create fear amongst the populace to distract friendly security forces and limit our ability to collect information. Insurgent forces may target patrols, observation posts, and logistics package (LOGPAC) with improvised explosive devices (IEDs) and ambushes.

1-20. The enemy may also utilize subterranean passages, avenues of approach, and hideouts to evade friendly forces or conduct sudden attacks from unexpected directions. Enemy EW efforts may include spoofing or jamming to disrupt positioning, navigation, and timing to deny effective communications and precise targeting. The enemy will link its activities with information operations to influence the local and international audience and gain support.

SECTION III – KEY PERSONNEL

1-21. Every scout in the platoon needs required information to accomplish the mission. Providing a clear task, purpose, and commander's intent coupled with reconnaissance and security guidance to all echelons allows scout platoons to exercise disciplined initiative and complete the mission successfully, regardless of setbacks or losses.

1-22. Duties and responsibilities as outlined below are a guideline for all scout platoons. Task organization (known as TASKORG) or absence of personnel may warrant other members of the scout platoon performing additional duties outside their traditional scope. All scouts must be proficient in their responsibilities, which are listed below, and of the next higher position to accomplish the mission successfully.

COMMON RESPONSIBILITIES

1-23. All leaders assume the duties of the next higher leader in their absence and take initiative to accomplish the mission in the absence of orders. They are responsible for what their echelon does or fails to do, and employs their echelon as directed by the scout platoon leader. They position themselves where they can influence the most critical tasks of the mission.

1-24. During planning all leaders adhere to timelines using backwards planning from LTIOV and understand commander's intent and that of the commander two levels up. They assist the platoon leader in planning direct/indirect fire control measures and also understand key tasks and information collection requirements and employ their echelon to accomplish them. The following common responsibilities apply to all scout platoon leadership regardless of position:

- Supervise or assist in selection, construction, and occupation of observation posts and firing positions.
- Ensure participation in and execution of mission critical rehearsals.
- Understand the capabilities and limitations of available personnel and equipment in and attached to the platoon.
- Use standardized report formats to keep the platoon leader informed.

- Employ indirect fires and Army attack helicopters.
- Control fires and establishes fire control measures.
- Perform precombat checks and inspections (PCC/PCI).
- Issue a five-point contingency plan when they leave the vehicle.

DUTIES AND RESPONSIBILITIES

1-25. The following duties apply to all scout platoon formations. The next higher leader is responsible to ensure subordinates successfully execute their duties.

PLATOON LEADER

1-26. The scout platoon leader develops trust and understanding with the commander and subordinates. The entire platoon must execute disciplined initiative consistent with the commander's reconnaissance and security guidance and train subordinates to do the same.

1-27. The platoon leader is responsible for what the platoon does or fails to do, including tactical employment, training, administration, personnel management, and logistics. Successful platoon leaders handle this responsibility by planning, making timely decisions, issuing orders, assigning tasks, and supervising platoon activities.

1-28. Scout platoon leaders fully understand the capabilities and limitations of personnel and equipment in and attached to their platoon. They develop and adhere to timelines using backwards planning from LTIOV, and understand the commanders intent and that of the commander two levels up, allowing them to exercise disciplined initiative to accomplish the mission in the absence of orders. Platoon leaders ensure key tasks and information requirements are understood by all subordinates. They backbrief the commander on their plan to accomplish the mission and allot time for section leaders to plan their section's scheme of maneuver. They evaluate enemy threat at the platoon level and template threats down to the team, and continually plan and reassess one phase ahead during execution. They plan communications to enable early and accurate warning through timely and accurate reporting, maneuver their elements, and employ fires and other enablers.

1-29. During planning, platoon leaders use parallel planning to issue operation orders (OPORD), fragmentary orders (FRAGORD), and warning orders (WARNORD). The platoon leader works with the troop fires support officer and develops a scheme of fires overlay. They assign subordinates as observers, develop a scheme of air overlay, and provide clear guidance to the UAS and Army attack aviation assets.

1-30. The platoon leader directs and assists the platoon sergeant (known as PSG) in planning and executing sustainment. They conduct planning with the help of the leaders and attachments within the platoon and develop redundant (digital and analog) graphic control measures for distribution. Platoon leaders conduct troop leading procedures (TLP) and identify the need for enablers and assets, synchronize them, and request them in a timely manner. They coordinate with adjacent units and understand that unit's

mission. Prior to execution, they perform PCI according to their platoon standard operating procedures (SOPs).

1-31. During execution, scout platoon leaders position themselves where they can influence the most critical tasks of the mission while controlling fires and establishing fire control measures. They use standardized report formats to keep the commander informed and maneuver sections by providing guidance to the section leader to accomplish the mission. Additionally, they collect section range cards and prepare a platoon sector sketch. They direct the development and refinement of the platoon's pre-execution tasks, and make adjustments when required.

PLATOON SERGEANT

1-32. The PSG is the senior noncommissioned officer (NCO) in the platoon and second in succession of command. The senior most experienced scout in the platoon and the only NCO that assumes a leadership role from a commissioned officer, the PSG provides expertise, helps, and advises the platoon leader. They lead the platoon in the platoon leader's absence, and supervise the platoons' administration, logistics, and maintenance. The PSG assists the platoon leader with the development of paragraph four of the OPORD. PSGs understand the commander's intent and that of the commander two levels up.

1-33. The PSGs primary focus is directing all resupply and maintenance activities. The PSG receives requests from the section leader for rations, water, ammunition, and replacement equipment, and conducts coordination directly with the troop first sergeant (1SG), or executive officer (XO) using standardized report formats for all classes of supply. They develop the scheme of support overlay and distribute it across the platoon.

1-34. The PSG supervises and directs the platoon medic, combat lifesaver (CLS) personnel, and aid and litter teams. They develop and supervise the platoon's casualty collection plan and all medical evacuation (MEDEVAC) and casualty evacuation (CASEVAC) plans.

1-35. Additionally, the PSG maintains platoon status of personnel, weapons, and equipment and submits standardized reports to the commander or 1SG. They ensure that ammunition, supplies, and loads are evenly distributed.

1-36. They monitor the morale, discipline, and health of the platoon and ensure that the platoon adheres to the platoon leader's timeline. The PSG enforces compliance with platoon and troop SOPs.

1-37. The PSG conducts PCC and is responsible for the security plan during all operations. They confirm and recommend locations of the casualty collection point (CCP), ambulance exchange point, logistic release point (known as LRP), and maintenance collection point (known as MCP), and template them on the scheme of support overlay. The PSG delegates responsibility to section leader to confirm or deny suitability of all CCPs/ambulance exchange points/LRPs/MCPs) templated on the scheme of support overlay. The PSG enforces net discipline amongst the platoon, and distributes priorities of work during all phases of operations.

SECTION LEADER

1-38. The term section leader is used to denote which squad leader (known as SQDLDR) is in charge of a specific TASKORG. The section leader is responsible for the tactical employment and combat readiness of their section, including the health, welfare, and training of Soldiers, and maintenance of weapons and equipment of their squad. They help the platoon leader plan the scheme of maneuver and make relevant recommendations during planning and execution.

1-39. The section leader maintains section status of personnel, weapons, and equipment and submits standardized reports to the platoon leader or PSG. They ensure that ammunition, supplies, and loads are evenly distributed in the section. Section leaders direct the maintenance of the section's weapons and equipment and perform PCC.

1-40. The section leaders delegate tasks to squad and team leaders, and supervises there accomplishment. While maneuvering their section during execution, within the platoon leader's guidance, the section leader will refine the plan to meet the needs of a changing operational environment.

1-41. Additionally, the section leader assists the platoon leader in planning direct and indirect fire control measures and employs indirect fires and Army aviation assets. They understand key tasks and information collection requirements and employ their section to accomplish them. They prepare a section sector sketch and develop a route reconnaissance overlay in support of route reconnaissance missions.

SQUAD LEADER

1-42. The SQDLDR is responsible for the combat readiness and tactical employment of their squad and scout vehicle. They supervise the health, welfare, and training of Soldiers, and maintenance of the vehicle, equipment, and weapons.

1-43. The SQDLDRs maintain the squads' status of personnel, weapons, and equipment, and submit standardized reports to the section leader. They ensure that ammunition, supplies, and loads are evenly distributed, and direct the maintenance of the squads' weapons and equipment. Additionally, they employ indirect fires and aviation assets.

1-44. The SQDLDRs help the section leader plan the scheme of maneuver. They delegate tasks to team leaders (known as TLs) and subordinates, and supervise their accomplishment. SQDLDRs follow the platoon leader's plan and make recommendations, understand key tasks and information collection requirements and employ their squad to accomplish them. They plan for aspects of long duration observation posts, dismounted reconnaissance and security patrols, and prepare a range card, DA Form 5517 (*Standard Range Card*).

TEAM LEADER

1-45. The TLs assist SQDLDRs by providing direct oversight and supervision of their scouts. TLs are the first link in the chain of command and are responsible for the combat

readiness and tactical employment of their team, the health, welfare, and training of Soldiers, and the maintenance of equipment and weapons.

1-46. TLs interpret commander's intent and reconnaissance and security guidance into directed actions for Soldiers. TLs inform the squad leader of preparation status by personally checking on: scout's readiness of equipment such as vehicle fluid levels, filled canteens, and packed rucksacks according to the tactical SOP. Additionally, the TL verifies sensitive items and ammunition status, checking weapons and ammunition, and prepares their team for PCC and PCI.

1-47. TLs delegate tasks to subordinates, and supervise the subordinate actions. They inform and provide recommendations to the SQDLDR. They employ indirect fires and aviation assets. They prepare to establish OPs and lead patrols. TLs establish communications security, fill loads into radios, and other equipment. They prepare a range card, for the squad/section leader.

GUNNER

1-48. The gunner is responsible for the combat readiness and tactical employment of their weapon system, and vehicle mounted communications systems. Additionally, the gunner maneuvers the vehicle, as directed, in the absence of the vehicle commander.

1-49. The gunner performs the maintenance, assembly, disassembly, and operator checks of the weapon system. During an engagement the gunner will detect, identify, engage, and assess enemy targets as directed by the vehicle commander. They recognize firing angle limitations and direct the driver to reposition the vehicle to eliminate them. The gunner coordinates sector responsibilities over voice communications systems with other vehicle gunners throughout the platoon during missions.

1-50. Gunners prepare a range card and assume control of the vehicle in the absence of the vehicle commander. They assist in navigating and maneuvering the vehicle. They employ their vehicle/weapon system/optics to accomplish the tasks and requirements, delegate tasks to the driver, and supervise their accomplishment.

DRIVER

1-51. The driver is responsible for the combat readiness and tactical employment of their vehicle. The driver tactically maneuvers the vehicle as directed by the vehicle commander.

1-52. Drivers perform the preventive maintenance and operator checks of the vehicle and equipment. They maintain vehicle status of personnel, weapons, equipment, and petroleum, oils, and lubricants, and submit reports to the gunner.

1-53. The driver recognizes firing angle limitations and repositions the vehicle to eliminate them. They assume control of the vehicle in the absence of the crew and assist in navigating and maneuvering the vehicle. The driver is always looking for the next covered and concealed position during maneuvering and communicates it to the vehicle commander.

1-54. They assist the gunner in maintaining and employing all communication systems mounted in the vehicle. They perform PCC ensuring that ammunition, supplies, and loads are evenly distributed and secured in the vehicle.

1-55. They receive a five-point contingency plan when personnel leave the vehicle. They observe their sector of responsibility, camouflage the vehicle, and provide local security when needed. Drivers help detect, identify, and assess enemy targets. They maintain and improve on all scout skills.

SCOUT

1-56. Scouts understand how to stealthily navigate through terrain to close in and report on enemy units. They move to positions of advantage, establish well-camouflaged and emplaced observation posts, and send accurate and timely reports to their higher element. Scouts use their sensors and systems to identify and observe NAIs for the commander. They are experts with their analog and digital reporting systems, and they apply these systems to report as much detailed and pertinent information as possible to inform higher commanders.

1-57. Scouts assume duties of the team leader in their absence. They are experts with their rifle, its optics, and its laser-aiming device, and are effective with their weapon system both day and night. They are capable of engaging all targets with well-aimed shots. They employ all weapons of the squad and are proficient in their individual and assigned tasks. Scouts know the duties of their teammates and prepare to execute their mission, as needed.

1-58. Scouts understand their requirements as a member of a special team (detainee search, aid/litter, site exploitation, CLS, demolitions, and wire/mine breach teams). They manage their food, water, and ammunition during missions, and maintain proper vehicle, individual, and equipment camouflage during all operations. They provide local security, perform the maintenance and operator checks of their equipment, and accomplish all assigned tasks.

1-59. Scouts make relevant recommendations to the team leader, and understand the capabilities and limitations of personnel and equipment, in and attached, to their platoon. They observe their sector of responsibility, and employ all scout skills to accomplish the mission. They are proficient in use of indirect fires. They understand how to collect information on routes and in areas as directed by the team leader. Scouts understand the fundamentals of reconnaissance and security and collect and provide information to assist leaders.

SPECIAL WEAPONS

1-60. Scouts carrying special weapons; grenade launcher, machine guns, Javelin, or Stinger have the same duties as the scout with the addition of the following: engages targets with appropriate type of rounds, both day and night and understands the capabilities and limitations of equipment employment. They perform the maintenance and operator checks on their equipment.

1-61. The scout grenadier can identify 40-mm (millimeter) rounds by shape and color, and know how to employ each type of round. They know each rounds minimum safety constraints and the maximum ranges for each type of target. The grenadier is familiar with the leaf sight increments without reading the markings. Additionally, they know how to make an adjustment from the first round fired to obtain a second-round impact. The grenadier is proficient in quick reloading, firing in all positions, and accurate when firing on the move.

1-62. The machine gunner accurately engages groups of enemy personnel, thin-skinned vehicles, bunker doors or apertures, and suspected enemy locations with automatic fire. They provide suppressive fire on selected targets to enable the supported unit to maintain freedom of maneuver.

1-63. Machine gunners must engage targets from the prone, kneeling, and standing positions, with and without night observation devices. They are responsible for their assistant gunner and all the gun equipment, and knowing the ballistic effects of the weapon on all types of targets.

1-64. The javelin gunner engages targets both day and night, knows how to employ the javelin, its minimum safety constraints, and knows the maximum effective range of the javelin. Javelin gunners understand the capabilities and limitations of equipment employment considerations. They perform the maintenance and operator checks on missiles and on the command launch unit and maintain batteries for the command launch unit. They operate and troubleshoot the command launch unit without the use of a flashlight.

1-65. The Stinger gunner defends the scout platoon from air threats. A second person helps carry the equipment. They engage targets both day and night and know how to employ the Stinger and its minimum safety constraints, while also understanding the maximum effective range of the Stinger.

RADIO TELEPHONE OPERATOR

1-66. The scout acting as radio telephone operator (known as RTO) is there to maintain communications with higher, adjacent units, and attachments. The RTO maintains communications at all prescribed times and takes actions necessary to regain communications, sends and receives all reports using standardized formats, and is an expert at employing field expedient antennas.

1-67. The RTO maintains a copy of the signal operating instructions and assists the platoon leader with information management. They manage battery usage and signal output during operations in accordance with communication windows and SOPs.

1-68. The RTO maintains communications equipment and employs the assigned crypto key filling device. They perform the maintenance and operator checks on their assigned communications equipment. RTOs understand the capabilities and limitations of equipment employment considerations consistent with displaced and dispersed locations. They understand actions taken when they encounter a meaconing, intrusion, jamming and interference threat.

COMBAT MEDIC

1-69. Combat medics reside in the medical platoon and support the Cavalry squadron. Combat medics attach to Cavalry troops with one combat medic per scout platoon and one senior combat medic per troop. The combat medic makes their assessment, administers initial medical care, initiates a DD Form 1380 (*Tactical Combat Casualty Care [TCCC] Card*), then requests evacuation or returns the scout to duty. The combat medic also assists in the training of the platoon's CLSs in enhanced first-aid procedures, and requisitions class VIII supplies from the squadron aid station (known as SAS).

FORWARD OBSERVER (TROOP LEVEL)

1-70. The forward observer (FO), along with their RTO, is the scout platoon's subject matter expert on indirect fire planning and execution. They advise the scout platoon leadership on the employment and execution for all fire support assets, including troop mortars, field artillery, and other allocated fire support assets. They are responsible for locating targets, and calling and adjusting indirect fires. The fire support team also knows the mission and concept of operation, specifically the scout platoon's scheme of maneuver, and concept of fires and is the scout platoon leader's indirect fire expert.

MORTARS (TROOP LEVEL)

1-71. Circumstances may warrant dismounted mortar teams be attached to the scout platoon. Soldiers of the platoon may have to carry ammunition for the mortars during movements. Planning for additional weight and making load adjustments for the Soldiers facilitate mission accomplishment.

1-72. They must understand the platoon's scheme of maneuver and know their current location while maintaining communication with the fire direction center (FDC). They assist the platoon leader in planning for use of indirect fires and assist with planning and selection of the mortar firing point. Additionally, they plot fires and determine firing data.

HABITUAL ENABLERS

1-73. Scout platoons may receive additional attachments to those listed here. See chapter 6 for an expanded and more detailed discussion of possible attachments to the scout platoon. In general, scout platoons should understand the following information from attachments:

- What is their mission?
- What capabilities do they bring to the fight?
- What are their limitations?
- Who has control of them?
- How do they move and maneuver?
- Who has responsibility for their sustainment?
- What are their communication capabilities (radio frequencies, call signs)?

- How long will they remain and where do they go once their mission is complete?
- How do you locate them for a face-to-face link up?

SECTION IV – ORGANIZATIONS

1-74. Below are the current capabilities and limitations common to each of the BCT scout platoons. Also provided below are descriptions for the organization, equipment, capabilities, and limitations that are specific for each of the scout platoons.

COMMON SCOUT PLATOON CAPABILITIES AND LIMITATIONS

1-75. The following general capabilities and limitations apply to all types of scout platoons. Specific platoon capabilities center on the formation types discussed below.

1-76. Each scout platoon can conduct simultaneous reconnaissance of one area per scout section. The size of each area depends on factors such as the available road network, terrain features, anticipated enemy activity, reconnaissance tasks to perform, availability of UAS and Army aviation to support, and the time available. Each platoon can conduct a detailed zone reconnaissance at a rate dependent on METT-TC and number of tasks associated with the mission. All scout platoons can reconnoiter two routes in a permissive no-threat environment, one route in a low-threat environment, and one route as a subordinate element conducting reconnaissance as a troop in a medium to high-threat environment.

1-77. Scout platoons provide all weather, accurate, and timely reconnaissance and security in nonrestrictive, restrictive, and urban terrain using surveillance systems, and mounted and dismounted scouts.

1-78. Scout platoons employ integrated sensors and systems to defeat enemy deception, decoys, and cover and concealment that would otherwise remain undetected.

1-79. Each scout platoon can also—

- Operate in three scout sections or two scout sections to respond to changes in the mission variables of METT-TC.
- Conduct mounted and dismounted reconnaissance or security concurrently at the platoon, section, and squad level.
- Conduct three dismounted patrols concurrently.
- Operate three mounted and three dismounted observation posts for more than 12 hours.
- Operate six mounted and six dismounted observation posts for up to 12 hours.
- Communicate with and report information by voice and data over distances normally associated with beyond line-of-sight communications.
- Observe, detect, identify, and classify enemy elements during the conduct of reconnaissance and security tasks.

- Operate in close proximity to the enemy and among civilian populations.
- Defeat, destroy, or impede enemy reconnaissance elements within capabilities.
- Integrate attachments to identify enemy signatures and enable multidomain reconnaissance and security.
- Move at speeds equal to or faster than the supported unit.
- Lead and train squads, teams, and crews with NCOs.

SCOUT SQUAD

1-80. The purpose of the scout squad is to conduct reconnaissance and security missions, provide local security, establish observation posts, and clear intervisibility (known as IV) lines for their section and platoon. A scout squad enables depth through the combination of mounted and dismounted scouts. The vehicle crew (vehicle commander, driver, and gunner) perform the primary vehicle duties, including crew gunnery qualification. The squad possesses a dismounted capability that task organizes based on mission requirements. Therefore, all scouts must be proficient on maintaining their vehicle, their mounted weapon systems, and the M320 grenade launcher, the Javelin Missile System, and the M240B machine gun. Cross-training mounted and dismounted tasks across the squad increases the squad's flexibility and ability to sustain reconnaissance and security mission requirements.

1-81. The composition of the scout squads differ across the formations of the Armored brigade combat team (ABCT), Stryker brigade combat team (SBCT), Infantry brigade combat team (IBCT), combined arms battalions and Infantry battalion. The composition of the scout squads are listed in paragraphs 1-83 to 1-86.

1-82. The ABCT and SBCT Cavalry troops have six scout squads within each scout platoon. Each squad consists of six personnel and one reconnaissance vehicle (Bradley or Stryker).

1-83. The ABCT combined arms battalion has six scout squads within the scout platoon. Three of the squads consist of six personnel and a Bradley and three squads consist of four personnel and a high mobility multipurpose wheeled vehicle (HMMWV) or Joint Light Tactical Vehicle.

1-84. The IBCT Cavalry squadron has six scout squads within each scout platoon of the mounted troops. Each squad consists of four personnel and a reconnaissance vehicle (HMMWV). The IBCT Cavalry squadron dismounted troop has three scout squads within each scout platoon and each squad consists of eight personnel.

1-85. The IBCT Infantry battalion scout platoon has three scout squads within each scout platoon. Each squad consists of six personnel and two vehicles (HMMWVs or Joint Light Tactical Vehicles).

SCOUT SECTION

1-86. Regardless of scout platoon formation, platoons may task organize as two or three section concepts. Characteristics shared by all scout sections are in the following paragraphs.

1-87. Each scout platoon consists of two or three scout sections. Each section includes two or three scout squads. The scout platoon leader and PSG designate the section leader to lead the Alpha and Bravo sections. The headquarters section includes the platoon leader and the PSG, depending on how the platoon task organizes.

1-88. In some cases, the platoon may fight as a single entity, which is most common when the platoon supports a higher-level security mission such as a guard. When a section employs its dismounted teams as a squad-sized dismounted element, a squad leader usually dismount to lead the teams.

1-89. The platoon leader or PSG may dismount to perform specific leader tasks. In such a case, a team leader assumes responsibility for the vehicle to provide leadership to the mounted team.

1-90. The platoon leader or PSG may operate together within a command section or separately. METT-TC variables may require them to operate with other sections to ensure effective mission command.

1-91. The scout section requires its two scout vehicles and their mounted teams to conduct coordinated tactical movements. Mounted scout squads must have the capability to operate and move their vehicles, command their vehicles, or lead the movement of the section's vehicles. The mounted teams require the ability to secure themselves and their vehicles at the short halt while maintaining the ability to move immediately.

1-92. Scout sections must operate their primary weapons and optics concurrently, and remain on the platoon's communications and mission command systems. Mounted teams require sufficient personnel to minimally operate their vehicle while one Soldier from the vehicle dismounts to provide local security. In the case of a scout section equipped with Bradleys' or Stryker Infantry carrier vehicles the gunners may dismount to provide local security while the vehicle commander and driver remain to control weapons, optics, communications, and the vehicle itself. In the case of Stryker reconnaissance vehicles or up-armored light wheeled platform variants with two crew positions on the vehicle, the third Soldier in the mounted team, not part of the dismounting scout teams, fulfills the local security requirement at the short halt.

1-93. The scout section security missions are normally screening missions. When screening, the section must have enough personnel to monitor communications, use the vehicle's primary optic and primary weapon, and move the vehicle. Other Soldiers in the section maintain the dismounted observation post, provide local security, and conduct periodic patrols. Additionally during long duration missions, over 12 hours, the section executes squad- and team-size dismounted patrols. When the section employs a six Soldier dismounted patrol, the two mounted three-Soldier teams assume local security and mounted observation post duties.

TWO SECTION

1-94. Use the two-section organization when there is a requirement for increased security, when two elements can efficiently cover a sector, or when the threat situation is unknown. The two-section organization allows for maximum dismounts and is best suitable for area reconnaissance missions.

1-95. Advantages to a two-section organization are—

- Easier to gain fire superiority.
- Effective if there are only two high-speed avenues of approach to observe.
- Simplified command and control, senior leader (platoon leader or PSG) in each section.
- Easier to effectively mass personnel.
- Simplified mission command.
- Easier CASEVAC.

1-96. The disadvantages to a two-section organization are—

- Harder to disperse forces over a wider area.
- Higher chance of compromise due to massing of sound and visual signature.
- Harder to conduct simultaneous reconnaissance on more than two NAIs.

THREE SECTION

1-97. Use the three-section organization when there is a requirement to cover a wider area or there are multiple avenues of approach and area of interests within the platoon's zone or screen. The three-section organization provides added depth to the platoon's screen.

1-98. Advantages of a three-section organization are—

- Easier to disperse forces over a wider area.
- Easier to conduct simultaneous reconnaissance of more than two NAIs.
- Lesser chance of compromise because forces are spread out.
- Easier to form a headquarters section with platoon leader and PSG in same section.

1-99. The disadvantages to a three-section organization are—

- Harder to gain fire superiority.
- Harder to mass personnel.
- Harder to conduct CASEVAC with dispersed distance.
- Harder to ensure senior leaders are in proper position to best influence to mission.

ABCT CAVALRY SQUADRON SCOUT PLATOON

1-100. The sound signature of the Bradley will be the most difficult factor to overcome. Leaders should allot additional time for dismounts to leave the vehicle at greater

distances from the NAI to maintain stealth. Each platoon has one platoon leader, one PSG, and four squad leaders. As described above, for tactical employment, all leaders employ their sections using the wingman concept. The ABCT Cavalry squadron scout platoon has the following common equipment in each platoon:

- Six M2A3 Bradley fighting vehicles.
- M240L 7.62-mm machine gun.
- Javelin command launch unit.

1-101. The ABCT Cavalry squadron scout platoon capabilities include:

- Provide all weather, continuous, accurate, and timely reconnaissance and security in nonrestrictive terrain.
- Survivability and fight for information against appropriate threat.
- The M2A3 Bradley fighting vehicle armed with a 25-mm cannon, 7.62-mm coaxial machine gun, and tube launched, optically tracked, wire guided (TOW) missile system, provides firepower.

1-102. The ABCT Cavalry squadron scout platoon limitations include:

- Limited maneuverability in urban environments and other types of complex terrain.
- The K-series modified table of organization and equipment also lacks the Long-Range Advance Scout Surveillance System (known as LRAS3) optic system for long-range target acquisition and surveillance and only has one fire support sensor system variant if attached a fire support team.

1-103. The platoon's vehicles create sustainment consideration for resupply, refueling, and maintenance despite the ABCTs enhanced sustainment capability.

1-104. The following is a possible TASKORG for ABCT scout platoons that have 6 vehicles and 36 personnel. (See figure 1-1.)

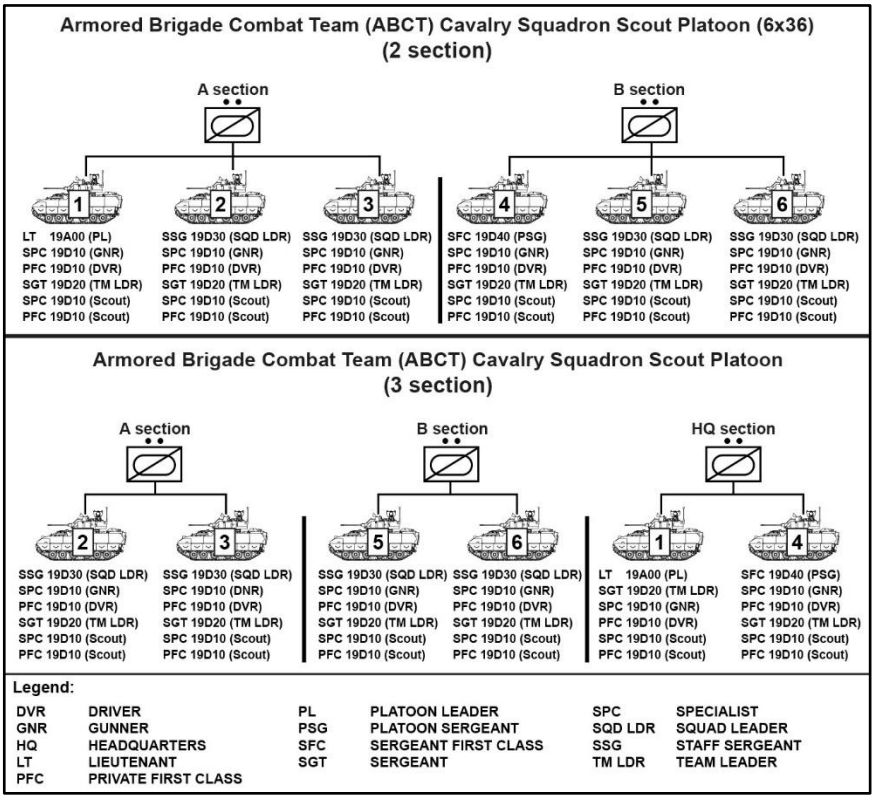


Figure 1-1. ABCT Cavalry squadron scout platoon

ABCT COMBINED ARMS BATTALION SCOUT PLATOON

1-105. With eight vehicles, it is possible to have four, two vehicle sections. Four sections may be beneficial in some security postures, or if senior leaders need to be able to move to multiple sections to best influence the mission. Additionally, the platoon can task organize to have a section leader in a Bradley or a HMMWV. The advantage to the section leader in a HMMWV is a lower signature so they can operate forward, locate an enemy, and conduct a target handover to their wingman. The ABCT combined arms battalion scout platoon has the following common equipment:

- Three M2A3 Bradley vehicles.
- Five up-armored, HMMWVs.
- AN/TAS-8 LRAS3.
- Javelin command launch unit.
- MK19 40-mm machine gun grenade.

- .50 caliber heavy machine gun.
- M240L 7.62-mm machine gun.

1-106. In addition to the capabilities and limitations discussed above in the ABCT Cavalry squadron scout platoon, the ABCT combined arms battalion scout platoon up-armored light-wheeled platforms provide greater stealth capabilities and limited protection and mobility.

1-107. The following is a technique for scout platoons that have 3 Bradley fighting vehicles, 5 light-wheeled platforms, and 36 personnel. (See figure 1-2.)

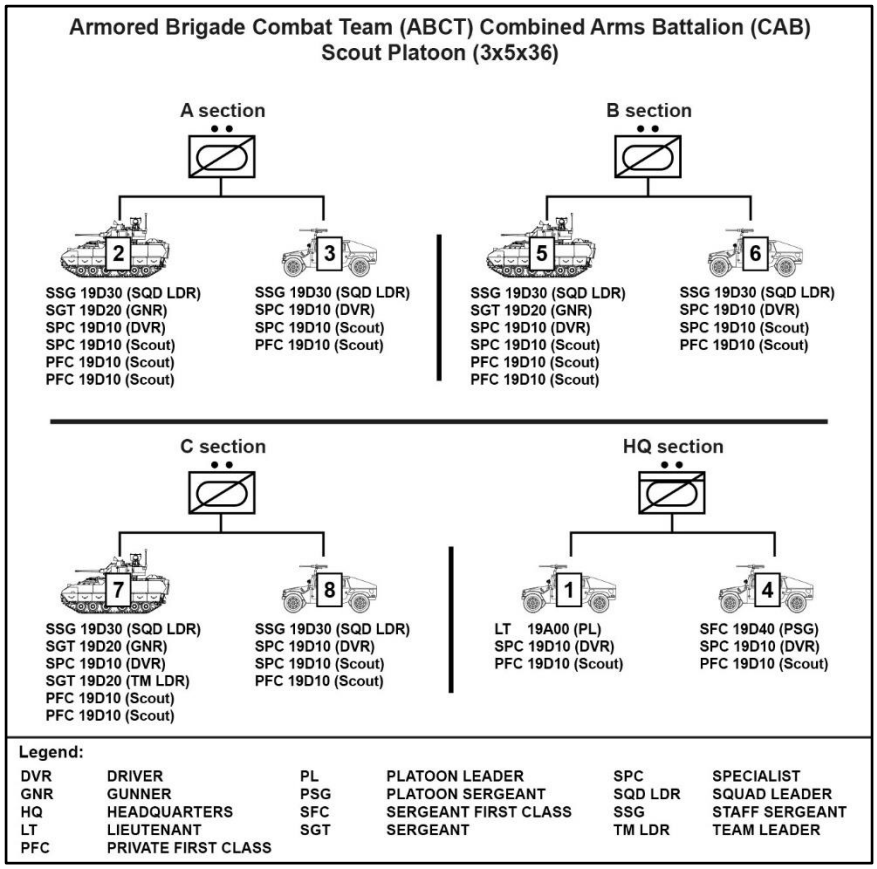


Figure 1-2. ABCT combined arms battalion scout platoon

SBCT SCOUT PLATOONS

1-108. The SBCT Cavalry squadron and Stryker Infantry battalion scout platoon has one platoon leader, one PSG, and four squad leaders. As described above, for tactical employment, all leaders employ as sections using the wingman concept. The SBCT scout platoon has the following equipment in each platoon:

- Six Stryker vehicles.
- AN/TAS-8 LRAS3.
- Javelin command launch units.
- MK19 40-mm machine gun grenade.
- .50 caliber heavy machine gun.
- M240L 7.62-mm machine gun.

1-109. The SBCT Cavalry squadron scout platoon capabilities include—

- Provide all weather, continuous, accurate, and timely reconnaissance and security in nonrestrictive terrain.
- Provide reconnaissance and security for SBCT operations.
- Maximizing the teaming of ground scouts to conduct close reconnaissance of enemy forces.
- Fighting for information against light and motorized forces.

1-110. The SBCT Cavalry squadron scout platoon has limitations in its ability to maneuver in complex terrain during inclement weather conditions.

1-111. The following is possible TASKORG for SBCT Cavalry squadron scout platoons that have 6 vehicles and 36 personnel. Including the Stryker maneuver battalion scout platoons. (See figure 1-3, page 1-22.)

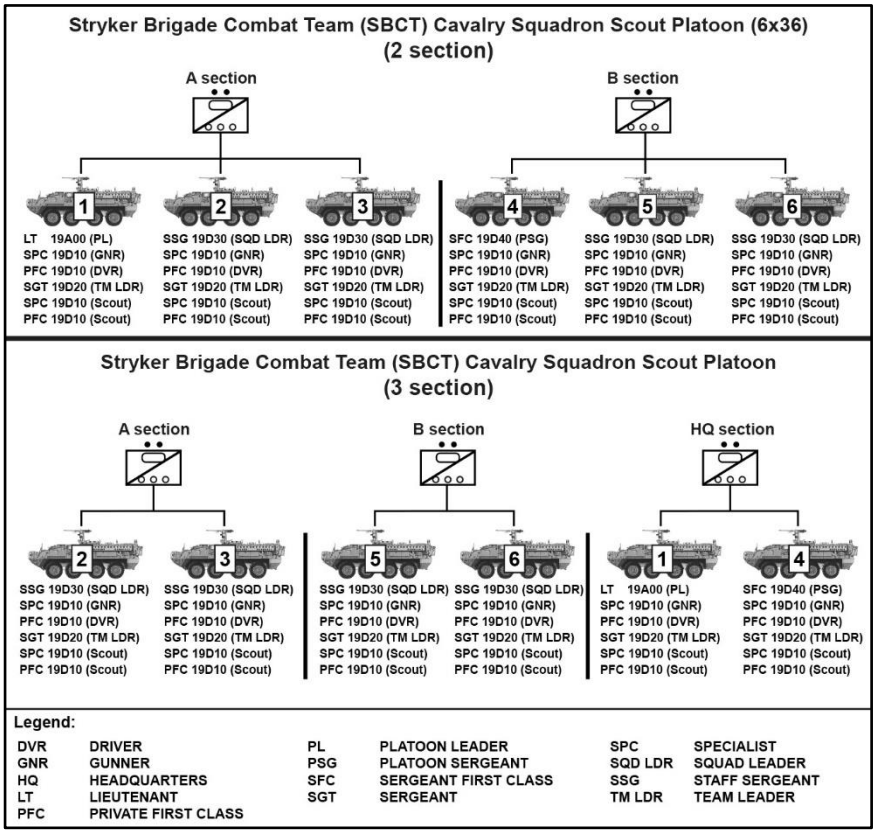


Figure 1-3. SBCT scout platoon

IBCT SCOUT PLATOONS

1-112. There are two types of scout platoons in the IBCT, platoons with vehicles for each section and a dismounted platoon. The paragraphs below discuss both types of scout platoons in the IBCT Cavalry troops.

IBCT CAVALRY SQUADRON MOUNTED TROOP SCOUT PLATOON

1-113. The mounted IBCT scout platoon has one platoon leader, one PSG, and four squad leaders. As described above, for tactical employment, all leaders employ as sections using the wingman concept. The IBCT mounted scout platoon has the following equipment in each platoon:

- Six up-armored, HMMWVs.
- AN/TAS-8 LRAS3.

- Javelin command launch units.
- MK19 40-mm machine gun grenade.
- .50 caliber heavy machine gun.
- M240L 7.62-mm machine gun.
- M41 TOW improvised target acquisition system.

1-114. The IBCT mounted scout platoon has the following capabilities:

- Provides reconnaissance and security for IBCT operations.
- Possesses two mounted TOW systems.
- Possesses greater firepower, mobility, and protection than IBCT units.
- Fights for information against appropriate threat.

1-115. The IBCT mounted scout platoon has the following limitations:

- The up-armored HMMWV provides limited protection.
- The up-armored HMMWV's added weight limits mobility, especially in complex terrain.
- The mounted scout platoon has limited dismounts.

1-116. The following is possible TASKORG for the mounted scout platoons that have 6 vehicles and 24 personnel. (See figure 1-4, on page 1-24.)

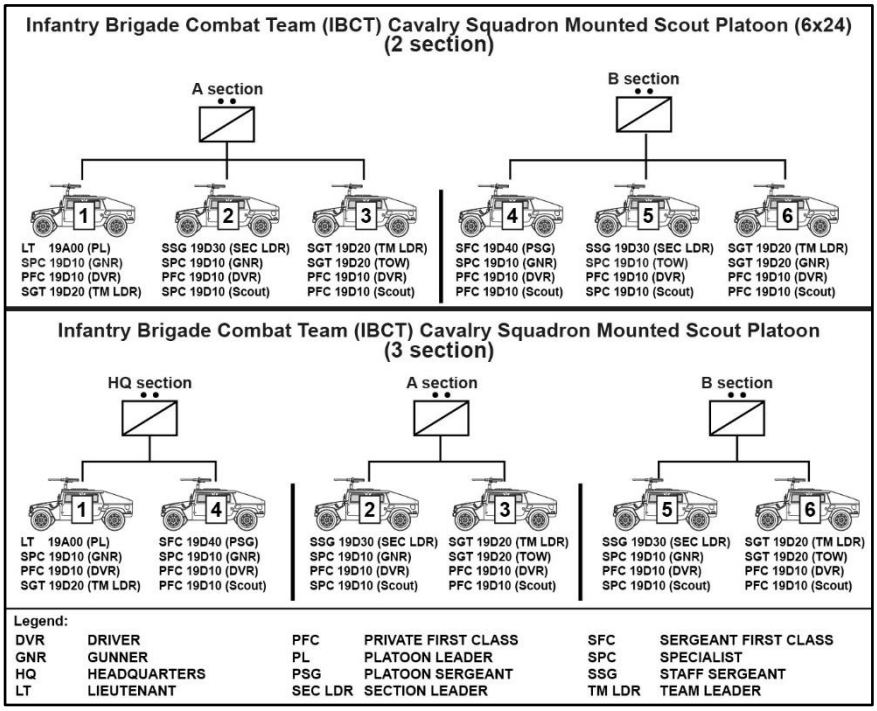


Figure 1-4. IBCT Cavalry squadron mounted scout platoon

IBCT CAVALRY SQUADRON DISMOUNTED TROOP SCOUT PLATOON

1-117. The dismounted scout platoon is especially suited for conducting stealthy reconnaissance. In any instance, the scheme of support will be the biggest hindrance on successful mission accomplishment. Resupply of the dismounted troop may require mounted troops or external assets to assist. 11B Infantry Soldiers compose the IBCT dismounted troop scout platoon. They provide the dedicated dismounted capabilities of reconnaissance and security missions for IBCT operations.

1-118. The IBCT dismounted scout platoon has the following capabilities:

- Operate centralized or decentralized as three independent squads.
- Conduct stealthy reconnaissance and security tasks.
- Provide all weather, continuous, accurate, and timely reconnaissance and security in complex, close, restrictive, and urban terrain.
- Conduct ground, water, and air insertion.
- Conduct multiple reconnaissance and security tasks (area, zone, route reconnaissance) in complex terrain.

1-119. The IBCT dismounted scout platoon has the following limitations:

- Limited mounted capability, requiring augmentation of mobility platforms for rapid movement.
- Depends on the use of stealth, cover, concealment, and their dismounted patrolling skills to remain undetected.
- Limited direct-fire standoff, lethality, and survivability.
- Requires additional planning and employment time to reduce risk due to limited protection.
- Equipment and supplies limited to only what the platoon can man-pack or cache dismounted.
- Has digital tactical internet systems only in vehicles.

1-120. Figure 1-5, page 1-26, illustrates a possible TASKORG for scout platoons that have 1 vehicle and 28 personnel.

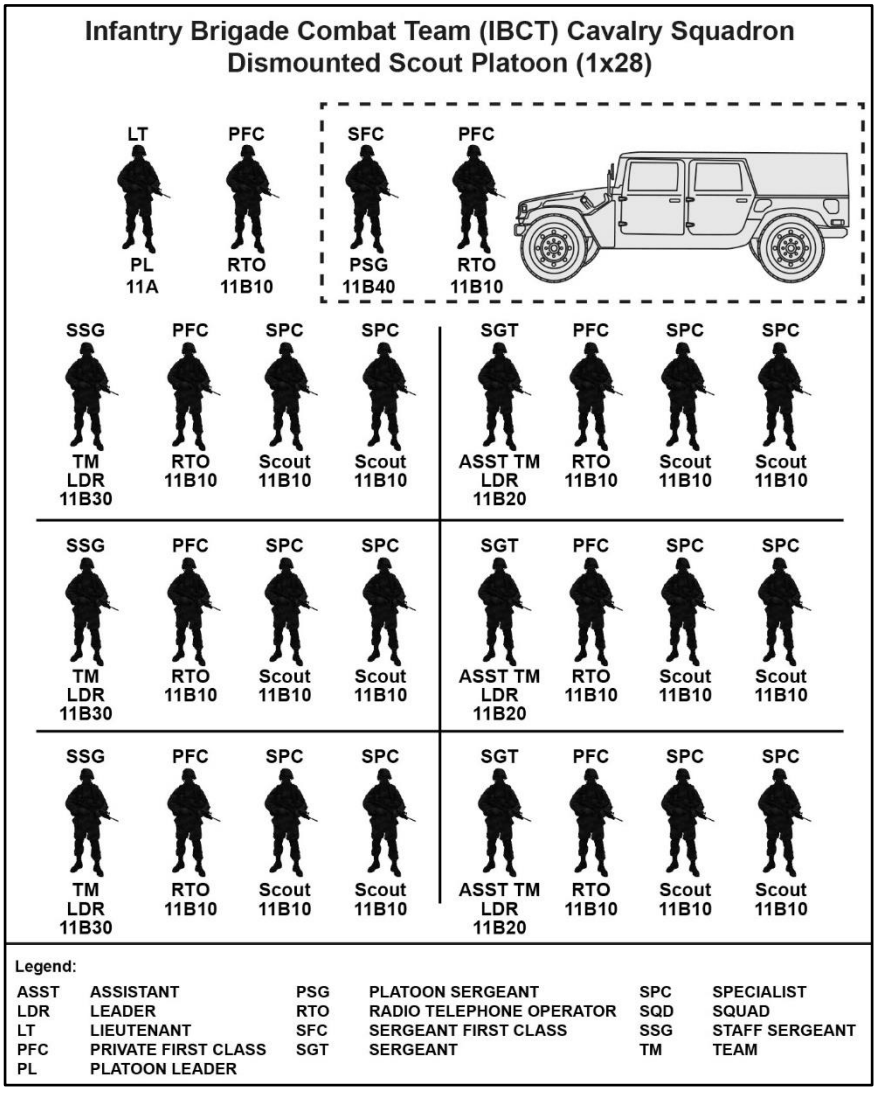


Figure 1-5. IBCT Cavalry squadron dismounted scout platoon

INFANTRY BATTALION SCOUT PLATOON

1-121. The Infantry battalion scout platoon serves as the forward reconnaissance and security element for the battalion commander. The primary mission of the scout platoon is to conduct reconnaissance and security to answer CCIR, normally defined within the battalion's information collection plan. The platoon conducts route, zone, and area reconnaissance tasks. The platoon can also conduct limited screening missions and can

participate as part of a larger force in guard tasks. The platoon has one officer and 21 enlisted personnel. The PSG assists and advises the platoon leader, and leads the platoon in the platoon leader's absence.

1-122. The scout platoon organizes into a platoon headquarters and three squads of six men each. Each SQDLDR is responsible for controlling their squad's movement and information requirements. They report information collected that answers PIRs to the scout platoon leader or battalion command post.

1-123. In either offensive or defensive operations, the commander may deploy scout platoons to conduct screening operations of the battalion's front, flank, or rear. The scout platoon may also occupy outposts from which it can relay critical information to the battalion command post concerning enemy composition, disposition, and activities.

1-124. The Infantry battalion scout platoon has the following capabilities:

- Provides all weather, continuous, accurate, and timely reconnaissance and security in complex terrain.
- Conducts stealthy reconnaissance and security tasks.
- Assesses situations rapidly and directs combat power, reconnaissance, and security capabilities to support answering CCIRs.
- Employs integrated and synchronized reconnaissance to detect threat deception, decoys, and cover and concealment.
- Conducts insertion by ground, water, and air.

1-125. The Infantry battalion scout platoon has the following limitations:

- Limited dismounted capability if operating all eight of the platoon's vehicles.
- Limited direct-fire standoff, lethality, and survivability.
- Dismounted tasks associated with zone, area, and route reconnaissance.
- Limited organic sustainment assets.

1-126. Figure 1-6, page 1-28, illustrates a possible TASKORG for IBCT Infantry battalion scout platoons that have 8 vehicles and 21 personnel.

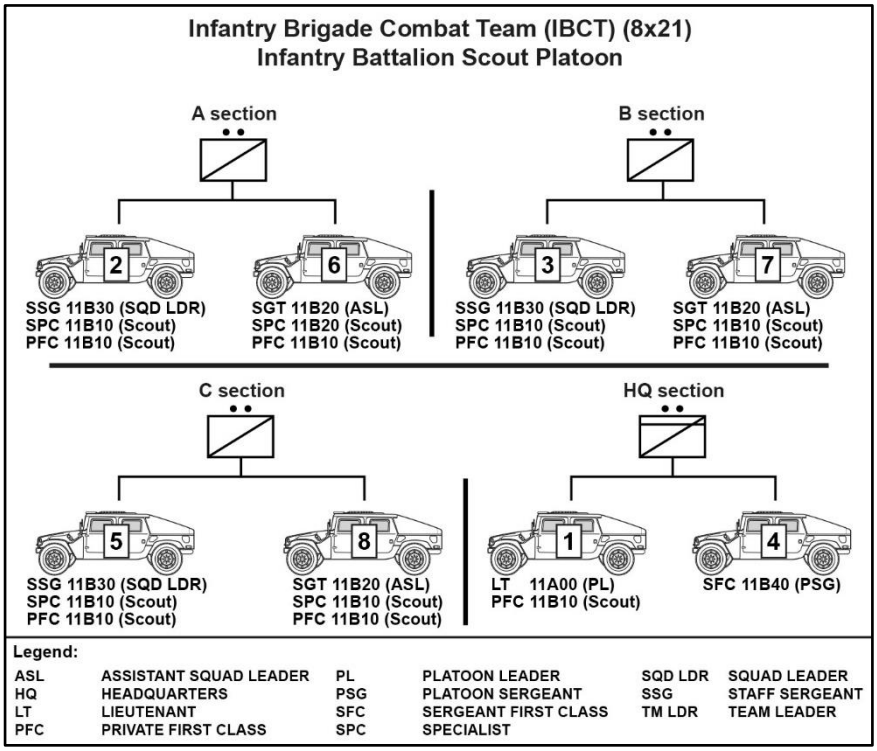


Figure 1-6. IBCT Infantry battalion scout platoon

Chapter 2

Command and Control

Command and control is the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission (JP 1). Command and control is fundamental to the art and science of warfare.

Scout platoons apply command and control to develop the situation in close contact with the enemy and civilian populations. The application of TLP ensure clear and concise mission orders to enable the exercise of disciplined initiative by subordinate elements in execution. Effective command and control during reconnaissance and security missions is essential to make effective decisions in an uncertain environment.

BCT commanders require timely and accurate information from scout platoons. The scout platoon is the most reliable all weather, continuous organization BCT or battalion/squadron commanders have to answer information requirements.

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SECTION I – PLATOON MISSION COMMAND

2-1. *Mission command* is the Army's approach to command and control that empowers subordinate decision making and decentralized execution appropriate to the situation (ADP 6-0).

MISSION COMMAND PRINCIPLES

2-2. Scout platoon leaders lead consistent with mission command—

- Competence.

- Trust.
- Shared understanding.
- Commander's intent.
- Mission orders.
- Initiative.
- Risk acceptance.

2-3. Tactically and technically competent commanders, subordinates, and teams are the basis of effective mission command. Leaders within the scout platoon must be technically competent at their jobs and those of their subordinates.

2-4. The scout platoons complex mission requirements require increased emphasis on teamwork, which may require a longer and more deliberate team-building process than other organizations. There needs to be mutual trust from the lowest ranked scout throughout the platoon. Scouts often operate with limited communications and minimal guidance stretched over remote distances during which scouts must develop certainty from uncertain situations; developing information on enemy, terrain, and civilian populations. The scout platoon mission requires commanders and platoon leaders to develop trust to operate effectively. They develop this trust during after action reviews and counseling sessions. Leaders need to sit with subordinates and highlight expectations. Developing trust is consistent with candor. Leaders develop candor in subordinates by listening and understanding subordinate point of views Subordinates must speak out if they see a better solution or violation of doctrine or safety. If a leader chooses a different approach or course of action (COA) subordinates feel all the facts were present in decision making and trust leaders to execute successfully.

2-5. The platoon requires shared understanding of the mission, intent, and commander's reconnaissance and security guidance to accomplish the mission. Understanding the mission two levels up and the mission of the supported unit allows subordinates to focus on mission accomplishment without being dwelling on unnecessary detail.

2-6. At the platoon level, it is essential for leaders to understand that troop commander's focus their orders on the commander's intent, purpose of the operation, and commander's reconnaissance and security guidance, offering platoon leaders both freedom of action as well as direction to allow subordinates to execute and accomplish stated objectives.

2-7. The scout platoon leader, assisted by the PSG, uses TLP and mission orders to prepare for missions, issue orders, and employ the platoon. Command and control allows the scout platoon leader to emphasize timely decision making and clearly identify the tasks for subordinates to execute to achieve the desired end state.

2-8. Scouts exercise initiative based on the commander's intent and reconnaissance and security guidance to make informed decisions on possible courses of action. As conditions change, they apply their understanding of that guidance to execute disciplined initiative to meet commander's desired end state.

2-9. By understanding their own and subordinate capabilities and competence, coupled with trust and understanding throughout the scout platoon, leaders can focus on the commander's intent. They conduct TLP and rapidly produce mission orders that allow their subordinate's initiative in providing clarity through reconnaissance and security missions for supported commanders. They rely on all of the above listed elements to accept risk in the unclear environment in which they operate.

IMPORTANCE OF COMMANDER'S INTENT

2-10. It is critical that the platoon leader and subordinate elements clearly understand and execute missions within their commander's intent. Commander's intent describes what constitutes success for the reconnaissance and security operation including the operation's purpose, key tasks, and the conditions that define the end state. It describes the "what" for the scout platoon leader, allowing them to achieve desired results without further orders. Commander's intent must be simple, concise, and easily understood two echelons lower in the chain of command to enable Soldier's abilities to act quickly and decisively in fluid and chaotic situations.

2-11. Maneuver battalion scout platoons may not receive commander's reconnaissance and security guidance as described in Cavalry doctrine. They often have to refine commander's intent into guidance for their subordinates to achieve success. The components of commander's intent are expanded purpose, key tasks, and end state.

COMMANDER'S RECONNAISSANCE AND SECURITY GUIDANCE

2-12. Commander's reconnaissance and security guidance is an essential component of reconnaissance and security operations. Commanders must provide subordinate leaders with clear guidance to operate with disciplined initiative on the battlefield that ultimately achieves the higher commander's intent (see FM 3-98 for more information.). Critical to the platoon leader's ability to execute the mission is a clear understanding of the commander's reconnaissance or security guidance, which is:

- Focus.
- Tempo.
- Engagement/disengagement criteria.
- Displacement criteria for the mission.

COMMANDER'S CRITICAL INFORMATION REQUIREMENTS

2-13. The commander provides guidance and focus by defining operational priorities and establishing decision points and CCIRs (ADP 2-0). A *commander's critical information requirement* is an information requirement identified by the commander as being critical to facilitating timely decision making (JP 3-0). Commanders limit the number of CCIRs to focus efforts for their elements conducting reconnaissance and security as well as facilitate timely and accurate reporting. The two key elements are

PIRs and friendly forces information requirements. (Refer to JP 3-0 and ADP 5-0 for more information.) (See figure 2-1.)

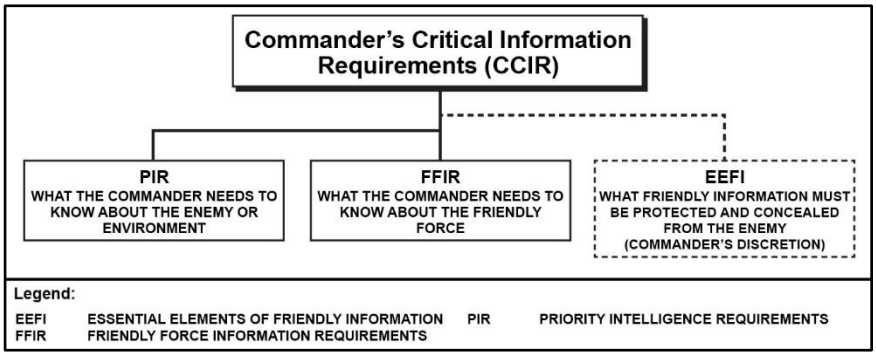


Figure 2-1. CCIR and essential elements of friendly information

2-14. A CCIR directly influences decision making and usually tie directly to decision points. A CCIR is—

- Specified by a commander for a specific operation.
- Applicable only to the commander who specifies it (or their subordinates executing reconnaissance and security tasks in support of the commander).
- Situation dependent – directly linked to a current mission or decision that will create a new mission, branch, or sequel to the current or future mission.
- Time-sensitive and therefore usually assigned a LTIOV.

2-15. *Priority intelligence requirement* is an intelligence requirement that the commander and staff need to understand the threat or other aspects of the operational environment (JP 2-01). PIR identifies the information about the enemy and the operational environment that the commander considers most important. PIR becomes the central focus for scout platoons conducting reconnaissance and security for a commander.

2-16. The primary role of a scout platoon during reconnaissance is to collect information, which enables the BCT or battalion commander and staff to analyze the information that answer PIR.

2-17. PIR exist at echelon (division, brigade, battalion/squadron, and troop) to enable timely decision making for the commander who requires the information about the operational environment or enemy to make a decision. Scout platoons should not develop their own PIR. Troop commanders develop limited, if any PIR, which must link to decisions they expect to make. Instead, a scout platoon collects on an indicator or specific information requirement that links through the information collection plan to the PIR and decision point for the commander who assigned the PIR or can make the decision linked to it.

2-18. Friendly force information requirement. A *friendly force information requirement* is information the commander and staff need to understand the status of

friendly force and supporting capabilities (JP 3-0.). Friendly force information requirements identify the information about mission, troops, and support available as well as time available for friendly forces that the commander considers most important. (See figure 2-1 on page 2-4.)

2-19. Essential elements of friendly information (EEFI). Commanders describe information they want to protect as essential elements of friendly information. An *essential element of friendly information* is a critical aspect of a friendly operation that, if known by a threat would subsequently compromise, lead to failure, or limit success of the operation and therefore should be protected from enemy detection (ADP 6-0). Although EEFIs are not CCIRs, they have the same priority. EEFIs establish elements of information to protect rather than ones to seek or collect. EEFI identification is central to prioritizing units, information, or activities focusing security tasks.

INFORMATION COLLECTION

2-20. In most cases where commanders execute decision point tactics, staffs and subordinate units will break a commander's PIR into manageable pieces of quantifiable information. (See figure 2-2, page 2-6.) The breakdown and organization of these information requirements is a logical process that results in the information collection plan.

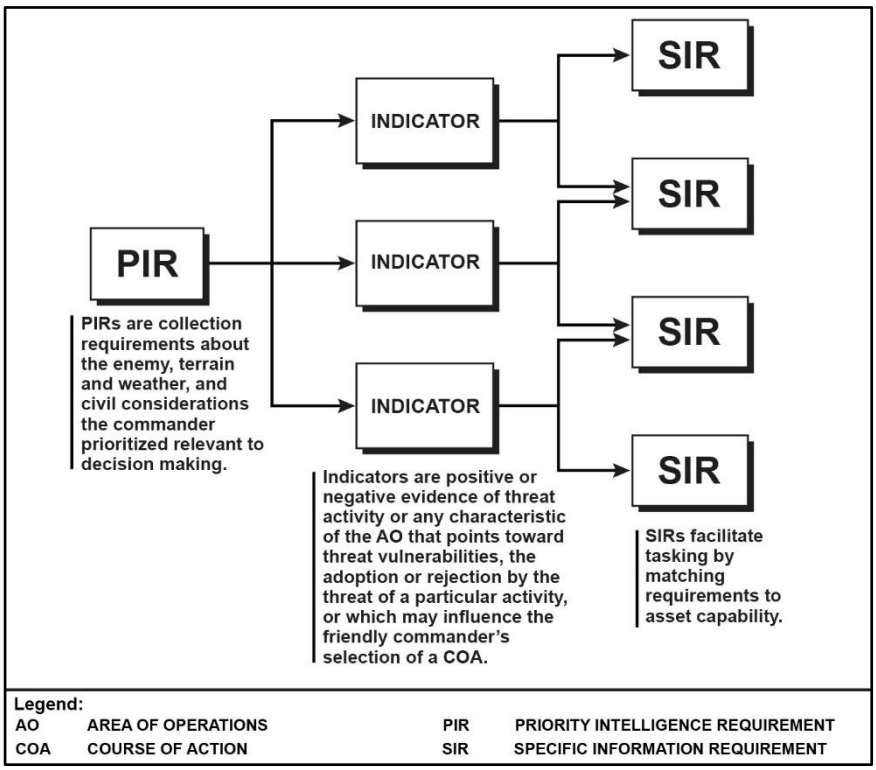


Figure 2-2. Priority intelligence requirement breakdown

2-21. To this end, products of the intelligence preparation of the battlefield/battlespace (IPB) (such as the enemy situational template, the event template, and the higher commanders' CCIR) are critically important to assisting the BCT in anticipating events and adapting to changing situations. Scout platoons are by extension the eyes and ears of the commander whom they enable. The squadron's primary purpose is to collect information, to answer PIR which enables the BCT commander and staff to analyze information that answer PIR for the brigade commander and the battalion scout's primary purpose is to collect information that answers PIR for the battalion commander while providing reaction time allowing commanders to make decisions.

2-22. PIRs break down into indicators, which are positive or negative evidence of threat activity or any characteristic of the AO that points toward threat vulnerabilities, the adoption or rejection by the threat of a particular activity, or which may influence the friendly commander's selection of a COA.

2-23. After developing PIRs into indicators, the staff and troop commanders will then develop specific information requirements (SIR) associated with each indicator to facilitate tasking by matching requirements to asset capability. SIR also provide specific information about specific threat activity (or lack thereof) at specific locations. Cavalry

units should have access to all information requirements at the lowest level to enable them to timely and accurately report thus helping develop the commander's situational understanding and facilitate timely decisions.

2-24. The following is an example of BCT information collection plan development. The BCT commander wants to know "when will enemy artillery be in range of our main body?" The PIR will drive the decision to transition phases of the operation. The BCT staff will conduct an analysis of likely firing positions given the terrain, subsequent PIR, indicators, and SIR for their respective AO resulting in the following PIR breakdown that clearly links back to the BCT commander's decision point and enables clear understanding for the execution level to understand the purpose of the information they are collecting as well as facilitate tasking by echelon:

- BCT Decision: Transition Phase of the operation.
- BCT PIR 1: When will enemy artillery be in range of our main body?
- Indicator 1.1: Is enemy reconnaissance present in the vicinity of NAI 3?
- Indicator 1.2: Is there enemy movement south of Phase Line Gowins?
- Indicator 1.3: Do the bridges at grid A and grid B support tracked vehicles?

2-25. The squadron refines the information collection plan from the BCT in support of BCT commander's PIR and decision by conducting an analysis of likely firing positions given the terrain. They develop additional indicators and SIR, a staff process that involves matching an indicator with the appropriate intelligence collection asset, for the AO based on the squadron's IPB:

- BCT Decision: Transition Phase of the operation.
- BCT PIR 1: When will enemy artillery be in range of our main body?
- Indicator 1.1: Is enemy reconnaissance present in the vicinity of NAI 3?
- Squadron SIR 1.1.1: Bravo troop can be tasked to conduct area reconnaissance of NAI 3 to confirm or deny presence of enemy reconnaissance vehicles vicinity of NAI number 3.
- Indicator 1.2: Is there enemy movement south of Phase Line Gowins?
- Squadron 1.2.1: Charlie troop can be tasked to conduct area reconnaissance of NAI 1 to confirm/deny presence of enemy vehicles vicinity of Phase Line Gowins.
- Indicator 1.3: Do the bridges at grid A and grid B support tracked vehicles?
- Squadron Indicator 1.4: Are the routes trafficable into NAI 3?
- Squadron SIR 1.4.1 Alpha troop can be tasked to conduct route reconnaissance and determine bridge load bearing capacity at grid A and grid B.

2-26. Troops further refine and nest the information collection plan within their respective AO, adding indicators if necessary and linking indicators for their platoons. Once assigned against a collection asset the indicators become, SIR. Staff and leaders should consider using the eight forms of contact as a clear way to describe how to detect information requirements and match them to the appropriate asset. Anticipating enemy contact allows the troop commander to create nested specified tasks to their platoon leaders linking the supported commander's decision points and associated PIR, to indicators and SIR, with appropriate NAIs, and LTIOV. For example, Bravo troop may refine squadron's information plan into the following for its platoons:

- BCT Decision: Transition Phase of the operation.
- BCT PIR 1: When will enemy artillery be in range of our main body?
- Indicator 1.1: Is enemy reconnaissance present in the vicinity of NAI 3?
- Troop SIR 1.1.1: Platoons can be tasked to conduct area reconnaissance of NAI 3 to confirm or deny presence of enemy reconnaissance vehicles vicinity of NAI number 3.
- Troop SIR 1.1.2: RAVEN can be tasked to conduct aerial area reconnaissance of NAI 3 to confirm or deny presence of enemy reconnaissance vehicles.
- Troop Indicator 1.1.2: Are enemy observation posts in NAI 31?
- Troop SIR 1.1.2: Platoons can be tasked to conduct area reconnaissance of NAI 31 to confirm or deny presence of enemy observation posts.
- Troop SIR 1.1.3: Attached low-level voice intercept team can be tasked to conduct surveillance of NAI 31 for electronic signature.

2-27. The platoon leader receives the specified tasks and the information collection plan in WARNORDs, OPORDs, or FRAGORDs. The platoon leader's scheme of maneuver focuses on executing tactical tasks to answer the tasked indicators.

SECTION II – TROOP LEADING PROCEDURES

2-28. TLP provide small-unit leaders a framework for planning and preparing for operations (refer to FM 6-0 for more information). TLP begins when the leader receives a mission and continues throughout the operations process (plan, prepare, execute and assess). TLP are a sequence of actions that assist leaders in effectively and efficiently using available time to issue orders and execute tactical operations.

2-29. TLP are the scout platoon leader's most frequently used tool in mission preparation. Parallel planning will aid the scout platoon in accomplishing its mission. Even if the platoon leader does not have a complete plan, issuing guidance early allows more time for rehearsals which are, essential to any successful operation, particularly in the scout platoon. Scout sections and squads often operate dispersed and over extended distances and the section and squad leaders require time to conduct their planning and issue orders and guidance to their Soldiers. The eight steps in TLP are—

- Step 1. Receive the mission.
- Step 2. Issue a WARNORD.
- Step 3. Make a tentative plan.

- Step 4. Initiate movement.
- Step 5. Conduct reconnaissance.
- Step 6. Complete the plan.
- Step 7. Issue the order.
- Step 8. Supervise and refine.

2-30. Planning in the scout platoon is always a time-constrained event. Required to develop the situation for their command, scouts understand they are executing their mission shortly after the higher headquarters' mission analysis, and the issuance of WARNORD 2. Subsequently their own situation, specifically relating to enemy, terrain, and civilian populations will be extremely unclear. Scouts at all levels train subordinates in TLP and backwards planning.

2-31. All planning begins backwards planned from LTIOV. It may be useful for the platoon leader to develop a detailed planning timeline and standardize it in an SOP to help them manage their own time during the planning process.

2-32. When specialized elements (engineer, chemical, biological, radiological, and nuclear [CBRN], explosive ordnance disposal, and so forth) attach to the Scout element, these attachments should be included in the planning process as early as possible to ensure that METT-TC considerations relevant to their mission sets are addressed. The equipment and time requirements of attachments to execute their support tasks and the additional terrain considerations of these operations may significantly impact the mission planning of a scout operation.

2-33. Scout platoons plan geographically decentralized in many circumstances. The scout platoon may be in a screen and have to plan the next reconnaissance mission while executing security tasks. Often, time and distance will not permit gathering the entire Platoon around a terrain board for an OPORD. Leaders must become adept at overcoming the distance separating the scout platoon from other maneuver elements. Possible solutions include:

- Practice the use of digital communication systems to distribute graphics and orders.
- Require all leaders to monitor the troop frequency while the commander issues the OPORD to the platoon leader.
- Require all personnel observe listening silence while orders are issued on the frequency.
- Predetermine runners from platoon leader/PSG vehicle to communicate complex information between vehicles.
- Designate personnel from each squad to prepare copies of analog graphics, or personnel from platoon leader/PSG vehicles prepare for the section leader.
- Ensure everyone has standardized operating graphics, not just the platoon leader before missions. Graphics include, at a minimum, boundaries, phase lines, checkpoints, and NAIs or TAIs.

- Require section leader to move to the platoon leader's location one or more at a time to receive information not easily understood verbally or the platoon leader moves to section leader to brief information.
- Standardize formats in the tactical SOP for conveying complex information such as information requirements.

STEP 1– RECEIVE THE MISSION

2-34. The scout platoon leader receives their mission from the commander. It is the platoon leader's responsibility to have a complete understanding of the mission and the commander's intent including implied tasks not explicitly stated. The platoon leader should ask questions when they are unsure, and develop requests for information to gain as much information as possible. Requests for information may not be answered in a timely manner or at all, and the platoon leader will operate off assumptions.

2-35. If the situation allows, the platoon leader should bring their PSG and section or squad leader when they receive the mission from the commander. Multiple platoon representatives at the briefing may save time and assist the understanding of subordinate leaders without diluting information. At the receipt of the mission the platoon leader must—

- Understand the enemy, friendly, and civilian situation.
- Understand the commander's intent, tasks (key, specific, and implied), end state, commander's reconnaissance and security guidance and CCIRs.
- Understand the reconnaissance and security objective.
- Understand how the platoon plan fits into the higher headquarters' plan.
- Know any attached assets and how to coordinate with them.
- Copy all common graphics available including graphic control measures, scheme of maneuver, support, fires, information collection, air, enemy situation. A member of the platoon leader's crew should copy graphics so the platoon leader has more time to understand and plan the mission.
- Copy planning and execution timeline. Pay close attention to critical times specified by higher.

2-36. The platoon leader conducts a confirmation brief usually within 20 minutes of receiving the order or as time demands, so the commander knows that the platoon leader understands the mission, commander's intent, CCIR, and the purpose of conducting the mission. The commander may require a confirmation brief immediately following the brief. Platoon leaders bring up shortfalls that they identified on their initial assessment of the mission. If the platoon leader identifies a shortfall, they generate a possible solution to present to the commander.

2-37. The confirmation brief will not hinder the issuance of the WARNORD to the platoon. The PSG may issue the WARNORD if the platoon leader is conducting a confirmation brief.

2-38. While the platoon leader receives the mission from the commanding officer, the rest of the platoon executes tasks to prepare for the mission. Regardless of the platoon's mission, completing the tasks listed below allow increased planning time.

2-39. The PSG alerts the platoon that the platoon leader is receiving a mission, gathers supply requests from subordinate leaders, and consolidates the green 2 report. Additionally, they will create or update the battle roster, maintain accountability of weapons and equipment, create or update the master arms list and supervise the cross loading of supplies.

2-40. Section/squad/team leaders consolidate supply requests, perform PCCs of equipment, submit the green 2 report, improve camouflage, and supervise equipment maintenance. Additionally, rehearsing battle drills or tasks from the platoon or troop SOP that generally do not change and are common to all operations like CASEVAC and react to indirect fire. The time for rehearsals during the rest of the planning process will generally center on actions on the objective and critical points in the operation or the entire operation itself.

2-41. Dismounts and drivers conduct before or during preventive maintenance checks and services (PMCS) of individual equipment and vehicles, improve individual, equipment, and vehicle camouflage, inventory all equipment and class I and inform their leader when complete.

STEP 2 – ISSUE A WARNING ORDER

2-42. The platoon leader with the help of the PSG finishes their initial assessment of the situation and available time. They do not wait for more information, and issue the best and most detailed WARNORD possible. A WARNORD is a preliminary notice of an order or action that is to follow. The more time subordinates have to prepare and conduct rehearsals, the better. The platoon leader will issue additional WARNORDs as more information becomes available or the situation changes.

2-43. The platoon leader conducts more analysis of the WARNORD received from the troop commander prior to issuing to the platoon. For example, the timeline the platoon leader received may include details for the troop, but not adequately address times for section rehearsals. The timeline they received for execution may only state, "execute mission" and "mission complete" and may not include LTIOV for indicators or PIR. The execution timeline may change slightly during TLP, both the platoon leader and PSG understand the platoon's capabilities and limitations and apply sound judgement to estimate the time required. Use of a platoon standardized timeline format will aid scouts in planning and execution.

2-44. The platoon leader will issue the first WARNORD usually within 30 minutes of the completion of receiving the mission, or as time demands. The minimum requirements for a WARNORD are—

- I. Situation.
  - Area of interest.
  - AO.

- Enemy forces.
- Friendly forces.
- Interagency, intergovernmental, and nongovernmental organizations.
- Civil considerations.
- Attachments and detachments.

- II. Mission.
- III. Execution.
  - Initial commander's intent.
  - Concept of operations.
  - Tasks to subordinate units.
  - Coordinating instructions.
- IV. Sustainment.
- V. Command Signal.

Additional things that a scout platoon leader adds to a WARNORD are—

-- Directed changes to TASKORG.

-- Key tasks and end state.

-- Restated mission statement (if analysis was not done at troop level, restated mission must be approved by troop commander).

-- Specified tasks to subordinates.

-- Commander's reconnaissance and security guidance.

-- CCIRs.

-- A copy of all common graphics available including graphic control measures, scheme of maneuver, support, fires, information collection, air, enemy situation.

-- Specific tasks and rehearsals and who is responsible for their completion.

-- Refined platoon timeline.

-- Time and place of the OPORD.

2-45. It is helpful to have a member of each squad designated to copy graphics allowing leaders more time to plan. The platoon leader issues additional WARNORDs as more information becomes available.

STEP 3 – MAKE A TENTATIVE PLAN

2-46. The platoon leader performs mission analysis to gain a better understanding of the situation. Every attempt should be made to obtain any analysis done by higher headquarters and staff before the platoon leader starts their own analysis. Regardless of having higher level products, the platoon leader begins mission analysis. They use the mission variables of METT-TC. No other useful planning concerning execution precedes without conducting mission analysis.

2-47. Always complete mission analysis prior to the scheme of maneuver. Subordinates cannot make simple, flexible plans against a thinking enemy if they do not understand what the enemy is doing. Also, all analysis is subject to change with time, and as more intelligence becomes available. Terrain and enemy analysis is constantly updated before, during, and after operations.

2-48. METT-TC is a way to help scouts understand the aspects of the mission and how this affects operations. It may help to think of METT-TC as a synchronized (sync) matrix throughout operations. Sync matrixes (see table 2-1) help the leader understand they must accomplish their mission in time, and with proper terrain analysis, and space.

Table 2-1. Example hasty sync matrix

<table>
<tr><td>Time</td><td>0900</td><td>0930</td><td>1000</td><td>1030</td><td>1100</td><td>1130</td><td>1200</td><td>1230</td><td>1300</td></tr>
<tr><td>Enemy</td><td colspan="4">Attack on city court house</td><td colspan="2">Withdrawal</td><td colspan="3">Consolidate vicinity Hill 431</td></tr>
<tr><td>Civilians</td><td colspan="6">Running in all directions from court house</td><td colspan="3">Medical services in AO</td></tr>
<tr><td>The Higher Headquarters' Mission</td><td colspan="9">Phase II: Defense of AO Strike</td></tr>
<tr><td>Platoon Mission</td><td colspan="5">Phase III: Area Security of City Court House</td><td colspan="4">Phase IV: Area Reconnaissance of Hill 431</td></tr>
<tr><td>Attachments/2x AH-64</td><td></td><td colspan="2">En route from BSA</td><td colspan="2">Provincial Center</td><td>Hill 431</td><td colspan="3">Return to BSA</td></tr>
<tr><td colspan="10">Legend: AO – area of operation, BSA – brigade support area</td></tr>
</table>

2-49. METT-TC analysis does not need to be in a particular order. The order follows the preference of the leader and the experience they have analyzing a mission. Some leaders may evaluate in the order of terrain and weather, enemy, civil considerations, time, mission and finally troops and support available. For the sake of simplicity, we will explore each section in the order of the standard acronym, METT-TC.

MISSION

2-50. Scouts must understand the mission and commander's intent, reconnaissance and security guidance, and the CCIR. Scouts are responsible for collecting information about all aspects of CCIR from the decision point to the indicators. The relevant information reported from the scout on the ground and analyzed by leaders will help drive the higher commander's decision making process and aid in exercising economy of force by positioning follow-on forces where they are needed. Leaders at all levels understand how their plan nests with the higher headquarters and what information higher headquarters needs to aid the commander in making an informed decision. Understanding what indicators link to commanders' decisions aids subordinate leaders in taking disciplined initiative. It is impossible to predict the outcome of every engagement. However, an understanding of what the higher commander needs to know, and why, will aid leaders in adapting the current plan to meet the requirements of the commander.

2-51. A way to help analyze the mission is to answer and understand questions and information such as the following:

- What is the higher headquarters' mission, intent, end state, and CCIR two levels up?
- What is my unit's purpose?
- What have I been told to do, and why?
- What tasks did the commander say must be accomplished (specified tasks)?
- What other tasks must I accomplish to conduct the mission (implied tasks)?
- Based on the commander's intent, which of my tasks are absolutely essential?
- How does my commander's reconnaissance and security guidance fit into the higher headquarters' plan?
- What is the composition and disposition of the enemy we are expected to encounter?

2-52. Scout platoons face an elusive, diverse, flexible, and adaptive enemy. The enemy combines a wide array of lethal and nonlethal weapons, including modern peer, near-peer, hybrid threats, and improvised systems presenting a complex enemy situation. Because these wide ranging capabilities, the platoon must consider each form of contact that the enemy may use because of these wide ranging capabilities. The forms of contact to consider are—

- Direct fire.
- Indirect fire.
- Nonhostile civilian contact.
- Obstacles.
- CBRN.
- Aerial.
- Visual.
- EW.

ENEMY

2-53. All analysis of the enemy must consider the terrain where they are operating. Because of the constrained time the scout platoon is always under, the enemy situation may be unclear, or partially depicted. It is likely that the platoon leader will receive an enemy situation template with symbols representing entire platoons.

2-54. The platoon leader must understand the enemy's objective, and depict the enemy in their AO down to the squad and team level. Breaking the enemy two levels down gives their subordinate leaders a better understanding of enemy capabilities and how to address these capabilities in the friendly plan. Successful enemy analysis allows the platoon leader to visualize when and where to anticipate contact and the form of contact to expect. This allows the scout platoon leader to create a friendly plan that synchronizes assets at the time and place of expected contact.

2-55. The platoon leader may try to answer some questions during their analysis to help understand the threat. Questions may include—

- What is the composition, disposition, and strength of the enemy force?
- What are the capabilities of their weapon and surveillance systems?
- Where are their kill zones?
- What is the enemy trying to do (defend, reinforce, attack, withdraw, or delay)?
- What will they do in response to friendly actions?

2-56. The troop commander or staff may provide products and information on the enemy. Leaders must be flexible with enemy estimates and adjust to what they are facing especially if it differs from what they predicted. The platoon leader tries to answer or understand the following and articulate their findings to subordinates—

- Enemy's composition, disposition, and strength.
- Enemy's objectives one and two levels up.
- Enemy's weapon systems and optics capabilities.
- Enemy equipment (uniform color/pattern, equipment carried on their person).
- Vehicle composition, vehicle appearance, configuration and formations (how many are there? If I see one, how far away are the others?).
- Enemy activity in relation to their mission.
- Historical and doctrinal reference of how the enemy fights.
- Recent experience with how the enemy fights.
- Order of battle.
- Forms of contact the enemy prefers to gain contact with the platoon and forms of contact the enemy may avoid.
- Enemy's engagement, disengagement, and displace criteria.

2-57. Understanding the above information will aid the platoon leader with planning and preparing for anticipated threats. Failing to understand the enemy or shortchanging the enemy in the assessment generally leads to failure.

2-58. The platoon leader receives a most likely COA and a most dangerous COA from the troop commander. Some circumstances and time constraints may warrant only receiving a most likely COA and planning based on that. The troop commander specifies when this circumstance is happening and informs the platoon leader. In all other cases, the platoon leader plans off the most likely COA and most dangerous COA.

2-59. Generally, the enemy COAs the platoon leader receives is unit symbols that are platoon- or section-sized elements like the image below. It is platoon leaders' responsibilities to take the information they gain and refine the enemy COAs down to squad and team levels. It may help to depict sectors of fire and limits of weapon systems for all anticipated forms of contact to aid themselves and subordinate leaders in understanding the threat and planning against it. (See figure 2-3, page 2-16.)

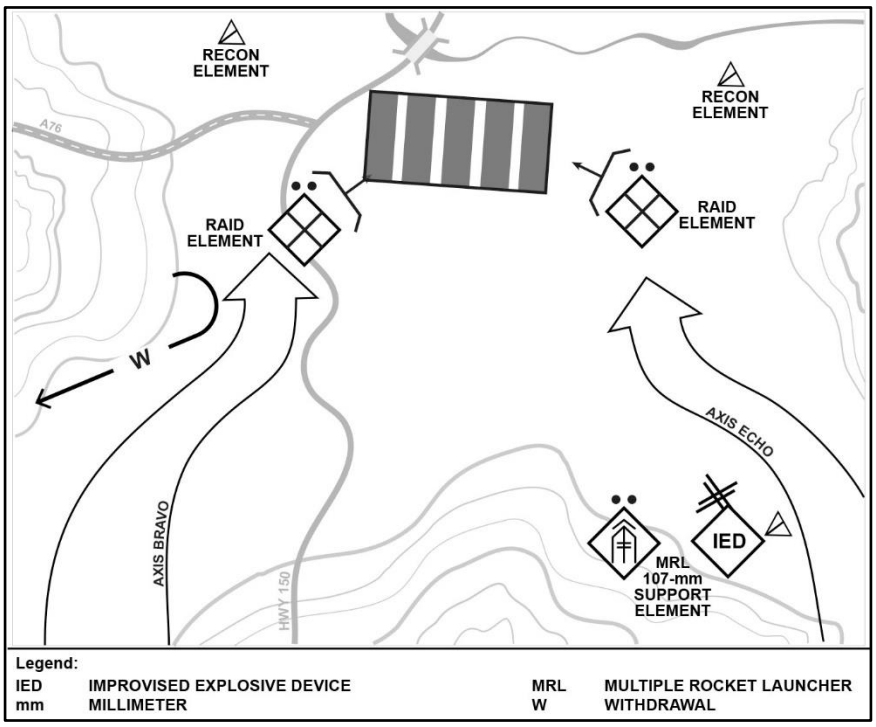


Figure 2-3. Enemy course of action

TERRAIN AND WEATHER

2-60. Leaders must thoroughly know and understand the terrain and weather in their AO. Overlooking minute details or false assumptions during planning on seemingly unpassable terrain or effects of weather involving streams, fords, and narrow defiles have historically lead to disaster. Inadequate reconnaissance and security involving terrain is often categorized by surprise, confusion, and routes of maneuver and support elements.

Terrain

2-61. Leaders consider how the terrain will affect the enemy and friendly mission. Scouts conduct terrain analysis using observation and fields of fire, avenues of approach, key terrain, obstacles, and cover and concealment (OAKOC). In general, terrain and weather do not favor one side over the other unless one is better prepared to operate in the environment or is more familiar with it. The terrain however, may favor defending or attacking forces. Analysis of terrain answers the question: What is the terrain's effect on the operation?

2-62. While OAKOC is an easily remembered acronym to use for analysis, the results are briefed in an order based on local guidance. Another way of thinking about it is that obstacles indicate avenues of approach dominated by key terrain dictating observation and fields of fire and defining cover and concealment.

2-63. An obstacle is any natural or scout-made obstruction designed or employed to disrupt, fix, turn, or block the movement of an opposing force, and to impose additional losses in personnel, time, and equipment on the opposing force. It is important to take into account obstacle effects. For example, rubble and debris in a street may halt wheeled vehicle movement, but only slow a dismounted force. Understand obstacles from the friendly and enemy perspective to be successful.

2-64. Avenues of approach are air or ground routes used by an attacking force leading to its objective or to key terrain in its path. The identification of avenues of approach is important because all COAs that involve maneuver depend on available avenues of approach. Mobility corridors are those areas relatively free of obstacles where a force will be canalized due to terrain restrictions allowing military forces to capitalize on the principles of mass and speed (refer to ATP 2-01.3 for more information). Identifying mobility corridors requires some knowledge of friendly and enemy forces and their preferred tactics. The best mobility corridors use unrestricted terrain that provided enough space for a force to move in its preferred doctrinal formations while avoiding major obstacles.

2-65. Avenues of approach consist of a series of mobility corridors through which a maneuvering force must pass to reach its objective. (See table 2-2.) Avenues of approach must provide ease of movement and enough width for dispersion of a force large enough to significantly affect the outcome of the operation. Classify mobility corridors based on the distance between the terrain features that form the corridor. Mobility corridor ranges are not absolute but reflect the relative and approximate distance between terrain features.

2-66. Prioritize avenues of approach based on how well each supports the ability to meet the desired result in a timely and efficient manner. Evaluate avenues of approach for suitability in terms of—

- Access to key terrain and adjacent avenues.
- Degree of canalization and ease of movement.
- Sustainability (line of communications support).
- Access to the objective.

Table 2-2. Avenue of approach to mobility corridor comparison examples

Avenue of Approach	*Cross-country Mobility Corridor Classification*	*Approximate Distance Between Terrain Features (in kilometers)*
Division	Brigade/Regiment	10
Brigade/Regiment	Brigade/Regiment	6
Battalion	Company	2

2-67. *Key terrain* is an identifiable characteristic whose seizure or retention affords a marked advantage to either combatant (ADP 3-90). In natural terrain dominated by restrictive terrain features, high ground can be key terrain because it dominates an area with good observation and fields of fire. In an open or arid environment, a draw or wadi can be key terrain because it offers good cover and concealment. In urban environments, infrastructure (such as bridges, medical facilities, choke points, intersections, industrial complexes, and economic, social, and government institutions) may be key terrain.

2-68. Evaluate key terrain by assessing the impact of controlling it for either force. Observation is the condition of weather and terrain that permits a force to see friendly, enemy, and neutral personnel, systems, and key aspects of the operational environment. Commanders evaluate their observation capabilities for electronic and optical line-of-sight surveillance systems, as well as for unaided visual observation. The highest terrain normally provides the best observation. In natural terrain, there are limitations on observation caused by relative, localized, and often subtle variations in terrain elevations. These limitations are IV lines. IV is the condition of being able to see one point from the other.

2-69. Anticipate limitations in observation by adverse weather, dusk, and smoke. In urban terrain, observation is primarily limited by man-made structures, as well as the activity and debris associated with human activity. Analyzing observation and fields of fire in urban terrain is more complicated than it is for natural terrain.

2-70. Fields of fire is observation limited to a specific linear distance based on weapons systems capabilities. A unit's field of fire is directly related to its ability to observe. Evaluation of observation and fields of fire identifies—

- Potential engagement areas.
- Defensible terrain.
- Specific equipment or equipment positions.
- Areas where forces are most vulnerable to observation and fires.
- Identification of visual dead space.

2-71. Analysis of fields of fire includes an evaluation of all direct and indirect fire weapons systems in a command's inventory. An ideal field of fire for a direct fire weapon is an open area in which the enemy can be seen and on which the enemy has no protection out to the maximum effective range of that weapon. An ideal field of fire for an indirect fire weapons system is a target area that provides no protection from the system's munitions. Terrain that offers good observation and fields of fire generally favors defensive COAs.

2-72. Cover is the physical protection from bullets, fragments of exploding rounds, flame, nuclear effects, and biological and chemical agents. Cover and concealment is available by ditches, caves, riverbanks, folds in the ground, shell craters, buildings, walls, and embankments. Cover does not necessarily provide concealment. An example of cover without concealment is a bunker in plain sight that is intended for the protection of personnel.

2-73. Concealment is protection from observation or surveillance. It degrades the enemy's ability to observe forces, equipment, or position. Concealment is available in tall grass, trees, underbrush, cultivated vegetation, weather conditions (such as snow, fog, or rain), as well as man-made camouflage. Concealment does not necessarily provide cover.

2-74. A line-of-sight analysis determines the observation, fields of fire, and cover and concealment that the terrain provides to both the friendly and enemy or adversary forces. Figure 2-4 shows the masked area that lies behind terrain that is level with or higher than the defensive position. Scouts cannot see or fire direct weapons into the masked area as there is no observation or fields of fire behind terrain masking. The masked area provides the attacker cover from the defender's direct fire and concealment from the defender's observations. If the enemy or adversary has done proper analysis, then they would select one or more of the approach routes.

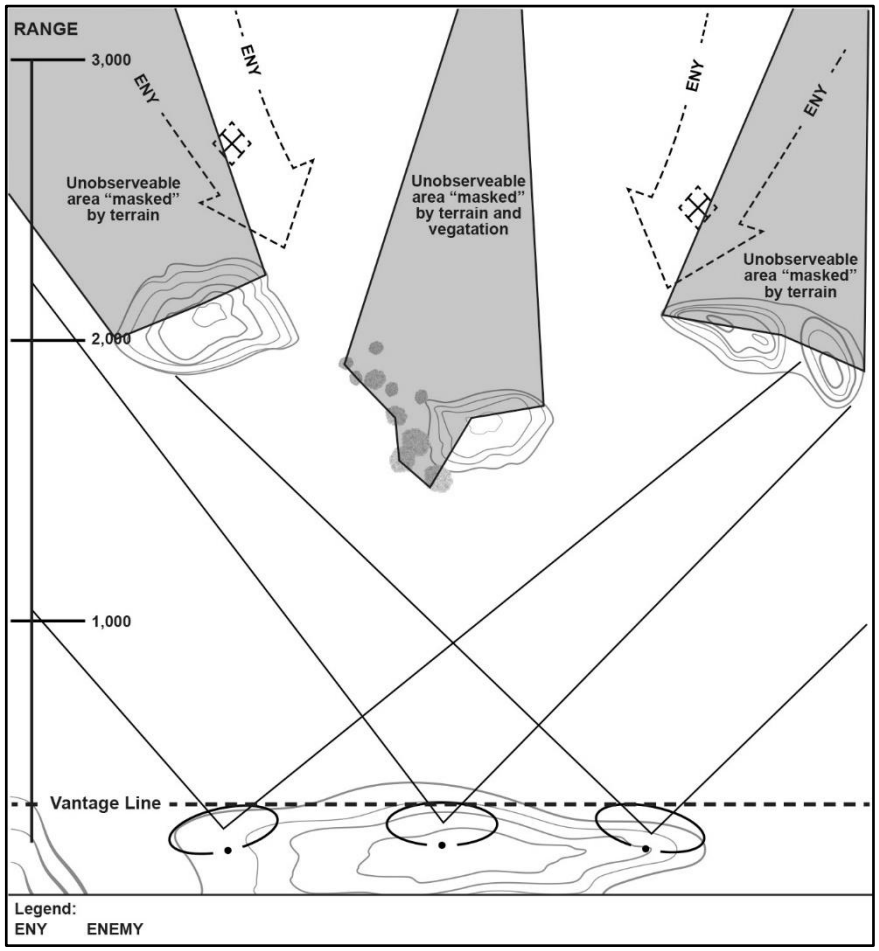


Figure 2-4. Line of sight analysis

2-75. Time permitting a thorough analysis leads to greater terrain appreciation. The table below provides a quick reference matrix for analyzing terrain, it is a way to help leaders understand OAKOC (see table 2-3).

Table 2-3. Example observation and fields of fire, avenues of approach, key terrain, obstacles, and cover and concealment matrix

	Location and affects.	***Who it favors.***
***O**bservation and Fields of Fire*	Scouts crest in the mountains provides excellent observation of the valley.	Friendly
***A**venues of Approach*	Terrain allows concealed route of travel from NAI 003 to NAI 004	Friendly
***K**ey and Decisive Terrain*	Hilltops that separate NAIs 003 and 004. This is key because it overwatches the RTE and the backside of the mountain.	Friendly
***O**bstacles*	Suspected enemy explosives on the RTE, C section is tasked to locate and report. Rocky and vegetated terrain means vehicle movement will be hindered; deploy dismounts to guide vehicles.	Enemy
***C**over and Concealment*	Mountainous terrain and vegetation provides excellent survivability.	Neither
Legend: NAI – named area of interest, RTE – route		

2-76. Leaders may receive a modified combined obstacle overlay (MCOO) from higher headquarters to help them understand the terrain. Cavalry leaders must understand that the MCOO was done in a time-constrained environment and should apply their own analysis to determine and refine how terrain and weather uniquely affect the enemy and their mission in their AO.

2-77. An MCOO is a graphic product that portrays the effects of natural and urban terrain on military operations. The MCOO normally depicts military significant aspects of the terrain and other aspects of the terrain that can affect mobility. Though not all inclusive, some of these aspects are—

- Avenues of approach.
- Mobility corridors.
- Natural and man-made obstacles.
- Terrain mobility classifications.
- Key terrain.

2-78. The MCOO provides a basis for identifying ground avenues of approach and mobility corridors. Unlike the cross-country mobility, the combined obstacle overlay integrates all obstacles to vehicular movement, such as built-up areas, slope, soils, vegetation, and hydrology into one overlay. The overlay depicts areas that impede movement (severely restricted and restricted areas) and areas where friendly and enemy forces can move unimpeded (unrestricted areas).

2-79. The end result of producing an MCOO, either detailed or simplified, is that scout platoon leaders understand the terrain in which they are operating. Doing the MCOO may also help them understand limits in line of sight communications systems. Figure 2-5 is an example of an MCOO.

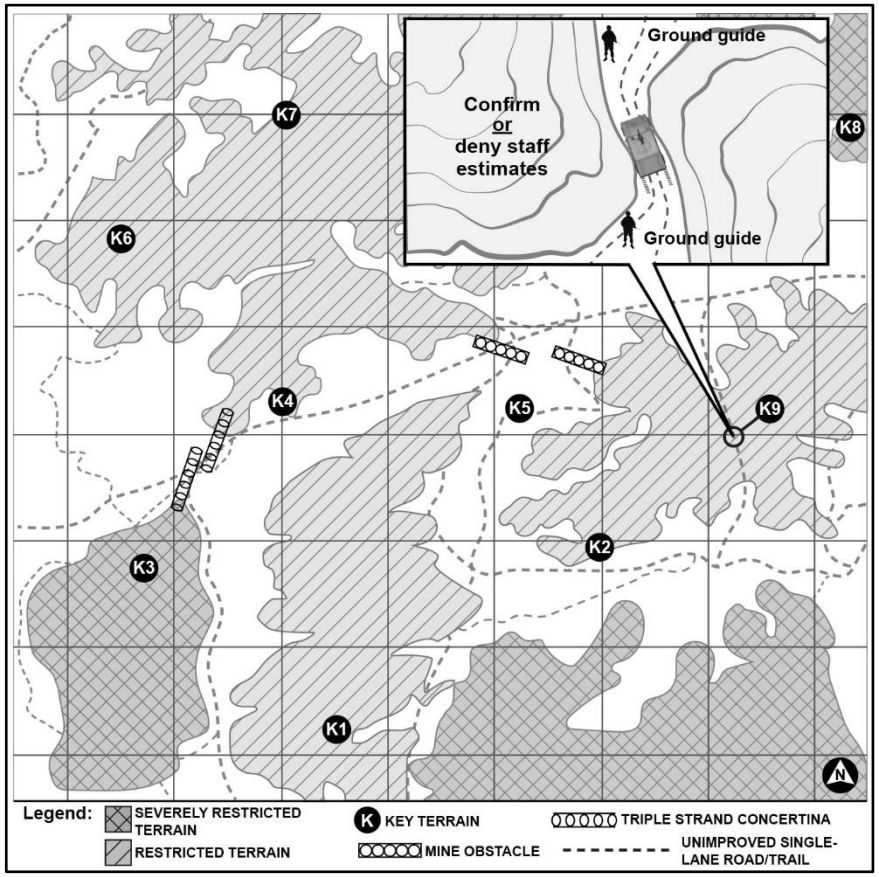


Figure 2-5. Modified combined obstacles overlay, example

2-80. An MCOO is simply a way to help leaders understand their AO. During planning platoon leaders need to evaluate the terrain using the five elements of military terrain analysis (OAKOC). During security tasks, they evaluate the enemy's capability to maneuver and during reconnaissance tasks, they consider friendly vehicle capabilities.

2-81. Scouts always confirm or deny assumptions made by higher headquarters, in this case terrain. Terrain that squadron or BCT staffs determine to be impassable needs to be verified as such, even if scouts must dismount and slowly maneuver a single vehicle through a pass with a ground guide. If the enemy can only move wheeled versus tracked vehicles through unsecured terrain to a position of advantage they will, if it enables them

to maneuver against friendly reconnaissance. They must confirm or deny the commander's assumptions and quickly and accurately report their findings.

2-82. The platoon leader must ensure they determine the relation and importance of their terrain and weather analysis and which forces it favors. For example, stating the fact there is a stream in the AO does not help anybody. But saying there is a stream that friendly forces cannot cross and will force the use of existing bridges that the enemy will overwatch helps subordinates understand actions they will have to take when crossing a danger area.

Weather

2-83. The five military aspects of weather are visibility, winds, precipitation, cloud cover, temperature and humidity. Like terrain, it is important to determine how weather affects the mission. Thoroughly understanding weather impacts are vital. Simply stating it will be windy will not suffice. Explaining the wind direction and effects on smoke targets, the use of aviation or UAS, dust trails or smell helps subordinates understand why the analysis matters. Additionally, the map cannot show that it is raining, but will give indicators of which creeks may flood and become difficult to cross. A general understanding of weather patterns before deployment into an area will aid leaders in planning and understanding time requirements during operations. Table 2-4 is a way to help leaders understand the effects of weather on their operation.

Table 2-4. Example effects of weather matrix

	Data					***Effects and who it favors***
Visibility	10 miles.					Neither.
Wind	Blowing from north to south at four miles per hour.					Defender: Wind will carry dust signatures and sound towards the enemy.
Precipitation	10 percent chance of rain.					Defender: Track vehicle maneuverability.
Cloud Cover	No cloud cover.					Neither.
Temperature	10 to 37 degrees F					Defender: Effects on thermal systems.
Humidity	N/A					N/A
Light Data						
Solar/Lunar Data	BMNT 0657	Sun Rise 0749	Moon Rise 0729	Sun Set 1949	EENT 2042	Moon Set 1909
Who it favors	Defenders: Zero percent illumination will make dismounted movement slower and Soldiers will make more noise because it is difficult to see.					
Legend: BMNT – begin morning nautical twilight, EENT – end of evening nautical twilight, F – Fahrenheit, N/A – not applicable						

TROOPS AND SUPPORT AVAILABLE

2-84. Leaders study their TASKORG to determine the number, type, capabilities, and condition of available friendly troops and other support. They must understand the impact on the mission of troops and available support. For instance, a squad that conducted drown proof training and has several strong swimmers may be best suited for water operations. A very claustrophobic squad leader may not be the best choice for subterranean task. Arrange gunnery skills to anticipated enemy engagements. Leaders consider the following to help them understand the troops and support available:

- Determine the strengths and weaknesses of subordinate leaders. Consider the supply status of ammunition, water, fuel, and other necessary items.
- Assess the present physical condition of Soldiers (morale, sleep).
- Evaluate the condition of equipment.
- Determine the unit's training status and experience relative to the mission.
- Gauge additional Soldiers or augmenting units.
- Measure required additional assets to accomplish the mission.

2-85. Understanding the platoon's troops will help focus efforts on actual mission accomplishment tasks. The situation may warrant a long duration observation post while the unit may not rehearse or plan for this in the past. Identifying impacts early will aid in prioritizing rehearsals and possibly gathering and requesting additional materials and resources early in the planning process. Identifying facts early and developing possible solutions will ease the planning process during time constrained planning.

TIME

2-86. As addressed in the first step of TLP, time analysis is a critical aspect to planning, preparation, and execution. Time analysis is often the first thing a leader does. Nest all time analysis conducted in a Cavalry organization with the higher headquarters timeline, and backwards plan from LTIOV.

2-87. The leader must not only appreciate how much time is available, but they also appreciate the time and space aspects of preparing, moving, fighting, and sustaining. They must see their own tasks and enemy actions in relation to time. Most importantly, as events occur, they must adjust the time available and assess its impact on what they must accomplish. Finally, they must update previous timelines for their subordinates, listing all events that affect higher headquarters, the organization, and its subordinate elements which may help to answer a few questions concerning time:

- How does my mission fit into the higher headquarters?
- What times did my commander tell me to be accomplished with tasks?
- How long will each reconnaissance mission take?
- What critical times do I have to meet to facilitate the higher headquarters' CCIR?
- What is the enemy's timeline?
- When is the LTIOV for my reconnaissance and security objective?

- How long will it take for me to move from my current location to being set on the line of departure (LD)?
- How long will I allow myself to plan to facilitate maximum time for rehearsals?

2-88. As stated before, plan and execute all reconnaissance and security in a time constrained environment. It can be beneficial to have a member of the platoon leader's crew to keep track of the platoon's own timelines and provide warnings before tasks go over time. For example, if the platoon leader planned for 15 minutes to do terrain analysis, the designated scout will remind the platoon leader of the set time constraint to ensure the platoon stays on timeline. Creating a simple, flexible plan and rehearsal early is far better than a perfect plan with no time for rehearsals.

2-89. While the platoon leader is conducting mission analysis, the rest of the platoon can execute tasks to prepare for the mission. The PSG can submit the supply requests and green 2. The PSG will also enforce the security and rest plans.

2-90. Section/squad/team leaders are following the timeline issued in the WARNORD. They can also correct deficiencies found during their PCC. The section leader also needs to be prepared to assist the platoon leader with planning the scheme of maneuver.

2-91. Dismounts and drivers follow the timeline issued in the WARNORD, fix issues identified during the PCC and complete the PMCS of their equipment and vehicles. They also complete their individual, equipment, and vehicle camouflage.

2-92. Once mission analysis is complete, the platoon leader can move to developing the scheme of maneuver. The platoon leader must not forget why they are executing the mission. It is easy to be sidetracked after focusing on terrain and enemy analysis. Before developing the scheme of maneuver, review the commander's intent, commander's reconnaissance and security guidance, mission statement, higher echelon scheme of fires, and all specified tasks and associated indictors. The platoon's scheme of maneuver must address the terrain, enemy, and all friendly requirements by clearly describing task, purpose, location, and effect to subordinate elements in time and space.

2-93. If the platoon is given priority of fires for mortars, artillery, or close air support (CAS), the platoon leader must develop a fires plan simultaneously with the scheme of maneuver by developing execution times and controls for preplanned targets along the route. Some examples of preplanned targets are high-speed avenues of approach along the lead friendly element's flanks, NAIs, and possible enemy observation posts that can observe the route. While developing the fires plan, the platoon leader can answer the correct questions:

- Who will observe the targets?
- Where will the primary observers be at that time?
- Who will be alternate observers?
- Where will the element firing on that target (mortars, artillery, CAS) be, to enabling them to support firing on that target?

2-94. It is acceptable to have section leaders plan their own scheme of maneuver to maximize their experience and give them more confidence and understanding with the plan. The section leaders must graphically depict their plan for the scout platoon leader.

CIVIL CONSIDERATIONS

2-95. Civil considerations include the influences of scout-made infrastructure; civilian institutions; and the attitudes and activities of civilian leaders, populations, and organizations within an AO, with regard to the conduct of military operations. Civil considerations generally focus on the immediate impact of civilians on operations in progress. The civil considerations can either help or hinder friendly or enemy forces; the difference lies in which leader has taken time to learn the situation and its possible effects on the operation. Analysis of civil considerations answers three critical questions:

- How do civilian considerations affect the operation?
- How does the operation affect the civilians?
- How do our forces build national will in our AO?

2-96. The higher headquarters provides the leader with civil considerations that may affect the next echelon's mission. A way that higher headquarters may analyze the civil considerations is cross-walking areas, structures, capabilities, organizations, people, and events with political, military, economic, social, information, and infrastructure. See ATP 2-01.3 for more information.

2-97. If the platoon leader gets the opportunity to see this information, they must remain focused. They must understand what specifically they are looking for as it pertains to their mission to maximize time in their analysis and planning.

2-98. Civil considerations may help drive decisions like a displaced persons plan, how long it will be safe to conduct society-focused reconnaissance in an area, and where to focus reconnaissance and security operations during stability tasks. Regardless of the mission, the scout platoon leader must have a general understanding of the civilian population in their AO.

STEP 4 – INITIATE MOVEMENT

2-99. Leaders initiate any movement necessary to continue mission preparation or to posture the unit for the start of the mission. Leaders may execute this step at any time throughout the sequence of TLP. It can include movement to an assembly area, battle position (BP), or new AO, or the movement of guides or quartering parties.

2-100. If the platoon is to initiate some kind of movement during the planning process, the initial timeline issued during the WARNORD must reflect it. It may be beneficial to have the PSG control any movement during the planning process so the platoon leader has more time to plan. Section leaders can assist in planning the movement as well.

STEP 5 – CONDUCT RECONNAISSANCE

2-101. The conduct reconnaissance step of TLP allows the platoon leader to confirm the validity of their tentative plan. They should at least confirm their initial march route to the LD or start point (SP) and check initial positions. If possible, they should also check some of the area beyond the LD, taking their section leaders with them so they too can see the ground. If the platoon leader cannot go personally, they should task their subordinates to accomplish specific reconnaissance requirements to most efficiently use the available time. An example of this is tasking a squad leader to reconnoiter and verify route time to the SP. The platoon leader must conduct the reconnaissance with an open mind; not everything they see will match their tentative plan. They must be flexible enough to change and competent enough to work out new plans swiftly. The platoon leader must ensure that all reconnaissance is authorized by their higher headquarters.

2-102. The platoon leader should know all tools are at their disposal. It may be possible to task the troop Raven to look at routes and verify suspected enemy positions. If the platoon leader wants to use the Raven, they must produce a scheme of air overlay and have a way to explain to the Raven operator what they are looking for. Depicted below in an example of a way to communicate what they wants a UAS operator to look at and report on. (See table 2-5 and figure 2-6.)

Table 2-5. Example scheme of air matrix

Location	***What to look for. (Mark all findings on the provided overlay)***
ACP 1 to ACP 2	Orient on RTE Yellow. Look for any obstacles that would impede the movement of a Stryker, and attempt to determine if routes Diane and Boyd are wide enough for a Stryker.
ACP 2 to ACP 3	Orient on Route Gold and identify the tallest buildings and mark them on the GRG. Identify buildings that appear to be abandoned and mark them on the GRG.
ACP 3 to ACP 1	Orient on NAI 12 and look for indications of tracked BMP occupying battle positions. Look vicinity CP 12 for dismounted personnel armed with rifles and RPGs.
Legend: ACP – airspace control point, BMP – Russian amphibious tracked infantry fighting vehicle, CP – checkpoint, GRG – gridded reference graphic, NAI – named area of interest, RPG – rocket propelled grenade, RTE – route	

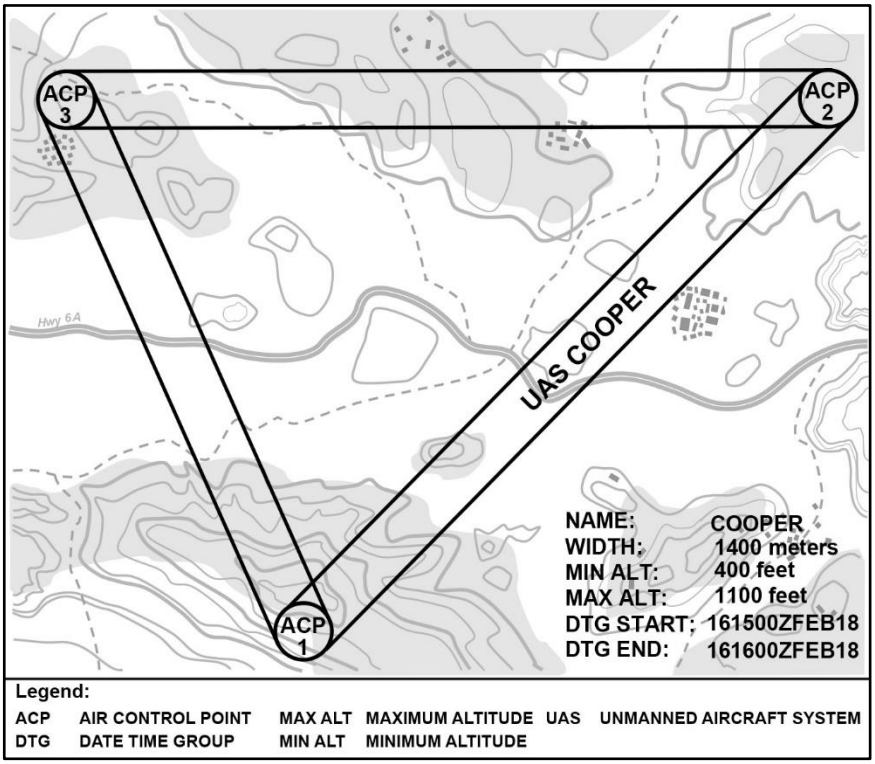


Figure 2-6. Scheme of air control measures

2-103. During stability operations, another tool may be base defense surveillance systems. These systems often have very powerful color and thermal gimbaled cameras that can observe over long distances. Collocating with the operator and asking them to look at certain areas can give the leader a better idea of what to expect during movement or how they will handle actions on the objective.

STEP 6 – COMPLETE THE PLAN

2-104. Subordinates should complete a terrain model for the OPORD. It is helpful to have a member of the platoon leaders crew make the terrain model as they will usually be near the platoon leader and able to obtain copies of new graphics or changes and quickly adapt them to the terrain model.

2-105. Complete all graphics; at a minimum, each vehicle commander will have a copy of all common operating graphics. The distribution of graphics to the vehicle level will help ensure complete understanding during the OPORD. It helps to have Soldiers with neat hand writing produce analog copies of the graphics to save time.

2-106. The platoon leader conducts their backbrief to the commander prior to issuing the platoon OPORD. They will describe how they intend to accomplish the mission and how their plan nests with the higher headquarters'. The platoon leader will bring a copy of all graphics they produce and give them to the commander. The PSG will conduct a backbrief with the 1SG to ensure the scheme of support and sustainment is feasible and nests with target reference points (TRP) plan.

STEP 7 – ISSUE THE ORDER

2-107. The OPORD precisely and concisely explains both the leader's intent and concept of how they envision the unit accomplishing the mission. The order does not contain unnecessary information. Deliver the OPORD quickly and in a manner that allows subordinates to concentrate on understanding the leader's vision and not just copying what they say verbatim. The leader must prepare adequately and deliver the OPORD confidently and quickly to build and sustain confidence in their subordinates.

2-108. When the leader finishes issuing the order, subordinate leaders should leave with a clear understanding of what the platoon leader expects their elements to do. All leaders are responsible for ensuring that their subordinates understand.

2-109. Complete the order with a confirmation brief. At a minimum, each subordinate leader should backbrief the unit mission and intent and how it nests with the higher headquarters', their own task(s) and purpose, commanders reconnaissance and security guidance, and information requirements broken down to indicators with a time attached. The confirmation brief also provides an opportunity to highlight any issues or concerns.

2-110. If addressing something discussed during previous WARNORDs during the OPORD, it is adequate to say no change. However, it may be beneficial to spot check a few subordinates understanding of information briefed as, no change. If the subordinates do not understand the information, clarify it to the group. The correct way to brief the OPORD is the one that conveys the information the subordinates need to know to accomplish the mission and understand how their mission nests with the higher headquarters'.

2-111. All members of the platoon should be present for the OPORD. Some circumstances may warrant not all members of the platoon present for the OPORD. When this is the case, the platoon leader should, at a minimum, brief their PSG, section, and squad leaders. Allot additional time for them to then brief their subordinates.

STEP 8 – SUPERVISE AND REFINE

2-112. The platoon leader and PSG make sure all crewmembers receive briefs from their vehicle commanders or team leaders and understand the mission and concept of the operation. Team briefings and rehearsals are essential to a successful operation. The platoon leader makes sure the entire platoon conducts PCC and procedures according to the SOP.

2-113. The platoon leader and PSG should observe each crew during PCC if possible, if it was not completed during the planning process. The platoon leader or PSG are responsible for conducting PCI after the PCC is complete and before execution.

2-114. Rehearsals are practice sessions conducted to prepare units for an upcoming operation or event. They are essential in ensuring thorough preparation, coordination, and understanding of the commander's plan and intent. Leaders should never underestimate the value of rehearsals. Leaders can change the type of rehearsal to fit the mission and time available. They may use map rehearsals, live rehearsals, and radio rehearsals to ensure that all elements of the plan are understood. Leaders use well-planned, efficiently run rehearsals to accomplish the following:

- Reinforce training and increase proficiency in critical tasks.
- Reveal weaknesses or problems in the plan, leading to further refinement of the plan or development of additional contingency plans.
- Integrate the actions of subordinate elements (actions on contact and battle drills).
- Confirm coordination requirements between the company and adjacent units.
- Improve each Soldier's understanding of the concept of the operation, the direct fire plan, the indirect fires plan, anticipated contingencies, and possible actions and reactions for various situations that may arise during the operation.
- Ensure that subordinates are prepared to execute in their leaders' absence.

2-115. Rehearsals are too often the first thing to cut when leaders use their time unwisely. When time is short, a rehearsal may be the best thing to develop subordinates understanding. Forcing subordinates to demonstrate their execution displays at a much higher level of understanding then saying: ROGER, I GOT IT.

2-116. Flexibility is key to effective operations. The platoon leader must refine their plan as new information becomes available. If they adjust their plan, they must inform the platoon and troop commander. Once the operation has begun, the platoon must adapt quickly to new situations and new orders.

2-117. When there is not enough time to conduct all eight TLP steps in detail, the platoon leader must understand how to trim them to save time. Most TLP can be done mentally. Upon receiving the order, the platoon leader conducts a quick map reconnaissance and analysis and then sends for the vehicle commanders. They make sure they post the minimum required control measures on their maps and give an abbreviated order consisting of a quick enemy and friendly situation, the platoon mission, commander's intent, key tasks, and end state, commander's reconnaissance and security guidance, and information requirements broken down into indicators with a time attached, and the concept of the operation. The PSG briefs adjustments to the scheme of support and sustainment. SOPs should clearly outline how the platoon will communicate and execute primary, alternate, contingency, and emergency (known as PACE)/no communications plans in the absence of orders.

2-118. The abbreviated order should not be the standard technique used by the platoon; it is a technique to use only when time is short. In some cases, there may not be enough

time even for these shortened procedures. The platoon may have to move out and receive FRAGORDs by radio or at the next scheduled halt. Effective SOPs and training enable platoons to move and accomplish their mission with a minimum of formal orders.

2-119. When time is available, however, there is no substitute for effective preparatory instructions, a thorough tactical plan, and a formal OPORD. The odds of success increase considerably when conducting detailed planning and rehearsals prior to an operation, even when time is short. Successful platoon leaders make the most of every available minute.

SECTION III – PLANNING CONSIDERATIONS

2-120. The purpose of this section is to outline the measures of planning, methods, and tactical employment involved in executing reconnaissance and security tasks. Leaders should be alert to other considerations not discussed here.

OPERATIONAL CONSIDERATIONS

2-121. The scout platoon develops an understanding of what is happening and why. In the operational environment, collecting information that may identify enemy centers of gravity, decisive points, and the means to influence their will and behavior are some of the most important contributions the scout platoon can make to ensure successful mission accomplishment.

TIME MANAGEMENT

2-122. Historically maneuver units focus on LD time as the critical execution event during an operation. Scout platoons must adhere to LD time but their planning and time management revolves on LTIOV.

LATEST TIME INFORMATION IS OF VALUE

2-123. *Latest time information is of value* is the time by which an intelligence organization or staff must deliver information to the requester in order to provide decisionmakers with timely intelligence. This must include the time anticipated for processing and disseminating that information as well as for making the decision. (ATP 2-01).

2-124. In relation to the scout platoon, LTIOV correlates to the information the troop or squadron commander's needs to answer questions leading to the mission decisions throughout the operation. Often LTIOV for the scout platoon is tied to execution of their specified tasks, for example conducting a route reconnaissance of an assigned NAI with an indicator or SIR, linked to PIR, to report by a specific time and date. Completion of this task enables the commander to initiate an execution or adjustment decision in time for it to be effective. Therefore, understanding LTIOV is critical for backwards planning and allotting time for effective planning and execution ahead of the threat.

BACKWARDS PLANNING

2-125. Leaders follow the "one-third or two-thirds" rule to allocate time available for planning and preparation. Leaders use no more than one-third of usable, available planning time. They leave the remaining two-thirds for their subordinates. They use the remaining two-thirds available time to their plan, and oversee preparations. Cavalry leaders must apply prioritization, focus, and efficiency to meet this goal.

2-126. Time management is essential to mission success. For example, if the scout platoon has nine hours prior to the start of mission, the platoon leader and PSG should allow themselves a total of three hours to develop their plan, resource allocation, and briefings, and allocate the remaining six hours to section and squad leaders. Platoon leader/PSG should encourage their section leadership to utilize the same planning process, thus allowing the team level leadership to initiate all equipment checks, maintenance, mission preparation, and rehearsal time.

WARFIGHTING FUNCTIONS

2-127. Commanders use the group of tasks and systems (people, organizations, information, and processes) to accomplish missions and training objectives. There are six warfighting functions (ADP 3-0):

- Command and control.
- Movement and maneuver.
- Intelligence.
- Fires.
- Sustainment.
- Protection.

COMMAND RELATIONSHIPS

2-128. Command relationships define superior and subordinate relationships between unit(s) and leaders. By specifying a chain of command, command relationships unify effort and give leaders the ability to employ subordinate forces with maximum flexibility. Command relationships identify the degree of control of the supported commander. The type of command relationship often relates to the expected longevity of the relationship between the units involved and quickly identifies the degree of support that the gaining and losing commanders provide.

2-129. Organic. The scout platoon is assigned to and forms an essential part of the military organization. Organic units are listed in the higher unit's table of organization and equipment or modified table of organization and equipment.

2-130. Assigned. The scout platoon remains subordinate to a higher headquarters for an extended period of time, typically years.

2-131. Attached. The scout platoon is temporarily subordinate to the gaining headquarters and the period may be lengthy, often months or years.

2-132. Operational control. This authority allows the gaining commander to task-organize and direct forces. The parent unit retains responsibility for training, maintenance, resupply, and unit-level reporting.

2-133. Tactical control. This authority allows the gaining commander to direct but not to task-organize forces. The parent unit retains responsibility for training, maintenance, resupply, and unit-level reporting.

2-134. During most tactical operations, the scout platoon can task organize to operate with units such as Armor, Infantry, or Stryker. The scout platoon can have units or teams attached to them such as engineers, civil affairs teams, tactical military information support teams, human intelligence (HUMINT) collection teams, explosive ordnance disposal teams, EW assets, and Army aviation.

SUPPORT RELATIONSHIPS

2-135. Supporting and supported units share specific relationships and responsibilities. For example, the assigning headquarters retains logistic support responsibility and the authority to reorganize or reassign all or part of a supporting force. Although support relationships usually do not occur at the platoon level, it is important to understand how they affect the type of support it provides or receives. (Refer to ADP 3-0 for further information.) The three types of support relationships are—

- Direct support. The scout platoon provides support to the BCT commander. The platoon is under the command of the supported unit, and is required to report directly to that unit and provide any requested support.
- Reinforcing. In this type of support, the scout platoon provides reinforcing support for another unit. As a secondary mission, it remains responsive for direct support requests.
- General support. The scout platoon can provide general support to the unit as a whole or to any particular subunit.

BATTALION SCOUT PLATOON PLANNING CONSIDERATIONS

2-136. Battalion scouts execute the same functionality for their commander as their eyes and ears. The battalion scout platoon usually coordinates their role allowing commanders to concentrate forces at the decisive point, identify and attack enemy weaknesses, isolate the enemy from sources of strength, and maneuver to strike the enemy from unexpected directions.

2-137. The mission planning in the ABCT, IBCT, and SBCT maneuver battalions is identical to Cavalry squadron planning, the difference occurs with the level of staff planning and integration. Similar to BCT planning, the battalion staff assigns the scout platoon missions against the commander's decision points. Collaboration occurs between the S-3 and S-2 and platoon leader in deploying the scout platoon. The most important collaboration between the S-3 and the S-2 in reconnaissance and security operations involves the development of PIRs, because PIRs drive reconnaissance and security operations and shape the formations, methods, and locations that tasked assets utilize. The S-3 and the S-2 must work on the PIR collectively. Squadron staffs and

subsequently troop commanders become adept at rapid planning and integration in uncertain conditions. Battalion's staffs must also develop this capability in regards to their scout platoon deployment.

2-138. Commander/S-3 responsibilities. Commanders must provide clear intent and reconnaissance and security guidance. They must understand what they want their scout platoon to accomplish and explain that to the platoon leader. Maneuver battalion commanders and staffs must fully understand mission similarities in role, capabilities, and limitations. A battalion scout platoon, depending on type, may not be able to occupy and maintain multiple long duration OPs. Without access to company level mortars, they face challenges establishing depth during security tasks. They must efficiently coordinate between two headquarters to effect successful transitions.

2-139. Maneuver battalion scout platoons often operate in coordination with the BCT Cavalry squadron. They can often pass their battalion through the squadron to attack or defend. Subsequently, they must be proficient at all transitional enabling tasks such as battle and reconnaissance handover (known as RHO), forward and rearward passage of lines (known as RPOL), and securing the flanks of their battalion while it is on or near the objective. The scout platoon leader, PSG, and senior scout divide responsibility for monitoring battalion and squadron nets. Platoon leaders interact directly with more senior staff leaders and commanders. To combat overload, if possible, the scout platoon leader participates in staff planning specifically IPB and COA development early to create better understanding for the scout platoon leader. The PSG coordinates directly with the headquarters troop 1SG and the battalion logistics staff officer (S-4) for required sustainment.

2-140. To maximize training efficiency scout platoons in maneuver battalion conduct military occupational specialty specific and cross level training with the Cavalry squadron when possible. Doing so maximizes both the battalion and scout platoons' resources.

FIGHTING FOR INFORMATION

2-141. Fighting for information is a term commonly associated with Cavalry formations but one that can be applicable to a range of organizations. In the simplest terms, fighting for information entails the collection of information generated by limited, focused offensive action that exposes multiple echelons of the enemy's order of battle, potentially altering their decision cycle.

2-142. When associated with Cavalry formations, fighting for information is applicable during both reconnaissance and security operations. It is important to note that in many cases fighting for information can, and should be a synergistic effort. While a Cavalry organization collect information resulting from its offensive action, observation of secondary enemy echelons by other sensors (rotary wing, UAS, signals intelligence, and so forth.) also fulfills the definition of fighting for information. Cavalry units generally task organize. Fighting for information includes—

- Winning visual contact.
- Focused and limited offensive action.

- Retaining freedom of maneuver.
- Causing an observable enemy reaction.
- Rapidly developing the situation.
- Identification of enemy weaknesses to exploit.

SECTION IV – COMMON GRAPHIC CONTROL MEASURES

2-143. Scout platoons operate in an uncertain environment. The higher commander defines the commander's intent and establishes control measures allowing for decentralized execution and scout platoon leaders' initiative to the greatest extent (refer to ADP 3-90 for more information). Scout platoons should utilize graphic control measures to reinforce expectations during the execution of reconnaissance and security missions (see table 2-6). Common graphic control measures for the scout platoon conducting reconnaissance and security missions are—

Table 2-6. Reconnaissance and security graphic control measures

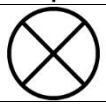
Graphic Control Measure	*Definition*
	Assembly area (AA). An area a unit occupies to prepare for an operation.
	Battle handover line (BHOL). A designated phase line on the ground when responsibility transitions from the stationary force to the moving force and vice versa.
	Checkpoint (CKP). A predetermined point on the ground used to control movement tactical maneuver, and orientation.
	Contact point. A point on the terrain, easily identifiable, where two or more units are required to make contact.
	Coordination point. Designated on boundaries as specific points for coordination of fires and maneuver between adjacent units.
	Cover. 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.

Table 2-6. Reconnaissance and security graphic control measures (continued)

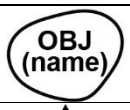
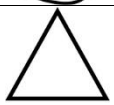
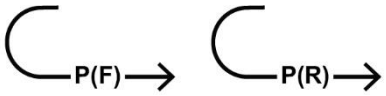
Graphic Control Measure	*Definition*
	Forward edge of the battle area (FEBA). The foremost limits of a series of areas in which ground combat units are deployed, excluding the areas in which the covering or screening forces are operating, designated to coordinate fire support, the positioning of forces, or the maneuver of units.
	Forward line of own troops (FLOT). A line that indicates the most forward positions of friendly forces in any kind of military operation at a specific time.
	Guard. A security task to protect the main force by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct tire support 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.
	Named area of interest (NAI). A geospatial area or system node or link against which information that will satisfy a specific information requirement can be collected.
	Objective (OBJ). A location on the ground used to orient operations, phase operations, facilitate changes of direction, and provide for unity of effort.
	Observation post (OP). A position from which military observations are made, or fire directed and adjusted, and which possesses appropriate communication.
	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.
	Phase line (PL). Line used for control and coordination of military operations, usually an easily identified feature in the operational area.
	Reconnaissance handover line (RHL). A designated phase line on the ground where reconnaissance responsibility transitions from one element to another.

Table 2-6. Reconnaissance and security graphic control measures (continued)

Graphic Control Measure	*Definition*
	Route (RTE). The prescribed course to be traveled from a specific point of origin to a specific destination.
	Screen. A security task that primarily provides early warning to the protected force.

SECTION V – COMMUNICATIONS

2-144. Communications are vital to reconnaissance and security operations. Regardless if scout platoons find enemy indicators, they must be able to relay that information to the supported command to be effective. Leaders place the same emphasis in their communications plan as any of the other warfighting functions. Because of the extended frontages and distances over which the scout platoon operates, it must rely heavily on effective communications techniques. These techniques include not only the means of communications (such as visual signals, radio, and digital systems) and the proper way of using them, but also the effective application of operational terms, radiotelephone procedures, and digital tactics, techniques, and procedures (TTP).

JOINT CAPABILITIES

2-145. Joint capabilities release is one of the primary digital systems the scout platoon uses to send and receive digital information to support information requirements. The joint capabilities release also provides a digital common operating picture to enhance the platoon's situational awareness during mission execution.

SCOUT PLATOON RADIO NETS

2-146. Leaders in scout platoons employ and monitor the following radio nets. (See figure 2-7 and figure 2-8, on page 2-38.)

Note. The scout platoon leader may assign section or squad leaders to monitor the nets of units operating to the front or rear of the platoon. These units' nets would become the alternate nets monitored by leaders. This technique supports situational awareness and facilitates an RHO or battle handover.

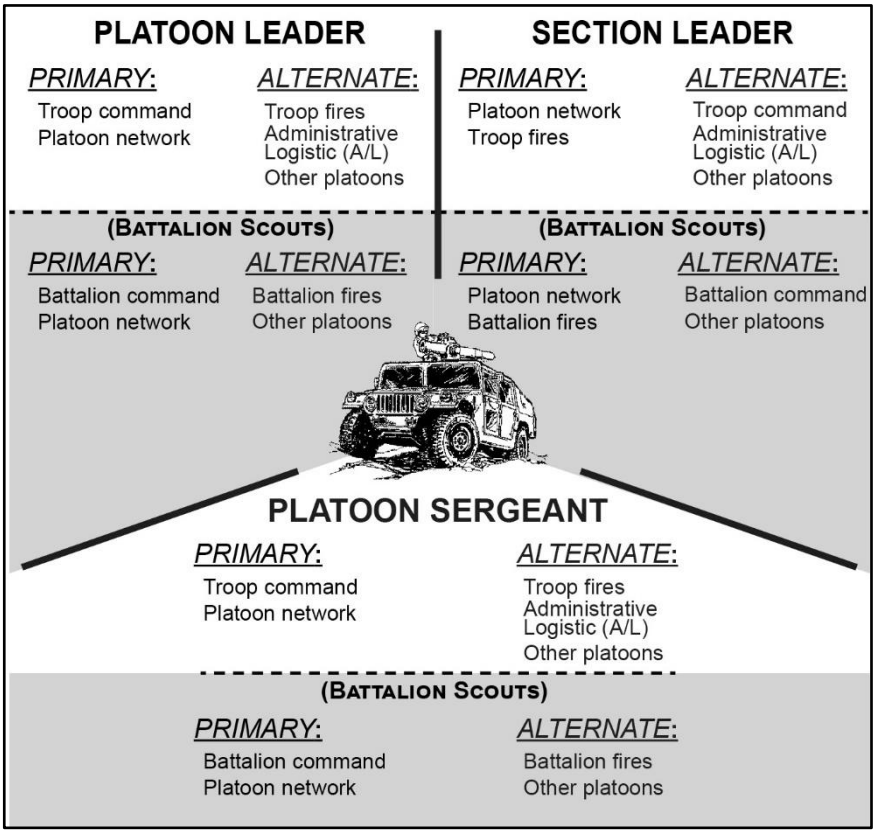


Figure 2-7. Scout platoon nets

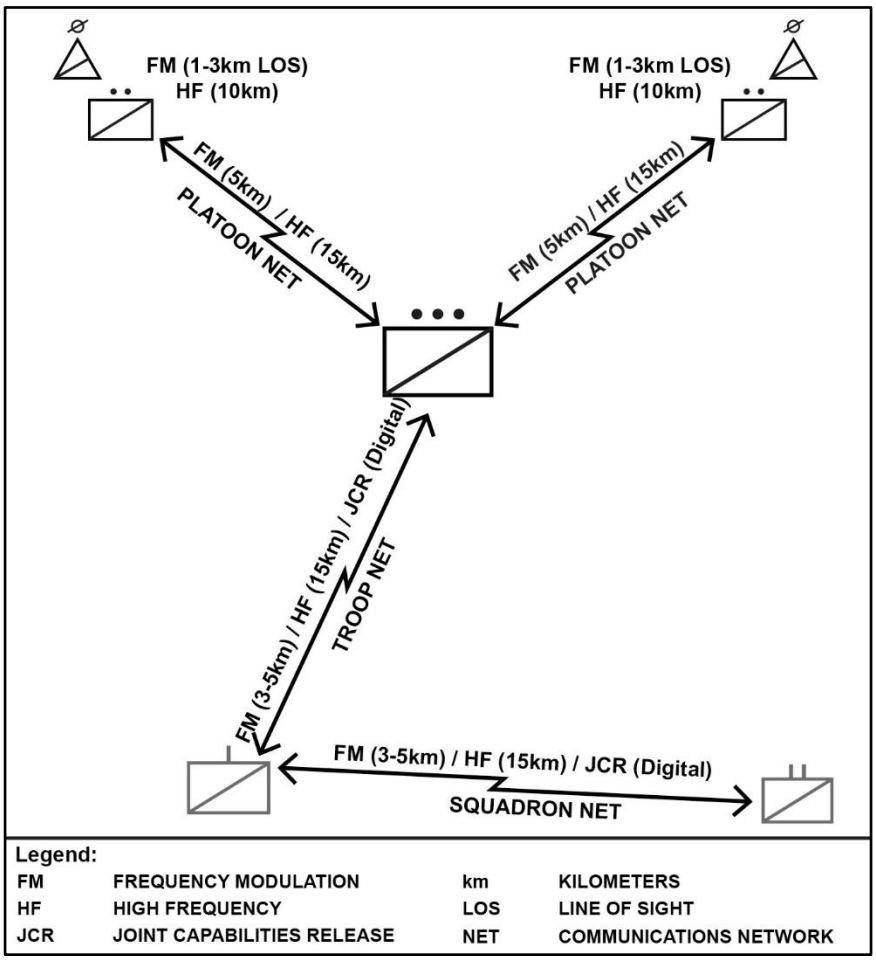


Figure 2-8. Scout platoon communication structure

PLATOON NET

2-147. The platoon net facilitates mission command. All elements within the scout platoon must have the ability to monitor and transmit on this net at all times. Making sure this happens is one of the keys to effective command and control during the conduct of tactical missions. All scouts must also have the ability to rapidly change to any other platoon net as required to coordinate contact points or handover of reconnaissance responsibilities.

TROOP COMMAND NET

2-148. Troop command net maneuvers the troop as well as processes most routine reports not sent on digital mission command systems. The troop command post is the net control station, and the scout platoon leader or PSG sends routine reports to the troop XO. Platoon leaders talk to each other and coordinate key tactical actions of their platoons; however, platoon leaders will use each other's platoon nets to pass routine messages not of interest to the troop commander.

2-149. Both the scout platoon leader and PSG must always have the ability to monitor and transmit on this net. All scouts must be able to switch to this net to send reports and receive guidance if they are unable to contact their platoon leader or PSG.

TROOP FIRES NET

2-150. Many troops operate a troop fires net to send calls for fire to the troop fire support officer (FSO) or directly to the troop mortars. Scout platoon leaders should direct all radios not actively operating on another net to enter this net. All scouts must have the ability to switch to this net and coordinate indirect. Scouts must also be ready to change to the nets of supporting elements such as tank and mobile gun systems to coordinate supporting fires.

ADMINISTRATIVE AND LOGISTICS NET

2-151. The PSG usually monitors the administrative and logistics (known as A/L) net for the platoon, but the platoon leader must be familiar with it as well. The PSG uses it as required to send routine A/L reports. This net also coordinates resupply and evacuation of casualties.

RETRANSMISSION

2-152. When the scout platoon operates at extended distances from the troop command post, it may use the retransmission net to facilitate effective communications between the platoon leader and the troop or supported unit. The platoon leader should request use of the retransmission net during all missions requiring frequency modulation (FM) communications at extended ranges.

TECHNIQUES OF EFFECTIVE COMMUNICATIONS

2-153. The platoon leader and PSG are responsible for ensuring that their scouts understand and adhere to the following guidelines, which can contribute to more effective, more secure tactical communications.

KNOW THE SYSTEM

2-154. Each scout must be an expert at using and maintaining all responsible communications systems. In particular, scouts must understand its capabilities and

limitations. Scouts must also understand how to maintain the system and how to troubleshoot it whenever they suspects it is not functioning properly. They must also be able to recognize differences between malfunctions and jamming or interference.

DURATION

2-155. All messages sent within or from the platoon must be short and informative. The longer the message, the greater the opportunity for enemy elements to use electronic means to determine the platoon's location. Message length can be controlled in several ways:

- Write the message down and then eliminate all unnecessary words from the written message before sending it.
- Read the message as written when sending it.
- Use brevity codes and pro-words, such as "WILCO" meaning, "will comply," that reduce the need to explain the tactical picture in detail.
- Break long messages into several parts and send each separately.

PRIMARY, ALTERNATE, CONTINGENCY, AND EMERGENCY PLAN

2-156. The PACE plan is a communication plan that exists for a specific mission or task, not a specific unit, as the plan considers both intra- and inter-unit sharing of information. The PACE plan designates the order in which an element will move through available communications systems until contact establishing with the desired distant element.

2-157. Develop a PACE plan for each phase of an operation to insure mission command of the formation. The plan reflects the training, equipment status, and true capabilities of the formation. Actions of how to execute the PACE plan; switching frequencies and radios, identifying meaconing, intrusion, jamming and interference, and times to execute these switches must be fully understood at all echelons of the scout platoon.

Chapter 3

Reconnaissance

Reconnaissance is a mission 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 (see JP 2-0 for more information). Scout platoons conduct reconnaissance missions in support of the commander to answer questions the commander deems most important to support decision making. Reconnaissance is a part of all scout missions and performed both mounted and dismounted.

The scout platoons seek to determine valuable information about enemy forces, terrain, and local populations. Successful reconnaissance enables the supported unit to seize, retain, and exploit the initiative, by identifying, creating, and capitalizing on opportunities discovered and reported by the platoon. A key component of reconnaissance is providing timely and accurate information, allowing maneuver commanders to generate options and make timely decisions, enabling the commander to maneuver to positions of advantage and concentrate combat power at the decisive point. Skillful reconnaissance operations allow the commander to shape the battlefield, ideally accepting or initiating combat at times and places of their choosing.

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SECTION I – BASICS OF RECONNAISSANCE TASKS

3-1. It is important to understand that scout platoons can conduct surveillance tasks as part of reconnaissance and security. Surveillance is passive and continuous. Reconnaissance is active and involves combat maneuver and fighting for information. Reconnaissance also involves many tactics, techniques, and procedures throughout the course of a mission.

3-2. A scout's primary tools for reconnaissance are the human senses. The platoon's equipment supplements and complements those senses. The following are some examples of what a scout must be able to determine about the enemy through the use of the human senses. See table 3-1.

Table 3-1. Scout senses

Sight (Looks for)	***Hearing (Listens for)***
-Movement, sudden or unusual movement. (Day) -Lights, fires, or reflections. (Night) -Enemy personnel. -Enemy vehicles, aircraft, and unmanned aircraft system (UAS). -Smoke or dust. -Engine exhaust fumes. -Unusual movement of farm or wild animals. -Activity of the local populace. -Vehicle tracks. -Signs or evidence of enemy occupation. -Recently cut foliage or vegetation. -Muzzle flashes.	-Gunfire sounds (by type of weapon). -Running engines. -Track sounds. -Voices. -Metallic sounds. -Unusual calm or silence. -Dismounted movement through brush or woods. -Enemy UAS or aircraft. -Indicators of enemy radio interception or jamming.
Touch (Feels)	***Smell***
-Warmth of coals. -Freshness of tracks. -Age of discarded food or trash.	-Cooking food. -Vehicle exhaust. -Burning petroleum, oils, and lubricants (POL). -Age of discarded food or trash. -Human waste.

FUNDAMENTALS OF RECONNAISSANCE

3-3. Scout platoons conduct all reconnaissance tasks guided by the fundamentals of reconnaissance. There are seven fundamentals that govern the planning and the execution of reconnaissance tasks.

3-4. Ensure continuous reconnaissance. The scout platoon conducts continuous reconnaissance to gain as much information as possible about the AO and the enemy. Continuous reconnaissance provides commanders with a constant flow of information. Leaders manage scout's tasks. Continuous reconnaissance does not mean every available asset at full power, nonstop, continuously. Leaders need to plan in scheduled maintenance, feeding, and rest. Leaving optics on at high power, draining batteries, observing a deserted plain in daylight is not consistent with continuous reconnaissance,

tasking a section with rest after a long duration observation post does not violate the fundamental of continuous reconnaissance.

3-5. Do not keep reconnaissance assets in reserve. Every scout and every pair of eyes makes a difference. Employ all scouts in executing reconnaissance tasks. Leaders need to plan for scheduled maintenance, feeding, and rest, which is not tasking a reserve but required for successful mission execution. Continuous and focused collection efforts require a concerted effort to maximize the reconnaissance management techniques.

3-6. Orient on the reconnaissance objective. The scout platoon's scheme of maneuver focuses toward a specific objective of the commander. The reconnaissance objective is an effect or expectation the commander is hoping to achieve or prevent, or confirm or deny. Reconnaissance objectives can be a combination of terrain features, enemy, or civil considerations that provide commanders with the necessary information. It is the simplified focus for the commander on which scout platoons try and maximize their capability to collect information. The reconnaissance objective is tied to both the commander's end state and PIR.

3-7. Report all information rapidly and accurately. Scouts aid the commander in the development of plans and rapid decision-making. Scouts must report all information exactly as they see it and as fast as possible. They must never assume, distort, or exaggerate. Information that the enemy is not present paints the overall picture just as importantly as where the enemy is located.

3-8. Retain freedom of maneuver. Tactical mobility and maneuver drive the success of reconnaissance tasks. Platoon leaders consider task organization, their commander's reconnaissance guidance, movement techniques, and scheme of maneuver to retain their unit's ability to maneuver. Scout platoons change movement techniques and employ multiple assets by phase to make contact with the smallest possible element and avoid becoming decisively engaged. The scout platoon retains freedom of maneuver by avoiding decisive engagement with a superior force.

3-9. Gain and maintain enemy contact. Scout platoons gain and maintain contact with the enemy on terms and conditions of their choosing. Using at least one of the eight forms of contact, commanders and staffs plans for and integrate aerial and ground sensors and platforms to assist the scout platoon to gain contact with the enemy by using the smallest element possible. They may change forms of contact while still maintaining contact such as breaking direct fire contact while another section maintains visual contact.

3-10. Develop the situation rapidly. Effective scout platoons understand how time impacts movement (both friendly and enemy) and how timely information collection requirements impact the commander's decisions. Whether the scouts encounter an obstacle or an enemy force, they must rapidly develop the situation in regards to composition, disposition, and activity, quickly, with minimum guidance from higher. Time is the scout platoon's most precious resource and cannot be wasted.

RECONNAISSANCE PLANNING CONSIDERATIONS

3-11. Reconnaissance planning occurs at all echelons. Planning in this chapter details requirements for the scout platoon leader, but also highlights the required planning by the PSG and the section leader. In order to be an effective scout platoon, scouts must understand the higher unit's scheme of maneuver as well as the templated enemy scheme of maneuver. The scout platoon's scheme of maneuver is the product of a series of tactical tasks conducted to answer indicators for a supported commander.

COMMANDER'S RECONNAISSANCE GUIDANCE

3-12. Commanders provide clear reconnaissance guidance that offers the scout platoon both freedom of action to develop the situation as well as adequate direction to ensure the scout platoon can accomplish stated reconnaissance objectives within the required timeline. The commander's reconnaissance guidance enables disciplined initiative and provides subordinate elements clear understanding of the commander's requirements and expectations. Scout platoons in maneuver battalions may have to interpret the commander's intent, end state, task and purpose, and develop reconnaissance and security guidance for their platoon. Everyone in the scout platoon must understand the commander's reconnaissance guidance. Guidance and the information collection plan tie directly to what the supported commander needs to know to rapidly make decisions and choose courses of action. Commanders issue reconnaissance guidance in the five-paragraph operations order to refine their intent. Reconnaissance guidance may change for each phase of an operation. The commander's reconnaissance guidance consists of four elements:

- Focus.
- Tempo of reconnaissance.
- Engagement and disengagement criteria (lethal and nonlethal).
- Displacement criteria.

Focus

3-13. Focus allows the platoon leader to determine which tasks the platoon needs to accomplish first, where to concentrate reconnaissance activities, and the assets required. It narrows the scope of tasks to the information that is most important or critical to the squadron or battalion and brigade's operations. The focus is terrain, enemy forces, or a civilian population. Terrain includes weather effects and civilian population includes society and infrastructure networks.

3-14. The commander narrows the focus further by defining a reconnaissance objective. A reconnaissance objective is a terrain feature, civilian population, or an enemy force about which the commander wants to obtain additional information. The reconnaissance objective consists of confirm or deny information about a specific geographical location, civilian population, or threat activity, allowing the scout platoon to set priorities and focus on the reconnaissance objective when under time constraints. The reconnaissance objective directly supports the end state defined in the commander's intent.

Tempo of Reconnaissance

3-15. Tempo refers to the level of detail and the level of covertness required by the scout platoon to accomplish reconnaissance tasks. Reconnaissance tempo allows the platoon leader to establish associated time requirements and correlate them with the planning time, movement formations, engagement criteria, and methods such as dismounted or mounted reconnaissance. Four terms describe tempo: rapid, deliberate, stealthy, and forceful. Rapid and deliberate are levels of detail and are mutually exclusive, meaning a scout platoon cannot be rapid and deliberate at the same time. Stealthy and forceful are mutually exclusive levels of covertness, meaning a scout platoon cannot be stealthy and forceful at the same time. When the scout platoon leader issues reconnaissance guidance, they express two of these words as tempo. Leaders must ensure however, that everyone in the platoon clearly understands what these words imply. An example would be, "Our tempo of reconnaissance will be stealthy and deliberate. I want to thoroughly check every culvert, ravine, ditch, and underpass for signs of enemy activity. Time is not as important as an exhaustive search." Reconnaissance tempo has four distinct terms and four possible combinations associated with it as displayed in figure 3-1.

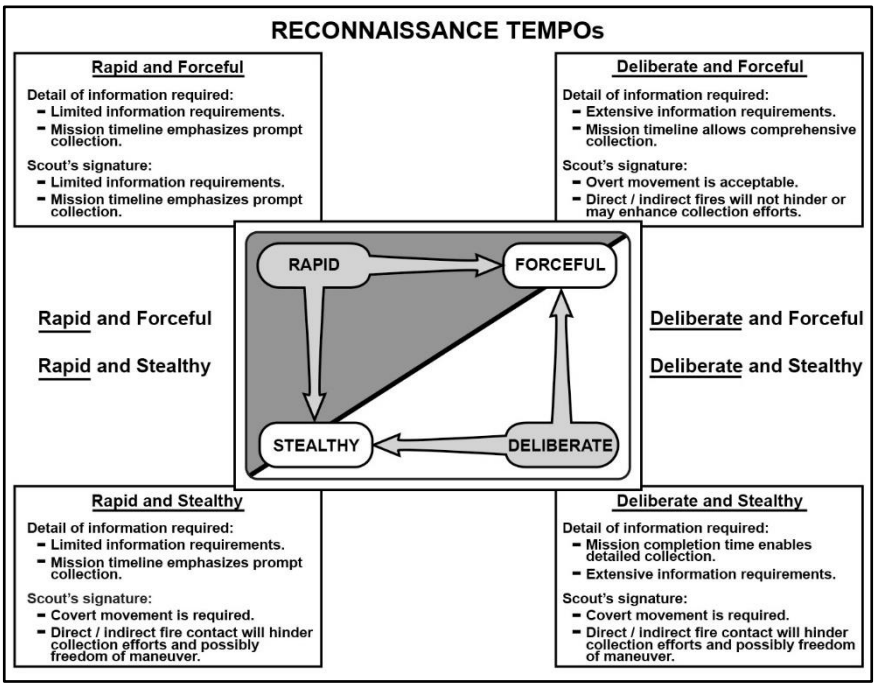


Figure 3-1. Tempo of reconnaissance

3-16. Rapid tempo indicates that the level of detail for the reconnaissance mission requires satisfying only a certain number of prescribed tasks or PIR. An example of this would be a rapid route reconnaissance in which the commander is only concerned with

the ability of a bridge to support follow-on forces. Given this guidance, the scout platoon would conduct an overall rapid reconnaissance of the route; however, they would transition to a deliberate tempo at the NAI associated with the bridge and answer all necessary information requirements from the commander.

3-17. Deliberate tempo implies accomplishing all tasks of the mission to ensure overall mission success. An example of this would be when an organization is new to its AO and possesses limited information about a route that is planned as a main supply route for future operations. Given this scenario, the commander would order the scout platoon to conduct a deliberate route reconnaissance of the main supply route, following all of the tasks associated with a route reconnaissance.

3-18. Stealthy tempo emphasizes avoiding detection and generally consists of restrictive engagement criteria. Stealthy reconnaissance usually takes more time and often uses dismounted reconnaissance methods to maximize the use of cover and concealment to reduce friendly signatures. Use stealthy reconnaissance when there is more time available, likely enemy threat contact, required detailed reconnaissance, or when terrain restricts the use of mounted reconnaissance elements.

3-19. Forceful tempo allows scouts to develop the situation rapidly by employing ground and air assets. Detection is not a concern. Forceful reconnaissance may rely upon the use of standoff weapons and optics to rapidly seize the initiative and answer CCIR. Scouts use a forceful reconnaissance tempo with limited time, few detailed information requirements, terrain does not support covert methods, or when stealthy reconnaissance cannot answer the information requirements.

Engagement and Disengagement Criteria

3-20. Engagement criteria are protocols that specify those circumstances for initiating engagement with an enemy force. These can be either restrictive or permissive, but it is not sufficient to define engagement criteria using terms such as aggressive or discreet. Define engagement criteria using precise doctrinal terms, such as “three or fewer personnel carriers” or “squad size or smaller dismounted elements. The commander’s guidance establishes which targets the scout platoon engages, under which circumstances to use direct or indirect fires, and which targets the scout platoon hand over to another maneuver element. The commander’s guidance enables the platoon leader to—

- Conduct the platoon’s direct fire planning.
- Plan for bypass criteria.
- Plan for the destruction of specific enemy dismounts and vehicles.

Displacement Criteria

3-21. Displacement criteria are triggers for a planned withdrawal, passage of lines, or an RHO between units. Displacement criteria conditions are either event-driven (example, answering associated PIR), time-driven (example, meeting latest time information of value trigger), or threat driven (example, identification of enemy reserve). Once meeting displacement criteria, the scout platoon may transition to the

next mission, phase, or task and is relieved from the responsibility of maintaining a form of contact with the enemy.

RECONNAISSANCE TECHNIQUES

3-22. There are two reconnaissance techniques scout platoons execute to answer information requirements: reconnaissance pull and reconnaissance push. Scout platoons employ these techniques based on their commander's level of understanding of the operational environment combined with the time available to refine their understanding. Scout platoons must be capable of initiating reconnaissance upon receipt of the squadron or battalion's WARNORD number 2. Therefore, scout platoons operate on different operational timelines than their supported unit, often well before other maneuver units initiate movement. Scout platoons usually transition between reconnaissance and security tasks as the BCT progresses through its operations cycle.

3-23. Scout platoons execute the reconnaissance push technique when commanders have a relatively thorough understanding of the operational environment. In these cases, the scout platoon is pushed into specific portions of an AO to confirm, deny, and validate planning assumptions impacting operations.

3-24. Scout platoons use the reconnaissance pull technique when commanders are uncertain of composition and disposition of enemy forces in their AO or terrain information or have limited available time. In these cases, scout platoons initially work over a broad area to develop the enemy situation rapidly. As the scout platoon gains an understanding of enemy weaknesses, they pull the main body to positions of tactical advantage.

RECONNAISSANCE METHODS

3-25. The scout platoon leader seeks to use appropriate combinations of reconnaissance methods (dismounted, mounted, aerial, and reconnaissance by fire) to accomplish their mission and gain and maintain contact with the enemy. No method is mutually exclusive and the greater the number of assets applied usually increases the effectiveness of the operation. The scout platoon conducts reconnaissance using a combination of dismounted, mounted, aerial, and reconnaissance by fire methods augmented with higher echelon technical sensor capabilities.

Dismounted

3-26. Dismounted reconnaissance is the most time consuming method, but also permits the most detailed collection of information. Scouts conduct dismounted reconnaissance when there is—

- The requirement for detailed reconnaissance.
- The requirement for stealth.
- Expected or actual enemy contact.

- Restricted terrain.
- Permissive time constraints.
- A primary concern for security.

3-27. The primary purpose of dismounted reconnaissance is to obtain detailed information about terrain features, obstacles, or enemy forces. In addition, scouts dismount and reconnoiter forward of their vehicle to provide security before moving through danger areas such as IV lines, hilltops, curves, or other blind spots. They also dismount to set up short or long duration observation posts. Dismounted scouts provide security for each other as they move (see figure 3-2). Ideally, at least two scouts work together when operating dismounted. When only a single scout dismounts, the scout should never move out of supporting distance of the vehicle.

3-28. Other considerations for the use of dismounted reconnaissance include a slower rate of movement for scouts on foot, extensive requirements for detailed preliminary planning and coordination, and reduced protection from CBRN threats and hazards, enemy fire, booby traps, and IEDs. These considerations are incorporated into planning to mitigate risk to scouts as they conduct reconnaissance.

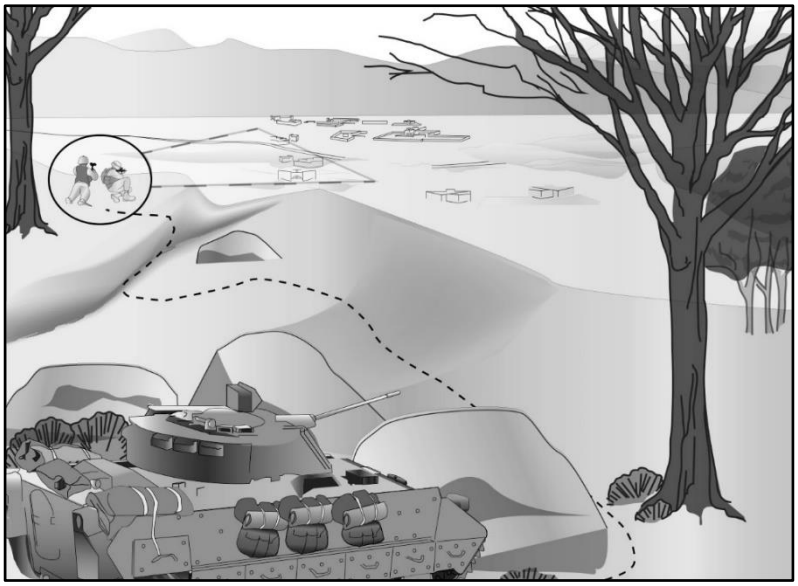


Figure 3-2. Dismounted team conducting short duration operation

3-29. Dismounted scouts carry equipment that gives them the capability to report information accurately and to call for and adjust indirect fires. At a minimum, dismounted scouts should plan for observation posts using mnemonic, commonly known as CWORMS:

- Compass and navigation equipment.
- Weapons, such as personal, crew-served and anti-tank.

- Optics: binoculars, spotting scope, thermal sights, and night observation devices with spare batteries.
- Radios and report formats. Signal operating instructions.
- Map of the area with operational graphics.
- Seasonal equipment. Wet weather gear, gloves, sleeping bags, CBRN equipment based on weather and threat.

Mounted

3-30. Mounted reconnaissance is one of the most frequently employed methods. It allows scouts to conduct fairly detailed reconnaissance while maintaining speed and momentum during a mission. Mounted reconnaissance will make maximum use of standoff using vehicle weapons systems and optics. Scouts use mounted reconnaissance when there is:

- Limited time.
- Small requirement for detailed reconnaissance.
- Large distances requiring mounted maneuver.
- Known enemy locations.
- Low minefields and obstacles threat.
- Unlikely enemy contact.

3-31. Speed and momentum are rarely necessary in reconnaissance, but they are often critical to the successful execution of offensive operations that the reconnaissance mission supports. Additionally poorly planned time often necessitates scouts use of speed. Mounted reconnaissance offers scouts the advantages of using their reconnaissance vehicle for protection and additional firepower. These advantages depend on the specific vehicle employed, but they can include firepower, armor protection, increased navigation and communications capability, and thermal optics.

3-32. Other considerations for the use of mounted reconnaissance include the loss of covertness due to the visual, noise, and thermal signatures of the vehicle and the loss of some detail because of restricted vision and impairment on the senses of smell and hearing. These considerations are incorporated into planning to mitigate the risk to scouts as they conduct reconnaissance. Figure 3-3, page 3-10, highlights an example of scouts conducting mounted reconnaissance.

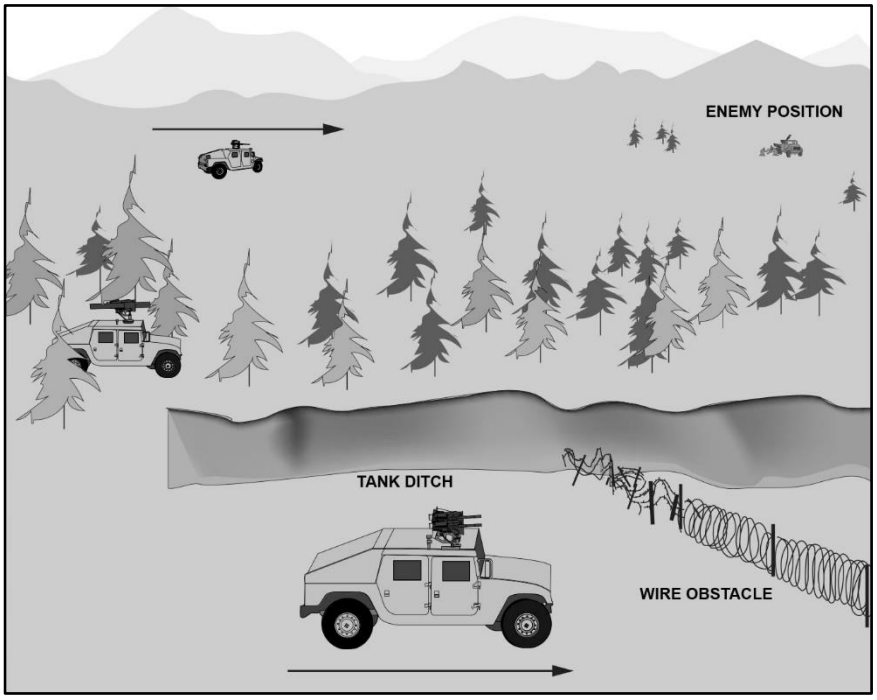


Figure 3-3. Scouts conducting mounted reconnaissance

Aerial

3-33. Aerial reconnaissance conducted by UAS or Army aviation assets provides a flexible, low-risk means for gaining basic information in the least amount of time. It serves as a link between sensors and mounted or dismounted reconnaissance. Aerial reconnaissance can quickly reconnoiter impassable terrain.

3-34. The UAS is organic to the troop and squadron of the ABCT, IBCT, and SBCT for surveillance and reconnaissance. Complex terrain, adverse weather conditions, enemy deception/countermeasures, and enemy air defense systems severely limit the effectiveness and potential availability of aerial reconnaissance assets. The scout platoon can employ the UAS forward in its AO to facilitate reconnaissance in complex terrain or to maximize the UAS operational range.

3-35. The higher headquarters may direct aerial reconnaissance, or the platoon leader may determine the requirement for aerial reconnaissance when there is:

- Weather permitting.
- Extremely limited time, requiring information quickly.
- No ground reconnaissance assets available.
- Extended distances.

- Significant risk to ground forces from known or unknown enemy locations.
- Complex terrain.

Reconnaissance by Fire

3-36. In the reconnaissance by fire method, scouts place direct or indirect fire on positions where there is information on, or a reasonable suspicion of enemy occupation; the goal is to cause the enemy to disclose their composition, disposition and willingness to fight. Scouts use reconnaissance by fire when expecting enemy contact, and they have limited time available or when they are unable to maneuver and develop the situation. Reconnaissance by fire eliminates any element of surprise the scouts have and it is likely to provide the enemy detailed knowledge of their location. It may, however, reduce the chance of scouts being ambushed within established kill zones. Reconnaissance by fire does not always work. For example, disciplined troops in prepared positions will not react to the scouts' fires. Examples of situations in which scouts employ reconnaissance by fire include:

- Presence of a natural or man-made obstacle.
- Existence of an obvious kill zone.
- A suspected enemy position that fits the situational template.
- Signs of recent activity (track marks, trash).
- Bunker complexes.

3-37. When such evidence exists, the scouts should maneuver to observe from different locations. When the decision is finally made to use reconnaissance by fire, weapons should be used in the following priority:

- Indirect fire.
- Dismounted machine gun.
- 25-mm chain gun, MK-19, mounted machine gun.
- TOW.

3-38. Reconnaissance by fire does not mean the indiscriminate use of direct and indirect fires at all wood lines and hilltops in the hopes of causing the enemy to react. The enemy will recognize that and may not react and also wastes valuable ammunition.

Indirect Fire

3-39. Scouts can employ reconnaissance by indirect fire providing security for the scouts by not disclosing their exact position. All scouts should observe the effects of the indirect fire.

3-40. Reconnaissance by indirect fire has disadvantages. Indirect fire requires more coordination and communication than direct fire; it is less responsive and may be less accurate than direct fire. Indirect fire is subject to considerations beyond the control of the scout platoon such as the supporting unit's class V supply status, counterbattery threats, and command approval. Additionally, the effects of indirect fire may obscure the scout's vision. Figure 3-4, page 3-12, is a graphical depiction of scouts using the reconnaissance by indirect fire method.

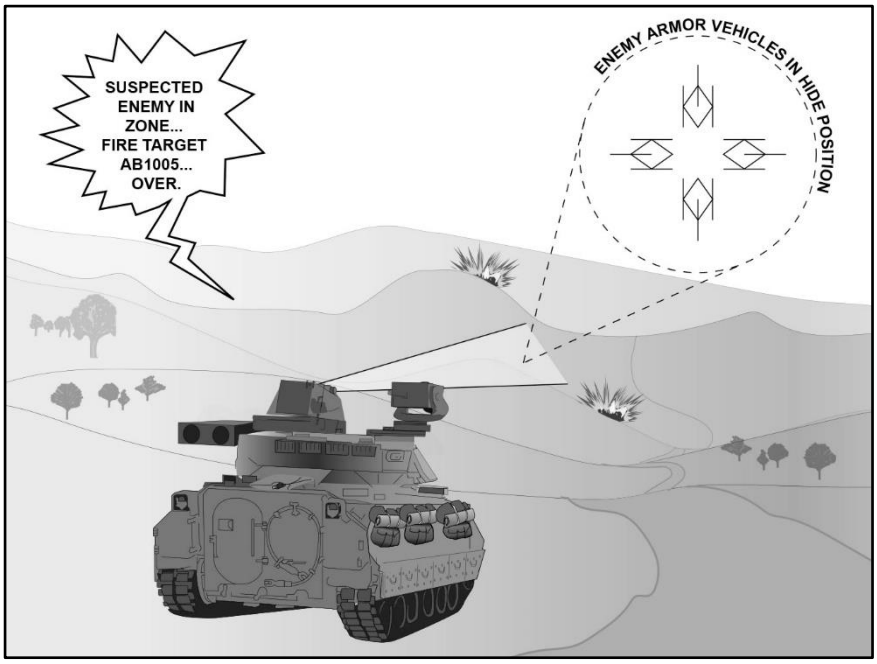


Figure 3-4. Scouts using reconnaissance by fire, indirect

Direct Fire

3-41. Scouts use their organic weapons to place accurate direct fires on suspected enemy positions that are likely to provoke a rapid enemy response, but disclose the scouts' position. Maximum effective range of the weapon limits direct fire and uses valuable ammunition. Scouts must work together when employing direct fire. The scout who fires may not be in the best position to observe because of obscuration and the survival requirement to move to a covered position after firing. Another scout, in a different position can observe for an enemy reaction. The observing scout remains undetected and accurately reports enemy information. When using direct fire, the scout platoon leader should also place indirect fires on suspected positions for suppression if the enemy responds in strength.

3-42. One example of the technique of integrating reconnaissance methods is the use of mounted and dismounted reconnaissance at the individual vehicle, squad or section level at any point where scouts encounter IV lines or before suspected enemy locations. Before execution, the platoon leader should direct the use of the appropriate movement technique and specify the reconnaissance method based on anticipated enemy contact depicted in the enemy situational templates. In execution, the vehicles stop short of the crest of the IV line, and deploy their dismounts. The dismounted element will use stealth, cover, and concealment to gain observation on the far side of the IV line. Once the

dismounts confirm or deny enemy contact, they provide overwatch while the vehicles bound the IV line. The vehicles and dismounted teams link up and remount in an area with cover and concealment or not anticipating enemy contact before continuing to the next terrain feature or NAI. The scout platoon's vehicles relay or retransmit back to commander.

RECONNAISSANCE SENSOR AND SURVEILLANCE ASSETS

3-43. While not separate reconnaissance methods, sensor and surveillance assets cue different reconnaissance methods. They maintain surveillance of areas that require observation over extended periods and facilitate cueing for aerial, dismounted, and mounted reconnaissance. Sensors provide redundancy when assets push forward to facilitate ground reconnaissance, and can extend distance between ground reconnaissance and the enemy. The platoon leader needs to know the capabilities, limitations, and command support relationship of the various sensor systems. These systems are susceptible to countermeasures, lack the ability to convey the human dimension of the AO in terms of assessing the enemy's morale, and cannot make crucial decisions or judgment calls. The higher headquarters may direct the use of sensors to—

- Expand the scope of missions in a larger AO.
- Conduct missions of an extended duration.
- Conduct CBRN.
- Cue a more thorough ground or aerial reconnaissance of a given area.

RECONNAISSANCE MANAGEMENT

3-44. Effective use of reconnaissance management greatly enhances the scout platoon's ability to gain and maintain contact with the enemy on friendly terms. Leaders may task organize as appropriate to accomplish the mission. Understanding the known communication plan and linkage is useful for the following reconnaissance management techniques to be successful. Figure 3-5, on page 3-14, highlights reconnaissance management in relation to an NAI.

3-45. 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. An example of cueing is a dismounted observation post that gains visual contact with threat elements at a distance beyond positive identification. Visual contact can cue the use of the troop level Raven UAS to conduct aerial reconnaissance of the visual contact to confirm threat disposition and composition.

3-46. Mixing is using two or more different assets to collect against the same intelligence requirement. An example of mixing would be the use of a dismounted observation post and a vehicle using its optics to conduct reconnaissance on the same NAI from different vantage points.

3-47. Redundancy is using two or more like assets to collect against the same intelligence requirement. An example of redundancy would be the use of two separate dismounted observation posts observing the same NAI from different locations.

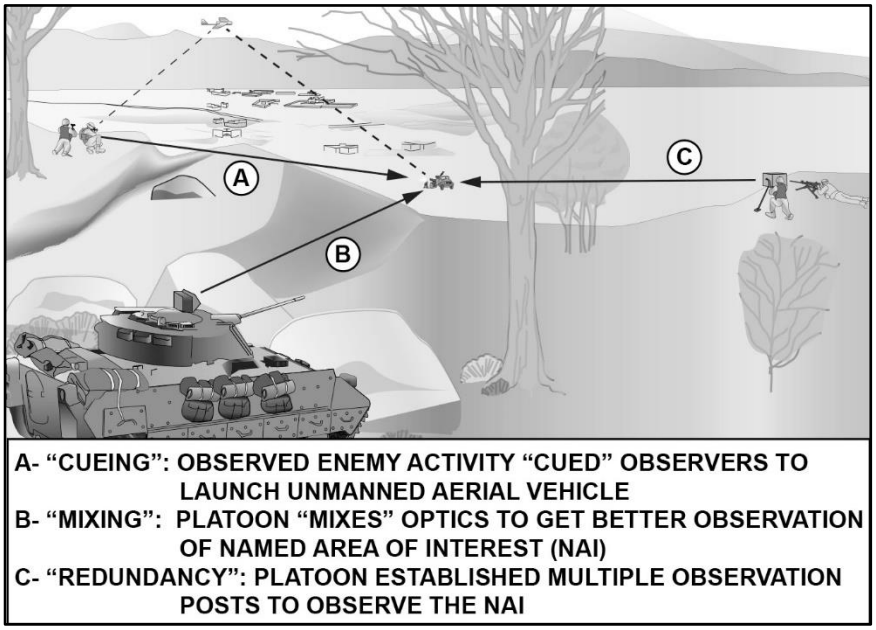


Figure 3-5. Reconnaissance management, example

SECTION II – FORMS OF RECONNAISSANCE

3-48. The four forms of reconnaissance scout platoons conduct are zone, area, route, and reconnaissance in force. Special forces conduct the fifth form, special reconnaisance.

ZONE RECONNAISSANCE

3-49. Zone reconnaissance is the directed effort to obtain detailed information concerning enemy, terrain, or civil considerations, in accordance with the commander's intent. Scout platoons conduct a zone reconnaissance within a location delineated by LD, lateral boundaries, and a limit of advance (LOA).

3-50. Zone reconnaissance focuses on enemy, terrain, or civilian population and consider infrastructure a part of terrain. Additionally, the commander may focus the reconnaissance effort on a specific enemy force, such as the reserve.

3-51. Commanders direct scouts to conduct zone reconnaissance when they are uncertain of the composition and disposition of enemy forces in their AO, information concerning terrain is vague, or requiring information from or on the civilian population. In these cases, reconnaissance assets initially work over a broad area to develop the enemy situation. As they gain an understanding of enemy weaknesses, they then pull the main body to positions of tactical advantage.

3-52. A zone reconnaissance is normally a deliberate, time-consuming process. It takes more time than any other reconnaissance mission, so the commander must plan for adequate time for the scout platoon to conduct the mission. A zone reconnaissance normally occurs over an extended distance and starts from a LD. However, when the reconnaissance objective is the enemy force, a commander may forego a detailed reconnaissance of the zone and focus assets on those NAIs that would reveal enemy compositions and dispositions. The scout platoon cannot disregard terrain when focusing on the enemy. However, it may minimize its terrain reconnaissance to actions that influence an NAI.

TASKS

3-53. The troop commander or battalion S-3, in conjunction with the squadron or battalion commander, determines the priority of tasks best suited (collection of information necessary) to answer PIRs then focuses the troop's collection efforts against these requirements. Tasks associated with zone reconnaissance are—

- Find and report all enemy forces within the zone.
- Clear all enemy forces in the designated AO within the capability of the unit conducting reconnaissance based on engagement criteria.
- 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.
- Inspect and classify all bridges within the zone.
- Locate fords or crossing sites within the zone.
- Inspect and classify all overpasses, underpasses, and culverts.
- Locate and clear all mines, obstacles, and barriers in the zone (within capability).
- Report reconnaissance information.

3-54. Based on priority, the commander may direct the following:

- Reconnoiter all terrain within the zone.
- Reconnoiter specific terrain within the zone.
- Locate bypass around built-up areas, obstacles, and contaminated areas.

CONSIDERATIONS

3-55. Zone reconnaissance is time-consuming. Unless the orders specify which tasks to omit, all tasks are implied in the mission statement. When speed is the primary concern, commanders modify the focus, tempo, and engagement criteria to prioritize the tasks for the platoon leader. Commanders determine the width of the zone by the road network, terrain features, anticipated enemy activity, and time available to accomplish the mission. UAS assets can act as an economy of force role to observe areas beyond the operational reach of ground reconnaissance elements.

3-56. The supported commander's order includes phase lines and other graphic control measures within the area that control the maneuver of the scout platoon during the zone reconnaissance mission. The platoon leader verifies mission requirements by identifying

information requirements, CCIR, SIR, and develops understanding of the higher commander's plan.

EXAMPLE OF ZONE RECONNAISSANCE

3-57. To maximize reconnaissance assets and prepare for contact, the platoon leader deploys the sections before reaching the LD. The platoon is in position early enough to conduct observation of the LD. To do this, the platoon leader designates a section or team to conduct a reconnaissance of the route from the SP to the release point (RP), and capture the time it takes to complete the movement. This time is used in deciding when to execute the SP, allowing the platoon enough time to complete movement to the LD and establish initial observation posts.

3-58. Once the scout platoon occupies their initial positions before the LD, vehicle commanders direct team members to observe the zone beyond the LD for enemy movement. The platoon stops turns off vehicles, Soldiers dismount and take a knee and remove headgear. Soldiers look for existing undisturbed terrain. They check using optics or natural sight to scan for booby-traps, disturbed vegetation, indicators of enemy presence, and recheck friendly camouflage efforts. Drivers locate next covered and concealed positions and possible driving hazards. Gunners familiarize themselves with the AO and possible enemy positions while scanning with weapons systems. Everyone listens for sounds of nature to return or any vehicular noise. Soldiers smell for exhaust fumes, cordite, or any unusual smell. This technique is a halt known by the mnemonic aide: stop, look, listen, and smell (SLLS). It is intended to rapidly acclimatize the platoon to their AO. During this time, the platoon leader requests any updates from the commander or S-2 on enemy activity prior to moving across the LD. The platoon remains in observation positions until the time prescribed in the OPORD and then crosses the LD, or on order from the commander.

3-59. The scout platoon executes zone reconnaissance by using the movement technique described in the OPORD. The sections move into their respective AO within the zone for which the platoon is responsible. The platoon leader uses phase lines, checkpoints, contact points, or Grid Index Reference System and Terrain Index Reference System (known as TIRS) to direct movement so the platoon can reconnoiter the entire zone. The platoon leader ensures the sections remain generally online while maintaining adequate security through overwatch, which prevents development of significant gaps that a moving enemy can exploit. Section and team leaders submitting location reports on a timely and regular basis facilitate and enable movement.

3-60. In mounted scout platoons, scouts dismount to gather detailed information, reconnoiter danger areas, or move through areas not accessible by the vehicles. The sections maneuver through their sectors in a back and forth pattern to properly explore the zone and accomplish all tasks. The platoon continues to inspect the zone until it reaches the LOA. After completing the zone reconnaissance, the scout platoon transitions to a follow-on mission that often includes moving into a screen. Executing a hasty screen at halts or at phase lines, allows the scout platoon to provide early warning of enemy activities; send class I, III, and V reports; and conduct consolidation and reorganization while friendly elements move into a defense behind the platoon's screen.

3-61. In figure 3-6, page 3-18, the platoon leader deploys the platoon abreast prior to reaching the LD. Once on the LD, the platoon conducts a SLLS halt beginning to observe their assigned AO and cross the LD at the time prescribed by the commander. Based on the platoon leader's analysis and TLP, the platoon executes appropriate movement techniques and formations. For the purpose of this example, the platoon will use the bounding overwatch movement technique.

3-62. Once Alpha section has crossed Phase Line Bruder, they conduct zone reconnaissance in their assigned section boundaries from the LD to Phase Line Cook. Alpha section will not cross Phase Line Cook until Bravo section is also set on Phase Line Cook. Once Alpha section is set on Phase Line Cook, they radio to Bravo section to begin their zone reconnaissance from the LD to Phase Line Cook. Once both sections are set on Phase Line Cook, they deploy their dismounts to conduct reconnaissance of the bridges in vicinity of checkpoint 1 and checkpoint 2. The dismounts determine the trafficability of the bridge, locate necessary bypass routes, and conduct a BLUE 5 CROSSREP (known as crossing report) (see appendix A). Once both bridges are devoid of enemy forces, and suitable for continued movement, the vehicles collapse their overwatch positions and pick up their respective dismounted elements. (See figure 3-6.) It is important for the platoon leader to report the platoon's execution of all graphic control measures and actions (mounted and dismounted) to the troop command post. The platoon leader reports assist the troop's development of a common operating picture and enhance situational awareness for the commander.

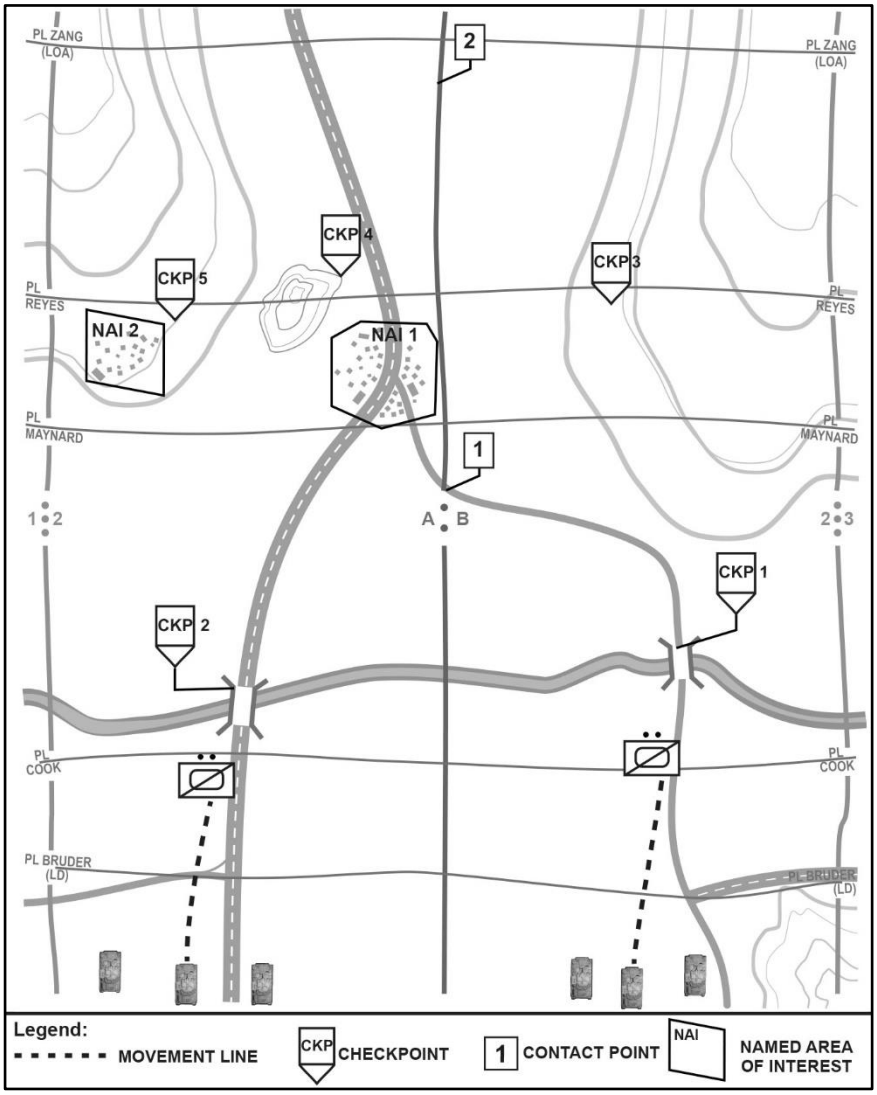


Figure 3-6. Scout platoon conducts zone reconnaissance

3-63. Both sections rapidly maneuver across their respective bridge, to minimize the large linear danger area between subordinate elements of the platoon. Once across the bridge, Alpha section continues its zone reconnaissance to Phase Line Maynard to begin observation of NAI 1 (major road intersection). Once set on Phase Line Maynard, Alpha section radios to Bravo section that overwatch is set; Bravo section then begins its zone reconnaissance to Phase Line Maynard. Once on Phase Line Maynard, Alpha section deploys its dismounts to execute a more thorough reconnaissance of NAI 1 and NAI 2. The dismounts establish an observation post according to the commander's

reconnaissance guidance (see figure 3-7). Once the determining NAI is clear of enemy forces, the Alpha section bounds forward to pick up the dismounted element.

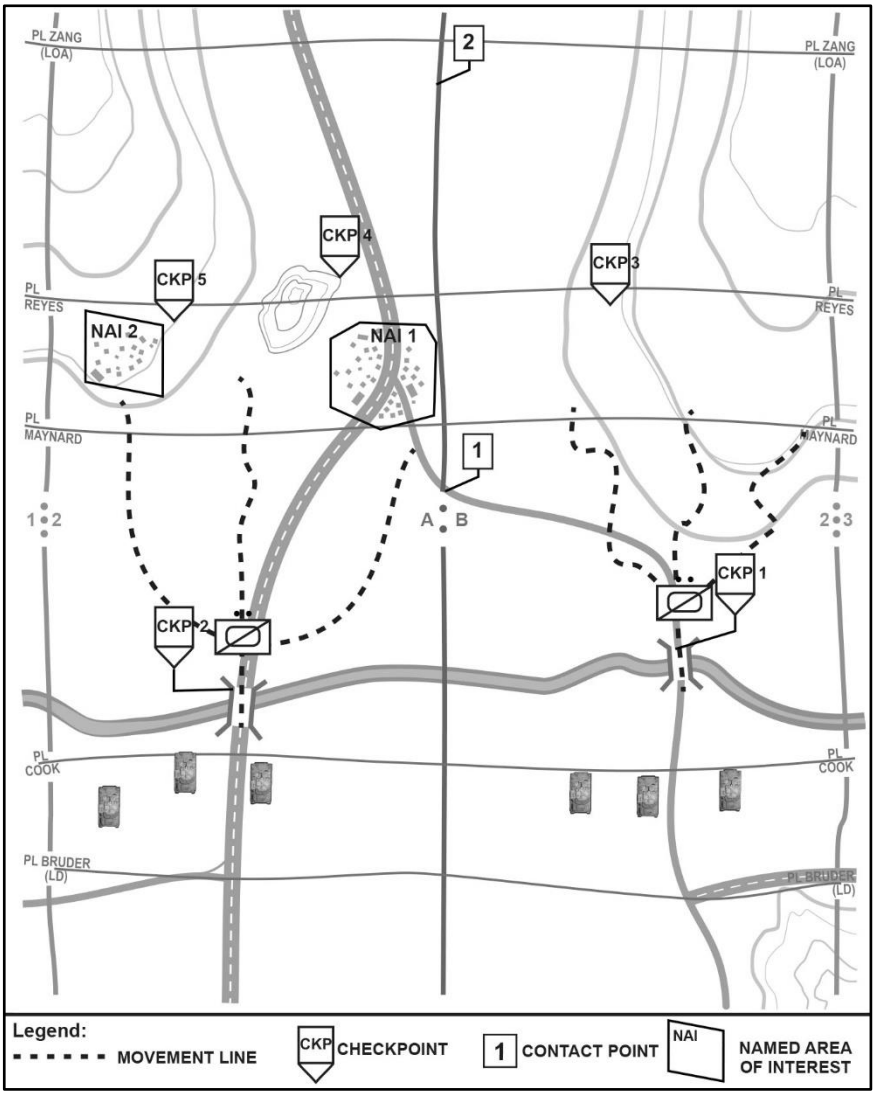


Figure 3-7. Zone reconnaissance, establish observation posts

3-64. Both sections conduct a short halt at Phase Line Reyes, until the platoon leader grants permission to cross the phase line. Once the platoon leader authorizes movement, Alpha section bounds first to the LOA (Phase Line Zang), where it establishes a short duration screen. Once the section screen is set, Alpha section radios Bravo section to cross Phase Line Reyes and bound to the LOA to establish a platoon consolidated screen until the platoon reaches its displacement criteria. (See figure 3-8, on page 3-20.)

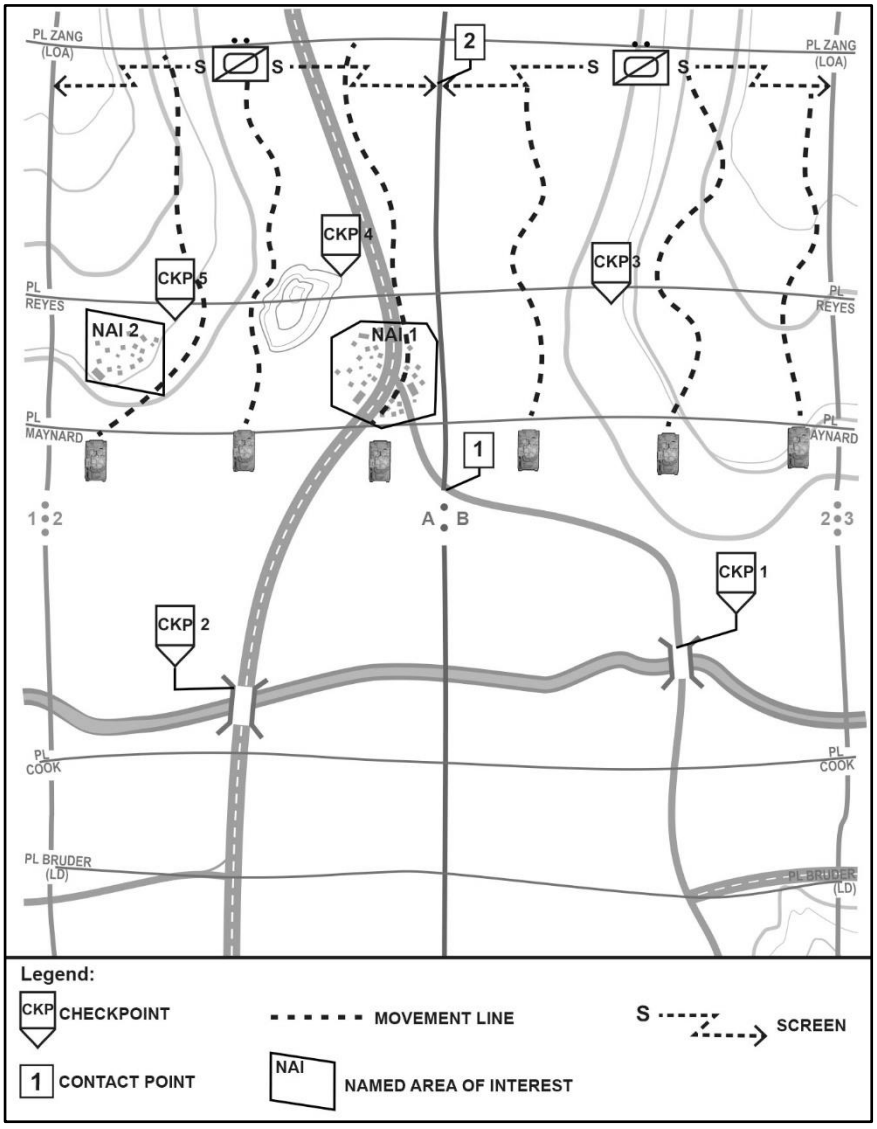


Figure 3-8. Zone reconnaissance, establishing a screen

AREA RECONNAISSANCE

3-65. An area reconnaissance is a form of reconnaissance that focuses on obtaining detailed information about the terrain, enemy, or civilian population within a prescribed area. For a scout platoon, a prescribed area may encompass one or a combination of these factors. For example, a scout platoon may deploy to a prescribed area such as a town to gather information about the population, roads, bridges, market places, and other society and infrastructure. Area reconnaissance is often employed during a zone reconnaissance for small towns, dead zones, and NAIs. The primary difference that identifies an area reconnaissance is the reduced size of the area boundaries compared to a zone. Additionally, whereas in a zone reconnaissance, the scout platoon focuses on the entirety of their assigned zone, from the LD to the LOA, in an area reconnaissance, the scout platoon may not be responsible for conducting reconnaissance during their movement to their assigned area. The commander may dictate that the reconnaissance begins once the platoon reaches their assigned reconnaissance area, or NAI associated with the tasked area reconnaissance, conducts a SLLS halt, and begins their reconnaissance.

TASKS

3-66. The tasks for an area reconnaissance are the same as a zone reconnaissance. Based on time and intent, the commander may omit certain tasks for the platoon to focus on during an area reconnaissance. Unless the commander directs otherwise, the scout platoon's primary tasks usually associated with an area reconnaissance include:

- Finding and reporting all enemy forces within the area.
- Reconnoitering specific terrain within the area.
- Reporting reconnaissance information.

3-67. Other tasks include the following:

- Reconnoiter all terrain within the area.
- Inspect and classify all bridges within the area.
- Locate fords or crossing sites near all bridges within the area.
- Inspect and classify all overpasses, underpasses, and culverts.
- Locate and clear all mines, obstacles, and barriers in the area within its capability.
- Locate a bypass around built-up area, obstacles, and contaminated areas.

CONSIDERATIONS

3-68. As with the zone reconnaissance, the platoon leader ensures that the platoon has all known information and intelligence pertaining to the AO. The commander determines the infiltration method and sequence for the platoon. At times, the commander may require recommendations from the platoon leader to assist in this process. If so, the platoon conducts reconnaissance during their TLP to identify their infiltration routes and identify the method or whether methods change throughout the mission. The platoon leader may request other assets available to the BCT. Information

from intelligence assets can help the platoon develop and complete the scheme of maneuver during TLP. The platoon leader and section leaders use intelligence and geospatial products with a detailed map reconnaissance to determine how terrain supports movement. The platoon views the terrain not only from the perspective of how it supports the mission success, but also from the enemy's perspective. Aviation and UAS assets not organic to the troop can provide early warning and reconnaissance of areas that are inaccessible to the platoon.

INFILTRATION AND EXFILTRATION

3-69. Scout platoons frequently employ infiltration and exfiltration in executing forms of reconnaissance and security to avoid detection and direct fire contact with enemy elements. Infiltration and exfiltration can occur during zone, area, or route reconnaissance tasks. Area reconnaissance, in particular, is a form of reconnaissance that is especially effective for infiltration and exfiltration. Infiltration and exfiltration occurs when elements of the platoon proceed mounted, dismounted, or using a combination of the two methods. Preceding infiltration, augmentation assets may have to insert the platoon into the AO where it conducts infiltration. Insertion may be by ground, air, or water assets (if they are available and the tactical situation permits). Extraction may require ground, air, or water assets.

EXAMPLE OF CONDUCTING AN AREA RECONNAISSANCE

3-70. The following paragraphs include an example of a combined arms battalion scout platoon conducting an area reconnaissance. The illustration below by no means is "the" way, but a way to conduct an area reconnaissance in respect to the mission variables of METT-TC.

3-71. In the following example, the troop commander gave the platoon leader a mission of conducting an area reconnaissance of Objective Sledge and Objective Hammer. The platoon was not assigned a specific route and enemy disposition is vague. The platoon leader analyzes the terrain, mission requirements, and the commander's reconnaissance guidance and decides to use the two-section platoon configuration (phase line in Alpha and PSG in Bravo section) to execute the mission. The platoon leader develops a concept sketch and adds graphic control measures to control the movement of the platoon. Graphic control measures for this example include section boundaries, checkpoints, phase lines, target reference points, and NAIs (see figure 3-9). It is important for the platoon leader to report the platoon's execution of all graphic control measures and actions (mounted and dismounted) to the troop command post. The platoon leader reports aid the troop's development of a common operating picture and enhance situational awareness for the commander.

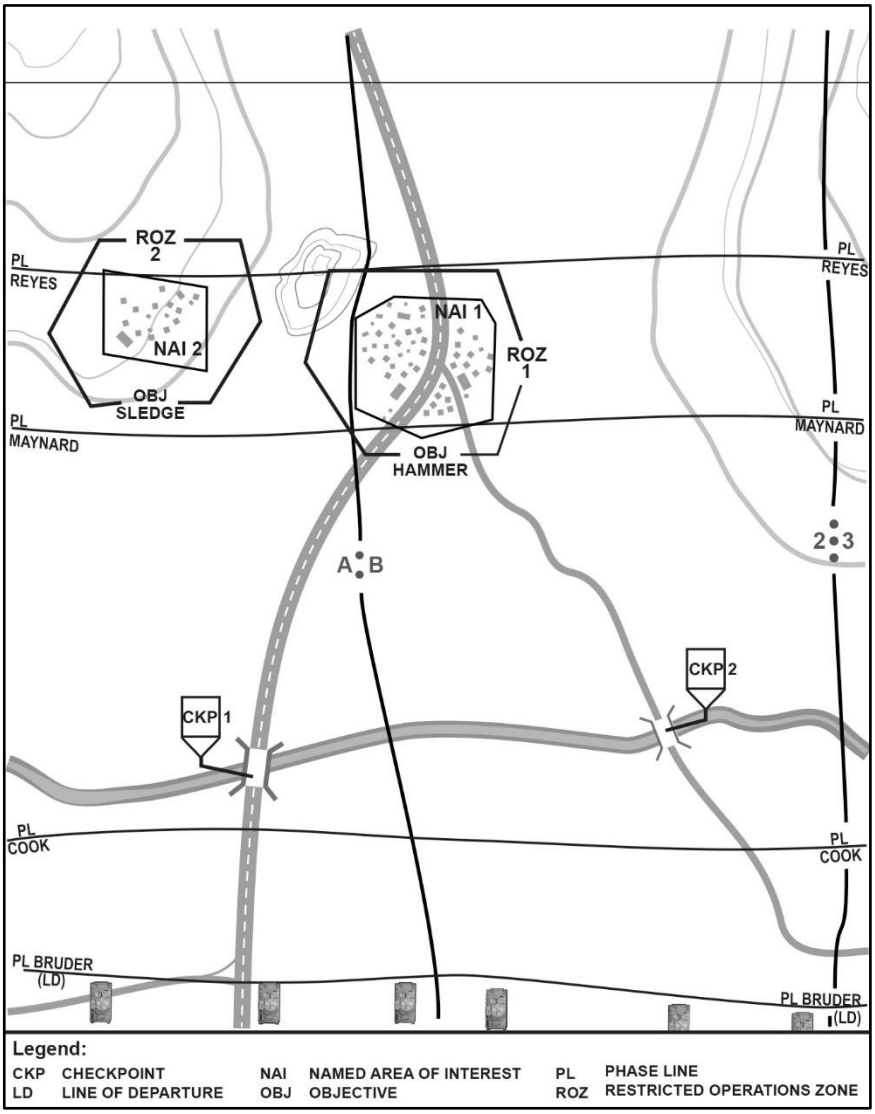


Figure 3-9. Scout platoon staged to conduct an area reconnaissance

3-72. In this example, Alpha section is responsible for NAI 2, a threat focused NAI and Bravo section is responsible for NAI 1, a terrain focused NAI. Given the platoon leader's terrain and enemy analysis and identification of weather effects, the section leaders develop their scheme of maneuver to answer their assigned indicators, adhering to the fundamentals of reconnaissance at all times.

3-73. Upon execution, the platoon crosses Phase Line Bruder (LD) at the time specified in the commander's OPORD using the bounding overwatch moving technique. Alpha section leads the movement. Alpha section maneuvers from LD to Phase Line Cook, set, and provide overwatch for Bravo section to maneuver to Phase Line Cook. Once Bravo section is set at Phase Line Cook, both sections employ their dismounted teams to conduct a detailed reconnaissance of the bridges within their respective boundaries. (See figure 3-10.)

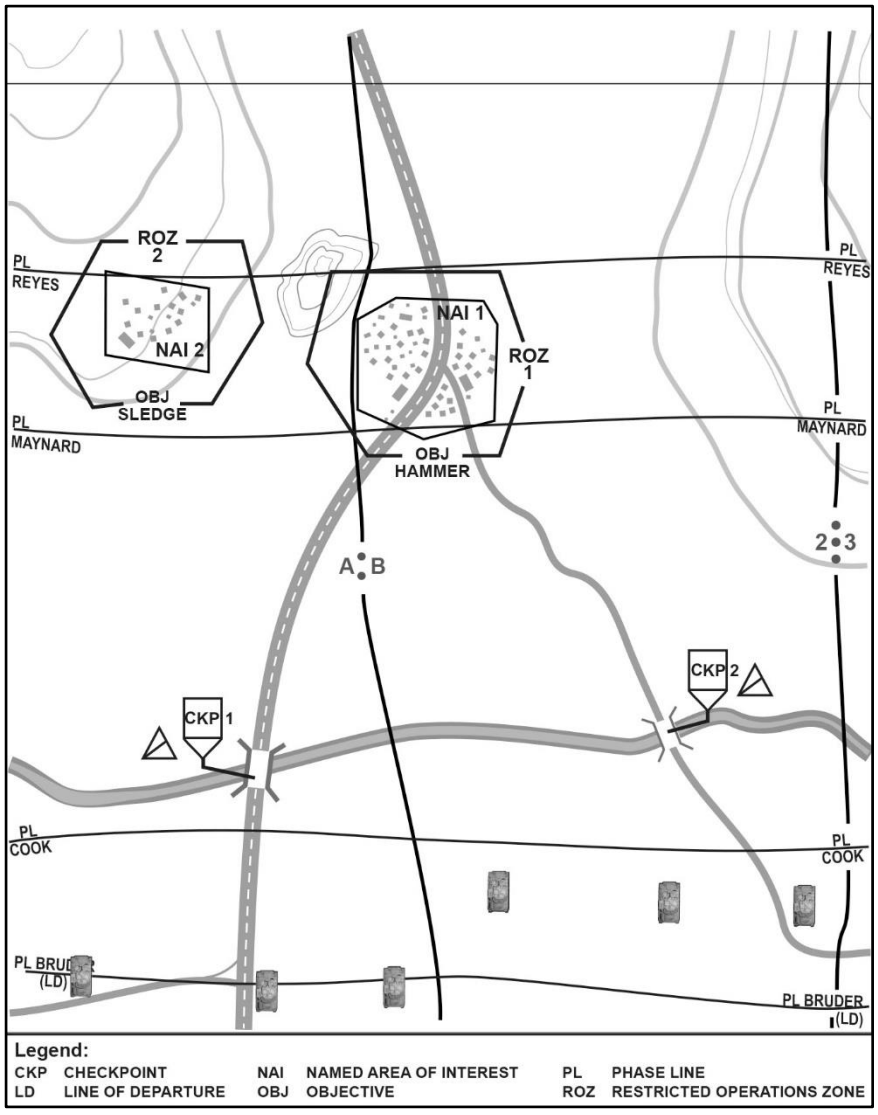


Figure 3-10. Scout platoon staged to conduct an area reconnaissance (continued)

3-74. The dismounted teams conduct a detailed reconnaissance of the bridges to ensure the bridges can support the platoon's vehicles as well as follow-on forces movement. Once the bridges are deemed feasible for crossing and cleared of any threats, the mounted team picks up the dismounted teams and continues the mission. Alpha section crosses the bridge within their section and maneuver to Phase Line Maynard. Once Alpha section is set in the vicinity of Phase Line Maynard, the platoon leader radios to Bravo section to maneuver to Phase Line Maynard. Alpha section provides overwatch for Bravo section while Bravo section maneuvers to Phase Line Maynard. Additionally, the platoon requests and receives UAS to reconnoiter NAIs 1 and 2 prior to the platoon's execution of Phase Line Maynard. The platoon leader establishes restricted operations zone (ROZ) 1 and ROZ 2 to manage the UAS employment. Once both sections are set at Phase Line Maynard, they deploy their dismounted teams to establish dismounted observation posts forward of the vehicles to provide observation on their respective NAIs (see figure 3-11, on page 3-26).

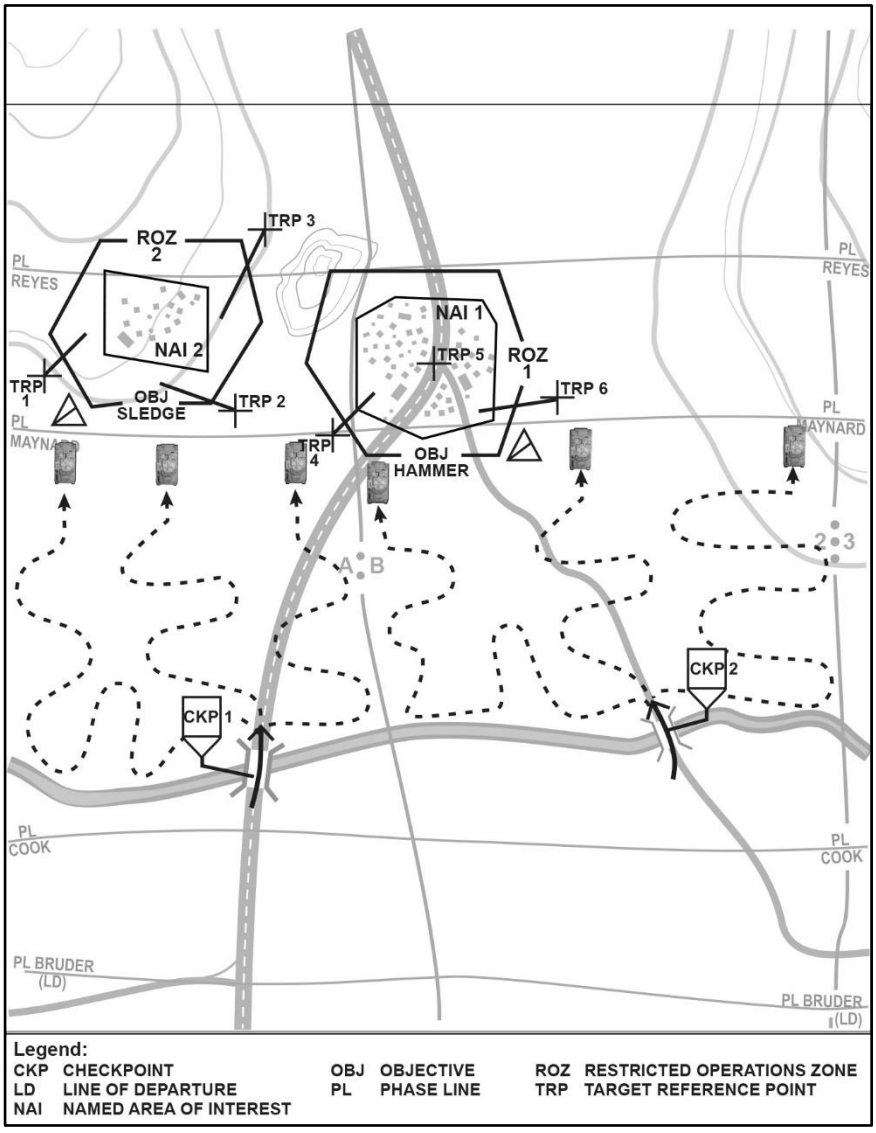


Figure 3-11. Scout platoon staged to conduct an area reconnaissance (continued)

3-75. Throughout this mission, the section leaders assist the platoon leader in selecting the best mutually supporting observation posts (mounted and dismounted), support by fire (known as SBF) locations, infiltration routes, vehicle hide sites, and egress routes for the mission. The dismounted teams crosstalk with their respective mounted team to verify and confirm TRPs and preplanned fires targets to aid in engagement, disengagement, and displacement. The platoon leader preplans the fires targets short of, on, and beyond the NAI and reconnaissance objectives.

3-76. The platoon leader and section leader must constantly track their subordinates' positions, thereby increasing the speed and accuracy of ground clearance for fires. When scouts establish an observation post, either mounted or dismounted, the platoon leader must coordinate with the troop FSO and mortar FDC to establish a no fire area. To deconflict airspace, the platoon leader has the option to deconflict by time, space, or a combination of the two. By establishing an air corridor for the employment of the UAS, the platoon leader can establish necessary graphical control measures to rapidly de-conflict the gun target line of indirect fires systems through airspace management.

ROUTE RECONNAISSANCE

3-77. A 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. A scout platoon conducts a route reconnaissance to answer questions for the commander about the presence and disposition of obstacles and enemy along a route and whether it will support the movement of friendly vehicles.

TASKS

3-78. During a route reconnaissance, the platoon prepares to accomplish a wide range of tasks. Based on time available and the commander's intent, the platoon may decide to conduct the reconnaissance to acquire specific information. To be ready for either type of situation along the route, the platoon leader clearly understands the following tasks they may have to accomplish in a route reconnaissance:

- Find, report, and based on engagement criteria, clear within capabilities all enemy forces that can influence movement along the route.
- Reconnoiter and determine the trafficability of the route.
- Reconnoiter all terrain the enemy can use to affect movement along the route.
- Reconnoiter all built-up areas along route.
- Reconnoiter all lateral routes. Conduct out-posting along lateral routes to identify potential enemy positions and forces that could influence the route.
- Inspect and classify all bridges within the area.
- Reconnoiter defiles along the route, clear of enemy and obstacles (within capability), or locate a bypass.
- Inspect and classify all overpasses, underpasses, and culverts.
- Locate fords or crossing sites near all bridges on the route.
- Locate and clear all IEDs, mines, obstacles, and barriers on the route within capability.

- Locate bypasses around built-up areas, obstacles, and contaminated areas.
- Report route information.

CONSIDERATIONS

3-79. Scout platoons usually conduct a detailed reconnaissance of one route, due to the number of tasks to accomplish in a route reconnaissance. A scout platoon can reconnoiter a route independently or may operate as part of a larger force such as a Cavalry troop. Based on the commander's reconnaissance guidance and intent, the scout platoon may require engineer assets to assist with the route reconnaissance.

3-80. The OPORD the platoon leader receives specifies the route the platoon must reconnoiter and defines the route from SP to RP. Additionally, the order should specify platoon boundaries, LD, and LOA or reconnaissance objective. These control measures specify how much terrain on both sides of the route the platoon must reconnoiter and where the operation must begin and end. The scout platoon needs to reconnoiter all lateral routes and terrain that can influence the route out to at least half the maximum effective range of their respective vehicles main direct fire weapon system, a technique known as out-posting.

3-81. During the initial planning phase, the platoon leader must take into consideration the type of unit the route reconnaissance is supporting. For example, if a platoon is conducting a route reconnaissance to determine the feasibility of the route to serve as a main supply route for future logistical convoys, the platoon leader must understand what types of vehicles will utilize the route. Understanding the purpose of the route enables the platoon leader to develop platoon NAI's specifically tied to curves, slopes, bridges, and other terrain features. See figure 3-12.

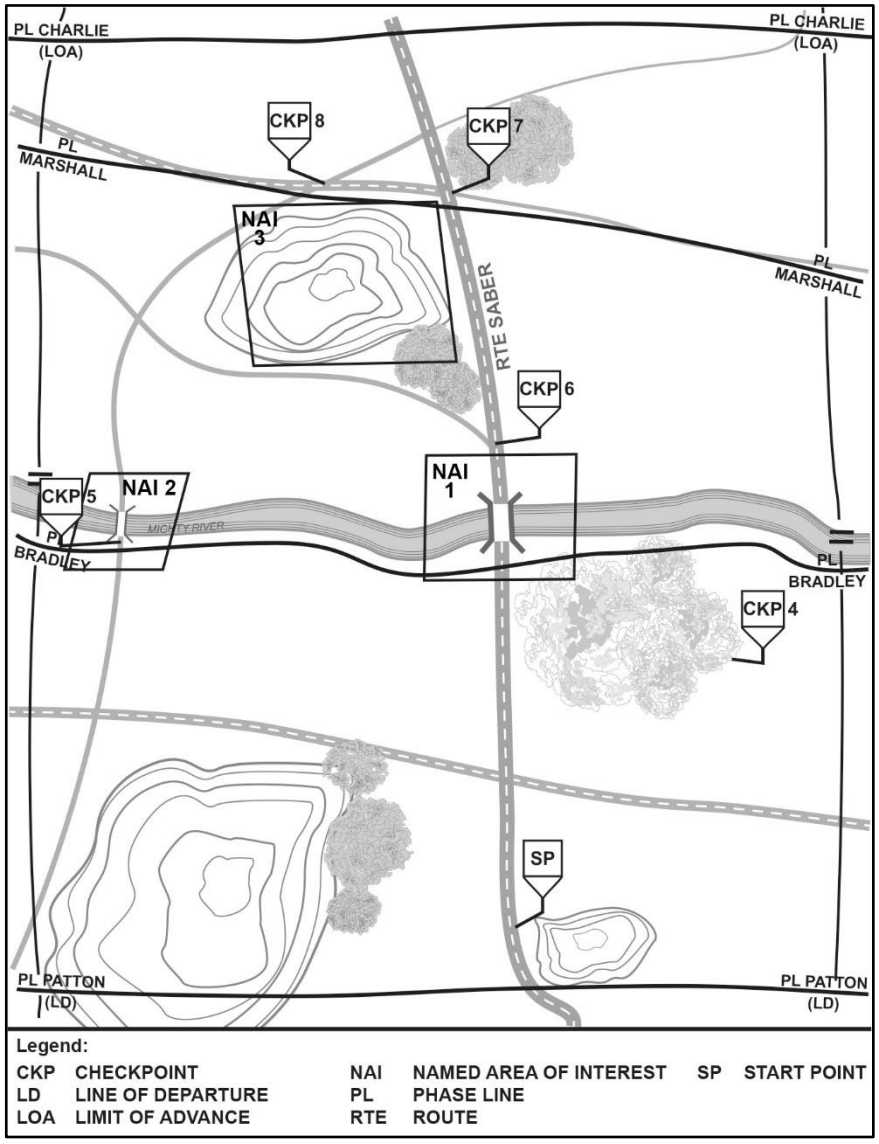


Figure 3-12. Route reconnaissance graphics, example

3-82. The platoon leader may add additional graphics and platoon level NAI's to the platoon internal graphics. The platoon leader must provide all additional operational graphics to the troop command post to ensure a clear common operating picture is present across the entirety of the formation.

3-83. In coordination with the FSO, the platoon leader plans artillery targets on known or suspected enemy positions and on dominant terrain throughout the AO. The platoon

leader evaluates the factors of METT-TC to select a platoon organization of a two or three section formation. The platoon leader must ensure that at least one section has responsibility for reconnoitering the route and physically drives the length of the route. The three-section organization is usually the type best suited to reconnoiter one route. One section reconnoiters the terrain left of the route, another section covers the terrain on the right side of the route, and the most experienced section reconnoiters the route. The platoon leader controls the movement of the other two sections.

EXAMPLE OF A ROUTE RECONNAISSANCE

3-84. When the scout platoon conducts a route reconnaissance, after its SLLS halt, it often deploys in a vee formation because of the detailed nature of this mission. Headquarters section is positioned to the left of the route, Bravo section to the right, and Alpha section in the center of the zone along Route Saber. The platoon should deploy into the formation prior to reaching Phase Line Patton and conduct its SLLS halt, (LD) so that it crosses the LD at the specified time. The platoon leader reports crossing the LD to the troop command post when the first element crosses it.

3-85. The platoon leader is responsible for the scout platoon's movement through the sector. The platoon leader uses checkpoints to control the movement and focuses on key terrain or features that may influence movement along the route.

3-86. Unless the sector is very small or consists of open terrain, the platoon moves as individual sections. As the sections move to the checkpoints, they maneuver in a zigzag pattern to clear the sector and complete all critical tasks of the route reconnaissance. The lead teams on the flanks must observe the route and report any restrictions or obstacles that may restrict movement along the route. Visually clearing the route before Alpha section's maneuvers provides better security and allows Alpha section to concentrate on the route reconnaissance tasks. As the sections maneuver toward the checkpoints, they maintain visual contact with the route (see figure 3-13).

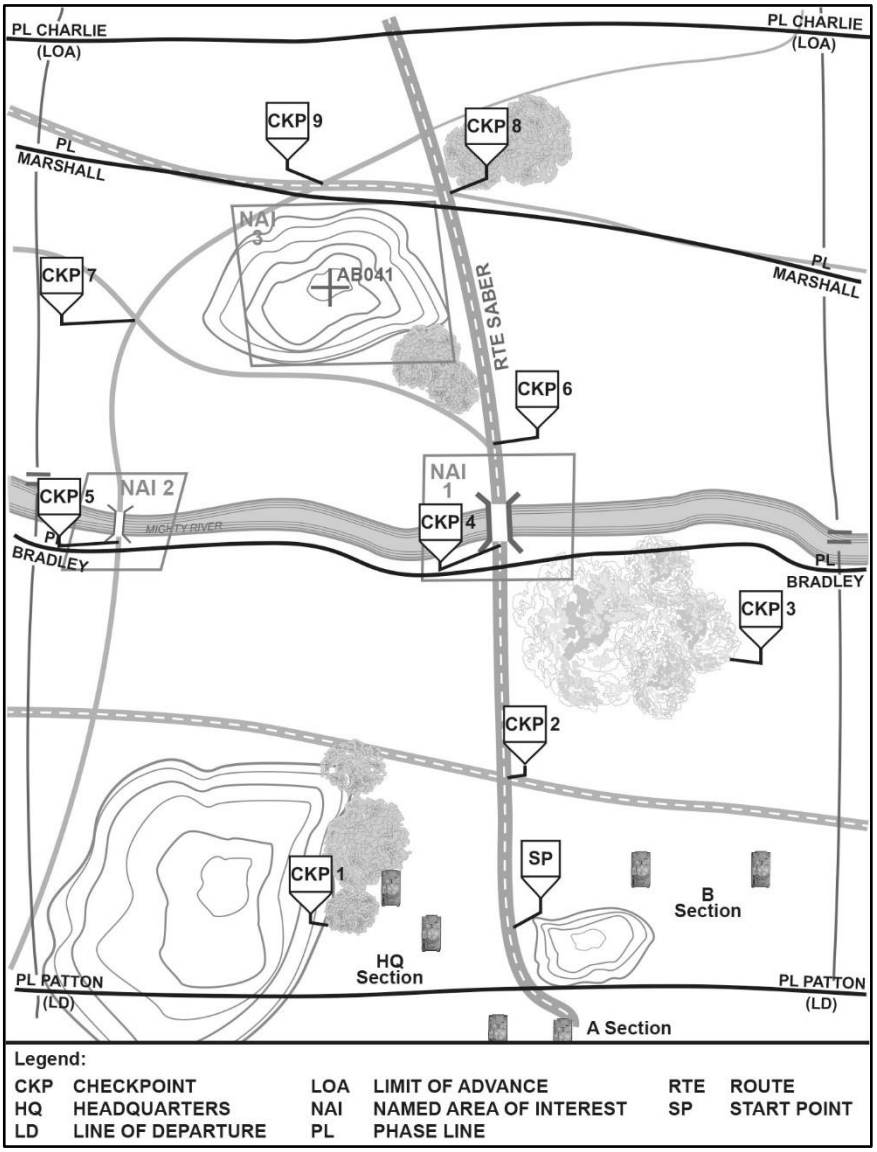


Figure 3-13. Route reconnaissance (continued)

3-87. After both lead sections report "SET" at Phase Line Bradley and are in overwatch positions, Alpha section begins their reconnaissance of the route. As the platoon leader's vehicle moves along the route, the wingman maneuvers to provide overwatch for the reconnaissance. As the platoon leader travels along Route Saber, the platoon leader normally sends a route classification of the trafficability at intervals designated by the

commander. Sending a separate route report occurs only if there is a significant or unexpected change in the route's makeup (see figure 3-14).

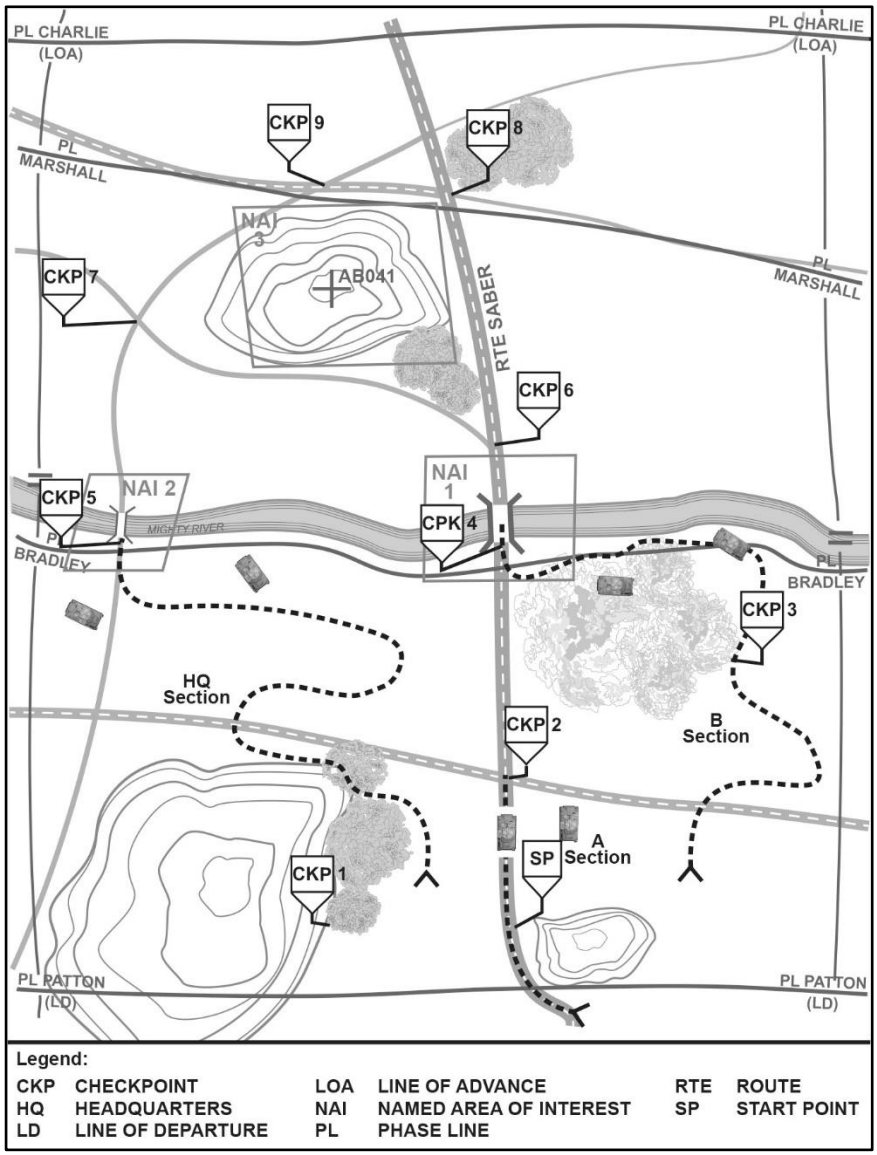


Figure 3-14. Route reconnaissance (continued)

3-88. As Alpha section clears the route, the other sections move ahead, clearing and reconnoitering critical and dominant terrain. The platoon leader controls and coordinates the movement of the sections. The platoon leader must ensure that the flank sections remain far enough forward of Alpha section to provide security. The flank sections have

also been assigned responsibility for covering lateral routes. Headquarters section is executing a lateral route and uses checkpoint 8 to tie-in with Alpha section on Route Saber (see figure 3-15).

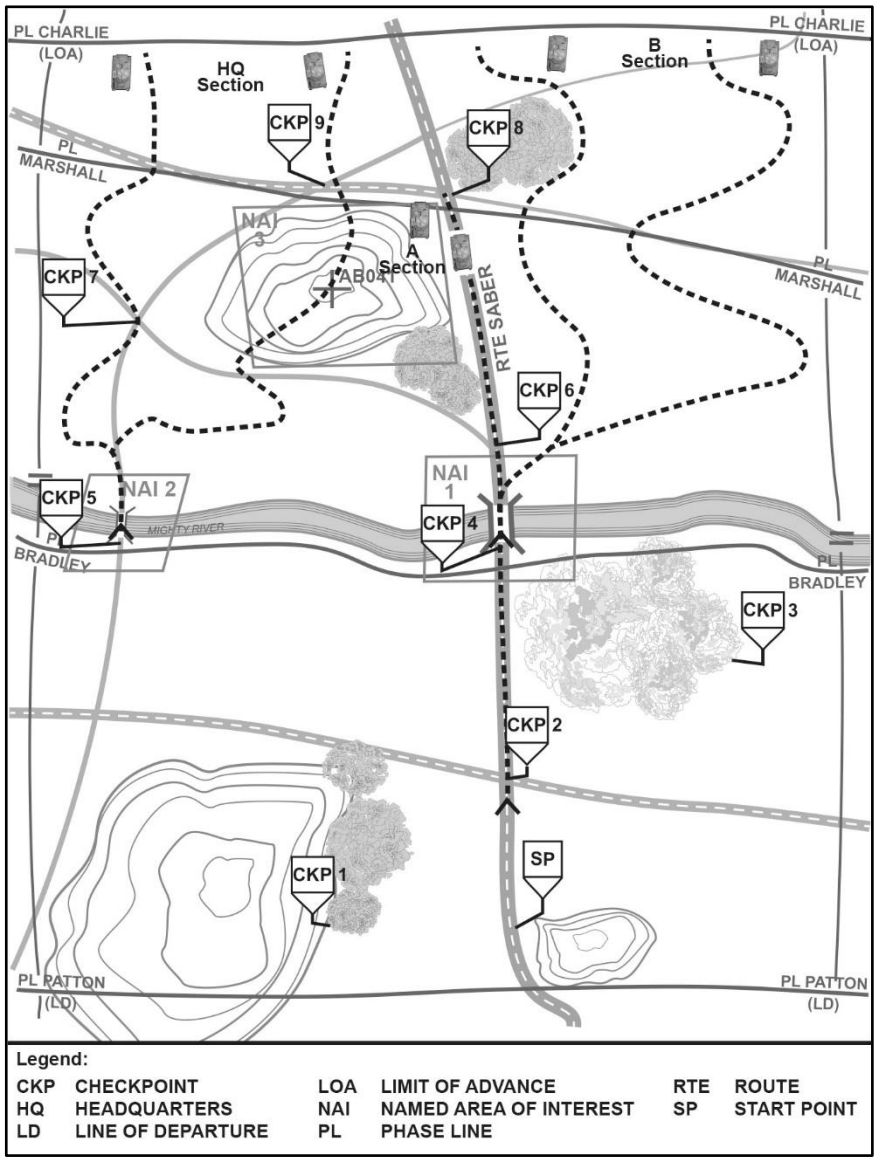


Figure 3-15. Route reconnaissance (continued)

3-89. The platoon OPORD must address actions on the approach to the stream. In this case, the two flank sections have been given the task of locating bypasses in the form of

fords or unmapped bridges. Headquarters section is successful in locating a mapped bridge. Bravo section is unsuccessful in locating a feasible fording site, and maneuvers to cross the main bridge that is located along the route within Alpha section's AO.

3-90. Alpha section continues its route reconnaissance along the route until it approaches the bridge site. It then executes a bridge reconnaissance to establish trafficability of the bridge. Headquarters section occupies an overwatch position while Alpha section reconnoiters the bridge. Bravo section continues its reconnaissance one terrain feature beyond the stream and then occupies a short-duration observation post.

3-91. Alpha section completes its bridge reconnaissance and establishes local security on the approaches to the far side of the bridge. Once this is complete, Headquarters section maneuvers across the bridge through Alpha section and continues its reconnaissance to clear dominant terrain on the left flank of the route. Once Bravo section is set in sector, the platoon resumes its route reconnaissance to the LOA.

ROUTE RECONNAISSANCE OVERLAY

3-92. Figure 3-16 is an example of graphics in route classification overlays. At a minimum, they include the following information on the route-classification overlay:

- Route-classification formula.
- Name and rank of person in charge of performing the classification.
- Unit conducting the classification.
- Date-time group (DTG) that the classification was conducted.
- Map name, edition, and scale.
- Any remarks to ensure complete understanding of the information on overlay.

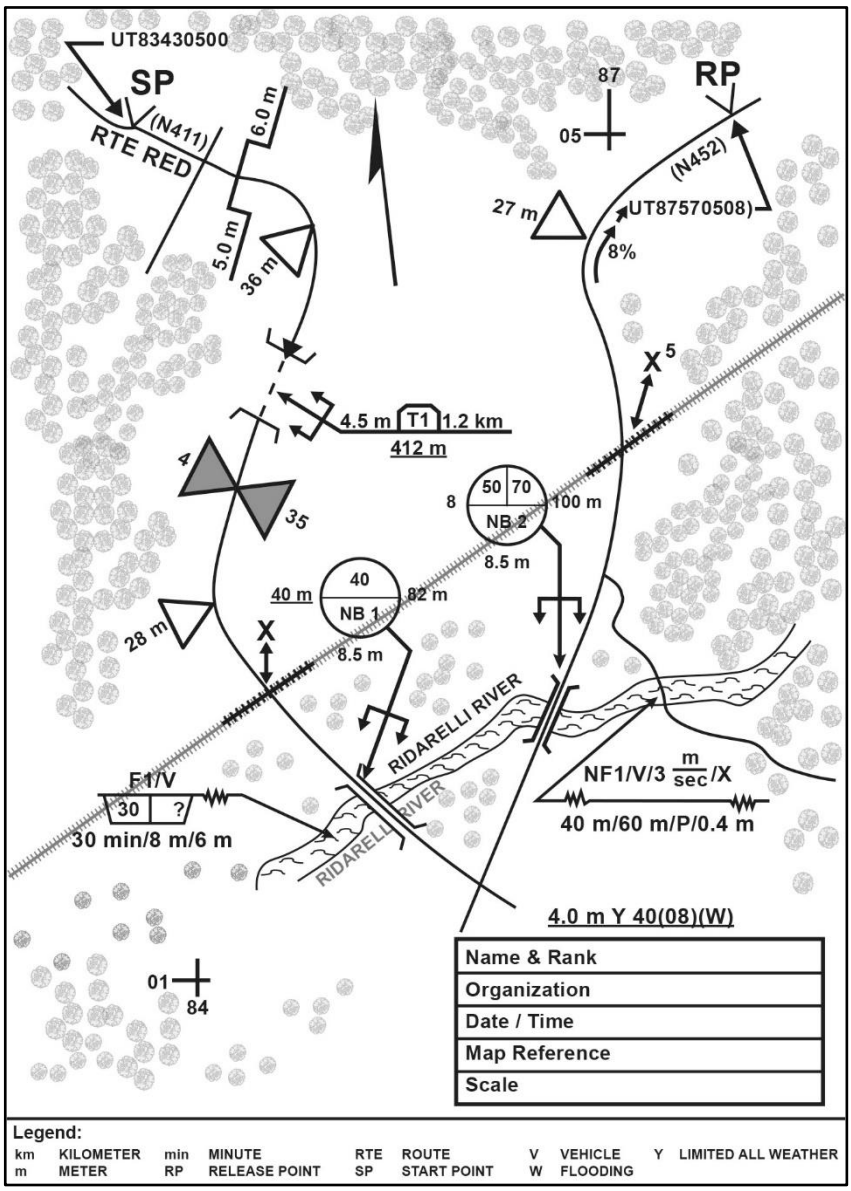


Figure 3-16. Route classification overlay graphics, example

3-93. Figures 3-17a, b, c, d, and e, on pages 3-36 through 3-40, outline a variety of symbols used to illustrate route reconnaissance data on overlays. Use these symbols in association with route classification formulas discussed in paragraphs 3-94 through 3-111.

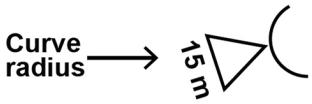
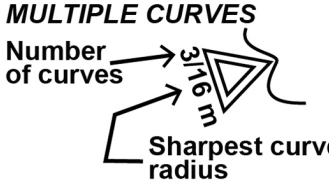
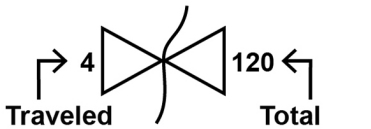
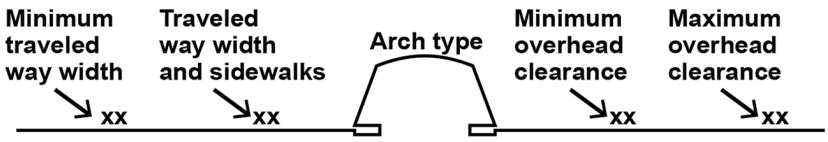
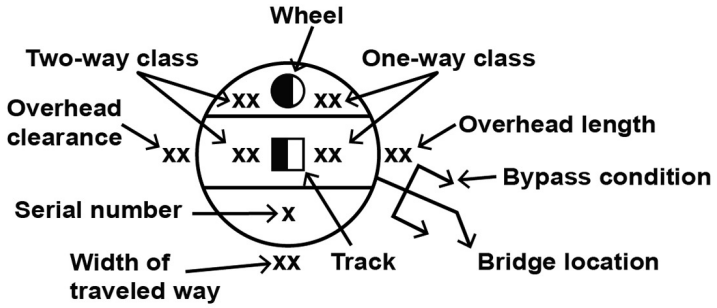
Symbol	Description and criteria
SINGLE CURVE 	SINGLE CURVE: Any curve with a radius of 25 meters (m) or less is an obstruction. All curves with a radius less than 45 meters are reportable.
MULTIPLE CURVES 	SERIES OF SHARP CURVES: The figure to the left indicates the number of curves; that to the right, the minimum radius of curvature in meters.
CRITICAL POINT  Number critical points in order and describe them on DD Form 3015 (Engineer Reconnaissance Report).	CRITICAL POINT: A key geographic point or position important to the success of an operation; a point in time, a crisis or turning point; or any point along a route of march where interference with troop movement may occur.
CONSTRICTION 	CONSTRICTION: (An obstruction.) Any reduction in the traveled way below the minimum required. The figure to the left indicates the width of the constriction; that to the right, the total constricted length, both in meters.
UNDERPASS  UNDERPASSES: Show shape of structure (obstruction) when overhead clearance is less than 4.3 meters.	
ROUTE DESIGNATION *(495)*	ROUTE DESIGNATION: Civil or military route designation. Written in parentheses along route.
Legend: DD DEPARTMENT OF DEFENSE	

Figure 3-17a. Route reconnaissance overlay symbols

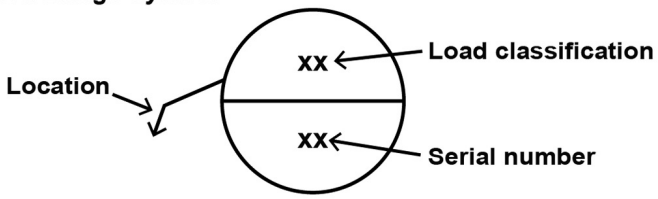
Symbol	Description and criteria

BRIDGE
Full North Atlantic Treaty Organization (NATO) Bridge Symbol



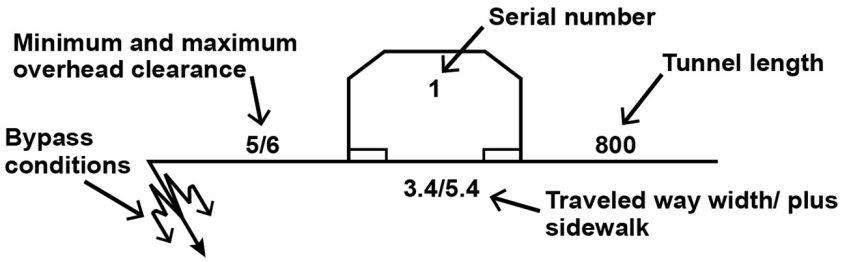
When full NATO bridge symbol is used on an overlay, the additional information column on the DD Form 3011 (Bridge Reconnaissance Report) will not contain bypass length, traveled way width, or overhead clearance.

BRIDGE
Abbreviated Bridge Symbol



When abbreviated symbol is used, DD Form 3011 (Bridge Reconnaissance Report) must be attached.

TUNNEL



TUNNEL: (Includes man-made snow sheds.) Show the shape or structure or obstruction when overhead clearance is less than 4.3 meters.

Legend:
DD DEPARTMENT OF DEFENSE

Figure 3-17b. Route reconnaissance overlay symbols

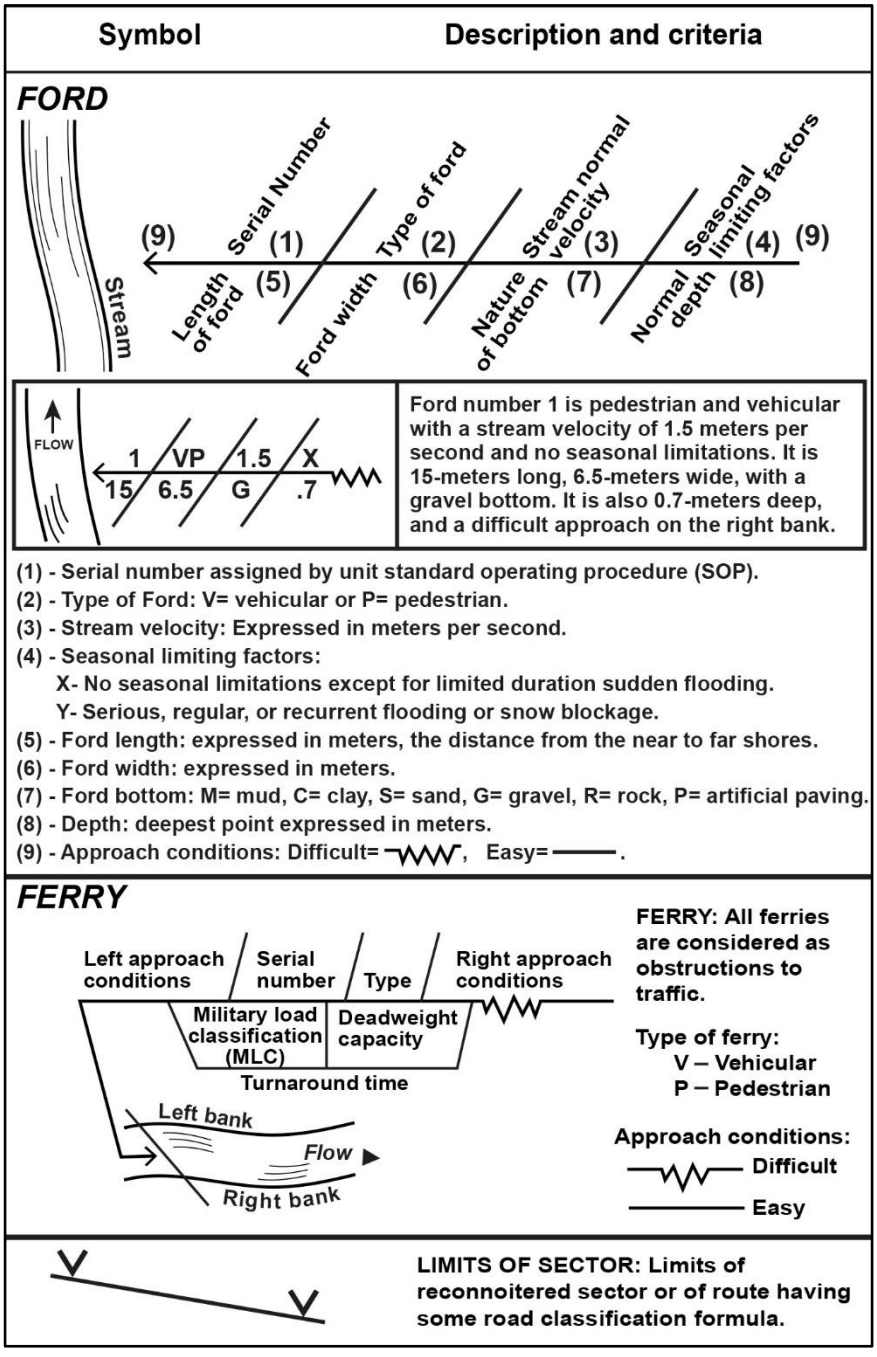


Figure 3-17c. Route reconnaissance overlay symbols

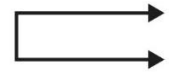
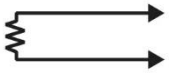
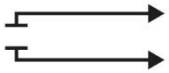
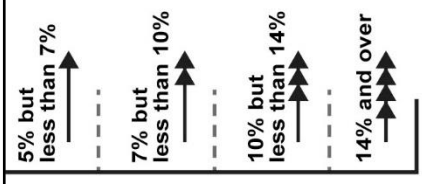
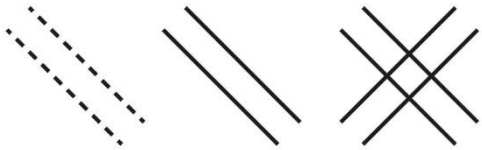
Symbol	Description and criteria
BYPASSES	
	BYPASSES: Are local alternate routes which enable traffic to avoid an obstruction. Bypasses are classified as EASY, DIFFICULT, or IMPOSSIBLE. Each type bypass is represented symobolically on the line extending from the symbol to the main location and defined as follows:
	**BYPASS EASY: The obstacle can be crossed within the immediate vicinity by a U.S. 5-ton truck (or NATO equivalent) without work to improve the bypass.**
	**BYPASS DIFFICULT: The obstacle can be crossed within the immediate vicinity, but some work will be necessary to prepare the bypass.**
	**BYPASS IMPOSSIBLE: The obstacle can only be crossed by one of the following methods:** **(1) Repair of item, such as bridge.** **(2) New construction.** **(3) Detour using an alternate route that crosses the obstacle some distance away.**
STEEP GRADES	
	**STEEP GRADES: (An obstruction.) Any grade 7% or higher. Actual % of grade will be shown. Arrows always point uphill, and length of arrow represents length of grade if map scale permits. (The percent of slope is written to the right of the arrow.)**
OBSTACLES	
	**OBSTACLES: Are natural or man-made restrictions which impede the flow of traffic along a designated route.**
Legend: % PERCENT NATO NORTH ATLANTIC TREATY ORGANIZATION U.S. UNITED STATES	

Figure 3-17d. Route reconnaissance overlay symbols

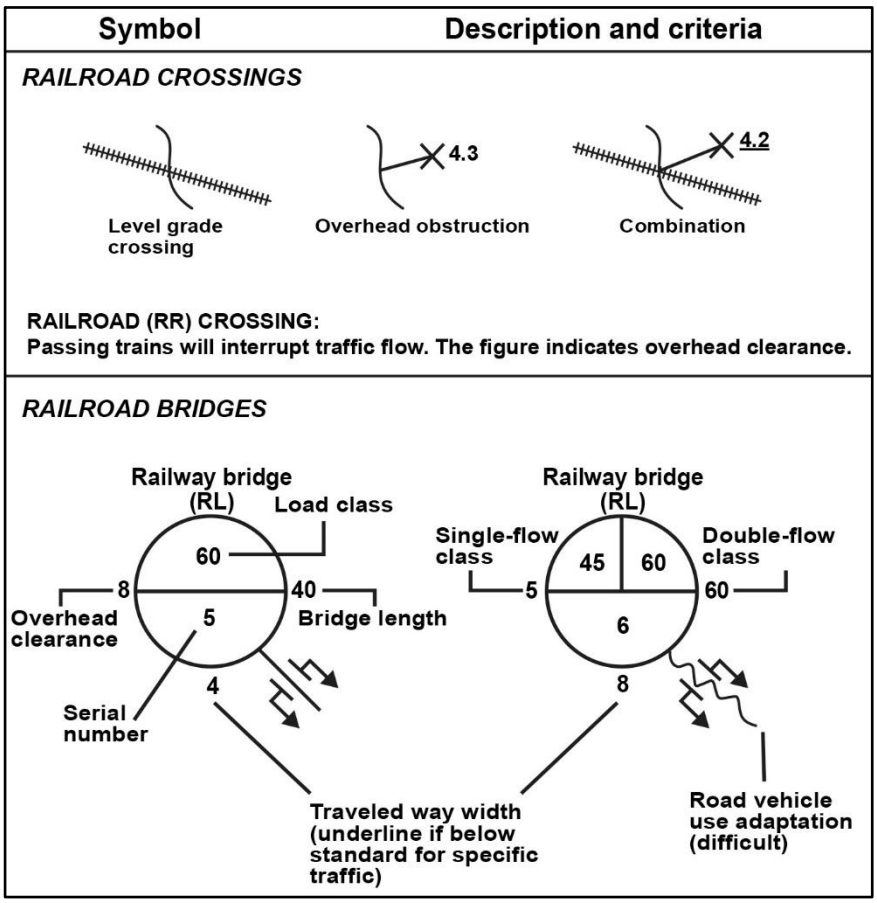


Figure 3-17e. Route reconnaissance overlay symbols

ROUTE CLASSIFICATION FORMATS

3-94. Information gathered during the route reconnaissance inputs into the route classification formula. Record the format on the route-classification overlay as, for example, 5.5m / Y / 30 / 4.6 (OB) (W). The format consists of the following:

- Traveled width, in meters.
- Route type (based on ability to withstand weather).
- Lowest military load classification (MLC).
- Lowest overhead clearance, in meters.
- Obstructions to traffic flow (OB), if applicable.
- Special conditions, snow blockage (T) or flooding (W), if applicable.

Traveled-way Width

3-95. The traveled-way width is the narrowest width of traveled way on a route. Figure 3-18 outlines the required measurements needed to determine the route's width. The narrowest constriction (bridge, tunnel, road, underpass, other) along the route determines the traveled-way width.

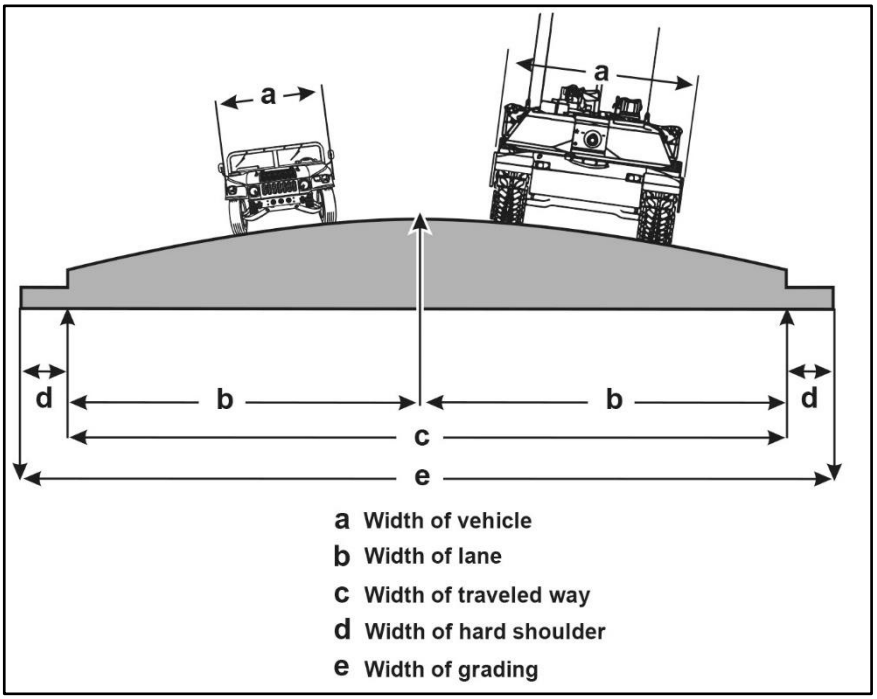


Figure 3-18. Route width formula

Route Type

3-96. The route type is determined by the ability to withstand weather. It is determined by the worst section of road on the entire route and is categorized as follows:

- Type X. An all-weather route that, with reasonable maintenance, is passable throughout the year to a volume of traffic never appreciably less than its maximum capacity. This type of route is normally formed of roads having waterproof surfaces and being only slightly affected by rain, frost, thaw, or heat. This type of route is never closed because of weather effects other than snow or flood blockage.
- Type Y. A limited, all-weather route that is passable throughout the year with reasonable maintenance, but at times has a volume of traffic considerably less than maximum capacity. This type of route usually consists of roads that do not have waterproof surfaces. The route is considerably affected by rain,

frost, thaw, or heat. This type of route is closed for short periods (up to one day at a time) by adverse weather conditions during which heavy use of the road would probably lead to complete collapse.

- Type Z. A fair-weather route is passable only in fair weather. This type of route is so seriously affected by adverse weather conditions that it may remain closed for long periods. Improvement of such a route can only be achieved by construction or realignment.

Lowest Military Load Classification

3-97. A route MLC is a weight load classification number that represents the safe load carrying capacity, and it indicates the maximum vehicle class that can be accepted under normal conditions. Usually, the lowest bridge MLC (regardless of the vehicle type or conditions of traffic flow) determines the route MLC. If there is not a bridge on the route, the worst section of road determines the overall classification of the route.

Requirements for Classification Numbers

3-98. Classification numbers are mandatory for all self-propelled vehicles having a total weight of three tons or more, and all trailers with a payload of 1.5 tons or greater. (Refer to Standardization Agreement 2021.) Trailers with a rated capacity of less than 1.5 tons are usually combined with their towing vehicles for classification. During the classification process, vehicles are future divide into two groups—those with trailers (vehicle combination class number [known as CCN]) and those without (single vehicle classification number)—and calculated for each vehicle classification.

Procedures for Vehicle Classification

3-99. The actual mathematical computation of a vehicle's MLC is beyond the capability of route reconnaissance teams, scouts use the temporary procedures described in paragraph 3-100. MLC information is found in the vehicle's technical manual or on the dash's data plate located on the dashboard.

Temporary Procedure for Vehicle Classification

3-100. When a single vehicle tows another vehicle at a distance less than 30.5 meters and the vehicles are not designed as one unit, the temporary vehicle assign MLC number to this combination. The classification number assigned is nine-tenths of the sum of the normal vehicle classification numbers if the total of both classifications is less than 60. If the sum of the two military classification numbers is 60 or over, then the total becomes the MLC number for the nonstandard combination.

$$CCN = 0.9 (A + B) \text{ if } A + B < 60$$
$$CCN = A + B \text{ if } A + B > 60$$

where—

A = class of first vehicle

B = class of second vehicle

Expedient Procedure – Wheeled Vehicle Classification

3-101. On occasions when a vehicle needs classification in the field, observe and compare the unclassified vehicle to a vehicle that is similar. Compare the axle loads, gross weight, and dimensions of the unclassified vehicle with those of a similar classification.

Example of Expedient Procedure for Wheeled Vehicle Classification

The expedient classification for a wheeled vehicle is estimated to be 85 percent of its total weight. Determine the vehicle's gross weight; multiply the air pressure in the tires (in pounds per square inch [psi]) by the total area (in square inches) of the tires in contact with the ground. If a gauge is not available, use 75 psi as an average value, which yields an approximate weight of the vehicle in pounds. Convert this figure to tons and find 85 percent of the weight in tons.

Expedient Procedure – Tracked Vehicle Classification

3-102. Tracked vehicles weigh about one ton per square foot of track contact with the ground. Determining the area of track in contact with the ground, assigns the vehicle's gross weight. When vehicles weigh a fraction over whole tonnage, assign the next higher classification number.

Lowest Overhead Clearance

3-103. The lowest overhead clearance is the vertical distance between the road surface and any overhead obstacle that denies the use of the road to some vehicles. Use the infinity symbol for unlimited clearance in the route classification format. Points along the route where the minimum overhead clearance is less than 4.3 meters are considered an obstruction.

Obstructions to Traffic Flow

3-104. Several route characteristics are considered obstructions. Annotate the following obstructions on the overlay with graphics and include in the route classification formula as OB (table 3-2, page 3-44 contains information to determine traffic flow capability):

- Overhead obstructions with a clearance of less than 4.3 meters.
- Reductions in traveled-way widths that are below the standard minimums.
- Curves with a radius of 25 meters and less. Curves with a radius of 25.1 to 45 meters are not considered an obstruction; however, they must be recorded on the route classification overlay.
- Slopes (gradients) of seven percent or greater.

- Ferries.
- Fords.

Table 3-2. Traffic flow capability based on route width

	Limited Access	***Single Lane***	***Single Flow***	***Double Flow***
Wheeled	At least 3.5 m	3.5 to 5.5 m	5.5 to 7.3 m	Over 7.3 m
Tracked and wheeled vehicles	At least 4.0 m	4.0 to 6.0 m	6.0 to 8.0 m	Over 8 m
Legend: m – meters				

Seasonal Conditions

3-105. Use specific symbols to depict special conditions:

- When snow blocks traffic on a regular and recurrent basis, the symbol following the route-classification formula is T.
- When flooding blocks traffic on a regular and recurrent basis, the symbol following the route-classification formula is W.

Curves

3-106. The speed at which vehicles move along a route is affected by sharp curves. Curves with a radius of 25 meters or less are obstructions to traffic. These curves are indicated as obstructions on the route classification format b the annotation OB.

3-107. There are three methods available to measure the radius of a curve. Each of the following methods provide adequate information about the curve:

- Tape measure.
- Triangulation.
- Chord.

3-108. Figure 3-19 is an example of a method of determining a curve's radius based upon the following formula (all measurements are in meters) shown below:

$$R = \frac{M^2 + C^2}{2M}$$

R = radius of the curve.

C = one-half the distance from the centerline of the road to the outer extremities of the curve.

M = the perpendicular distance from the center of the tape to the centerline of the road.

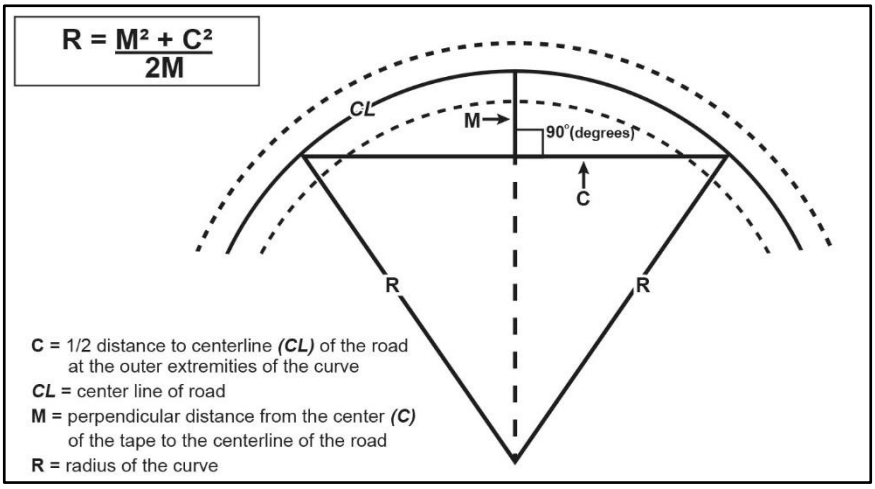


Figure 3-19. Chord method for determining curve radius

3-109. Figure 3-20 is an example of how to utilize the radius of a curve formula once the data has been collected by the scout platoon.

SITUATION: Your scouts report the measurements of a curve are 26 meters across the chord and 4 meters from the center of the chord to the centerline of the curve. Use the formula method:

$$R = \frac{26^2}{8(4)} + \frac{4}{2} \qquad R = \frac{676}{32} + \frac{4}{2}$$

$$R = 21.125 + 2$$

$$R = 23.125$$

23.125 to TWO decimals and CUT OFF = 23.12 meters

LEGEND:
R RADIUS

Figure 3-20. Radius of curve formula

3-110. The example below follows the method of determining a curve's radius based upon the formula R = (57.3 x L) / (DC) (all measurements are in meters):

R = Radius of curve

L = Length of curve from star of curve to end of curve

DC = Degree change from azimuths. (The degree change in azimuths is the change between the azimuth taken in the direction of travel entering the curve to the azimuth taken in the direction of travel exiting the curve.) (See figure 3-21.)

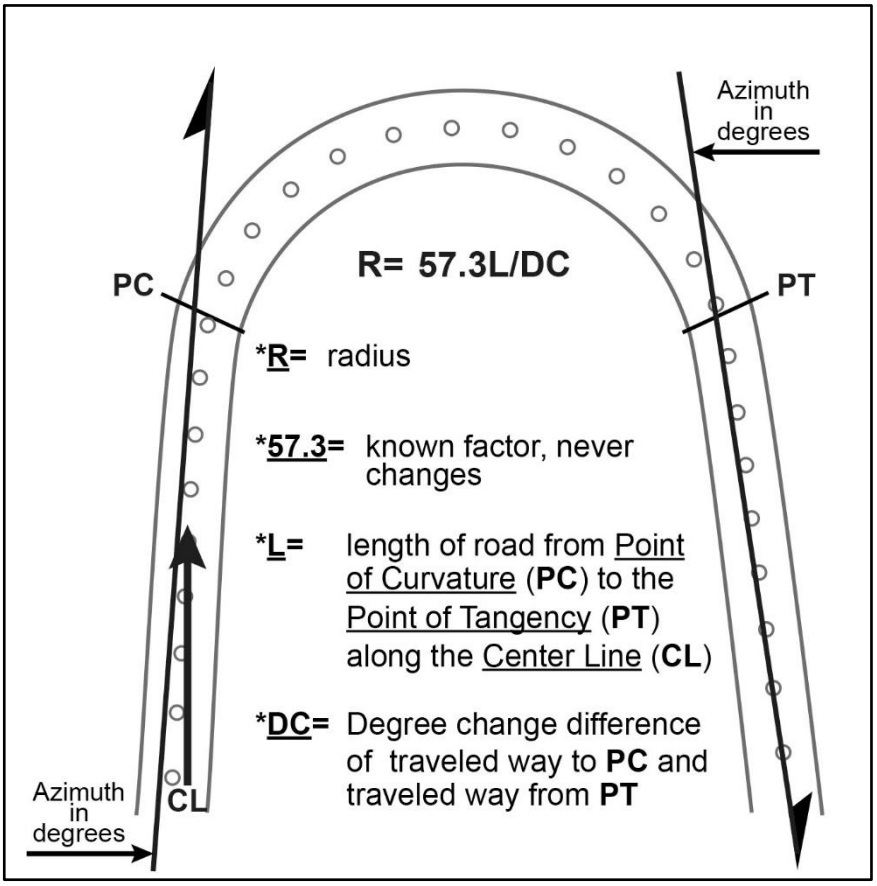


Figure 3-21. Radius of curve formula example

Slope

3-111. There are several formulas and methods to determine the gradient of slope, as shown in figure 3-22, figures 3-23 and 3-24, on page 3-49 and 3-50.

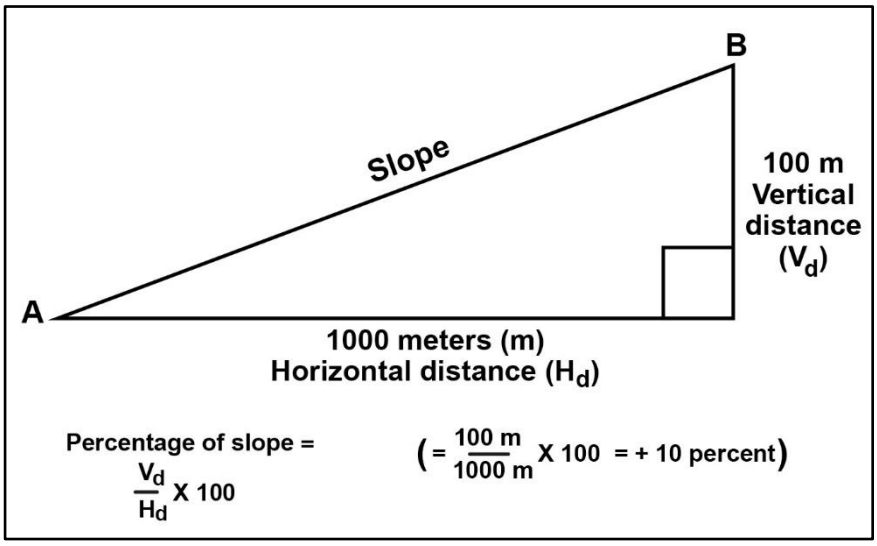


Figure 3-22. Gradient of slope formula

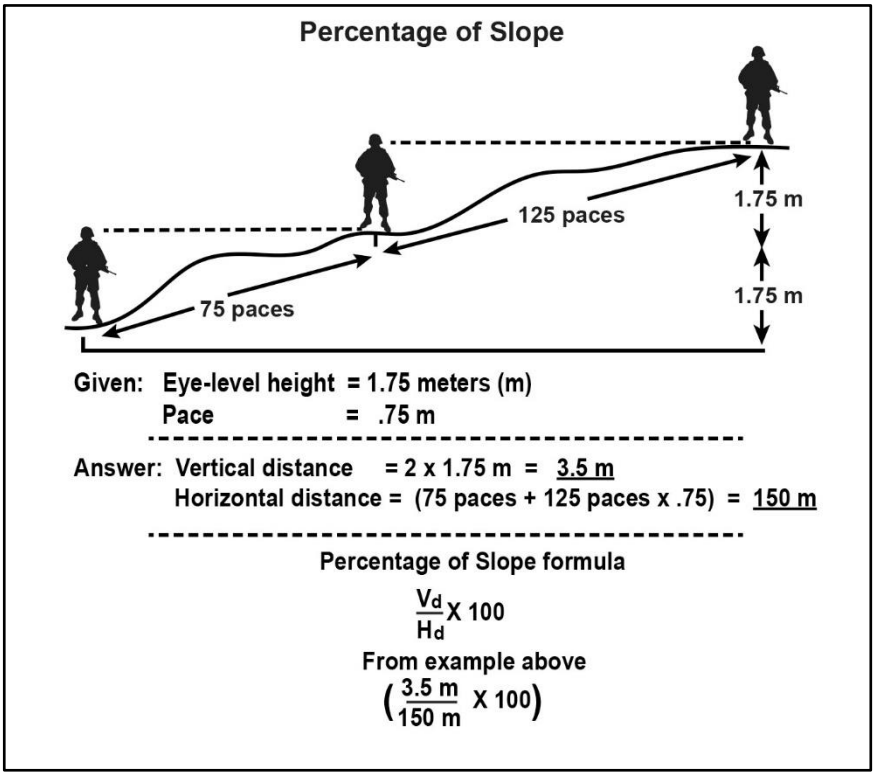


Figure 3-23. Pace method for percentage slope

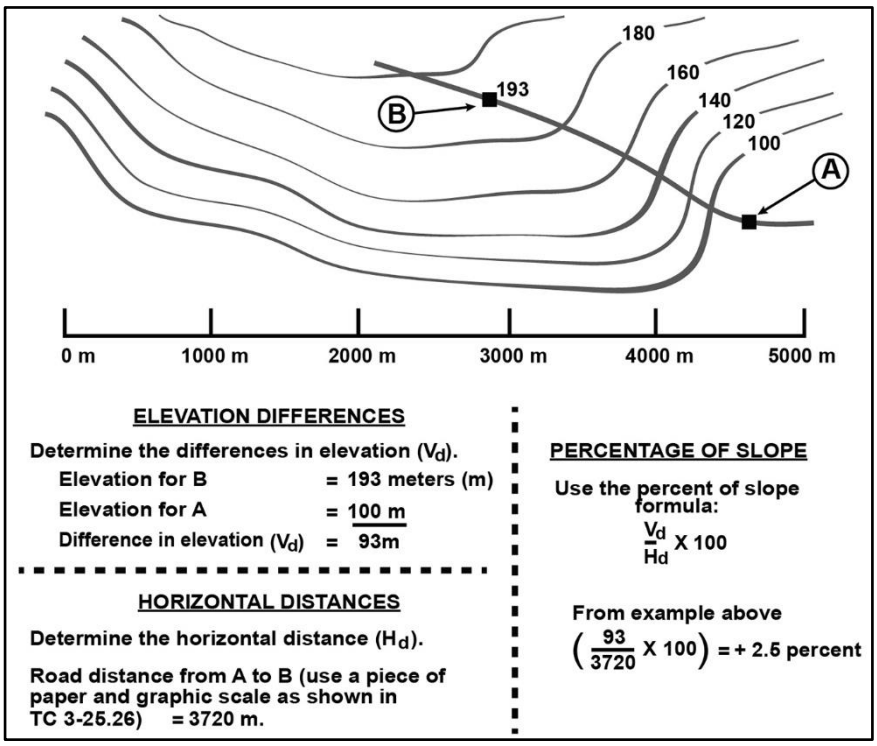


Figure 3-24. Map method for percentage slope

PLATOON LEADER RESPONSIBILITIES AND CONSIDERATIONS

3-112. The platoon leader integrates route reconnaissance information as they collect it into the overall route recon report. The collection team that actually conducts the reconnaissance disseminates this information to the platoon and team leaders. The platoon leader ensures they enter all information into the appropriate report formats on tactical internet systems, such as joint capabilities release, and forward to the higher headquarters for collection.

3-113. Route reconnaissance continues until the section reaches the RP. The platoon continues to move in their assigned section boundaries to a distance of approximately 2 to 3 kilometers (km) (based on threat and terrain) beyond the RP for security purposes. The platoon then transitions to its follow-on mission as dictated in the OPORD. Upon completion, the platoon leader reports the results of the reconnaissance to the commander. If the platoon leader or engineer assets developed a route overlay, it is included in the report.

RECONNAISSANCE IN FORCE

3-114. A reconnaissance in force is a squadron-level mission. Reconnaissance in force is an aggressive reconnaissance which develops information and intelligence in contact with the enemy to determine and exploit enemy weaknesses. The scout platoon usually conducts zone or an attack in support of the unit conducting the reconnaissance in force mission. (Refer to ATP 3-20.96 for more information on a reconnaissance in force). Tasks for reconnaissance in force include—

- Penetrate the enemy's security area and determine its size and depth.
- Determine the location and disposition of enemy forces.
- Attack enemy positions and attempt to force the enemy to react by using local reserves or major counterattack forces, employing fires, adjusting positions, and employing specific weapon systems.
- Determine weaknesses in the enemy's disposition for exploitation.
- Locate obstacles and create lanes as specified.
- Entering AOs in complex terrain not previously occupied by friendly forces, such as urban environments.

SPECIAL RECONNAISSANCE

3-115. *Special reconnaissance* is reconnaissance and surveillance actions conducted as a special operation in hostile, denied, or politically sensitive environments to collect or verify information of strategic or operational significance, employing military capabilities not normally found in conventional forces (JP 3-05).

SECTION III – RECONNAISSANCE HANDOVER

3-116. RHO is the process of planning, preparing, and executing transfer of responsibility and information from one element to another to facilitate continued observation or surveillance of enemy contact or an assigned area. The term element refers to all echelons involved in the RHO, from observation posts to squadron and battalion-sized components. Scout platoons can be the transferring element, the receiving element, or provide command and control for the RHO.

3-117. An RHO may cover an area or zone, such as an AO, NAI, TAI, avenues of approach, or any enemy elements. It involves transferring physical, visual, electronic, or digital observation in any number of combinations. Assets such as ground sensors and UAS may transfer. Scout platoons execute an RHO with a designated RHO coordination point, phase line where reconnaissance responsibility transitions from one element to another known as the reconnaissance handover line, or trigger such as visual contact with threat forces outside of the platoon's engagement criteria.

3-118. RHOs can occur in offensive or defensive reconnaissance and security operations. Normally, the platoon leadership can find conditions and criteria for conducting RHOs in the commander's reconnaissance or security guidance for displacement criteria located in the troop OPORD, FRAGORD, or WARNORD. If the commander does not dictate conditions or criteria within the OPORD, platoon leadership MUST submit requests for information to the commander prior to SP or LD.

3-119. A successful RHO ensures that there are no violations of any of the fundamentals of reconnaissance or security. This transfer of responsibility and information prevents gaps or seams from emerging that the enemy can exploit. If conducting target handover, the receiving unit acquires the target before handover is complete.

3-120. Once an RHO is complete during reconnaissance, the element transferring control either conducts an RPOL as the passing unit through the main body receiving responsibility, acts as the stationary unit in a forward passage of lines (known as FPOL) for the element receiving responsibility, or continues further into zone to continue their reconnaissance mission.

3-121. In security operations such as a screen or guard, it is common to have a phase line or RHO line between the scout platoon and its adjacent unit where the responsibility to maintain contact with the threat transfers once the threat crosses that line. The element transferring control maintains contact with threat forces until the threat crosses the RHO line, conducts an RPOL as the passing unit, or conducts an FPOL as the stationary unit.

3-122. Typically, the elements accepting an RHO are another scout platoon or a maneuver organization prepared to begin offensive operations to complete an RHO. Additionally, units may execute RHOs with aerial assets such as UAS, and attack aviation.

3-123. Several tasks for RHO are shared with a battle handover, including relief in place, linkup, and passage of lines. Unlike BHO, however, it does not imply the assumption of a fight or being within enemy direct fire range, but focuses on planning, preparing, and executing the transfer of responsibility and information of an assigned area from one element to another. An RHO or reconnaissance handover line may turn into a BHO or battle handover line (BHL) quickly during reconnaissance if the scout platoon contacts a superior enemy force.

PLANNING CONSIDERATIONS

3-124. Reconnaissance and security tasks require the platoon conducting the handover to effectively coordinate with higher, lower, and adjacent units. Planning for these tasks requires the RHO coordination to start at the higher echelons and execute at the lowest element.

3-125. Scout platoons must have a thorough understanding of the RHO criteria, and follow the control measures specified by higher headquarters. The unit commander directs how to transfer handover to other elements. Platoon leadership coordinates and executes RHO tasks using planning steps such as—

- Coordinating for redundant surveillance to assist in maintaining enemy contact.
- Determining location, timeline, and criteria for RHO.
- Preparing and understanding a multi-layered communications plan between elements.
- Exchanging all plans and information gathered about the AO.
- Notifying troop of the progress of the handover.
- Identifying and coordinating for target handover, as necessary.
- Synchronizing indirect fires and exchanging fire support information.
- Selecting secure contact points or linkup points.
- Exchanging information and information gathering assets.
- Coordinating transfer and acceptance of responsibility between units.
- Rehearsals.
- Recognizing signals.

RECONNAISSANCE HANDOVER PRIORITY OF REHEARSALS

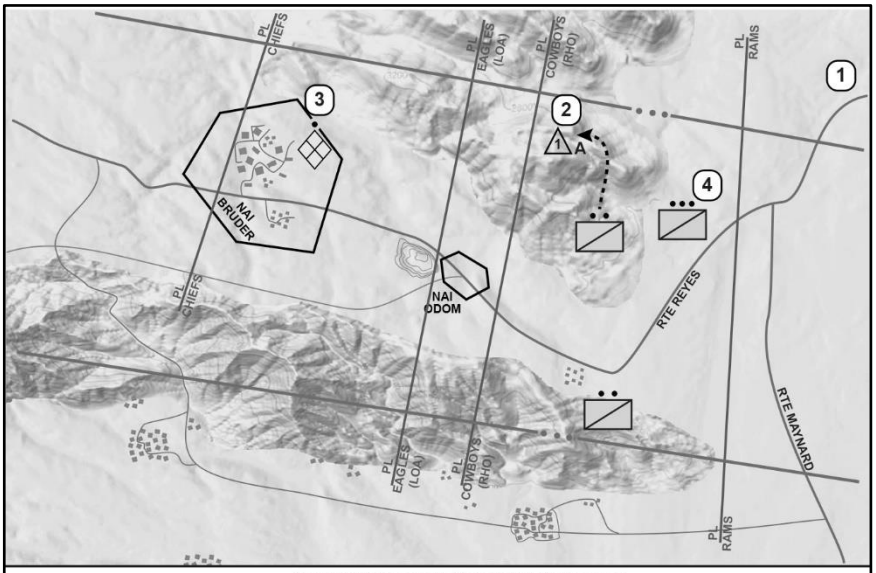
3-126. Scout platoons may conduct RHOs with follow-on or security (stationary) forces, accept RHOs from a forward force, or provide mission command for the handover. Include the following priorities of rehearsals in the platoon's planning timeline:

- Actions on contact incorporating both transferring and receiving elements, for likely forms of contact.
- Movement between vehicles hide and vehicle BPs.
- Displacement from dismounted and mounted observation posts sequentially or simultaneously.
- Linkup procedures.
- Information exchange such as graphic control measures, direct fire plan, indirect fire plan, recognition signals, CCIR, situation reports (SITREPs), and any supporting assets.
- Target handover.
- Communications: PACE plan.
- CASEVAC or MEDEVAC plan for both transferring and receiving elements.
- Passage of lines procedures.
- Relief in place procedures.
- Other actions deemed necessary per METT-TC.
- Execution of an RHO.

EXAMPLE OF RECONNAISSANCE HANDOVER

3-127. The following vignette describes a possible RHO. Phase 1 – The scout platoon is conducting a zone reconnaissance to reconnoiter key terrain, determine feasibility of all routes within platoon boundaries for follow-on forces, and also to determine if the NAI Bruder contains threat forces. Prior to performing reconnaissance on NAI Odom, the scout platoon leader deploys a dismount team on elevated terrain to the north in an attempt to gain observation on NAI Bruder. The team sets an observation post on the mountain. They observe what appears to be a squad of enemy dismounts manning fighting positions on the northeastern outskirts of NAI Bruder. The observation post team sends a BLUE 1 report to the platoon leader, with a recommendation to cue UAS for mixing and deploying another observation post team for redundancy. The platoon leader agrees, decides to deploy another dismounted team to establish an observation post vicinity the southwest mountain within the AO and coordinates with troop command for UAS (see figure 3-25). Commander's reconnaissance guidance is as follows:

- Focus – Terrain based focus with how it favors the enemy.
- Tempo – Stealthy and rapid. Movement should prioritize remaining undetected.
- Engagement criteria – Dismount teams of nine or fewer, two or fewer Russian combat reconnaissance patrol vehicles (known as BRDMs)/Russian class of armored vehicles (known as BTRs,) two or fewer Russian amphibious tracked infantry fighting vehicles (known as BMPs), one tank.
- Disengagement criteria – 10 or more dismounts, three or more BMPs, three or more BRDM/BTRs, two or more tanks.
- Displacement criteria- Troop and platoon receives change of mission from squadron to continue reconnaissance after the RHO with battalion scouts, if enemy outside of engagement criteria is identified.



Reconnaissance Handover (phase I)

Key Events:

1. The scout platoon conducts a Zone Reconnaissance.
2. The platoon leader dispatches A section to establish an OP on key terrain to observe NAI Bruder.
3. The OP observes an occupied enemy dismount fighting position north/east in NAI Bruder.
4. The scout platoon leader sends a Blue 1 report to the troop CP.

Legend:

CP	COMMAND POST	OP	OBSERVATION POST	RHO	RECONNAISSANCE HANDOVER
LOA	LIMIT OF ADVANCE	PL	PHASE LINE	RTE	ROUTE
NAI	NAMED AREA OF INTEREST				

Figure 3-25. Reconnaissance handover

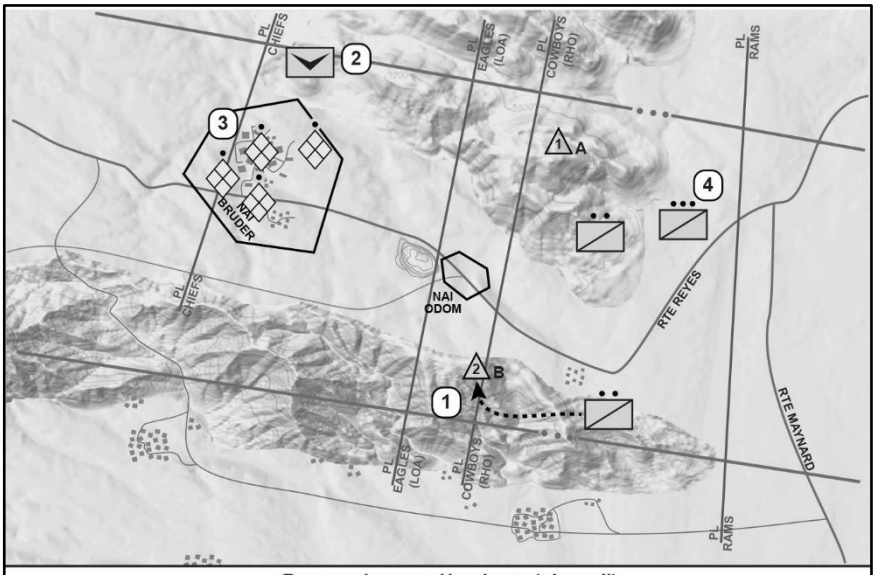
3-128. Phase 2 – Instead of immediately engaging the enemy, the platoon leader decides to develop the situation on NAI Bruder. (See figure 3-26, on page 3-57) After deploying an additional observation post team and flying the UAS, scouts realized there are multiple fighting positions located on the perimeter of NAI Bruder and an additional platoon of enemy dismounted forces located in the center, which is well outside of the scout platoon's engagement criteria. To maintain contact while continuing mission, the scout platoon conducts a RHO with the Infantry battalion scouts. The platoon leader sends an updated BLUE 1 to the troop commander, with recommendation to conduct the RHO. The troop commander agrees, and directs the Cavalry scout platoon to continue zone reconnaissance South of NAI Bruder after the RHO is complete (see figure 3-27 on page 3-58). The platoon leader begins to conduct the necessary coordination's for the RHO, which includes:

- Preparing and understanding a multilayered communications plan between elements.
- Exchanging all plans and information gathered about the AO.

- Identifying and coordinating for target handover, as necessary.
- Synchronizing indirect fires and exchanging fire support information.
- Selecting contact points or linkup points that will not become compromised.
- Exchanging information and information gathering assets.
- Coordinating transfer and acceptance of responsibility between units.
- Recognizing signals.

3-129. Commanders reconnaissance guidance for this phase is—

- Focus – terrain and how it favors the enemy.
- Tempo – stealthy and rapid. Stay undetected, use terrain to move quickly.
- Engagement criteria – Dismount teams of nine or fewer, two or fewer BRDM/BTRs, two or fewer BMPs, one tank.
- Disengagement criteria – 10 or more dismounts, 3 or more BMP, 3 or more BRDM/BTR, 2 or more tanks.
- Displacement criteria – Troop and platoon receives change of mission from squadron to continue reconnaissance after an RHO with battalion scouts, if enemy outside of engagement criteria is identified.



Reconnaissance Handover (phase II)

Key Events:

1. The scout platoon establishes a secondary OP position on key terrain to the south/east of NAI Bruder.
2. On order, the scout platoon launched a UAS to observe dead space in NAI Bruder.
3. The UAS detects a large enemy presence in NAI Bruder that exceeds the scout platoon's engagement criteria.
4. The scout platoon leader sends an updated Blue 1 report to the troop CP and recommends a RHO.

Legend:

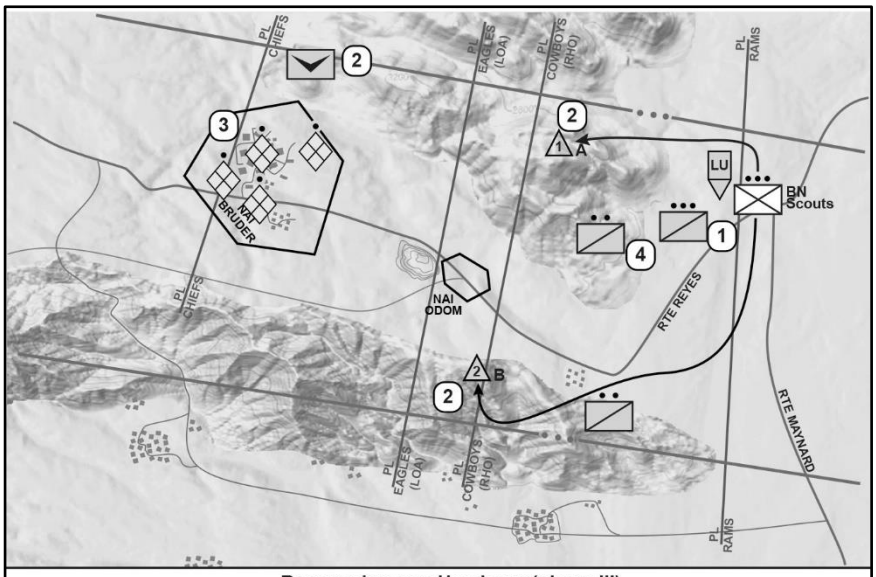
CP	COMMAND POST	OP	OBSERVATION POST	RTE	ROUTE
LOA	LIMIT OF ADVANCE	PL	PHASE LINE	UAS	UNMANNED AERIAL SYSTEM
NAI	NAMED AREA OF INTEREST	RHO	RECONNAISSANCE HANDOVER		

Figure 3-26. Reconnaissance handover phase II

3-130. Phase 3 – The platoon leader establishes communications with the battalion scouts, and gives criteria for near and far side recognition signals. The platoon establishes the linkup at the intersection of route Reyes and route Maynard. Via the radio, the scout platoon leader provides the more pertinent aspects of the AO such as enemy composition, disposition, location, indirect fire plan, and actions on contact for both elements while conducting the RHO. The platoon leader also sends photos of NAI Bruder and photos of any sector sketches or range cards developed at the observation posts via data transfer using the AN/PRC-150 radio. At the linkup, the transferring unit and receiving unit discuss any other aspects that would not have been feasible discussing over the radio. Since this is a target handover, the scout platoon maintains contact with the threat until the battalion scouts are in position to observe (see figure 3-27). Commanders reconnaissance guidance is as follows:

- Focus – Unchanged.
- Tempo – stealthy and rapid. Stay undiscovered but continue to move rapidly.

- Engagement criteria – Dismount teams of nine or fewer, two or fewer BRDM/BTRs, two or fewer BMPs, one tank.
- Disengagement criteria – 10 or more dismounts, three or more BMPs, three or more BRDM/BTRs, two or more tanks.
- Displacement criteria – Bypass enemy and continue with reconnaissance after the RHO with battalion scouts if enemy outside of engagement criteria are identified.



Reconnaissance Handover (phase III)

Key Events:

1. Battalion scouts conduct a linkup with the scout platoon and begins the reconnaissance handover.
2. The scout platoon maintains observation of NAI Bruder while the battalion scouts move into positions.
3. The scout platoon transfers area control to the battalion scouts.
4. The scout platoon leader notifies the troop CP of handover completion and begins movement out of the area.

Legend:

BN	BATTALION	LOA	LIMIT OF ADVANCE	RHO	RECONNAISSANCE HANDOVER
CP	COMMAND POST	NAI	NAMED AREA OF INTEREST	RTE	ROUTE
LU	LINKUP	PL	PHASE LINE		

Figure 3-27. Reconnaissance handover phase III

BATTLE HANDOVER

3-131. A battle handover is an operation generally associated with a passage of lines in which a stationary unit and a passing unit transfer responsibility for fighting a threat force from one unit to another. A BHL is a designated phase line on the ground where responsibility transitions from the stationary force to the moving force and vice versa. The battle handover's purpose is to sustain continuity of the fight and to prevent the

threat from moving unopposed on the battlefield as one force picks up the fight from another. It also preserves the fighting capabilities of both friendly units. It shares many tasks and planning considerations with an RHO. The difference between the RHO and a battle handover is that the focus is primarily threat, and there is an assumption of a fight for the receiving element of a battle handover. Battle handovers can occur in both reconnaissance and security operations.

3-132. A battle handover can occur during either offensive or defensive operations. During defensive operations, usual planning and coordination occurs in advance to facilitate execution and usually involves a RPOL. In the offense, it is situation dependent and often initiated by a FRAGORD. A battle handover usually occurs in the offense when one unit passes through or around another unit. Orders or tactical SOPs containing clear, simple, standardized procedures and control measures enhance the ability of units to coordinate without experiencing a corresponding loss in momentum.

PASSAGE OF LINES

3-133. 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. Designate passages as a FPOL or RPOL. Passage of lines is inherently a high risk activity that requires detailed planning, rehearsals, and communication to mitigate risk to friendly forces and operational tempo.

3-134. Scout platoons conducts a passage of lines in support of another friendly element's attack or 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 AO between two commanders. That transfer of authority usually occurs when roughly two-thirds of the passing force moves 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. RHOs or battle handovers occur during a passage of lines, because there is a transfer of responsibility between units for the AO. There are three key elements in a passage of lines: the stationary unit, the passing unit, and the commander.

3-135. Conditions and criteria for conducting a passage of lines are normally in the commander's reconnaissance or security guidance for displacement criteria, located in the troop OPORD, FRAGORD, or WARNORD.

3-136. A passage of lines occurs under two conditions: FPOL and RPOL. FPOL occur when a unit passes through another unit's positions while moving toward the enemy. RPOL occur when a unit passes through another unit's positions while moving away from the enemy. A unit may participate in a passage of lines as either the passing or stationary force. Ideally, a passage of lines does not interfere with conducting the stationary unit's operations.

3-137. The scout platoon, acting independently or as part of a higher passage, may be either the stationary or the passing unit. The platoon normally assists in some portion of

the passage of lines and may coordinate the passage. In many cases, the scout platoon conducts a passage separate from its higher headquarters.

3-138. Control measures associated with a passage of lines are generally restrictive to prevent friendly fire incidents. At a minimum, they include the AO, avenues of approach, attack positions, BHL, reconnaissance handover line, 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, avenues of approach, routes, and start and end times for the passage. The commander may also use SP, RP, fire support coordination measures, such as coordinated fire lines, and other control measures as necessary to conduct this task. 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, knows where the obstacles are, and 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.

PASSING UNIT TASKS

3-139. The passing unit accomplishes several tasks during the passage of lines in the RHO and battle handover including—

- Establishing communications immediately, entering the command, intelligence, and fire support communication nets of the stationary unit.
- Collocating a unit or vehicle with the tactical command post or main command post of the stationary unit as soon as possible to enhance communication and unity of effort.
- Reporting continuously to the stationary unit during a rearward passage the location, size, composition, and current activity of all threat forces. If the threat is attacking, the passing unit reports the direction of movement, movement formation, and estimated rate of advance. If the threat is defending, the passing unit reports threat locations, orientation, composition, engagement area, reserves (if known), obstacle systems, and flanks.
- Reporting continuously to the stationary unit the location, size, and activity of all parent unit elements, including augmentation, sustainment, and mission command assets.
- Coordinating with the stationary unit based upon the current dispositions of the parent unit to determine contact points for subordinate elements (such as scout sections) to synchronize handover and passage of lines with representatives of the stationary unit. Once determining contact points, the passing unit leader sends a FRAGORD to all elements specifying the location for the passage with the stationary unit. The passing unit confirms recognition signals used during passage.
- Ensuring subordinate elements acknowledge where to coordinate the passage and that representatives are dispatched to the assigned contact points. At the

contact points, the representatives confirm recognition signals and exchange required information with their counterparts from the stationary unit.

- Maintaining visual contact with all threat units in a rearward passage, conducting movement back to the reconnaissance handover line and BHL, and avoiding decisive engagements.
- Displaying correct recognition signals and using the correct challenge and password as specified in the signal operating instructions during the passage.
- Maintaining proper weapons orientation.

STATIONARY UNIT TASKS

3-140. The stationary unit accomplishes a variety of tasks when ordered to conduct a passage of lines during an RHO and a battle handover. These tasks include—

- Establishing communications, coordinating necessary contact points, and directing the passing unit to the contact points based on current dispositions of the designated units.
- Exchanging fire support plans to include target lists and fire support contact frequencies.
- Ensuring contact points are manned and secured, and that passing elements have established personal communication with their representatives.
- Ensuring representatives at the contact points assign each passing element a passage point into the AO, and a route that extends from the passage points to the rear boundary or assembly area (in a rearward passage) or to the attack position (in a forward passage).
- Exchanging required information, including Force XXI Battle Command, brigade and below, with the passing unit as outlined in their unit SOP.
- Positioning elements to overwatch the reconnaissance handover line and BHL where they have the best possible observation of threat avenues of approach, adjusting as necessary during limited visibility.
- Ensuring routes through a system are clearly marked and physically controlled by guides, or escorts provided to the passing unit.
- Ensuring all routes of withdrawal obligated to the passing unit are unobstructed facilitates rapid movement to the rearward passage.
- Ensuring obligated routes of advance, attack positions, and routes to the reconnaissance handover line and BHL are clear and facilitate rapid movement (forward passage).

PREPARATION

3-141. Units are particularly vulnerable during a passage of lines. Effective preparation is critical because subordinate elements may be concentrated, stationary unit fires may be temporarily masked, and the passing unit may not be disposed properly to react to enemy actions. To assist in preparing for the passage, the commander may task subordinate units with a number of missions, including detailed reconnaissance and coordination. Graphic control measures include considerations such as the following:

- Reconnaissance handover line and BHL. The leader of the unit, in consultation with both commanders, establishes a reconnaissance handover line and BHL. The stationary unit leader determines the location of the reconnaissance handover line and BHL and overwatches the line with direct fires.
- Fire support coordination measures. If necessary, these are established or identified.
- Contact points. Establish these on identifiable terrain and are normally in the vicinity of the passage lanes. For RPOL, establish the contact points forward of the reconnaissance handover line and BHL. For forward passage, establish the contact points in the stationary unit's AO, rearward of the passage lanes.
- Passage points. Passage points are a specifically designated place where the passing units pass through the stationary unit. The location of this point is where the commander deems most suitable to control movement.
  - In a FPOL, the passage point marks the location where the passing unit is no longer bound by the restrictions placed on it by the stationary force.
  - In a RPOL, 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.
- Passage lanes. The stationary unit establishes passage lanes to move the passing unit quickly through defending unit positions. This could include passing through gaps in friendly obstacles and moving near or through friendly engagement areas and BPs. Lanes are restrictive and should be wide enough to allow the passing unit to move in a tactical formation. The passage lane begins at the passage point and ends at the rear of the stationary unit BPs. The passage is complete when the moving unit exits the lane.
- Routes. Routes are used to move the passing unit through the stationary unit. The number of routes designated varies based upon METT-TC. As a general rule, plan multiple lanes to facilitate rapid passage of moving units and to avoid unnecessary massing of units. The stationary unit may escort or guide the passing unit along the lane/route.

- Assembly area. An assembly area in the AO of the stationary unit allows the passing unit to conduct hasty reorganization and emergency sustainment actions. This assembly area is temporary in nature.
- Exfiltration points. Leaders should plan infiltration points and lanes for personnel unable to complete the passage with their unit. Passing unit liaison officers may remain located with stationary unit command posts to serve as a point of contact for infiltrating personnel and equipment. Personnel who infiltrate must have some way of contacting the stationary unit before crossing into friendly territory.

COORDINATION

3-142. Coordination for the RHO and battle handover occurs at a preplanned contact point where critical information is exchanged from the commander out of contact to the commander in contact. Coordination for the passage of lines and the handover should occur simultaneously.

3-143. The scout platoon leader plays a major role in coordination for handover and passage of lines. The platoon leader is responsible for conducting reconnaissance to obtain information for use by the parent unit and the platoon. The platoon leader then uses this information in the coordination process.

3-144. During the scout platoon's reconnaissance, the platoon leader must confirm the following factors:

- The disposition of the stationary force through which the platoon and its parent unit passes.
- The location of contact points where both units are required to make physical contact at a predetermined time.
- The location of passage lanes that provide a clear route through the stationary unit's position to facilitate a smooth and continuous passage. Select unoccupied positions or ones on the flanks of units in position. If possible, the platoon leader should reconnoiter multiple routes that can reduce vulnerability during the mission.
- The rear boundary or assembly area (in a rearward passage) or the attack position (in a forward passage). This position should provide cover and concealment and be located where the passing unit does not interfere with the stationary unit.
- The initial locations for enablers and sustainment elements of the platoon's parent unit.

3-145. Based on this reconnaissance, the platoon leader coordinates the following information:

- Contact points (primary and alternate) and passage points.
- Passage lanes, including the SP, RP, and critical points.
- The LD.
- Location and number of guides and guide vehicles.

- Routes through obstacles, including alternate routes.
- Sustainment plans, including resupply (classes III and V), maintenance, MEDEVAC and CASEVAC, and disposition of enemy prisoners of war (EPWs).
- Traffic control factors, such as number of vehicles by type.
- Time of the passage.
- Rally points; the rear boundary or assembly area (rearward passage), or the attack position (forward passage).
- Actions on contact, if required during the passage.
- Times for transfer of responsibility for control of the sector, handover of the enemy, and reconnaissance handover line, or BHL.
- Exchange of information both enemy and friendly situation.

ASSIST WITH A PASSAGE OF LINES

3-146. The platoon enhances mission command for the commander, who may require the platoon to assist other units in the passage of lines. The platoon may conduct tasks of a stationary or passing unit, or assist its parent unit.

3-147. Elements of the platoon may help in securing contact and passage points where units meet and pass or reconnoiter possible passage lanes (primary and alternate), clearing them of obstacles (within capability), and marking their locations. The platoon may conduct area reconnaissance of attack positions (forward passage) and assembly area locations (rearward passage), including a requirement to check for CBRN and high-yield explosive contamination.

3-148. The platoon may assist the commander by occupying observation posts or conducting patrols to provide a continuous flow of information about the enemy situation or guide units from contact points to or through passage lanes. The platoon may also control traffic at the passage point and in the lane or act as a communications link by positioning in the passage area in case units involved in the passage have trouble staying in contact with each other.

EXECUTING A FORWARD PASSAGE OF LINES AS THE PASSING FORCE

3-149. An FPOL is usually executed using a column or staggered column formation along a covered and concealed route. The scout platoon ensures they maintain proper weapon orientation and follow weapons hold status at all times. The platoon makes sure that proper recognition signals, such as VS-17 and chemical light sticks, are displayed properly. The platoon leader and PSG monitor the stationary unit's radio frequency throughout the passage of lines.

3-150. Upon reaching the contact point, the PSG or designated leader positions themselves with the stationary unit's representative. Together they count the vehicles and personnel to ensure all elements move into the passage lane.

3-151. Once the platoon enters the passage lane it does not stop or block the lane. All elements move through the passage lane until they reach the RP on the far side. If a

vehicle becomes inoperable in the passage lane, the platoon attempts to self-recover. If requiring recovery assets, the stationary unit dispatches a team to pull the inoperable vehicle back to the contact point and clear the passage.

3-152. If the platoon receives indirect fire during their passage, they continue movement to the RP as the stationary unit has responsibility for directing counterbattery fire. The platoon leader should give a spot report (SPOTREP) to the stationary unit command post to ensure they have situational awareness.

3-153. If the platoon receives direct fire during the passage, they return fire as they maneuver to the RP. It is important that the platoon stay within the passage lane to avoid fratricide. The stationary unit returns fire on enemy positions, and has clear lanes of fire to effectively accomplish this.

3-154. Upon reaching the RP, the platoon deploys in sector. Elements cross the LD when adequate cover is available and permission is given prior to crossing. Once all elements reach the LD and assume covered positions to observe the assigned sectors, the platoon leader notifies the commander. The passing commander notifies the stationary commander and assumes responsibility of the AO forward of the reconnaissance handover line and BHL. The platoon then starts their primary mission as outlined in the OPORD.

EXECUTING A REARWARD PASSAGE OF LINES AS THE PASSING FORCE

3-155. In an RPOL as the passing force, the platoon is forward of the reconnaissance handover line or BHL conducting reconnaissance or security tasks. The PSG or a designated platoon representative maneuvers to the contact point forward of the stationary unit's positions. It is very important to display that weapons orientation and recognition signals to avoid fratricide. Upon linkup at the contact point, the PSG or platoon representative verifies passage instructions with the stationary unit representative. Collect all information and transmit instructions to the remainder of the platoon. On the order of the higher commander, the platoon begins movement to the contact point.

3-156. As vehicles or personnel reach the contact point, count them and continue moving to the SP of the passage lane. Platoon elements may not all arrive at the contact point simultaneously, but still continue movement to the rear. Once elements enter the passage lane, they do not stop until they reach the RP and the tactical assembly area located nearby. The PSG is the last element of the platoon to enter the passage lane. After existing the lane and passing the RP, the PSG notifies the commander that upon the platoon clearing the passage lane.

3-157. The first elements of the platoon that reaches the tactical assembly area take up the 12 o'clock position and ensure the following elements take up positions on the perimeter. As the platoon sets in the tactical assembly area, they report to the platoon leader. Once the entire platoon reaches the tactical assembly area, the platoon leader notifies the commander and begins movement rearward.

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Chapter 4
Security

Scout platoons conduct security missions to provide early and accurate warning of enemy actions, provide time and maneuver space to react to the enemy, and develop a situation that allows the commander effective use of the protected force. The scout platoon conducts security tasks in conjunction with reconnaissance missions.

The scout platoon may operate at considerable distances from the friendly elements it is protecting, limited only by communications capabilities and the range of direct fire, CAS, and indirect fire support. Scout platoons can conduct security missions independently or as part of a larger force.

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SECTION I – BASICS OF SECURITY TASKS

4-1. Security is inherent in all operations and is always the first priority of work. Continual reconnaissance and the development of information requirements are the means to provide security. Security operations follow the fundamentals of security to ensure early and accurate warning of enemy forces and provide reaction time and maneuver space to develop the situation and allow the commander to determine the most effective use of force to neutralize, defeat, or destroy enemy forces. There are five forms of security operations: screen, guard, cover, area security, and local security. Each form provides varying levels of protection to the main body with the desired form selected by weighing operational and mission variables with the end state.

4-2. The main difference between security operations and reconnaissance operations is that security operations orient on the protected force or facility, while reconnaissance is enemy and terrain oriented. However, security operations cannot be divorced from reconnaissance missions as one of the fundamentals of security is to perform continuous reconnaissance. Security operations prevent enemy reconnaissance assets from determining friendly locations, strengths, and weaknesses.

FUNDAMENTALS OF SECURITY

4-3. The fundamentals of security are important to the scout platoon because they provide the platoon direction and focus when executing security tasks. Successful security missions depend on the scout platoon properly applying the five fundamentals of security.

4-4. Provide early and accurate warning. Detecting the enemy force quicklyand reporting accurate and timely information providesearly warning to the protected force commander. Early warning provides the time, space, and details needed to retain the tactical initiative, enabling the commander to choose the time and place to concentrate friendly forces and assets against the observed enemy.

4-5. Provide reaction time and maneuver space. The scout platoon normally operates as far from the protected force as possible, consistent with the factors of METT-TC. Greater distances generally yield greater reaction time and maneuver space for the protected force commander. If necessary, the scout platoon fights to gain time and space for the commander.

4-6. Orient on the force, area, or facility to protect. While reconnaissance tasks focuses on a reconnaissance objective, security tasks orients on the protected force or facility. The scout platoon directs all of its actions on securing the protected force or facility and providing maximum early warning of enemy activity. While the platoon orients on the force to protect, they still focus on the terrain, the enemy, or civilian population. The scout platoon operates between the protected force and known or suspected enemy elements. The scout platoon moves as the protected force moves, either to the protected force's flank or to the protected force's rear.

4-7. Perform continuous reconnaissance. The scout platoon conducts continuous reconnaissance during security missions to gain as much information as possible about the AO and enemy. The platoon uses combinations of observation posts, Army aviation, UAS, patrols, and other information collection assets to perform continuous reconnaissance in an attempt to determine enemy composition and disposition as well as key factors about the AO.

4-8. Maintain enemy contact. Scout platoons maintain contact with the enemy once contact is made unless otherwise directed. Although contact does not have to be maintained by the individual section or team, the scout platoon stays in contact collectively and continuously by maintaining the capability to use one or more of the forms of contact, including depth of observers in time and space. Maintaining enemy contact through one or more of the eight forms of contact enables the platoon leader to make recommendations to the commander and generate options for the protected force commander to identify and exploit windows of opportunity.

SECURITY PLANNING CONSIDERATIONS

4-9. Scout platoons augment with assets such as engineer or Infantry squads, ground surveillance systems, artillery observers, air defense assets, and UAS assets when

conducting security tasks. Scout platoon leaders should take the following into consideration when planning to execute security missions:

- Location and orientation of the security area.
- Initial observation post locations.
- Types and duration of observation posts.
- Time available to establish the security force.
- Criteria for ending the security mission.
- Augmentation requirements of the force.
- Intelligence support to security mission.
- Special requirements or constraints.
- Direct and indirect fires planning.
- Integration of ground and air operations.
- Use of movement corridors.
- Planning the engineer effort.
- Reporting criteria.
- Concept of sustainment.

COMMANDER'S SECURITY GUIDANCE

4-10. The troop commander develops security guidance based on the squadron commander's guidance and overall plan. An understanding of this guidance aids the troop commander in planning and executing the troop's mission. The squadron commander's security guidance enables the commander to specify guidance and intent for subordinate leaders. Platoon leaders must disseminate the commander's guidance to the lowest level to ensure all leaders and Soldiers understand and can execute the mission. The commander's security guidance consists of the same four elements included in reconnaissance guidance.

4-11. Focus. The focus of security tasks defines what the scout platoon is to protect and why – the focus describes the expected results of the security mission. The focus of security is enemy, terrain, or civilian populations. Terrain includes weather effects and civilian population includes society and infrastructure networks. The security objective clarifies and prioritizes the security tasks for the scout platoon nested within the maneuver plan of the protected commander. The security objective helps leaders understand the expected results of the security mission. This can also include the social/human demographics, infrastructure, or a combination of factors.

4-12. Tempo of security. Clearly articulating the tempo of security tasks, which allows the scout platoon leader to establish associated time requirements that drive planning such as the method of establishing observation posts (either mounted or dismounted), requirements for UAS, and required sustainment and communications support necessary to execute the mission. Additionally, it describes the haste scouts employed in occupying and establishing observation posts.

- Short duration: scout platoons conduct short-duration observation posts for periods less than 12 hours.
- Long duration: scout platoons conduct long-duration observation posts for greater than 12 hours.

4-13. Engagement/disengagement criteria. Just as the commander issues guidance concerning engagement and disengagement criteria in reconnaissance guidance, the same criteria apply for security guidance. Engagement criteria should be defined using precise doctrinal terms.

4-14. Displacement criteria. The displacement criteria dictates a set of conditions required before the scout platoon conducts movement and maneuver to a subsequent fighting position or assumes a follow-on mission.

METHODS AND MANAGEMENT

4-15. Security operations use the same methods and management as reconnaissance to maintain enemy contact. No single reconnaissance asset can answer every intelligence requirement and there are rarely enough reconnaissance assets to cover every requirement. The squadron/battalion and BCT staffs use a mix of reconnaissance management methods, such as cueing, mixing, and redundancy, in addition to task organizing, in an attempt to use limited assets effectively and collect the most critical information with the fewest assets as quickly as possible.

4-16. Cueing. 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. An example of cueing in a security screening mission is the cueing of an aerial asset for a RHO to allow the scout platoon to begin displacement.

4-17. Another example is a screening element identifying the enemy's main body from the screen and cueing an attack asset to begin the attack, displacement, or a battle handover (see figure 4-1).

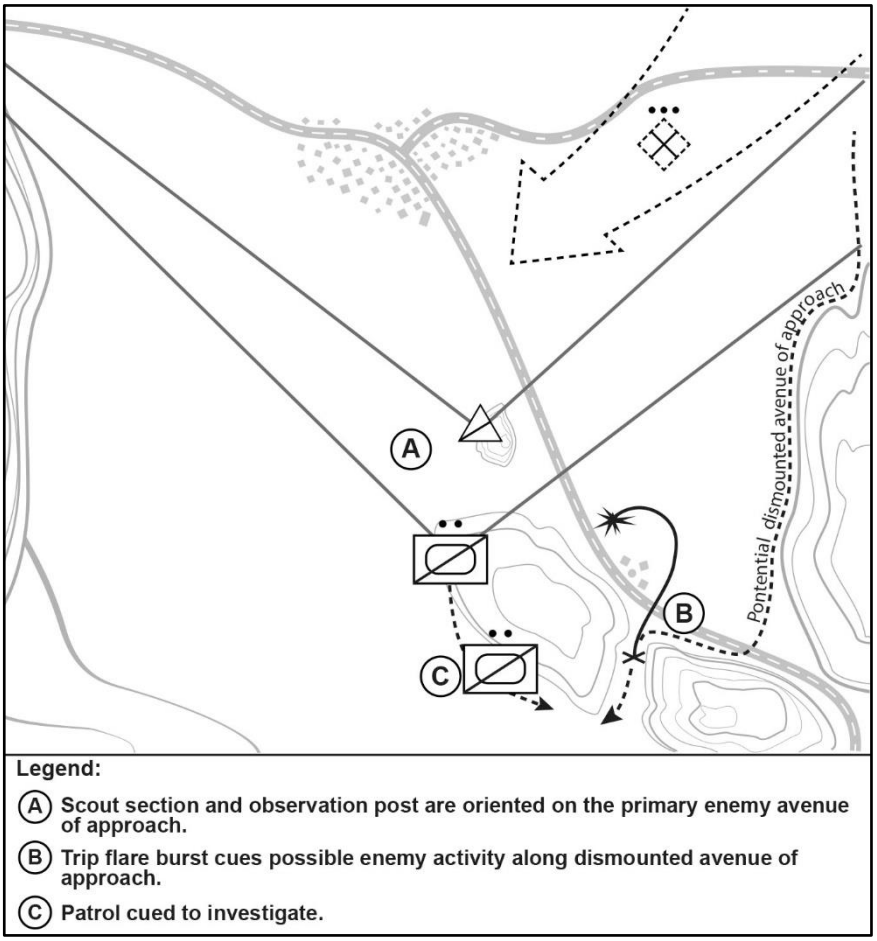


Figure 4-1. Use of cueing during a security mission

4-18. Mixing. 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, the utilization of a combination of mounted and dismounted observation posts and aerial reconnaissance assets in support of answering PIR on the same NAI. Another form of mixing is the collection of information in support of answering PIR using different capabilities. For example, signals intelligence mixed with HUMINT on the same NAI.

4-19. Redundancy. Redundancy is using two or more like assets to collect against the same intelligence requirement. In security missions, an example would be the utilization of more than mounted observation posts on an NAI covering an avenue of approach which achieves the same through observing the same NAI with the same method from different locations.

4-20. Figure 4-2 illustrates an example of an observation post observing an NAI to the north. Another observation post is observing the same NAI from the east.

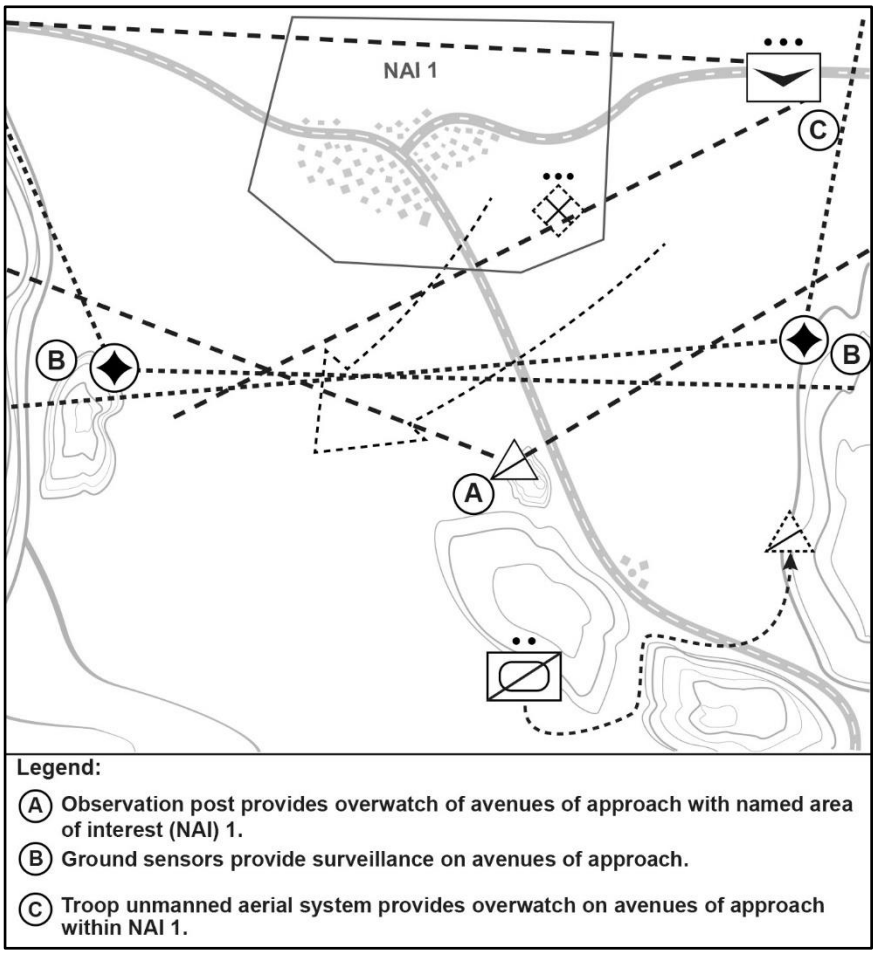


Figure 4-2. Use of redundancy during security tasks

SECTION II – FORMS OF SECURITY TASKS

4-21. The five forms of security tasks are screen, guard, cover, area security, and local security. Scout platoons conduct guard and cover as part of a larger force. The paragraphs below discuss each task. (Refer to FM 3-98 for more information.)

SCREEN

4-22. A screen is a security task that scout platoons conduct to provide early warning to the protected force and report information related to a commander's PIR. Within its

capabilities and based upon the higher commander's guidance, the scout platoon conducts counterreconnaissance to destroy or repel enemy reconnaissance forces. Screen tasks are defensive in nature and prevent enemy observation of the protected force. Scout platoons conduct screens to the front, flanks, or rear of a stationary friendly force, and to the flanks or rear of a moving friendly force. Scout platoons do not conduct screening missions forward of a moving friendly force.

4-23. The scout platoon accomplishes a screen by establishing a series of observation posts and conducting patrols to ensure adequate reconnaissance and surveillance of the assigned sector or area. Commanders direct the scout platoon to screen when they want advance warning of when and where the enemy is attacking. Operating over an extended area, the platoon fights to prevent enemy observation of the protected force, or engage targets of opportunity. Scout platoons plan screens in-depth. Depth prevents the threat from easily identifying and penetrating the screen, prevents gaps from occurring when observation posts displace, allows platoons to gain and maintain enemy contact, and facilitates the destruction of enemy reconnaissance elements without compromising tasks.

TASKS

4-24. Execution considerations guide screen planning. Tasks that a scout platoon conducts for the screen—

- Allow no enemy ground element to pass through the screen undetected and unreported.
- Maintain continuous surveillance of all avenues of approach that affect the main body's mission.
- Conduct counterreconnaissance to destroy, defeat, or disrupt all enemy reconnaissance elements, within capabilities and according to the commander's security guidance.
- Locate and identify the lead elements of an echeloned enemy force that indicate the enemy's main attack, as prescribed in the enemy's order of battle.
- Determine the direction of enemy movement, maintain contact, and report threat activities, even while displacing.
- Impede and harass the enemy within capabilities without becoming decisively engaged and while displacing to provide the protected force commander with additional time and maneuver space.
- Detect and report all enemy elements attempting to pass through the screen, both ground and aerial, to provide the protected force commander early warning of enemy activities.

PLANNING CONSIDERATIONS

4-25. Stationary or moving screens are relative to the actions of the force to protect. Inactivity in a stationary screen leads to identifiable and exploitable gaps for the threat. After issuing a WARNORD, the scout platoon leader analyzes the mission and determines what to accomplish by evaluating the following:

- Commander's security guidance.
- Information received about the threat from the squadron or battalion's S-2 assessment that also determines which enemy activity to expect.
- Actions on contact through the eight forms of contact.
- Terrain the platoon maneuvers through during the execution of security tasks.
- Nonorganic assets requests and integration to support the platoon's mission.

4-26. Once the platoon leader has a thorough understanding of the surveillance requirements, assessment of available assets to execute these requirements occurs. Based on the platoon leaders own analysis and the IPB products possessed, the platoon leader must consider where to focus the reconnaissance assets and determine their fields of observation.

4-27. The scout platoon uses cueing, mixing, and redundancy of organic and nonorganic assets to answer the CCIRs. The scout platoon also employs a variety of observation techniques (mounted, dismounted, aerial, and sensor) to ensure no gaps exist in the assigned sector and accuracy of information collected. A few of these observation techniques are listed below:

- Width of the screened sector.
- Requirements to observe specific NAIs or TAIs.
- Possible follow-on missions: branches and sequels to the operation.
- Range of supporting fires.
- Location of the initial screen – The higher headquarters establishes the general location of the initial screen. Adjust the screen closer or farther to the protected force only with approval.
- Communications plan (PACE, no commo [communication], communications security compromise plans).
- Location and times for resupply.

ASSETS

4-28. The initial screen plan needs to be executable without additional assets. If success hinges on planned assets that become unavailable during the mission, because of weather or enemy, it opens the platoon's plan to mission failure. Using the platoon's organic assets, the platoon leader develops a plan to provide early warning on the most likely mobility corridors. Nonorganic and higher assets can provide earlier information to cue other observation assets. These assets may patrol along exposed flanks or in gaps between ground observation posts, augment the surveillance of NAIs, or add redundancy and depth within the sector. To extend the depth of the scout platoon further, augmenting aerial reconnaissance assets may execute reconnaissance in their own AO. Aviation assets can provide continuous observation of threat elements to allow reconnaissance ground troops to displace to subsequent positions.

4-29. Fire planning includes the integration of indirect and direct fires, attack aviation, and CAS. The scout platoon leader should plan indirect fire targets at chokepoints, along likely avenues of approach, in areas where the threat must slow down, or in conjunction

with emplaced obstacles. The platoon leader should also plan engagement areas to help focus fires in areas along likely threat mobility corridors where the fires have the greatest likelihood of achieving desired effects. Most targets are not easily destroyed by supporting fires such as armored targets. It is critical that the higher headquarters clearly identify what indirect fire is available for the scout platoon during screening operations, identify the command or support relationship, develop the communications plan, pinpoint artillery and mortar firing positions. Higher headquarters must also identify fire support coordination measures, such as no fire areas, covering friendly observation posts or sections. The platoon leader can also add to the fires plan with approval from the FSO. The platoon leader should plan indirect fires for the initial screen and for alternate and subsequent locations.

DEPTH

4-30. Depth allows one element of the screen to pass enemy contact to another element without engaging or displacing by conducting a platoon internal RHO. Depth is critical in a screen. Depth is achieved by positioning observation posts, UAS, and other attached assets between the front line trace and rear boundary of the scout platoon. Depth prevents the enemy from identifying the screen, prevents gaps, allows contact, and facilitates destruction of enemy elements without compromising observation posts.

4-31. Scout platoon leaders assign section boundaries that allow multiple observation posts to establish a screen and create depth within the screen (see figure 4-3, page 4-10). Whenever possible, observation posts should be within supporting distance of each other to enhance security through mutual support and to enable RHO between observation posts. The mortar section positions behind the screen where they can support all elements of the screen. The ability to achieve depth is a result of several factors, including:

- Higher commander's intent and concept as expressed in the OPORD.
- Geographical location of the screen based on time-distance analysis.
- Location of the protected force, area, facility, or population.
- Engagement criteria, disengagement criteria, displacement criteria.
- Size of the scout platoon's AO.
- Terrain.
- Attachments and detachments.
- Logistical and indirect fires support from the main body.

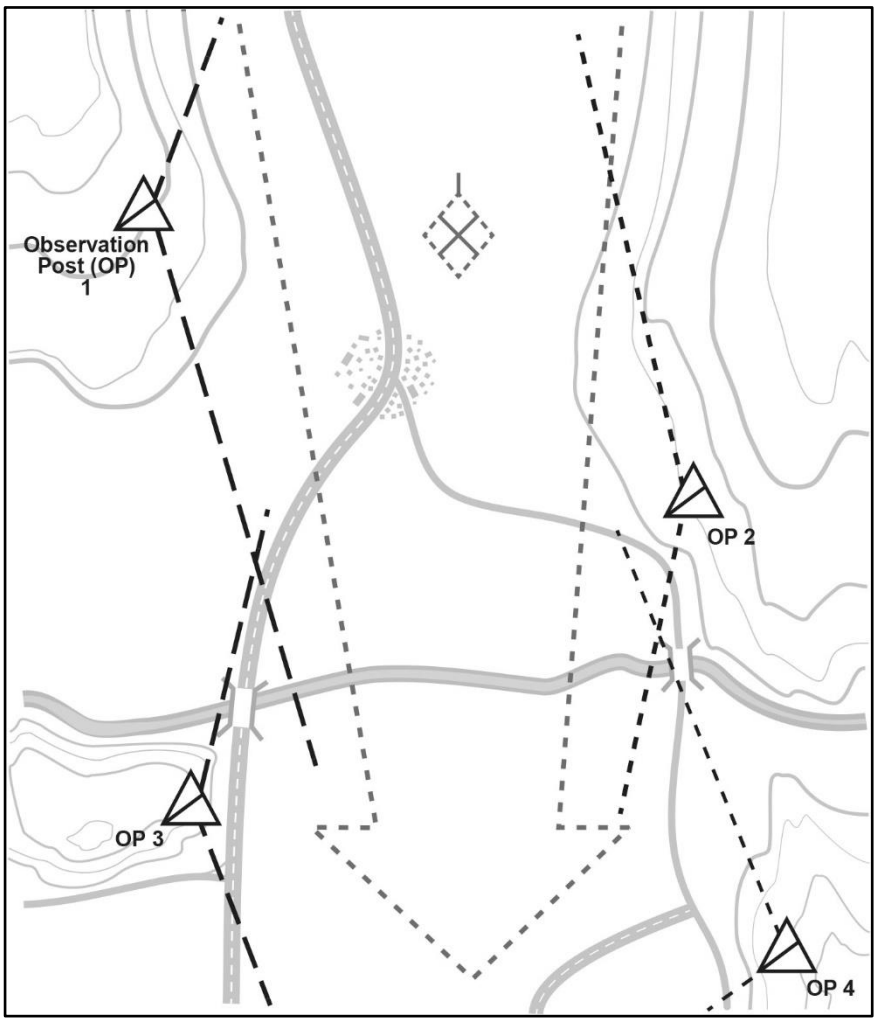


Figure 4-3. In-depth positioning of observation posts

STATIONARY SCREEN

4-32. Planning considerations for a stationary screen include establishing observation posts in-depth and conducting patrols to ensure adequate surveillance of the assigned AO. Screens are active, with stationary observation posts as only one part of the mission. To ensure that continuous overlapping surveillance occurs, the scout platoon employs observation posts, patrols (mounted and dismounted), aerial reconnaissance, and sensors.

4-33. Scout platoon leaders especially consider the war fighting functions of mission command, protection, and security while developing their scheme of fires concept of

sustainment and movement technique and maneuver formation to occupy the screen in relation to the enemy force to screen.

4-34. A platoon executing a screen requires the following minimum guidance from higher headquarters. The scout platoon leader evaluates each of the following considerations when developing the platoon's plan.

- Location of the initial screen and time to establish.
- Assigned AO for subordinate elements.
- Air and ground assets integration.
- Surveillance and acquisition assets available.
- Control of displacement to subsequent positions.
- RHO between screening elements.
- Width of the screened sector.
- Rear boundary of the screening force.
- Possible follow-on missions.

4-35. The screening force may have a wide frontage. A phase line placed along identifiable terrain graphically indicates the forward line of own troops and can serve as a LOA for the scout platoon. A boundary depicts the rear limit of the screen. The scout platoon is responsible for the area between the screened enemy force and the rear screen boundary. The boundary may serve as a battle handover line or a reconnaissance handover line. Other phase lines control maneuver of the sections and aid in both reporting and orientation. The scout platoon leader designates section AO to control lateral movement of sections (see figure 4-4, page 4-12).

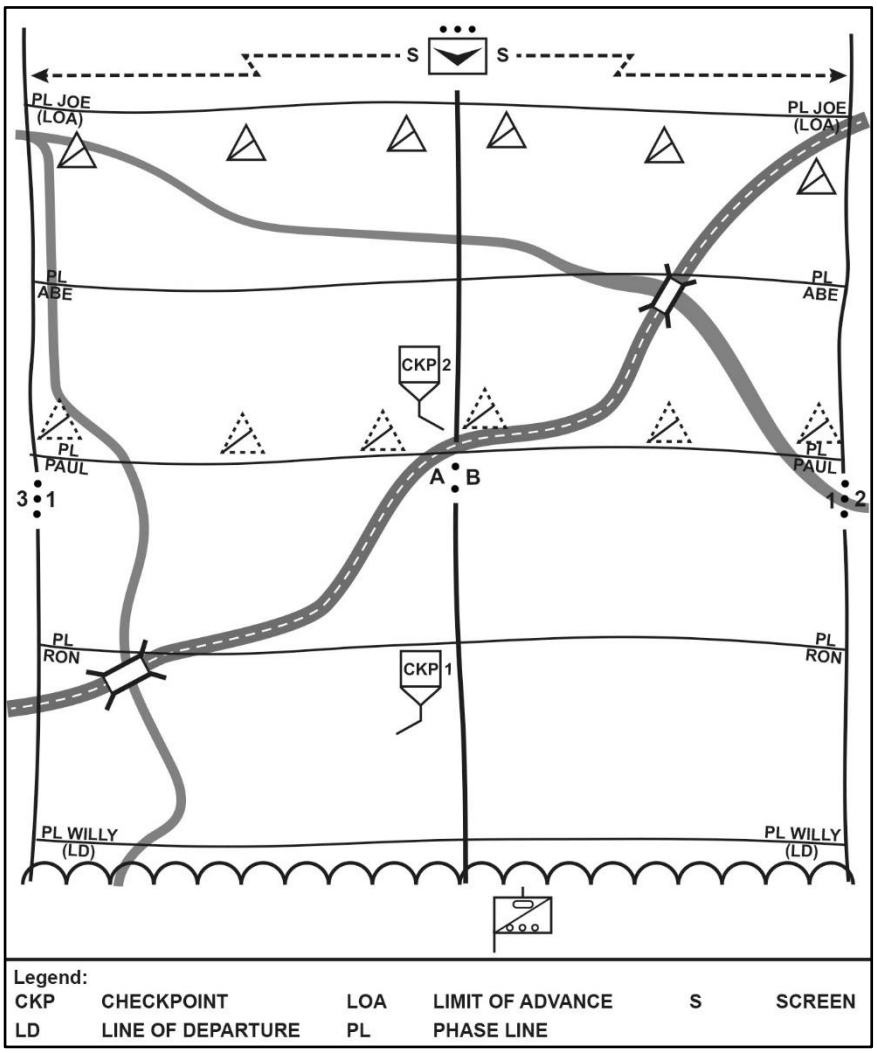


Figure 4-4. SBCT scout platoon stationary screen mission

Moving Screen

4-36. Scout platoons execute a moving screen in the same way it conducts a stationary screen, except for additional movement techniques. Scouts do not screen in front of a moving force. The screen's movement relies upon time and distance factors associated with the main body's movement. Responsibilities for a moving flank screen begin at the front of the main body's lead combat element, and ends at the rear of the protected force (excluding front and rear security forces). The scout platoon may conduct moving flank screens or screen the rear of the main body. As with a stationary screen, phase lines,

checkpoints, contact points, and lateral boundaries aid to orient and control the scout platoon's movement. The LD, which is the same as the protected force's, initiates the screen mission and becomes the rear boundary of the moving screen. The planning considerations discussed earlier for stationary screens also apply to a moving screen. However, emphasis may shift because the main body is moving.

4-37. As the main body moves, the scout platoon occupies a series of successive screens, regulating movement to maintain the time and distance factors desired by the main body commander. As with the stationary screen, integrating attack and reconnaissance aviation and UAS into the screen affords increased flexibility, fires platforms, and sensors to the mission. Ground and aerial reconnaissance assets may use four basic methods of movement. They are as follows:

- Alternate bounds by individual observation posts.
- Alternate bounds by sections.
- Successive bounds by sections.
- Continuous marching as a platoon.

Screen Location

4-38. The scout platoon leader determines the likely enemy avenues of approach based on the squadron or battalion S-2's assessment, and directs the screen accordingly. The platoon leader uses platoon boundaries, phase lines, and recognizable terrain features to assign section boundaries. The platoon leader takes the capabilities and limitations of organic and attached sensors into consideration and arrays them along the screen, accordingly to maximize their effects. The commander establishes the general location of the initial screen. To prevent fratricide, the platoon adjusts closer to the protected force only with approval from higher. The initial screen often represents the forward line of own troops and it is considered a restrictive control measure requiring coordination when units move beyond it to conduct aerial or ground reconnaissance.

4-39. If requiring operations forward of the screen, the commander establishes a phase line to designate the scout platoon's LOA. Key considerations include determining observation and fields of fire, requirements to observe specific NAIs or TAIs, and the range of supporting indirect fire assets. With permission from the supported unit, the scout platoon can adjust the initial screen to meet these considerations.

SCREEN OCCUPATION

4-40. Select occupation of the screen from three primary methods: zone reconnaissance, infiltration, or tactical road march. The factors that determine the employment of a specific method, or a combination of methods, are the enemy situation (and the knowledge available about the enemy), the squadron commander's intent, the speed at which the main body is moving, available assets capability and the terrain. All three methods require the scout platoon to maintain contact with the main body and orient the screen in relation to the main body's maneuver or position.

4-41. Zone reconnaissance is the preferred method to occupy a screen as it provides useful information and intelligence regarding terrain and maximizes the opportunity to identify enemy forces located within the zone prior to occupying the screen. The tactical

road march method is the fastest but least secure. The scout platoon may use the infiltration method when requiring a covert posture for the security mission. The scout platoon will need to make additional efforts to maintain a stealthy posture throughout the infiltration. The scout platoon focuses only on maneuver (not reconnaissance) when using this method which gives the platoon more speed to occupy observation posts. Scouts will still send reports to the scout platoon leader and the platoon leader will continue to report to the troop as necessary. Infiltration ensures the most stealth.

4-42. The scout platoon crosses the LD separately from the main body in the first technique and conducts a tactical road march within an AO parallel to the protected force. The platoon then deploys from a RP to the initial screen positions. Scout platoons occupy observation posts as they reach them. UAS can conduct surveillance forward of the scout platoon or assist in maintaining contact with the main body. Sensors can augment observation posts by providing long-range surveillance of enemy avenues of approach (see figure 4-5).

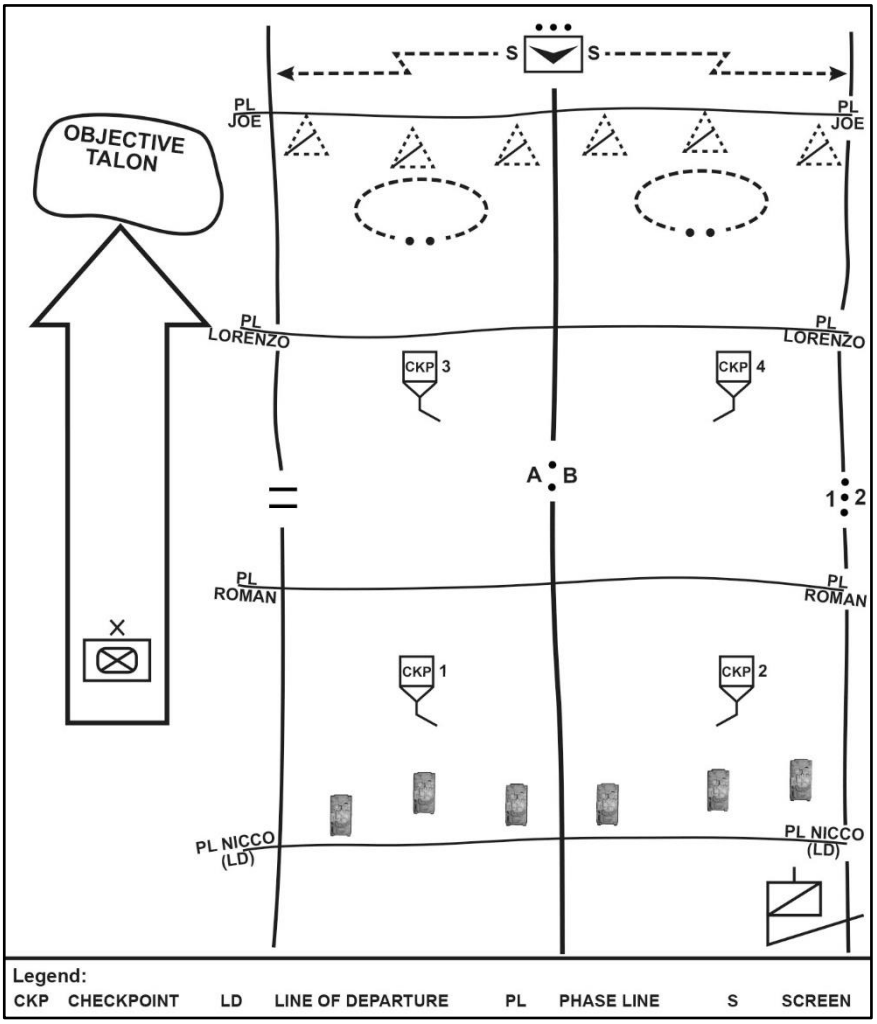


Figure 4-5. ABCT scout platoon moving screen mission

Observation Posts

4-43. The scout platoon conducts three steps for an observation post. These steps are set, establish, and occupy. After completing terrain analysis, the leaders in the platoon identify the number of observation posts required and template locations that allow the best observation of NAIs/TAIs and provide depth through the sector. Section/squad leaders and team leaders then select the exact position for each observation post once they are physically at the planned location. Observation posts should have the following characteristics:

- Covered and concealed routes to and from the observation post. Scouts are able to enter and leave the observation post without being detected by the enemy.
- Unobstructed observation of the assigned area or sector. Ideally, the fields of observation of adjacent observation posts overlap to ensure full coverage of the sector.
- Effective cover and concealment. Scouts should select positions with cover and concealment to reduce their vulnerability. They may need to bypass a position with favorable observation capability but without cover and concealment in favor of a position that affords better survivability.
- A location that does not attract attention. Do not establish observation posts in locations such as a water tower, an isolated grove of trees, or a lone building or tree. These locations draw enemy attention and may be enemy artillery TRPs. The one exception to this rule is during stability missions where urban emplacement is necessary. The observation posts should also be away from natural lines of drift along which a moving enemy force can travel. These locations might include a route on the floor of a valley or a site near a major highway.
- A location that does not skyline the observers. Avoid hilltops. Position observation posts farther down the slope of the hill or on the side, provided there are covered and concealed routes into and out of the position. Camouflage observation post sites with foliage around the observation post site, and camo netting secured as tight as possible so wind cannot cause movement that will attract observation.

4-44. The above considerations apply to general areas in selecting locations. During this process, scouts should Apply the principles summarized by the mnemonic BLUES:

- B – Blend in with the surrounding area. Does the site look natural? Does it attract unwanted attention?
- L – Low-to-the-ground constructed sites. Does the site provide protection against small arms and direct weapons fire?
- U – Unexpected sites. Does the enemy expect Soldiers to look out the window, or out the small hole in the wall?
- E – Evacuation routes planned during site selection. Where is the link-up location with friendly forces?
- S – Avoid silhouetting of the site. Use the sides of hills not the crests; and always have a backdrop. Can the enemy see a scout silhouetted against the skyline, wall, or other object?

4-45. Scout platoons should position observation posts to provide observation of NAIs and TAIs, to support clear radio communications, and provide security in accordance with the commander's intent. The scout platoon leader and section leaders should all record observation post locations and report any relocation of the observation post to troop. Limit access to the observation post to authorized personnel only observation posts in-depth maximize vehicle-mounted positions with dismounted scouts forward of

the vehicle, or a combination of dismounted scouts and vehicle-mounted scouts (see table 4-1 for observation post manning capabilities by organization).

Table 4-1. Dismounted observation post capabilities

Organization	*Number of Sections*	*Dismounted Scouts per Section**	*Possible Platoon OPs** (up to 12 hours)*	*Possible Platoon OPs** (12+ hours)*	*Possible OPs** (with patrols)*
ABCT (6x36)	2-3	6-9	6	3	2
ABCT (3x5)	2-3 +HQ	4-7	3	2	2
SBCT (6x36)	2-3	6-9	6	3	2
IBCT, Mounted (6x24)	2-3	2-3	3	1	2
IBCT, Dismounted	3 +HQ	8	6	3	2
IBCT Battalion	2-3	8	6	3	2
*Number of available scouts depend on section configuration, does not count vehicle commander or crews. **Assumes vehicles and dismounts operating as mutually supporting OPs.					
Legend: ABCT – Armored brigade combat team, HQ – headquarters, IBCT – Infantry brigade combat team, OPs – observation posts, SBCT – Stryker brigade combat team					

4-46. In-depth observation post placement allows the scout platoon to observe the entire sector. This method works well when the platoon has a sector with several avenues of approach or when the platoon operates in heavily vegetated terrain. In-depth placement allows for redundancy in observation and better interlocking coverage of the sector. The platoon leader provides mission orders and security guidance from higher to sections and other attachments with the commander's intent and security guidance. That guidance also develops the indicators for subordinates to look for within NAIs.

4-47. There are other tactical tasks that encompass the observation post. These duties are broken down into teams. Teams consist of the observation team, the support-by-fire team, and the security team. All Soldiers are observers and can still report as if they are on the observing team, however they have specific jobs to support the observers and enhance the survivability of the section. A minimum of three scouts should man each respective team. Observation teams are equipped to observe the area, report information, protect themselves, and call for and adjust fire. One scout observes the area while the other scout provides local security, the last scout records information, and sends reports to the section/squad leader or platoon leader.

4-48. The observers should switch duties every 20 to 30 minutes because the observer's effectiveness decreases quickly after that time. The support-by-fire team has crew-served weapons to provide direct fires in support of the observing team's displacement.

The security team overwatches both the observing team and the support-by-fire teams. They accomplish this by providing local reconnaissance of the dead space that the other teams are not observing. Essential equipment for each observation post is CWORMS.

Observation Post Vignette

4-49. The following vignette describes an example of how a scout section may occupy an observation post. The scout platoon section stops short of its observation post site, they may conduct a SLLS check. The section leader directs the drivers into positions to overwatch the observation post site, and any terrain the enemy could use to interfere with movement into or out of the position. Leader dismounts with scouts from each vehicle and moves forward to reconnoiter the observation post. Drivers and gunners remain in their vehicles to overwatch the dismounted personnel.

4-50. The section leader moves the dismounted scouts to the observation post site, establishes security overwatching the far side of the site, and checks the site for mines, booby traps, and enemy personnel. After verifying that they can observe the sector or area of responsibility from this site, the section leader issues a five-point contingency plan using the mnemonic "going, others, time, what happens if the leader fails to return, actions," (known as GOTWA), see figure 5-33 on page 5-53) and displacement criteria to the observing teams before returning to the vehicles.

4-51. The section leader selects observation, and security positions for the vehicles and dismounted teams. A well-established observation post has an observation team, an SBF team, and a security team. SBF teams and security teams overlap supporting range to have more observation teams. At this point, the observation post is set.

4-52. Drivers and dismounted scouts from each vehicle mark or stake their vehicle observation position. Once they reconnoiter and secure the area around the observation post, the section leader signals the vehicles and dismounts forward to move into their positions.

4-53. The gunners and vehicle commanders for each vehicle complete and check their range card. The section leader checks the cards to ensure they provide complete coverage of the sector. Range cards are a valuable reference if the vehicle is ordered to fight.

4-54. The drivers and dismounts camouflage the vehicle and dismounted positions, by breaking up the outlines of the vehicle with natural vegetation and the crew's camo (camouflage) netting. The section leader will make a sector sketch using the range cards from all positions in the section leader's observation post. The sector sketch is similar to a range card but with some important differences. At a minimum, the sketch includes the following:

- Key and significant terrain, including NAIs and avenues of approach.
- Location of the observation team.
- Location of the SBF position.
- Locations of security positions.
- Alternate positions (hide, fighting, and observation).

- Routes to and from the observation post and fighting positions.
- Sectors of observation, with dead space identified.
- Preplanned indirect fire targets.
- TRPs for direct fire.
- Prepared SPOTREPs and calls for fire based on trigger lines and projected locations where the enemy will first be seen.
- Locations of protective obstacles, such as claymore mines and trip flares.

4-55. The section leader keeps a copy of the sector sketch and forwards one to the scout platoon leader. The section leader then returns the range cards to the gunner. The observation post is established and the scout platoon leader sends the appropriate BLUE 2 report to the troop.

MAINTAINING THE POSITION

4-56. Once the section leader establishes the observation post and assigns the scouts their sectors of observation, the section improves the position. Scouts manning the observation post site begin providing protection from indirect and direct fires. They also camouflage the position, install wire communications equipment, and emplace hasty obstacles for local protection. As the observation post improves, displaced soil and other materials are disposed behind the observation post site not to the front. Which prevents detection. Vehicle commanders (or gunners) and drivers reconnoiter the routes to their fighting/observation positions and alternate positions, perform maintenance, and camouflage vehicles and positions. The section leader's observation post sketch is accurate. (See figure 4-6, on page 4-20.) An azimuth obtained from a hull-down position is attainable and observable from hide and turret-down positions. The same principle applies for dismounted observation posts.

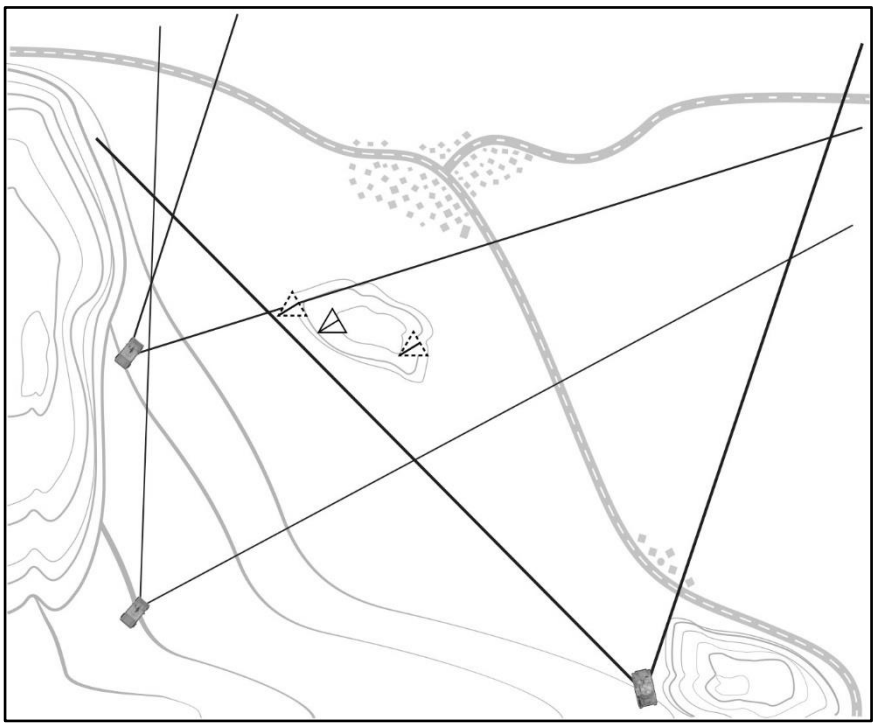


Figure 4-6. Vehicles overwatching an observation post

Observation Post Communications

4-57. The scouts occupying the observation post use wire or radios as their primary means of communication. As a last resort, use messengers to report information if jamming occurs. Scouts moving to and from the observation post as messengers ensure the enemy does not detect their movement. The scout in the vehicle monitoring observation post communications relays reports or information to the platoon leader by digital communications or radio. The scouts in the observation post will carry a radio as a primary means of communications; they can use it to send reports or to talk directly to their fire support team or mortar section for indirect fire support. Scouts will adhere to the PACE, NO-COMMS, and communications security compromise plans published in their signal operating instructions.

Observation Post Security

4-58. Scouts are vulnerable in an observation post, and their best self-defense is not being seen, heard, or otherwise located by the enemy. They employ active and passive measures to protect themselves from enemy detection, and from direct and indirect fires.

4-59. To provide early warning of enemy movement around a screen line or observation post position, scouts emplace unattended ground sensors in areas in dead space around and between their observation posts. Trip flares and claymore mines provide additional early warning and protection from enemy personnel. Once these devices trigger the enemy has an indication there is an overwatching element for that device.

4-60. Active patrolling by security teams around and between observation posts also enhances security. Patrols give the platoon the ability to observe areas they cannot observe from the observation posts and clear the area around the observation post of enemy. A patrol can consist of a minimum of three scouts. The platoon executes continuous reconnaissance by patrolling immediately after occupation of the position to discover enemy elements that possibly detected occupation of the observation post. The patrol reconnoiters likely and favorable enemy observation positions, also checking the camouflage of the friendly positions. Route selection is critical when organizing patrols because scouts must assume the observation post position is under observation. Observation posts cannot always avoid being seen by the enemy but take actions to limit their vulnerability. Covered positions provide protection from enemy fires and vehicle dispersion, and further reduce the effects of these fires. The vehicles in the fighting positions extract the scouts from the observation post when enemy identify and attack the position. Scouts will at all times adhere to noise and light and litter discipline.

4-61. METT-TC may dictate an extended screen across frontages in excess of what the scout platoon can effectively accomplish. The commander, as part of the mission analysis, will determine where to accept risk in the extended screen based on the squadron or battalion staff's IPB analysis and identifies what additional augmentation is required to cover the AO.

Search and Scan

4-62. Crew or squad search (observation) is the act of carefully observing or watching the AO. Scouts conduct observation during both reconnaissance and security missions. Crewmembers use the unaided eye and vehicle optics to search or scan the predetermined sector to acquire (detect, locate, and identify) targets. Sectors are assigned to crewmembers based on the scout team organization and the scout platform. (See figure 4-7, on page 4-22, and figure 4-8, on page 4-23.) Sectors are also adjusted when the vehicle buttons up. Sectors of observation are best found in unit SOPs and adjusted to mission requirements.

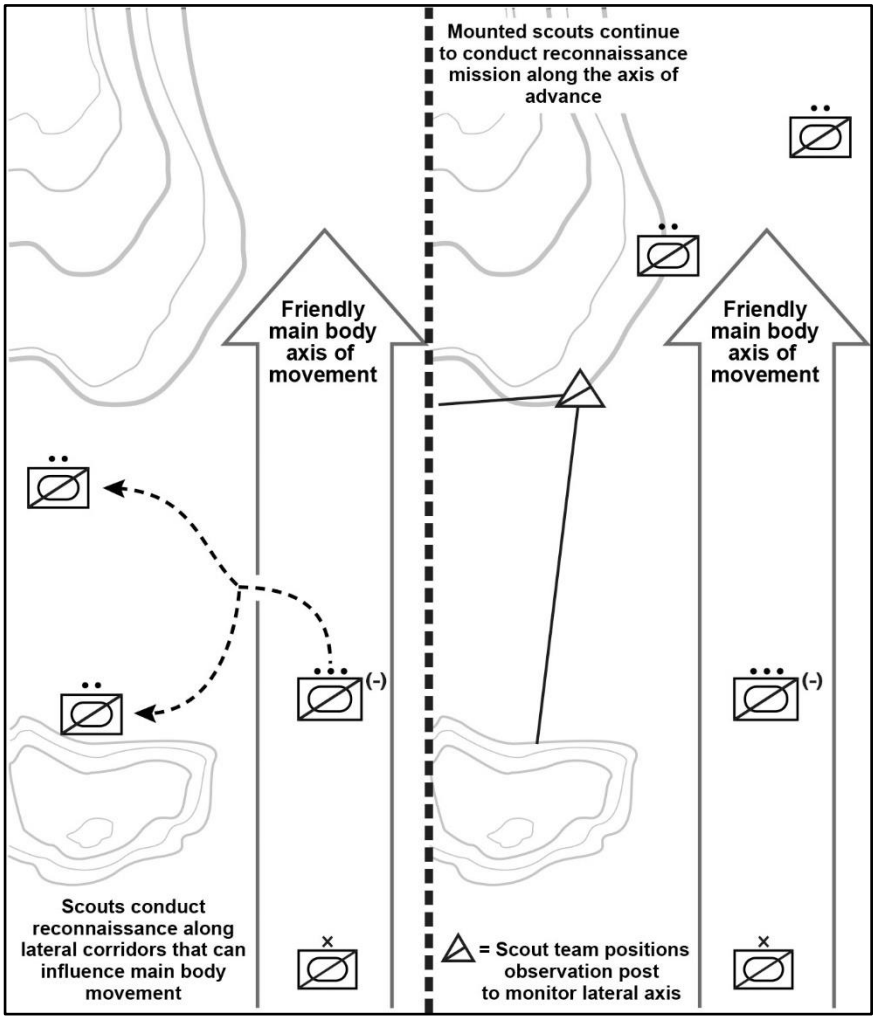


Figure 4-7. Sectors

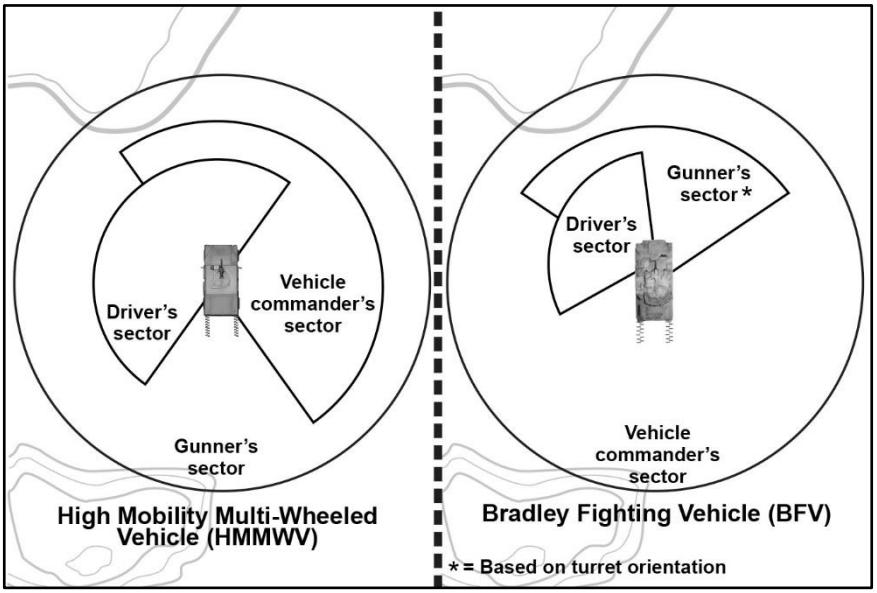


Figure 4-8. Vehicle sectors

Ground Search Techniques

4-63. Crewmembers scan their areas of observation at all times to detect targets or possible target locations. Also consider engagement priorities for threat during scanning with the most dangerous being a priority. There are three ground search techniques that enable crewmembers to locate targets quickly: rapid scan, slow (50-meter) scan, and detailed search. All crewmembers may use these techniques using the unaided eye, binoculars, or vehicle optics, in either clear or limited visibility conditions.

4-64. Rapid scan. The rapid scan method is used to quickly detect obvious signs of enemy activity (see figure 4-9, on page 4-24. Rapid scan is usually the first method used, whether scouts are stationary or moving. The vehicle commander may use binoculars or the unaided eye; the gunner may use the gunner's primary sight, binoculars, or the unaided eye; all other crewmembers use the unaided eye. Perform the following actions when conducting the rapid scan:

- Start in the center of the sector and rapidly scan from the nearest to the farthest visible point.
- Then orient left or right and conduct a rapid scan, from near to far. This sweep must overlap the center area of the previously scanned sector.
- Once one side of the center is scanned completely, scan the other side in the same manner.

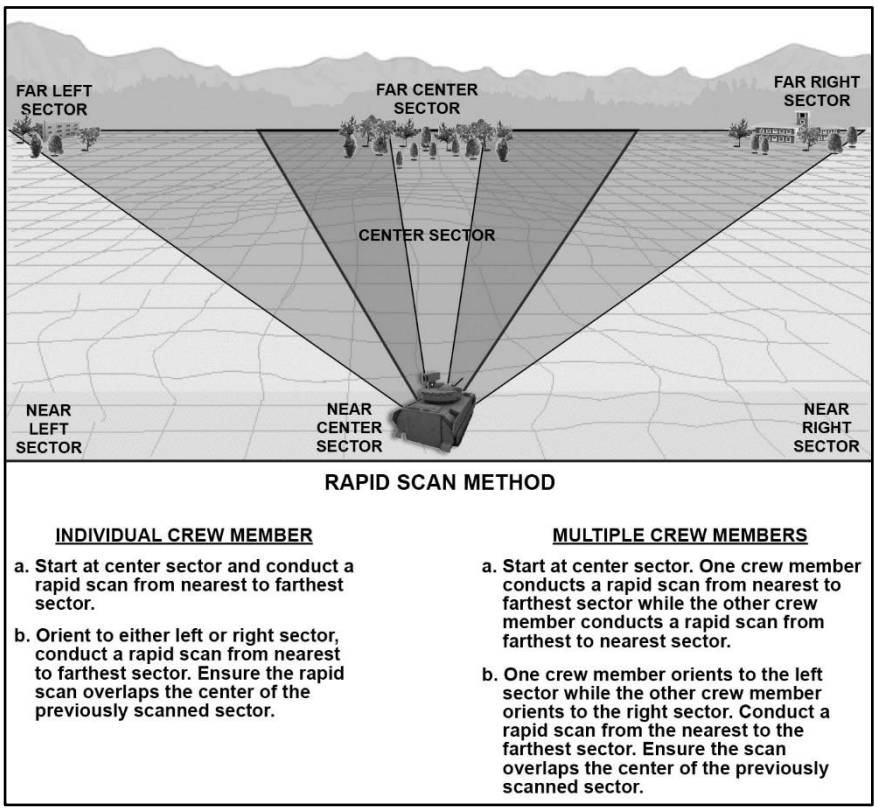


Figure 4-9. Rapid scan technique

4-65. Slow (50-meter) scan. If no obvious targets are present in the rapid scan, crewmembers conduct a more deliberate scan of the terrain using their optics or binoculars (see figure 4-10). The slow scanning method is best used by the vehicle commander or gunner from a hull-down position or during a short halt. Perform the following actions when conducting the slow scan:

- Pausing at short intervals to give the eyes time to focus, search a strip of the target area 50 meters deep from right to left.
- Then search a strip farther out from left to right, overlapping the first area scanned.
- Continue this method of scanning until the entire target area has been searched.
- When a suspicious area or possible target signature is detected, stop and search the immediate area thoroughly using the detailed search technique.

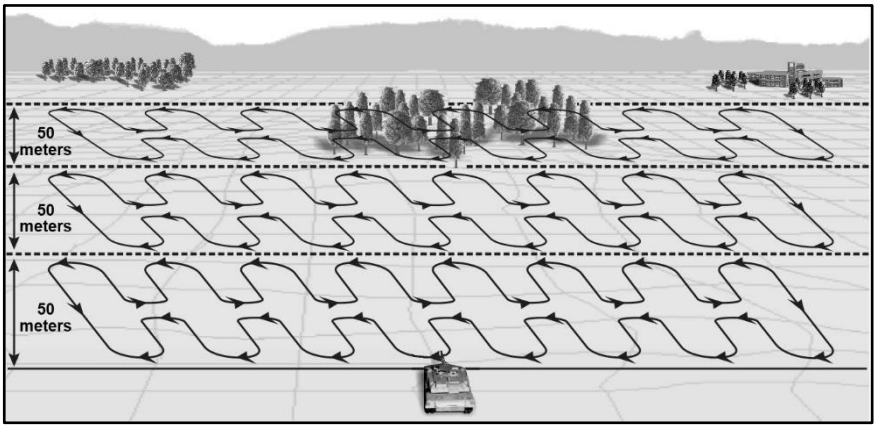


Figure 4-10. Slow scan technique

4-66. Detailed search. If no targets are found using the rapid or slow scan technique and time permits, crews should use their optics (day and night) to make a careful, deliberate search of specific areas in their assigned area (see figure 4-11, on page 4-26). This method is also used to search in detail small areas or locations with likely or suspected avenues of approach. Perform the following actions when conducting the detailed search:

- Concentrate on one specific area or location and study that area intensely.
- Look for direct or indirect target signatures by scanning in a clockwise direction around the focal point (terrain feature) of the area. Some examples of signatures to look for include the following:
  - Dust created by movement of vehicles.
  - Diesel smoke or exhaust.
  - Track or tire marks.
  - Reflections or flashes from glass or metal.
  - Angular objects that do not conform to the surrounding area.
  - Vegetation that appears out of place.
  - Flash or smoke from a weapon or missile.
  - Entrenchments or earthworks.

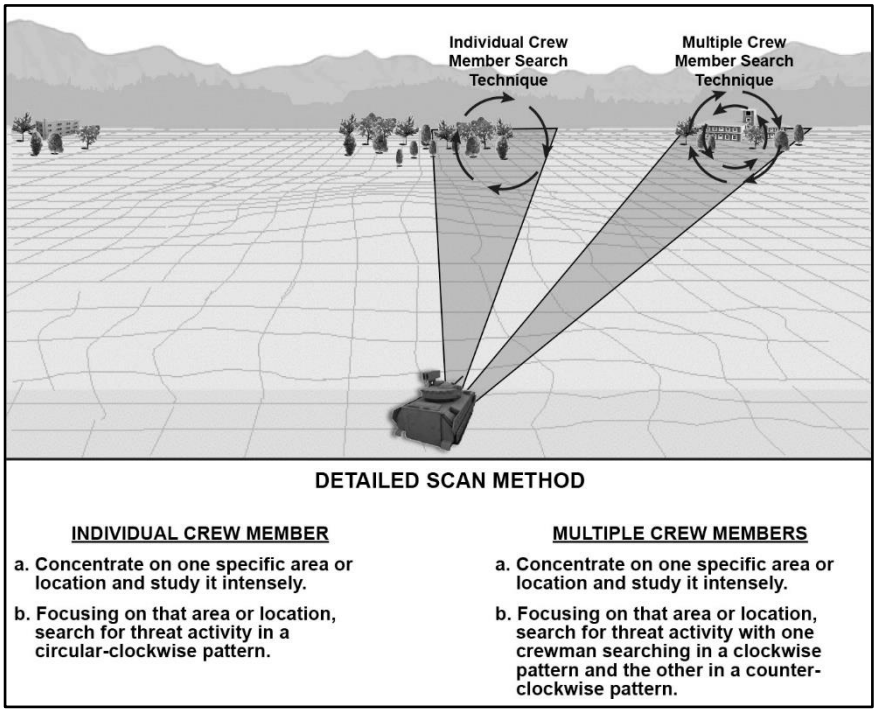


Figure 4-11. Detailed search

Off-Center Vision Method

4-67. Day and night scanning techniques (rapid, slow, and detailed) are similar. Crewmembers can use these techniques:

- At night, using daylight optics or the unaided eye, crewmembers should not look directly at an object, but a few degrees off to the side of the target object.
- Crewmembers move their eyes in short, abrupt, irregular movements when scanning with off-center vision.
- At each likely target area, crewmembers should pause a few seconds to attempt to detect a target or any movement.
- If crewmembers detect an object as a possible target, they use their off-center vision to observe it.
- While observing the object, frequent eye movement is necessary to prevent object fade-out.
- Cupping their hands around the eyes also increases their night vision.

Air Search Techniques

4-68. There are two methods to detect aerial targets quickly: flat terrain scan and hilly terrain techniques (see figure 4-12). Both methods are based on the slow (50-meter) scanning technique with the following adjustments:

- In flat terrain, crewmembers search the horizon by moving their eyes in short movements from object to object. More detail is registered this way than with a continuous scan of the horizon. Crewmembers should always search from near to far for possible targets.
- In hilly terrain, crewmembers search the sky just below the horizon and move upward. They use prominent terrain features as points of reference to ensure overlapping areas of search, scanning from far to near, low to high.

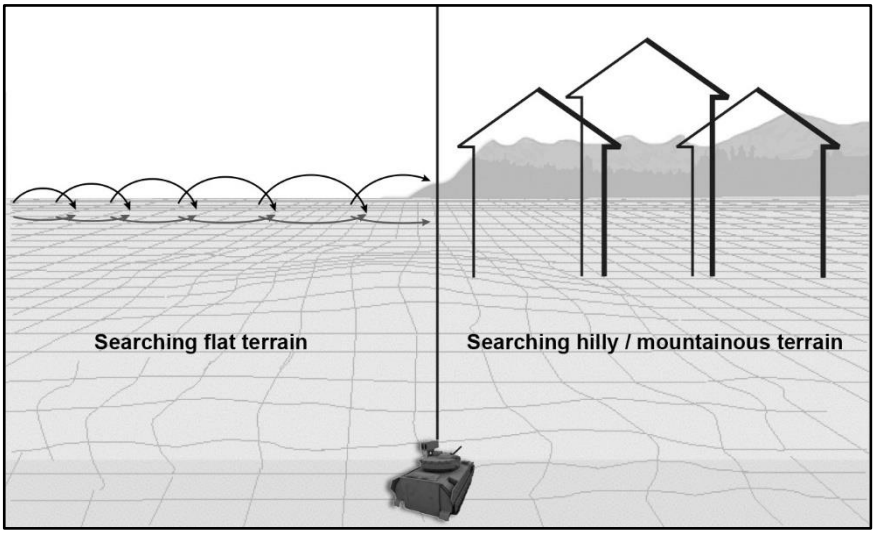


Figure 4-12. Air search technique

Crew Search Tips

4-69. The following considerations and suggestions can help scouts make more effective use of target search techniques:

- Optical devices can acquire targets at ranges greater than are possible with the unaided eye. These devices include binoculars, night-vision goggles, starlight scopes, and vehicle-mounted optics systems.
- Initial scanning is always done with the unaided eye first, then with an appropriate optical system (such as binoculars or sights).
- Target search is continuous. Any possible target missed on the first or second scan may be seen on the third or fourth scan.
- The entire crew must look for likely targets, using proper scanning techniques within their assigned sectors of observation.

- While on the move, the gunner should use the rapid scan technique, constantly scanning their sector limits from their right to their left.
- Targets on the edge of the peripheral field of view are harder to locate.
- Operations under CBRN conditions limit the crew's ability to acquire and locate targets. The crew's field of vision is greatly narrowed while wearing the protective mask. Continuous scanning is a must.
- Concentrate the search in areas where targets are most likely to appear, such as identified avenues of approach, wood lines, and reverse slope firing positions.
- Do not neglect to scan 360 degrees. Targets that are impossible to spot from the front are often visible from the flank or rear.

DEFINE TRIGGER LINES AND DECISION POINTS

4-70. The commander develops specific engagement and disengagement criteria for the scout platoon to trigger specified actions. These can include displacement to secondary observation posts or the initiation of direct or indirect fires against the enemy. Producing a well-developed set of engagement, disengagement, and displacement criteria for the scout platoon allows the commander to exercise effective control over the platoon. During screening missions, emplacing graphic control measures at possible enemy reaction areas will aid in the reporting to higher. Identifying these locations within your AO is important.

4-71. Triggers are physical points on the ground, or actions, or events. During the offensive tasks, a trigger is often a maneuver action or event. In the defense, a trigger is more often a physical spot on the ground. See table 4-2 for the suggested sequence for trigger development.

Table 4-2. Trigger development sequence

Steps	*Actions*
Step 1	Position on the ground. Determine where fires will engage the enemy, for example, the impact of high explosive rounds on target or location of illumination rounds employed at night to discover a possible threat.
Step 2	Enemy rate of movement. To engage a moving target, determine rate of movement through estimation, past experience, doctrinal literature, or from scout reports of enemy speed.
Step 3	Time of flight of the rounds. Determine the time of flight of the rounds from the weapon system firing the mission.
Step 4	Processing time. Determine processing time which is the time required from the call for fire to rounds being fired from the weapon system.
Step 5	The total mission time. Determine total mission time which is time of flight plus processing time.
Step 6	Location. Place the trigger point the required distance from a planned target location based on the following: {total mission time x speed of enemy = distance}.

Preparation Tasks

4-72. Preparation tasks include reconnaissance to the screen and observation post positions, hasty occupation of observation posts, and deliberate occupation of the screen. Prior to movement, leaders conduct engagement area development located in counterreconnaissance section in paragraph 4-73, PCC and PCI) and rehearsals.

Reconnaissance to the Screen

4-73. The scout platoon conducts reconnaissance, movement, or infiltration to the templated screen location. Once on the ground, the platoon leader must direct and conduct reconnaissance to ensure enemy counterreconnaissance elements have not already infiltrated the area, as well as identify the actual locations for observation posts or BPs. A technique to sequence this reconnaissance:

- Plan collection and security.
- Move and infiltrate to the templated location.
- Defeat or bypass enemy or counterreconnaissance according to the commander's guidance.
- Establish observation posts or BPs.
- Observe and defend or conduct counterreconnaissance.
- Displace to conduct battle or RHO in accordance with commander's guidance.
- Transition to the next mission.

4-74. Once reconnaissance, movement, or infiltration is complete, the platoon leader will confirm or adjust the security plan from map reconnaissance and tentative plan before the platoon OPORD is issued. If the adjustments change any aspect of the troop's order, the platoon leader will inform the commander before executing the changes. If the scout platoon leader is unable to issue the full OPORD during the reconnaissance, the platoon leader should, at a minimum, issue a detailed WARNORD and conduct rehearsals.

4-75. When conducting the reconnaissance of the screen and observation post positions, scouts should use marking materials (for daylight and limited visibility recognition) to indicate key locations. They should record the eight-digit grid coordinates for key locations manually on their maps and using electronic means such as Global Positioning System (GPS) or joint capabilities release (if available).

4-76. To be most effective, the reconnaissance begins from the enemy's perspective in the engagement area, with the party looking toward the observation post or BP. The platoon leader must receive permission from the commander to move in front of the observation post or BP.

4-77. The platoon leader explains the enemy situation, outlining probable COAs and the effects of terrain on enemy movement. They also identify the enemy's potential SBF positions as well as avenues through the platoon's BP.

4-78. The platoon leader and section leaders then mark the engagement area with platoon and section sectors of fire. They may also mark TRPs and tentative obstacle locations. As necessary, designate fire control measures and mark using easily identifiable terrain features.

4-79. When reconnaissance of the engagement area is complete and all observation posts understand where the platoon leader wants to defeat the enemy's reconnaissance elements, the platoon leader and section leaders move back to their positons. They discuss details of the platoon fire plan, including the trigger lines, engagement criteria, direct fire control measures, disengagement criteria and disengagement plan, and routes to supplementary or subsequent observation post or BPs. They also make plans to identify and mark primary and alternate fighting positions.

Rehearsal

4-80. Rehearsals are especially effective in helping the platoon to practice and coordinate necessary tactical skills, including the following:

- Observation post occupation steps.
- Calls for fire.
- Initiation, distribution, and control of direct and indirect fires.
- Engagement area.
- Movement to alternate and supplementary fighting positions.
- Displacement to subsequent BPs.

4-81. Rehearsals can begin as soon as the platoon receives the troop WARNORD, with individual crews practicing berm drills, snake board exercises, and ammunition transfer drills. Initial walk-through rehearsals on a sand table can focus on deliberate or hasty occupation procedures, fire distribution, and the disengagement plan. The scout platoon also conducts mounted movement and force on-force rehearsals. The platoon continues to raise the level of difficulty by conducting the rehearsals at night, and at various mission-oriented protective posture (MOPP) levels, using these rehearsal techniques. The platoon leader should integrate voice and digital radio traffic, as well as, calls for fire during all rehearsals.

Reporting

4-82. Use contact reports, SPOTREPs, and SITREPs as appropriate to report enemy in the scout platoon's AO. In the defense, use contact reports to alert the platoon to previously unidentified enemy targets. The SPOTREPs and SITREPs are sent to list the number, types, and locations of enemy vehicles observed, engaged, or destroyed, and to provide the strength and status of friendly forces.

4-83. All scouts involved in the reporting process must avoid sending redundant or inflated descriptions of the situation. Such reports not only are confusing, but also may trigger unnecessary, and possibly dangerous, actions by higher headquarters. Scouts need to provide higher headquarters with accurate and detailed reports using standardized size, activity, location, unit, time, and equipment (SALUTE). Platoon

leaders need to analyze reports and make recommendations to the troop command post on the enemy situation in relation to SIR, indicators, PIR, and CCIR.

Repositioning the Screen

4-84. The speed of the main body, distance to the objective, and the enemy situation determines the movement of the screen. The scout platoon's movement centers on a designated route of advance. The route is parallel to the axis of advance of the main body and is large enough to accommodate rapid movement of the scout platoon and to facilitate the scout platoon's occupation of the screen. The scout platoon keeps the route clear to ensure rapid movement of the troop's enablers, sustainment, and mission command assets. Both ground and aerial reconnaissance assets use the four basic movement methods: alternate bounds by observation posts, alternate bounds by units, successive bounds, and continuous marching to reposition the screen.

Hasty Occupation

4-85. Scout platoons conduct a hasty occupation of the screen under a variety of circumstances. Scout platoons may transition from reconnaissance to security by conducting a hasty occupation of observation posts or BPs or attack-by-fire positions in defensible terrain or after identifying, securing, or occupying key terrain. During security operations, hasty occupation may occur after disengagement and movement to subsequent observation posts or BPs, or in response to FRAGORDs reflecting a change of mission. As a minimum, the scout platoon leader must have the following information for ordering the scout platoon to conduct a hasty occupation:

- Commander's intent and security guidance.
- Information collection plan.
- The tentative location of the screen and any control measures.

4-86. The scout platoon leader must pass this information to the platoon. The platoon leader designates observation posts and NAIs or BPs and an engagement area with TRPs based on this minimum information. The platoon leader must define the NAI and engagement area, platoon observation and direct fires plans, or to identify locations where the scout platoon can mass fires or observation. Depending on the situation, the platoon leader issues the information in person, over the radio, or by a digital overlay (if available). The platoon leader continues to develop the situation. As time permits, the platoon leader establishes the following fire control measures:

- The trigger line and engagement criteria for sections and weapon systems.
- The fire pattern to be used.
- Disengagement and displacement criteria and the disengagement and displacement plan according to the commander's guidance and scheme of maneuver.

Movement Considerations

4-87. Individual vehicles move from hull-down to turret-down firing positions within their primary and alternate positions based on two considerations: the necessity to

maintain direct fire on the enemy and the effectiveness of enemy fires. Each vehicle commander's decision to move between firing positions are influenced by the enemy's movement rate, the number of advancing enemy vehicles, the accuracy in which the enemy is acquiring and engaging friendly fighting positions, and the lethality of enemy weapon systems.

Disengagement and Repositioning

4-88. The platoon may be required to disengage and reposition to a subsequent BP as specified by the commander's security guidance. If the scout platoon must disengage direct fire contact, the scout platoon leader chooses between two methods of maneuver depending on whether or not the move is conducted with overwatch (and cover) by an adjacent platoon. In all cases, the platoon leader must ensure that responsibility for contact with the enemy is maintained by elements of the platoon or handed off to another asset or maneuver element.

Disengagement and Repositioning With Cover

4-89. If the scout platoon's maneuver is covered by an adjacent platoon, the entire platoon usually bounds as a whole. The displacing platoon employs smoke grenades and obscuration fires, if possible, to screen their displacement.

4-90. The platoon leader issues instructions or uses a prearranged signal to initiate movement. The platoon simultaneously backs down to hide positions, remounts all dismounted scouts, keeping front hulls toward the enemy, until adequate cover protects each vehicle. Individual vehicles orient weapon systems toward the enemy as they move to the subsequent or supplementary positions along previously identified and reconnoitered routes.

Completion of Disengagement and Repositioning

4-91. When the scout platoon occupies the subsequent set of observation posts/BP and all vehicles are ready to continue the screen, the displacement is complete. If the scout platoon identified and reconnoitered the subsequent positions during the reconnaissance or movement to the screen and rehearsed the displacement and occupation, the occupation should go quickly. The platoon leader must conduct the actions of a hasty occupation outlined previously in this chapter.

Limited Visibility

4-92. The scout platoon leader must plan for limited visibility conditions, as these conditions often occur during the conduct of a screen mission. The platoon leader should never allow gaps in the screen when aircraft cannot fly or scouts cannot observe their assigned area. The scout platoon can take the following actions to guard against gaps:

- Adjust ground observation posts for day and night.
- Employ night and thermal observation devices.
- Increase the use of electronic surveillance devices, ground-based sensors, and the LRAS3.

- Place trip flares and observation posts along dismounted avenues of approach.
- Conduct dismounted patrols.

4-93. Depth in the screen facilitates acquisition of enemy forces that may elude forward elements. Coordinating the conduct of patrols can help prevent misidentification and fratricide. Rigorous noise, light, and litter discipline during limited visibility prevents compromise and bypass of observation posts by enemy forces. Additional observation posts established as listening posts take advantage of the extended distance sound travels at night. Observation posts plan and use indirect fires, visible and infrared (IR), illumination rounds, as needed.

Graphic Control Measures for Security Missions

4-94. The scout platoon's use of control measures provides flexibility in terms of mission execution. The platoon leader issues FRAGORDs to adjust their plans to the enemy situation and uses graphic control measures to direct and orient the platoon accordingly. Use graphic control measures to control a screen. The platoon leader uses phase lines to control the unit's movement. The platoon leader plans to use these phase lines as on-order boundaries to control the platoon's movement. The commander and scout platoon leader establishes phase lines based on the planned size of the scout platoon's screen.

4-95. The platoon leader does not divide avenues of approach with a phase line. The platoon leader use phase lines rearward of the initial screen to control the platoon's retrograde movement (toward the main body). The platoon leader can also use NAIs, and checkpoints to control the observation and movement of task organized sections and assets operationally controlled by the platoon. The platoon leader positions these forces to support the scouts on the screen. If the scouts make enemy contact, the platoon leader can use these control measures to designate alternate and subsequent locations to occupy if not previously planned. The conduct of a delay by the platoon using these battle positons will provide additional time for the protected force to react to the enemy attack.

4-96. The platoon leader uses mortar firing points or checkpoints to track the locations of the mortar section. The commander is operationally controlling the mortar section, but the scout platoon leader can reconnoiter favorable locations for the mortars. The scouts reconnoiter positions rearward of the screen where they allow the mortars to fire two-thirds of their maximum range forward of the screen. The platoon leader plans subsequent (on-order) mortar firing points between the screen line and the main body, if not already done by the commander. (See ATP 3-21.90 for mortar employment, survivability, and position selection considerations.)

Control of Displacement to Subsequent Positions

4-97. Phase lines and checkpoints help control the event-driven task of displacing to subsequent positions. The troop and squadron's plan defines the event criteria that triggers the scout platoon's displacement including RHO between screening elements.

4-98. Displacement of the scout platoon to subsequent positions is event-driven. The approach of an identified and specified enemy element, detection by an enemy force, relief by a friendly unit, or movement of the protected force may dictate displacement. Collapsing of the screen requires well-rehearsed displacement drills performed at the squad, section, and platoon level, local security, and for the platoon to maintain contact with the enemy as it displaces.

GUARD

4-99. 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. BCT commanders might assign a guard mission when they expect contact or has an exposed flank that requires greater protection than a screen can provide. The guard force conducts reconnaissance, attacks, defends, and delays as necessary to provide reaction time and maneuver space to the protected force. There are three types of guard missions: advance guard, flank guard, and rear guard. Additionally, a commander may assign a guard mission to protect a stationary or moving force. (Refer to FM 3-98 and ATP 3-20.97 for greater detail on guard missions).

4-100. A scout platoon does not usually conduct a guard mission by itself, but may participate in a guard mission as part of a larger force. During a guard mission, a scout platoon may reconnoiter, attack, defend, and delay to prevent enemy observed indirect fires, direct observation, and direct fires against the protected force.

COVER

4-101. Cover is a security task that is a self-contained force that is capable of operating independently of the main body to allow early development of the situation, deceive, disorganize, and destroy enemy forces. The covering force protects the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fires against the main body. The key distinction to remember is unlike the screen or guard, cover is tactically self-contained, meaning, because the covering force or portions of it often engage with enemy forces, it must have substantial combat power and sustainment resources to engage the enemy and still accomplish its mission. In addition, a covering force accomplishes all the tasks of screen or guard. Cover force is generally conducted by a reinforced BCT-sized element. (Refer to FM 3-98 for a better understanding of cover.)

4-102. A scout platoon will never conduct a cover mission by itself, but may participate in a cover mission as part of a larger force. While participating as part of a cover mission, scout platoons usually conduct either zone reconnaissance or screen missions depending on higher headquarters' scheme of maneuver. During a cover mission, a scout platoon may reconnoiter, attack, defend, and delay to prevent enemy indirect fires, direct observation, and direct fires against the protected force.

AREA SECURITY

4-103. *Area security* is type of security operation conducted to protect friendly forces, lines of communications, and activities within a specific area (ADP 3-90). It includes the reconnaissance of the area. Area security missions include protecting personnel, airfields (as well as terrain around airfields from which enemy may fire surface-to-air missiles), convoys, critical and key infrastructure, terrain features, towns, main supply routes, lines of communications, and equipment.

4-104. Scout platoons conduct area security missions to neutralize or defeat enemy operations in a specified area. It operates in an area delineated by the headquarters assigning the area security mission. Scout platoons may screen, reconnoiter, attack, defend, or delay as necessary to accomplish its area security mission. Area security missions may be offensive or defensive in nature while focusing on the enemy. Scout platoon leaders may balance the level of security measures with the type and level of threat posed in the specific area; however, all-around security is essential.

4-105. Area security missions deny the enemy the ability to influence friendly actions in a specific area or to deny the enemy use of an area which may entail occupying and establishing a 360-degree perimeter around the area to secure, or taking actions to destroy enemy reconnaissance forces already present. The area to secure may range from specific points (building, bridges, defiles) to areas such as terrain features (ridgelines, hills) to large population centers and adjacent areas.

PLANNING CONSIDERATIONS

4-106. Proper engagement area development is vital for the scout platoon to develop a plan to provide adequate security for the assigned area. The environmental factors and capabilities of the scout platoon with all attached enablers will determine specific platoon missions. Common enablers include engineers, UAS, and attack/reconnaissance aviation. The environmental factors are as follows:

- The natural defensive characteristics of the terrain.
- Existing roads and waterways for military lines of communication and civilian commerce.
- The control of land and water areas and avenues of approach surrounding the area to be secured extending to a range beyond that of enemy artillery, rockets, and mortars.
- The control of airspace. The proximity to critical sites such as airfields, power generation plants, and civic buildings.

4-107. Due to the possibility of commanders tying their forces to fixed installations or sites, these types of security missions may become defensive in nature which must be carefully balanced with the need for offensive action. Early warning of enemy activity is paramount in the conduct of area security missions and provides the commander with time to react to any threat. Proper reconnaissance and planning coupled with dismounted/mounted patrols and aerial reconnaissance is key to successful missions.

4-108. Establish a perimeter when a scout platoon must secure an area not tied defensively to an adjacent unit. Perimeters vary in shape depending on the military aspects of terrain and the required reaction time and maneuver space needed by the supported unit. If the commander determines the most probable direction of enemy attack, the commander may weight that part of the perimeter to cover that approach. The perimeter shape conforms to the terrain features that best use observation and fields of fire.

4-109. At the scout platoon level, perimeters are divided into sectors with boundaries and contact points. The scout platoon leader must then assign sectors to individual sections and squads. Mutual support and coordination between defensive elements require detailed planning, positioning, and coordination due to the employment of both mounted and dismounted security positions.

4-110. Establish a screen by integrating observation posts, unmanned ground sensors, ground surveillance radar, unmanned aerial systems, and patrols. Scouts use of long-range scout surveillance systems will allow the scout platoon to identify and observe the enemy early, and will provide more reaction time and better situational awareness.

4-111. Depth is provided through the use of alternate and subsequent fighting positions. The mobility and firepower of armored forces will allow for rapid traverse of large areas and the ability to quickly mass to destroy any enemy penetration.

4-112. Immediate reaction to information or any type of attack is vital. Leaders execute discipline initiative. Reaction operations or commitment of the force to protect is simple, planned, and rehearsed day and night.

ASSETS

4-113. The initial plan for the area security mission should not rely on additional assets. If assets cannot execute because of weather or enemy, the platoon may assume risk by solely relying on the use of the additional assets. Using the platoon's organic assets (such as LRAS3, optics, and observers), the platoon leader develops a plan to provide early warning on the most likely mobility corridors. External assets can provide earlier information to cue other observation assets. These assets may patrol along exposed flanks or in gaps between ground observation posts, augment the surveillance of NAI, or add redundancy and depth within the sector. To further extend the security area of the platoon, augmenting aerial reconnaissance assets may operate in the platoon AO. Aviation assets provide continuous observation of threat elements to allow reconnaissance ground troops to displace to subsequent positions.

4-114. Fire planning includes the integration of indirect and direct fires, attack aviation, and CAS. The scout platoon leader should plan targets at chokepoints on likely approaches, in areas where the threat must slow down, due to natural obstacles, or in conjunction with emplaced obstacles. It is critical that the higher headquarters clearly identify what supporting indirect fires are available for the scout platoon, the command or support relationship, the communications plan, artillery and mortar positioning, and fire support coordination measures such as a no fire area covering the scout platoon's observation posts and positions. The platoon leader also adds to the fires plan with

approval from the FSO. The platoon leader also plans fires for the initial area security as well as for alternate and subsequent locations. It is important for the scout platoon's supporting elements to know which targets to activate and which targets are inactive, giving the supporting fires the ability to send rounds to the target faster.

OUTPOSTING

4-115. Outposting is a technique used during route security to screen the route after it has been reconnoitered. Platoons can also use this technique during route reconnaissance missions to cover lateral and boundary routes. Outposting provides early waning of advancing enemy elements attempting to interdict on key portions of the route or key avenues of approach. Outposting differs from a conventional screen operation in that the outposts are oriented on the route rather than on the friendly main body. Normally, the outposting platoon follows the platoon that is executing the route reconnaissance. Outposts have a limited ability to destroy small enemy forces attempting to influence the route. Their primary purpose is to acquire the enemy and then direct reaction forces or indirect fire to destroy the enemy. Crews must understand that this technique is limited by mutual support and communication between observation posts and from the platoon to the supported maneuver unit (see figure 4-13, on page 4-38).

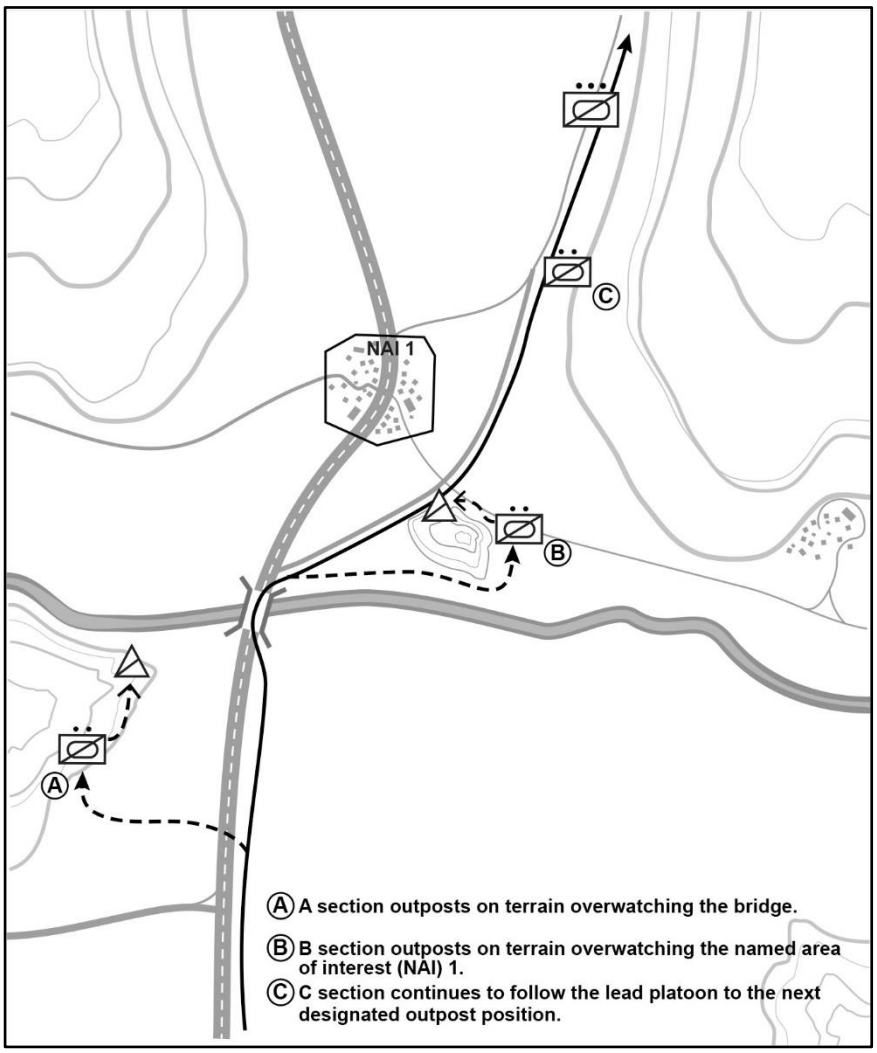


Figure 4-13. Scout platoon outposting a route

LOCAL SECURITY

4-116. Local security consists of observation posts, local security patrols, perimeter security, and other measures to provide close-in security for a force. This is an important part of maintaining the initiative. The requirement for maintaining local security is inherent in all missions. The scout platoon may support local security as part of a larger unit or maintain local security independently away from friendly elements. In some cases, it maintains its own assembly area and local security within the larger unit's footprint. Local security includes all measures taken to prevent surprise by the enemy,

including missions against the platoon's location. It involves avoiding detection by the enemy or deceiving the enemy about friendly positions and intentions.

4-117. Scout platoons dismount to provide local security around their vehicles whenever they come to a halt during mission execution which prevents surprise and the loss of Soldiers and equipment to dismounted enemy elements. While dismounted, scouts present as small a target as possible while still observing the area and approaches around their location. Security teams need to bring antitank weapons as a protection measure against the armor and aviation threats. They are ready to engage the enemy under favorable conditions such as—

- Employing observation posts.
- Employing patrols to cover perimeters and dead space.
- Enforcing stand-to.
- Enforcing proper communications procedures.
- Employing camouflage.
- Enforcing noise and light discipline.
- Employing sensors for surveillance of the area around the unit.

SECTION III – COUNTERRECONNAISSANCE

4-118. Counterreconnaissance is the sum of all actions taken at each echelon to counter enemy reconnaissance efforts throughout the AO. Counterreconnaissance is active and passive and includes action to destroy or repel enemy reconnaissance elements and deny the enemy information about friendly units. Counterreconnaissance is an inherent task in all security operations. Counterreconnaissance keeps enemy reconnaissance forces from observing the main body by defeating or blocking them. Scout platoons conduct tactical tasks to defeat, neutralize, or cause the withdrawal of enemy reconnaissance forces within their capabilities and within the commander's engagement and disengagement.

4-119. The counterreconnaissance plan should address how to acquire and defeat enemy reconnaissance elements. The squadron and battalion S-2 provides key input into the planning process for executing counterreconnaissance missions. The counterreconnaissance plan identifies avenues of approach into the scout platoon's sector, what type of enemy reconnaissance elements the unit expects in the sector, and when enemy forces are most likely to move into the sector. The scout platoon leader uses this information to formulate the counterreconnaissance plan and develop the specified tasks to execute the plan. Often, the counterreconnaissance plan calls on a scout platoon to conduct a screen mission to acquire, identify, and defeat enemy reconnaissance forces.

4-120. The scout platoon may task organize to accomplish its mission against the enemy. Whatever option the platoon leader employs, the counterreconnaissance fight requires firm control, monitoring at the higher headquarters, early coordination, and a thorough rehearsal. An effective counterreconnaissance fight defeats the enemy's reconnaissance effort, forcing the enemy to attack without information about the friendly force's composition and disposition.

ENGAGEMENT AREA DEVELOPMENT

4-121. Screens and tactical tasks the scout platoons conduct during security missions use engagement areas, where the platoon leader anticipates engaging enemy reconnaissance elements. The engagement area is the area where the scout platoon leader intends to destroy an enemy force using the massed fires of all available weapons. The platoon engagement area development is a complex function and requires parallel planning and preparation for the scout platoon to accomplish its mission.

4-122. The platoon leader and subordinate leaders use a standardized set of procedures to develop an engagement area. Leaders may use the mnemonic "I ID PEPR" to aide in engagement area development. Steps 1 to 3 are in order. During steps 4, 5, and 6 the troop emplaces obstacles first to ensure they tie into terrain and shape the engagement area, then emplaces observation and direct fire to overwatch those obstacles, and finally plans indirect fires to support the plan and cover any dead space that the engagement area might have. However, leaders may conduct steps 4 to 6 in any order. The steps for engagement area development are—

- Step 1. I – Identify likely enemy avenues of approach.
- Step 2. I – Identify most likely enemy COA.
- Step 3. D – Determine where to kill the enemy.
- Step 4. P – Plan and integrate obstacles.
- Step 5. E – Emplace direct fire weapon systems.
- Step 6. P – Plan and integrate fires.
- Step 7. R – Rehearse the execution of operations within the engagement area.

IDENTIFY LIKELY ENEMY AVENUES OF APPROACH

4-123. The platoon leader conducts an initial reconnaissance from the enemy's perspective, along each avenue of approach into the engagement area. Review chapter 2 of this publication for a discussion on avenues of approach. The platoon leader confirms key terrain identified by the troop commander. The platoon leader considers positions that provide an advantage over the enemy, natural obstacles, and choke points that restrict forward movement during this reconnaissance. The platoon leader determines which avenues of approach provide cover and concealment for the enemy. The platoon leader also evaluates lateral routes that adjoin each avenue of approach (see figure 4-14).

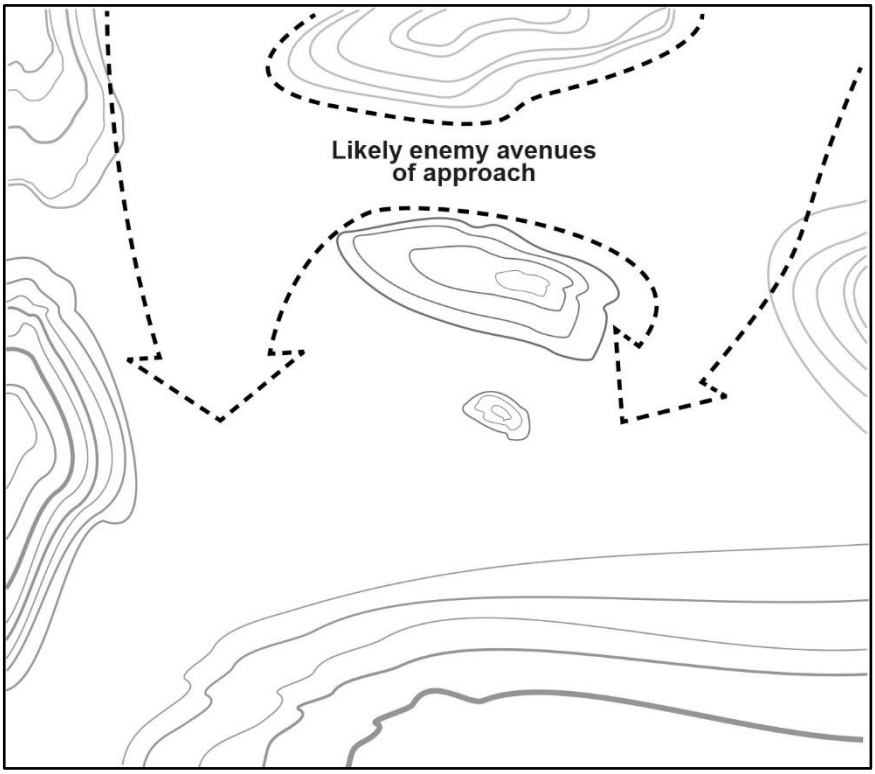


Figure 4-14. Possible or likely enemy avenues of approach

IDENTIFY ENEMY SCHEME OF MANEUVER

4-124. The platoon leader greatly enhances this step of the engagement area development process by gaining information early. (See figure 4-15, page 4-42.) The scout platoon leader receives guidance from the battalion staff and the troop commander to the following questions from:

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

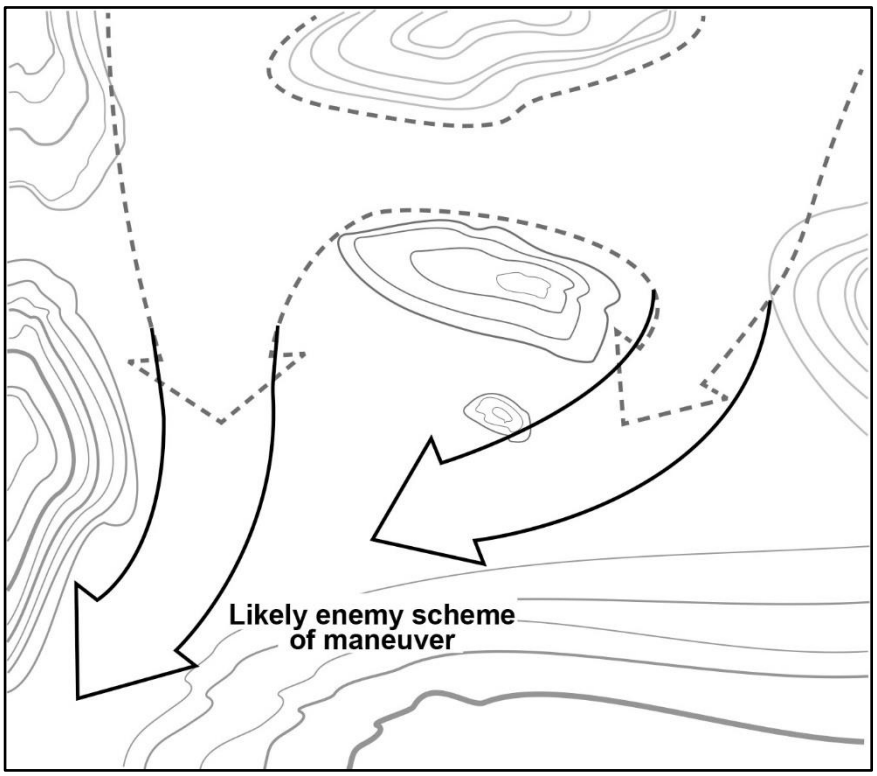


Figure 4-15. Likely enemy scheme of maneuver

4-125. Determine where to kill the enemy. The scout platoon leader must determine where to mass combat power on the enemy to accomplish their purpose. The platoon leader decides the platoon's engagement area based on an assessment of how the enemy will fight. This entry point is normally marked by prominent terrain. (See figure 4-16.)

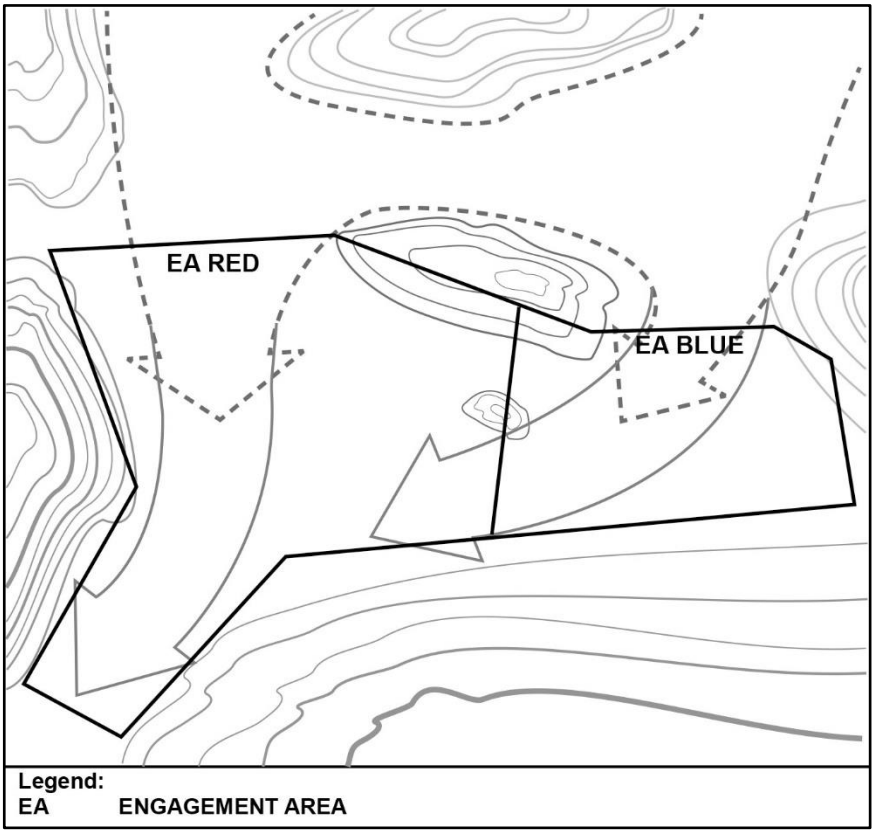


Figure 4-16. Locations to kill the enemy

PLAN AND INTEGRATE OBSTACLES

4-126. The scout platoon leader must integrate tactical obstacles with the direct fire plan, to be successful in the defense. The platoon leader must consider the intent of each obstacle. The scout platoon must have a clear task and purpose to properly emplace a tactical obstacle. Due to the prioritization of the defensive effort, the platoon leader might instead integrate natural obstacles into the platoon's plan. The troop may designate the purpose of the tactical obstacle. The purpose influences many aspects of the operation, from selection and design of obstacle sites, to actual conduct of the defense. The platoon leader must report the platoon's location and the gaps in the obstacle to the troop commander once the platoon has emplaced. (See figure 4-17, page 4-44.)

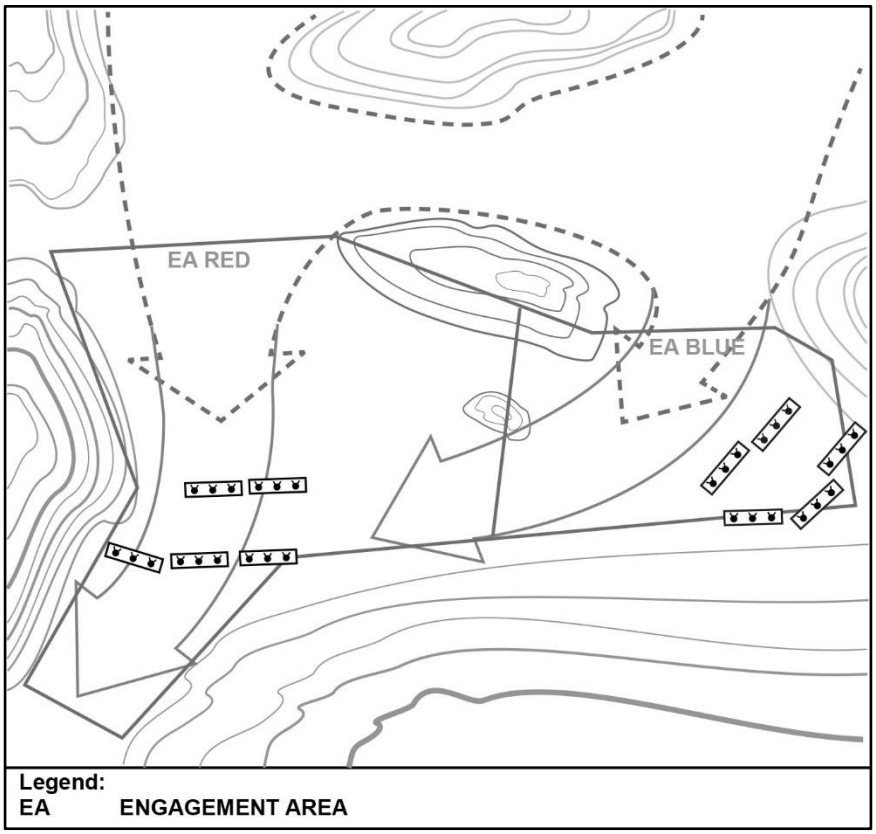


Figure 4-17. Plan for and integration of obstacles

EMPLACE WEAPONS SYSTEMS AND OBSERVATION POSTS

4-127. Leaders must know the characteristics, capabilities, and limitations of the scout platoon's weapons as well as the effects of terrain and the tactics used by the enemy to effectively position weapons. The scout platoon leader should position weapons/observation posts where they have protection, where they can avoid detection, and where they can surprise the enemy with accurate and lethal fires. The platoon leader must know where they want to destroy the enemy, and what effect they want the weapons to achieve (see figure 4-18). The platoon leader must consider the following to position the weapons/observation posts effectively:

- Selecting tentative defensive positions for each observation post.
- Conducting a leader's reconnaissance of the tentative defensive positions.
- Walking the engagement area to confirm that the selected positions are tactically advantageous (time permitting).
- Confirming and marking the selected defensive positions.

- Developing a direct fire plan that accomplishes the platoon's purpose.
- Ensuring the defensive positions do not conflict with those of adjacent units and is effectively tied in with adjacent positions.
- Selecting primary, alternate, and supplementary observation posts or fighting positions to achieve the desired effect for each TRP.
- Ensuring that scouts position their vehicles, observation posts, and weapon systems to effectively cover each TRP in the platoon's engagement area.
- Inspecting all positions. Ensure they are able to observe the TRPs and cannot be detected from the engagement area.

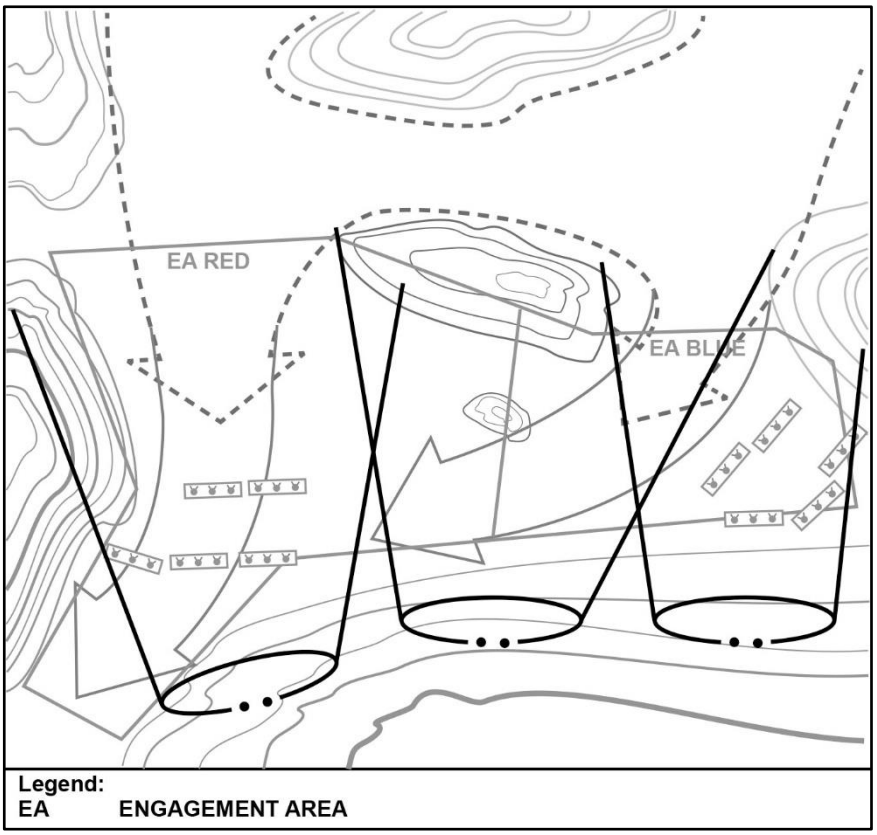


Figure 4-18. Emplace weapon systems

PLAN AND INTEGRATE INDIRECT FIRES

4-128. The platoon leader, with the FO, mortar leader, or troop FSO if available must accomplish the following when planning and integrating indirect fires (see figure 4-19, page 4-47):

- Determine the purpose of fires and where to best achieve this purpose.

- Establish the observation plan with redundancy for each target.
- Include members of subordinate elements with fire support responsibilities.
- Establish triggers based on enemy movement rates.
- Obtain accurate target locations using survey and navigational equipment.
- Refine target locations to ensure coverage of obstacles.

4-129. The entry point is normally marked by a prominent TRP. Ensure all platoon elements can engage with their direct fire weapon systems into the engagement area Plan so leaders can control fires in the engagement area. In addition, the scout platoon leader—

- Identifies TRPs that match the enemy's scheme of maneuver, allowing the platoon (or troop) to identify where it will engage the enemy through the depth of the engagement area.
- Identifies likely engagement location of enemy targets.
- Identifies and records the exact location of each TRP.
- Determines weapons systems availability to distribute fires to achieve the desired purpose.
- Begins development of a direct fire plan that focuses at each TRP.

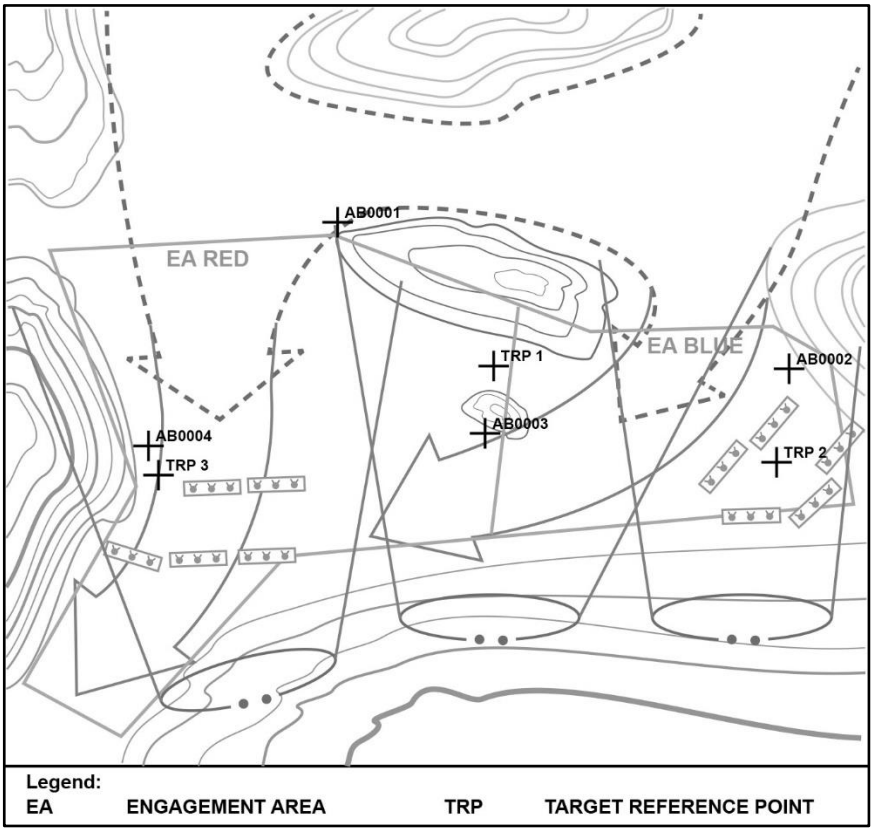


Figure 4-19. Integration of direct and indirect fires

RANGE CARD AND PLATOON FIRE PLAN

4-130. Each scout position and vehicle develops a range card in preparation for observation post defensive operations. The range card aids scouts in target acquisition and provides information for the platoon leader to develop the platoon fire plan. Additionally, if scouts change location, they can quickly orient to the terrain. (See figure 4-20, on page 4-48.)

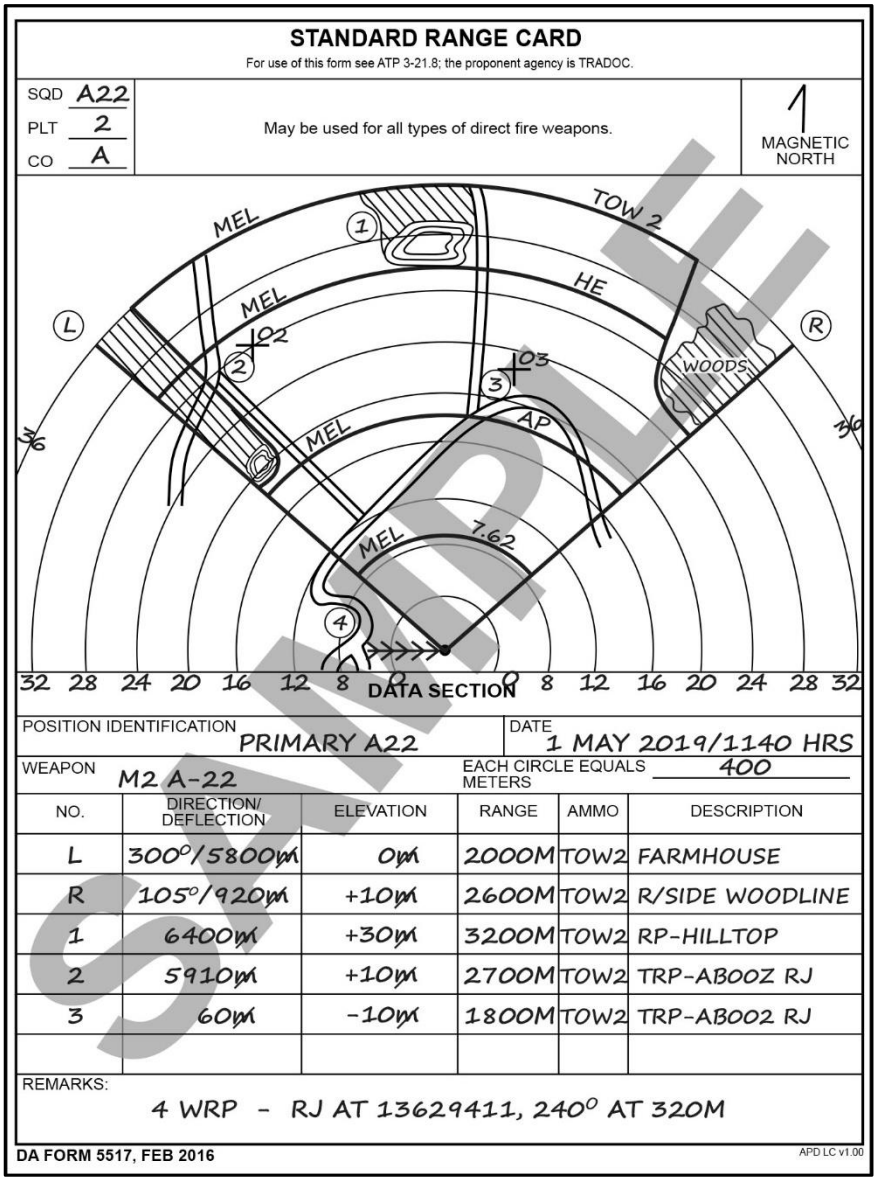


Figure 4-20. Completed range card, example

4-131. Each scout leader develops a sector sketch card or platoon fire plan as it prepares its observation posts for defensive operations. This is a rough topographical sketch of the observation post's assigned sector, which may be hand written or prepared using the vehicle's digital equipment. The range card aids scouts in target acquisition

and provides information for the platoon leader to develop the platoon fire plan. (See figure 4-21, on page 4-50.)

4-132. The platoon fire plan should provide information necessary to distribute and control the fires of all available direct and indirect fire weapons, both organic and attached.

4-133. Leaders combine all the observation post and vehicle's range cards, along with section sector sketches, and prepares a platoon sector sketch and platoon fire plan. The platoon sector sketch is drawn as close to scale as possible and includes a target list for direct and indirect fires. The platoon fire plan should provide information necessary to distribute and control the fires of all available direct and indirect fire weapons, both organic and attached. A copy is given to the troop commander, another to the platoon sergeant, and one stays with the platoon leader. The platoon sector sketch should illustrate all the elements contained in figure 4-21, page 4-50.

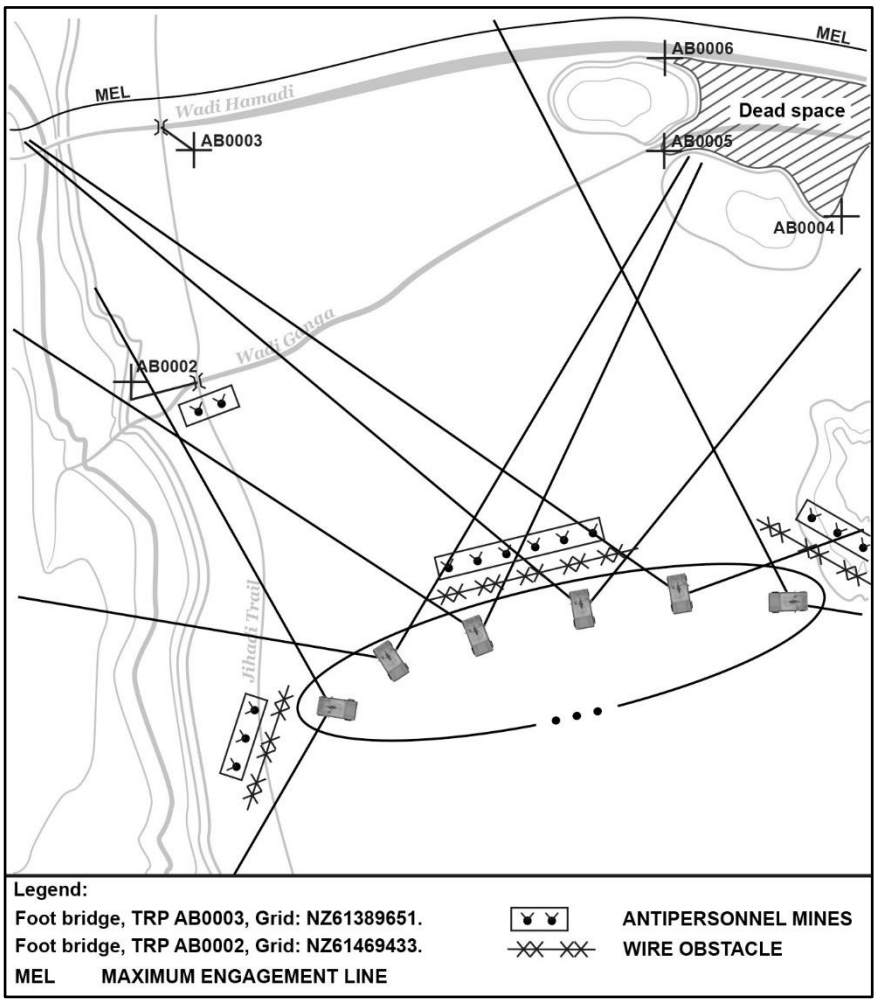


Figure 4-21. Platoon fire plan

REHEARSE ENGAGEMENT AREA ACTIONS

4-134. Rehearsals are meant to provide every member of the scout platoon an understanding of the plan and to prepare them to cover their assigned areas with direct and indirect fires. The scout platoon should participate in a troop-level engagement area rehearsal for the screen or guard. The platoon may use full dress rehearsals to gain a better understanding of the plan. Designated personnel may move through the engagement area to depict the attacking enemy force, while the platoon leader and section leaders rehearse anticipated actions from the platoon observation posts. The rehearsal should cover—

- Rearward passage of security forces (as required).

- Closure of lanes (as required).
- Use of fire commands, triggers, and maximum engagement lines to initiate direct and indirect fires.
- Shifting of fires to refocus and redistribute fire effects.
- Disengagement criteria.
- Identification of displacement routes and times.
- Preparation and transmission of critical reports.
- Assessment of the effects of enemy weapons systems.
- Displacement to alternate, supplementary, or subsequent defensive positions.
- Cross-leveling or resupply of class V.
- Evacuation of casualties.

DIRECT FIRE PLANNING AND ENGAGEMENTS

4-135. Scout platoon leaders plan to engage and destroy enemy forces. The platoon leader will integrate direct fire control measures into their missions, and brief them during the operations order. The scout platoon will use the detect, identify, decide, engage, and assess (known as DIDEA) process during reconnaissance and security missions. Direct fire planning and incorporation of the DIDEA process during direct fire engagements increases the lethality and survivability of the scout platoon.

DIRECT FIRE CONTROL MEASURES

4-136. Fire control measures are the means by which the scout platoon leader or their subordinate leaders control direct fires. Application of these concepts, procedures, and techniques helps the unit acquire the enemy, focus fires on the enemy, distribute the effects of the fires, and prevent fratricide. At the same time, no single measure is enough to control fires effectively. At troop level, fire control measures are effective only if the entire unit has a common understanding of what they mean and how to employ them. Table 4-3, page 4-52, lists terrain-based and threat-based fire control measures.

Table 4-3. Common fire-control measures

Terrain-Based Fire-Control Measures	*Threat-Based Fire-Control Measures*
Target reference point	Fire patterns
Engagement area	Target array
Sector of fire	Engagement priorities
Direction of fire	Weapons ready posture
Terrain-based quadrant	Engagement criteria
Friendly-based quadrant	Weapons control status
Maximum engagement line	Rules of engagement
Restrictive fire line	Weapons safety posture
Final protective line	Engagement techniques

TERRAIN-BASED FIRE-CONTROL MEASURES

4-137. The platoon leader uses terrain-based fire-control measures to focus and control fires on a particular point, line, or area rather than on a specific enemy element. The following paragraphs describe the techniques associated with this type of control measure.

4-138. A TRP is an easily recognizable point on the ground that leaders use to orient friendly forces and to focus and control direct fires. In addition, when TRPs are designated as indirect fire targets, they can be used in calling for and adjusting indirect fires. Leaders designate TRPs at probable (or known) enemy locations and along likely avenues of approach. TRPs, natural or man-made, can be established sites such as hills or buildings. They can also be expedient, temporary features designated as TRPs on the spot such as a burning enemy vehicle or smoke generated by an artillery round. While not ideal, TRPs can also be made by the unit with items such as engineer pickets with visible or IR chemical light sticks or IR strobe in the recessed groove of the picket. Ideally, TRPs should be permanent features and visible in three observation modes (unaided, passive-IR, and thermal) so all forces can identify them, for example:

- Prominent hill mass.
- Distinctive building.
- Observable enemy position.
- Destroyed vehicle.
- Ground-burst illumination.
- Smoke round.
- Laser pointer.

ENGAGEMENT AREA FIRE-CONTROL MEASURES

4-139. This fire control measure is an area along an enemy avenue of approach where the platoon leader intends to mass the direct fires of available weapons to destroy an enemy force. The size and shape of the engagement area is determined by the degree of relatively unobstructed IV available to the unit's weapons systems in their firing positions and by the maximum range of those weapons. Typically, platoon leaders

delineate responsibility within the engagement area by assigning each section a sector of fire.

SECTOR OF FIRE

4-140. A sector of fire is a defined area covered by direct fire. It distributes fires within an engagement area. Leaders assign sectors of fire to subordinate elements, crew-served weapons, and individual Soldiers to ensure coverage of an area of responsibility. They may also limit the sector of fire of an element or weapon to prevent accidental engagement of an adjacent unit. In assigning sectors of fire, commanders and subordinate leaders consider the number and types of weapons available. They also consider acquisition system type and field of view in determining the width of a sector of fire. For example, while unaided vision has a wide field of view, its ability to detect and identify targets at distant ranges and in limited visibility conditions is restricted. Conversely, most fire control acquisition systems have greater detection and identification ranges than the unaided eye, but their field of view is narrow. Means of designating sectors of fire include—

- TRP.
- Clock direction.
- Terrain-based quadrants.
- Friendly based quadrants.

DIRECTION OF FIRE

4-141. A direction of fire is an orientation or point used to assign responsibility for a particular area on the battlefield that must be covered by direct fire. Leaders designate directions of fire for the purpose of acquisition or engagement by crew-served weapons, or individual Soldiers. Direction of fire is most commonly employed when assigning sectors of fire would be difficult or impossible because of limited time or insufficient reference points. Means of designating a direction of fire include:

- Closest target reference point.
- Clock direction.
- Cardinal direction.
- Tracer on target.
- Infrared laser pointer.

QUADRANTS

4-142. Quadrants are subdivisions of an area created by superimposing imaginary perpendicular axes over the terrain to create four separate areas or quadrants. Quadrants can be based on the terrain, on friendly forces, or on the enemy formation. The technique in which quadrants are based on the enemy formation is usually referred to as the target array and is covered in threat-based fire control measures. The method of identifying quadrants is established in the unit SOP, but the unit must take care to avoid confusion when using quadrants based on terrain, friendly forces, and enemy formations simultaneously.

Terrain-based Quadrant

4-143. A terrain-based quadrant entails use of a TRP, either existing or constructed, to designate the center point of the axes that divide the area into four quadrants. This technique can be employed in both offensive and defensive operations. In the offense, the platoon leader designates the center of the quadrant using an existing feature or by creating a reference point such as using a ground burst illumination round, a smoke marking round, or a fire ignited by incendiary or tracer rounds. The axes delineating the quadrants run parallel and perpendicular to the direction of movement. In the defense, the platoon leader designates the center of the quadrant using an existing or constructed TRP. In figure 4-22, the quadrants are marked using the letter "Q" and a number (Q1 to Q4); quadrant numbers are in the same relative positions as on military map sheets (from Q1 as the upper left quadrant clockwise to Q4 as the lower left quadrant).

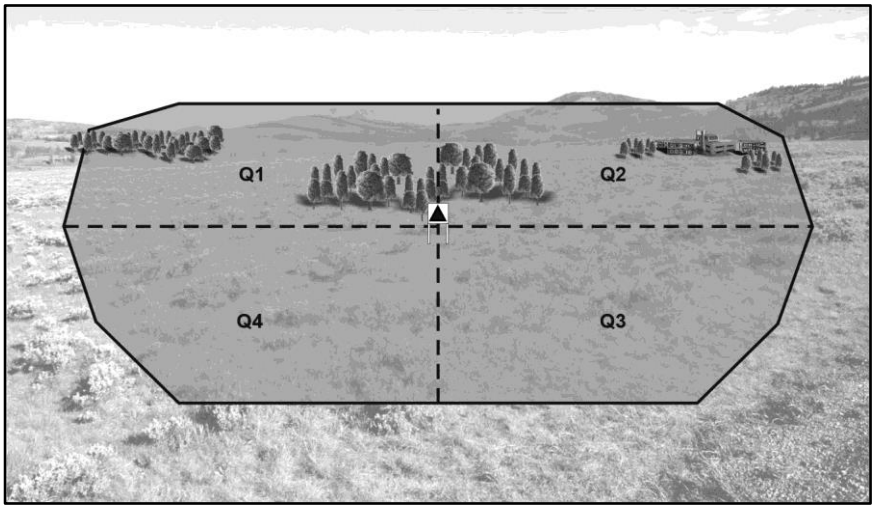


Figure 4-22. Terrain-based quadrants, examples

Friendly Based Quadrant

4-144. The friendly based quadrant technique entails superimposing quadrants over the unit's formation. The center point is based on the center of the formation, and the axes run parallel and perpendicular to the general direction of travel. For rapid orientation, the friendly quadrant technique might be better than the clock direction method because different elements of a large formation are rarely oriented in the same exact direction and because the relative dispersion of friendly forces causes parallax to the target. Figure 4-23 shows use of friendly-based quadrants.

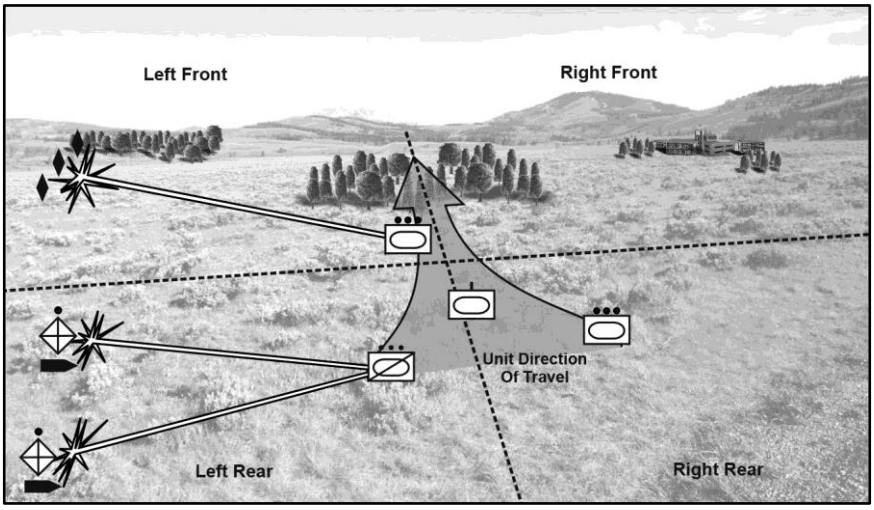


Figure 4-23. Friendly-based quadrants, example

MAXIMUM ENGAGEMENT LINE

4-145. A maximum engagement line is the linear image of the farthest limit of effective fire for a weapon or unit. This line is determined both by the weapons or units maximum effective range, and by the effects of terrain. For example, slope, vegetation, structures, and other features provide cover and concealment that may prevent the weapon from engaging out to the maximum effective range. A maximum engagement lines serves several purposes. The platoon leader may use it to prevent engaging beyond the maximum effective range of their weapons, to define criteria for the establishment of triggers, and to delineate the maximum extent of battle space on the sector sketch.

RESTRICTIVE FIRE LINE

4-146. A restrictive fire line is a line established between converging friendly forces (one or both might be moving) that prohibit fires and effects across the line without coordination with the affected force. In the offense, the platoon leader may designate a restrictive fire line to prevent a base of fire element from firing into the area where an assaulting element is maneuvering. In the defense, the platoon leader may establish a restrictive fire line to prevent the platoon from engaging a squad positioned in restricted terrain on the flank of an enemy avenue of approach.

FINAL PROTECTIVE LINE

4-147. The final protective line is a line of fire established where an enemy assault is halted by the interlocking fires of all available weapons. The unit reinforces this line with protective, tactical, and supplemental obstacles and with final protective fires

whenever possible. Initiation of the final protective fire is the signal for elements and individual Soldiers to shift fires to their assigned portion of the final protective line.

THREAT-BASED FIRE-CONTROL MEASURES

4-148. The platoon leader uses threat-based fire control measures to focus and control direct fires by directing the unit to engage a specific enemy element rather than to fire on a point or area. The following paragraphs describe the techniques associated with this type of fire control measure.

Fire Patterns

4-149. Fire patterns are a threat-based fire control measure designed to distribute the fires of a unit simultaneously among multiple, similar targets. They are most often used by platoons to distribute fires across an enemy formation. Leaders designate and adjust fire patterns based on terrain and the enemy formation. The basic fire patterns are frontal fire, cross fire, and depth fire.

Frontal Fire

4-150. Leaders may initiate frontal fire (see figure 4-24) when targets are arrayed in front of the unit in a lateral configuration. Weapons systems engage targets to their respective fronts. For example, the left flank weapon engages the left-most target, and the right flank weapon engages the right-most target. As the unit destroys targets, weapons shift fires toward the center of the enemy formation and from near to far.

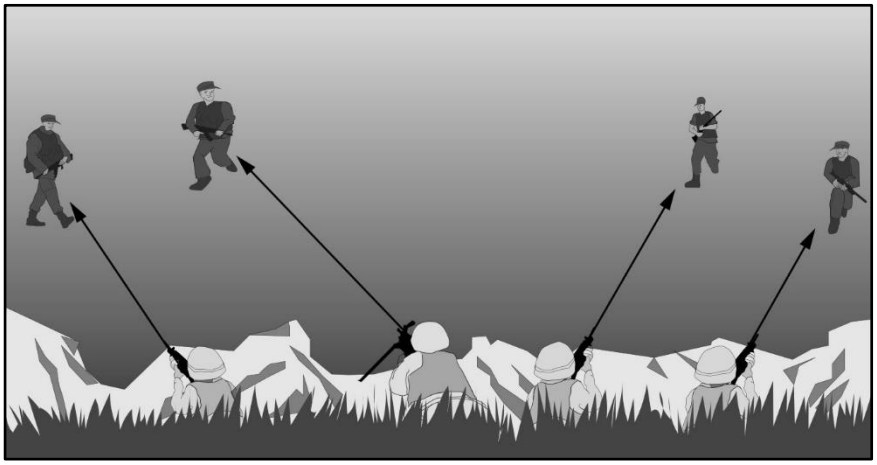


Figure 4-24. Frontal fire

Cross Fire

4-151. Leaders initiate cross fire (see figure 4-25) when targets are arrayed laterally across the unit's front in a manner that permits diagonal fires at the enemy's flank or when obstructions prevent unit weapons from firing frontally. Right flank weapons engage the left-most targets, and left flank weapons engage the right-most targets. Firing diagonally across an engagement area provides more flank shots, thus increasing the chance of kills. It also reduces the possibility of the enemy detecting friendly elements. As the unit destroys targets, weapons shift fires toward the center of the enemy formation.

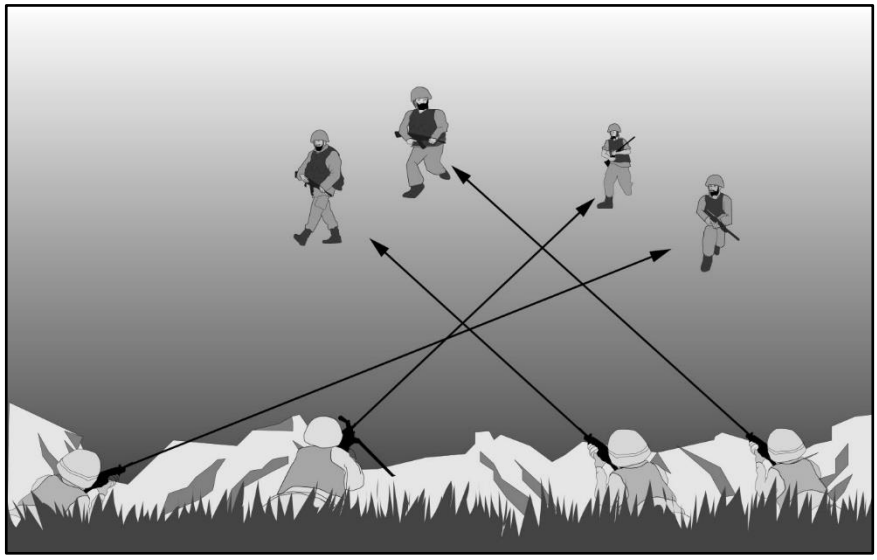


Figure 4-25. Cross Fire

Depth Fire

4-152. Leaders initiate depth fire (see figure 4-26) when targets are dispersed in-depth, perpendicular to the unit. Center weapons engage the closest targets, and flank weapons engage deeper targets. As the unit destroys targets, weapons shift fires toward the center of the enemy formation.

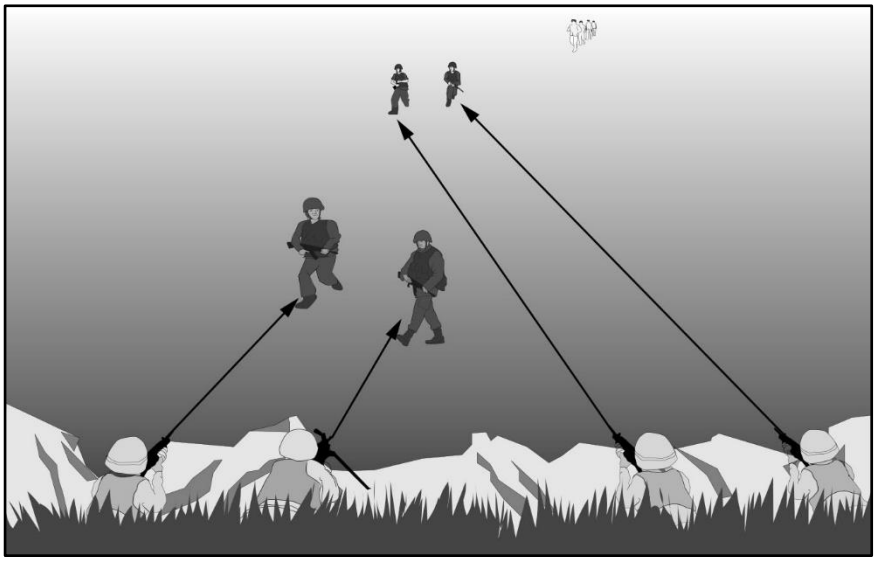


Figure 4-26. Depth fire

Target Array

4-153. Target array permits the platoon leader to distribute fires when the enemy force is concentrated and terrain-based controls are inadequate. This threat-based distribution measure is similar to the quadrant method mentioned in terrain-based fire control measures. The platoon leader creates the target array by superimposing a quadrant pattern over an enemy formation. The pattern centers on the enemy formation, with the axis running parallel and perpendicular to the enemy's direction of travel. Quadrants are described using their relative locations. Figure 4-27 illustrates examples of the target array technique.

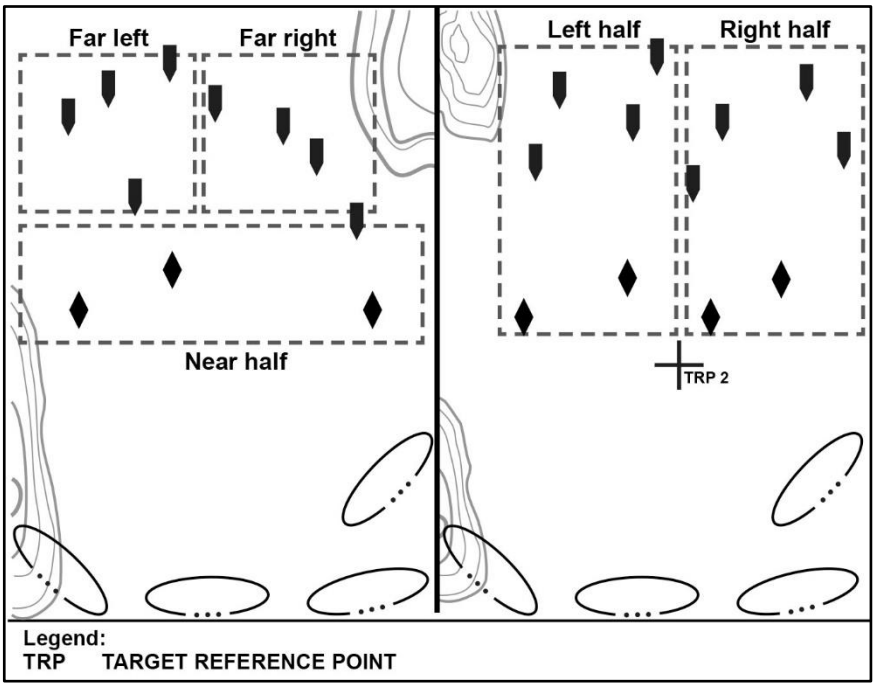


Figure 4-27. Target arrays, example

ENGAGEMENT PRIORITIES

4-154. Engagement priorities entail the sequential ordering of targets to be engaged. They serve one or more of the following critical fire control functions; prioritize targets, employ best weapons for targets, and distribute the platoon's fires.

Prioritize Targets

4-155. In concert with the concept of the operation, the platoon leader determines which target types provide the greatest threat to the platoon and sets these as engagement

priorities. For example, they may decide that destroying enemy engineer assets is the best way to prevent the enemy from breaching an obstacle.

4-156. Three target threat levels are used to articulate which threat of multiple threats presented require immediate attention, the most dangerous targets are engaged first. The three target threat levels are most dangerous, dangerous, and least dangerous.

4-157. When multiple targets of the same threat level are encountered, the targets are prioritized according to the threat they represent. The standard prioritization of targets establishes the order of engagements. Firers engage similar threats by the following guide:

- Near before far.
- Frontal before flank.
- Stationary before moving.

Employ Best Weapons for Target

4-158. Establishing engagement priorities for specific friendly systems increases the effectiveness with which the unit employs its weapons. When selecting the appropriate weapon and ammunition for use against threats, the leader or Soldier considers the determined threat type and the range to target. As an example, the engagement priority for the Javelin could be enemy fortifications first, then enemy armored vehicles.

Distribute Unit's Fires

4-159. Establishing different priorities for similar friendly systems helps to prevent overkill and achieve effective distribution of fires. For example, the platoon leader may designate the enemy fortifications as the initial priority for one section while making the enemy vehicles the priority for another section. This decreases the chance of multiple Javelins being fired against two enemy armored vehicles while ignoring the dangers posed by the fortifications.

DETECT, IDENTIFY, DECIDE, ENGAGE, AND ASSESS

4-160. DIDEA is a process that provides a standardized method of engagement for platoon weapons and platforms on the battlefield. The process allows Soldiers and leaders to maximize the effects of lethal fires against the enemy while at the same time reducing or eliminating the effects of fires on friendly or neutral personnel, equipment, or facilities. Figure 4-28 represents this process.

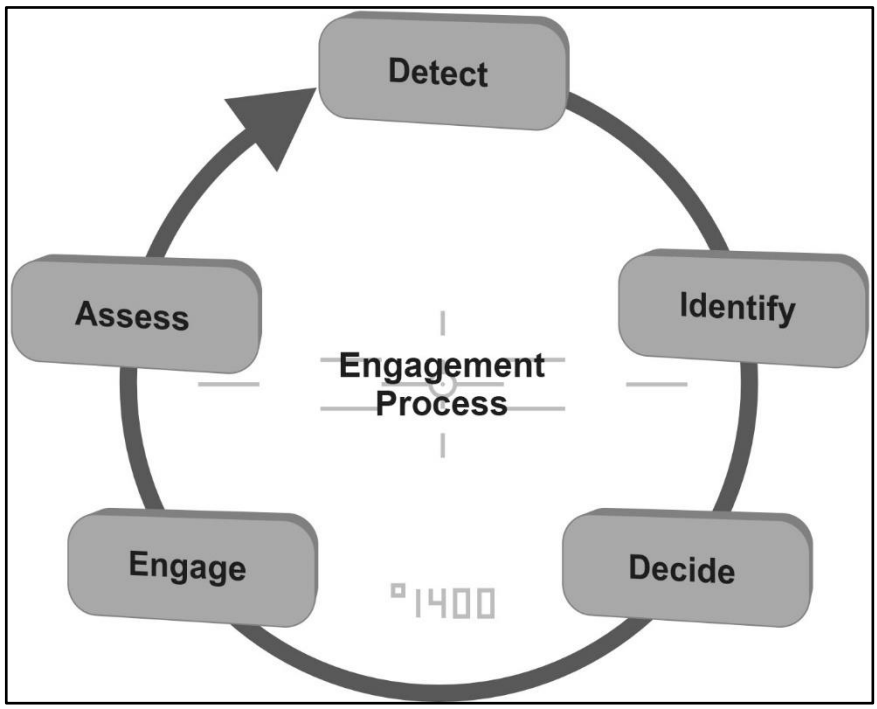


Figure 4-28. Direct fire engagement process

4-161. Direct fire weapons, platforms, squads, and small units incorporate the principles of combat identification into the direct fire engagement process. The DIDEA process provides an iterative, standardized, and systematic approach to target engagement activities with direct fire.

- Detect. The target detection process takes practice and skill to acquire potential threats successfully in various environments and visibility conditions. This process includes all actions to actively search, acquire, and locate potential targets.
- Identify. Once a potential threat is detected and acquired, the firer accurately identifies the range to target, and effectively establishes the threat as friend, foe, or neutral. Target identification is systematic process supporting the characterization of detected objects. Once identified as a hostile threat, crews classify the threat as most dangerous, dangerous, or least dangerous from their perspective.
- Decide. The determination is made by the crew to engage or not. Soldiers and leaders use all the situational information at their disposal to ensure an appropriate level of response to the threat.
- Engage. Engage is the specific application of military options or weapons to defeat, neutralize, or destroy the threat. Successful implementation of the weapons or military options at the disposal of the firer efficiently and

effectively alters, disrupts, or halts the threat's DIDEA process, and ultimately eliminates the threat to friendly force.

- Assess. This step evaluates the weapons or options employed to defeat the threat or threats. It is the process the crew uses to determine if the applied weapons or options deliver the desired effect.

Chapter 5
Basic Scout Skills

Scouts must master basic scout skills that they incorporate, both individually and collectively, into all reconnaissance and security missions. These skills are requisite in all scouts regardless of rank. Scouts have to perform reconnaissance and security in a dangerous and unknown environment, which requires these basic skills to be automatically understood and executed.

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SECTION I – FUNDAMENTALS OF TACTICAL MOVEMENT

5-1. Scouts determine movement techniques based primarily on enemy expectations, but also the troop-leading procedures, assets, and sensors such as; joint capabilities release, ground sensors and surveillance systems, and UAS. This section focuses on several critical aspects of tactical movement, including:

5-2. Movement fundamentals and formations: Allow the platoon to maneuver in a way to accomplish the mission but minimize causalities and retain freedom of maneuver.

5-3. Movement techniques: Successfully employed traveling, traveling overwatch, and bounding overwatch movement techniques allow the platoon to conduct reconnaissance without compromise. They also help the platoon leader minimize the platoon's exposure to enemy observation and fire and maximize the number of tactical options available to the platoon.

5-4. Mission considerations: Section leaders maintain situational awareness regarding the location of enemy forces, observable areas, and weapon systems capability by conducting stealthy movement and gaining visual contact with enemy forces. Obtaining

visual contact with the enemy first allows friendly forces to make contact on terms of their choosing.

5-5. Chance contact: The scout platoon takes steps to minimize chance contact with enemy forces by executing detailed IPB, visually clearing IV lines and templated danger areas, and utilization of proper movement techniques. The use of information collection assets and sensors such as the UAS and ground sensors reduce the possibility of chance contact. Scout platoons utilize dispersion and operate in supporting distance to make contact with the smallest element possible allowing freedom of maneuver and maximizing tactical options.

5-6. Timelines: Tactical movements are made in accordance with the timelines and operational phases directed by the higher commander. The platoon leader must adapt movement formations to meet the timeline directed by higher.

MOVEMENT AND MANEUVER

5-7. Sound tactical movement is the essence of all scout platoon missions. The platoon maneuvers in a way to accomplish the mission, but minimizes casualties and retains freedom of maneuver.

5-8. Effectively employed, the guidelines in this section can help scouts see the enemy first and observe them undetected which helps to achieve a number of tactical goals, including retaining the initiative, confirming or denying CCIR, and retaining freedom of movement to gain information. Tactical movement involves movement of a unit assigned a mission under combat conditions when not in direct ground contact with the enemy. Tactical movement is based on the anticipation of early ground contact with the enemy, either en route or shortly after arrival at the destination. Movement ends when ground contact is made or the unit reaches its destination. Movement is not maneuver. Maneuver happens once a unit has made contact with the enemy and combines movement with direct fires to gain a position of advantage over the enemy.

5-9. Platoon leaders plan movement and maneuver during the TLP and is based on the platoon's mission. The movement and maneuver plan must match the commander's intent, and ties closely to suspected enemy and terrain found within the platoon's AO. The platoon leader determines the platoon's routes, movement techniques, formations, and when to transition to maneuver based on the likelihood of enemy contact. Conduct maneuver to avoid enemy strengths and create an opportunity that increases the effects of combat power.

5-10. The platoon transitions to maneuver when enemy contact is made. To assist in the maneuver of the platoon to their objective, the platoon leader integrates multiple assets and other combat multipliers into the scheme of maneuver, such as the employment of fires, dismounted antitank teams, small unmanned aircraft systems assets.

5-11. Plan movement and maneuver using the war-game technique during the platoon planning process. The platoon leader, assisted by experienced members of the platoon, identifies expected enemy engagement areas, most likely enemy BPs, and areas best suited for the emplacement of enemy obstacles to slow or stop friendly forces, and plans

their maneuver to counter the enemy threats. The platoon leader designates friendly TRPs along the proposed routes and assigns sectors of fire, observation, and weapons orientation.

USE TERRAIN FOR COVER AND CONCEALMENT

5-12. Leaders look at the terrain, foliage, structures, and other features along avenues of approach (and on objectives or key terrain) to identify sites offering cover (protection from the effects of direct and indirect fire) and concealment (protection from observation). Cover and concealment is just as vital as clear fields of fire. Terrain offers concealment from enemy observation and cover from enemy fires. Scouts make maximum use of natural protection to accomplish their mission and avoid enemy detection as seen in figure 5-1. Scouts use cover whenever possible. When no cover is available, scouts use the concealment offered by trees, shadows, brush, and man-made structures.

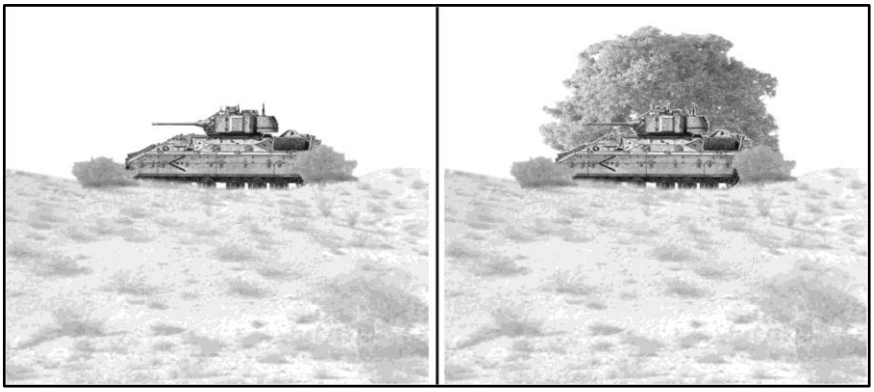


Figure 5-1. Use of natural terrain for concealment

5-13. During all movement, individual vehicles and personnel should avoid becoming silhouetted against a skyline. Vehicles should take precautions to avoid moving directly forward from a defilade position as this can enable the enemy to pinpoint the vehicle and engage it as it moves. Instead, vehicles should back up and move left or right around the previous position to get to the next location. Leaders should use dismounted scouts to clear past IV lines and use crest and berm drills to their maximum advantage (see figure 5-2, page 5-4).

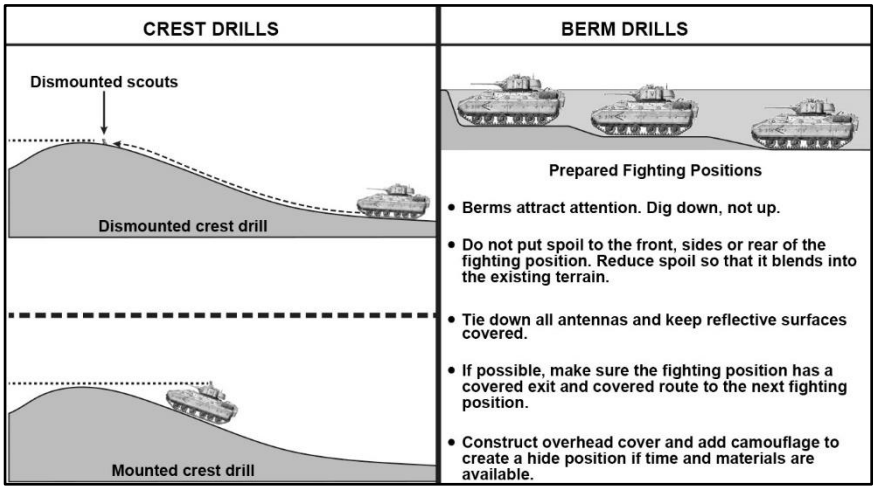


Figure 5-2. Crest and berm drill

5-14. The platoon avoids movement through these areas by combining proper terrain driving techniques with carefully selected routes that maximize security and reduce the signature of the vehicle. The platoon should stop short of danger areas and use dismounted scouts to reconnoiter ahead of them. For example, when encountering an open area, the platoon sends dismounts to a concealed position to observe the area. Scouts carefully check the other side of the open area for enemy positions. Vehicles provide overwatch for the dismounts while using combat identification techniques to mitigate the risk of fratricide. When clear, the platoon then quickly crosses the open area.

REDUCE VEHICLE-RELATED SIGNATURES

5-15. Reduce the scout platform's major signatures (audible, thermal, and visual) by shutting off the vehicle and related systems such as heaters or older thermal sights whenever the vehicle is not moving or when not using the system (normally referred to as a short count). Short count is most effective when conducted with multiple vehicles. Scouts further reduce visual and thermal signatures by erecting camouflage nets and use foliage found in the AO to alter the natural box shape of the vehicle, which helps hide a stationary vehicle visually and thermally. Nets tied to the vehicle reduce dust and exhaust signatures and reduce the thermal signature while moving. Scouts must employ camouflage materiel appropriately on vehicles during movement to break up the color and silhouette. If camouflage nets are not available, scouts can use foliage or camouflage nets along with foliage to break up colors and silhouettes. Another way scouts can reduce their vehicle's signature is to keep their hatches closed, which reduces noise and light signatures, as well as mask internal lights from outside observation. Other techniques to reduce the vehicle's signature are:

- Placing meal, ready to eat boxes or ponchos over windows, windshields, and periscope covers to minimize white light signature from the joint capabilities release/blue force tracking.
- Conducting external PCIs of vehicles using night observation devices to spot-check friendly light signatures.
- Reducing vehicle glass reflection from periscopes and windows by removing, covering, or camouflaging them (for example, placing a net over the windshield).

USE OF DISMOUNTED SCOUTS

5-16. Generally, the platoon sends out dismounts in elements of no fewer than three scouts, which enhances mission accomplishment and survivability. While vehicles easily alert enemy by their visual, sound, and exhaust signatures, dismounted patrols and observation posts are very difficult to notice. Scouts should dismount their vehicles and use optical devices to gain information on objectives or NAIs. Sending out the smallest element possible to gain observation and clear danger areas increases survivability for the platoon. For example, during reconnaissance tasks, scouts dismount beyond the direct fire range of suspected enemy positions and weapon systems. They then move in ahead of their vehicles using the cover and concealment of a dismounted avenue adjacent to the mounted route. Leaving the vehicles in hide or overwatch positions, the dismounted scouts occupy observation posts that provide critical information enhancing the unit's survivability.

SECTION II - NAVIGATION

5-17. Whether mounted or dismounted, scouts must be proficient in navigation. Technology has made navigation easier, but the enemy can degrade mission command systems so the scout must use several methods to aid in the navigation of the platoon throughout their AO. Leaders need to identify good ground along the route that facilitates movement and aid in the navigation from one area to the next. Leaders need to choose their terrain wisely, and choose routes that meet the tempo and focus established by the troop commander.

MAP CORRELATION

5-18. Scouts retain freedom of maneuver. To do so it is imperative they navigate by maintaining situational awareness within an AO. Leaders receive information from their higher headquarters in different formats and scales. For example, there may be operational graphics sent digitally through mission command systems such as joint capabilities release or on a simple piece of acetate. Conceptual graphics might be digital or sent as paper copy of power point slides. Map sheets may range from 1:50,000 to 1:250,000 scale. Soldiers have become accustomed to automatic navigational products such as GPS, which is subject to spoofing. Leaders must quickly correlate, process, and disseminate this information into comprehensible and quickly usable information to their subordinates.

5-19. Leaders consider terrain displayed on maps and products as it relates to their mission, anticipating likely cover, concealment, danger areas, built up areas and other military aspects of terrain. They anticipate potential weather effects on the terrain during their map reconnaissance. Swollen streams from high rain activity or loss of vegetation due to drought may affect the unit's movement plan. Leaders account for these conditions and consider how the enemy may use them to their advantage. Leaders must learn terrain appreciation to anticipate attacks or ambush at choke points and identify these areas during planning.

COMMON REFERENCE POINTS

5-20. After orienting their map, leaders lay out their operational graphics and other related products. Find common reference points on the graphics and maps such as hilltops, towns, lakes, bridges. Use these common reference points to align the various mission products to the map and quickly develop understanding of the mission in relation to the terrain.

5-21. After orienting terrain data to the map, locate graphic control measures. Transfer the relevant NAI's, LOA's, routes, and phase lines to the map. Identify coordination points and contact points.

DETERMINE SCALE

5-22. Finally, determine the scale of each product. Map legends typically provide distance scales. Staff products with no terrestrial association require estimation to determine distances. Ensure subordinates understand all graphics, their purpose, and the associated terrain.

5-23. When transferring map data, precision is key. Finer writing instruments are more useful than large markers. When copying acetate overlays, line the reference points up between the original and the copy prior to copying the graphics. This is generally done by outlining two grid squares, on opposite sides of the map, and labeling these grid reference marks with the appropriate vertical and horizontal grid line numbers. Ensure to outline four grid square lines and their numbers in the upper right and lower left to properly align the map.

NAVIGATION AIDS

5-24. There are two categories of navigational aids: linear, and point. Linear navigational aids are terrain features such as trails, streams, ridgelines, wood lines, power lines, streets, and contour lines. Point terrain features include hilltops, and prominent buildings. Navigation aids usually are assigned control measures to facilitate communication during the movement. Typically, linear features are labeled as phase lines, while point features are labeled as checkpoints. There are three primary categories of navigation aids: catching feature, handrails, and navigational attack points (TC 3-25.26).

CATCHING FEATURES

5-25. Catching features are obvious, prominent terrain features beyond a waypoint or control measure and are either linear or point. These features act as back stops indicating the unit has gone past their navigation point.

THE OFFSET-COMPASS METHOD

5-26. If there is the possibility of missing a particular point along the route (such as the end point or a navigational attack point), it is sometimes preferable to deliberately aim the leg to the left or right of the end point toward a prominent catching feature. Once reached, the unit simply turns the appropriate direction and moves to the desired endpoint. This method is especially helpful when the catching feature is linear.

HANDRAILS

5-27. Handrails are linear features parallel to the proposed route such as roads or highways, railroads, power transmission lines, ridgelines, or streams. These linear features run parallel to a unit's direction of movement. The general idea is to use the handrail to keep the unit oriented in the right direction. Guiding off of a handrail can increase the unit's speed while also acting as a catching feature.

BOXING-IN THE ROUTE

5-28. One of the techniques leaders can use to prevent themselves from making navigational errors is to "box-in" the leg or the entire route. This method uses catching features, handrails, and navigational attack points to form boundaries. Creating a box around the leg or route assists in easily recognizing and correcting deviation from the planned leg or route.

NAVIGATIONAL ATTACK POINTS

5-29. Navigational attack points are obvious landmarks that are found easily near the objective, LOA, or checkpoint. Upon arriving at the navigational attack point, the unit transitions from rough navigation (terrain association or general azimuth navigation) to point navigation (dead reckoning). Typically, label navigational attack points as checkpoints.

METHODS OF NAVIGATION

5-30. There are three methods of navigation: terrain association, general azimuth method, and point navigation (dead reckoning). When elements are in combat vehicles there is the stabilized turret alignment navigation method also available. Leaders use whichever type or combination that best suits the situation.

TERRAIN ASSOCIATION

5-31. Terrain association is the ability to identify terrain features on the ground by the contour intervals depicted on the map. The leader analyzes the terrain and identifies major terrain features, contour changes, and man-made structures along their axis of advance. As the unit moves, they use these features to orient the unit and to associate ground positions with map locations. The major advantage of terrain association forces the leader to continually assess the terrain.

GENERAL AZIMUTH METHOD

5-32. For the general azimuth method, the leader selects linear terrain features; then while maintaining map orientation and a general azimuth, the leader guides on the terrain feature. An advantage the general azimuth method has is it speeds movement, avoids fatigue, and often simplifies navigation because the unit follows the terrain feature. The disadvantage is it usually puts the unit on a natural line of drift. This method should end like terrain association, with the unit reaching a catching feature or a navigational attack point, then switching to point navigation.

DEAD RECKONING (POINT NAVIGATION)

5-33. Dead reckoning, also called point navigation, is accomplished by starting from a known point and strictly following a predetermined azimuth and distance. This form of navigation requires a high level of leader control because even a slight deviation over the course of a movement can cause navigation errors. This method uses the dismounted compass and a distance from the pace count (or a vehicle's odometer when mounted) to follow a prescribed route. Point navigation requires the leader to follow these step:

- Use the compass to maintain direction.
- Use the pace count or a vehicle odometer to measure the distance traveled for each leg or part.
- Review the written description of the route plan to help prevent navigational errors.

Note. Do not take compass reading from inside vehicles. Move away from vehicles when using a lensatic compass.

5-34. When performed correctly, point navigation is very reliable, but time-consuming. It is best when the need for navigational accuracy outweighs the importance of using terrain association. Point navigation is particularly useful when recognizable terrain features do not exist or are too far away to be helpful. For example, deserts, swamps, and thick forest make terrain association difficult. Using point navigation early on in a long movement can stress the compass Soldier and it may be advisable to switch them out. One of the problems with point navigation is negotiating severely restrictive terrain or danger areas.

STABILIZED TURRET ALIGNMENT NAVIGATION

5-35. Another method for vehicles with a stabilized turret is to align the turret on the azimuth of travel, then switch the turret stabilization system on and engage the gun stabilization function. Activate the stabilizer according to the vehicle operating procedures. With the stabilization function engaged the gun tube remains pointed toward the destination no matter which way the vehicle turns. This technique is not harmful to the stabilization system. It is subject to stabilization drift, so use it for no more than 5,000 meters before resetting. If engaging a target from the turret, repeat the entire process.

COMBINATION

5-36. Leaders can benefit from combining the different methods of navigation and also having several members of the platoon backing up navigation by utilizing alternative methods to ensure accuracy. Terrain association and the general azimuth method enable leaders to set a rough compass bearing and move as quickly as the situation allows toward a catching feature or a navigational attack point. Once reached, leaders switch to point navigation by paying close attention to detail, asking for as much time as necessary to analyze the situation and find their point. Terrain association and the general azimuth method allow for some flexibility in the movement, and do not require the same level of control as point navigation. Point navigation, on the other hand, enables leaders to precisely locate their objective or point.

ROUTE TYPES

5-37. There are three types of routes leaders can plan, those which follow linear terrain features; those which follow a designated contour interval; and those which go cross compartment. Terrain association is used with all three route types. Use the general azimuth method with the contour and terrain feature method. Point navigation is used primarily with cross compartment.

TERRAIN FEATURES

5-38. Following a terrain feature is nothing more than moving along linear features such as ridges, valleys, and streets. The advantage of this method is the unit is moving with the terrain, which is normally the least physically taxing of the methods. The disadvantage is following terrain features also means following natural lines of drift, which leads to a higher probability of chance contact with the enemy.

CONTOURING

5-39. Contouring (remaining at the same height the entire leg) is following the imaginary contour line around a hill or along a ridgeline. Contouring has two advantages. First, it prevents undue climbing or descending. Second, following the contour acts as handrail or catching feature. The disadvantage of contouring is it can be physically taxing by adding distance traveled.

CROSS COMPARTMENT

5-40. Cross compartment means following a predetermined azimuth and usually means moving against the terrain. The advantage of this method is it provides the most direct route from the SP to the end point of the leg or route. There are two primary disadvantages to this type of route. First, this method is physically taxing. Second, the unit might expose itself to enemy observation.

DEVELOP A LEG

5-41. The best way to manage a route is to divide it into segments called "legs." By breaking the overall route into several smaller segments, the leader is able to plan in detail. Legs typically have only one distance and direction. A change in direction usually ends the leg and begins a new one.

5-42. A leg must have a definite beginning and ending, marked with a control measure such as a checkpoint, phase line, or way point (when using GPS). When possible, the SP and end point should correspond to a navigational aid (catching feature or navigational attack point).

5-43. To develop a leg, leaders first determine the type of navigation and route best suiting the situation. Once these two decisions are made, the leader determines the distance and direction from the SP to the end point. The leader then identifies critical METT-TC information as it relates to the specific leg. Finally, leaders capture this information and draw a sketch on a route chart as depicted in figure 5-3.

LEG	AZMUTH/ DISTANCE	KEY INFORMATION
Leg 1: SP 1 to CKP 1. - Stay in woodline east of the hardball at base of hill.	008° /500m	O: Limited. A: HWY 1. K: Hill mass west of leg. O: Not applicable. C: Good.
Leg 2: CKP 1 to CKP 2. - Stay on south side of dirt secondary road. Continue movement to the large church at CKP 2.	030°/ 1800m	O: Unlimited. A: Dirt trail. K: Hill 18 southeast of leg. O: Not applicable. C: None.
Leg 3: CKP 2 to RP. - Stay on east side of hill 25. Continue movement to the boulders at the RP.	319°/450m	O: Unlimited. A: Dirt trail. K: Hill 25 west of leg. O: Not applicable. C: None.

Legend:

CKP	CHECK POINT	OAKOC	OBSERVATION AND FIELDS OF FIRE, AVENUES OF APPROACH, KEY TERRAIN, OBSTACLES, COVER AND CONCEALMENT
HWY	HIGHWAY		
°	DEGREES		
M	METERS		
MN	MAGNETIC NORTH		
RP	RELEASE POINT		
SP	START POINT		

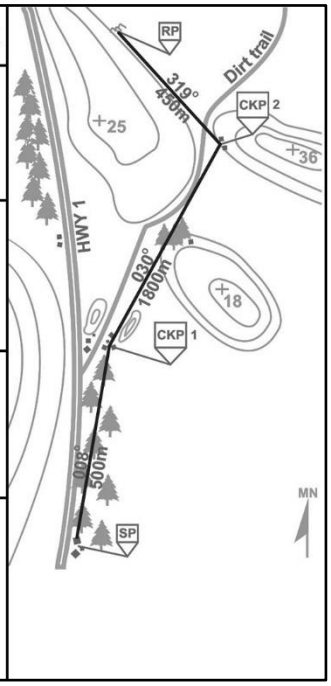


Figure 5-3. Sketching of legs, example

DANGER AREAS

5-44. During the execution of reconnaissance and security, the platoon encounters specific types of terrain features or regions that expose them to enemy fire. These danger areas are likely points of enemy contact due to the scout platoon's inherent vulnerabilities while navigating. Identify and highlight enemy cover, concealment, and observation danger areas when the platoon leader performs map reconnaissance and platoon analysis during TLP. There is no perfect way to counter every danger area so leaders at all levels need to use disciplined initiative when reacting to danger areas. Examples of danger areas include—

- Open areas.
- Wooded areas.
- Roads, trails, and rail lines.
- Urban areas.
- Minefields and obstacles.
- Streams.

LATERAL OR BOUNDARY ROUTES

5-45. As the platoon executes reconnaissance and security missions, routes, or mobility corridors that provide access into the terrain between the platoon and friendly elements to its flanks and rear are to be expected. These lateral mobility corridors pose a security threat to the platoon and the other friendly elements by allowing the enemy and scouts to move into the terrain around the platoon flanks unobserved. Leaders coordinate missions with adjacent units to prevent confusion, fratricide, or possible enemy exploitation. Scouts should not reconnoiter lateral routes beyond one-half the distance of the maximum effective range of overwatching weapon systems. It is critical that the platoon maintain continuous surveillance of these mobility corridors to protect against infiltrating enemy forces. If necessary, the platoon uses a series of contact and coordination points to enhance security during movement through the area. The UAS can monitor areas already cleared by the scout platoon and assist in mitigating enemy infiltration between adjacent elements.

5-46. To maintain surveillance of areas along known or suspected paths of enemy travel, the platoon can establish outposts to maximize the reconnaissance effort forward. This security technique uses short duration observation posts consisting of two Soldiers with equipment. A section or squad should deploy an outpost when it is at risk of losing observation of a possible enemy approach route that no other element can observe. Once deployed, the outpost maintains surveillance of the avenue of approach until the rest of the reconnaissance element returns. In doing so, this outpost provides security with early warning of enemy activity that the mounted element would not have detected.

SECTION III – MOUNTED SCOUT PLATOON FORMATIONS

5-47. During either mounted or dismounted movement, the scout platoon employs combat formations when the terrain and enemy situation supports their use or when the mission or reconnaissance objective is precisely focused, such as in a route reconnaissance.

5-48. The eight mounted scout platoon formations—line, vee, column, staggered column, wedge, echelon (left or right), coil, and herringbone—are intended to be flexible. Modify them to fit the situation, terrain, and combat losses; they do not have exact geometric dimensions and design. Transition into and out of the various formations must be second nature to each squad.

LINE FORMATION

5-49. Regardless of the platoon organization, the line formation is applicable to most scout platoon missions. (See figure 5-4.) This allows maximum reconnaissance forward and covers a wider AO. It also requires the platoon to have some form of overwatch because vehicles only provide local security.

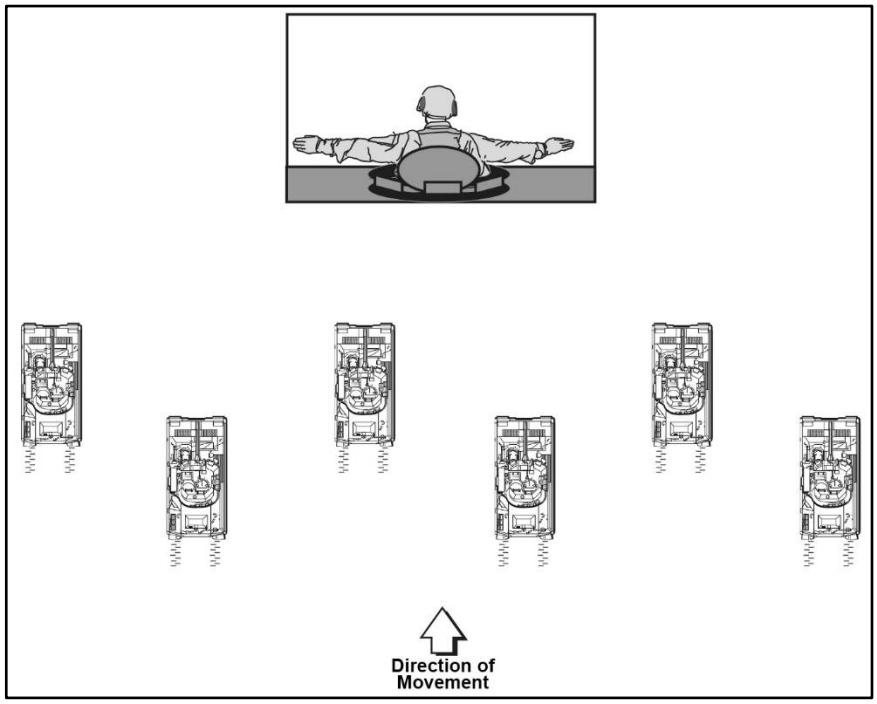


Figure 5-4. Line formation (ABCT scout platoon)

VEE FORMATION

5-50. The platoon maintains relative positioning based on terrain and combat losses. The vee formation lends itself to immediate mutual support and provides depth due to its flexibility. (See figure 5-5.) Using any of the techniques of movement, the two forward vehicles perform most of the information gathering and reporting. The rear vehicles provide overwatch.

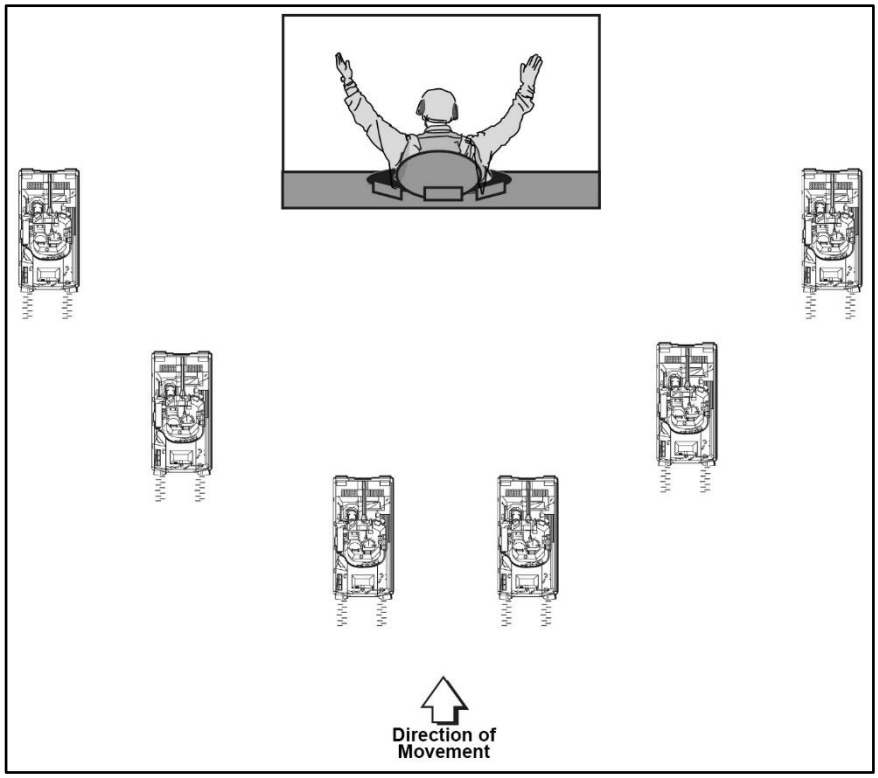


Figure 5-5. Vee formation (ABCT scout platoon)

COLUMN FORMATION

5-51. When speed is essential as it moves on a designated route, the platoon uses the column formation which offers good fields of fire to the flanks but little to the front and rear (see figure 5-6). Normally, the platoon leader briefs the section leaders on the route and speed, and then allows the lead section to control the column movement. This enables the platoon leader to concentrate on the subsequent mission. However, the platoon leader still has the responsibility of tracking the movement of the platoon. The order of march in the column may depend on which organization the platoon uses at the end of the movement.

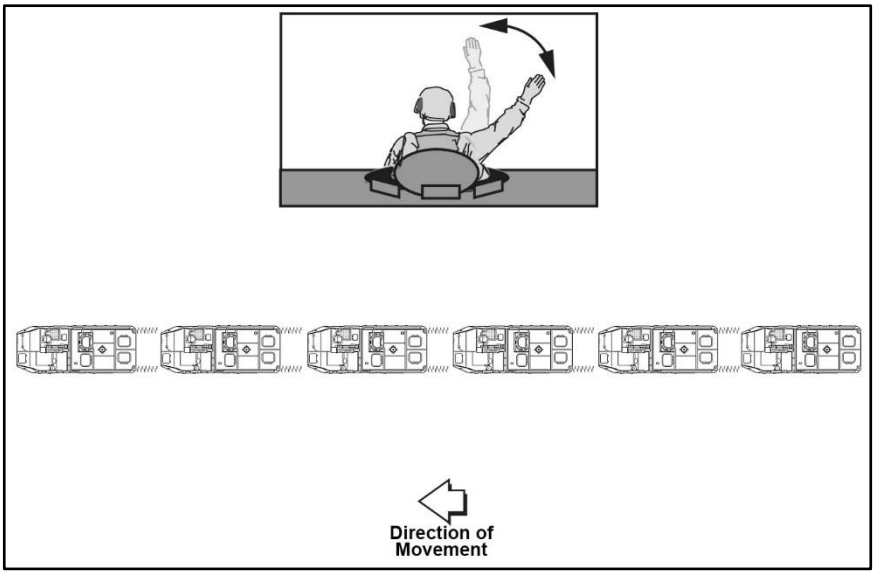


Figure 5-6. Column formation (SBCT scout platoon)

STAGGERED COLUMN

5-52. The platoon uses the staggered column formation for rapid movement across less restrictive terrain, affording all-around observation and fields of fire. The enemy emplaces explosive devices and mines just off the roadway, so platoons exercise caution to avoid driving on or just beyond the road shoulder when using this formation (see figure 5-7).

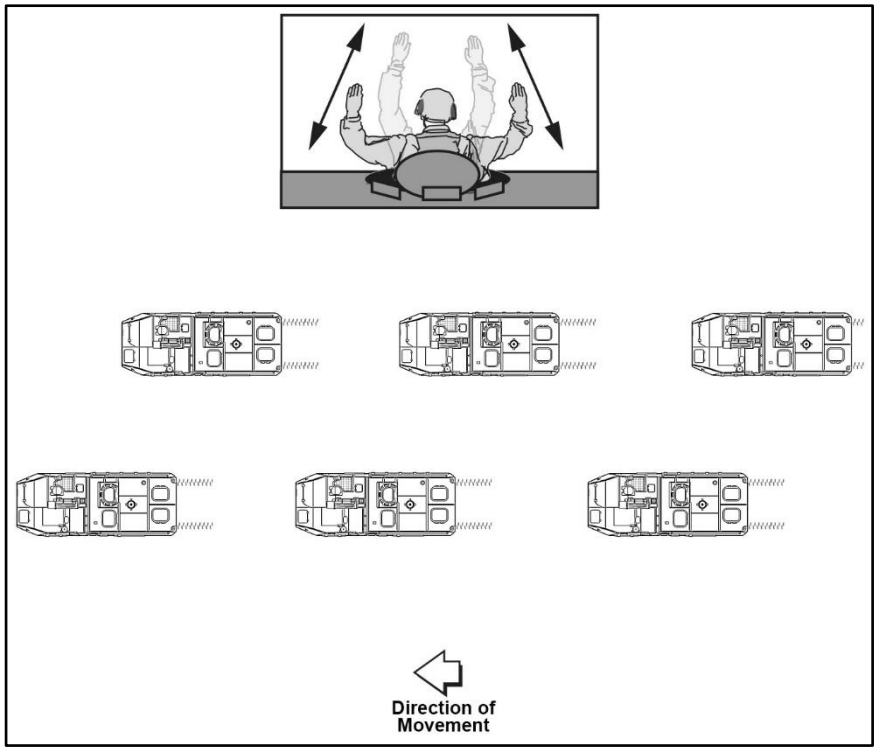


Figure 5-7. Staggered column formation (SBCT scout platoon)

WEDGE FORMATION

5-53. Maneuver unit platoons primarily use the wedge formation. (See figure 5-8.) Although this is not a typical reconnaissance formation, it may be used when enemy contact is likely and the platoon fights for information. The wedge can be formed with six-, three-, or two-vehicle organizations. This formation allows firepower to focus forward or shift to either flank. In the event the platoon makes enemy contact while moving, the wedge formation permits the platoon to gain contact with the smallest possible maneuver element—the section.

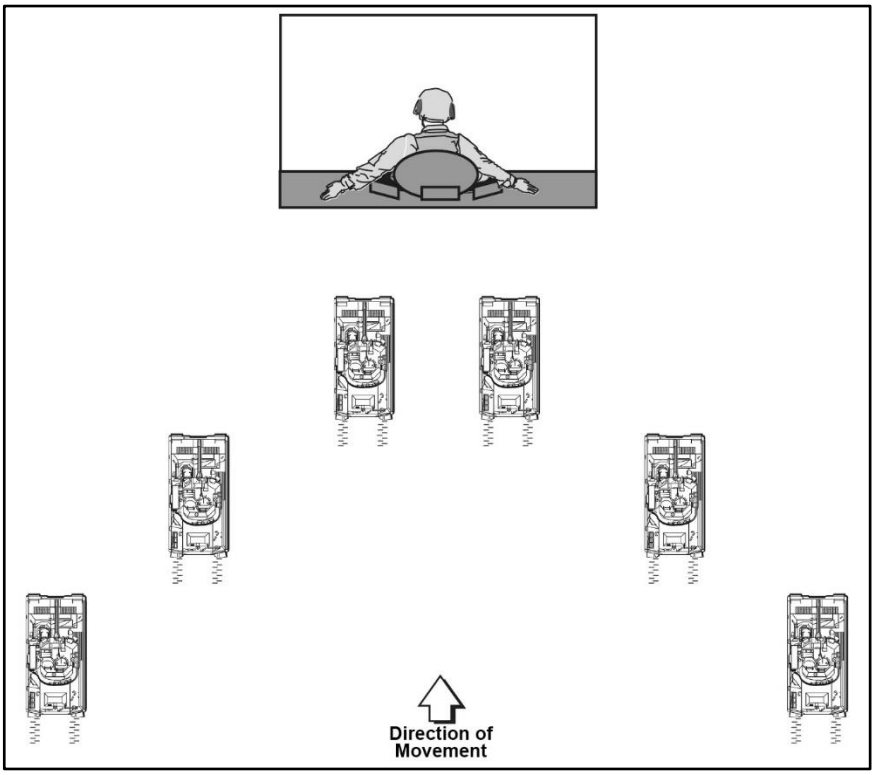


Figure 5-8. Wedge formation (ABCT scout platoon)

ECHELON (LEFT OR RIGHT)

5-54. When the platoon wants to maintain security or observation of one flank, and when the platoon does not expect enemy contact, they use the echelon formation shown. (See figure 5-9.)

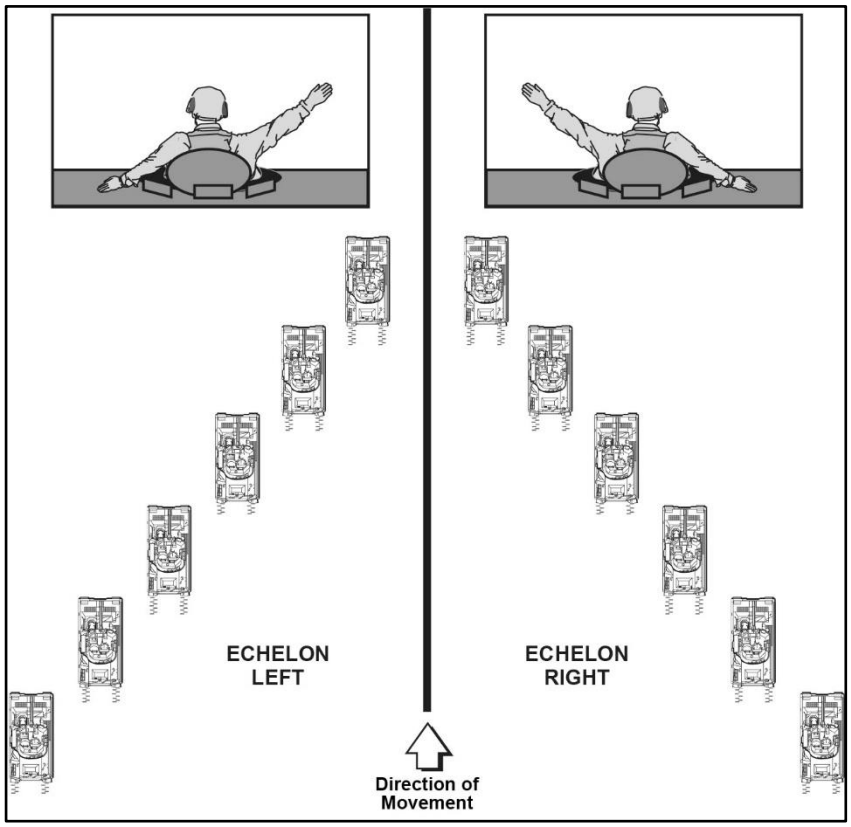


Figure 5-9. Echelon left or right (ABCT scout platoon)

COIL FORMATION

5-55. The platoon coil provides all-around security and observation when the platoon is stationary. (See figure 5-10.) Each vehicle has a particular position to occupy in the coil, and the platoon leader designates the orientation of the coil using a cardinal direction. In the absence of orders, the direction of travel becomes 12 o'clock. The platoon develops a coil SOP. The platoon usually executes this formation from the column or staggered column with the lead vehicle occupying the 12 o'clock position. Other vehicles occupy the clock positions according to the order of march. Vehicles position 100 to 150 meters apart or as dictated by terrain.

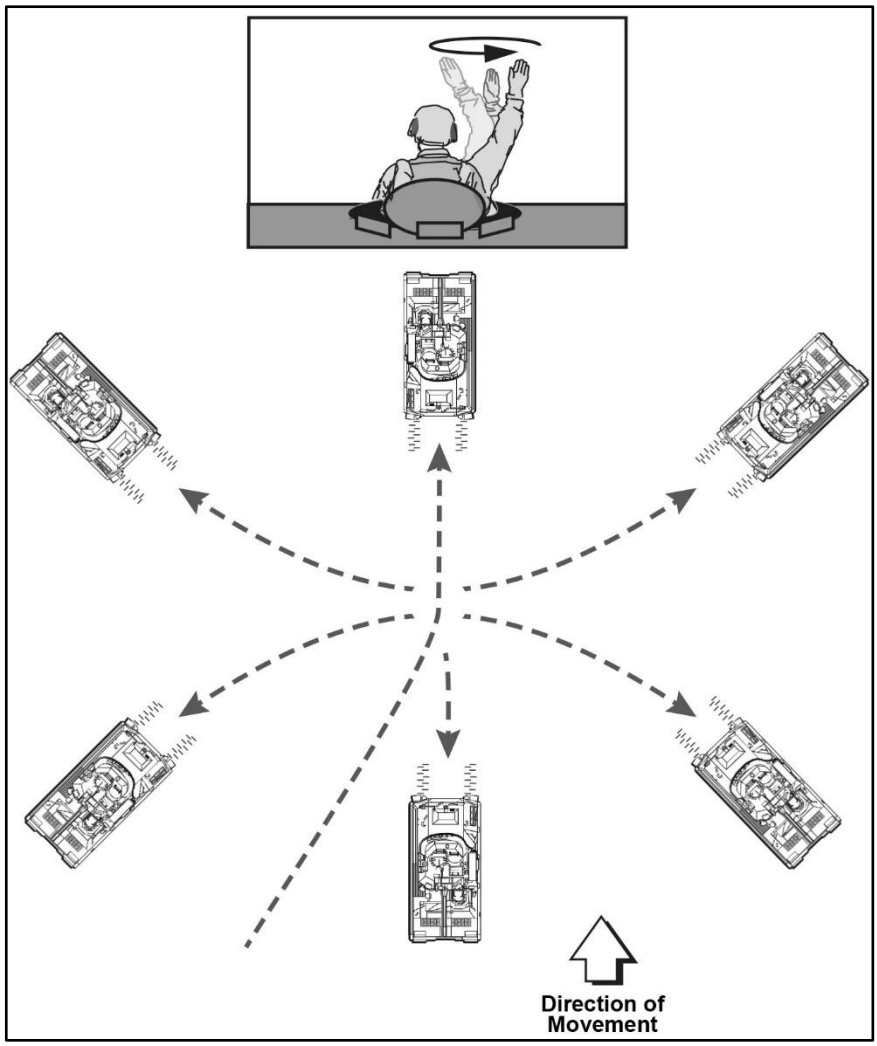


Figure 5-10. Coil formation (ABCT scout platoon)

HERRINGBONE FORMATION

5-56. The herringbone provides 360-degree security during a temporary halt from a march column, and scouts should dismount to provide greater security. The formation may widen to permit passage of vehicles down the center of the column. (See figure 5-11.) All vehicles should move completely off the road if terrain allows. Vehicle commanders reposition their vehicles as necessary to take advantage of the best cover, concealment, and fields of fire. As with the staggered column formation, platoons exercise caution when they use the herringbone formation to avoid explosive devices and mines emplaced just off the roadway.

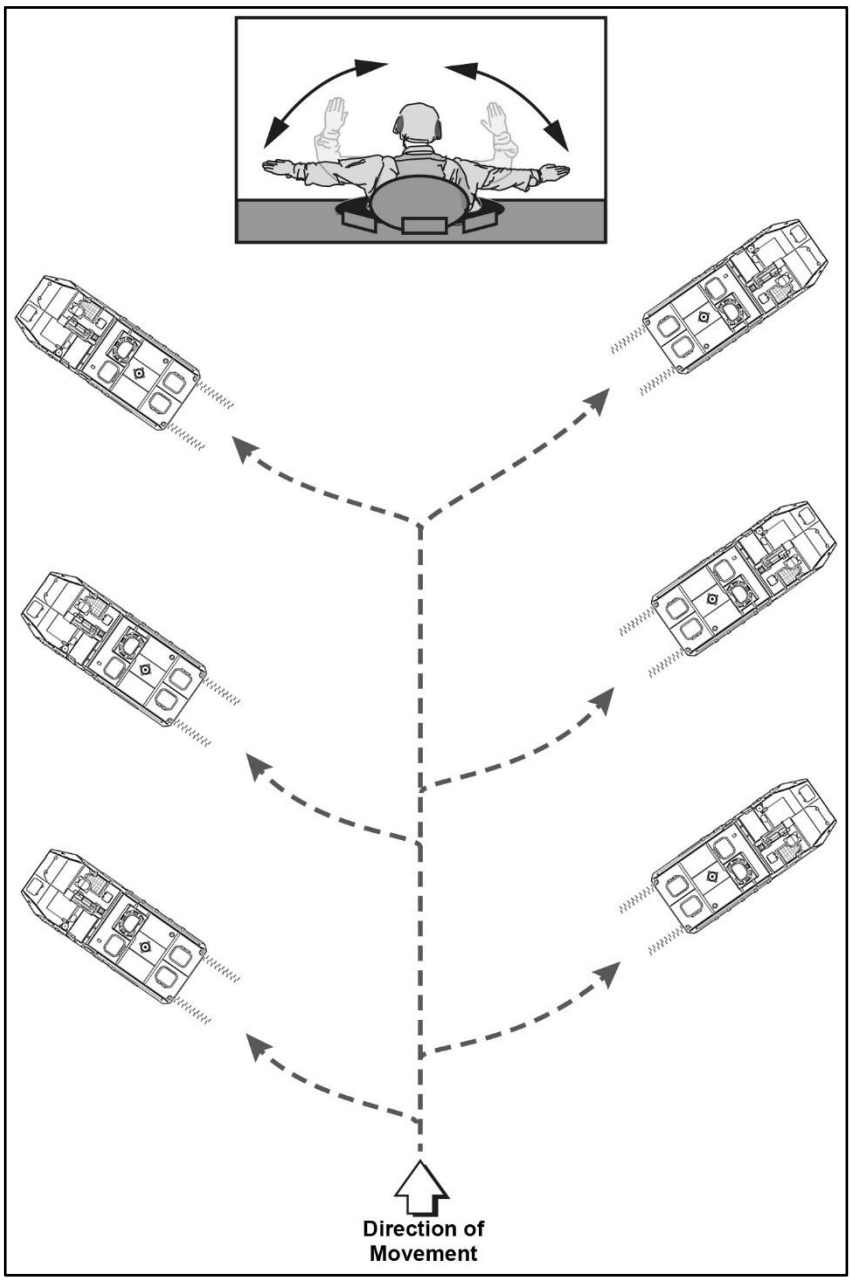


Figure 5-11. Herringbone formation (SBCT scout platoon)

SECTION IV – MOVEMENT TECHNIQUES

5-57. Movement techniques minimize exposure, maintain freedom of movement, maximize available tactical options, and react successfully to contact as seen in table 5-1 and figure 5-12. Effectively employed, movement techniques allow the platoon to find and observe threats without compromise. The movement techniques that the scout platoon use when conducting reconnaissance and security missions, both mounted and dismounted, are; traveling, traveling overwatch, and bounding overwatch.

5-58. The platoon leader adjusts movement based on the mission and enemy situation. Terrain considerations may also affect the choice of movement technique. In most tactical missions, the platoon moves as separate sections or teams under the mission command of the platoon leader. Leaders, particularly at the section level, should employ a degree of overwatch when enemy contact is possible. Regardless of which technique they use, the section leader gives the order explaining what each team does. Overwatch becomes more critical as the likelihood of enemy contact increases.

Table 5-1. Movement techniques and characteristics

Movement Techniques	***When Normally Used***	***Characteristics***			
		Control	***Dispersion***	***Speed***	***Security***
Traveling	Contact not likely	More	Less	Fastest	Least
Traveling overwatch	Contact possible	Less	More	Slower	More
Bounding overwatch	Contact expected	Most	Most	Slowest	Most

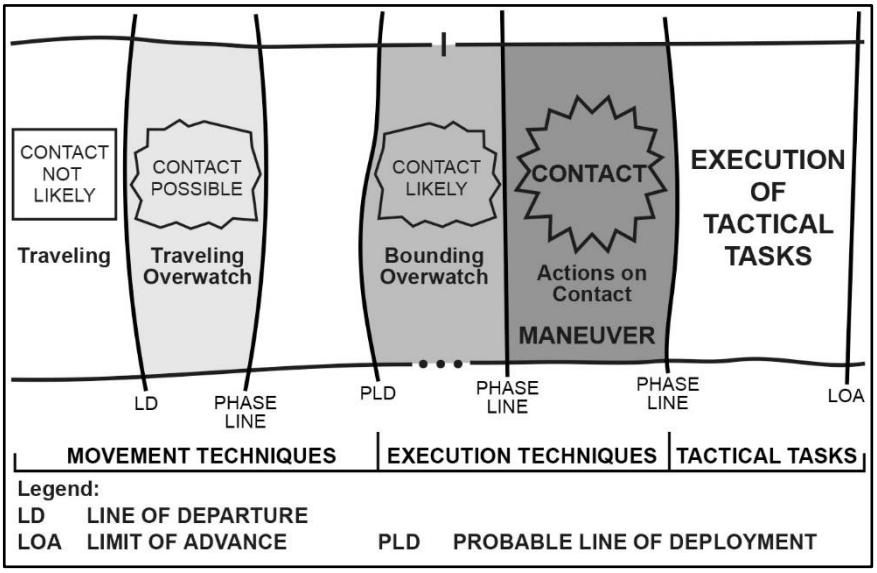


Figure 5-12. Movement techniques usage chart

5-59. Platoon leadership will encourage crewmember communication during training events. Drivers communicate with the vehicle commander about terrain that would impact the maneuver of their vehicle such as wadis, trenches, mud, and obstacles. Gunners need to request additional time from the vehicle commander when needing to scan hotspots along routes, and threats in danger areas such as passes and condensing terrain. Dismounted scouts and squad leaders communicate potential vehicle drop off points that could positively or negatively impact their dismount mission. Working together enhances the crew's ability to successfully accomplish their mission.

5-60. Crewmembers must remain vigilant while conducting mounted movement and maneuver. Drivers continuously scan their surroundings ever alert for any changes within the operating environment. Drivers should be constantly on the lookout for cover and concealment, moving to positions of advantage without having to be directed. Gunners are always aware of their sectors of fire and strive for 360-degree security. Vehicle commanders and section leaders maintain constant communications amongst vehicle crews and adjacent forces/vehicles. Good crosstalk and situational awareness within squads makes for greater lethality.

TRAVELING

5-61. Employ traveling in secured areas when speed is important and enemy contact is not likely. Traveling is the fastest but least secure movement technique. In this technique, the lead and trail elements move together as a unit. Movement is continuous, and squads maintain interval as terrain and weather permit. The platoon does not intend to engage in combat, but it disperses to prevent destruction in case of unexpected air or

ground attack. During traveling, formations are essentially not altered except for effects of terrain (see figure 5-13).

5-62. Traveling is the fastest technique of movement. Leaders must remain aware to use this technique only when speed is important. Squads must increase their vigilance because of the threat of a surprise attack. Always assume that the enemy is present even when an area has been cleared. Enemy combatants are always ready to exploit weaknesses and catch scout platoons off guard.

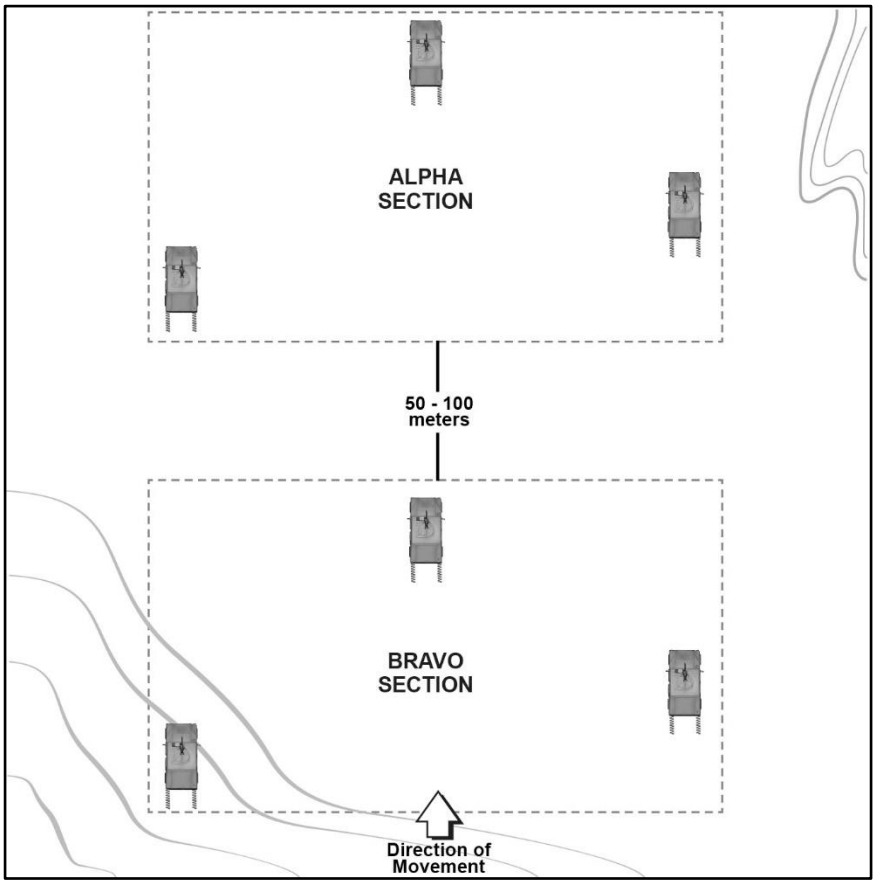


Figure 5-13. Traveling movement technique

TRAVELING OVERWATCH

5-63. The platoon leader uses traveling overwatch when they think contact is possible (see figure 5-14). 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. In some cases, improved awareness might prompt the trailing element to increase these distances. Leaders track the movement of forward elements. They observe and receive position updates to ensure the forward element remains on azimuth and within range of supporting direct fires.

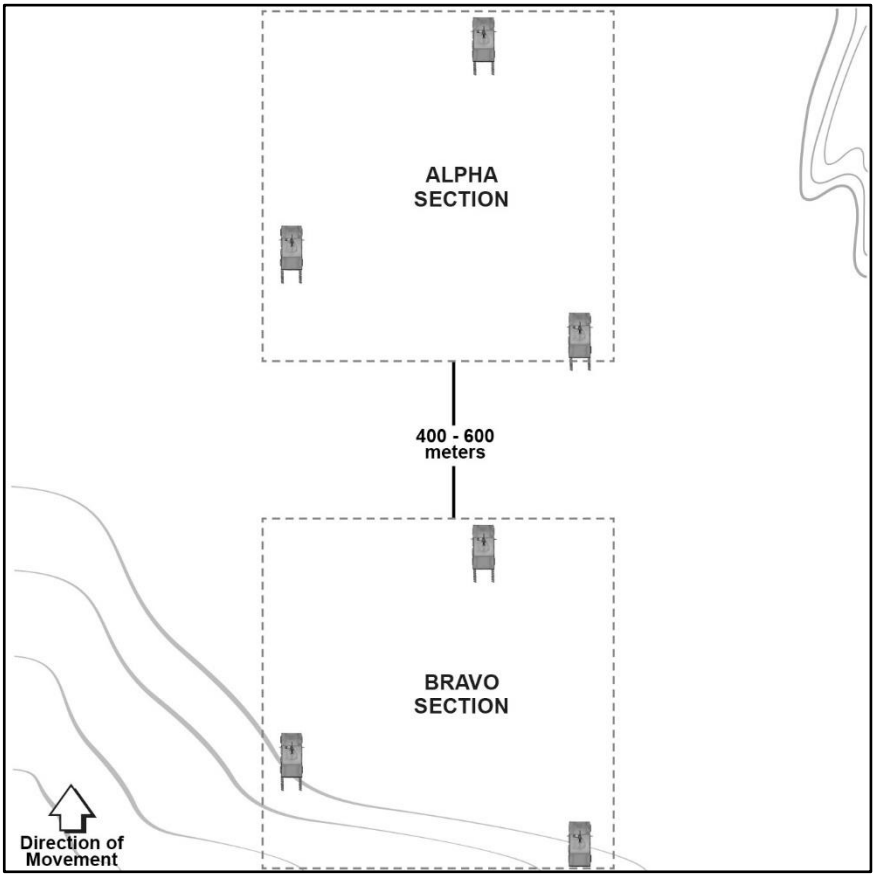


Figure 5-14. Traveling overwatch movement technique

BOUNDING OVERWATCH

5-64. When the platoon leader expects enemy contact, they use bounding overwatch with alternate or successive bounds. They initiate it based on reports received during planning about the enemy situation and on SITREPs received during movement. Bounding overwatch is similar to fire and movement in one unit stationary and concealed as much as possible, overwatches the movement of another. The difference is enemy contact is only expected. The key to this technique is the proper use of terrain.

5-65. Bounding overwatch is the most secure technique to use to find, fix, and destroy the enemy. The stationary positions of one section provide overwatch for the other

section as they are moving. The stationary element is set and using all available sensors, sights, and equipment to find the enemy. If a Stryker platoon were bounding, then they would use their remote weapon systems along with their long-range scout surveillance systems to identify the enemy for both sections (stationary and bounding sections). Sections bound half of the max effective range of the platoon's weapons systems, and each vehicle commander sends "moving" and "set," with their front line trace to the other section. By providing their front line trace, the other section will automatically know how far to advance during successive or alternating bounds.

ALTERNATE BOUNDS

5-66. In this method, the trail element advances past the lead element to the next overwatch position. This technique is usually more rapid than successive bounds and creates a more stable fire platform and better position for the overwatching vehicle (see figure 5-15).

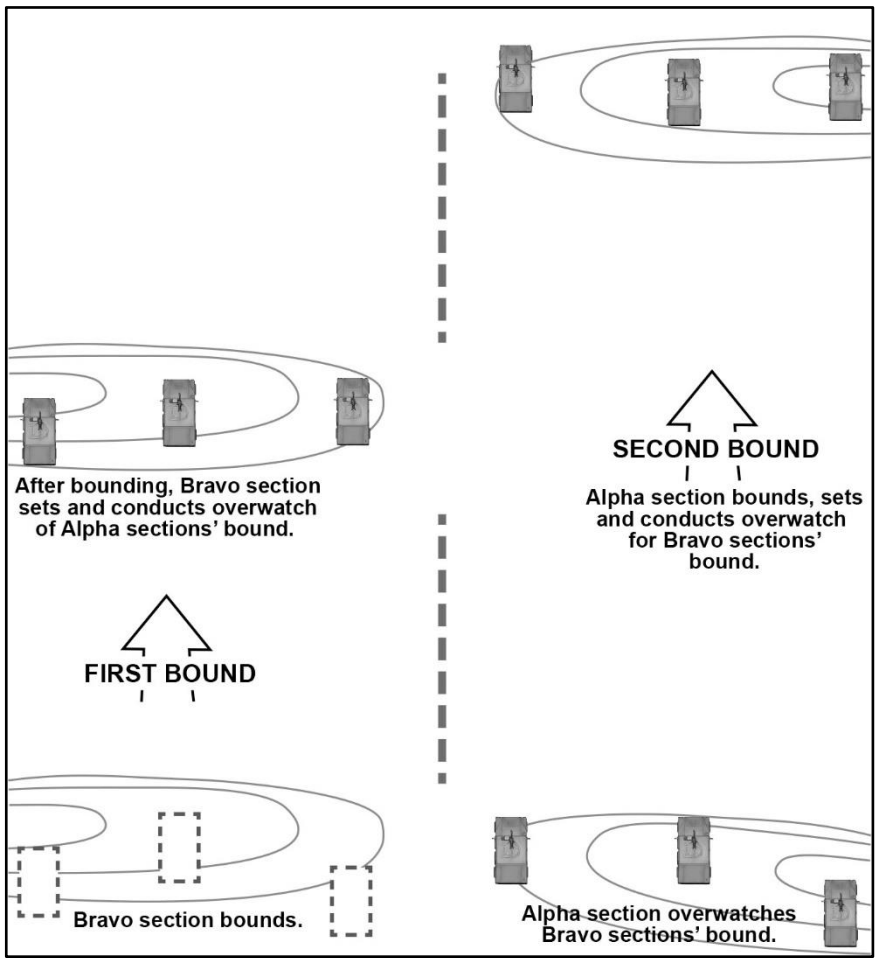


Figure 5-15. Bounding overwatch (alternate bounds)

SUCCESSIVE BOUNDS

5-67. In successive bounding, the trail element moves to an overwatch position that is approximately abreast of the lead element. This method is slower but easier to control and more secure (see figure 5-16).

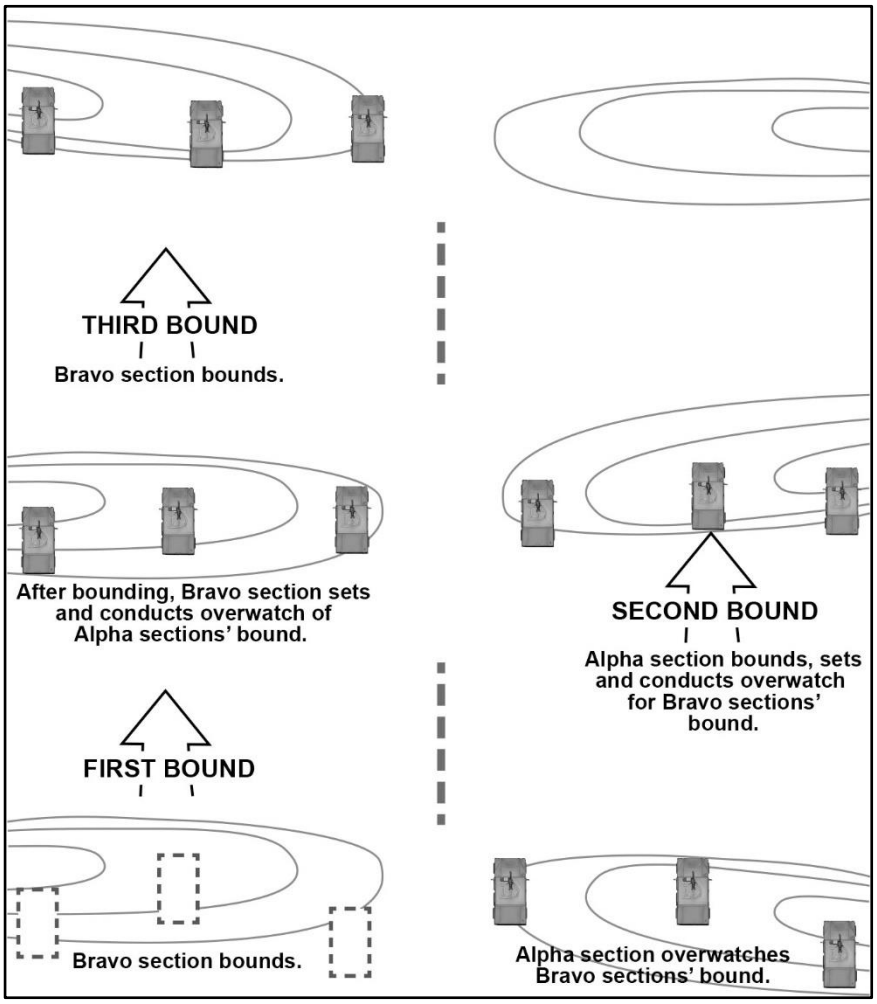


Figure 5-16. Bounding overwatch (successive bounds)

SECTION V – DISMOUNTED OPERATIONS

5-68. Although all platoons conduct dismounted operations at times, dismounted operations are the scout platoon's primary means for gathering information. The basic dismounted elements within the platoon are the team, squad, section, and platoon. Each scout vehicle has a designated dismounted team.

5-69. Every dismounted element consists of a reconnaissance element and a security element. The purpose of the reconnaissance element is to obtain data on information requirements. The security element's primary responsibility is to protect the reconnaissance element. The security element may also serve as a reconnaissance element or have alternate responsibilities. Whichever role the security element plays, its primary objective is protecting the dismounted element. A two-scout team is the smallest dismount element within the platoon. It takes a minimum of two Soldiers to establish an observation post, and then they can only operate that observation post effectively for no more than 12 hours. Observation posts occupied for more than 12 hours require, as a minimum, a squad or scout section to ensure continuous operation (refer to FM 3-90-2 for more information).

5-70. The following dismounted organizations describe other basic configurations and dismounted techniques within the platoon. This discussion; however, does not cover all the possible organizations or combinations.

5-71. METT-TC circumstances often require the scout platoon leader to task organize employing variations of the basic platoon organizations discussed previously. In addition, attachments, such as a section of infantry or engineers, may change the composition and number of squads or sections (See chapter 6 for augmentation considerations).

DISMOUNTED THREE-SCOUT TEAM

5-72. The three-scout dismounted team is the basic dismounted element within a typical scout squad (single scout vehicle, see chapter 1 for scout squad definition). It can perform reconnaissance tasks, security tasks, observation post and surveillance tasks, liaison, or a combination of these tasks. It is typically headed by a team leader or higher. One of the crewmembers can dismount to provide security for the vehicle and to serve as an antitank (Javelin) element. In this organization (as well as the other dismounted organizations), the vehicle may provide security for the entire element.

DISMOUNTED FOUR-SCOUT TEAM

5-73. The four-scout organization is the basic dismounted team configuration. In most scout platoons, this team combines the dismounted scouts from at least two squads, within a scout section. This attachment should be habitual, rehearsed, with clear command support established. It is typically headed by a squad leader or higher.

DISMOUNTED SIX-SCOUT TEAM

5-74. The dismounted squad combines the strength of two dismounted teams (from two scout vehicles). The platoon leader, PSG, or a staff sergeant squad leader heads this squad, which always includes an element designated for security and control. The squad is large enough to have an antitank and machine gun team as part of its security element.

DISMOUNTED PLATOON

5-75. The platoon leader or PSG heads the dismounted platoon element, which always includes an element designated for security and control. The dismounted platoon organization may be used if the threat is high (security of the element requires mutual support) or vehicular movement is impossible. Infiltration, for example, may require the platoon to conduct dismounted tactical movement. As noted, the platoon's vehicles may provide security for the entire element; this organization normally leaves crews mounted on each vehicle.

SPECIAL TEAMS

5-76. The leader must plan carefully to ensure they identify and assign all required tasks in the most efficient way. Where possible, the platoon leader should maintain squad and section integrity in assigning tasks. The chain of command continues to lead its elements during dismounted operations. The following elements are common to all dismounted operations:

- Headquarters element. It may consists of the leader of any attachments what that leader controls directly, such as an FO or engineers.
- Aid and litter team. Aid and litter teams are responsible for treating and evacuating casualties.
- EPW team. EPW teams are responsible for controlling prisoners. This team may also be the search team. If contact results in wounded or killed enemy Soldiers, this team searches those individuals for information and material they may have been carrying while the rest of the patrol provides security.
- Reconnaissance team. The reconnaissance team keeps watch on the objective from the time that the leader's reconnaissance ends until the unit deploys for actions on the objective.
- Security team. The security team provides overwatch and local security for the reconnaissance team.
- Point. The scout on point selects the actual route through the terrain, guided by the compass scout or patrol leader.
- En route recorder. The en route recorder records all information collected by the patrol.
- Compass scout. The compass scout assists in navigation by ensuring that the team remains on course at all times.

- Pace count scout. The pace count scout maintains an accurate pace at all times. The platoon or squad leader should designate how often the pace count is to report the pace.

Note. Individual Soldiers may have several of the duties listed above.

DISMOUNTED MOVEMENT

5-77. The selection of a movement technique is based on METT-TC. Factors to consider for each technique are control, dispersion, speed, and security. Movement techniques are not fixed formations. They refer to the distances between scouts, teams, and squads that vary based on mission, enemy, terrain, visibility, and any other factor that affects control. Scouts must be able to see their patrol leaders, and the patrol leader should be able to see their leaders. Leaders should control movement with hand-and-arm signals, using radios only when necessary. (Refer to ATP 3-21.8 for more information on dismounted movement fundamentals and procedures.)

FACTORS IN DISMOUNTED MOVEMENT

5-78. Scout platoons organize patrols based on the mission. There are several dismounted planning factors to address to ensure mission success.

Ensure that Patrol Members Can Navigate

5-79. Preparations are worthless if the patrol cannot find the objective in time or if the patrol encounters unexpected enemy contact during movement. Always plan to use a compass and pace count on a patrol.

Avoid Detection

5-80. Patrols must use stealth and the cover and concealment of the terrain to its maximum advantage. Whenever possible—

- Move during limited visibility.
- Use concealment of foliage and IV lines.
- Exploit the enemy's weaknesses.
- Synchronize movements through the use of triggers to coincide with other operations.

Maintain Constant Security

5-81. Always maintain 360-degree security. The patrol must constantly use both active and passive security measures—

- En route.
- At danger areas.

- At patrol bases.
- In the objective area.

Plan for Use of Supported Fires

5-82. Patrol Leaders must plan for fire support:

- TRPs and pre-planned targets. Fire support coordination measure must be coordinated with the FO and the tactical operations center prior to movement.
- Artillery.
- Mortars.
- Close combat attack/CAS.
- Naval gunfire.
- No fire areas.

Use Appropriate Movement Techniques and Formations

5-83. The enemy situation determines which of the three movement techniques to use. Using overwatch is preferred and METT-TC dependent. Vary movement techniques to meet changing situations.

Maintain Dispersion in Open Terrain

5-84. When enemy contact is possible and manpower permits, one team should be well forward and a security team should provide overwatch. Assign duties for the patrol's movement. Security teams maintain visual contact, but the distance between them should be such that the entire patrol does not become engaged if contact is made. Patrols should distribute their formations as necessary to gain better observation to the flanks. Although widely spaced, scouts must retain their positions relative to one another when in a wedge formation. Only in extreme situations should the file formation be used in the open.

Assign Responsibilities and Positions

5-85. The lead elements must secure the front along with assuming responsibility for navigation. For a long movement, the patrol leader may rotate the responsibilities of the lead elements. The elements in the rear conduct rear security. Leaders should move inside the formation where they can best maintain control of the patrol.

Use Control Measures

5-86. During movement, leaders use control measures (such as head counts, rally points, or phase lines) to maintain the patrol's effectiveness and security. Practice the platoon's SOP for actions on contact with inferior and superior forces so that the patrol's reaction to contact is a reflex action.

Plan for Contact

5-87. Leaders maneuver the patrol to ensure that enemy contact is made with the smallest element possible. They plan formations based on expected enemy actions.

DISMOUNTED MOVEMENT FORMATIONS

5-88. Every scout has a standard position within a dismounted movement formation. Soldiers can see their team leader. Leaders control their squads using hand and arm signals and intra-squad/team communications. Formations also provide 360-degree security and allow units to give the majority of their firepower to the flanks or fronts in anticipation of enemy contact. Using formations also gives the scout squad the ability to react to various forms of enemy contact and positions personnel where they are needed to perform the right task.

5-89. Dismounted scout squads, sections, and platoons could use up to seven combat movement formations that are grouped into two different categories: formations with one lead element, and formations with more than one lead element. The common formations that dismounted scouts utilize during reconnaissance and security missions are the:

- File.
- Wedge.
- Modified Wedge/Rolling T.
- Diamond.

5-90. Scouts could also use the line, vee, box, or echelon formation types when conducting dismounted movements with the platoon. It is important for leaders to maintain flexibility in their formations and use the best primary formation in regards to the anticipated enemy threat in the scout platoon's AO. Figure 5-17, page 5-34, displays the characteristics, advantages, and disadvantages of the primary formations.

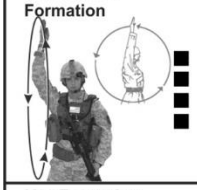
NAME / FORMATION / SIGNAL (IF APPLICABLE)	CHARACTERISTICS	ADVANTAGES	DISADVANTAGES
Line Formation 	- All elements arranged in a row - Majority of observation and direct fires oriented forward; minimal to the flanks - Each subordinate unit on the line must clear its own path forward - One subordinate designated as base on which the other subordinates cue their movement	Ability to: - Generate fire superiority to the front - Clear a large area - Disperse - Transition to bounding overwatch, base of fire, or assault	- Control difficulty increases during limited visibility and in restrictive or close terrain - Difficult to designate a maneuver element - Vulnerable assailable flanks - Potentially slow - Large signature
Column/File Formation 	- One lead element - Majority of observation and direct fires oriented to the flanks; minimal to the front - One route means unit only influenced by obstacles on that one route	- Easiest formation to control (as long as leader can communicate with lead element) - Ability to generate a maneuver element - Secure flanks - Speed	- Reduced ability to achieve fire superiority to the front - Clears a limited area and concentrates the unit - Transitions poorly to bounding overwatch, base of fire, and assault - Column's depth makes it a good target for close air attacks and machine gun beaten zone
Vee Formation 	- Two lead elements - Trail elements move between the two lead elements - Used when contact to the front is expected - "Reverse wedge" - Unit required to two lanes/routes forward	The ability to: - Generate fire superiority to the front - Generate a maneuver element - Secure flanks - Disperse - Transition to bounding overwatch, base of fire, or assault	- Control difficulty increases during limited visibility and in restrictive or close terrain - Potentially slow
Box Formation 	- Two lead elements - Trail elements follow lead elements - All-around security	Same as vee formation advantages	Same as vee formation disadvantages
Wedge Formation 	- One lead element - Trail elements paired off abreast of each other on the flanks - Used when the situation is uncertain	The ability to: - Control, even during limited visibility, in restrictive terrain, or in close terrain - Transition trail elements to base of fire or assault - Secure the front and flanks - Easy transition to line and column	- Trail elements are required to clear their path forward - Frequent need to transition to column in restrictive, close terrain
Diamond Formation 	- Similar to the wedge formation - Fourth element follows the lead element	Same as wedge formation advantages	Same as wedge formation disadvantages
Echelon Formation 	- Elements deployed diagonally left and right - Observation and fire to both the front and one flank - Each subordinate unit on the line clears its own path forward	- Ability to assign sectors that encompass both the front and flank	- Difficult to maintain proper relationship between subordinates - Vulnerable to the opposite flanks

Figure 5-17. Formation comparison chart

File

5-91. Platoons often use the file formation in severely restrictive terrain such as dense vegetation, when there is limited visibility and when scouts are inside a building. The file formation provides the dismounted team leader or squad leader the best control of the element, but this formation provides the least amount of security. Scouts generally use this formation when the threat is low and stealth is of importance. Figure 5-18 illustrates the file formation.

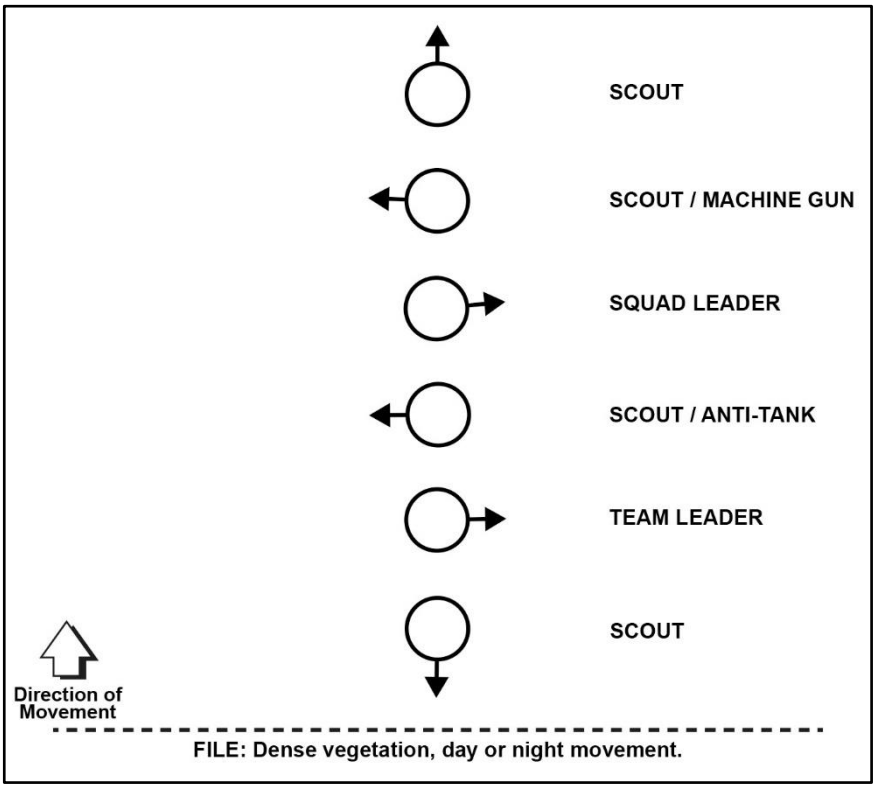


Figure 5-18. File formation

Wedge

5-92. The wedge formation is the scout squad's primary dismounted movement formation and used during reconnaissance and security mission. The interval between scouts in the wedge is normally 10 meters, and scouts adjust their intervals in relation to the terrain. The wedge formation provides the best security and allows for immediate fires in all directions. The wedge also provides good control of the scout, dismounted element for the leaders. Figure 5-19 illustrates the wedge formation.

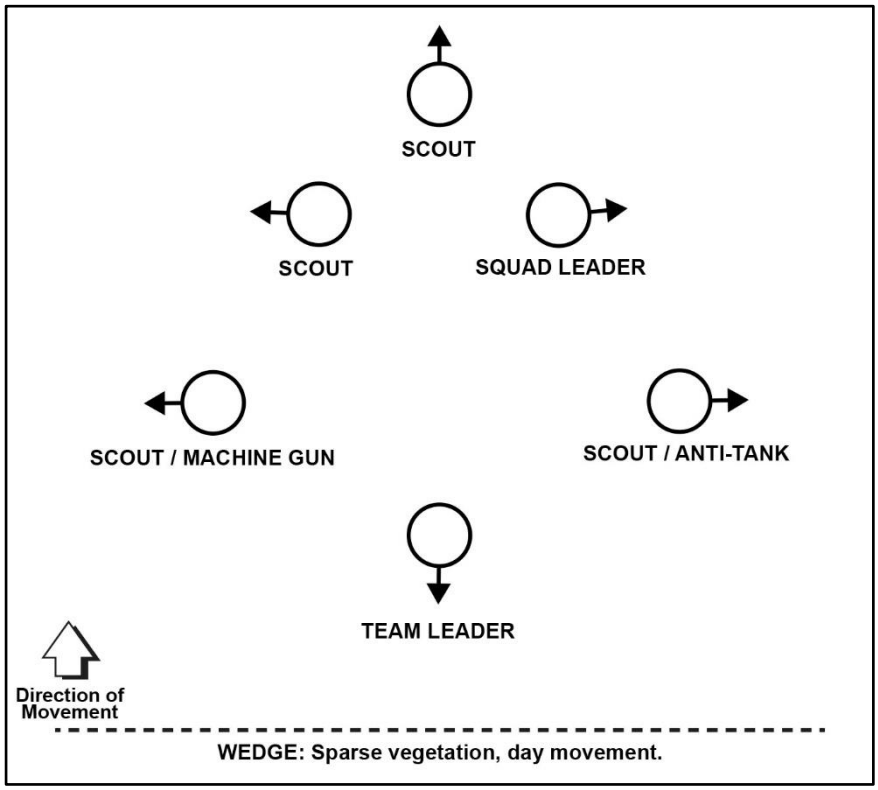


Figure 5-19. Wedge formation

Modified Wedge/Rolling T

5-93. Scouts could modify the wedge formation when terrain dictates, and a common modified formation is the rolling T formation. The rolling T formation still provides good firepower to the front and sides, but places some scouts behind each other like the file. The rolling T formation provides good control for the dismounted elements leaders especially when operating in a sparsely vegetated AO. Figure 5-20 illustrates the modified wedge, rolling T formation.

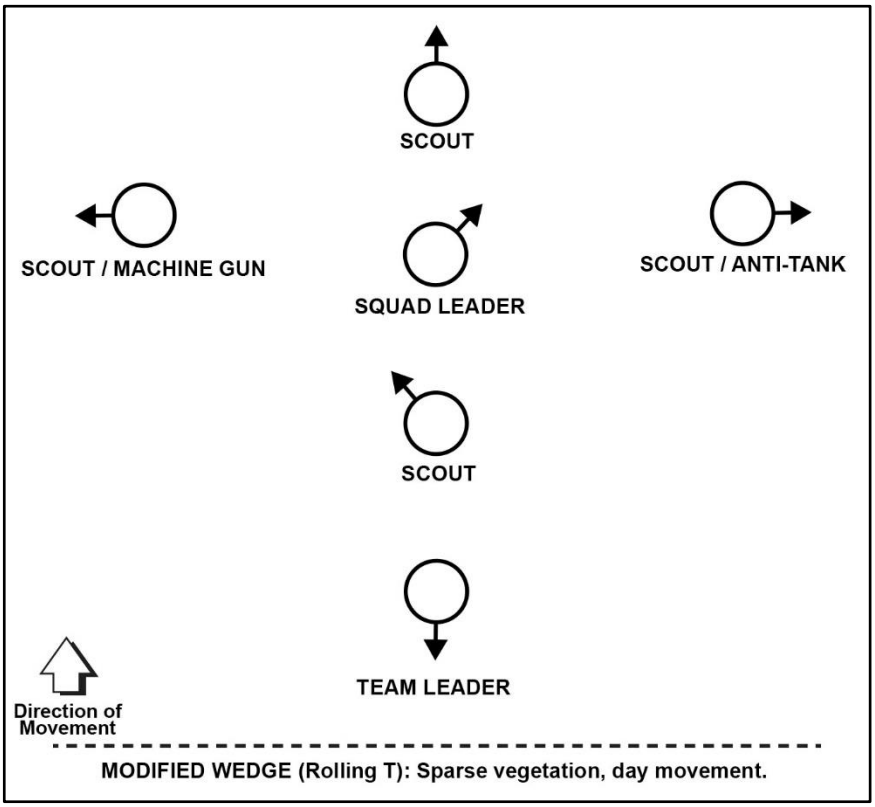


Figure 5-20. Modified wedge/rolling T formation

Diamond

5-94. The diamond formation is very similar to the wedge formation and is a great formation to use when the dismounted element is small, and the element is operating with an increased level of threat such as a built up or urban AO. This formation provides dispersion, 360-degree security, and great control for the dismounted team leader. Figure 5-21 illustrates the diamond formation.

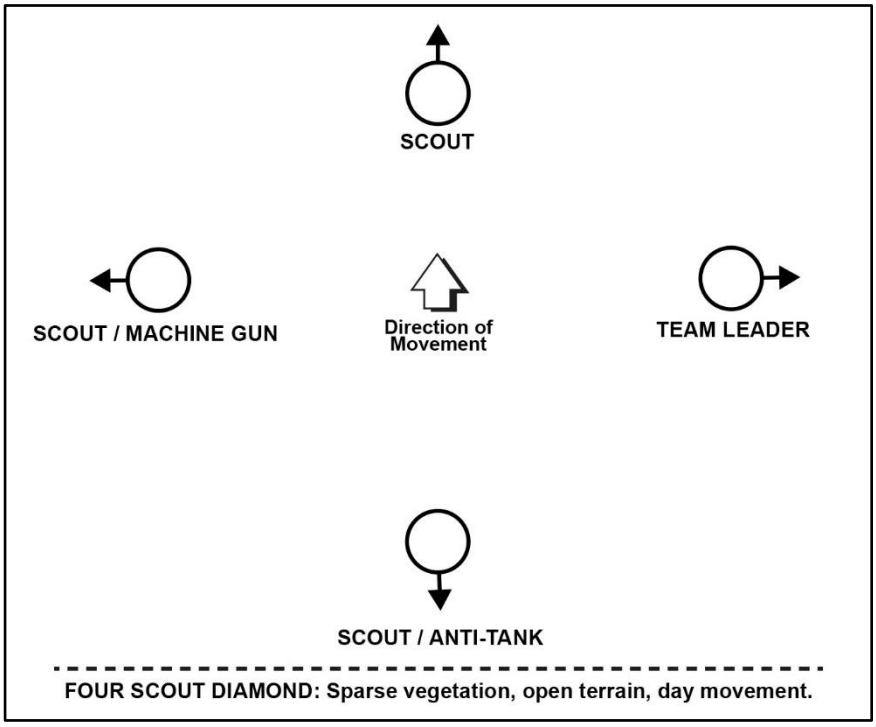


Figure 5-21. Four-scout diamond formation

SECURITY HALTS

5-95. During short halts, team members drop on one knee, face out, and freeze in place. The security halt should not exceed five minutes. If the halt exceeds five minutes, the team should move to the prone position. For extended halts, team members may sit with their feet facing outward and shoulders touching (see figure 5-22). This aids quick and quiet communication, and guarantees all-round security at all times. This technique offers the smallest signature and it is the most difficult to detect and is best used in dense vegetation.

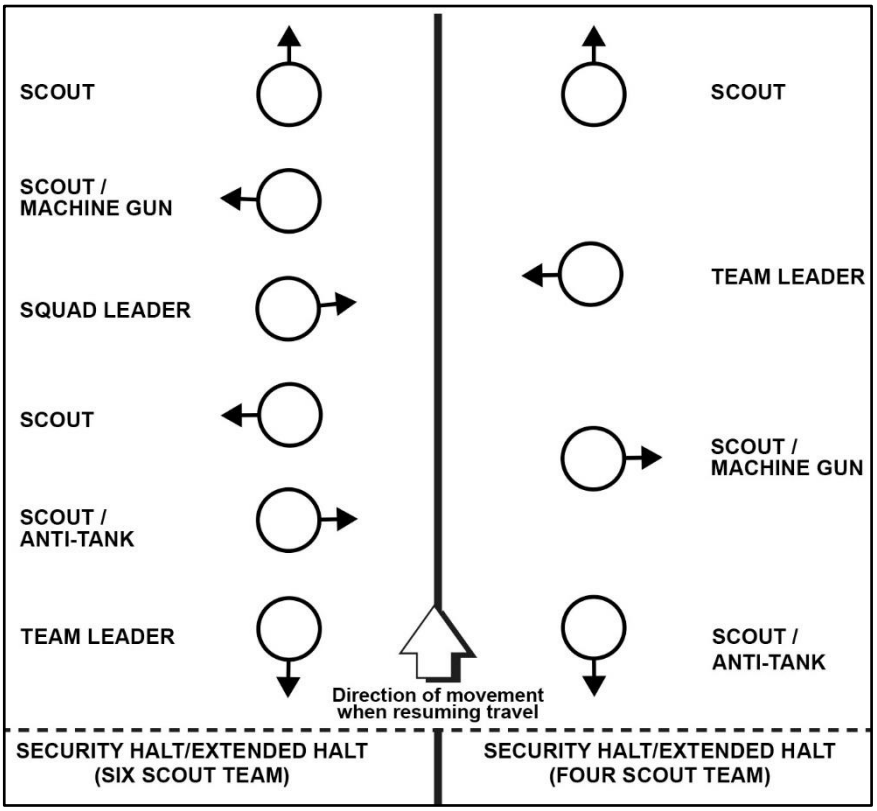


Figure 5-22. Security halt

ACTIONS AT DANGER AREAS

5-96. A danger area is one that increases chance of detection or a direct fire engagement. When moving, the patrol tries to avoid danger areas if possible. In many situations, however, the patrol must cross danger areas to continue the mission. Typical danger areas are the following:

- Known enemy positions.
- Roads and trails.
- Streams.
- Open areas.
- Urban environments.

OPERATIONAL CONSIDERATIONS

5-97. Specific plans are made before crossing danger areas. These plans are very similar to actions during mounted operations; however, they require more practice and rehearsal because a dismounted patrol does not have the same mobility, protection, and firepower to extract itself should it encounter a threat. In addition, plans are made for crossing unexpected danger areas; these can be modified quickly to fit the situation.

5-98. The patrol uses bounding overwatch or variations of it to cross a danger area. The leader designates procedures the patrol uses based on the time available, the size of the patrol, the size of the danger area, the fields of fire into the area, and the amount of security they can provide. A small patrol may cross all at once, in pairs, or one scout at a time. A large patrol normally crosses its subordinate elements one at a time. As each element crosses, it moves to an overwatch position or to the far side rally point until told to continue movement.

5-99. To cross a danger area, a patrol must take these actions:

- Designate near side and far side rally points.
- Secure the near side.
- Secure the far side.
- Cross the danger area.

5-100. Securing the near side may involve nothing more than observing it. In some places; however, it may involve posting security teams far enough out on both flanks and to the rear of the crossing point to give warning of an approaching enemy element and to overwatch the crossing of the rest of the patrol (see figure 5-23).

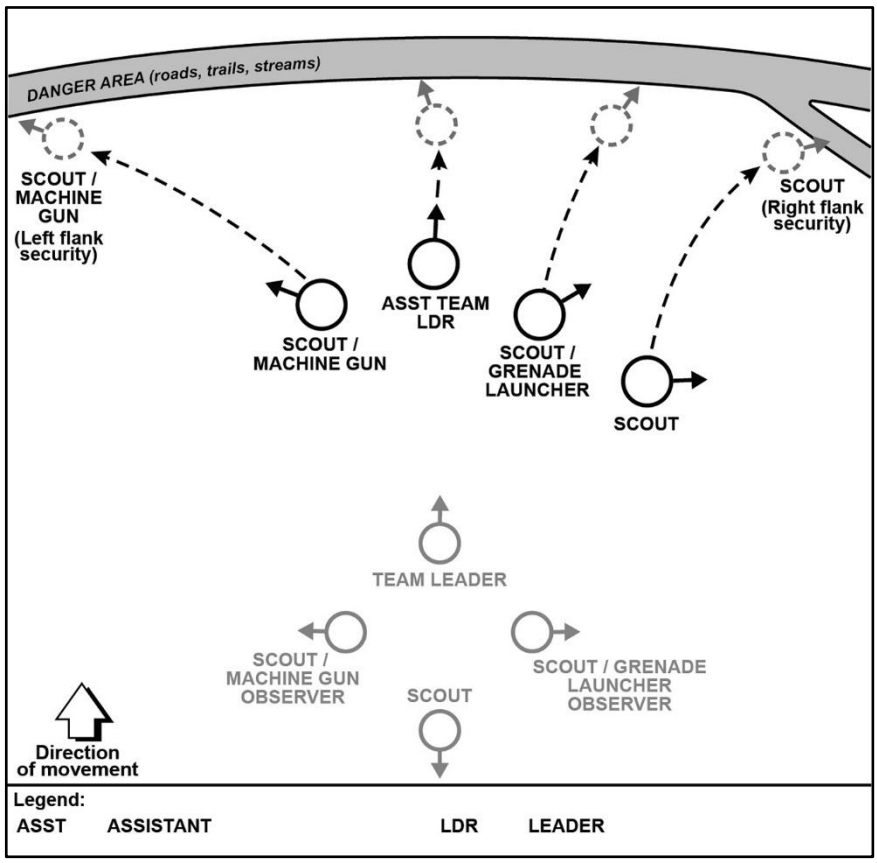


Figure 5-23. Securing the near side of a danger area

5-101. Once flank and rear security elements position, the danger area is quickly crossed by a team that then reconnoiters and secures the far side (see figure 5-24, on page 5-42). Thermal sights, if available, are able to scan and detect threats under moderate concealment due to their heat signatures. The area secured on the far side must be large enough for the entire patrol to occupy. Prior to crossing, the patrol leader issues a five-point contingency plan with detailed engagement criteria to the patrol. When the team leader is sure the far side is secure, they send two scouts back to signal the rest of the patrol to cross. As the near side elements begin to cross the danger area, the rest of the patrol is scanning with weapons and ready for possible enemy fire. When the patrol has crossed the danger area, the security teams cross and rejoin the patrol (see figure 5-25 on page 5-43).

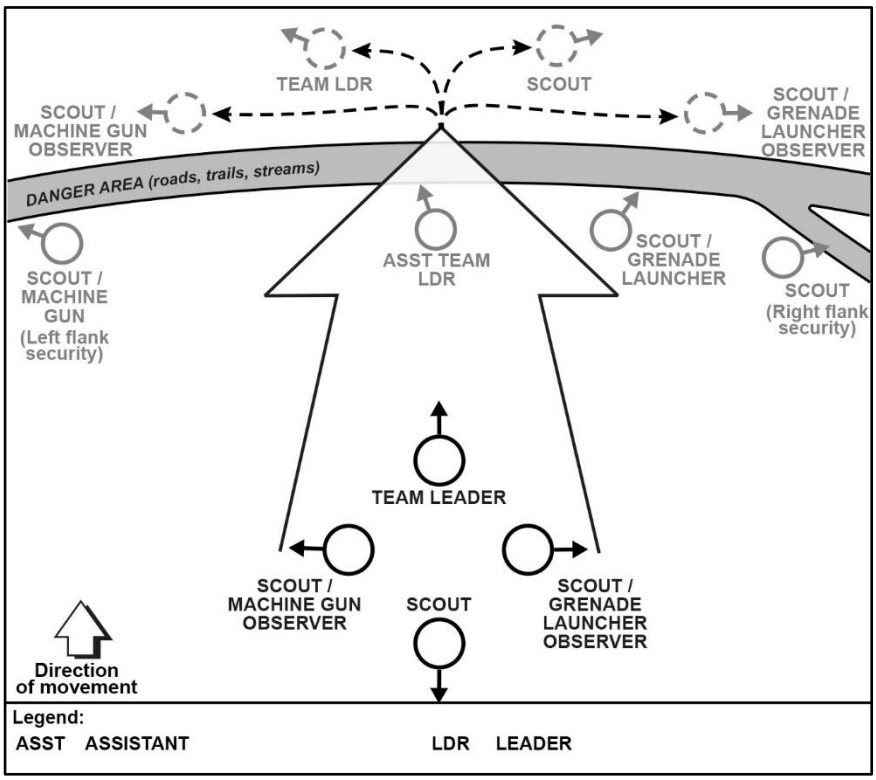


Figure 5-24. Securing the far side of a danger area

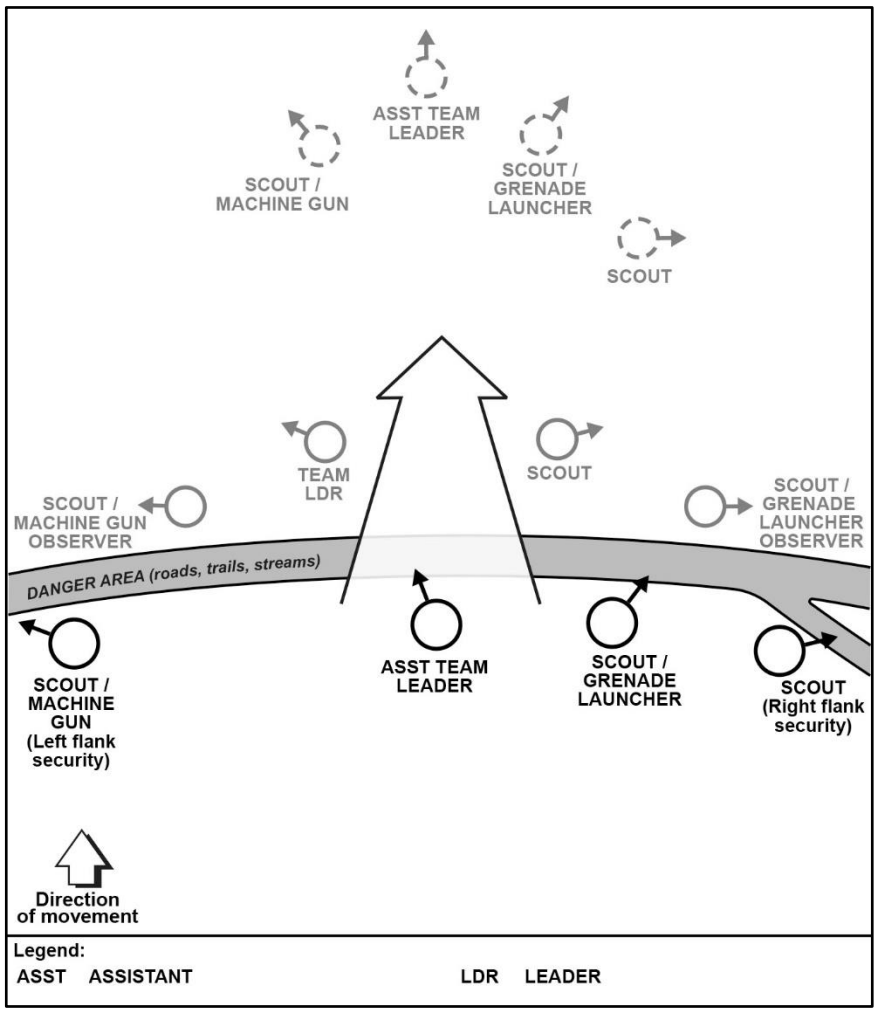


Figure 5-25. Crossing the danger area

SCROLL TO THE ROAD TECHNIQUE

5-102. The lead team member identifies the danger area and moves across placing their left or right shoulder toward the danger area (see figure 5-26). The second team member faces in the opposite direction from the lead team member. This gives security in both directions. Each member crosses in the same manner.

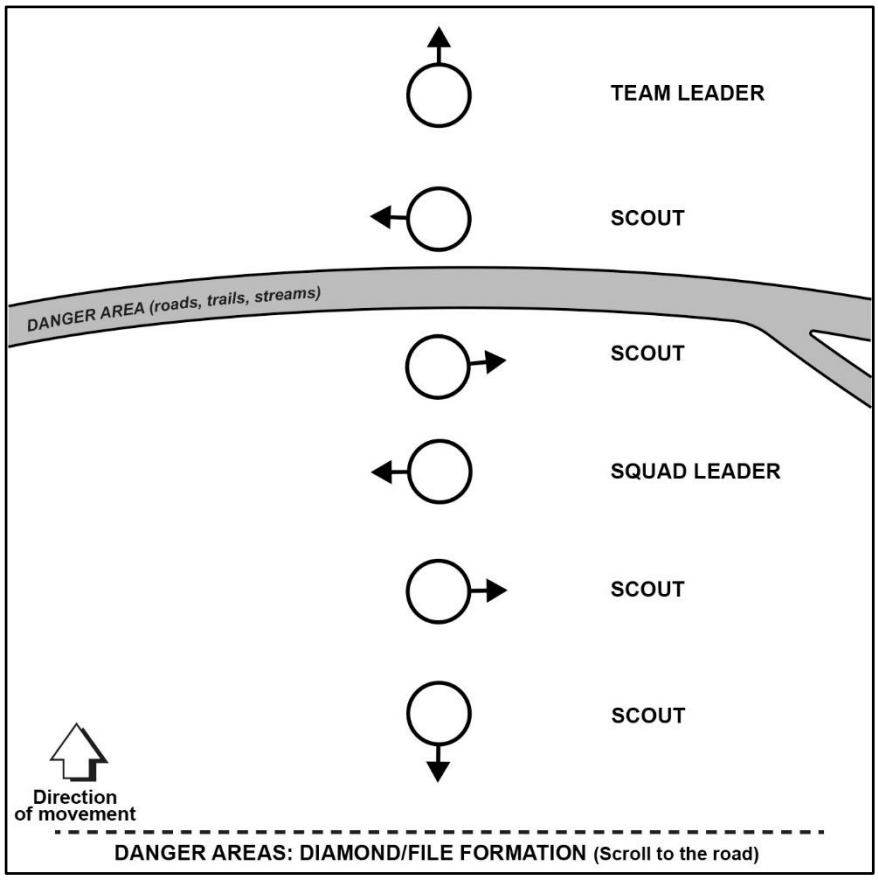


Figure 5-26. Scroll to the road technique

SMALL OPEN AREA TECHNIQUE

5-103. When crossing a small open area, the team uses the contour or detour bypass method (see figure 5-27). They avoid crossing directly through the open area, if possible.

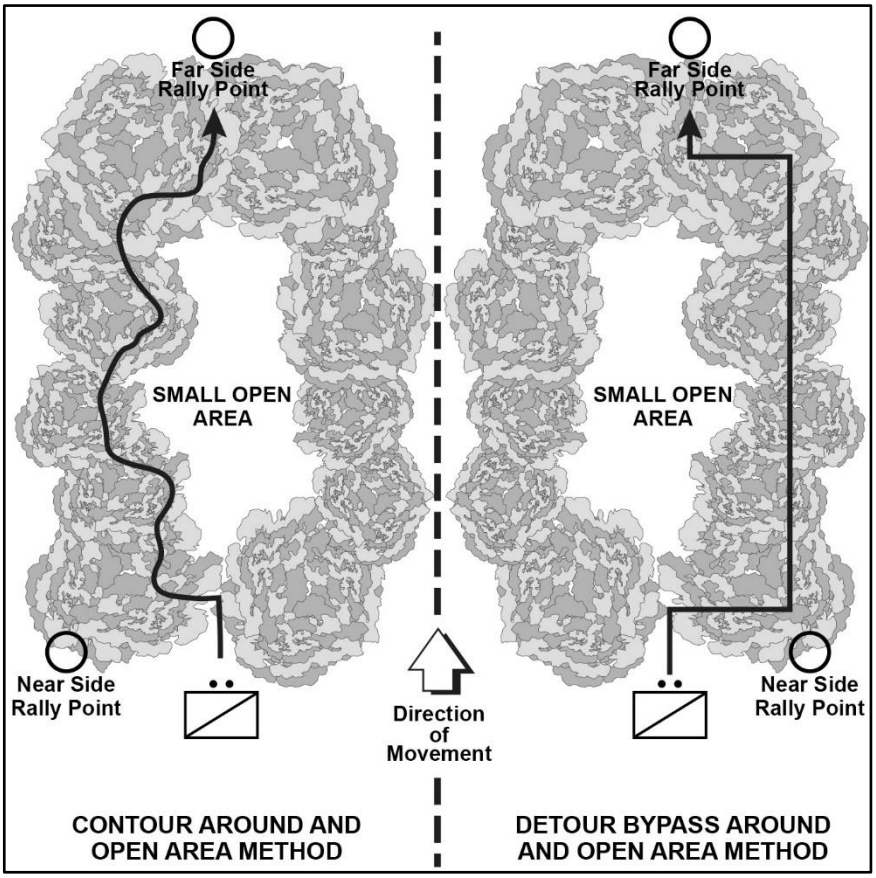


Figure 5-27. Crossing a small open area

BREAK CONTACT

5-104. The team breaks contact as soon as possible, since it lacks assets to stay and fight. METT-TC determines which drill to execute.

BREAK CONTACT (FRONT)

5-105. The team executes fire and movement by two- or three-scout teams until contact with the enemy is broken. When contacted from the front, the senior observer and another observer return fire with one full magazine each. An observer and the team leader move to a position to provide support for the withdrawal of the senior observer

and observer. Once the senior observer and observer have fired a complete magazine, team leader and observer begin firing, covering the withdrawal of the senior observer and observer to the next firing position. The process of fire and movement continues until contact is broken (see figure 5-28 and figure 5-29). The RTO and assistant team leader may place a claymore with a time-delay fuse to slow the enemy. It is placed in the position where the RTO was when the team began the break contact drill. When using a claymore mine in a battle drill, the mine is dual-primed (electrically and time-delay fuse).

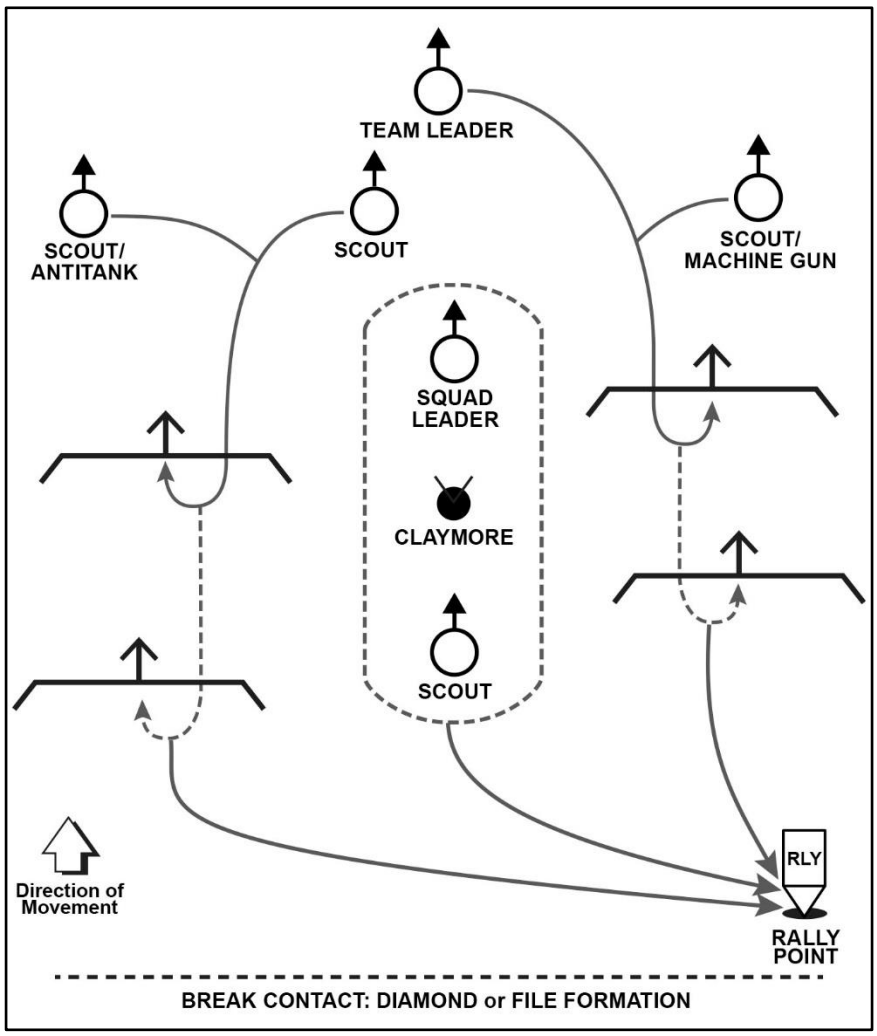


Figure 5-28. Break contact (front)

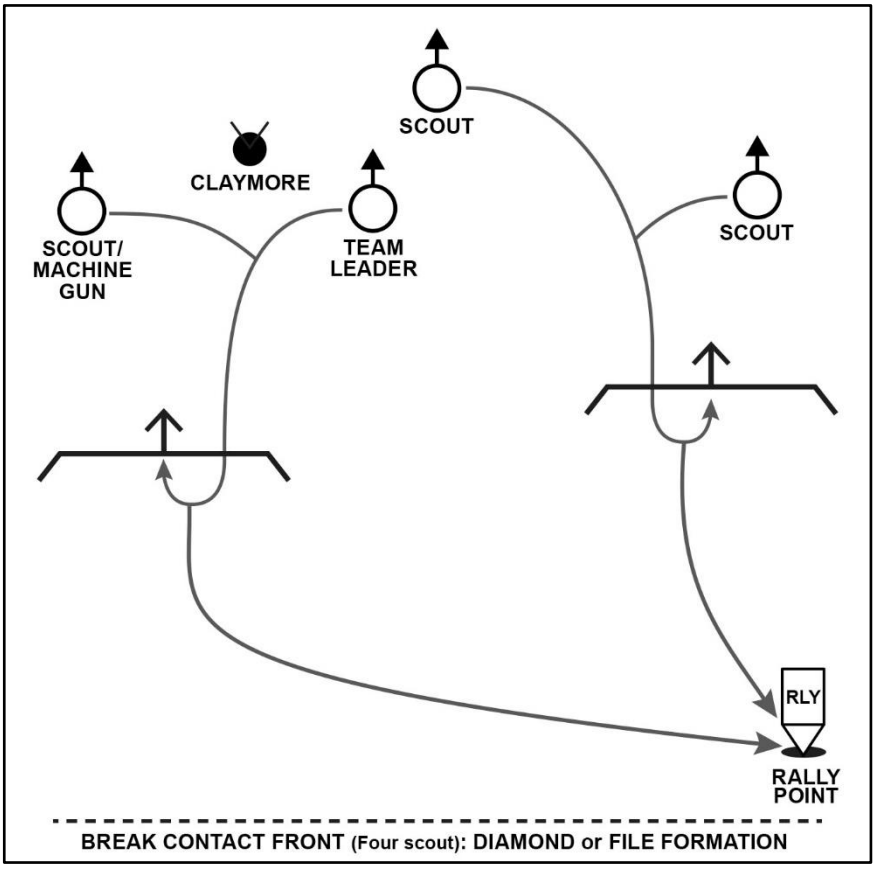


Figure 5-29. Break contact (front) (four scout)

5-106. Australian peel is a method to break contact from the front or rear. This technique is most effective while the team is in a file formation, the vegetation is dense, or during limited visibility. The second through the sixth team members take one or two steps to the left or right, depending on the terrain. One member at a time passes back through the formation (see figure 5-30, on page 5-48).

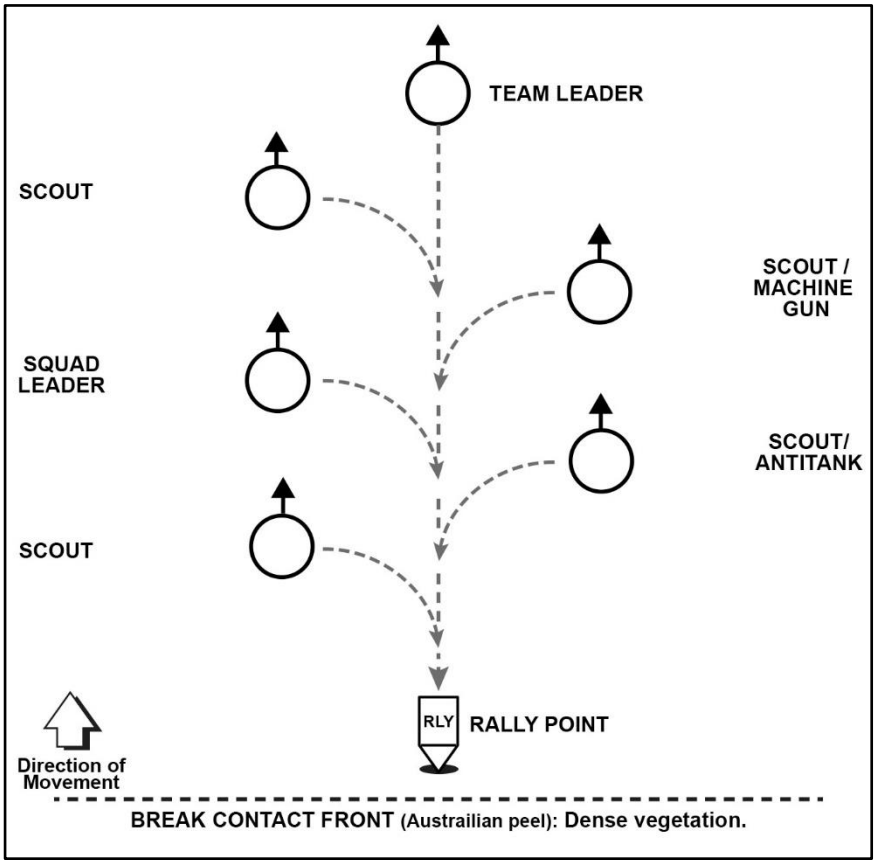


Figure 5-30. Break contact (Australian peel)

5-107. When contacted from the front, the first member fires a full magazine (with the selector switch on full automatic or three round burst). Every other member does the same, one at a time. Each scout waits until the scout in front of them is even or left or right before firing a weapon. Individuals move straight back through the inside of the formation, avoiding masking the fires of the members providing covering fire. The assistant team leader or the last member throws a hand grenade (fragmentary). During limited visibility, the battle drill may be executed without firing weapons. In this event, the battle drill is still executed in the same sequence. Upon completion of the first iteration, the team can emplace a claymore mine with a time-delay fuse to slow the enemy. The team initiates fires only if it has been compromised. If the enemy element breaks contact and ceases fire, the team should cease fire immediately to prevent revealing their new position.

5-108. If contact occurs from the rear, the battle drill is executed in the reverse sequence. The first scout is the last to throw a hand grenade (fragmentary). Once the battle drill is completed, the team moves to the designated rally point.

BREAK CONTACT (LEFT OR RIGHT)

5-109. If a patrol finds itself in a threat ambush, it must get out of the kill zone or face destruction. Team members in the kill zone, without order or signal, immediately return fire, throw smoke, and move quickly out of the kill zone by the safest route (see figure 5-31 and figure 5-32, on page 5-50). There is no set procedure for this; scouts must decide the best way for their situation. A team may assault through a near ambush. Soldiers not in the kill zone fire to support the withdrawal or hasty assault of the men in the kill zone.

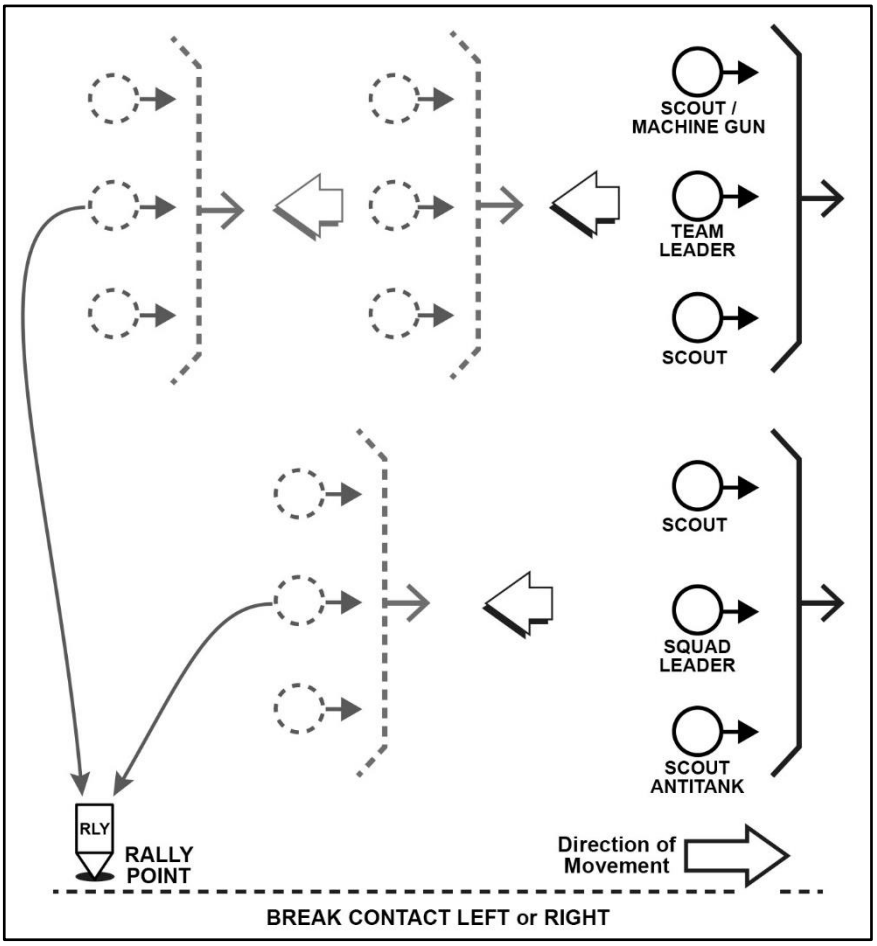


Figure 5-31. Break contact (left or right)

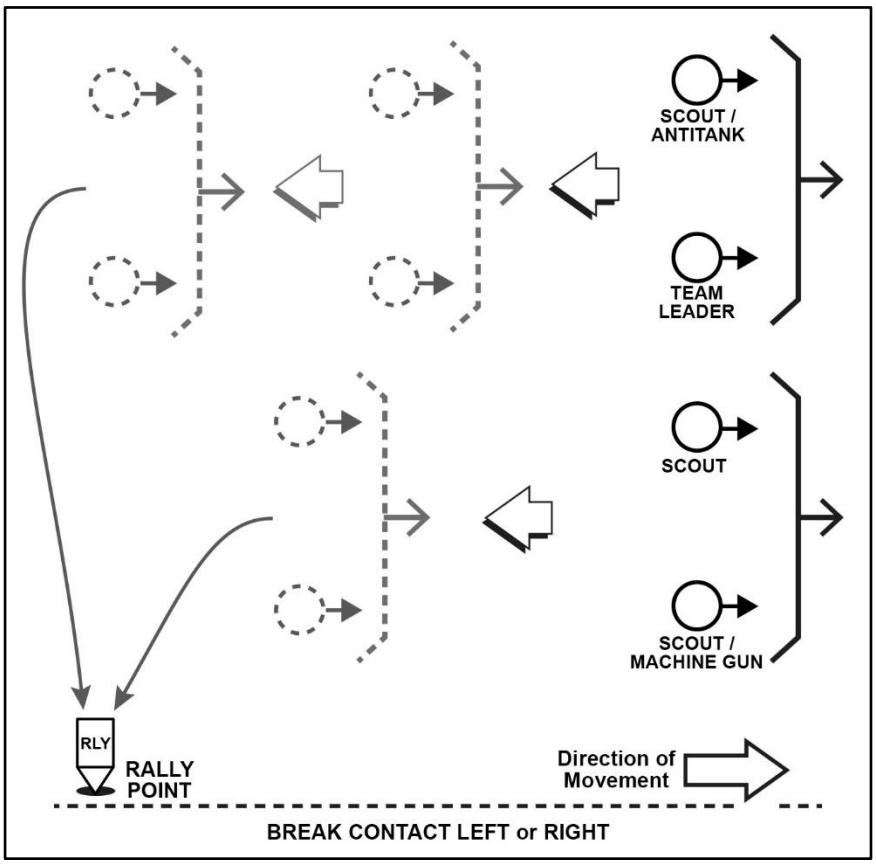


Figure 5-32. Break contact (left or right) (four scout)

TRACKING METHODS

5-110. The scout platoon may utilize tracking to follow the trail of a specific enemy force. Tracking is one of the best sources of combat information. Indicators may be so fresh that the tracker becomes an enemy stalker, or they find information that helps the commander plan a successful operation.

ORGANIZATION

5-111. When the patrol requires the use of tracking, the patrol leader assigns the task to only one squad. The remaining squads provide security or act as a reserve if making contact. They are—

- Squad leader—carries the radio, is the primary navigator, and has overall responsibility for accomplishing the mission, organizing the force, and setting each Soldier's load.

- Primary tracker—focuses on following the main trail left by the tracked group.
- Security—observes to the front and flanks of the trail and provides security for the primary tracker. Usually, this is the assistant squad leader.
- Rear security—provides security for the rear by looking back along the trail at irregular intervals to keep from being ambushed from behind. If the squad makes enemy contact to the front or flank, the rear security Soldier is in the best position to support those in contact. Recording the traveled azimuths to assist in navigation is also part of the duties.

CONCEPT OF TRACKING

5-112. A tracker has patience and moves slowly, quietly, and steadily while observing and interpreting available indicators. Reckless speed may result in overlooking important signs, losing the trail completely, or blundering into an enemy force. Attention to detail, common sense, logic, and knowledge of the environment and enemy habits allow Soldiers to obtain valuable information from signs in the AO. Any indicator that the tracker discovers falls into one or more of the following concepts:

- Displacement. Displacement takes place when anything moves from its original position. A well-defined footprint in soft, moist ground, or bent branches and rearward facing footprints are a good example of displacement. By studying this indicator, the tracker can determine several important facts. The print may indicate the direction of travel, or a print left by worn footwear or by a barefoot person may indicate lack of proper equipment.
- Stains. A stain occurs when any substance from one organism or article smears or deposits onto something else. The best example of staining is blood from a profusely bleeding wound. They are often in the form of spatters or drops but are not always on the ground. Blood may smear on leaves, twigs, or bushes. Staining can also occur when muddy footgear is dragged over grass, stones, and shrubs. Staining and displacement combine to indicate movement and direction. Crushed leaves may stain rocky ground that is too hard to leave footprints. Roots, stones, and vines may stain where moving feet crush leaves or berries. In some instances, it may be hard to determine the difference between staining and displacement since both terms can apply to some indicators. For example, muddied water may indicate recent movement. Stones in streams may be mud stained from footwear; algae can displace from stones in streams and stain other stones or the bank. Water that collects in footprints in swampy ground is muddy if the tracks are recent. With time, however, the mud settles and the water clears. The tracker can use this information to indicate time. Normally, the mud clears in about one hour. Clearing time, of course, varies with the terrain.
- Weather. The natural elements can aid or hinder the tracker. Wind, snow, rain, or sunlight may completely erase indicators. By studying the effects of weather on indicators, the tracker can determine the age of the clue. For example, when bloodstains are fresh, they are bright red. Air and sunlight change the color of blood to a deep ruby red that then turns into a dark brown

crust when the moisture evaporates. Scuff marks on trees or bushes darken with time; sap oozes and then hardens when it makes contact with the air. Footprints are greatly affected by weather and by carefully studying this weather process, the tracker can determine the approximate age of the footprint. If particles are just beginning to fall into the print, the tracker should become a stalker. If the edges of the print are dry and crusty, the prints are probably at least an hour old. Weather indicators vary with the terrain and should only be thought of as a guide.

- Litter. A poorly trained or poorly disciplined force moving over a piece of terrain is likely to leave a clear trail of litter. Gum, ration or candy wrappers, ration cans, cigarette butts, remains of fires, or even piles of human feces are signs of recent movement. Conversely, spit bottles are generally American litter. The tracker considers weather when estimating the age of such litter. Rain flattens or washes litter away and turns paper into pulp. Ration cans exposed to weather rust first at the exposed edge of the opening and then moves toward the center. The last rain or strong wind can be the basis for a time frame.
- Camouflage. Camouflage applies to tracking when the enemy employs techniques to confuse or slow down the tracker. Walking backward to leave confusing prints, brushing out trails, and moving over rocky ground or through streams are examples of techniques they employ to confuse the tracker. If the travelling party attempts to throw off the tracker by walking backward, the footprints are deepened at the toe, and soil appears scuffed or dragged in the direction of movement. By following carefully, the tracker normally finds a turnaround point.
- Immediate-use intelligence. The tracker constantly asks questions and finds indicators that help form a picture of the enemy. The tracker avoids reporting interpretations as facts. Including the indications of certain things should also be in the report. Immediate-use intelligence is information concerning the enemy that can be put to use right away. It helps gain surprise, and keeps the enemy off balance or from escaping the area entirely.

TYPES OF RALLY POINTS

5-113. The most common types of rally points are initial, en route, objective, reentry, near- and far-side. Soldiers must know which rally point to move to at each phase of the patrol mission. They should know what actions are required there and how long they are to wait at each rally point before moving to another. The following are descriptions of these five rally points:

- Initial rally point. An initial rally point is a place inside of friendly lines where a unit may assemble and reorganize if it makes enemy contact during the departure of friendly lines or before reaching the first en route rally point. It is normally selected by the commander of the friendly unit.
- En route rally point. The leader designates en route rally points based on the terrain, vegetation, and visibility.

- Objective rally point. Objective rally point is a point out of sight, sound, and small-arms range of the area. It normally is located in the direction the platoon plans to move after completing its actions on the objective.

Note. Isolated Soldiers able to function on their own make an attempt to move to the objective rally point, or a rally point designated in the patrol plan.

- Reentry rally point. The reentry rally point is located out of sight, sound, and small-arms weapons range of the friendly unit through which the platoon returns. This also means the reentry rally point should be outside the final protective fires of the friendly unit. The platoon occupies the reentry rally point as a security perimeter.
- Near- and far-side rally points. These rally points are on the near and far side of danger areas. If the platoon makes contact while crossing the danger area and control is lost, Soldiers on either side move to the rally point nearest them. They establish security, reestablish the chain of command, determine their personnel and equipment status, continue the patrol mission, and linkup at the objective rally point.

FIVE POINT CONTINGENCY PLAN

5-114. A five-point contingency plan is issued every time a leader or other individual separates from the main body. If a leader is going to conduct a reconnaissance of a hasty fighting position then they would give their five-point contingency plan to the rest of the squad, section, or platoon. This is done so all the members of the platoon understand where the leader is going, who is going with them, and how long they plan to be gone. If the leader fails to return then the platoon knows what actions to take. If either element receives contact then they know what to do for actions on contact, using GOTWA. (See figure 5-33.)

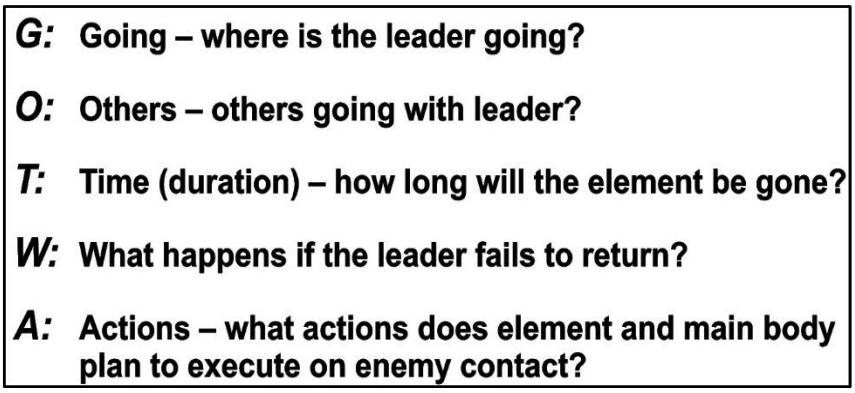


Figure 5-33. Five-point contingency plan

SECTION VI – ACTIONS ON CONTACT

5-115. Actions on contact are a series of combat actions, often conducted simultaneously, taken upon contact with the enemy to develop the situation. Prior to every reconnaissance and security mission, leaders analyze the mission with a focus on the enemy threat. The platoon leader must determine the probability of contact and identify locations where contact is most likely to occur. To do this, they use information from all available assets, including UASs, ground surveillance system reports on Force XXI Battle Command, brigade and below, information collected by dismounted patrols, and intelligence from the S-2. The leaders are then able to plan for contact and determine how to employ movement techniques, battle drills, and TTP to avoid chance contact.

5-116. The scout platoon should execute actions on contact using a logical, well-organized process of decision making and action entailing these five steps:

- Deploy and report.
- Evaluate and develop the situation.
- Choose a COA.
- Execute the selected COA.
- Recommend a COA to the commander.

5-117. The commander should specify actions on contact for the scout platoon. These specific instructions should include engagement criteria and desired COA, based on the size and activity of the enemy force encountered. By knowing these details ahead of time, the scout can develop the situation more rapidly and arrive at and execute the desired COA. The platoon should strive to make contact with the smallest possible element: the dismounted scout. Visual contact, in which the enemy is observed but the scout remains undetected, is the goal. This gives the platoon the greatest possible flexibility to maneuver and develop the situation.

5-118. When scouts platoons make contact with an enemy obstacle they must treat the obstacle like enemy contact, and assume that the obstacles are observed and covered with enemy direct fire. The steps that make up actions on contact must be thoroughly trained and rehearsed so that the platoon can react instinctively as a team whenever it encounters enemy forces.

5-119. Leaders understand properly executed actions on contact require time at the squad and platoon levels. To develop the situation, a scout platoon may have to execute flanking movements, conduct reconnaissance by fire, or call for and adjust indirect fires. Each of these activities requires time, and the leader balances the time required for subordinate elements to conduct actions on contact with the need for the troop or squadron to maintain momentum.

STEP 1 – DEPLOY AND REPORT

5-120. When a scout makes contact with the enemy, they react to the circumstances of the contact. The section or squad that makes initial visual contact with the enemy deploys to covered terrain that affords good observation and fields of fire. If the scout

receives fire from the enemy, they return fire, but only with the intent of breaking direct fire contact. Scouts want to refrain from being decisively engaged with the enemy and focus on their mission.

5-121. The scout or element in contact sends a contact report to the platoon leader and follows as soon as possible with a SPOTREP using SALUTE. If the scout or element in contact is unable to report or cannot report quickly, another squad in the section must report.

5-122. Scouts that are not in contact temporarily halt in covered terrain, monitor the incoming reports, and plot the situation on their maps. Once they determine that they cannot be influenced by the enemy or are not needed to support the element in contact, they continue their mission with the platoon leader's approval. The platoon leader or PSG relays the contact report to the commander, followed as soon as possible by a SPOTREP and updates.

STEP 2 – EVALUATE AND DEVELOP THE SITUATION

5-123. The scouts next concentrate on defining the current situation. If they have not sent a SPOTREP at this point, they initially focus on getting enough information to send one. If they have not been detected and time is available, the scouts reconnoiter the enemy position, emphasizing stealth, dismounted reconnaissance, and use of such assets as ground surveillance systems and UAS.

5-124. If the enemy is aware of their presence, the scouts use a combination of mounted and dismounted reconnaissance. They conduct dismounted reconnaissance to get detailed information on enemy dispositions. Use mounted reconnaissance to move additional assets into the area to support the element in contact. The platoon leader uses as many available assets as they can to develop the situation. The platoon analyzes and gathers information using surveillance, dismounts, UAS, and indirect fire. Once the platoon leader feels that they have enough information to identify operational considerations, they choose a COA.

STEP 3 – CHOOSE A COURSE OF ACTION

5-125. Developing the situation is a critical step in choosing the correct COA and providing an accurate, timely report to the commander. Once the platoon leader has enough information to make a decision, they select a COA that is within the capabilities of the platoon, that allows the platoon to continue the reconnaissance as quickly as possible, and that supports the commander's concept of the operation. The platoon leader considers various possible COAs, based on well-developed TTP and battle drills, to react appropriately to the types of contact the platoon may encounter. At a minimum, the platoon must rehearse and be ready to execute these potential COAs:

- Disengage from enemy contact.
- Break contact and bypass.
- Maintain contact and bypass.
- Maintain contact to support an attack on an inferior force.

- Conduct an attack against an inferior force.
- Conduct a hasty defense.
- Conduct a RHO.
- Conduct a battle handover, if applicable.

5-126. Once the element in contact develops the situation and the platoon leader has enough information to make a decision, the platoon leader selects a COA. The platoon leader ensures that the COA is within the capabilities of the platoon, that it allows the scouts to continue the reconnaissance as quickly as possible, and that it supports the commander's concept of the operation and intent. The platoon leader considers all available COAs, including those outlined in the following discussion.

DISENGAGE FROM ENEMY DIRECT OR INDIRECT FIRE CONTACT

5-127. The scout platoon cannot conduct its mission if it becomes decisively engaged. If it is engaged, the platoon must have a plan to break direct or indirect fire contact with the enemy. As a general rule, the platoon, section, or squad should disengage from the enemy as soon as direct or indirect fire contact occurs. This allows for continuation of the mission and reduces the chance of any loss of combat power.

5-128. At platoon level, observation posts or patrols gain contact with the enemy, then report and prepare to displace to successive positions. These platoon members should report the enemy contact to the overwatching vehicles and to the platoon leader.

5-129. When the enemy force triggers the observation posts displacement criteria (the point at which the observation posts must displace or risk detection and engagement by the enemy), the observation posts pass off responsibility for tracking the enemy to other observation posts in-depth. The platoon then displaces its observation posts to successive positions in-depth while maintaining contact with the enemy. Patrols request permission to return to the platoon vehicles. When permission has been granted, they use covered and concealed routes back to the vehicle positions and remount the vehicles

5-130. Once the platoon has reported initial contact to higher headquarters and the order to break contact has been given, disengagement should be executed with one section or squad acting as overwatch for the displacing section/squad as it moves. The section or squad that moves first keeps its weapon systems oriented on the enemy as it uses covered and concealed routes to move to a designated rally point that preclude enemy observation and provides cover and concealment. This element may also use on-board smoke generators or obscurant munitions (such as grenades) to cover its movement. The overwatching section or squad provides suppressive fires, both indirect and direct (if necessary), to cover the movement of the displacing section or squad. Mortars can also provide effective and responsive support when elements must break contact. The overwatching section must also employ its dismounts with the Javelin missile system.

5-131. Once the displacing section/squad has arrived at the rally point, it takes up defensive positions and reports its arrival to the overwatch section or squad. The overwatching element then calls for protective fires and uses an alternate covered and concealed route to move to the rally point. When the entire platoon or section has moved

back to the rally point, it consolidates and reorganizes, reports its status to the higher headquarters, and continues the mission. Figure 5-34 illustrates a situation in which a scout platoon breaks contact by sections.

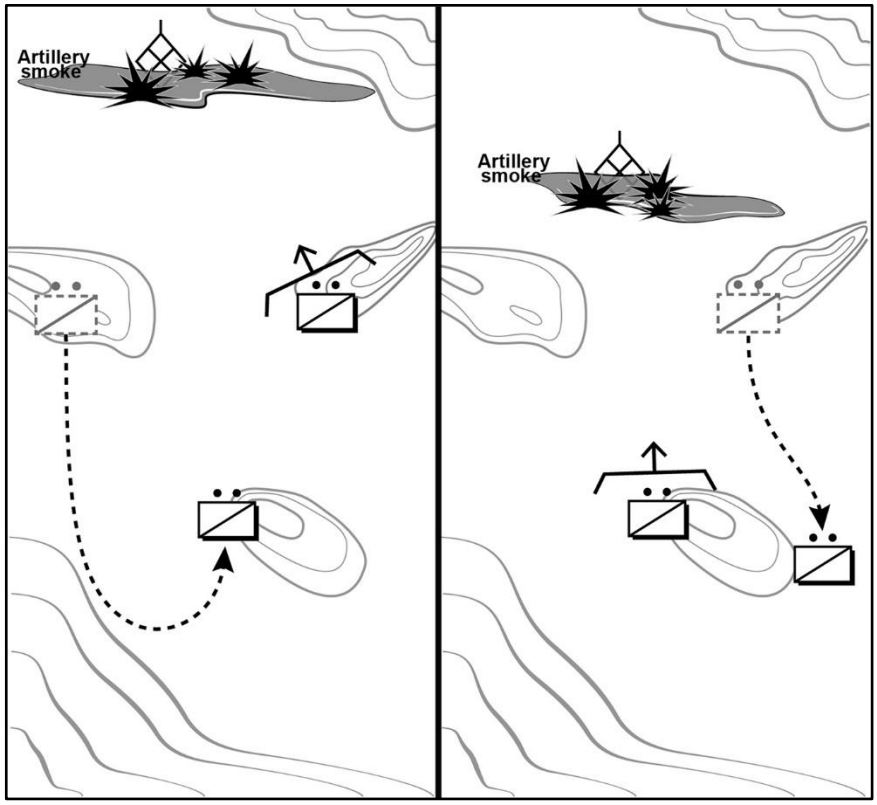


Figure 5-34. IBCT scout platoon disengages from contact

BREAK CONTACT AND BYPASS

5-132. This COA may be selected when the platoon does not have the resources to leave an element in contact and still continue to accomplish its priority reconnaissance tasks. It may also be selected when the platoon has made contact with an enemy force that cannot adversely affect the mission of the platoon's higher headquarters. Because breaking contact is a violation of reconnaissance fundamentals, the platoon leader must be sure that the higher headquarters is informed of and approves this COA (refer to figure 5-35, on page 5-58, and figure 5-36 on page 5-59).

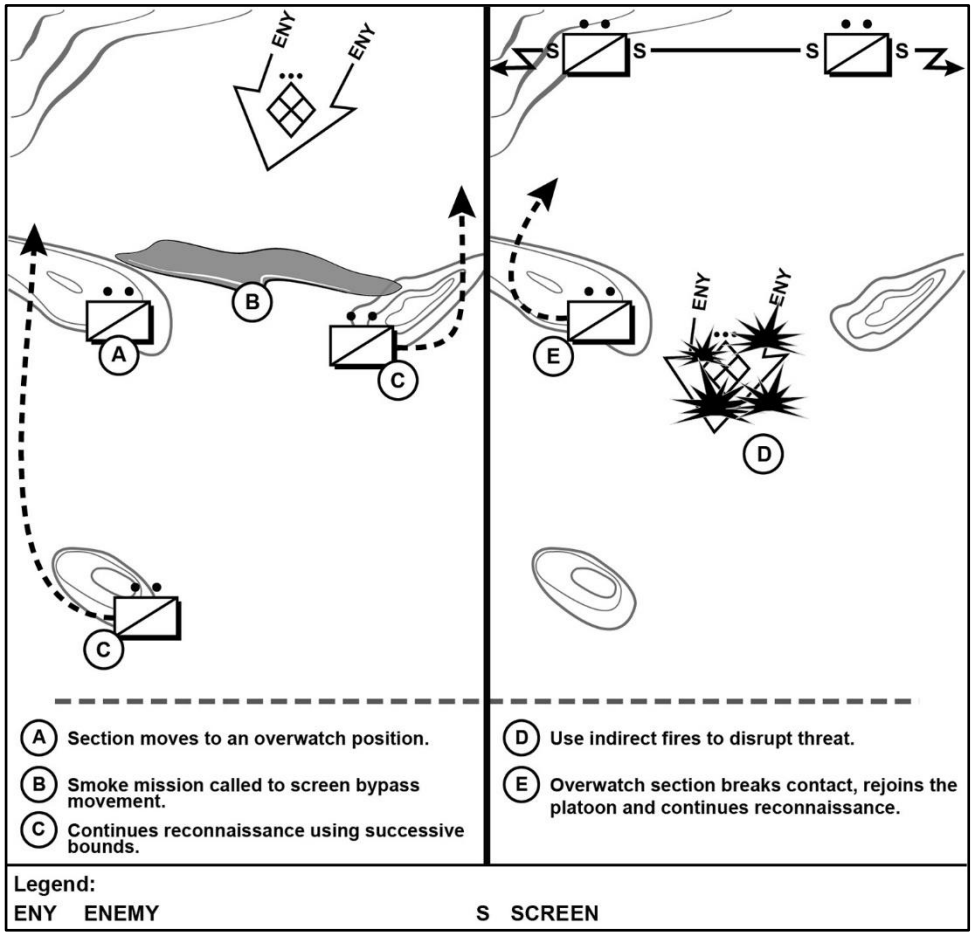


Figure 5-35. IBCT scout platoon breaks contact and conducts bypass

MAINTAIN CONTACT AND BYPASS

5-133. This COA is appropriate when an enemy force, based on its current disposition, is not in a position to influence the platoon's supported commander. An element (normally a section or squad) is left to maintain contact while the rest of the platoon continues the reconnaissance mission. The element that remains in contact maintains visual contact with the enemy and report if the enemy situation changes. The platoon must keep scouts in contact with the enemy unless specifically authorized to do otherwise. Depending on the applicable task organization, the platoon leader must carefully assess METT-TC before selecting this COA. Mission constraints may force the platoon leader to leave one vehicle in contact. If this is the case, the platoon leader must ensure that the vehicle is antitank-heavy (Javelin/TOW). To regain the use of all

assets, the platoon leader continues coordination to execute reconnaissance or to conduct a battle handover of the contact with a follow-on element (see figures 5-36 through 5-38, pages 5-59 and 5-61).

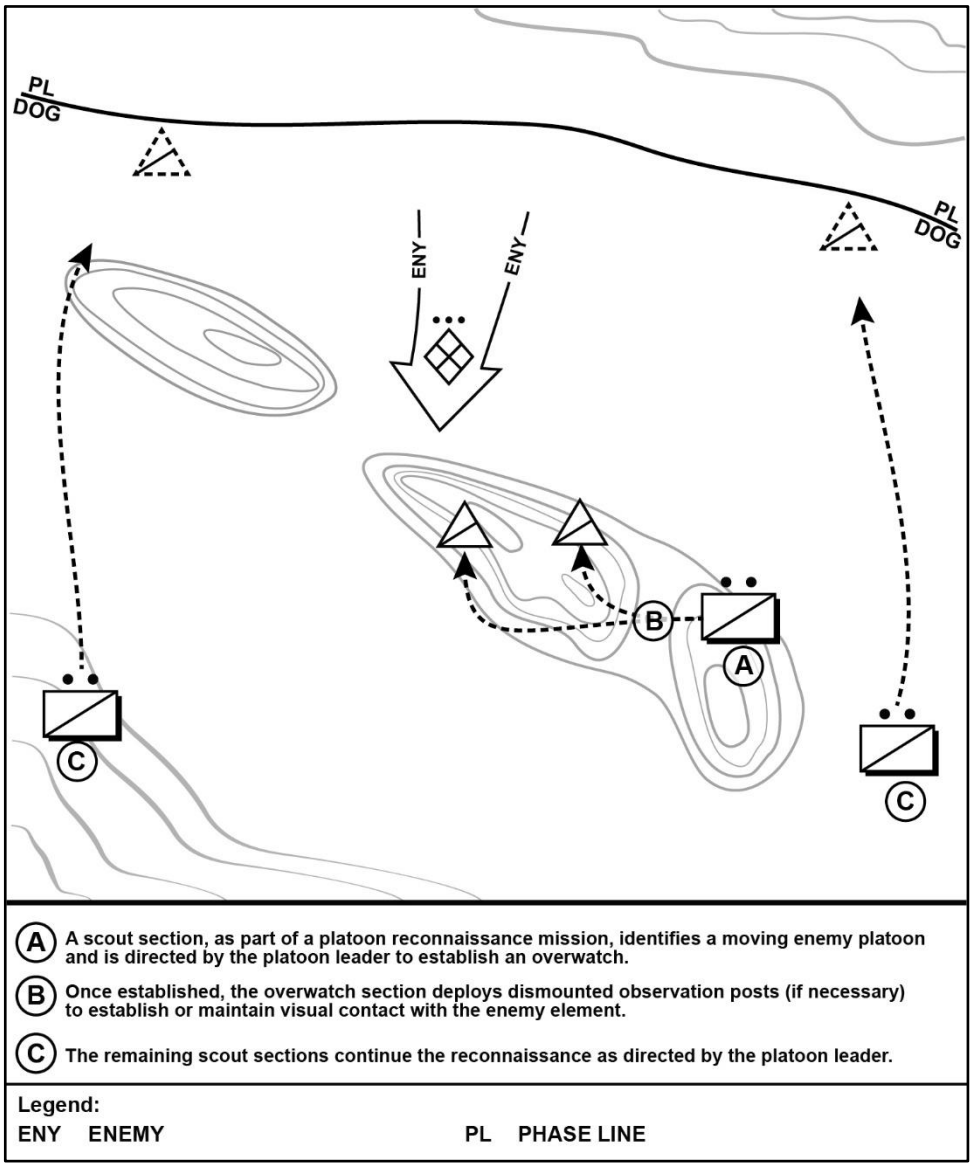


Figure 5-36. Scout platoon maintains contact and conducts bypass (phase I)

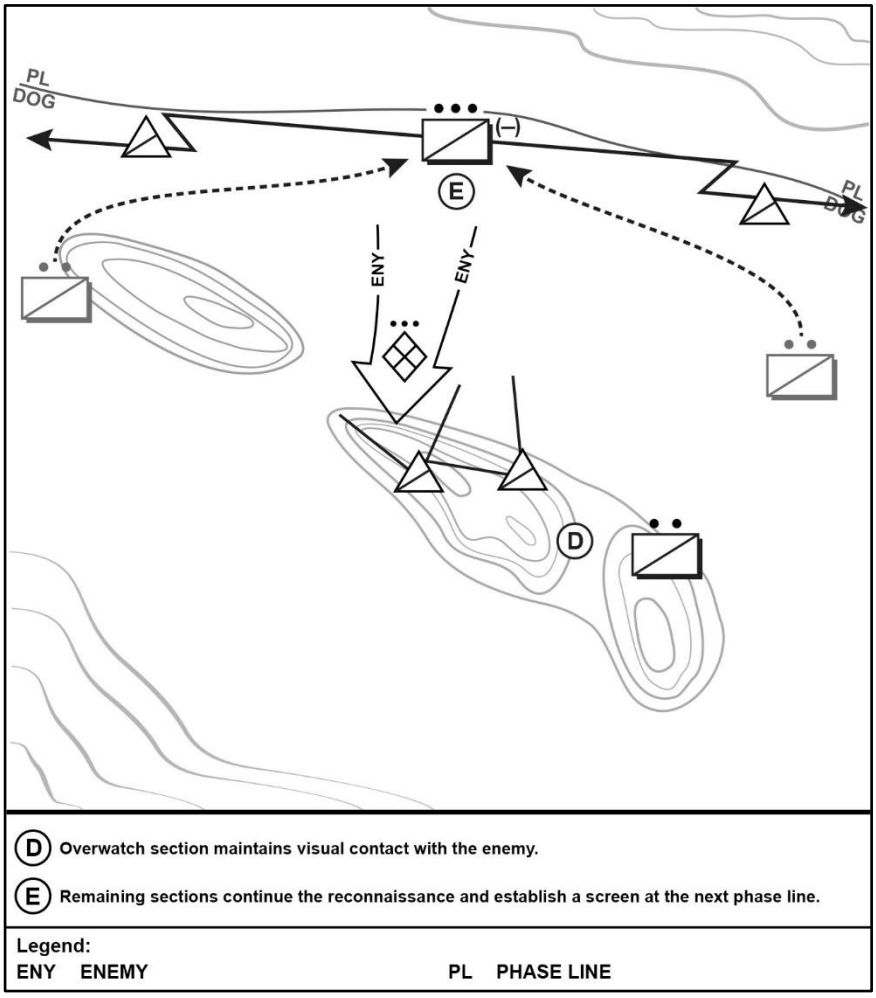


Figure 5-37. Scout platoon maintains contact and conducts bypass (phase II)

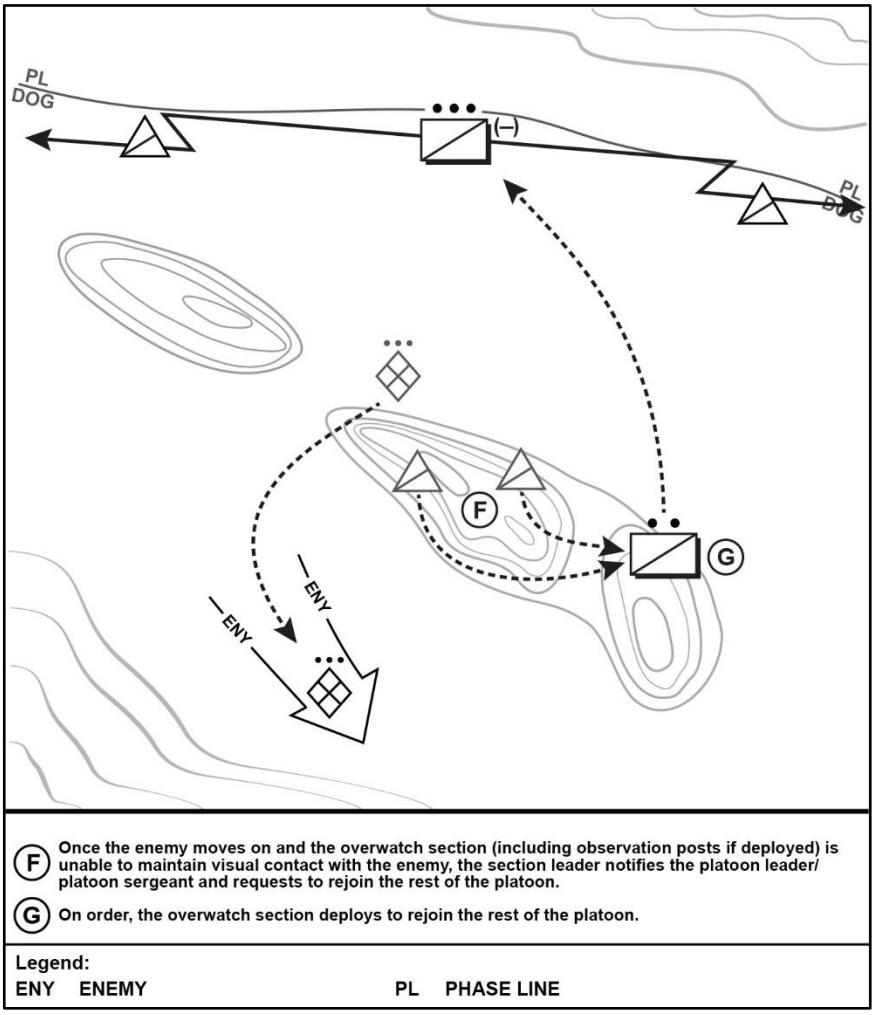


Figure 5-38. Scout platoon maintains contact and conducts bypass (phase III)

STEP 4 – EXECUTE THE SELECTED COURSE OF ACTION

5-134. The platoon leader updates the SPOTREP to the commander with any new information and then recommends a COA to the commander. The commander approves or disapproves the recommended COA based on how it affects the parent unit's mission.

5-135. If the commander and the S-2 have anticipated the enemy situation the platoon reports and addresses the contingency in the OPORD and provides guidance to their

subordinates on what COA the platoon should execute. In such a case, the platoon leader can evaluate the situation, choose a COA consistent with the supported commander's intent or concept, and execute it without further guidance. The platoon leader keeps the commander informed of what they are doing as they execute the COA.

STEP 5 – RECOMMEND A COURSE OF ACTION TO THE COMMANDER

5-136. Once the platoon leader selects a COA, keeping in mind the commander's intent, the troop commander is informed, and has the option of approving or disapproving it based upon its impact on the overall mission. To avoid delay, a unit SOP may provide automatic approval of certain actions.

SECTION VII –CBRN OPERATIONS

5-137. CBRN operations are the employment of capabilities that assess, protect against, and mitigate the entire range of CBRN incidents to enable freedom of action. CBRN operations support operational and strategic objectives to counter weapons of mass destruction and operate safely in a CBRN environment. Many state and nonstate actors (including terrorists and criminals) possess or have the capability to possess, develop, or proliferate CBRN weapons. U.S. policy prohibits the use of chemical or biological weapons under any circumstances, but it reserves the right to employ nuclear weapons. Many potential enemies are under no such constraint. (Refer to FM 3-11 for more information.)

MISSION ORIENTED PROTECTIVE POSTURE ANALYSIS

5-138. Protecting Soldiers from the harmful hazards associated with CBRN attacks in an AO is essential to preserving combat power. Leaders determine the appropriate MOPP level based on higher-level guidance and the MOPP analysis provided by CBRN and medical personnel. CBRN MOPP analysis process takes into account METT-TC, estimating unit/personnel effectiveness (for example, mission degradation), estimating additional logistic requirements (for example, water resupply and individual protective equipment replenishment), and assessing and weighing the tradeoffs between agent exposures versus degraded performance (for example, wearing of MOPP 4).

5-139. Leader involvement is necessary to ensure safe and sustained operations under various climatic conditions. Leaders should develop standard responses and COAs for each projected mission. If the probability of CBRN threats exists all Soldiers carry a protective mask, and ensure that individual protective gear is available within two hours. Second set available in six hours. The standard MOPP levels are—

- MOPP level 0. Carry a protective mask, and ensure that individual protective gear is within arm's reach.
- MOPP level 1. Suit worn. Mask, gloves, and boots carried.
- MOPP level 2. Suit and boots worn. Gloves and mask carried.

- MOPP level 3. Suit, boots, and mask worn. Gloves carried.
- MOPP level 4. All protection worn.

5-140. Leaders know that they cannot expect the same work rates in MOPP level 4 as they achieved in MOPP level 0. They reevaluate the ability to meet mission requirements and communicate changes to the force. MOPP reduction decisions are the most difficult to make because of the many considerations that affect the final decision. Commanders must evaluate the situation from the Soldier and mission perspectives. Factors include the criticality of the current mission, potential effects of personnel exposure, and the impact on the casualty care system. ATP 3-11.32/MCWP 10-10E.8/ NTTP 3-11.37/AFTTP 3-2.46 provides work/rest cycles and water replacement guidelines for CBRN MOPP levels.

5-141. Leaders determine the appropriate MOPP level by assessing mission variables and weighing the impact of increased protection levels. Higher headquarters provide MOPP level directives to subordinate elements, and subordinate elements may increase but not decrease MOPP levels.

5-142. When a CBRN attack is recognized, everyone in the company team must receive the warning and assume the appropriate MOPP level. Soldiers in immediate danger need warnings they can see or hear. The alarm or signal must be simple and unmistakable if it is to produce a quick and correct reaction.

5-143. If a CBRN hazard is located mark the contaminated area. The CBRN warning and reporting system and standardized contamination markers contribute to orderly warning procedures. Warning methods include automatic alarms, vocal alarms (a shout of GAS is the most frequently used alarm), nonvocal alarms (horn blasts or banging of metal-to-metal objects), and visual alarms, most commonly the appropriate hand-and-arm signals.

UNMASKING PROCEDURES

5-144. Scouts should unmask as soon as possible except when expecting a live biological or toxin attack. After notifying the next higher headquarters, use the procedures outlined in the following paragraphs to determine if unmasking is safe.

UNMASKING WITH A M256A2 DETECTOR KIT

5-145. If an M256A2 detector kit is available, use it to supplement unmasking procedures. The kit does not detect all agents; therefore, follow proper unmasking procedures, which take approximately 15 minutes. Once performing all tests with the kit (including a check for liquid contamination using M8 detector paper) and the results are negative, use the following procedures:

- The senior person selects one or two Soldiers to start the unmasking procedures. If possible, they move to a shady place; bright, direct sunlight can cause pupils in the eyes to constrict, giving a false symptom.
- Selected Soldiers unmask for 5 minutes, then don, seal, and clear their masks.

- Observe the Soldiers for 10 minutes. If no symptoms appear, request permission from higher headquarters to signal ALL CLEAR.
- Watch all Soldiers for possible delayed symptoms. Always have first-aid treatment immediately available in case it is needed.

UNMASKING WITHOUT A M256A2 DETECTOR KIT

5-146. If an M256A2 kit is not available, this unmasking procedure takes approximately 35 minutes. Use M8 paper to check the area for possible liquid contamination. Conduct unmasking using these procedures:

- The senior person should select one or two individuals to start the unmasking procedures.
- If possible, move to a shady place (bright, direct sunlight can cause pupils in the eyes to constrict, giving false signs of nerve agent exposure).
- Have the selected individuals unmask—take a deep breath, hold it, and break the seal for 15 seconds, keeping their eyes wide open.
- Have the selected individuals clear and reseal their masks.
- Observe the selected individuals for 10 minutes.
- If no symptoms appear, the commander or leader has the selected individuals break the seal of their masks, take two or three breaths keeping their eyes wide open, and clear and reseal their masks.
- Observe selected individuals for 10 minutes (if no symptoms appear, have the selected individuals unmask for five minutes and then remask).
- If no symptoms appear in 10 minutes after remasking, the commander considers issuing a directive for an all-clear.
- Continue to watch personnel for possible delayed symptoms (always have first aid treatment immediately available in case it is needed).

Chapter 6
Enablers

Combat power augmentation provided by other units enhances the maneuver of the scout platoon during reconnaissance and security missions. Commanders employ combat power augmentation to enhance the effectiveness of the scout platoon's missions. The unit commander and their subordinate leaders must understand the capabilities and limitations of these elements to effectively incorporate them into unit missions.

The integration of enablers provides the scout platoon leader with the right additional assets to accomplish the mission while achieving the higher commander's intent. Enablers should complement the scout platoon's mission, not detract from it. The platoon's integration of these assets begins during platoon planning and continues through rehearsals and execution.

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SECTION I – BRIGADE COMBAT TEAM ASSETS

6-1. The BCT has several organic assets that attach to or provide support to enhance the scout platoon's effectiveness during certain missions. Fires assets allocated to a scout platoon can support reconnaissance and security during decisive action operations. Engineers have resources and knowledge to compliment the scout platoon and bring many additional advantages to support all scout platoon missions. Information collection assets such as HUMINT collection teams, UAS, military intelligence company, and sensor teams provide additional means to gain tactical advantage during missions. CBRN assets often attach to the scout platoon and provide a great asset to provide a capability for contamination avoidance, protection, and decontamination in a contested operational environment.

6-2. Any time the scout platoon receives augmentation; the platoon leadership needs to clearly understand the task organization, capabilities, limitations, task and purpose, sustainment requirements, and any special considerations for the new attachment. The scout platoon leader should rapidly apply the first three principles of the mission

command philosophy to "build cohesive teams through mutual trust, create shared understanding, and provide a clear commander's intent" when integrating enablers.

6-3. Other TTPs to effectively integrate new team members are to provide them with a copy of the current mission order and graphics, a copy of the platoon tactical SOP; add the attachments to the units digital address book and distribute the digital graphics; and add the new unit's attachments' frequencies and call signs to the scout platoon's communications listing. During the initial link up, the gaining unit scout platoon leadership should also increase the new team member's situational understanding of the operational environment by providing them with a current situational update.

6-4. The responsibilities of integrating enabling units not only lie with the gaining unit, but also with the arriving element. These enabling elements bring specialized capabilities, require specific resources, and may arrive with a task and purpose provided by the shared higher headquarters. It is important that both the scout platoon leadership and the new team members have a shared understanding of the capabilities of each organization. To assist both elements in achieving this understanding the enabling attachment should prepare a capabilities brief. An example checklist of topics is provided in table 6-1.

Table 6-1. Enabler integration checklist

✓	*Enabler Integration Checklist*	*Unit Information*
	Unit call sign.	
	Task organization.	
	Task and purpose from higher headquarters.	
	Training readiness to accomplish required task.	
	Recommended scheme of maneuver for employment.	
	Specialized information collection assets and their requirements.	
	Specialized fires assets.	
	Specialized protection assets.	
	Personnel.	
	Supply status by classes of supply.	
	Maintenance status.	
	Immediate repair or recovery needs.	
	Contact information of losing unit for sustainment cross over.	
	Specialized sustainment assets.	
	Frequencies.	
	Digital joint capabilities release address.	
	Specialized monitoring, control, and surveillance equipment and requirements.	

ENGINEER SUPPORT

6-5. Engineers conduct technical reconnaissance to collect specialized information about a designated zone, area, or route. Engineers conduct these missions regardless of enemy action and may require task organized security elements when threat of enemy action is expected. Technical reconnaissance mission is normally a specified task from higher headquarters or derived from mission analysis. Combat engineers can substantially increase capability and capacity of the scout platoon when integrated during reconnaissance and security missions. Engineers task organized to the platoon generally focus on reconnaissance and mobility tasks during reconnaissance missions. Technical reconnaissance is especially useful during route reconnaissance or terrain oriented zone or area reconnaissance where engineers can inspect and classify natural and man-made structures and areas. Engineer reconnaissance teams (ERTs) can also execute covert or overt breaching of obstacles to allow the scout platoon to continue its reconnaissance.

6-6. Attachments from the brigade engineer battalion may be a CBRN reconnaissance platoon, a route clearance platoon, breaching sapper squads, horizontal construction

squads, or engineer squads. The platoon leader must understand the purpose for the attachments and ensure the scheme of maneuver supports them accomplishing their mission.

ENGINEER RECONNAISSANCE TASKS

6-7. Engineer reconnaissance consists of tasks that are 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 geographical characteristics of a particular area. Reconnaissance is a focused collection effort performed before, during, and after missions to provide information used in the IPB process and by the commander to format develop, confirm, or modify a COA. Engineer units do not have designated reconnaissance organizations; however, engineer reconnaissance is prescribed and task organized in orders, but it depletes resources from other engineer missions.

ENABLING AND TEAMING WITH OTHER RECONNAISSANCE CAPABILITIES

6-8. ERTs that team directly with dedicated reconnaissance assets or scout platoons increase the tempo and effectiveness of the reconnaissance mission. ERTs are organized from organic personnel and equipment from the brigade's engineer battalion or engineer units task organized to the BCT combat engineers are typically task organized in direct support of maneuver units. Under this command relationship, the maneuver unit commander can employ the organic scout platoon attached with an ERT to collect information that will satisfy tactical information requirements. When employed in this fashion, the scout platoon conducts the overall reconnaissance mission while the ERT focuses on the collection of specific technical information supporting mobility and countermobility (obstacles, bypasses, river crossing sites, landing zones (LZ), and combat road or trail capacity).

ENGINEER RECONNAISSANCE TASKS

6-9. Engineers support all forms of reconnaissance. The majority of engineer reconnaissance capabilities enable the collection of technical information in support of combat engineering. (See figure 6-1.) Reconnaissance in support of mobility, countermobility, and survivability is conducted primarily by ERTs, which are (composed of combat engineers) and focuses on collecting tactical and technical information to support the BCT's mobility.

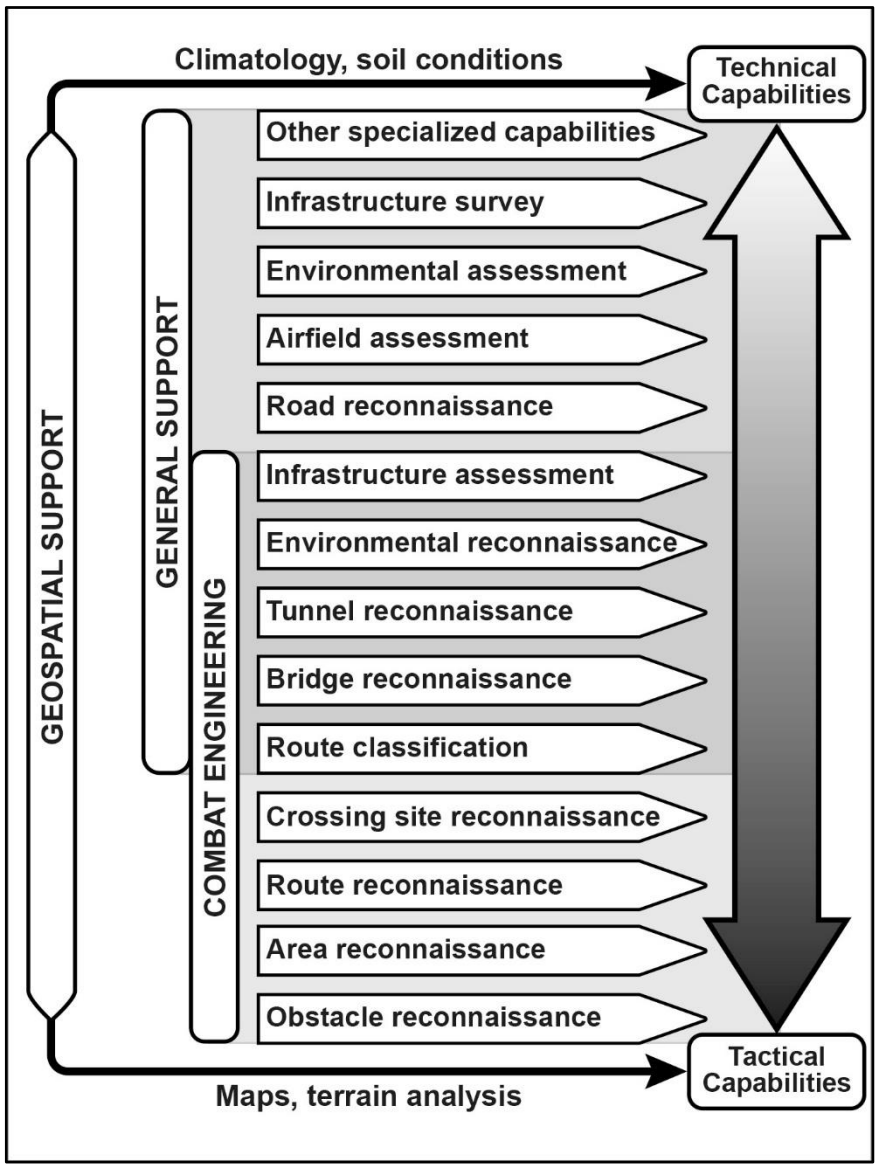


Figure 6-1. Engineer reconnaissance capabilities

LIMITATIONS OF AN ENGINEER RECONNAISSANCE TEAM

6-10. An ERT primary task with regard to tactical and protective obstacles is the reconnaissance of those obstacles and locating and marking bypasses around obstacles and restrictions. An ERT has the following limitations:

- An unaugmented ERT has extreme limitations in its ability to destroy or repel enemy reconnaissance units and security forces.
- The ERT has restrictions in the distance it operates away from the main body due to the range and type of communications, the range of supporting indirect fires, and the ability to receive sustainment.
- The amount of technical reconnaissance equipment has limitations when lacking organic transportation.

SUSTAINMENT

6-11. Some units may need to request augmentation to conduct sustainment operations. Specifically IBCT dismounted and ABCT combined arms battalion scouts which have inherent CASEVAC challenges. See sustainment chapter for further discussion.

FIRES SUPPORT

6-12. Scout platoons may receive indirect fire support from mortars, field artillery, naval gunfire, aviation assets such as CAS, or aviation call for fire. To make effective use of these assets, scouts must understand their capabilities, limitations, and employment requirements. (Refer to ATP 3-20.97, FM 3-09 and ATP 3-21.90 for more information.)

6-13. Except as specifically directed, the scout platoon rarely engages enemy with direct fire. When needing lethal fires, the scout platoon usually employs indirect fire, CAS, or aviation call for fire assets, and may direct fires on specific targets to disengage from the enemy or to attack targets provided in the commander's high-payoff target list. Scout use fires during both reconnaissance and security to engage the enemy without disclosing their position and preserve their combat powers capabilities and basic load of ammunition. Additionally, fires provide the ability to break direct fire contact.

6-14. Mortars and field artillery assets are the primary indirect fire support resources available to the scout platoon, although additional support can also come from aircraft and naval ships. In addition to understanding the capabilities and limitations of these assets, scouts must know what fire request channels to use when calling for fires. The scout platoon leader must be prepared to work with the troop and squadron/battalion FSOs to plan and coordinate fire support.

PLANNING CONSIDERATIONS

6-15. The planning process begins with receipt of the mission. The scout platoon leader and FSO interact throughout planning and execution to provide necessary support continuously. While developing plans for employment of forces, the commander and the FSO prepare for the best use of fires by determining:

- Lethal and nonlethal assets tasked to support the scout platoon.
- Targets to attack, including the high payoff target list.
- Lethal and nonlethal assets to employ, along with ammunition and delivery provisions.

- Communications plan (digital/FM).
- Desired target effects.
- Engagement priorities.

6-16. The scout platoon leader clearly states the intent for fires and ensures the fires plan is developed to support each phase of the mission. The following list covers areas the platoon leader coordinates with the FSO:

- Scheme of maneuver. Includes the AO, timing of advance, rate of movement, passage of lines, and Army aviation in the AO.
- Priority of fires. Identify which scout section has priority of fires.
- Priority targets. Identify priority targets and how long they will remain in effect.
- High-payoff target list. This is a list of targets whose loss to the enemy significantly contributes to the success of the friendly COA.
- Close air support. The scout platoon leader and FSO, in coordination with the squadron tactical air control party, determine what CAS assets are available, when they are available, and how to use them, including target selection and the desired effects.
- Fire support coordination measures. Establish existing or proposed, permissive or restrictive control measures, or recommend for establishment, by the appropriate commander.
- Ammunition restrictions. These place limitations on the use of obscurants, improved conventional munitions, or other ammunition including the established controlled supply rates.

6-17. The fire support plan outlines how to use both lethal and nonlethal fires. The troop FSO develops the fire support plan, and constantly refines it as the mission continues. The fire support plan ranks targets in priority order, matches them with the available indirect fires systems, eliminates duplication with platoon targets, and allows fires to execute quickly and without specific direction from the commander. A fire support plan includes:

- The general concept of how indirect fires support the reconnaissance or security mission.
- A target list that includes planned locations of fires.
- Priority of fires.
- High-payoff targets and priority targets.
- Allocation of priority targets and final protective fires, if available.
- Execution matrix.
- Required airspace coordination areas.
- Fire support coordination measures.
- Rules of engagement.
- Clearance of fires.

6-18. The troop FSO disseminates the fire support plan during the troop OPORD brief or by other means, such as a digital message. It contains all the elements listed above

and adjusted upon receiving the platoon indirect fire plans. The fire support officer develops a fire support matrix that coincides with the fire support plan, and distributed to all key leaders including the scout platoon leader. The troop, fire support execution matrix is a tool used to aid in executing a squadron plan. The matrix is a graphical way of assigning target responsibilities and allocating fire support resources to the squadron or battalion, troop and scout platoon. See figure 6-2 for an example of a troop, fire support matrix.

COMMANDER'S INTENT FOR FIRE SUPPORT: TROOP OFFENSE SMOKE ON BB 1001 TO COVER OUR INITIAL MOVEMENT ACROSS THE LD. FIRE GROUP BIB ON OBJECTIVE FOX AS 2ND AND 3RD PLATOONS CROSS PL BLUE. USE BB3109 TO HELP BLOCK A COUNTERATTACK FROM HILL 333.

TGT #	GRID	DESCRIPTION	DECISION POINT	EXECUTION	
				PRIMARY	BACKUP
BB 1001	123456	SMOKE OP	WHEN 1ST PLT IS READY TO CROSS LD	1ST PLT	FSO
BB 1002	123567	SUSPECTED INF SQUAD	2ND AND 3RD PLTs CROSS PL BLUE	TRP CDR	2ND PLT
BB 3108 (GRP BIB)	125467	AT POSITION	2ND AND 3RD PLTs CROSS PL BLUE	TRP CDR	2ND PLT
BB 3109	143335	ROAD JCT	IF CATK BRIDGE AT 146578	2ND PLT	3RD PLT
BB 2102	136324	SUSPECTED AT POSITION	IF RECEIVE FIRE FROM POSITION	FSO	XO

HIGH PAYOFF TARGETS: ALL ATGM POSITIONS

ACTIONS UPON: XO MONITORS MORTAR PLT NET FOR FIRE SUPPORT COORDINATION
LOSS OF FSO: PLs SWITCH TO CH2 OR THE MORTAR NET TO FIRE MISSIONS.

	PRIORITY OF FIRE			
	CROSS LD		CROSS PL BLUE	
	FA	MTR	FA	MTR
PLT	1ST PLT	1ST PLT	2ND PLT	2ND PLT
TRP	A TRP	B TRP	A TRP	B TRP
SQDN	2-1		2-1	

AMMUNITION AVAILABLE TO TF

FA DPICM/HE
16 BN 3 RDS
FA SMK 23 MIN
MTR HE 24 PLT 6
MTR SMOKE: 20 MIN

SOI		
	DAY 05	DAY 06
FA NET	31:10	42:00
MTR NET	56:00	23:65
MTR FDC	38:45	26:30
FA FDC	36:00	47:45
BN FSO	42:25	31:15

COORDINATING INSTRUCTIONS
1. SHOOT 120-mm MORTAR SMOKE ON BB 1001
2. GRP BIB TGTS ARE FA PRIORITY TGTS
3. SHOOT IMMEDIATELY ANY ADA TARGETS

Legend:

ADA	AIR DEFENSE ARTILLERY	GRP	GROUP	PLT	PLATOON
AT	ANTITANK	HE	HIGH EXPLOSIVE	RDS	ROUNDS
ATGM	ANTITANK GUIDED MISSILE	HVY	HEAVY	SMK	SMOKE
BN	BATTALOIN	INF	INFANTRY	SOI	SIGNAL OPERATING INSTRUCTIONS
CDR	COMMANDER	JCT	JUNCTION		
CH	CHANNEL	LD	LINE OF DEPARTURE	SQDN	SQUADRON
CATK	COUNTERATTACK	MIN	MINUTES	TF	TASK FORCE
DPICM	DUAL PURPOSE IMPROVED CONVENTIONAL MUNITION	mm	MILLIMETER	TGT	TARGET
		MTR	MORTAR	TRP	TROOP
FA	FIELD ARTILLERY	OBJ	OBJECTIVE	XO	EXECUTIVE OFFICER
FDC	FIRE DIRECTION CENTER	OP	OBSERVATION POST		
FSO	FIRE SUPPORT OFFICER	PL	PHASE LINE		

SAMPLE

Figure 6-2. Troop fire support execution matrix, example

FIRES IN DIRECT CONTACT

6-19. Scout platoons use supporting fires while in direct fire contact during reconnaissance and security missions. Unexpected contact requires disengaging from the enemy. Use of contact supporting fires for disengagements often slows the enemy by degrading their effectiveness. Indirect fires may cause the enemy to seek cover or fight with their vehicles buttoned up which gives the scout platoon more freedom of maneuver to disengage. Suppression of the enemy and obscuration of friendly movement is usually the desired effect for the scout platoon during chance or unexpected contact.

TARGET LOCATION ERROR

6-20. The difference between the coordinates generated for a target and the actual location of the target location error is the target location error (TLE), which is expressed primarily in terms of circular and vertical errors or infrequently as a spherical error.

6-21. Accurate target location is crucial to achieving first round effects on targets. The use of position locating systems, mensuration tools, and laser designators and rangefinders operating from known locations are critical to accurately locating targets and achieving first round fire for effect. When these capabilities are not available and the observer is operating in a degraded mode, the observer must rely on thorough terrain map study to locate targets accurately. Frequently in these degraded situations, the observer is unable to locate targets accurately and must correct errors in target location by adjusting fires onto a target, thereby forfeiting surprise and effects on target. In order to consistently determine an accurate target location, a good observer—

- Must be able to determine an accurate target location through mensuration using current target location tools.
- Must be able to self-locate to within 10 meters (100 meters if degraded by lack of position locating systems or other navigational aids).
- Uses prominent terrain features to relate potential target areas to grid locations on a map.
- Makes a thorough study of terrain by drawing a terrain sketch (in a static location).
- Associates the direction in which the observer is looking with a direction line on the map.
- Must be able to use electronic navigational aids with map analysis verification.

6-22. Boresight. Scout platoons conduct PMCS on their optics in accordance with technical manuals. Scouts ensure their boresight of optics by verifying lasers against known terrain features or by placing vehicles downrange in a known location (GPS) and verify accuracy thus reducing target location error.

6-23. Location of observer. Accuracy for the observer's location is fundamental to effective fires. Observers verify locations of properly encrypted LRAS3 or other devises with handheld GPS devises to confirm the location of the observer.

6-24. Direction. Scouts provide the most accurate direction for the employment of fires. When using a lensatic compass ensure the reading to the target is as accurate as possible. Do not place compass near metal such as the hood of a vehicle but place the compass on a berm or ground to increase accuracy.

6-25. Distance estimation. One of the biggest challenge for a scout is distance estimation. Scouts can perform the following techniques to estimate distance.

- Mental estimation.
- Estimating when visibility is good.
- Estimating by using known dimensions.
- Estimating from a terrain study.

6-26. Triangulation. Triangulation is another possible means to provide reduced target location error, although it is time consuming, and therefore limited to situations not requiring immediate responsiveness. Perform triangulation using one or more sensors. The more sensors used, the greater the accuracy. When more than one observer or sensor is available, multiple sensors locate the target and provide target coordinates to the FDC. If only one sensor or observer is available, then they must obtain target data from a minimum of two different locations at least 100 meters apart. The farther the observer moves between readings, and the more locations from which readings are taken, the more accurate the resulting target location will be.

6-27. Cavalry scouts should be intimately familiar with ATP 3-09.30. Especially the target location and identification chapter which contains distance estimation techniques.

MORTAR EMPLOYMENT

6-28. Mortars provide indirect fire support that is extremely responsive to the scout platoon's needs. They provide a heavy volume of fires that are ideal for attacking targets on reverse slopes, in narrow ravines or trenches, and in forests, towns, and other areas that are difficult to strike with low-angle fires. Suppression, obscuration, and illumination are the three types of mortar support available to the scout platoon.

MORTAR CAPABILITIES

6-29. Mortars are most effective—

- In urban areas or mountainous terrain.
- When requiring a fast response time.
- Against light skinned vehicles and troops.

MORTAR LIMITATIONS

6-30. Drawbacks to using mortars are—

- Short-range capability.
- Limited munitions selection.
- Vulnerability to enemy counterfire radars due to the high angle of fire.
- Limited basic loads of ammunition.

- Effectiveness against armored vehicles.

FIELD ARTILLERY SUPPORT

6-31. The brigade's organic field artillery battalion can provide supporting indirect fires to the scout platoon. The fires battalion has several different munitions available such as high explosive, dual-purpose improved conventional munitions; white phosphorus, scatterable mines; high explosive rocket-assisted projectiles; Excalibur guided projectiles; obscuration; and illumination munitions.

ARTILLERY CAPABILITIES

6-32. Artillery elements support the scout platoon by—

- Providing continuous all-weather and all-terrain fire support.
- Shifting and massing fires rapidly.
- Supporting in-depth with long-range fires.
- Employing a variety of conventional shell and fuze combinations.
- Engaging stationary point targets with 155-mm Excalibur guided munitions or Guided Multiple Launch Rocket System (MLRS) munitions accurately.

ARTILLERY LIMITATIONS

6-33. Artillery elements supporting the scout platoon have—

- Limited effectiveness on moving targets.
- Limited ability to destroy point targets without considerable ammunition expenditure.
- Increased vulnerability to enemy counterfire due to firing signature.

6-34. Field artillery employs a wide variety of munitions tailorable for the engagement of different types of targets. These ammunition types include—

- High explosives for use against personnel, field fortifications, and vehicles.
- Obscurants for obscuration and screening.
- Illumination.
- White phosphorus for obscuration, marking, screening, and incendiary effects against materiel targets.
- Guided MLRS rockets and 155-mm Excalibur rounds for use against point targets.
- Dual-purpose improved conventional munitions s for use against personnel and light armored vehicles in the open.
- Scatterable mines.

6-35. Scatterable mines include area denial munitions for use against personnel, remote antiarmor mine systems, and armored vehicles. When firing a scatterable mines mission, the battery is not available for other fire missions because it requires slightly more lead time than other field artillery delivered munitions.

FIRE REQUEST PROCESS

6-36. Scouts are the primary elements responsible for requesting and adjusting indirect fire, and every scout in the platoon must be familiar with the request and adjustment process. The request will ultimately be processed through the troop fire support team.

FIRE REQUEST CHANNELS

6-37. Normally, Scouts send all requests for indirect fire support through the fire support team on the troop command net and the commander approves the request. The fire support team selects the best available fire support asset to engage a target. Adjustments to the fire mission are normally also sent to the fire support team, which then relays the message to the artillery unit on a digital fire direction net or to the mortars on the fire support net.

6-38. Besides specific requests sent to the fire support team, the platoon can request fire support in several other ways:

- Calls for fire can result from SPOTREPs sent on the troop command net; the troop fire support team eavesdrops on the net and requests fires on targets of opportunity and on targets approved by the commander.
- Requests for fire can be submitted through preformatted SPOTREPs and contact reports sent via the joint capabilities release system.

FIRE DIRECTION AND CONTROL PROCEDURES

6-39. The following are the different methods and procedures for indirect fire. All scouts in the platoon must be proficient in calls for fire.

INITIAL CALL FOR FIRE

6-40. The standard call for fire comprises six elements (see figure 6-3). They include three basic transmissions:

- Observer identification and WARNORD (first transmission).
- Target location (second transmission).
- Target description, method of engagement, and method of fire and control (third transmission).

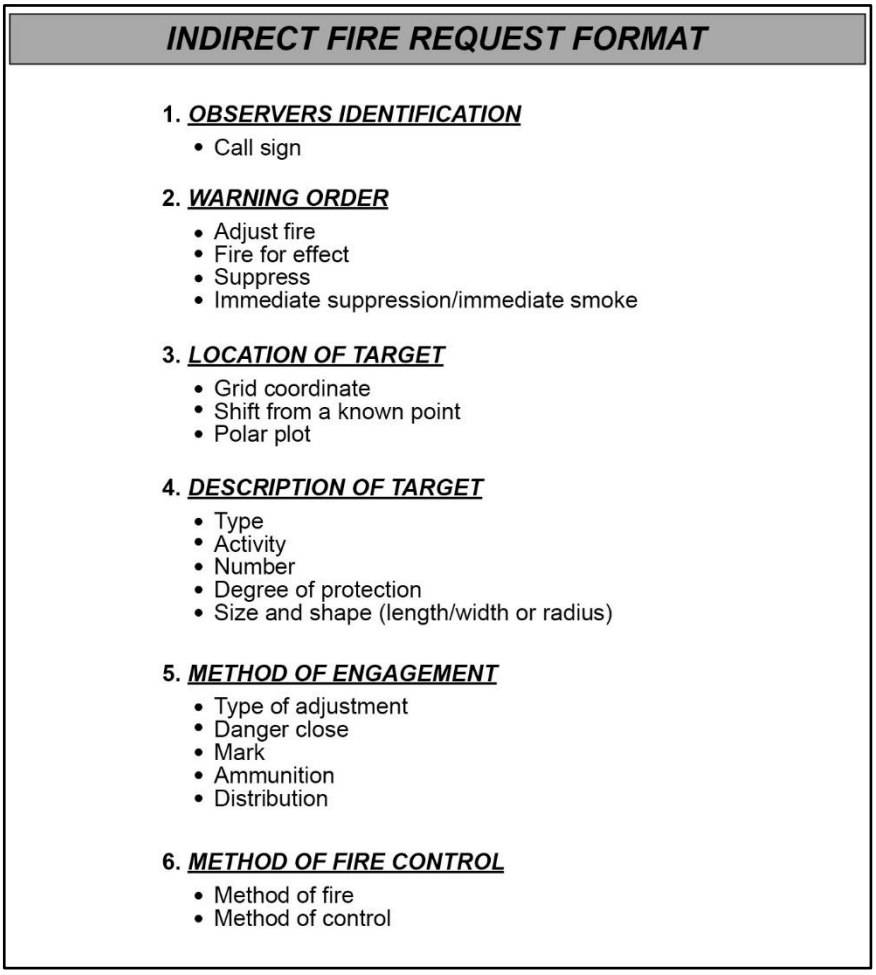


Figure 6-3. Indirect fire request format

Observer Identification and Warning Order (First Transmission)

6-41. Observer identification tells the FDC who is calling. The WARNORD clears the net for the fire mission and tells the FDC the type of mission, size of element, and the method of locating the target. The types of indirect fire missions are the following:

- Adjust fire. This is used when the observer is uncertain of the exact target location. The observer says, ADJUST FIRE.
- Fire for effect. The observer strives for first-round fire for effect when they are sure the target location is correct. The observer should also be sure the rounds of the first volley have the desired effect on the target so little or no adjustment is required. The observer announces, FIRE FOR EFFECT.

Note. With digital systems, properly updated positioning data and an accurate range to the target provide extremely accurate target location. This enables observers to call FIRE FOR EFFECT on the first transmission.

- Suppression. The word SUPPRESS is used to quickly bring fire on a preplanned target when unable to observe. This is a simplified call for fire and is sent in one transmission. Example: THUNDER 11—THIS IS RED 1—SUPPRESS AF2401—OVER. Target description is not announced.
- Immediate suppression. This is used to bring fire quickly on a planned target or a target of opportunity that is firing at a friendly unit or aircraft. As an example, the observer says, THUNDER 11— THIS IS RED 2—IMMEDIATE SUPPRESSION AF2402—OVER. Target description is not announced.
- Immediate smoke. This is used to place smoke quickly on a planned target or a target of opportunity that is firing at a friendly unit. Sample transmission: THUNDER 11—THIS IS RED 4—IMMEDIATE SMOKE AF2405—OVER.

6-42. The polar and shift methods are announced to the FDC as part of the first transmission. They are covered more in the following paragraph.

6-43. Following the type of mission, the method of target location is announced; this prepares the FDC to receive the data sent by the observer and apply it to locate the target. The three methods for locating targets are grid, polar plot, and shift from a known point. The polar and shift methods are announced to the FDC. If the observer does not specify either polar or shift, the FDC knows the grid method is being used; the word "grid" is not announced. Example: THUNDER 11—THIS IS RED 3—FIRE FOR EFFECT—POLAR—OVER

Target Location (Second Transmission)

6-44. The third element of the call for fire is target location. There are five methods of establishing target location. They are grid, laser grid, polar plot, laser polar, and shift from known point. When utilizing precision targeting devices to establish location, it is required to transmit the target location error in the target location portion of the call for fire request.

Grid Method

6-45. In the grid method, the target location normally includes a two-letter grid zone identifier with eight digits (example: "AB13572468"). The direction from the observer to the target (in milliradians [mils], if possible) must be given to the FDC after the call for fire, but before the first adjusting rounds are shot. With the likelihood of operating in built-up areas, crewmembers should call for fire using 8- or 10-digit grids to reduce collateral damage.

Laser Grid Method

6-46. The laser grid method is the same as described in paragraph 6-4 except the target grid is given at a greater level of accuracy (8 to 10 digits depending on targeting device accuracy). The far target locator can be used to acquire the target. The transmission also includes the target location error (if known). For example, GRID AB1357924680, target location error 4.0 OVER.

Note. A mission is not a laser grid mission just because the observer used a laser to determine the initial target location. If the observer plans to send normal left, right, add, or drop corrections, the mission is a normal grid mission. The mission is a laser grid mission only when the method for subsequent corrections are laser burst corrections.

Polar Plot Method

6-47. This method requires that the observer and the FDC know the observer's exact location. The observer determines the direction (to the nearest 10 mils) of the observer-target (known as OT) line and the distance (to the nearest 100 meters) from the position to the target.

Laser Polar Plot Method

6-48. The laser polar method differs from a polar mission in that the direction is determined to the nearest mil (instead of 10 mils) and the distance is to the nearest 10 meters (instead of 100).

Shift From a Known Point Method

6-49. This is the least preferred and most difficult method of target location. The observer may have one or more known points in the area of responsibility and only works if the observer and the FDC have a common known point such as an artillery target or significant feature like a bridge or tower. To locate the target, the observer first determines the direction to the known point to the nearest 10 mils. If the observer has no compass, direction can be determined by using a map and protractor or by using the binocular reticle pattern and a known direction to the known point. The observer then determines direction to the target using the right add, left subtract rule (known as RALS).

6-50. The observer then determines the lateral and range shifts (see figure 6-4, page 6-16). Lateral shifts are left or right from the known point to the OT line and are given to the nearest 10 meters. Range shifts are given as ADD (when the target is beyond the known point) or DROP (when the target is closer than the known point). Range shifts are given to the nearest 100 meters. (Refer to ATP 3-09.30 for more information.)

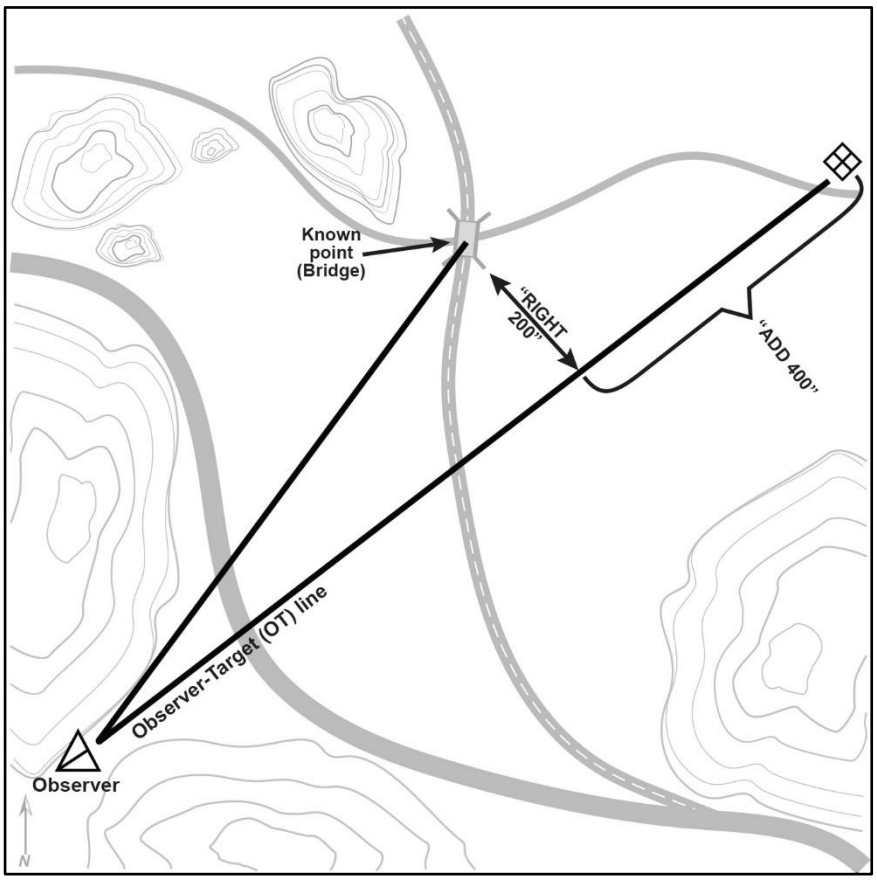


Figure 6-4. Lateral and range shifts from a known point

Target Description, Method of Engagement, and Method of Fire and Control (Third Transmission)

6-51. The observer includes the target description, method of engagement, and method for fire and control in the call for fire using the guidelines discussed in paragraphs 6-52 through 6-56.

Target Description

6-52. The observer describes the target to the FDC, and then the FDC determines the type and amount of ammunition needed. The target description should be brief but accurate. This is the last required element in the call for fire.

6-53. A target description may be DISMOUNTED INFANTRY SQUAD IN THE OPEN or TWO TANKS IN TURRET DOWN POSITION.

Method of Engagement

6-54. The observer requests how to attack the target (including type of ammunition, fuse, and distance from friendly personnel). The FDC may change the ammunition type and fuse based on availability or other constraints. If the target is within 600 meters of friendly personnel, the observer announces DANGER CLOSE.

Method of Fire and Control

6-55. The observer states who will give the command to begin firing. If the observer wants to control the time of firing, they say, AT MY COMMAND. The FDC tells the observer when the unit is ready to fire. At the proper time, the observer says, FIRE. If the observer does not say, AT MY COMMAND, the FDC directs the designated unit(s) to fire as soon as the platoon or battery is ready. (See table 6-2).

Table 6-2. Methods and procedures for indirect call for fire

FIRST TRANSMISSION	*THIRD TRANSMISSION*
1. Observers Identification (call signs)	**4. Target Description**
2. Warning Order	Type
Adjust fire	Activity
Fire for effect	Number
Suppress	Degree of protection
Immediate suppression/immediate smoke	Size and shape (length/width or radius)
	5. Method of Engagement
SECOND TRANSMISSION	Type of adjustment
3. Target Location	Danger close
Grid coordinate	Mark
Shift from a known point	Ammunition
Polar plot	Distribution
	6. Method of Fire and Control
	Method of fire
	Method of control

ADJUSTING INDIRECT FIRE

6-56. Once the call for fire has been made, the observer's next concern is to get rounds on the target. If the observer can locate the target accurately, fire for effect is requested in the initial call for fire. When the observer cannot accurately locate the target, for any reason such as deceptive terrain, lack of identifiable terrain features, or poor visibility, they must execute an adjustment to bring fires on the target. Normally, one artillery piece or mortar is used in adjustment.

6-57. The observer must first pick an adjusting point. For a destruction mission (precision fire), the target is the adjusting point. For an area target (area fire), the

observer must pick a well-defined adjusting point at the center of the area or close to it. The observer must spot the first adjusting round and each successive round and send range and deviation corrections, as required, back to the FDC until fire hits the target. The observer spots by relating the burst or group of bursts to the adjusting point. (Refer to ATP 3-09.30 for more information.)

Deviation Spotting

6-58. As applied to deviation (left or right), spotting involves measuring the horizontal angle (in mils) between the burst and the adjusting point (see figure 6-5). A burst to the right (or left) of the target is spotted as (number) MILS RIGHT (LEFT).

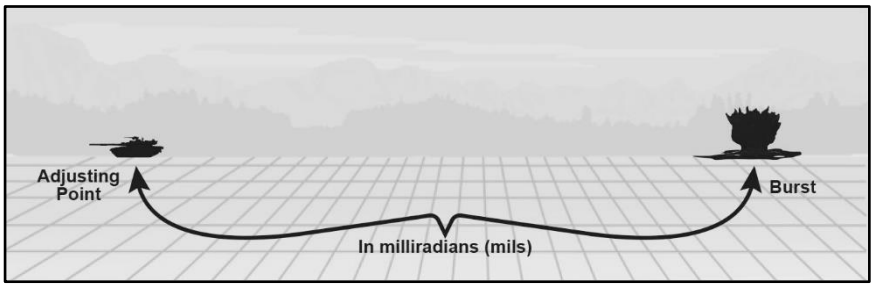


Figure 6-5. Deviation spotting

Reticle Method

6-59. The mil scale on military binoculars or the hand-and-fingers method is a technique to determine deviation. In the M22 and M24 binoculars, the horizontal and vertical scales are divided into 10-mil increments with shorter hash marks at 5 mil increments. The binocular reticle is shown in figure 6-6. The scale cannot be used to determine vertical angle. Only a leveled measuring device can accurately measure vertical angle. The hand-and-fingers technique may be used as shown in figure 6-7 on page 6-20.

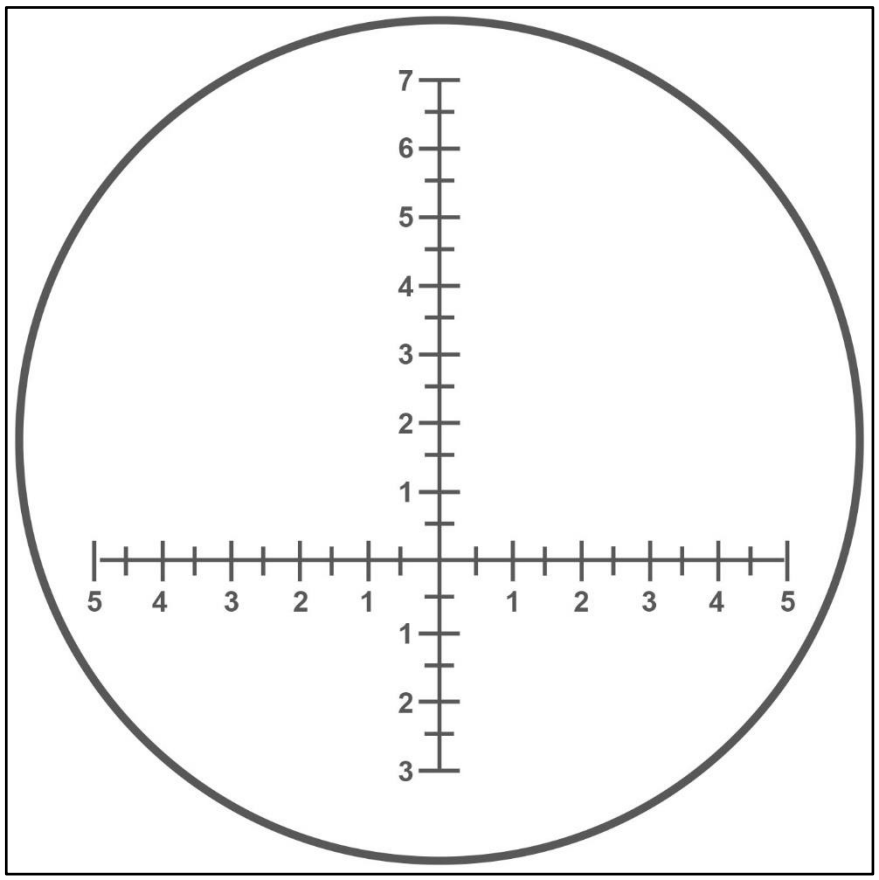


Figure 6-6. M22 and M24 binocular reticle pattern

Hand and Finger Method

6-60. When all other means to measure angular deviation are not available, the observer may use the hand and fingers as a measuring device. Figure 6-7 illustrates the approximate numbers for an average hand.

6-61. Each scout should calibrate their own hand and fingers to determine the width in mils for the various combinations of finger and hand positions shown, and then memorize those numbers. Calibrate hand measurements by comparing measurements taken with the hand and measurements taken with a more accurate measuring device.

6-62. When using hand and fingers in measuring angular deviation, the scout fully extends the arm (elbow locked) so that the hand and fingers are always the same distance from the eyes. The scout always points the palm of the hand toward the target area and holds the fingers as demonstrated in figure 6-7. Anything that changes the method, such as wearing a glove or not keeping the fingers together, affects the measurement.

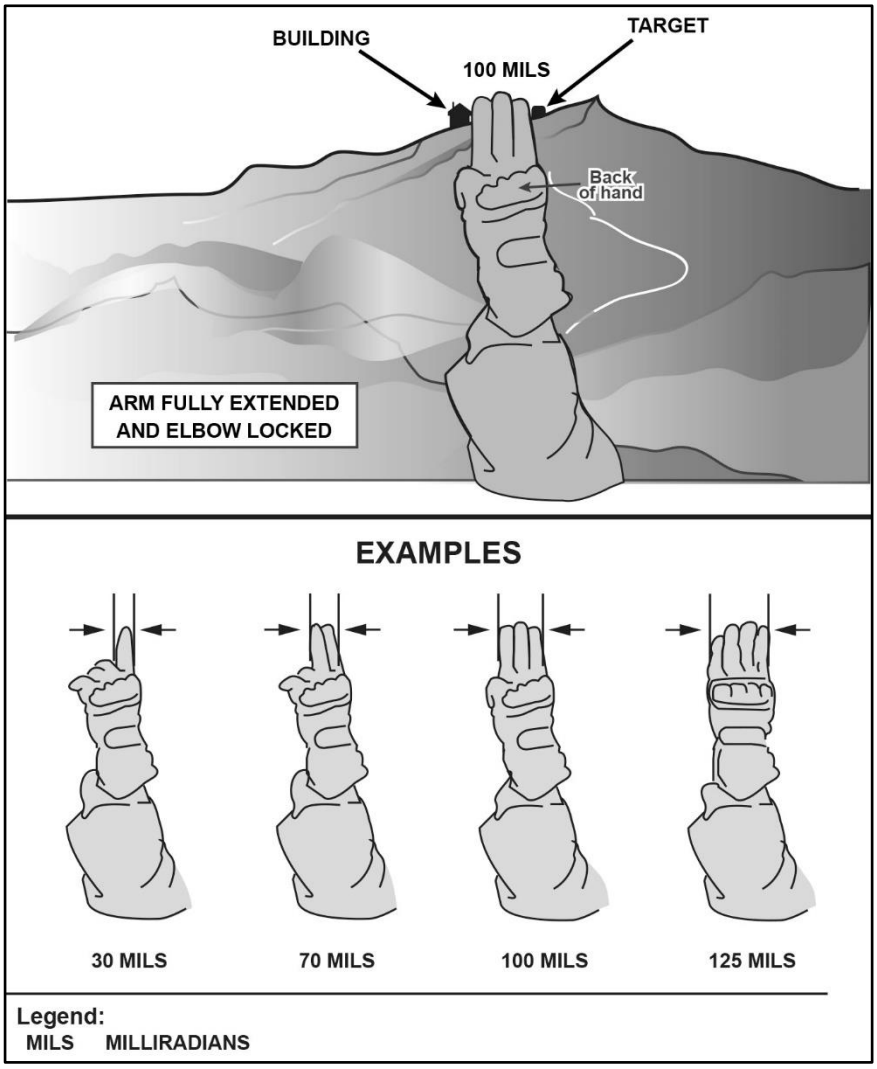


Figure 6-7. Use of hand and fingers method to determine deviation

6-63. A burst on the OT line is spotted as ON LINE. Deviation to the left or right should be measured to the nearest 5 mils for area targets, with measurements taken from the center of the burst. Scouts estimate the deviation for a destruction mission (precision fire) to the nearest mil. Figure 6-8 shows the adjusting point at the center of the binocular's horizontal scale.

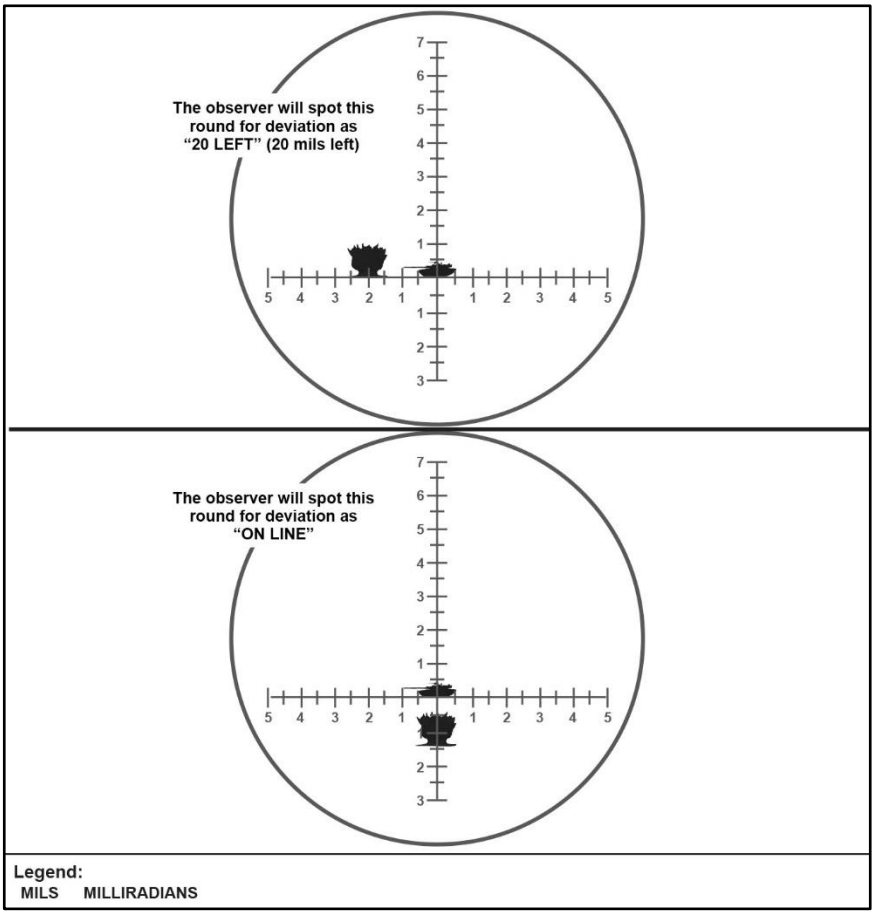


Figure 6-8. Deviation spotting with binoculars

6-64. Once the observer determines the observed deviation (in mils), the observer must convert it into a deviation correction (in meters). Deviation correction is the distance in meters the scouts must move to be in line between observer and target. It is sent, with the range correction, to the FDC for the next adjusting round or when calling for fire for effect.

6-65. The first step in determining deviation correction is to calculate the OT factor, the distance from the observer to the target in kilometers. The observer calculates the distance to the target in meters and divides by 1,000; see table 6-3 for examples of this process. The precise correction is determined by multiplying the observed deviation by the OT factor; it is expressed to the nearest 10 meters (see figure 6-9).

Table 6-3. Determining the observer target factor

Guide for Determining the OT (observer-target) Factor
OT distance greater than 1,000 meters. Round to the nearest thousand, and express in thousands of meters.
EXAMPLES: OT distance, 4,200 meters – OT factor, 4.0 OT distance, 2,700 meters – OT factor, 3.0
OT distance less than 1,000 meters. Round to the nearest 100 meters and express in thousands of meters.
EXAMPLES: OT distance, 800 meters – OT factor, 0.8

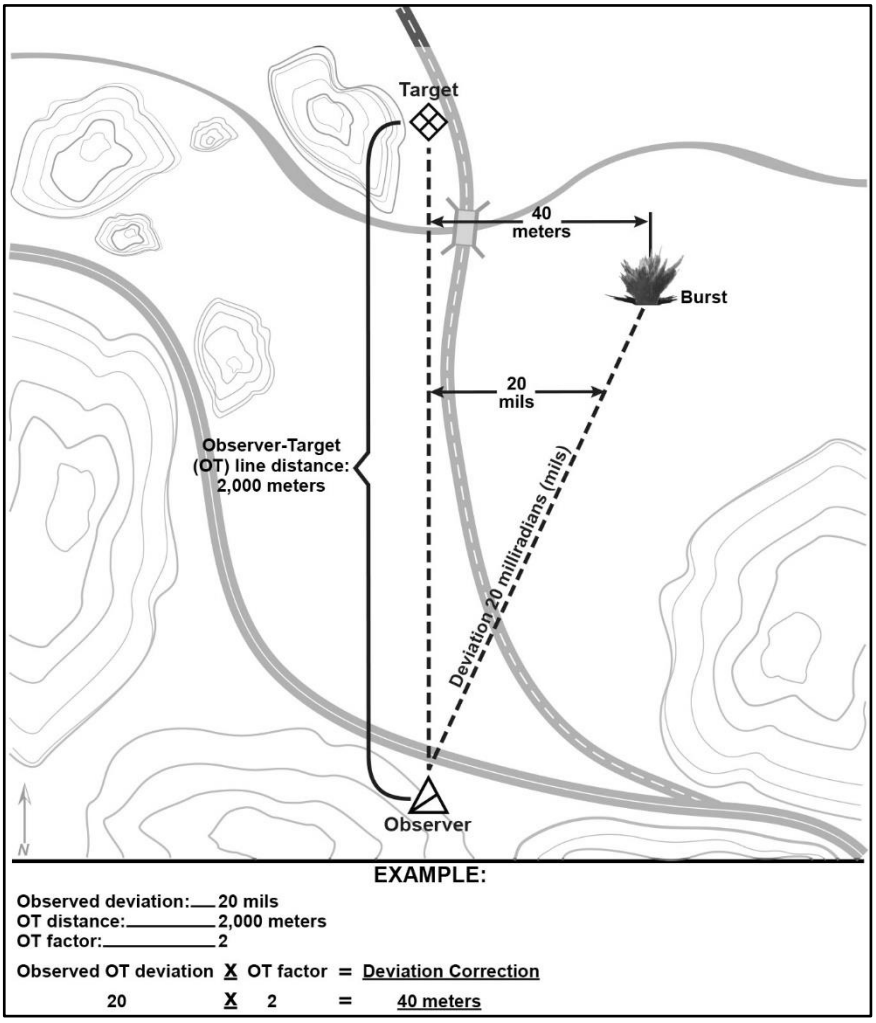


Figure 6-9. Converting mil deviation to deviation correction

6-66. The observer's goal in making the correction is to move the adjusting rounds close enough to the OT line so that range spotting can be made accurately. Minor deviation corrections (10 to 20 meters) are necessary in adjustment of precision fire. In adjustment of area fire, however, the observer should ignore small deviation corrections (20 meters or less) except when such a small change is necessary to determine a definite range spotting.

Range Spotting

6-67. Range spotting is the second type of adjustment required to get fire on the target (see figure 6-10). Any range spotting other than DOUBTFUL, LOST, or UNOBSERVED is definite. Usually, an adjusting round's burst that is on or near the OT line will give a definite range spotting. However, even experienced observers use caution and good judgements when range spotting.

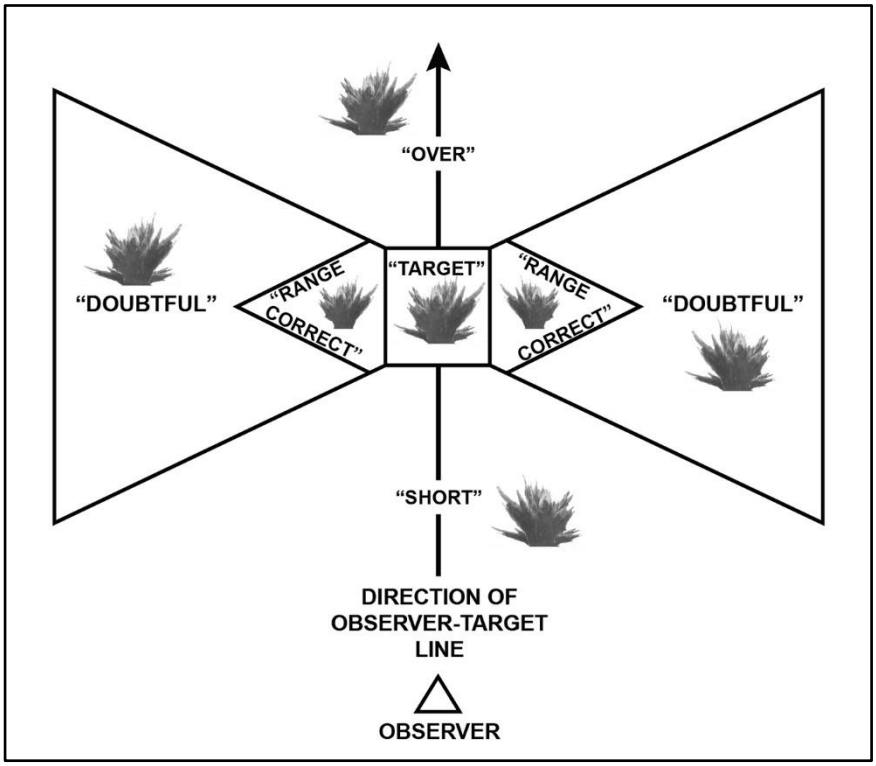


Figure 6-10. Range spotting

6-68. The observer can sometimes make a definite range spotting even when the burst is not on or near the OT line. The observer uses personal knowledge of the terrain or wind and observes debris scattered by the explosion. Possible range spottings calls include—

- OVER – a round that impacts beyond the adjusting point.
- SHORT – a round that impacts between the observer and the adjusting point.
- TARGET – a round that impacts on the target. Use this spotting only in precision fire (registration or destruction missions).
- RANGE CORRECT – a round that impacts at the correct range.
- DOUBTFUL – a round that can be observed but cannot be spotted as OVER, SHORT, TARGET, or RANGE CORRECT.

- LOST – a round whose location cannot be determined by sight or sound.
- UNOBSERVED – a round not observed but known to have impacted (usually heard).
- UNOBSERVED OVER or UNOBSERVED SHORT – a round not observed but known to have impacted over or short.

Range Correction

6-69. The observer gives range corrections so that, with each successive correction, the adjusting round intentionally lands over or short of the adjusting point, closing on the target.

Successive Bracketing

6-70. Successive bracketing is best when observers are inexperienced or when precise adjustment is required, such as precision registrations and destruction missions. It mathematically ensures fire-for-effect rounds are within 50 meters of the target.

6-71. After the first definite range spotting is determined, the observer should send a range correction to the FDC to establish a range bracket of known distance (one round over and one round short). Once the observer establishes the bracket, they successively split the bracket until confident that the rounds will impact within 50 meters of the adjusting point when requesting fires for effect. Normally, range changes of 100, 200, 400, or 800 meters make splitting the bracket easier. The observer enters fire for effect when the rounds impact within 50 meters of the adjusting point. (See figure 6-11, on page 6-26.)

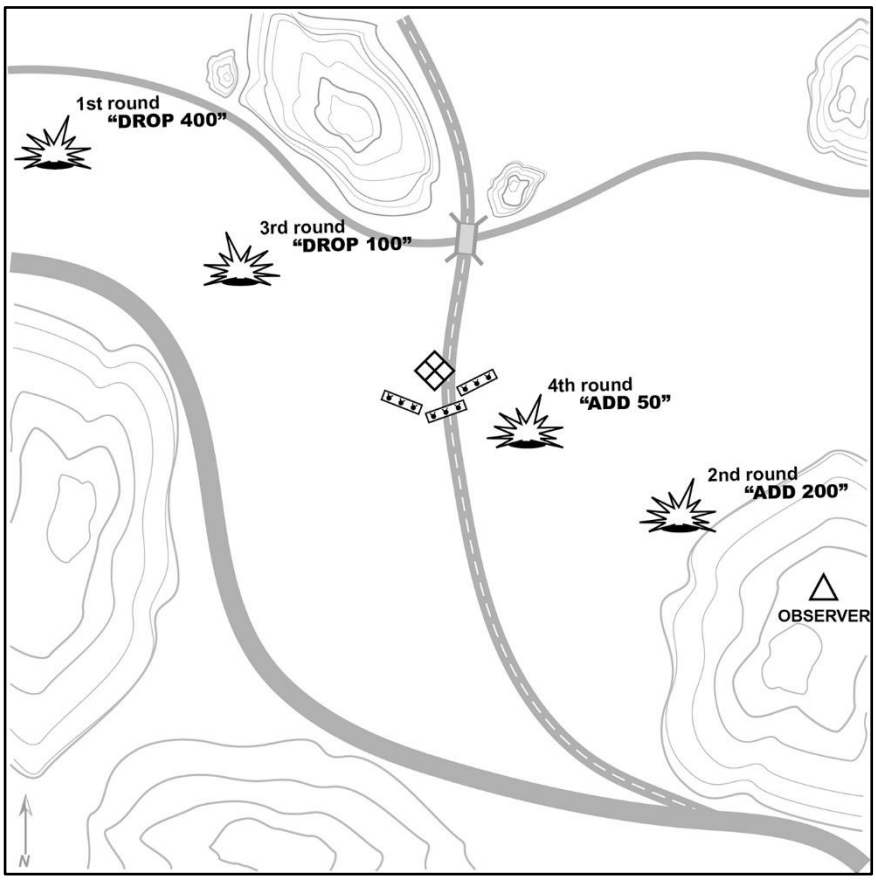


Figure 6-11. Successive bracketing

Hasty Bracketing

6-72. Hasty bracketing is best when responsive fires are required and the observer is experienced in the adjustment of fire.

6-73. Experience has shown that effectiveness on the target decreases as the number of rounds used in adjustment increases. An alternative to successive bracketing is hasty bracketing. While successive bracketing mathematically ensures that the fire-for-effect rounds will strike within 50 meters of the adjusting point, it is a relatively slow and unresponsive technique. Therefore, if the nature of the target dictates that effective fires are needed faster than successive bracketing can provide them, hasty bracketing should be used.

6-74. The observer gets a bracket on the first correction much as in the successive bracketing technique. The observer uses this initial bracket as a yardstick to determine

the subsequent correction. The observer sends the FDC the correction to move the rounds to the target and FIRE FOR EFFECT (see figure 6-12).

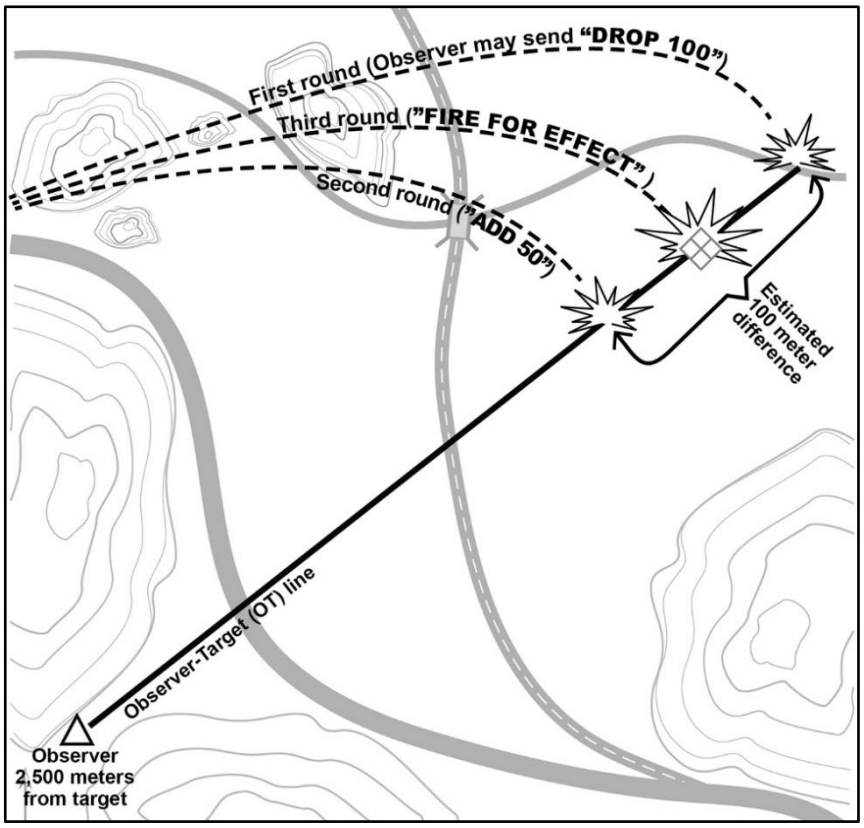


Figure 6-12. Hasty bracketing

Creeping (DANGER CLOSE)

6-75. The creeping method of adjustment is used in DANGER CLOSE situations. The initial round is fired beyond the target. Adjusting rounds are moved closer to the target, 50 meters or less at a time, until the target is engaged (see figure 6-13, page 6-28). This method is slow and tends to use more ammunition than other adjustments; therefore, it should be used only when Soldier safety is a major concern.

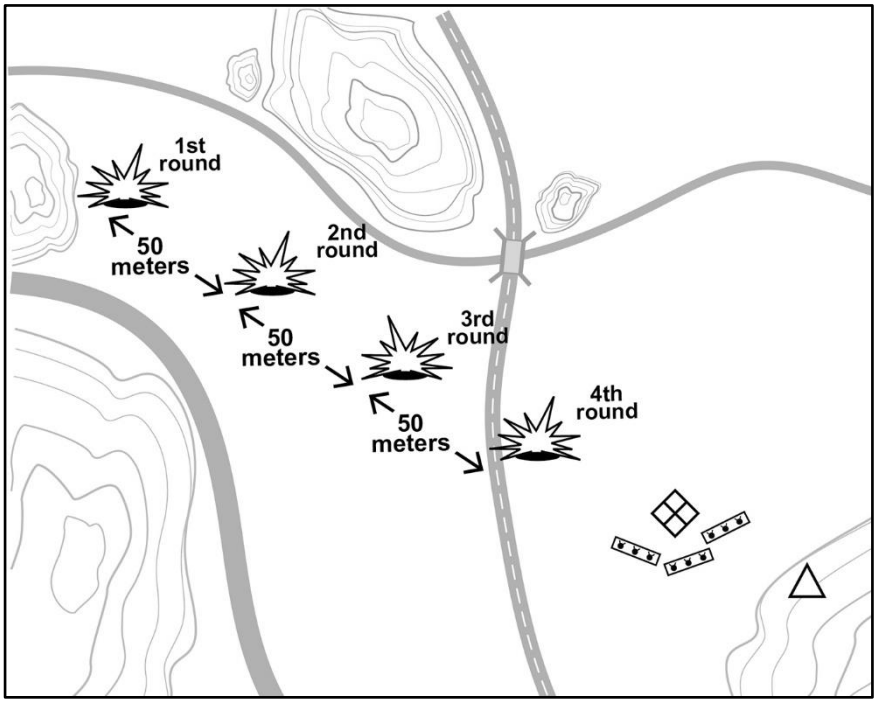


Figure 6-13. Creeping method of adjustment

Refinement and Surveillance

6-76. The observer notes the results of the fire for effect. Table 6-4 illustrates various alternatives available to the observer after fire for effect rounds have been fired.

Table 6-4. Results and observer actions

Results of Fire for Effect	***Observer's Actions (Radio Transmission in Parentheses)***
Accurate and sufficient	End of mission, surveillance (END OF MISSION, RPG SILENCED, OVER)
Accurate, sufficient, target replot desired	Request replot, end of mission, surveillance (RECORD AS TARGET, END OF MISSION, BMP NEUTRALIZED, OVER)
Inaccurate and sufficient	Refinement, end of mission, surveillance (RIGHT 20, ADD 20, END OF MISSION, RPG SILENCED, OVER)
Inaccurate, sufficient, target replot desired	Refinement, request replot, end of mission, surveillance (RIGHT 10, RECORD AS TARGET, END OF MISSION, BMP NEUTRALIZED, OVER)
Inaccurate and insufficient	Refinement, repeat and reenter, adjust fire (RIGHT 10, ADD 50, REPEAT, or RIGHT 10, ADD 100, ADJUST FIRE, OVER)
Accurate and insufficient	Repeat (REPEAT, OVER)
Legend: BMP--Russian amphibious tracked infantry fighting vehicle; RPG--rocket propelled grenade	

EXAMPLES OF A CALL FOR FIRE TRANSMISSIONS

6-77. Table 6-5 is an example of a GRID mission. Table 6-6 is an example of a shift from known point fire mission.

Table 6-5. Example of a GRID mission

Observer	*Firing Unit*
F24, this is J42, ADJUST FIRE, OVER.	J42, this is F24, ADJUST FIRE, OUT.
GRID WM 180513, DIRECTION 0530, OVER.	GRID WM 180513, DIRECTION 0530, OUT.
Infantry platoon dug in, OVER.	Infantry platoon dug in, OUT.
SHOT OUT.	SHOT OVER.
SLASH OUT.	SPLASH OVER.
End of mission, 15 casualties, platoon dispersed, OVER.	End of mission, 15 casualties, platoon dispersed, OUT.

Table 6-6. Example of a shift from a known point

Observer	*Firing Unit*
J42, this is F24, ADJUST FIRE, SHIFT AB1001, OUT.	J42, this is F24, ADJUST FIRE, SHIFT AB1001, OUT.
DIRECTION 2420, RIGHT 400, ADD 400, OUT.	DIRECTION 2420, RIGHT 400, ADD 400, OUT.
5T72 Tanks at POL site, OVER.	5T72 Tanks at POL site, OUT.
I AUTHENTICATE Tango, OVER.	AUTHENTICATE Juliet, November, OVER.
SHOT OUT.	SHOT OVER.
SPLASH OUT.	SPLASH OVER.
End of mission, two tanks destroyed, three in wood line, OVER.	End of mission, two tanks destroyed, three in wood line, OUT.
Legend: POL – petroleum, oils, and lubricants	

6-78. In addition to the supporting cannon units, MLRS/High Mobility Artillery Rocket System elements may also provide fires. Unlike cannon artillery, MLRS units fire rocket and missile munitions delivering only high explosive, dual-purpose improved conventional munitions, or antipersonnel and antimateriel warheads. They provide rocket or missile fires but do not offer special munitions such as obscuration, illumination, or white phosphorus. The maximum range of a MLRS rocket is 32,000 to 45,000 meters, depending upon the type of munitions. The planning range for MLRS missiles in the Army Tactical Missile System is 100,000 to 300,000 meters, depending upon the type of munitions.

SNIPER EMPLOYMENT

6-79. The sniper's primary mission in combat is to deliver precision long-range fires on selected targets. Effective long-range fires create casualties, slow movement, instills fear and influences enemy decisions and actions, lowers morale, and adds confusion to enemy operations. Snipers observe, collect, and provide critical, detailed information. Examples include snipers providing overwatch during a dismounted portion of zone reconnaissance or adding depth to a screen in complex terrain.

MILITARY INTELLIGENCE COMPANY

6-80. The military intelligence company personnel task organized according to the BCT commander and staff based on the mission variables. Soldiers from the military intelligence company support the BCT and its subordinate commands by executing HUMINT, signals intelligence, and tactical UAS collection; document and media exploitation; and, in certain instances, biometrics and forensic collection.

UNMANNED AERIAL SYSTEM

6-81. UAS are a mix of hand or rail launched reconnaissance and surveillance tools which are remote operated aircrafts controlled from an on the ground operator. These UAS transmit live airborne video images, compass headings, and location information to a ground control station, a reconnaissance, surveillance and target acquisition laptop (if connected), and a one-station remote viewing terminal. They are tools that tactical commanders could employ to gather mission critical information about the operational environment, and reduce the tactical risk within their formation.

6-82. Integration of UAS in reconnaissance and security missions increases the informational gathering capability for scout platoons. These systems can provide the scout platoon a flexible, low-risk means for gaining basic information in a speedy and efficient manner. The scout platoon's use of UAS can provide quick information gathering of a designated AO covering dead space that cannot be seen by ground forces. They provide an alternate way to observe an area through a different point of view. UAS provide operational capabilities in force protection, convoy security, target identification, and battle damage assessments.

6-83. Information derived from UAS assets helps the scout platoon leader determine which routes and cross-country terrain best accommodate reconnaissance tasks. In addition, the scout platoon takes information generated by UAS units and immediately sends SPOTREPs to organizations that need combat information. Information gathered by the UAS range from very near (over the next hill or around the next block) to hundreds of kilometers away. (Refer to ATP 3-04.1 for more information.) Scout platoons employ the man-portable UAS assets but also have direct access to real-time or near-real-time feeds from other UAS such as the BCT asset, the RQ-7 Shadow.

EMPLOYMENT

6-84. Scout platoon leaders have to tactically integrate UAS positions forward of mounted observation post positions along the screen to provide early warning of enemy, and observation of dead space in their engagement areas and AO. Small UAS category includes handheld (such as mini or micro) UAS. At this time, airspace requirements have not been determined for these mini or micro UAS. The UAS teams will be operating independently from other platoon elements and need to conduct similar priorities of work when conducting UAS operations as an observation post team. The UAS team needs to camouflage their positions, place no fire areas over their location, and report all required information to higher as needed. Security of the UAS site is very important.

6-85. Observation posts are not a desired launch point for a UAS and should only be used as a last resort. If a system launches from an observation post, then that observation post would most likely be compromised and would have to immediately relocate to their secondary or tertiary observation post position. Enemy forces could easily identify the observation post through sight and sound of a UAS launch site and would immediately attempt to destroy the threat. Scout platoon leaders and commanders need to carefully plan the separation between the raven operator and the team member conducting the launch.

Planning

6-86. Terrain considerations such as how the elevation of surrounding terrain and line of sight between the ground control station and the objective will affect the mission. UAS operators will consider the ground contour along proposed flight routes, foliage effects on the radio frequency link, and the effect of operation in high altitude areas. Time considerations include coordination times for launch and on target, expected duration of UAS missions, and set-up and recover time.

6-87. Troops available for the launch team (two-person minimum), security for the UAS team, training level of the small unmanned aircraft systems team, and other support/augmentation (data capture, remote launch/recovery) need to be considered during the scout platoon's TLP.

Launch and Recovery

6-88. Launch and recovery are the two most high-risk times when conducting UAS operations. Include risk mitigation when planning for the launch and recovery of UASs. Operators have to ensure continuous security of the launch and recovery site, while the platoons focus remains on the tactical situation. The aircraft will be at its lowest point of the flight and within sight and sound of any enemy in close proximity to friendly forces. The enemy will take every opportunity to observe a UAS during flight in an attempt to observe the launch or recovery location. Regardless of UAS size, the scout platoon should be on full alert during launch and recovery, observing assigned sectors and not the UAS take-off and landing.

RESTRICTED OPERATING ZONE

6-89. UAS operators need to submit either a preplanned or an immediate ROZ request as the first step to fly their systems in the AO during missions. Operators work with their commander and scout platoon leader to establish what type of ROZ they plan to use and to ensure the request is submitted to the squadron or battalion command post. The common three ROZ types are circular, box, and route.

6-90. A circular ROZ requires a center point grid and the UAS operator then puts in a request expanding a circular area over a center point grid with a radius in miles or kilometers. The circular ROZ is one of the easiest types of ROZs to establish (see figure 6-14).

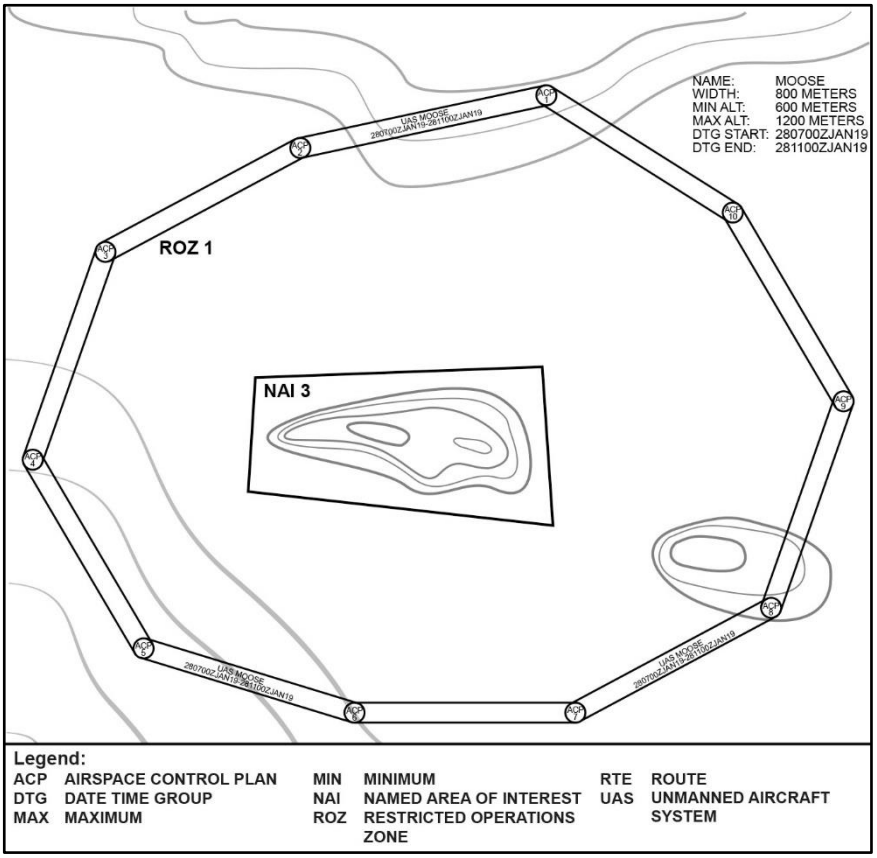


Figure 6-14. Circular restricted operating zone

6-91. The box ROZ requires the UAS operator to establish an area they want their system to fly over and using a box graphic with a minimum of four grid locations for each corner of the box graphic. The box ROZ could have more than four grid locations if needed (see figure 6-15, page 6-34).

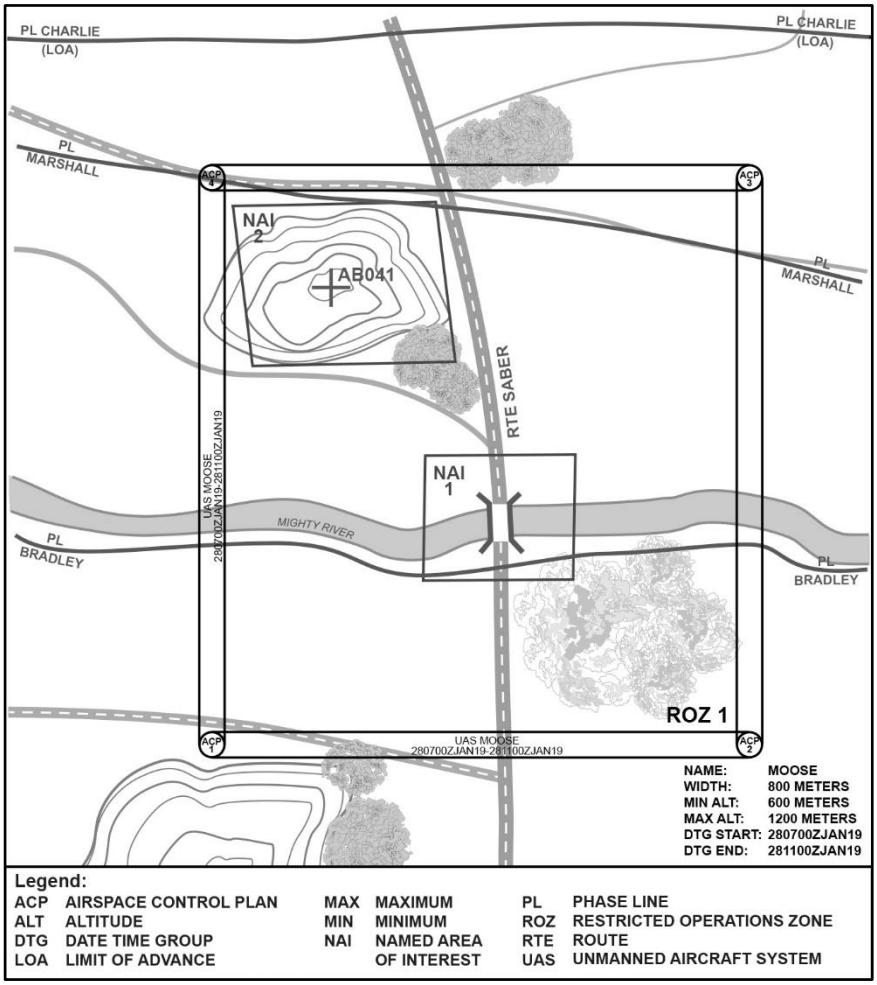


Figure 6-15. Box restricted operating zone

6-92. When requesting a ROZ, the operator will transmit the request along with a list of other required information. There is no standardized UAS mission request form, but units should be familiar with the information needed for the request process. The information the scout platoon provides is what the squadron/battalion is going to request. The scout platoon conducting the launch ensures they are tracking all the submitted information. It is common for UAS information such as frequencies, launch and recovery grid locations, ROZ names, and flight times to change after the ROZ approval process and this could delay UAS operations. Table 6-7 is an example of the information transmitted for a nonstandard UAS mission request.

Table 6-7. Nonstandard unmanned aerial system mission request, example

Unmanned Aerial System Mission Request Information			
REQUESTOR INFORMATION			
Unit: C TRP, 2-1 CAV			
Point of Contact: 1LT Brown			
Phone: 123-456-7890			
Email: ava.d.brown.mil@mail.mil			
Contact Frequency: FM: Frequency 431			
Mission Purpose: Area Reconnaissance			
Requested Name of Airspace Control Measure: PL RED			
Launch Site (Grid): 11S EC 12345 34543		Recovery Site (Grid): 11S EC 12300 34500	
Launch Site Altitude (MSL): 800 Meters		Recover Site Altitude (MSL): 845 Meters	
SUAV Channel: 45			
Type of Measure (Shape) Mark an "X" next to type requested:			
ROZ (Circle) Grid: Grid coordinate of center point_11S EC 12600 34900 Coordinate of Center Point Radius (nm/miles/km) 3 Miles			
Route (Corridor) Enter two coordinates and width for each segment. Identify (nm/miles/km)			
1. 11S EC 12345 67890	W: 1 KM	2. 11SEC 23451 789056	W: 1.5 KM
3. 11S EC 67890 12345	W: 1 KM	4. 11S EC 54321 09876	W: 2 KM
5. 11S EC 89765 76234	W: 1.5 KM	6. 11S EC 24531 76854	W: 0.9 KM
Box (can have more than 4 points). Enter a coordinate for each corner of the shape:			
1. 11S EC 12345 67890	2. 11S EC 23451 78906	3. 11S EC 89765 76234	
4. 11S EC 24531 76854	5. 11S EC 54321 09876	6. 11S EC 67890 12345	
Flight Altitude in AGL: Minimum: 600 Meters		Maximum: 1200 Meters	
DTG of Mission: Start (Launch): 280400JAN 2020		Stop (Recovery):280900JAN2020	
NOTE: ZULU TIME ONLY! Zulu – Local +/- 14 Hours			
DTG Request submitted to battalion/squadron S-3: 151300JAN2020			
OFFICIAL USE			
Battalion S-3: Reviewed by SFC Taylor, Michael			
Sent to ADAM/BAE (POC and DTG)			
Comments: ROZ has been submitted and waiting on ADAM/BAE Cell for approval.			
Legend: ADAM – air defense airspace management, AGL – above ground level, BAE – brigade aviation element, DTG – date-time group, km – kilometers, MSL - missile, nm – nautical miles, POC – point of contact, ROZ – restricted operating zone, S-3 – battalion or brigade operations staff officer, UAV – unmanned aerial vehicle, W – width			

WEATHER EFFECTS

6-93. Winds. Unmanned aircrafts have crosswind and total wind limitations that may affect launch and recovery operations. Winds at altitude may have significant effects on unmanned aircrafts range, transit time, and time on station. High surface winds at UAS communications and relay sites may force antenna stowage and delaying or curtailing missions. UAS will operate in blowing sand and dust with wind speeds up to 20 knots. Wind speeds over 20 knots will reduce mission capability and create a higher risk of damage during launch, landing, and recovery. Operators will need to determine if it is safe to launch their system in higher wind speeds and make their recommendation to the troop commander. The squadron weather officer can provide real time weather reports to UAS operators. Leaders must also understand the effects of precipitation visibility, and temperature effect on UAS operations.

UNMANNED AERIAL SURVEILLANCE RECONNAISSANCE TASKS

6-94. Small UASs can operate approximately 10 km forward of the scout platoon (METT-TC dependent), and conduct reconnaissance of areas that are particularly dangerous to ground elements, such as open areas and defiles. Upon enemy contact, the UAS provides early warning for the scout platoon and maintains contact with the enemy until the platoon moves forward for handover.

UNMANNED AERIAL SURVEILLANCE SECURITY TASKS

6-95. The UAS complements the scout platoon during security tasks by assisting in identifying enemy reconnaissance and main body elements, and providing early warning forward of the platoon. The UAS also has a critical role in providing security through the depth of the screen by observing dead space between observation posts.

6-96. Usually the UAS positions forward of the ground observation posts, which provides added depth to the screen, especially during operations in daylight. Ultimately, the positioning of UAS always depends on the specific METT-TC situation (see figure 6-16).

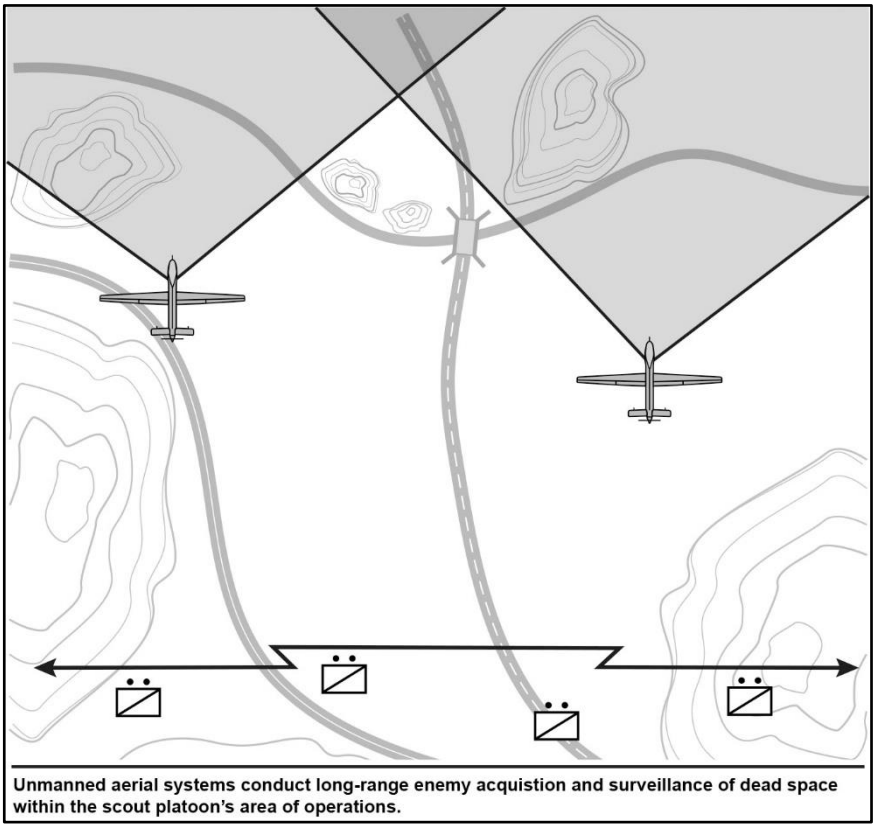


Figure 6-16. Unmanned aircraft system complementing a ground scout platoon's screen

AREA SECURITY

6-97. The UAS element can complement the scout platoon during area security missions by providing additional 360-degree security, or conducting reconnaissance for additional maneuver space. An aerial screen can provide early warning for a scout platoon executing a convoy escort mission or securing a critical point. (See figure 6-17, on page 6-38.) The UAS can identify enemy ambush positions forward of the convoy or bypass an obstacle (as illustrated in figure 6-18 on page 6-39.

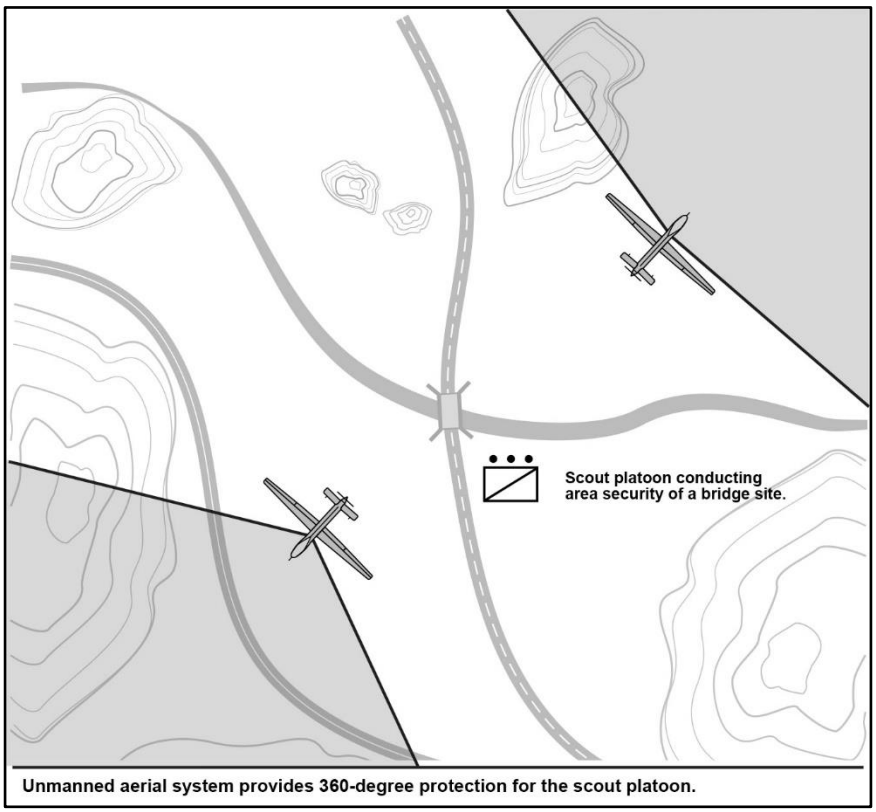


Figure 6-17. Unmanned aircraft system providing additional security for a scout platoon

6-98. UAS supporting the scout platoon can identify an enemy element before visual or physical contact with the scout platoon preventing unwanted detection and engagement. The lead vehicle and the overwatch element occupy positions allowing them to observe the enemy and, if necessary, destroy the enemy while the UAS provides the scout platoon with overhead security. The UAS may also establish and maintain contact with a moving enemy element while friendly units conduct a RHO during a screen mission.



Figure 6-18. Unmanned aircraft system reconnoitering a bypass for a scout platoon

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR

6-99. BCT CBRN assets may attach to the platoon and provide capability for advanced CBRN detection and presumptive or field confirmatory identification capabilities and subject-matter expertise in recognizing indicators of enemy CBRN related operations. The standoff CBRN sensors of the CBRN reconnaissance platoon will enable contamination avoidance and reduce operational risk. BCT CBRN elements are limited to reconnaissance elements in the brigade engineer battalion, and do not provide decontamination support.

6-100. In the ABCT and SBCT, CBRN reconnaissance platoons will be equipped with the nuclear, biological, chemical reconnaissance vehicle. IBCT reconnaissance platoon are vehicle-equipped but conduct reconnaissance dismounted.

6-101. Advantages of mounted CBRN reconnaissance (nuclear, biological, chemical reconnaissance vehicle) are—

- Speed. When time is limited, conducting the reconnaissance mission mounted without exiting the vehicle provides the commander faster feedback and the capability to cover large areas. Vehicles offer increased mobility in open terrain. Mounted reconnaissance may be conducted in high-mobility, multipurpose wheeled vehicles or nuclear, biological, chemical reconnaissance vehicles.
- Protection. Vehicles provide the reconnaissance and security element additional protection from CBRN and conventional hazards. These advantages depend on the specific vehicle employed. Reconnaissance vehicles may include the following:
  - Armor protection.
  - Enhanced navigation and communications capability.
  - Enhanced optics providing stand-off detection before entering contamination.
  - Firepower to defeat light-skinned armor vehicles and some infantry fighting vehicles (IFVs).
  - Vehicle collective protection.
  - Meteorological data.
  - Remaining mounted allows the reconnaissance and security element to conduct detailed CBRN reconnaissance at a speed greater than dismounted CBRN reconnaissance and security could achieve.

6-102. Disadvantages of mounted CBRN reconnaissance (NBCRV) are—

- Loss of stealth due to the visual, noise, and thermal signatures of vehicles.
- Loss of accuracy to pinpoint actual contamination.
- Higher probability of false positives.
- Higher probability of false negatives.
- Decontamination requirements for personnel and vehicles.
- CBRN reconnaissance vehicles are often not equipped with dismounted reconnaissance capabilities for buildings or other places not accessible by vehicles.

6-103. Advantages of dismounted CBRN reconnaissance are—

- Permitting elements to benefit from the concealment offered by vegetation and terrain.
- Providing IBCTs and light forces the capability to exploit narrow gaps between CBRN contamination, and enabling penetration of forces at an enemy's perceived denied terrain.
- Reducing visual or audio signature.

- Providing the ability to conduct reconnaissance operations when the CBRN hazard is in close proximity to adversary positions.
- Conducting reconnaissance operations in restricted terrain, such as dense urban environments and subterranean facilities.

6-104. Disadvantages of dismounted CBRN reconnaissance are—

- A slow rate of movement and increased time to complete.
- A greater work/rest requirement and oxygen consumption rates to execute operations.
- An extensive requirement for detailed preliminary planning and coordination.
- Considerable risks to Soldiers conducting dismounted CBRN reconnaissance operations.
- Requirements for technical decontamination planning.
- Limited range of communications capabilities.
- Reduced protection from—
  - Working in direct contact with CBRN threats and hazards.
  - Adversary direct and indirect fires.
  - Booby traps.
  - IEDs.

6-105. The purpose of CBRN reconnaissance and security reconnaissance is to provide commanders with detailed, timely, and accurate information about the CBRN threat, by visual observation or CBRN detection methods, and to gain situational understanding of CBRN threats and hazards. Information that is collected from multiple sources and analyzed becomes intelligence that provides answers to the CCIR and PIR concerning an enemy's use of CBRN weapons or regarding impacts of an accidental release of CBRN material.

SECTION II – EXTERNAL BRIGADE COMBAT TEAM ASSETS

6-106. When required, the troop may request augmentation for the scout platoon from outside the BCT. Both habitual and other augmentation assets are below.

AIR AND MISSILE DEFENSE SUPPORT

6-107. Due to the scarcity of air defense assets, scout platoons cannot plan on always receiving dedicated air and missile defense (AMD) protection assets. Consequently, scout platoons must employ passive and active measures to nullify and reduce the effectiveness of enemy attack or surveillance by enemy aircraft, UAS, and missiles. These measures include avoiding detection, limiting the damage if attacked, and if necessary, engaging enemy aircraft with intent to destroy or disrupt the attack.

PASSIVE AIR AND MISSILE DEFENSE

6-108. Passive AMD is the scout platoon's first line of defense, which includes two types: attack avoidance and damage-limiting measures. To avoid an attack, scouts use

concealment, camouflage, deception, and any other necessary action to prevent the enemy from observing their location. Concealment is the most effective measure to remain undetected from visual and thermal sensors. To remain concealed from enemy air attacks and UAS, scouts must occupy locations that prevent overhead observation. These locations must afford scouts clear observation and fields of fire to provide early warning of approaching aircraft. When effective concealment is not available, vehicles must camouflage, hide track marks leading to the position, and cover all reflective shiny or bright-colored surfaces that could attract attention. To limit the damage of an attack, scout platoons must prepare to disperse and use natural or man-made cover to reduce the effects of enemy munitions. Dispersion is especially important when occupying static positions such as assembly areas or preparing to cross a water or breached obstacle. If an attack is imminent, vehicles must disperse quickly to concealed positions if possible and remain stationary, as they are more difficult to see than a moving vehicle. Effective cover and concealment can include folds in the earth, depressions, and buildings.

ACTIVE AIR AND MISSILE DEFENSE

6-109. Execute active AMD measures based on the situation, the capabilities of organic weapon systems, and whether AMD assets have been task organized to the scout platoon. If engaging enemy aircraft with organic weapon systems, the most effective action is a coordinated, focused, volume of fire, including the scout platoon leader's synchronizing crew-served weapons or guided munitions, such as TOW missile systems when equipped. The football field technique is recommended for aircraft engagement with unguided organic weapon systems. For rotary-wing aircraft, aiming should lead the aircraft by one-half football field for crossing or overhead courses, and slightly above the fuselage for aircraft flying directly at the platoon's position (see figure 6-19).

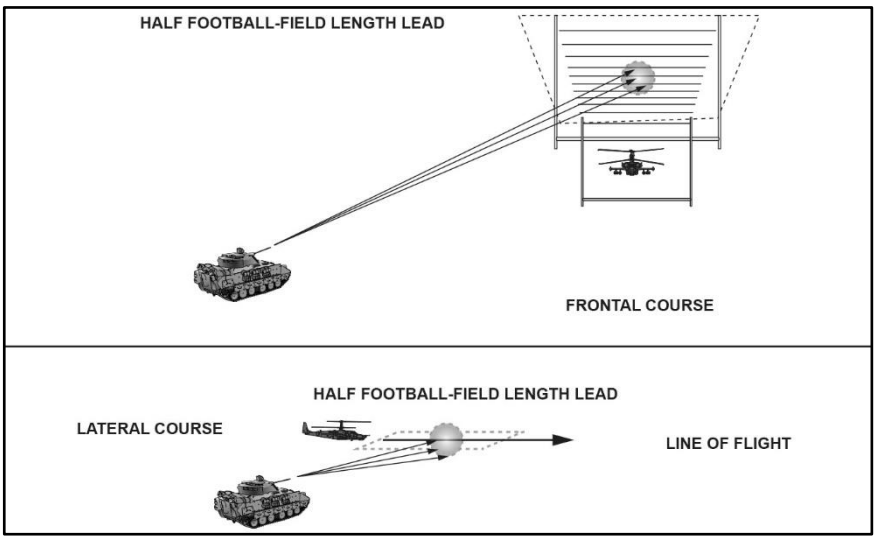


Figure 6-19. Football field technique: rotary-wing aiming points

6-110. For fixed-wing aircraft, aiming should lead the aircraft by two football fields for crossing or overhead courses and slightly above the nose if flying directly at the scout's position (see figure 6-20, on page 6-44). If AMD assets such as an Avenger element or Stinger man-portable air defense system task-organize into the platoon, they will be the primary means of engaging enemy aircraft with support from organic weapon systems.

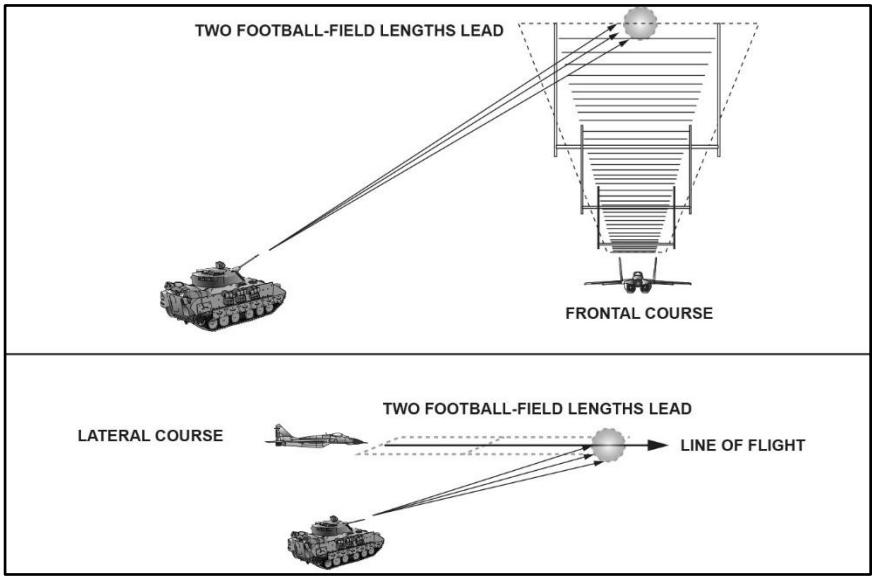


Figure 6-20. Football field technique: fixed-wing aiming points

PLANNING CONSIDERATIONS

6-111. If dedicated AMD assets are task organized to the scout platoon, it is essential to factor their capabilities and limitations into the platoon's scheme of maneuver. Some of the factors the platoon should consider are—

- Acquisition and munition range and type.
- AMD asset sustainment.
- Mutually supporting and overlapping fires.
- AMD engagement criteria.

ARMY AVIATION SUPPORT

6-112. Army aviation conducts air-ground operations as the aerial maneuver force of the combined arms team, or as an independent maneuver force in support of ground forces. During reconnaissance and security missions, scouts platoons are primarily supported by air assets from the attack reconnaissance squadron (known as ARS) of the combat aviation brigade. Assets from the ARS provide accurate and timely information collection; provides reaction time and maneuver space; and destroys, defeats, delays, diverts, or disrupts enemy forces. Although ARS assets are fully capable of conducting an attack, the integration of UAS platforms make the ARS the best aerial formation for conducting reconnaissance, security, and movement to contact as primary missions.

6-113. Scout platoons may receive support from the attack reconnaissance battalion; however, attack reconnaissance battalion assets have less overall reconnaissance

capabilities than the ARS due to the lack of organic UAS platforms, making attack operations their primary mission. Refer to FM 3-04 for more information on the difference between ARS and attack reconnaissance battalion assets, as well as other aviation brigade assets.

6-114. Attack reconnaissance squadron assets are capable of conducting the following tasks in support of scout platoons:

- Zone, area, route, reconnaissance, and reconnaissance in force.
- Screen.
- Guard and area security.
- Movement to contact.
- Attack.

7-115. Scout platoons use plain and direct language when speaking to aircraft crews. They describe the situation and what they want the aircraft to do. Do not broadcast overly complicated or stilted and formal transmissions. When transmitting procedural requirements, follow the format exactly. Aviation attack reconnaissance units use a standardized check-in brief format to transmit information to the supported ground unit. The check-in brief format in table 6-8 provides the scout platoon with key and essential information about the aviation assets that should be transmitted.

Table 6-8. Air to ground check-in brief, example

Air to Ground Check-In Brief
1. Check-in call: "Red One, this is Bravo Three-Four." (ground unit) (aircraft call sign)
2. Aircraft team composition and location: "Two AH-64Es approximately 12 kilometers north of your position." (Compositional) (Location)
3. Munitions available. "Weapons load: 100 rounds of 30 millimeter, 14 point detonating rockets, 4 hellfires."
4. Night vision capability and type: "Night vision and forward looking infrared capable."
5. Station time: "We have approximately 120 minutes of play time: request your SITREP.
Legend: SITREP – situation report

6-116. Aviation attack reconnaissance units will request a ground SITREP from of the scout platoon following the check-in brief to gain situational awareness of the following:

- Location of all friendly ground forces in the AO.
- Scout platoon's mission.
- Enemy situation (if applicable).
- Aircraft task and purpose.

- Any other aircraft or UAS operating in the AO.
- Any hazards to aircraft.

RECONNAISSANCE

6-117. Scout platoons leverage aviation reconnaissance capabilities to conduct reconnaissance at greater distances and in severely restricted terrain. Regardless of whether reconnaissance is a specified task or not, it is always an implied task for every aviation element to gather and report information on enemy and friendly disposition, terrain, and civil activities observed during the course of all operations. During route reconnaissance, aviation assets can focus on terrain, ensuring maneuverability for the scout platoon by identifying potential obstacles and hazards

SECURITY

6-118. Similar to reconnaissance, aviation reconnaissance assets conduct security tasks; however, the only security task that aviation can perform autonomously is the screen. Screens are the only form of security scout platoons can employ aviation reconnaissance assets as an additional, independent maneuver element. When the scout platoon is operating as part of a guard or cover operation, aviation reconnaissance assets can conduct tactical, enabling, and sustaining tasks in support of the scout platoon including screen, zone and route reconnaissance, movement to contact, and attacks. When directly supporting the scout platoon they also conduct area security, including convoy and route security.

6-119. Since aviation assets are unbound by complex terrain, they add depth to the overall security operation for the protected force. For example, UAS in the deep area conduct reconnaissance on a NAI to provide early and accurate warning of impeding enemy forces to manned assets screening along the forward line of troops. The manned assets then gain and maintain enemy contact to provide early and accurate warning to the scout platoon, or call for fires on the enemy position.

MOVEMENT TO CONTACT

6-120. The speed, range, lethality, long-range communications, and reconnaissance capabilities of attack aviation reconnaissance assets ideally suit them to conduct movement to contact, especially with the employment of manned-unmanned teaming. Scout platoons may increase their freedom to maneuver by having aviation assets develop the situation and create favorable conditions to conduct subsequent tactical or enabling tasks.

ATTACK

6-121. Army aviation may conduct hasty or deliberate attacks in support of friendly forces in close contact or out of contact with enemy forces. When attack reconnaissance assets support the scout platoon, the scout platoon leader controls the synchronization and integration of aviation maneuver, and the distribution and de-confliction of aviation fires. The air mission commander is the final release authority for any munitions fired

by the aircraft. Air-ground integration requires detailed planning; however, lack of time often prevents this integration. In this case, scout platoons use the attack aviation call for fire, a standardized 5-line format for employing attack aircraft as depicted in table 6-9, to transmit coordinates.

Table 6-9. Attack aviation call for fire, example

Attack Aviation Call for Fire (5-Line)
1. Observer/Warning Order: "Red One, this is Bravo Three-Four, fire mission, over." (Aircraft call-sign) (Ground Unit)
2. Friendly location/mark: "My position is QS1234567, marked by "infrared strobe." (Location) (Mark)
3. Target location: "Target location QS82134563." (Grid, target reference point, bearing [magnetic] and range [meters])
4. Target description/mark: "Armored vehicle, marked by tracer and infrared pointer." (Target description) (Target Mark)
5. Remarks: "At my command, over." (Threats, danger close clearance, restrictions, at my command, when ready, and so forth.)

6-122. Alternatively, Army aviation may conduct attacks against enemy forces out of friendly contact to preemptively divert, disrupt, delay, or destroy enemy capabilities before they can be brought to bear on friendly forces. While these operations may require more detailed planning and range from relatively low-risk to extremely high-risk, they may be effective at shaping the enemy force prior to the scout platoon's mission. The air mission commander controls the maneuver and fires for these missions.

CLOSE AIR SUPPORT

6-123. The scout platoon may employ CAS from fixed-wing aircraft to augment other supporting fires or to attack targets of opportunity. The speed, range, and maneuverability of aircraft allow them to attack targets that other supporting fires may not be able to effectively engage due to limiting factors such as target type, range, terrain, or the ground scheme of maneuver.

6-124. Ground commanders are the ultimate authority for all supporting fires in their respective AO. The ground commander at the lowest level is responsible for the employment of CAS assets unless responsibility is specifically retained by a higher level commander in the ground force's chain of command.

IMMEDIATE CLOSE AIR SUPPORT

6-125. Requests for immediate CAS occur when identifying requirements that are identified too late to meet the air tasking order cutoff time. If there are no immediate CAS sorties available when identifying and targets of opportunity, then other aircraft may divert to engage these targets or provide CAS for scout platoon missions.

PLANNING CONSIDERATIONS

6-126. CAS mission success relates directly to thorough planning based on the following considerations:

- Weather.
- Identification of enemy and friendly forces.
- Target acquisition and identification procedures.
- Target type and desired weapon effects.
- Final attack heading.
- Suppression of enemy air defenses.
- CAS and artillery integration.

NIGHT CLOSE AIR SUPPORT

6-127. As with weather considerations, the use of GPS and laser-guided munitions enhance the ability of CAS assets to provide support at night. The two most important requirements of a night CAS mission are target identification, and positive marking, and identification of friendly unit locations.

6-128. Flares from terminal controllers or other CAS aircraft can effectively illuminate target areas. Artillery and mortar-fired illumination provide longer sustained rate of fire. Flares used during limited visibility such as fog or obscuration can make it more difficult for aircraft to find targets. During a low cloud ceiling, flares can highlight the aircraft against the clouds.

6-129. Tracers and infrared beacons can improve safety and provide target area reference. Strobe and IR lights are very useful for marking friendly locations, especially in overcast conditions. Aside from obvious security considerations, almost any light that a scout has filtered, covered, or uncovered is useful for signaling aircraft.

CLOSE AIR SUPPORT REQUEST

6-130. The CAS request provides situational awareness and the information necessary for the crew of the aircraft to successfully engage target(s). The terminal controller, normally a joint terminal attack controller (JTAC) or forward air controller-airborne, transmits via radio to the attack aircraft, providing the aircrew enough time to write down the information and set up their navigational equipment. Table 6-10 provides the CAS request format. Lines 4 and 6 and any restrictions are mandatory read-back items by the aircrew, but the controller may request read-back of additional items.

6-131. Scout platoons may employ joint fire observers if no JTAC/forward air controller-airborne support is available. Scout platoons working forward and independent of the troop may conduct emergency control of CAS missions in the absence of JTAC/forward air controller-airborne or joint fire observers personnel. Referred to as, 'CAS by a nonqualified controller,' non-JTAC controllers clearly state to attacking aircraft that they are 'non-JTAC qualified' during aircraft check-in. (Refer to ATP 3-09.32/MCRP 3-16.6A/NTTP 3-09.2/AFTTP 3-2.8, chapter 3 for additional information on CAS coordination.)

Table 6-10. Close air support briefing (game plan and 9-line)

CAS Briefing (Game Plan and 9-Line)
Do not transmit line numbers. Units of measurement are standard unless briefed. Lines 4, 6, and restrictions are mandatory read-back. Terminal controller may request additional read-back. JTAC: "(Aircraft call sign), advise when ready for game plan." JTAC: "Type (1, 2, 3) control (method of attack, effects desired or ordnance, interval). Advise when ready for 9-line."
1. IP/BP: "_____"
2. Heading: "_____" (degrees magnetic, initial point or battle position-to-target) Offset: "_____" (left of right, when requested)
3. Distance: "_____" (initial point-to-target in nautical miles, battle position-to-target in meters)
4. Target elevation: "_____" (in feet, mean seal level)
5. Target description: "_____"
6. Target location: "_____" (latitude and longitude or grid coordinates, or offsets or visual)
7. Type mark / terminal guidance: "_____" (description of mark; if laser handoff, call sign of lasing platform and code)
8. Location of friendlies: "_____" (from target, cardinal direction and distance in meters)
9. Egress: "_____"
Remarks / *restrictions: • Laser to target line (LTL) / point target line (PTL) • Desired type and number of ordnance or weapons effect (if not previously coordinated). • Surface-to-air threat, location, and type of suppression of enemy air defenses. • Additional remarks (for example, gun-to-target line, weather, hazards, friendly marking.) • Additional calls requested. • *Final attack headings or attack direction. • *Airspace coordination areas. • *Danger close and initials (if applicable). • *Time on target (TOT) / time to target (TTT).
Legend: CAS – close air support, JTAC – joint terminal attack controller, IP – initial position, BP – battle position

EXPLOSIVE ORDNANCE DISPOSAL

6-132. Explosive ordnance disposal teams support scout platoons by detecting, identifying, conducting on-site evaluation, rendering safe, exploiting, and achieving final disposition of all explosive ordnance, including IED and weapons of mass destruction. (See ATP 4-32 and ATP 4-32.3 for more information.) Explosive ordnance disposal units support scout platoons conducting reconnaissance and security by protecting the force. The principles for explosive ordnance disposal operations are in ATP 4-32.

INTERPRETERS

6-133. Interpreters are valuable assets to assist in reconnaissance tasks when scout platoons operate in close proximity to civilian populations. Early in the planning process, the scout platoon leader should request an interpreter who is familiar with the AO. Using an interpreter improves communication between the local population and the scout platoon, helps improve information collection, and fosters acceptance of the scout platoon within the particular AO. Interpreters often operate during searches, including tasks at roadblocks and checkpoints. It is very important to use approved interpreters when collecting or verifying information and take into consideration the security clearance level of the interpreter.

6-134. The role of the interpreter is to pass and receive information in a contextually correct manner in a designated language. The scout platoon leader must brief the interpreter on expected duties. The scout platoon leader must also ensure they are in control of conversations, not the interpreter.

Chapter 7
Sustainment

Sustainment is the provision of logistics, personnel services, and health service support necessary to maintain operations until mission completion. Sustainment for the scout platoon is a potentially challenging task due to the wide-ranging, low profile, and at times, decentralized nature of their mission. The scout platoon often operates well in front of maneuver forces while conducting reconnaissance and security missions. Distance and the need to keep sustainment tasks undetected by the threat hinder resupply operations for the platoon.

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SECTION I – BASICS OF SUSTAINMENT

7-1. Every member of the scout platoon participates in sustainment activities. Sustainment elements arm, fuel, fix, feed, and provide transportation and personnel for the scout platoon. Sustainment creates unique planning and operational challenges, with most of the responsibility falling to the platoon sergeant.

LEADERS RESPONSIBILITIES

7-2. Sustainment responsibilities for the scout platoon include reporting and requesting support requirements through the troop and ensuring that they properly execute sustainment operations when support elements arrive in the platoon's AO. The PSG is normally in charge of these functions with guidance and oversight provided by the platoon leader. The PSG must track and submit accurate personnel and logistical reports, along with other necessary information and requests.

PLATOON LEADER

7-3. The scout platoon leader is responsible for the platoon's execution of the platoon's sustainment plan. The platoon leader is responsible for the development of the platoon sustainment plan, the readiness of the platoon, and everything in between. The platoon leader receives assistance from the experienced NCOs of the platoon, but is overall responsible for the maintenance, sustainment, and medical plans and requisite training, which starts upon taking over a platoon. Operator qualifications, maintenance, and lifesaving training which all falls under sustainment is something that the platoon leader needs to address as soon as they are given the responsibilities of leading a platoon. Proper and adequate training are necessary for the platoon members to operate platoon equipment and to hold designated platoon duties such as CLSs, vehicle recovery specialists, and drivers and it is the responsibility of both the platoon leader and subordinate leaders to ensure that the platoon members meet all training requirements for the positions in which they fill.

7-4. The platoon leader is overall responsible for the platoon sustainment, but the platoon leader directs subordinate leaders to accomplish all maintenance, sustainment, and MEDEVAC aspects. The platoon leader develops the platoon sustainment plan, addressed later in this chapter, but the platoon leader delegates certain functions to subordinate leaders. The platoon leader cannot delegate responsibility so the platoon leader maintains an active role in all sustainment functions.

7-5. Maintenance is vital to the platoon, and the platoon leader ensures that all platoon vehicles, weapon systems, and equipment such as radio's, night vision devices, and optics, are combat ready at all times. The platoon leader ensures tracking, managing, and repairing of all broken equipment even when conducted by higher-level maintenance. The platoon leader and platoon's noncommissioned officers are present, provide leadership, supervise, and assist maintenance operations during dedicated maintenance times. The platoon leader ensures the platoon does preventive maintenance on all equipment in accordance with the equipment's technical manual. The platoon leader gathers all the platoon's DA Form 5988-Es (*Equipment Maintenance and Inspection Worksheets*) or DA Form 2404s (*Equipment Inspection and Maintenance Worksheets*) to track and address all deficiencies.

7-6. The platoon leader knows the status of the current platoon maintenance activities, including corrective actions for equipment faults, maintenance work orders, and requisition of repair parts. The platoon leader always keeps the commander and XO informed of the scout platoon's maintenance status. The platoon leader is responsible for checking all personnel with active operator's licenses can operate their equipment.

7-7. Sustainment is vitally important for the platoon as the scout platoon operates as far forward on the battlefield as possible, and relies on internal supplies for sustainment. The platoon leader knows the current logistic status of the platoon, additionally, how quickly their platoon consumes or expends each resource (water, fuel, ammunition, and subsistence). The platoon leader receives the logistics status report from the PSG, and provides it to the platoon XO or troop commander when necessary. The platoon leader leads the platoon sustainment rehearsal with the assistance of the PSG.

PLATOON SERGEANT

7-8. The PSG is the scout platoon's primary sustainment planner, coordinator, and operator; reporting directly to the scout platoon leader. The PSG executes the scout platoon's logistical plan, relying heavily on platoon and troop SOPs. The PSG directly supervises and controls the platoon's assets. During preparations for the mission, the PSG works closely with the platoon leader and section leaders to determine specific sustainment requirements to support the tactical plan. The PSG advises the platoon leader as they develop the sustainment paragraph of the platoon OPORD. The PSG then ensures proper arrangements occur to meet are made to provide those sustainment requirements.

7-9. During missions, the PSG's first priority is assisting the platoon leader with the conduct of the mission. The PSG maintains accountability of the platoon's sustainment uses and requirements during mission execution. The PSG gathers reports from squad teams, squads, and section leaders, and coordinates sustainment requirements directly with the troop 1SG and XO.

7-10. The PSG is as important in the platoon's maintenance readiness as the platoon leader. The PSG supervises the platoon's operators during PMCS on weapons, equipment, and vehicles, and shares the maintenance status with maintenance personnel, and other troop leadership. The PSG is the person with the most experience in platoon operations as they relate to maintenance and is the platoon's subject matter expert on all maintenance related subjects. The PSG coordinates with the appropriate personnel at all friction points to ensure all of the platoon's equipment is operational. If there is a communications issue then the PSG works with battalion or brigade signal staff officer for repairs, if there is an issue with ordered parts being taken off the DA Form 5988-E then they coordinate with the XO and maintenance personnel. The PSG has the experience and knowledge to improve the operational readiness of the platoon.

7-11. The PSG is the medical coordinator for the platoon. When needed, the PSG establishes and maintains the platoon CCPs and controls casualty and MEDEVAC requests for the platoon. The PSG transports the platoon medic and coordinates with the troop headquarters for additional medical assets. The PSG bears the responsibility for collecting, identifying, and transferring all human remains to the mortuary collection point. The PSG advises the platoon leader about the medical portion of all missions, and assists in establishing a well thought-out and effective MEDEVAC/CASEVAC plan that includes—

- Planning:
  - Determines the location of the scout platoon's resupply points during mission execution.
  - Conducts close coordination with the troop 1SG and XO for planning and resourcing the scout platoon's missions.
  - Maintains the scout platoon's manning roster and crew rosters.
- Maintenance:
  - Informs the scout platoon leader of the platoon's maintenance and logistics status.

- Directs and supervises maintenance of the platoon's equipment, vehicles, and weapon systems.
- Collects reports of the scout platoon's maintenance status in the field and sends the appropriate consolidated reports to maintenance personnel.

- Medical:
  - Directs and supervises treatment and evacuation of casualties.
  - Identifies and establishes platoon CCPs during combat missions.

7-12. Sustainment: Before, during, and after missions, the PSG tracks changes in consumption of the classes of supplies for the platoon and reports those changes to the XO or 1SG. The PSG monitors the platoon member's actions during resupply operations and ensures that everyone in the platoon understands actions at the resupply point. The PSG's crew meets the troop LOGPAC at the designated LRP and then guides the platoon level sustainment operation. The PSG oversees and directs crews to cross-level supplies and equipment throughout the platoon and does the following:

- Tracks changes in consumption of class I (Subsistence), class III (Fuel), class IX (Repair Parts) and expenditure rates of class V (Ammunition); reports the logistical status report to the XO or 1SG.
- Monitors actions during resupply operations and ensures each squad or section leader understands actions at the resupply point.
- Ensures vehicles receive adequate fuel in the field and stay topped off in garrison.
- Ensures the scout platoon executes the troop's sustainment operations according to the sustainment plan.
- Assists the platoon leader in leading a platoon level sustainment rehearsal with squad and section leadership present.
- Meets the LOGPAC at the designated LRP and guides platoon level sustainment operations.
- Cross-levels supplies and equipment throughout the platoon.

SECTION LEADERS

7-13. Section leaders are responsible for overseeing that all members of their section understand the scout platoon's sustainment plan. Section leaders provide the direct guidance and supervision down to the lowest level and play an integral role in all sustainment tasks.

7-14. Section leaders provide the required oversight needed when operators are conducting PMCS, and ensure that dispatch records are accurate, and turned in on time. For sustainment, section leaders compile personnel and logistic reports from the section and submit them to the PSG. Section leaders make sure everything is accurate and turned in according to the platoon tactical SOP. The section leaders obtain supplies, equipment, and mail from the PSG and ensure proper distribution within the section. They transfer and cross-level equipment and supplies when required, and provide direct guidance during platoon resupply operations. Additionally, section leaders correct hygiene deficiencies and monitor the health and welfare of the members of their section.

SUSTAINMENT FUNCTIONS

7-15. Sustainment involves the interrelated functions of conducting logistics, providing personnel services, and providing health service support. (See table 7-1.) Logistics determines the depth and duration of troop operations and is essential to retaining and exploiting the initiative.

Table 7-1. Sustainment functions

Sustainment Functions		
Logistics	***Personnel Services***	***Army Medical Department***
Maintenance	Human resources support	Organic and area medical support
Transportation	Financial management	Hospitalization (including chemical, biological, radiological and nuclear patients)
Supply	Legal support	Dental treatment
Field services	Religious support	Behavioral health and neuropsychiatric treatment
Distribution	Band support	Clinical laboratory services
Operational contract support		Medical evacuation (including en route care and medical regulating)
General engineering support		Medical logistics (including blood and blood products)

CLASSES OF SUPPLY

7-16. There are ten classes of supply. Each class has a major impact on the scout platoon's ability to accomplish its mission. The PSG obtains supplies and delivers them to the scout platoon based upon the established priorities for delivery set by the platoon leader. Combat operations demand class I, III, V, and IX supplies and equipment take priority because they are the most critical to the scout platoon during reconnaissance and security missions. (See table 7-2, on page 7-6 for the classes of supply.)

Table 7-2. Classes of supply

Class I	Rations and gratuitous issue of health, morale, and welfare items such as water and ice.
Class II	Clothing, individual equipment, tool sets, administrative and housekeeping supplies and equipment, and chemical, biological, radiological, and nuclear (CBRN) equipment.
Class III	Petroleum (bulk and packaged), oils, and lubricants
Class IV	Construction fortification and barrier, engineering materials such as pickets, sandbags, and concertina wire.
Class V	Ammunition, including mines and explosives.
Class VI	Personal-demand items, which include candy, soaps, and cameras.
Class VII	Major end items, such as vehicles and radio sets.
Class VIII	Medical, including medical-peculiar repair parts supplied through the squadron/battalion medical platoon.
Class IX	Repair parts and components for equipment maintenance, including documents required for equipment maintenance tasks.
Class X	Nonstandard items to support nonmilitary programs such agriculture and economic development.
Miscellaneous.	Anything that does not fall into one of the existing classes of supply.

SECTION II – SUSTAINMENT PLANNING

7-17. Platoon leaders fully integrate sustainment planning into all operational planning. The troop SOP should be the basis for sustainment operations, with planning conducted to determine specific requirements and to prepare for contingencies. The platoon OPORD should address specific sustainment matters of the mission. Address deviations from the sustainment SOP early in the planning process. In some situations, sustainment planning begins before receipt of the mission, as part of the ongoing process of refining the sustainment plan.

SUSTAINMENT PLANNING FACTORS

7-18. Planning for sustainment is primarily a troop and squadron-level task. While the troop commander and XO plan the task, the scout platoon leader and PSG are responsible for the execution of the plan. Concurrent with higher level planning, the scout platoon must plan, prepare, and execute its portion of the sustainment plan. The platoon leadership develops and refines their sustainment plan during the TLP process.

7-19. Maneuver battalion scout platoons coordinate directly with the battalion S-4, headquarters and headquarters company commander, and forward support company. Battalion staffs conduct the majority of battalion scout platoons planning and anticipate and coordinate directly with the platoon leader and PSG.

7-20. The scout platoon leader develops the sustainment plan by determining exactly what they have on hand to accurately estimate their support requirements. It is critical for the troop to know what critical supplies the platoon has on hand. This process is important not only in confirming the validity of the sustainment plan but also in ensuring the platoon's support requests are submitted as early as possible. The platoon leader can formulate the sustainment execution plan and submit support requests based on the results of the maneuver plan.

7-21. The sustainment plan provides answers to the operational questions that are identified during platoon mission analysis. Leaders should develop questions in relation to mission requirements, the threat, terrain and weather, time and location, and other considerations.

MISSION REQUIREMENTS

7-22. When conducting sustainment planning, the platoon leader and subordinate leaders need to address mission requirements. Reconnaissance requirements may vary from security requirements, so leaders address additional classes of supply they require outside of the basic load. Platoon leadership should forecast their status on the classes of supply and figure out if an emergency resupply of class III and V may be necessary during the mission. While planning for mission requirements, the platoon leadership identifies locations to possibly place prestocked supplies. The platoon analyzes attachments and their requirements and whether they may need additional supplies for the attachments. Finally, the platoon will have to determine if the developed sustainment plan is nested with, and will support the tactical plan. Adequate tracking and especially reporting to higher headquarters is essential in staff planning and forecasting.

THREAT

7-23. While conducting sustainment planning, the platoon leader determines the current enemy situation and future enemy activity, enemy capabilities, and how threat contact affects sustainment resupply during the mission. The platoon leader determines if planned LOGPACs need additional security due to expected enemy actions. The platoon leader determines expected enemy contact, and plans CASEVAC/MEDEVAC and sustainment that addresses the enemy.

TERRAIN AND WEATHER

7-24. Terrain and weather can have a significant impact on sustainment planning for the scout platoon. When conducting sustainment planning the platoon leader assesses the terrain to determine locations that provide the best security and feasibility for the trains, maintenance collection points, and CCP. The platoon leader identifies CASEVAC routes, and routes for the evacuation of contaminated personnel and equipment. Platoon leaders consider weather effects on operations during sustainment planning. Weather may increase or decrease sustainment requirements. Heat will increase water consumption, but cold can increase calorie intake.

TIME AND LOCATION

7-25. When conducting sustainment planning, one important factors of the plan is time and location. The platoon leadership determines when and where resupply will be required. They have to ensure that their methods and techniques nest with troops resupply plans. Leadership estimates to determine if their vehicles and personnel have the required resources available to accomplish the mission, and receive sustainment at the dates prescribed. The platoon leadership addresses resupply of mounted and dismounted positions, using the best techniques.

OTHER PLANNING CONSIDERATIONS

7-26. Detainees. During protection planning, the platoon needs to develop a plan for detainees. Detainee planning is later in this chapter, but the platoon needs to know how to secure detainees, what the platoon detainee plan is, identify detainee collection points, and plans to transfer detainees as transportation becomes available.

PRIORITY OF SUPPORT

7-27. Sometimes the platoon leadership designates who is priority to receive sustainment. One section or observation post takes priority over others.

FORECASTING LOGISTICS

7-28. Mission essential items and supplies make, or possibly break, a reconnaissance and security mission. Sustainment is an extremely important task platoon leadership needs to focus on, always. Accurately forecasting logistic requirements for the scout platoon is crucial to the success or failure of a mission. Scouts operating in a hot and humid environment need extra water. Vehicles that operate in a dry desert climate, for instance, will burn through oils and other class III products. Weapons need cleaning and maintaining at an increased rate.

7-29. Forecasting required logistic items is a fairly simple task, as long as the platoon leadership remains active, and aware of historical platoon usage, and needs. While performing mission analysis the platoon leadership will ask themselves, what supplies they have on hand, what are they going to be doing, and what supplies do they need. Leaders then have to go out and acquire the resources. If the platoon plans to send out more dismounted observation posts than usual, then anticipate burning through more batteries, water, and meal, ready to eat than they typically would during a mounted reconnaissance mission. The following class of supply discussion highlights only the most common for the scout platoon.

CLASS I (SUBSISTENCE)

7-30. Class I is one of the most important supplies in regards to sustainment planning for a scout platoon. Forecast class I based on the amount of scouts and attachments operating within the scout platoon. Meals and water consumption will provide the scout platoon the nutrients and hydration needed during reconnaissance and security.

7-31. Plan meals while understanding the troop and squadron feeding cycle. Meal, ready to eat is available to the scout platoon when there are no heat and serve meal options available. Water is a resource that all leaders carefully watch and maintain in abundance, during all missions. Mission requirements and environmental factors always alter water consumption within a platoon. Tables 7-3 and 7-4, on page 7-10, are estimates for class I (water consumption) that the scout platoon can use to provide forecasting assistance in planning reconnaissance and security.

Table 7-3. Water consumption chart

REQUIREMENTS FOR UNIVERSAL UNIT LEVEL ((UUL) (GAL/PERSON/DAY)
CONVENTIONAL THEATER

Function		Tropical		Arid		Temperate		Cold	
		Sustaining	Minimum	Sustaining	Minimum	Sustaining	Minimum	Sustaining	Minimum
Drinking		3.30	3.30	3.30	3.30	1.65	1.65	2.20	2.20
Personal Hygiene	Brushing Teeth 3 Times/Day	0.22	NA	0.22	NA	0.22	NA	0.22	NA
	Brushing Teeth 1 Time/Day	NA	0.08	NA	0.08	NA	0.08	NA	0.08
	Shaving	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
	Washing Hands 6 Times/Day	0.83	NA	0.83	NA	0.83	NA	0.83	NA
	Washing Hands 3 Times/Day	NA	0.42	NA	0.42	NA	0.42	NA	0.42
	Sponge Bath 5 Times/Week	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Food Preparation	Individual Meal (MRE)	0.14	0.43	0.14	0.43	0.14	0.43	0.14	0.43
	Unitized Group Ration (UGR) - A or H&S	1.78	NA	1.78	NA	1.78	NA	1.78	NA
Heat Injury Treatment		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Vehicle Maintenance		0.36	0.36	0.36	0.36	0.19	0.19	0.19	0.19
Non-potable Total		0.36	0.36	NA	NA	0.19	0.19	0.19	0.19
Potable Total		6.91	4.87	7.27	5.23	5.26	3.22	5.81	3.77
Theater Total		**7.27**	**5.23**	**7.27**	**5.23**	**5.45**	**3.41**	**6.00**	**3.96**

STANDARD PLANING FACTORS FOR UNIVERSAL UNIT LEVEL (GAL/PERSON/DAY)
CONVENTIONAL THEATER

Function	Tropical		Arid		*Temperate*		Cold	
	Sustaining	Minimum	Sustaining	Minimum	Sustaining	Minimum	Sustaining	Minimum
Drinking	3.30	3.30	3.30	3.30	1.65	1.65	2.20	2.20
Personal Hygiene	1.67	1.13	1.67	1.13	1.67	1.13	1.67	1.13
Food Preparation Total	1.93	0.43	1.93	0.43	1.93	0.43	1.93	0.43
Heat Injury Treatment	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Vehicle Maintenance	0.36	0.36	0.36	0.36	0.19	0.19	0.19	0.19
Non-potable Total	0.36	0.36	NA	NA	0.19	0.19	0.19	0.19
Potable Total	6.91	4.87	7.27	5.23	5.26	3.22	5.81	3.77
Theater Total	**7.27**	**5.23**	**7.27**	**5.23**	**5.45**	**3.41**	**6.00**	**3.96**

Legend:

A	A-RATION	H&S	HEAT AND SERVE	NA	NOT APPLICABLE
GAL	GALLON	MRE	MEAL, READY TO EAT		

Table 7-4. Daily environmental water consumption chart in gallons per person

Use	*Temperate*	*Tropical*	*Arid*	*Arctic*
Drinking water	1.5	3.0	3.0	2.0
Personal hygiene	1.7	1.7	1.7	1.7
Field feeding	2.8	2.8	2.8	2.8
Heat injury treatment	.1	.2	.2	.1
Vehicle maintenance			.2	
Standard planning factor	6.1	7.7	7.9	6.6

CLASS III (PETROLEUM, OILS, AND LUBRICANTS)

7-32. The scout platoon relies heavily on their vehicle platforms to retain freedom of maneuver. They use the advanced sight and optics systems to see and report. Scouts rely on the protection of their vehicles protective armor. Although vehicles are great to use, they require substantial amounts of class III to operate. Scout platoon leaders have the added responsibility to plan and forecast required class III so they meet their objectives. Table 7-5 assist the scout platoon leadership in understanding their vehicles burn rate, and can identify the need to bring more class III in fuel cans on their vehicles, or plan sustainment operations during the mission.

Table 7-5. Scout platoon vehicle burn rates

Vehicle	*Fuel Capacity (Gallons)*	*Idle (Gal/Hr)*	*Cross-Country (Gal/Hr)*	*Road Primary/Secondary (Gal/Hr)*
M2/3 BFV	175	1.70	19.11	21.96/21.57
STRYKER	56	1.23	7.66	4.07/4.60
HMMWV (Armored)	26	1.29	4.53	2.64/2.87
M1 ABRAMS	436	12.80	61.90	59.12/58.28
LMTV	52	1.02	7.05	2.82/3.34
Legend: BFV – Bradley fighting vehicle, Gal – gallon, HMMWV – high mobility multipurpose wheeled vehicle, Hr – hour, LMTV – light medium tactical vehicle				

7-33. Although the following table is only an estimate that assists in planning, the scout platoon can use an equation to figure out their fuel consumption prior the start of a mission. If a scout platoon leader is operating six M2A3 Bradley fighting vehicles for a zone reconnaissance mission followed by establishing a screen, for roughly a 24-hour period then they would calculate the following formula.

Scout Platoon Vehicle Burn Equation

Zone recon followed by screen mission (24 hr period)

Zone recon (8 hrs): 6 BFV x 19.11 (cross country) x 8 (hrs) = 917.28 gals

Screen mission (16hrs): 6 BFV x 1.70 (idle) x 16 (hrs) = 163.2 gals

24hr period= 917.28 + 163.2= 1080.48 gals of fuel (estimated to be used)

Each vehicle will use 1080.48 / 6 BFV = 180.08 gals per vehicle

If the platoon carries an additional 20 gals of fuel and uses silent watch when they are established on the screen, they could go 24 hrs without a class III resupply.

Legend: BFV – Bradley fighting vehicle, gal – gallons, hr – hour, hrs – hours

CLASS V (AMMUNITION)

7-34. Scout platoons forecast, request, and carry as much ammunition as they can, depending on their mission. There is no one size fits all unit basic load issued for combat operations, each mission receives a unit basic load determined by squadron and brigade planners, and requested through the Total Ammunition Management Information System, approved by the S-4.

7-35. The scout platoon receives their class V from the squadron and requests additional class V throughout the mission. Enemy capabilities drive the scout platoon to anticipate more. Vehicles carry distributed ammunition and the crew secures it appropriately.

BASIC AND COMBAT LOADS

7-36. Prior to any mission, platoon members ensure they have all appropriate supplies. Accomplish these tasks at the lowest level and verify by PSG and platoon leader during PCIs. Throughout the mission, the PSG ensures basic loads are replenished. (See ATP 4 -35 for more information.)

7-37. The basic load is the quantity of supplies required on hand, and which a unit or formation can move. It is expressed according to the wartime organization of the unit or formation and maintained at the prescribed levels.

7-38. The combat load is the minimum mission-essential equipment and supplies, determined by the platoon leader responsible for carrying out the mission, required for scouts to fight and survive immediate combat operations. Base the combat load on mission requirements and further dictated by the platoon leader.

LOAD PLANNING CONSIDERATIONS

7-39. Vehicle load plans should be standardized amongst every vehicle type in the platoon. Not every vehicle is going to have the same equipment, but each vehicle load plan needs to match, or be as similar to each other as possible. Standardized load plans are done so in the event of an emergency all crewmembers will know where all the platoon equipment is stored and located in each vehicle. If a dismount needs to grab a CLSs bag out of a vehicle then they should be able to run to any vehicle to grab the bag and know its location. Pack items in reverse order of use. The most essential items should be the last thing loaded. Standardized load plans are put into platoon tactical SOPs, and verified during PCC and PCI.

7-40. Preparing a military vehicle for combat operations is one of the most tedious, tiresome, and laboring tasks for the crewmembers. Each piece of vehicle and platoon equipment has to be stored appropriately. Ammunition needs to be placed within reach of vehicle crewmembers, maintenance equipment and tools have to be available for the driver, recovery equipment will be required during missions, and all this equipment will have to be readily available. Water and fuel cans are placed outside of the vehicle but are separated from each other. Grenades will have to be stored in a location that they could be used, but in a position where they can be grabbed without being "set off." Javelins have to be placed somewhere in the vehicle where a crewmember could grab quickly while dismounting to react to an armored threat. These are all examples of why load planning considerations are so important for reconnaissance and security mission preparation.

SUSTAINMENT OVERLAY

7-41. The key to understanding the scout platoon's sustainment plan is the development and distribution of sustainment overlay. The sustainment overlay should include current and proposed train's locations with LRPs, CCP including the marking methods, MCP, helicopter LZ, ambulance exchange point, and any friendly sustainment locations such as forward operating bases, or combat outposts. See ADP 1-02 for control measures necessary for the overlay. When developing paragraph 4 of the OPORD, the platoon leader should include the following areas, not all inclusive:

- Orientation. Orient all scouts to the sustainment overlay.
- Maintenance. Include all equipment, maintenance control points, and procedures such as utilizing and exchange of the DA Form 5988-E and DA Form 2404.
- Transportation. What is the current transportation plan, order of march with timeline to line up and be ready condition 1 (known as REDCON), bump plans, and recovery assets/plan?
- Supply. List specifics of who is carrying what by class of supply. For example, each Soldier will have a three day supply of class 1.
- Personnel services. Include who is responsible for detainee processing and locations for detainee collection areas.

- Medical. Include locations of established treatment facilities, preventive medicine, evacuation procedures, and responsibilities.

SUSTAINMENT REPORTING

7-42. The resupply of the scout platoon and the reporting of their status should be in accordance with the troop SOP; however, this should not limit the scout platoon from reporting or requesting supplies, as needed. Request supply needs typically through the appropriate yellow or red reports by voice or digital means. The PSG submits these reports by voice or digital communications based on the timeline in the troop SOP or immediately following enemy contact or a major loss of supplies. See appendix A for all standardized report formats.

SECTION III – PLATOON RESUPPLY OPERATIONS

7-43. Scout platoons use a large amount of equipment, operate as far forward on the battlefield as possible, and require frequent and substantial amounts of supplies to accomplish their assigned missions. Leaders at all levels report their classes of supplies which allow leaders to anticipate expenditures and plan for resupply operations throughout an expected mission. There are planned and emergency resupply methods that the squadron uses to bring in LOGPACs and supplies. Troop 1SGs use a technique (service station, tailgate, or combination of both) to get supplies to the scout platoon.

RESUPPLY METHODS

7-44. Resupply operations fall into one of two methods of resupply: planned and emergency. Examples of planned resupply include LOGPACs, caches, modular system exchange (like flat-rack exchange), or pre-positioned supplies. Emergency resupply is not a planned method of resupply, but made available when a unit uses more supplies than expected. The troop and platoon SOPs should specify cues and procedures for each method. The platoon rehearses resupply operations during platoon training exercises. The actual method selected for resupply in the field depends on the mission variables of METT-TC.

EMERGENCY RESUPPLY

7-45. Emergency resupply, commonly referred to as immediate resupply, normally involves fuel and ammunition, and executed when the scout platoon has such an urgent need for resupply and they cannot wait for routine LOGPAC. Conduct at the section and platoon level by redistributing ammunition between vehicles/squads to cross-level loads.

7-46. The PSG reports the need for emergency resupply to the 1SG who relays the request to the squadron S-4. The unit's combat trains maintain a small load of class III and V for these situations. The S-4 coordinates a linkup between the combat trains and the troop 1SG. The troop 1SG designates a LOGPAC site and provides guidance on what technique (tailgate, service station, or combination) the scout platoon will use.

Note. Use emergency resupply only when the scout platoon expended more class III and class V than planned and should not become a routine substitute due to poor skills.

PLANNED RESUPPLY

7-47. The LOGPAC is a simple and efficient method to accomplish routine resupply operations. These operations include regular resupply of items in classes I, III, V, and IX and any other items requested by the platoon and troop. The squadron staff plans LOGPAC at their level and conducts sustainment operations at every opportunity. The LOGPAC comprises troop and squadron assets that transport supplies to the troop, and the troop distribute supplies to the scout platoon.

7-48. The tactical situation dictates which technique of resupply the troop and scout platoon uses. The situation also dictates when to conduct resupply. Generally, the scout platoon should attempt to avoid resupply during the execution of reconnaissance missions and plan to resupply during mission transitions.

RESUPPLY PROCEDURES

7-49. Scout platoons must conduct resupply as quickly and efficiently as possible to ensure operational effectiveness and to allow the Cavalry troop LOGPAC to return to the logistics RP on time. In most cases, the troop 1SG will only have about two hours to conduct sustainment operations, so efficiency at the resupply point is important. Once the scout platoon completes resupply operations, the troop 1SG prepares the LOGPAC vehicles for the return trip.

RESUPPLY SITE SELECTION

7-50. The troop 1SG carefully chooses the logistics RP site to provide responsive support for the troop, to support the movement of wheeled resupply vehicles, and to limit exposure to enemy fires. The 1SG may task the scout platoon to conduct the on-ground reconnaissance of the resupply site. The 1SG or scout platoon ensures the LOGPAC site meets the following criteria:

- Provides excellent cover and concealment.
- Reduces the platoon's thermal signature.
- Offers adequate dispersion for vehicles.
- Provides level terrain to allow refueling.
- Allows proximity to the scout platoon positions (3 to 8 km behind the forward line of own troops and the center of the AO).
- Offers a road or trail network to support the wheeled resupply vehicles and heaviest troop vehicles.

RESUPPLY TECHNIQUES

7-51. Resupply techniques are how the troop gets supplies to maintain their combat power. There are two techniques scout platoons utilize to conduct resupply operations: tailgate and service station. Certain situations may call for a portion of the scout platoon to receive resupply by one technique, and another portion to receive resupply by a different technique. Resupply operations are done in conjunction with the task and the mission variables of METT-TC.

7-52. Scout platoons may use the tailgate technique while they are in static positions such as a screen or an assembly area. The 1SG may use unit or support personnel and vehicles to go to each scout platoon position to conduct resupply. The scout platoon can remains in position when using this technique and reconnaissance vehicles require little or no movement. The PSG ensures each position conducts resupply. If supply vehicles are unable to move near the scout platoon due to enemy fire or observation, the PSG may have to assist the resupply personnel in moving the supplies and equipment forward. Tailgate resupply technique is very time-consuming and requires an adequate road network for the wheeled supply vehicles to reach each scout vehicle's position. (See figure 7-1, page 7-16.)

7-53. The following procedures will take place during the tailgate resupply technique:

- Scout vehicles remain in place. Petroleum, oils, and lubricants (POL) and ammunition trucks travel around the assembly area, or in the most feasible order to each vehicle position and conduct resupply.
- Crewmembers rotate quickly through the feeding area and pick up supplies, water, and mail. The scout platoon maintains security throughout the resupply process.
- The PSG coordinates with the 1SG for the pick-up of Soldiers killed in action (KIA), and their personal effects.
- PSG ensures KIA casualties are brought to a mortuary affairs collection point.
- Ambulances pick up, treat, and evacuate seriously wounded in action Soldiers. All casualties are transported to the troop medical assets to receive emergency medical treatment and disposition. Soldiers are either returned to duty or evacuated to the next role of care for further treatment.
- Consolidate and secure. Troop trains transport detainees on a returning supply vehicle.
- The unit armorer, communications technician, and supporting maintenance personnel repairs known problems and spot check other equipment. Dispatching of vehicles should occur according to the troop SOP.
- Mechanics can repair vehicles on site or evacuate vehicles to the MCP.
- The PSG monitors the resupply of the platoon.

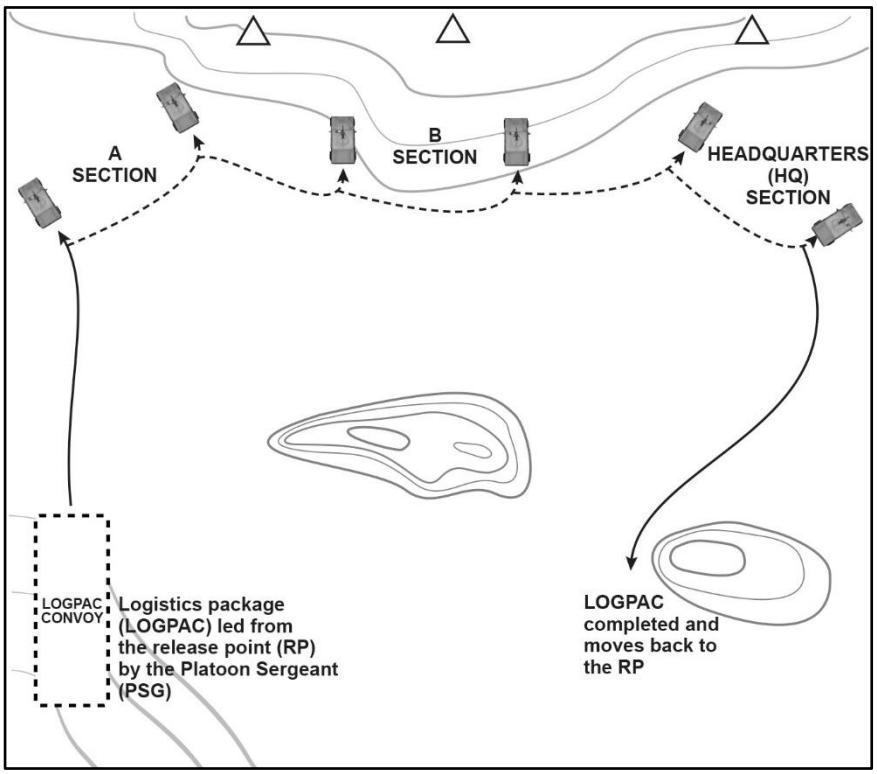


Figure 7-1. Tailgate resupply technique

SERVICE STATION RESUPPLY TECHNIQUE

7-54. The service station resupply technique is inherently faster than the tailgate technique but can create security problems due to movement and concentration. During screening missions, the scout platoon must be careful not to compromise the location of the observation posts. Units typically use this technique during mission transition.

7-55. Resupply for individual scout platoons or sections happen at the LOGPAC while the remainder of the troop stays in position. The 1SG sets up the LOGPAC as shown in figure 7-2. Platoon vehicles complete with resupply and Soldiers from the trains not assisting in resupply operations provide LOGPAC security.

7-56. The following procedures take place during the service station resupply:

- The PSGs supervise the operation and coordinate with the 1SG for any special requirements.
- Scout platoon's platoon leader or PSG designates certain vehicles to rotate through the LOGPAC at a designated location and follow the one-way traffic flow.

- Transport Soldiers needing medical attention to combat medics for treatment, or are prepared for further evacuation to the next level of care.
- The vehicle transporting KIA moves to the mortuary affairs holding area, out of the view of scouts, and transfers the remains and personal effects.
- Vehicle commanders and section leaders make contact with the scout platoon leader for orders, logistic status, and SITREP.
- Vehicles requiring maintenance support move to the maintenance area.
- The troop armorer, communications technician, and supporting maintenance personnel repairs known problems and spot check other vehicles.
- When the platoon or section resupplies completely they move back to their designated position.

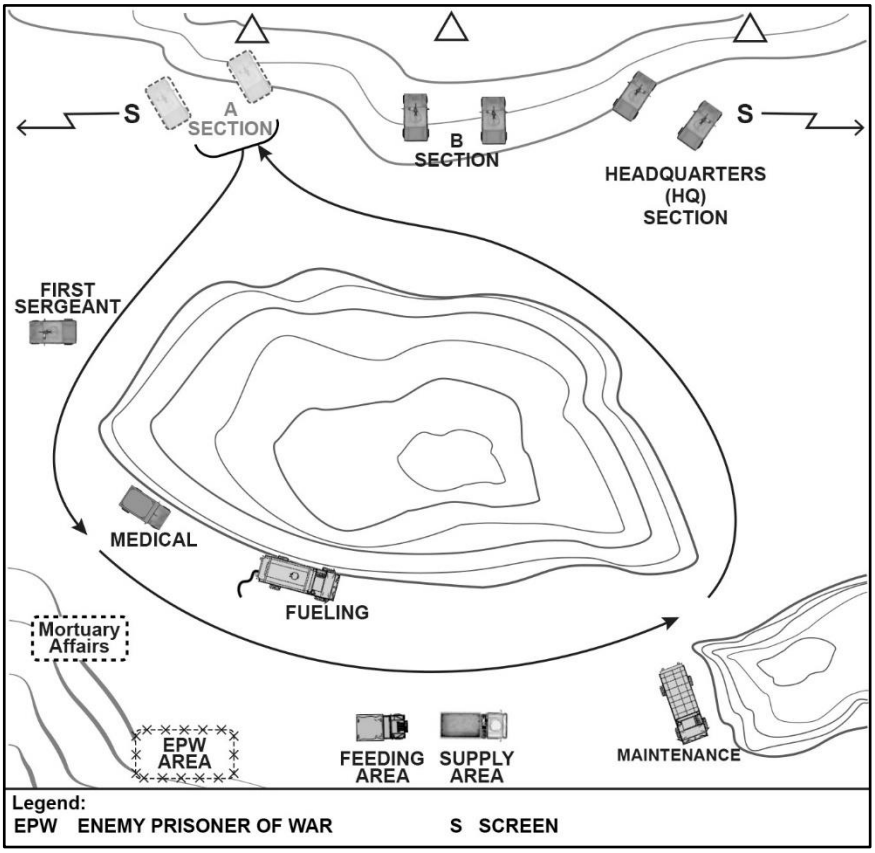


Figure 7-2. Service station resupply technique

Note. The platoon order should state the sequence for moving squads, sections, or Soldiers from positions. Troops may vary the technique by establishing a resupply point for each scout platoon or squad and moving the supplies to that point.

COMBINATION OF SERVICE STATION AND TAILGATE RESUPPLY

7-57. The scout platoon leader can vary the specifics of the two basic techniques or use them in combination. For example, the platoon could use the tailgate technique during a screening mission for the observation posts and use the service station technique for the observation posts in-depth. (See figure 7-3.)

7-58. The scout squads rotate individually to eat, pick up mail and sundries, and refill or exchange water cans. When all platoon vehicles and squads complete resupply, they move to a holding area and establish security.

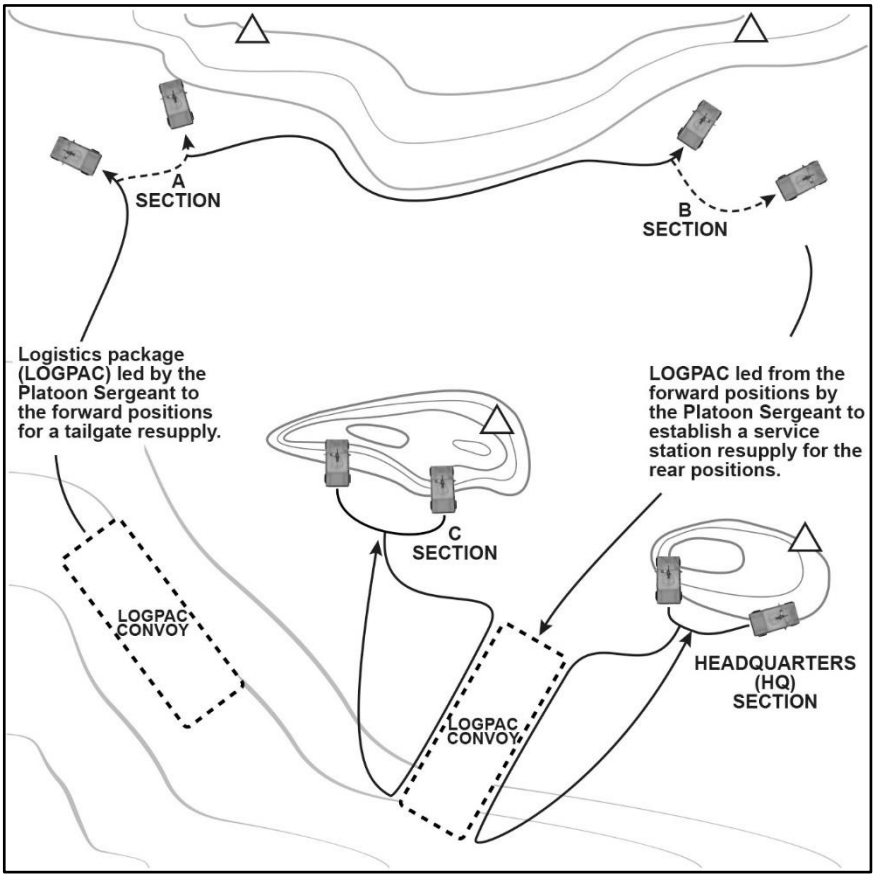


Figure 7-3. Combination of tailgate and service station resupply

PREPOSITIONED RESUPPLY OR CACHE

7-59. At times, the scout platoon will need prestocked supplies. These are also known as pre-positioned or "cached" resupply. Normally, the platoon only pre-positions classes IV and V items, but can also pre-position class III supplies. When the platoon conducts this type of resupply, the platoon leader directs the platoon sergeant to rotate vehicles or squads or sections through prestock positions based on the enemy situation and shortages within the platoon. Security requires planning to prevent enemy dismounts from destroying or sabotaging prestocked supplies.

7-60. The scout platoon must carefully plan and execute pre-stock requirements and every scout must know the exact locations of prestock sites. During reconnaissance or rehearsals, platoons verify cached locations and ensure the survivability of the prestocked supplies. These measures include selecting covered and concealed positions and digging in the prestock positions. The plan should include a grid to the location of

the sites and have a removal and destruction plan to prevent the enemy from capturing pre-positioned supplies.

AERIAL RESUPPLY

7-61. Helicopters and fixed wing assets can be a vital lifeline when scouts are forced to operate forward of friendly lines for extended periods. Aerial assets are useful in resupplying dismounted scouts manning observation posts in restricted terrain. This option is not always available due to availability of aircraft or degraded weather conditions. Careful choice of resupply routes, LZ, and drop zones help minimize the risk of signature to the resupply aircraft.

LOGISTICS PACKAGE SURVIVABILITY

7-62. The very nature of an ambush—a surprise attack from a concealed position—places the unit conducting the LOGPAC at a disadvantage. Combat situations often prevent a convoy from taking all the measures necessary to avoid being ambushed; therefore, it takes all possible measures to reduce its vulnerability. These are generally passive measures, supplemented by active measures, taken to defeat or escape from an ambush.

7-63. No single defensive measure, or combination of measures, prevents or effectively counters all ambushes or IED detonations. The effectiveness of counter ambush measures relates directly to the state of Soldiers' training and the ability of their leaders.

ACTIONS TO AVOID AN AMBUSH

7-64. Crews need to take actions to avoid possible ambush from the enemy. Crewmembers, leaders, and Soldiers always maintain vigilant observation of the route ahead of the convoy to detect anything suspicious. Crewmembers need to observe indicators of a potential ambush. Leaders will conduct a map, ground, and aerial reconnaissance of a route, and also select the best convoy route available. The platoon leader will receive an updated enemy SITREP of a route from the S-2 prior to the mission, and they use OPSEC to deny the enemy threat foreknowledge of the convoy. Convoy vehicles need to present a formidable target, and take actions which reduce the effectiveness of an ambush.

PRESENT A FORMIDABLE TARGET

7-65. Convoy vehicles present a formidable target by keeping all convoy crew-served weapons manned at all times. The enemy often chooses to avoid an ambush when the convoy is actively scanning, prepared to react to enemy actions. Turrets need to be actively moving, and providing direct fire weapon coverage at all times. Crewmembers will remain alert, and gunners will remain in an aggressive posture during convoy movements. Convoy leaders never routinely schedule convoys by time or route.

REDUCE EFFECTIVENESS OF AN AMBUSH

7-66. Convoys are always vulnerable and present the enemy with an opportunity to disrupt logistics to an element so the enemy will ambush logistic convoys. Leaders and Soldiers need to harden vehicles using sandbags emplaced throughout the floorboards of vehicles, fabricated armor add-ons welded over existing armor, and add enhanced ballistic glass enclosures for the gunner. Crews cover their loads with available tarps and covers. Place vehicles throughout the convoy based on tactical cross load, and separate vulnerable vehicles. Designate assistant drivers to reduce fatigue, and provide relief and aid if driver is injured during an ambush. Rehearse the following drills prior to all convoy movements:

- Down driver and gunner drill.
- React to contact (direct, indirect, and IED).
- Fire and evacuation drills.
- Vehicle rollover drill.
- Grenade-in vehicle drill.

SECTION IV – MAINTENANCE

7-67. The purpose of the Army maintenance system is to generate/regenerate combat power and preserve the equipment to enable mission accomplishment. Maintenance of scout platoon weapons and equipment is continuous. Every scout needs to know how to properly conduct maintenance according to the technical manual for all platoon equipment.

LEVELS OF MAINTENANCE

7-68. Maintenance includes inspecting, testing, servicing, repairing, requisitioning, recovering, and evacuating vehicles and equipment. Maintenance at the scout platoon level comprises thorough preventive maintenance checks, and services, and accurate reporting of maintenance problems to the troop.

7-69. There are two levels of Army maintenance—sustainment maintenance and field maintenance. Field maintenance primarily replaces parts on the user's system and sustainment maintenance repairs components off the user's platform.

FIELD MAINTENANCE

7-70. Field maintenance is an on-system maintenance mainly involving preventive maintenance and replacement of defective parts. The goal of field maintenance is to repair and return equipment to the Soldier. It covers tasks previously assigned to operator/crew, organization or unit, and direct support maintenance levels; and includes some off-system maintenance critical to mission readiness.

7-71. Scout squad and section leaders are the platoon's first-line maintenance supervisors. The scout platoon's maintenance status and combat readiness depends on

their commitment to proper maintenance procedures. The squad and section leader duties in this area include—

- Ensuring operators fill out and update DA Form 5988-E and DA Form 2408-18 (*Equipment Inspection List*) according to DA PAM 750-8.
- Training the squad and section in proper PMCS procedures.
- Ensuring the training and licensing for all crewmembers as drivers in preparing for continuous operations. At a minimum, ensuring the assigned vehicle driver or equipment operator is licensed.
- Installing repair parts upon receipt or store in authorized locations.
- Ensuring all tools and basic issue items are properly marked, stored, maintained, and accounted for.
- Ensuring the operator always tops off the vehicle in the garrison and that the vehicle receives as much fuel as possible, and at every opportunity in the field.
- Constantly updating the PSG on the maintenance and logistics status of the vehicles.

7-72. Operator maintenance includes the proper care, use, and maintenance of assigned vehicles and crew equipment such as weapons, optics, CBRN equipment, and night vision devices. The driver and other crewmembers perform daily PMCS such as inspecting, servicing, tightening, lubricating, cleaning, preserving, and adjusting vehicles and equipment. The driver and gunner are required to use a DA Form 5988-E to record these checks and services, and all equipment faults that cannot be immediately corrected. These reports are the primary means for reporting equipment faults through the vehicle commander/section leader to the PSG, platoon leader, and ultimately to organizational maintenance personnel. Checks and services prescribed for the automotive system, weapon systems, and turret are divided into three groups—before-mission, during mission, and after-mission.

WEAPONS MAINTENANCE

7-73. Platoon leadership provides time for platoon members to conduct weapons maintenance. Environmental conditions will have serious effects on weapons and platoon leadership will counter those effects by providing time to conduct maintenance on weapons. Maintenance on weapons is the proper disassemble, cleaning, lubrication, reassemble, and function checks on individual and crew weapons, according to the weapons technical manual. Leadership has to also schedule time to reconfirm zeros on sights, and to conduct weapon test fires prior to missions. Weapons cleaning, lubrication, and zeroing are high on the priority of work lists established from the PSG and issued to subordinate leaders. Maintenance of weapons will ensure proper and accurate firing of weapons systems.

- Before-mission.
- During-mission.
- After-mission.

VEHICLE RECOVERY

7-74. Recovery is the process of freeing or retrieving immobile, inoperative, or abandoned equipment from its current position and returning it to service or to a maintenance site for repairs. These actions typically involve extracting, towing, lifting, or winching. Limit towing usually to a field maintenance site or the nearest MCP.

7-75. Damaged and inoperable equipment on the battlefield can strain dedicated recovery resources. Strategically place dedicated recovery assets in the AO to effectively support battlefield recovery operations. Platoon leaders must emphasize the use of self and like vehicle recovery methods to the greatest extent possible. These practices will minimize the use of dedicated recovery assets for routine recovery missions.

WARNING

Recovery operations on the battlefield and in general can be extremely hazardous. Conduct a risk assessment and safety must remain a top priority for each recovery mission. Proper maintenance of recovery vehicles and serviceability of authorized rigging and other equipment is essential to ensure safe recovery missions. Consider operational variables prior to and during all recovery operations.

7-76. Prior to missions, the scout platoon leader and platoon sergeant should know what the plan of action for repair and recovery of disabled equipment. This information is put out during the OPORD and through subsequent rehearsals. It is critical that PCCs include inspection of tow bars and extraction straps to ensure they are complete, and are rated for the types of vehicles operating in and attached to the scout platoon. The platoon leadership needs to know the location of the closest maintenance control point. Depending on the level or the severity of battle damage, recovery is usually by the following methods: self-recovery, like-vehicle recovery, dedicated-recovery, and expedients.

SELF-RECOVERY

7-77. Self-recovery starts at the location where the equipment becomes mired or disabled. The operator and crew use the basic issue items and additional authorized list or on-vehicle equipment items to perform self-recovery. When the equipment has a mechanical failure, the operator and crew will use the equipment's technical manual to perform troubleshooting procedures with the tools available in the basic issue items and additional authorized list or on-vehicle equipment. When self-recovery fails, the operator and crew can request assistance from available like vehicles.

LIKE-RECOVERY

7-78. Use like-vehicle recovery when self-vehicle recovery fails. The principle is to use another piece of equipment "of the same weight class or heavier" to extract the mired, disabled, or damaged equipment by using tow bars, chains, tow cables, and/or allied kinetic energy recovery rope. When self-recovery and like-recovery are not practical or are unavailable, put in a request to use dedicated recovery assets.

7-79. The most common form of self-recovery is recovery of like vehicle with a tow bar. Before using a two bar (or any piece of recovery equipment), scouts answer the following questions: Is the tow bar safe to use; does it have all the safety pins and clips? Is the tow bar approved and have the capacity to tow the disabled vehicle? Is the towing vehicle equal to or greater than the weight of the vehicle being towed? (If not do not use).

DEDICATED RECOVERY

7-80. Dedicated recovery vehicles are specifically designed and equipped for recovering other vehicles. Wheeled wreckers and tracked recovery vehicles are examples. These are used when self-recovery or like-vehicle recovery is not possible because of the severity of the situation, safety considerations, or the inability to use like-vehicle assets employed in their primary mission. In general, wheel recovery systems recover wheeled vehicles, and track recovery systems recover tracked vehicles. Requests from the PSG or platoon leader for dedicated recovery systems located with the forward support company go to the XO.

Note. Check the vehicle technical manual prior to recovery and towing operations. Crewmembers need to check towing requirements such as disabling of the transfer case, disengaging of final drives, and hooking up air lines.

SECTION V – MEDICAL SUPPORT

7-81. Army Health System support to maneuver forces is provided by organic medical assets. The focus of the medical effort at the BCT-level and below is to rapidly locate, acquire, treat, stabilize, and evacuate patients. The Army Health System is a component of the Military Health System that is responsible for operational management of the health service support and force health protection missions for training, predeployment, deployment, and post deployment operations.

WOUNDED SCOUTS

7-82. The scout platoon's operating distance away from its higher headquarters make the treatment and evacuation of wounded scouts two of the most difficult tasks the scout platoon execute. To ensure successful handling of wounded scouts, squadrons and battalions must specifically allocate adequate assets to the scout platoon to assist in

evacuation. In addition, operational planning or SOPs must address evacuation procedures in detail.

7-83. It is the squad leaders' responsibility to ensure wounded scouts receive immediate first aid and immediate tactical combat casualty care, in conjunction with self-aid, buddy-aid, and CLS care performed by nonmedical personnel, and then immediately notify the platoon leader or PSG of all casualties. The use of scouts trained as CLSs is critical. As a minimum, one member of each scout squad must train as a CLS. If wounded scouts require evacuation, the platoon leader or PSG can take one of the following actions:

- Coordinate with the closest troop or company for ground evacuation.
- Request the troop or squadron/battalion to task organize a dedicated ambulance to the scout platoon for operations forward of the larger element.
- Conduct self-evacuation with organic platoon assets.
- Coordinate for aerial evacuation through the troop/company or squadron/battalion.

7-84. Aerial evacuation, if it is available, is preferred because of speed. The scouts coordinate with their higher headquarters and then switch to the designated frequency to coordinate directly with the MEDEVAC aircraft. They must pick a relatively flat, open, and covered and concealed position for the aircraft's LZ. The location should be given to the aircraft by FM and marked with colored smoke as the aircraft approaches the area. The scout platoon provides local security of the LZ until the evacuation is complete.

MEDICAL EVACUATION

7-85. When possible, the medical platoon ambulances provide evacuation and en route care from the scout's point of injury or the troop's CCP to the SAS. The ambulance team supporting the mission makes coordination with the senior trauma specialist supporting the platoons. In mass casualty situations, use nonmedical vehicles to assist in CASEVAC as directed by the scout platoon leader. Include plans for nonmedical vehicles performing CASEVAC in the unit tactical SOP.

GROUND EVACUATION REQUEST

7-86. The scout PSG requests a ground evacuation over troop net to the 1SG for—

- Soldiers not having life threating injuries.
- When time distance analysis shows that ground evacuation is faster.
- When air evacuation is not possible due to inclement weather or enemy situation

AIR EVACUATION

7-87. Use aerial evacuation, if available and meeting mission criteria regarding stealth because of speed. For evacuation by air, the scout platoon uses the standard 9-line air evacuation request format (see figure 7-4, on page 7-27). The medical company

prioritizes the request to determine if air evacuation is possible. In conducting the evacuation operation, the scout PSG accomplishes the following tasks:

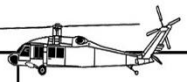
- Prepares and secures a suitable landing and pick up zone for the aircraft.
- Provides terminal guidance during the aircraft's approach.
- Marks the helicopters LZ.
- Establishes security of the LZ and has casualties ready to load.
- Provides SITREP to troop command post on wheels down and wheels up time.

7-88. Scouts coordinate with higher headquarters and then switch to the designated frequency to coordinate directly with the MEDEVAC aircraft. They must pick a relatively flat, open, terrain and masked by tree line or other intermediating terrain feature for the aircraft's LZ. Give the location to the aircraft by FM and once the air crew requests smoke, mark with colored smoke as the aircraft approaches the area. The air crew will call back with the proper color of the smoke. The scout platoon provides local security of the LZ until the evacuation is complete.

MEDICAL EVACUATION REQUEST

7-89. Immediately following an attack and upon learning of a casualty within the platoon the vehicle commander, squad or section leader, and PSG will start working up a 9-line MEDEVAC request. Along with the standard 9-line MEDEVAC request format, higher level care will request a mechanism of injury, injury type, signs, and treatment (MIST) report, which should be provided by the platoon medic or combat life saver on site. Figures 7-4 (front) and figure 7-5 (back) are a MEDEVAC request card that is laminated and carried by every Soldier within the platoon.

MEDEVAC REQUEST CARD GTA 08-01-004



LINE	ITEM	EVACUATION REQUEST MESSAGE
1	Location of Pickup Site.	
2	Radio Frequ., Call Sign, & Suffix.	
3	NO. Patients by Precendence.	
4	Special Equipment Required.	
5	Number of Patients by Type.	
6	Security of Pickup Site (Wartime).	
6	Number and Type of Wound, Injury, Illness (Peacetime).	
7	Method of Marking Pickup Site.	
8	Patient Nationality and Status.	
9	NBC Contamination (Wartime).	
9	Terrain Description (Peacetime).	

SAMPLE

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Figure 7-4. Graphic training aid 08-01-004 (front)

LINE ITEM	EXPLANATION
1. Location of Pickup Site.	Encrypt coordinates. When using the *DRYAD Numeral Cipher, the same SET line* will be used to encrypt grid zone letters and coordinates. To preclude misunderstanding, a statement is made that grid zone letters are included in the message (unless unit SOP specifies its use at all times).
2. Radio Frequency, Call Sign, Suffix.	Encrypt the frequency of the radio at the pickup site, *not* a relay frequency. The call sign (and suffix if used) of person to be contacted at the pickup site may be transmitting in the clear.
3. No. of Patients by Precedence.	Report only applicable info & encrypt brevity codes. A = Urgent, B = Urgent-Surg, C = Priority, D= Routine, E= Convenience (If 2 or more categories are reported in same request, insert the word "break" btwn each category.)
4. Spec Equipment.	Encrypt applicable brevity codes. A= None, B= Hoist, C= Extraction equipment, D= Ventilator.
5. No. of Patients by Type.	Report only applicable information and encrypt brevity code. If requesting MEDEVAC for both types, insert the word *"break"* between the litter entry and ambulatory entry. L + # of Pnt -Litter, A + # of Pnt - Ambul (sitting).
6. Security Pickup Site (Wartime).	N= No enemy troops in area, P= Possible enemy troops in area (approach with caution), E= Enemy troops in area (approach with caution), X= Enemy troops in area (armed escort required).
6. Number and type of Wound, Injury, Illness (Peacetime).	Specific information regarding patient wounds by type (gunshot or shrapnel). Report serious bleeding along with patient blood type, if known.
7. Method of Marking Pickup Site.	Encrypt the brevity codes. A= Panels, B= Pyrotechnic signal, C= Smoke Signal, D= Non, E= Other.
8. Patient Nationality and Status.	Number of patients in each category need not be transmitted. Encrypt only applicable brevity codes. A= US military, B= civilian, C= Non-US military, D= Non-US civilian, E= EPW.
9. NBC Contamination (Wartime).	Include this line only when applicable. Encrypt the applicable brevity codes, N = nuclear, B = biological, C = chemical.
9. Terrain Description (Peacetime).	Include details of terrain features in and around proposed landing site. If possible, describe the relationship of site to a prominent terrain feature (lake, mountain, tower).
Reference: ATP 4-02.2, *Medical Evacuation.*	

SAMPLE

Figure 7-5. Graphic training aid 08-01-004 (back) (continued)

MEDICAL TREATMENT

7-90. The combat medic, the physician, the physician assistant, or the health care specialist in the squadron or battalion aid station provides medical treatment for scouts after initial care. Tactical combat casualty care, also known as immediate far forward care, includes lifesaving steps that do not require the knowledge and skills of a physician.

FIRST RESPONSE

7-91. First response is the initial, essential, stabilizing medical care rendered to wounded, injured, or ill Soldiers at the point of initial injury or illness. The first responder is the first individual to reach a casualty and provide tactical combat casualty care, such as self-aid, buddy-aid (first aid), or enhanced first aid (CLS). First aid for the casualty includes (self-aid) or another individual (buddy-aid), while enhanced first aid is provided by the CLS. The individual who has medical military occupational specialty training is the combat medic (trauma specialist). They provide tactical combat casualty care for life threatening trauma and stabilizes and prioritizes (triages) wounded for evacuation to the SAS. At the SAS, wounded Soldiers receive advanced trauma

medicine by the clinicians assigned (the physician and physician's assistant). Platoon leaders and PSGs should incorporate tactical combat casualty care; self-aid and buddy-aid training for all scout platoon members into all training activities. Self-aid and buddy-aid is the first steps to saving a life and is trained to all members of the platoon. The goal for every platoon is to have everyone within the platoon to attend CLS training.

COMBAT LIFESAVER

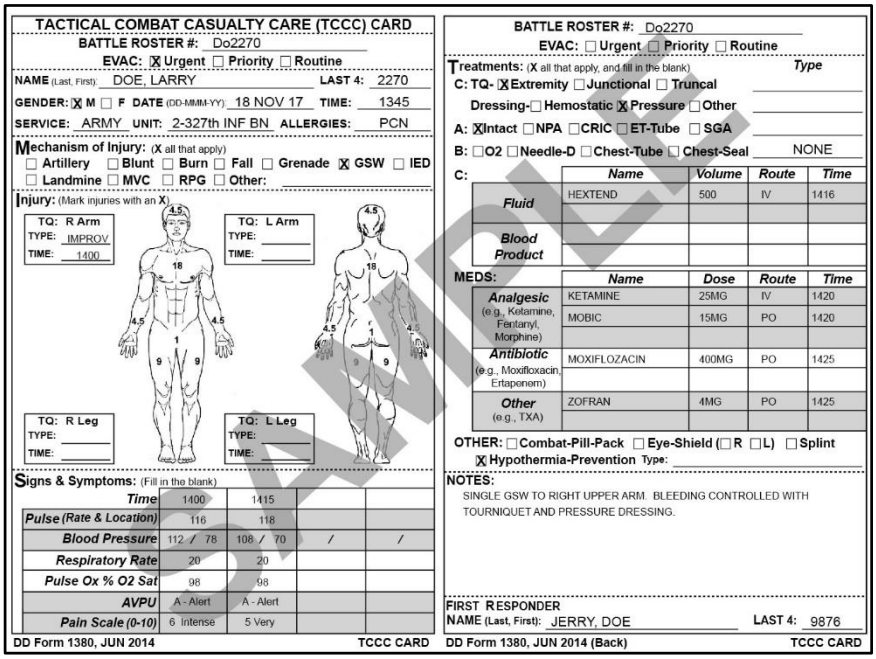
7-92. The CLS is a nonmedical Soldier trained to provide advanced first aid or lifesaving procedures beyond the level of self-aid or buddy-aid. The CLS does not take the place of medical personnel, but slows deterioration of a wounded Soldier's condition until treatment by medical personnel is possible. Each certified CLS has a CLS aid bag PSGs ensure CLS keep their aid bag stocked and inspected by a combat medic. Whenever possible, the troop platoon leader ensures there is at least one CLS in each dismount team or vehicle. An emerging first responder program expands CLS trauma treatment with increased emphasis on combat and away from training injuries.

7-93. CLSs are section members trained in enhanced first aid. They are the only medical assets for the section until a medic or another more qualified medical person becomes available. Because combat lifesaving is an organic capability, the platoon and troop should make it a training priority.

7-94. The CLS ensures the section CLS bag is packed, all IVs are present, and litters are properly packed, and identifies class VIII shortages to the platoon medic. They participate in all casualty treatment and litter carry drills. The CLS must know the location of the CCP and the tactical SOP for establishing them. They carry a laminated quick reference 9-line MEDEVAC card.

MEDIC OR TRAUMA SPECIALIST

7-95. The platoon medic is the dedicated medical asset in the platoon. The medic is the most experienced person in the platoon to provide medical treatment to a casualty, and to provide recommendations to the platoon leadership for CASEVAC/MEDEVAC planning. During combat planning and preparation, they inspect platoon CLS bags, verify that IVs are placed in litters, and fill class VIII shortages. The platoon medic recommends the location for the platoon CCPs and the tactical SOP for establishing them. They rehearse casualty treatment and litter carries with all platoon members, and conduct CLS refresher training The platoon medic is responsible for filling out a DD Form 1380 (See figure 7-6, page 7-30.)



TACTICAL COMBAT CASUALTY CARE (TCCC) CARD

BATTLE ROSTER #: Do2270

EVAC: [X] Urgent [ ] Priority [ ] Routine

NAME (Last, First): DOE, LARRY LAST 4: 2270

GENDER: [X] M [ ] F DATE (DD-MMM-YY): 18 NOV 17 TIME: 1345

SERVICE: ARMY UNIT: 2-327th INF BN ALLERGIES: PCN

Mechanism of Injury: (X all that apply)

[ ] Artillery [ ] Blunt [ ] Burn [ ] Fall [ ] Grenade [X] GSW [ ] IED

[ ] Landmine [ ] MVC [ ] RPG [ ] Other:

Injury: (Mark injuries with an X)

TQ: R Arm TYPE: IMPROV TIME: 1400

TQ: L Arm TYPE: TIME:

TQ: R Leg TYPE: TIME:

TQ: L Leg TYPE: TIME:

Signs & Symptoms: (Fill in the blank)

Time	1400	1415		
Pulse (Rate & Location)	116	118		
Blood Pressure	112 / 78	108 / 70	/	/
Respiratory Rate	20	20		
Pulse Ox % O2 Sat	98	98		
AVPU	A - Alert	A - Alert		
Pain Scale (0-10)	6 Intense	5 Very		

DD Form 1380, JUN 2014 TCCC CARD

BATTLE ROSTER #: Do2270

EVAC: [ ] Urgent [ ] Priority [ ] Routine

Treatments: (X all that apply, and fill in the blank) Type

C: TQ- [X] Extremity [ ] Junctional [ ] Truncal

Dressing- [ ] Hemostatic [X] Pressure [ ] Other

A: [X] Intact [ ] NPA [ ] CRIC [ ] ET-Tube [ ] SGA

B: [ ] O2 [ ] Needle-D [ ] Chest-Tube [ ] Chest-Seal NONE

C:

	Name	Volume	Route	Time
Fluid	HEXTEND	500	IV	1416
Blood Product				

MEDS:

	Name	Dose	Route	Time
Analgesic (e.g., Ketamine, Fentanyl, Morphine)	KETAMINE	25MG	IV	1420
	MOBIC	15MG	PO	1420
Antibiotic (e.g., Moxifloxacin, Ertapenem)	MOXIFLOZACIN	400MG	PO	1425
Other (e.g., TXA)	ZOFRAN	4MG	PO	1425

OTHER: [ ] Combat-Pill-Pack [ ] Eye-Shield ([ ] R [ ] L) [ ] Splint

[X] Hypothermia-Prevention Type:

NOTES:

SINGLE GSW TO RIGHT UPPER ARM. BLEEDING CONTROLLED WITH TOURNIQUET AND PRESSURE DRESSING.

FIRST RESPONDER

NAME (Last, First): JERRY, DOE LAST 4: 9876

DD Form 1380, JUN 2014 (Back) TCCC CARD

SAMPLE

Figure 7-6. DD Form 1380, Tactical Combat Casualty Care (TCCC) Card

HEALTH AND HYGIENE

7-96. All leaders in a scout platoon emphasize and enforce high standards of health and hygiene. A preventive-medicine approach covers all aspects of Soldiers' health and well-being, and leaders check for the following:

- Daily shaving to ensure proper fit of the protective mask when threatened by a CBRN attack.
- Regular bathing and changing of clothes as often as the situation permits.
- Weather-related problems, including frostbite, trench foot, immersion foot, and wind.
- Chill that can occur in cold weather and heat exhaustion and heat stroke that are common in hot weather.
- Sunburn, which can occur at any time.
- Preventing diseases, including insect-borne diseases such as malaria and Lyme disease.
- Effective field sanitation measures, including unit waste control, water purification, rodent control, and insect repellents.
- Operational stress control, preventing fatigue, and implementing a strict unit sleep plan.
- Fatigue, including strict implementation of the unit sleep plan.

COMBAT AND OPERATIONAL STRESS CONTROL

7-97. Leaders focus on protecting the force through treatment and prevention of combat and operational stress. Every Soldier responds differently to stressors found on today's current battlefield. All leaders, peers, and platoon members look out for indicators of combat and operational stress. A few examples of those indicators include:

- Witnessing death.
- Fearing for your life.
- Losing a close friend or valued leader.
- Experiencing relationship stress.
- Fatigue and lack of sleep over extended periods.
- Extended deployments over a short period of time.

7-98. Soldiers will start to display symptoms of combat and operational stress, and will need treatment from someone qualified to provide that treatment. Soldiers will start to display signs or symptoms of combat and operational stress such as angry outbursts, depression, trouble sleeping and nightmares, confusion, and withdrawal. Those are just a few of the symptoms, and every Soldier responds differently.

7-99. The brigade support battalion has a combat and operational stress control team consisting of a behavioral science officer and a mental health specialist. Chaplains can assist with combat stress control by identifying Soldiers who are under extreme stress. When leaders identify a Soldier with the signs and symptoms mentioned above, then leaders need to get the Soldier treatment immediately.

SECTION VI –DETAINEES

7-100. Detainees and captured enemy equipment or materials often provide excellent combat information. This information is of tactical value only if the scout platoon processes and evacuates detainees and material to the rear quickly. In tactical situations, the scout platoon will have specific procedures and guidelines for processing detainees and captured material. Detainees under Department of Defense (DOD) control will be given humanitarian care and treatment and treated in accordance with FM 2-22.3 and DODD 2310.01E

7-101. All persons captured, personnel detained or retained by U.S. Armed Forces during the course of military operations, are considered detained persons until their status is determined by higher military and civilian authorities. However, as a practical matter, when scout sections and platoons capture enemy personnel, they must provide the initial processing and holding for detainees. Detainee planning considerations must be part of the scout platoon's overall planning process. Detainee handling is a resource intensive and politically sensitive task requiring detailed training, guidance, and supervision. (See figure 7-7, page 7-32.)

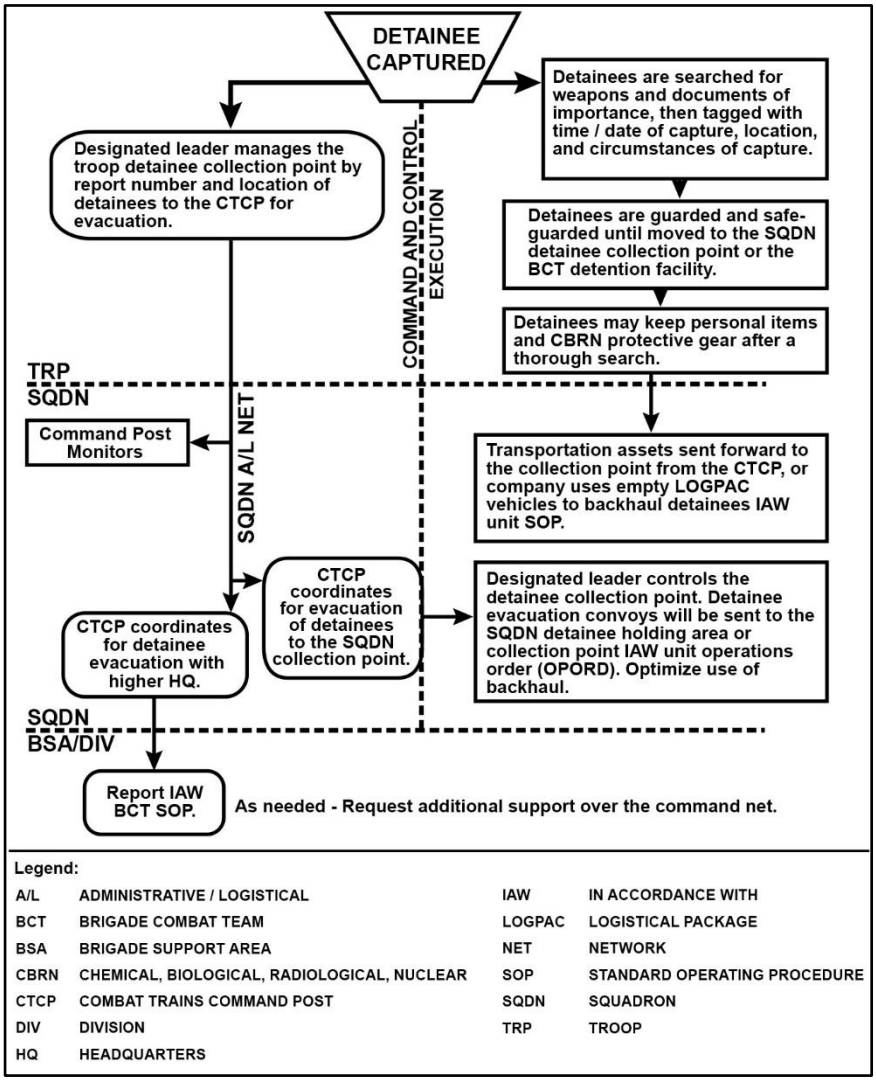


Figure 7-7. Detainee handling flow chart

7-102. All detained persons shall be given humanitarian care and treatment immediately. U.S. Armed Forces never torture, maltreat, or purposely place detained persons in positions of danger. There is never a military necessity exception to violate these principles.

7-103. Scouts must process detainees using the "Search, Silence, Segregate, Speed to safe area or rear, Safeguard, and Tag" (5Ss and T) technique. (Refer to FM 2-22.3, appendix D for more information.)

7-104. Search. Neutralize a detainee and confiscate weapons. Remove explosives, personal items, and items of potential intelligence or evidentiary value. Detainees maintain possession and CBRN protective equipment.

7-105. Silence. Prevent detainees from communicating with one another or making audible clamor such as chanting, singing, or praying. Silence uncooperative detainees by muffling them with a soft, clean cloth tied around their mouths and fastened at the backs of their heads. Do not use duct tape or other adhesives, place a cloth or other objects inside the mouth, or apply physical force to silence detainees.

+ 7-106. Segregate. Segregate detainees according to policy and SOPs. (Segregation requirements differ from operation to operation.) The ability to segregate detainees may be limited by the availability of manpower and resources at the point of capture. At a minimum, try to segregate detainees by grade, sex, age (keeping adults from juveniles and small children with mothers), and security risk. Military intelligence, military police personnel, and unit legal advisors can provide additional guidance and support in determining the appropriate segregation criteria.

7-107. Safeguard. Protect detainees and ensure the custody and integrity of all confiscated items. Scouts must safeguard detainees from combat risk, harm caused by other detainees, and improper treatment or care. Report all injuries. Correct and report violations of U.S. military policy that occur while safeguarding detainees. Acts, omissions, or both that constitute inhumane treatment are violations of the law of war, and as such, must be corrected immediately. Simply reporting violations is insufficient. If a violation is ongoing, a Soldier has an obligation to stop the violation then report it.

7-108. Speed. Quickly move detainees from the continuing risks associated with other combatants, and to quickly learn valuable information they may possess. If there are more detainees than the scouts can control, call for additional support, search the detainees, and hold them in a safe area until reinforcements arrive. Evacuate detainees from the battlefield to a holding area or facility as soon as possible. Transfer captured documents and other property to the forces assuming responsibility of the detainees.

7-109. Tag. Each DD Form 2745, (*Enemy Prisoner of War (EPW) Capture Tag)* has three parts. The parts are as follows:

- Using Part A of the DD Form 2745, tag each detainee (see figure 7-8, on page 7-34). Confiscated equipment, personal items, and evidence links to the detainee using the DD Form 2745 number.

- Part B of the DD Form 2745 is the unit record copy. (See figure 7-9.) When a DA Form 4137 (*Evidence/Property Custody Document*) documents confiscated items, it links to the detainee by annotating Part B.
- Part C of DD Form 2745 should be attached to the detainee's confiscated property. (See figure 7-10.)

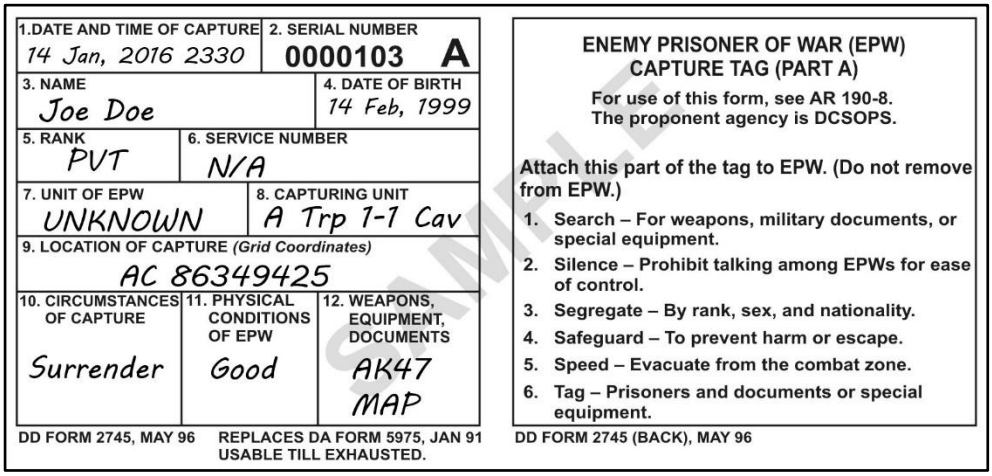


Figure 7-8. DD Form 2745, Enemy Prisoner of War (EPW) Capture Tag (Part A)

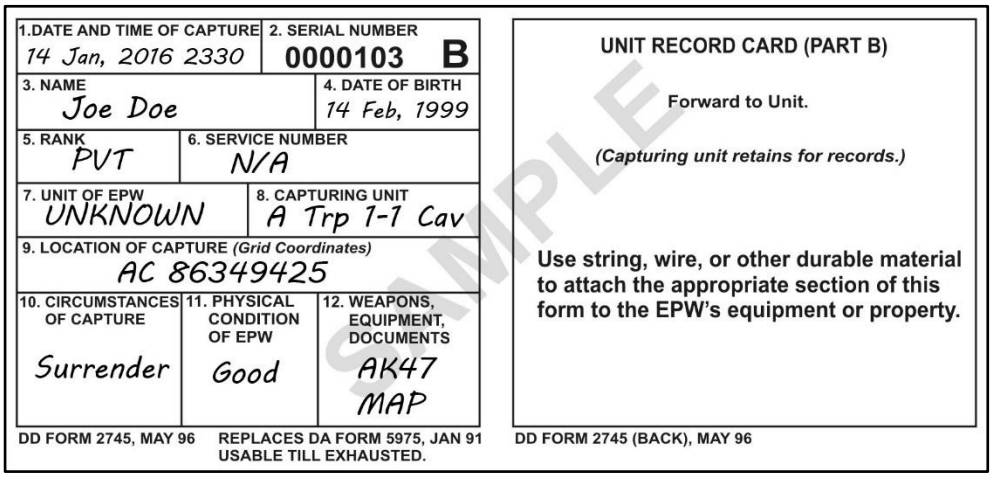


Figure 7-9. Enemy Prisoner of War (EPW) Capture Tag (Part B)

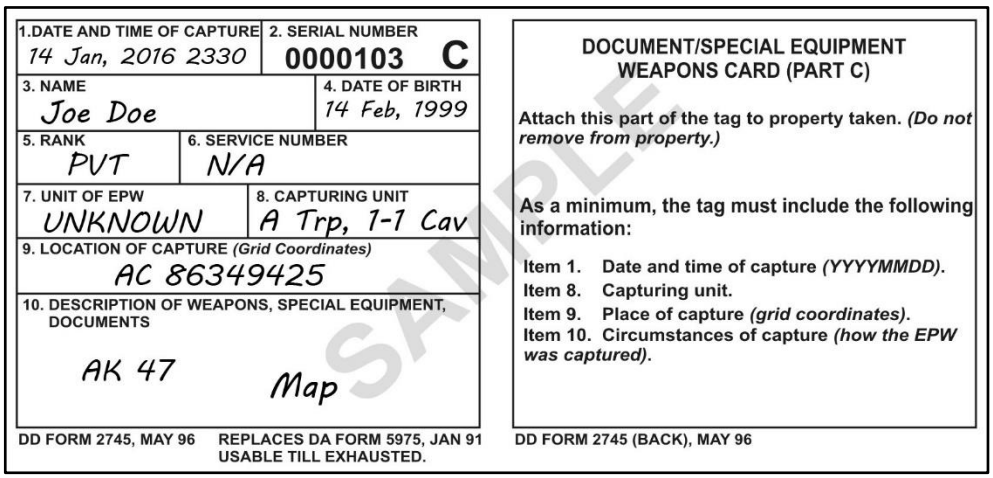


Figure 7-10. Enemy Prisoner of War (EPW) Capture Tag (Part C)

7-110. Evacuate detainees as soon as practical to the BCT detainee collection point. Tactical question detainees relative to collection of CCIRs as outlined by the requirements of the DOD Intelligence Interrogations, Detainee Debriefings, and Tactical Questioning policy as set forth in DODD 3115.09. However, always treat detainees in accordance with the U.S. Law of War Policy as set forth in the DODD 2311.01E. A military trained interrogator interrogates detainees and not scouts in the scout platoon. (See FM 2-22.3 for more information.)

7-111. Scouts capturing equipment, documents, and detainees should tag them using the DD Form 2745, take digital pictures, and report the capture immediately. Photograph all of the contents found on the detainee during the search with the detainee and place in a bag that remains on the detainee as they go to the detention facility. Detainees need their eyes and ears covered before they are placed into a transporting vehicle so they cannot see or hear common military reporting and tracking systems. Troop medics need to conduct a detainee medical screening and document all injuries prior to handing over any detainees.

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Appendix A

Analog Reports

Communication is imperative to a scout platoons success. To be able to quickly and accurately report, scouts require proficiency in communication equipment, procedures, and reports.

Scouts use the following report formats to ensure clear communications between units and echelons to facilitate common reporting formats.

CONTACT REPORT

A-1. Soldiers issue a contact report immediately upon contact with a threat or unknown force in the AO. A contact report is an alert, which can be very brief. A contact report takes priority over all other communications traffic and is primarily by radio. If Soldiers are already in a hide position and have detected the enemy before being detected first (and time permits) this initial report may be digital. State CONTACT, followed by a description of the threat or unknown force (dismounts) and the cardinal direction from the sender (north).

CONTACT REPORT

THIS IS WHITE 4, CONTACT, TANK, NORTH, OUT.

BLUE 1—SPOT REPORT

A-2. Soldiers use a SPOTREP when scouts observe any known or suspected threat activity. A SPOTREP is necessary when any characteristic in the AO can effect current and future missions, or when required by the OPORD. Soldiers always send threat information in the clear. A SPOTREP takes priority over all other routine radio traffic. The initial SPOTREP should follow no more than one minute after the contact report. State SPOTREP or UPDATED SPOTREP followed by pertinent information on these lines:

- Line ALPHA: Observer or source (omit if it is the calling station, otherwise use call signs or description).
- Line BRAVO: Activity or characteristic observed. Use the SALUTE format:
  - Size: The number of sighted personnel, vehicles, or other equipment.
  - Activity: What the threat is doing.

- Location: Grid coordinates. Report the center of mass for identical, closely grouped items, otherwise, report multiple grid coordinates of traces.
- Unit: Patches, signs, or markings.
- Time: Time the observed activity occurred.
- Equipment: Description or identification of all equipment associated with the activity.

- Line CHARLIE: Actions the reporting Soldier has taken and personal recommendations. Actions usually involve conducting additional reconnaissance to determine the complete threat situation or recommending and executing a specific COA.
- Line DELTA: Self-authentication (if required).

BLUE 1 SPOT REPORT, EXAMPLE

YELLOW 4, THIS IS YELLOW 2. BLUE ONE, OVER. ONE BRDM, STATIONARY, ORIENTED SOUTH AT GRID MS289546; 1725 HOURS. CONTINUING TO OBSERVE, OVER.

BLUE 2—SITUATION REPORT

A-3. Subordinate units submit a SITREP on the tactical situation and status to their higher headquarters. Submit the SITREP daily, after significant events, or when the platoon leader or commander requests it. State SITREP followed by pertinent information on these lines:

- Line 1: The as-of DTG.
- Line 2: Brief summary of threat activity, casualties inflicted, and prisoners captured.
- Line 3: Friendly locations (encoded using control measures or TIRS points).
- Line 4: Combat vehicles, operational tanks.
- Line 5: Defensive obstacles (encoded using codes, control measures, or TIRS points). The type and location can be listed as—
  - Obstacles. Abbreviations can include MF (for minefield), TD (for tank ditch), AB (for abetis), RC (for road crater), and CW (for concertina wire).
  - Executed demolition targets.
  - Reserved demolition targets.
- Line 6: Personnel strength classified using the following status levels:
  - Green: Full strength; 90 percent or more fit for duty.
  - Amber: Reduced strength; 80 percent to 89 percent fit for duty.
  - Red: Reduced strength; 60 percent to 79 percent fit for duty; the unit is mission capable.
  - Black: Reduced strength; 59 percent or less fit for duty.

- Line 7: Classes III and V supplies available for combat vehicles. Status levels for ammunition and petroleum, oil, and lubricants are the same ones used for personnel strength (Green, Amber, Red, or Black) with percentages referring to the amount of basic load level available. (Refer to line 6 of this report.)
- Line 8: Summary of tactical intentions.

Note. If an item is status level Black on lines 6 or 7, the appropriate yellow (logistics) report follows the transmission.

BLUE 2 SITUATION REPORT, EXAMPLE

YANKEE 21, THIS IS YANKEE 02, BLUE TWO, OVER. LINE 1: 062230. LINE 2: NEGATIVE CONTACT. LINE 3: VISIT 7. LINE 4B: 2. LINE 5: ABATIS, FROM X19 EAST ZERO POINT THREE NORTH ONE POINT SEVEN. LINE 6: GREEN. LINE 7A: GREEN. LINE 7B: AMBER. LINE 8: CONTINUING MISSION.

BLUE 4—REPORT FOR BRIDGE, OVERPASS, CULVERT, UNDERPASS, OR TUNNEL

A-4. To send a bridge report (known as a BRIDGEREP), state BRIDGEREP, followed by pertinent information on these lines:

- Line ALPHA: Type and location (for a long tunnel, include the entrance and exit locations). Use a TIRS point or grid coordinates.
- Line BRAVO: Overall length.
- Line CHARLIE: Width of roadway.
- Line DELTA: Height restrictions.
- Line ECHO: Length and number of spans.
- Line FOXTROT: Computed classification.
- Line GOLF: Bypass locations and conditions. Use a BLUE 5 report, if necessary.

BLUE 5—REPORT FOR FORD, FERRY, OR OTHER CROSSING SITE

A-5. To send the CROSSREP, state CROSSREP followed by pertinent information on these lines:

- Line ALPHA: Type and location, using a TIRS point or grid coordinates.
- Line BRAVO: Length of crossing in meters.
- Line CHARLIE: Usable width.
- Line DELTA: Current speed in meters per second.
- Line ECHO: Maximum depth in meters.
- Line FOXTROT: Bottom material and condition.

- Line GOLF: Capacity classification of any existing ferry equipment.
- Line HOTEL: Slope of entry bank.
- Line INDIA: Slope of exit bank.
- Line JULIETTE: Other comments as necessary.

BLUE 7—ROUTE RECONNAISSANCE REPORT

A-6. To report the results of a route reconnaissance, scouts should send an initial route reconnaissance report (known as ROUTEREP) at the SP. At a minimum, updates follow the initial report when obstructions, phase lines, and route changes become necessary. These update reports should include only the line(s) that have changed from the initial ROUTEREP. To send the report, state ROUTEREP, followed by pertinent information on these lines:

- Line ALPHA: From location, reported using a control measure or TIRS point.
- Line BRAVO: To location, reported using a control measure or TIRS point.
- Line CHARLIE: Type of route, reported using the following designations:
  - Highway: number 1.
  - Road: number 2.
  - Trail: number 3.
  - Cross-country: number 4.
- Line DELTA: Classification of route. Check for height, width, and weight restrictions to determine the appropriate class and report which vehicles the route can handle using the following designations:
  - All squadron and battalion vehicles (70-class minimum), reported using the number 1.
  - Tracked vehicles only, number 2.
  - Bradley or Cavalry fighting vehicles only (35-class restriction), number 3.
- Line ECHO: Seasonal limitations of route based on weather support capability, reported as follows:
  - All weather (usable year-round), reported using the letter X.
  - Limited all weather (use limited during bad weather), letter Y.
  - Fair weather (may be impassable during bad weather), letter Z.
- Line FOXTROT: Rate of movement the route supports, reported as follows:
  - Fast: Reported using the number 1.
  - Slow: Reported using the number 2.
- Line GOLF: Location and type of any critical points (send the applicable report). Report the following obstructions in all cases:
  - Curves with a radius of 45 meters or less.
  - Uphill slopes with grades of five percent or greater.

- Width restrictions of six meters or less for one-way traffic, 10 meters or less for two way traffic.
- Overhead clearance of 4.3 meters or less.

BLUE 9—OBSTACLE REPORT

A-7. Report all pertinent information using the following format:

- Line ALPHA: Type of obstacle or obstruction.
- Line BRAVO: Location, using grid coordinates. For large, complex obstacles, send the coordinates of the ends and all turn points.
- Line CHARLIE: Dimensions and orientation.
- Line DELTA: Composition.
- Line ECHO: Threat weapons influencing obstacle.
- Line FOXTROT: Observer's actions.

BLUE 10—BYPASS REPORT

A-8. Report all pertinent information using the following format:

- Line ALPHA: Observer or source.
- Line BRAVO: Length, width, surface type, grade.
- Line CHARLIE: Coordinates of from and to locations.
- Line DELTA: Seasonal and weather limitations. Use letter designation (X, Y, or Z) as described in the BLUE 7 ROUTEREP (line Echo).
- Line ECHO: Bypass markings.
- Line FOXTROT: Observer's actions.

BLUE 11—STAND-TO REPORT

A-9. Send the stand-to report (known as STANREP) to the platoon leader or tactical command post, as applicable, when stand-to is completed. To send this report, state STANREP, followed by pertinent information on these lines:

- Line ALPHA: Time stand-to was complete.
- Line BRAVO: Weapons on hand functional. Use the term UP for functional weapons on hand. Use EXCEPTION for weapons that are not on hand or not functional.
- Line CHARLIE: Sensitive and accountable items on hand. Use UP or EXCEPTION, as applicable.
- Line DELTA: Vehicles and radios on hand functional. Use UP or EXCEPTION, as applicable.
- Line ECHO: Report the on-hand or functional status of any other equipment using UP or EXCEPTION.

Note. For lines B, C, D, and E, refer to the Yellow 1 equipment status report for equipment line numbers.

BLUE 11 STAND-TO REPORT, EXAMPLE

BLACK 3, THIS IS RED 1; BLUE 11, OVER. LINE ALPHA: COMPLETE TIME 0600. LINE BRAVO: UP. LINE CHARLIE: ITEM 38, MISSING 1 EACH. LINE DELTA: RED 3 WILL NOT START.

STATUS REPORTS

A-10. Units routinely send reports to account for friendly equipment, captured enemy materiel, and personnel. These reports are significant because they relay information that has possible value in a concise format.

GREEN 2—SENSITIVE ITEMS REPORT

A-11. Units send the sensitive items report (known as SENSEREP) daily at prescribed times (before and after significant movement, after significant events, and after any consolidation or reorganization). Items covered include machine guns, personal weapons, night vision devices, binoculars, CBRN equipment, communications-electronics operating instruction materials, maps and graphics, and special equipment assigned to platoons for particular operations. To send this report, state SENSEREP followed by pertinent information on these lines:

- Line ALPHA: Reporting unit (use call sign).
- Line CHARLIE: Results of sensitive items check. Use the term UP for on-hand or functional items. For missing items, report the line description and serial number and provide an explanation. Use additional lines from the Yellow 1 report.
- Line ECHO: Initials of person sending report.

GREEN 2 SENSITIVE ITEMS REPORT, EXAMPLE

THIS IS RED 1. GREEN TWO, OVER. LINE ALPHA: RED. LINE CHARLIE: ALL UP. LINE ECHO: ROMEO WHISKY

GREEN 3—SPLASH REPORT

A-12. Units use the splash report for downed or missing aircraft. To send this report, provide all pertinent information on these lines:

- Line 1: Call sign.
- Line 2: Aircraft data (type and status).
- Line 3: Pilot status.

GREEN 4—PATROL REPORT

A-13. Units may submit the patrol report by radio or digital, when required. The following debriefing format can be used to ensure all pertinent information is provided in the patrol report:

- Designation of patrol. Include these elements:
- To: (Command unit.)
- From: (Patrol unit.)
- Maps: (Include maps used.)
- Size and composition of patrol.
- Task.
- Time of departure.
- Time of return.
- Routes (out and back).
- Terrain, includes a description of terrain by type (such as dry, swampy, and so forth), depth of ravines and draws, condition of bridges (type, size, and strength), and effect of terrain on tracked and wheeled vehicles.
- Threat includes details of threat strength, disposition, defenses, equipment, weapons, attitude, morale, exact location, and movements. The report should include the time of observation of the threat activity and coordinates for the location where the activity occurred.
- Any map corrections.
- Miscellaneous information includes pertinent details of CBRN warfare, if applicable.
- Results of encounters with the threat, includes threat prisoners and casualties, captured documents and equipment, identification of threat elements, and threat disposition after the contact.
- Condition of the patrol, includes disposition arrangements for any dead or wounded.
- Conclusions and recommendations, includes the extent of mission accomplishment and any patrol equipment and tactics recommendations.
- Additional remarks by the debriefed.

Note. The report should conclude with the name, rank or grade, and organization or unit of the patrol leader.

GREEN 6—DETAINEE AND CAPTURED MATERIAL REPORT

A-14. The detainee's captured materiel report informs the troop or squadron tactical command post of detainees and captured materiel of immediate tactical value only. Usually, units tag detainees and captured materiel immediately to show the place, time, and circumstances of capture to ensure information of value is not lost. Provide all pertinent information on the following lines (examples are in parentheses):

- Line 1: State Green 6.
- Line 2: Item captured (state enemy prisoner of war).
- Line 3: DTG of capture (260845SEP83).
- Line 4: Place of capture using grid coordinates (NS 621434).
- Line 5: Capturing unit (appropriate call sign).
- Line 6: Circumstances of capture described as briefly as possible.

A-15. Format for reporting captured materiel. Provide all pertinent information on the following lines (examples in parentheses):

- Line 1: State Green 6.
- Line 2: Item captured (state MATERIEL).
- Line 3: Type of document or equipment (communications-electronics operating instruction).
- Line 4: DTG of capture (160900JUN83).
- Line 5: Place of capture, using grid coordinates (NE824615).
- Line 6: Capturing unit (appropriate call sign).
- Line 7: Circumstances of capture described as briefly as possible.

Note. After sending the report to the platoon or troop commander, provide disposition instructions or recommendations, if necessary.

LOGISTICS REPORTS

A-16. Units use a logistics report to report the status of sustainment items and request resupply. Units should immediately follow a status report with a request report.

YELLOW 1—EQUIPMENT STATUS REPORT

A-17. Each platoon sergeant sends the equipment status report by courier or voice radio to the troop or task force tactical command post every day. The information is as of 1200 hours that same day. Units record the equipment status using one of these terms: operational, inoperative, or combat loss. Provide all pertinent information using the following categories and lines:

- Weapons.
  - Line 1: Bayonet multipurpose system, XM9.
  - Line 2: Pistol, 9 mm, automatic, M9 with equipment.
  - Line 3: Rifle, 5.56-mm, M4 with equipment.
  - Line 4: Launcher, grenade, M203A2/M320A1, with equipment.
  - Line 5: Machine gun, M2, .50 caliber heavy barrel.
  - Line 6: Machine gun, 7.62-mm, M240B.
  - Line 7: Machine gun, light 5.56-mm, M249.
  - Line 8: Machine gun, grenade, 40-mm, MK19 MOD III.
  - Line 12: Command launch unit, Javelin.

Note. Use lines 13, 14, 15, and 16 as needed for additional weapons assigned to the platoon.

- Vehicles and vehicle equipment.
  - Line 17: HMMWV, M1151, 50 Cal.
  - Line 18: HMMWV, M1151, MK19.
  - Line 18: HMMWV, TOW M1151.
  - Line 19: Bradley or Cavalry Fighting Vehicle, M3.
  - Line 20: Stryker.

Note. Use lines 21, 22, 23, and 24 as needed for additional vehicles and vehicle equipment assigned to the platoon.

- CBRN equipment.
  - Line 25: Radiac set.
  - Line 26: Radiac set, dosimeter.
  - Line 27: Chemical detection.
  - Line 28: Mask, chemical-biological.

Note. Use lines 29, 30, and 31 as needed for additional CBRN equipment assigned to the platoon.

- Radios.
  - Line 32: Radio set: AN/PRC-119F I.
  - Line 33: Radio set: Hand Held AN/PRC-148.
  - Line 34: Radio set: Radio Set: AN/PSC-5.
  - Line 35: Radio set: AN/VRC-8I I.
  - Line 36: Radio set: AN/VRI1F I.
  - Line 37: Radio set: ANIC-92F I.
  - Line 38: Radio set: AN/VRC-104(V) 6, 150 WATT W/PRC-150 high frequency radio.

Note. Use lines 39, 40, and 41 as needed for additional radios assigned to the platoon.

- Miscellaneous equipment.
  - Line 42: Demolition set, explosive, initiating, electric, and semi-electric.
  - Line 43: Detecting set, mine, portable, metallic, AN/PSS-11.
  - Line 44: Night vision goggles, AN/PVS-7B.
  - Line 45: Battlefield Anti-Intrusion System, AN/PRS-9.

- Line 46: Binoculars, modular construction, mil scale reticle, 7 x 50-mm with equipment.
- Line 47: Telescope, straight, military.

Note. Use lines 48, 49, and 50 as needed for any additional equipment assigned to the platoon.

YELLOW 1A—BATTLE LOSS SPOT REPORT

A-18. The platoon leader or platoon sergeant transmits the Yellow 1A report as soon as possible after items are lost or damaged in battle. Losses are reported using line numbers from the Yellow 1 report. Provide pertinent information on the following lines:

- Line 1: Time of loss.
- Line 2: Number of equipment pieces to be evacuated to troop and battalion or higher for maintenance. Refer to the appropriate line numbers from the Yellow 1 report.
- Line 3: Number of equipment pieces destroyed, abandoned, and left in pieces. Refer to the appropriate line numbers from the Yellow 1 report.
- Line 4: Location (encoded) of abandoned equipment.

Note. Yellow 1A reports are not cumulative. Units send a Yellow 1A report showing total unit status no later than 1300 hours once daily. The Yellow 1A report gives equipment status as of 1200 hours that day.

YELLOW 2—AMMUNITION STATUS REPORT

A-19. Transmit an ammunition status report once daily at 1300 hours or immediately upon completion of threat contact, the following status codes are used:

- Green: 90 percent or more on hand, all ammunition types.
- Amber: 80 percent to 89 percent on hand, all ammunition types.
- Red: 60 percent to 79 percent on hand, all ammunition types.
- Black: 59 percent or less on hand, all ammunition types.

Note. Black status in a Yellow 2 report requires immediate follow-up with a Yellow 2A report. Green, Amber, or Red status does not require submission of a Yellow 2A report.

YELLOW 2A—AMMUNITION REQUEST

A-20. The required quantity of each type of ammunition is requested using the following line numbers:

- Line 1: Report as-of DTG.

- Line 2: 5.56-mm mix.
- Line 3: 5.56-mm ball.
- Line 4: 5.56-mm tracer.
- Line 5: 7.62-mm (coax).
- Line 6: Grenade, 40-mm, high explosive.
- Line 7: Grenade, 40-mm, white phosphorous.
- Line 8: Grenade, 40-mm, antipersonnel.
- Line 9: .50 caliber (M2).
- Line 10: .50 caliber (M85).
- Line 11: 40-mm, high explosive/dual purpose.
- Line 12: 25-mm high explosive.
- Line 13: 25-mm antipersonnel.
- Line 14: TOW.
- Line 15: AT4.
- Line 16: Javelin.
- Line 17: Grenade, fragmentation.
- Line 18: Grenade, smoke.
- Line 19: Grenade, thermite.
- Line 20: Blasting cap, nonelectric.
- Line 21: Fuse, igniter.
- Line 22: Fuse, blast, time.
- Line 23: Mine, claymore.
- Line 24: Mine, antitank.
- Line 25: Mine, antipersonnel.

Note. All Yellow 2A requests are for the quantity of ammunition the platoon requires unless otherwise specified. When sending a Yellow 2A report, use only the lines required for specific requests. Use additional lines (beginning with line 26) to request any other types of ammunition that the platoon needs. Attached units should coordinate with the S-4 for additional line numbers for their ammunition requirements.

YELLOW 3—PETROLEUM, OILS, AND LUBRICANTS STATUS REPORT

A-21. Units send the POL report twice daily, or as requested. Use the following status codes:

- Green: 90 percent or more of the required quantity on hand.
- Amber: 80 to 89 percent on hand.
- Red: 60 to 79 percent on hand.
- Black: 59 percent or less on hand.

YELLOW 3A— PETROLEUM, OILS, AND LUBRICANTS REQUEST

A-22. Use the following line numbers to request the required quantity of each type of POL product:

- Line 1: Report as of DTG.
- Line 2: Diesel gallon (gal).
- Line 3: Oil, OE-30 (gal).
- Line 4: Oil, OE-90 (gal).
- Line 5: Antifreeze (gal).
- Line 6: Brake fluid (gal).
- Line 7: Hydraulic fluid, OHA quart (qt).
- Line 8: Hydraulic fluid, OHT (qt).
- Line 9: Grease, GAA pound (lb).

Note. Use lines 10, 11, and 12 as needed for any other equipment assigned to the platoon. Use additional lines (beginning with Line 21) to request any other POL products the platoon or attached elements require.

PERSONNEL REPORTS

A-23. Units use personnel reports to notify the command group of casualties and to request replacement personnel. A request for replacements must immediately follow a casualty report.

RED 2—PERSONNEL BATTLE LOSS REPORT

A-24. Units transmit a Red 2 report to the troop and task force tactical command post as casualties occur. The unit also completes DA Form 1156, (*Casualty Feeder Card*) with witness statements, and submits all to the 1SG. Red 2 is an interim report to update information sent in the last Red 1 report. Provide all pertinent information using the following lines:

- Line 1: Battle roster number.
- Line 2: DTG of the incident.
- Line 3: Location of the incident (encoded).

- Line 4: Type of casualties, encoded by letter as follows:
  - ALPHA: KIA, hostile action.
  - BRAVO: KIA, nonhostile action.
  - CHARLIE: Body recovered.
  - DELTA: Body not recovered.
  - ECHO: Body identified.
  - FOXTROT: Body not identified.
  - GOLF: Missing in action.
  - HOTEL: Captured.
  - INDIA: Wounded in action, slight, hostile action.
  - JULIET: Wounded in action, serious, hostile action.
  - KILO: Wounded in action, slight, nonhostile action.
  - LIMA: Wounded in action, serious, nonhostile action.
  - MIKE: Accident.
- Line 5: Location of casualties or evacuation.

RED 3—MEDICAL EVACUATION REQUEST

A-25. Units send a Red 3 report to the medical team on the troop or company command net to request MEDEVAC support.

A-26. The following is the ground evacuation format. Provide pertinent information on the following lines:

- Line 1: State EVAC (not spoken: evacuation).
- Line 2: Location for pickup (encoded).
- Line 3: Number of casualties.
- Line 4: Category of patient condition, encoded by letter designation as follows:
  - ALPHA: Urgent.
  - BRAVO: Priority.
  - CHARLIE: Routine.

Note. Use the letter designation with the number of patients in each category; for example, TWO ALPHA indicates that two patients require evacuation on an urgent basis.

A-27. The air evacuation format is as follows:

- Line 1: Location. Specify the grid coordinates for the six-digit grid location preceded by the 100,000-meter grid identification.
- Line 2: Radio frequency and call sign. The frequency and call sign is the radio frequency and call sign at the site of the unit requesting evacuation.

- Line 3: Patient category of precedence. Classify the casualties' priority for evacuation using the following terms:
  - Urgent. Evacuation required within two hours saving life or limb.
  - Priority. Patient's medical condition is deteriorating, becoming urgent within four hours.
  - Routine. Evacuation required, but several hours until patient's condition expected to deteriorate.
  - Tactical immediate. Evacuation required so casualties do not endanger the tactical mission.
- Line 4: Special equipment and emergency medical supplies.
- Line 5: Number and type of casualties.
- Line 6: Security of pickup site. Describe conditions for security at the pickup zone.
- Line 7: Signaling and site marking. Specify the signaling and marking methods to use.
- Line 8: Patient nationality and status.
- Line 9: CBRN contamination area. Specify locations of any contaminated areas affecting the evacuation operation.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR, EXPLOSIVE REPORTS

A-28. Units use CBRN explosives reports to describe contaminated areas, means of delivery, persistence, and initial agent identification. Units ensure that appropriate protective postures occur before gathering information for CBRN reports.

CBRN-1—OBSERVER'S INITIAL REPORT

A-29. The CBRN 1 report may use CHEM/BIO/RAD/NUC to represent a chemical report, biological report, radiological report, or nuclear report respectively. To send the CBRN-1 report, state CBRN ONE and give the type of CBRN incident (nuclear, biological, radiological, or chemical). Other information that may be sent includes precedence of the report, date and time of the report (universal time [also called ZULU]), and security classification with the FROM and TO times the classification is applicable. Provide all pertinent information on the following lines:

- Line ALPHA: Strike serial number (if known).
- Line BRAVO: Position of observer (universal transverse Mercator [known as UTM] coordinates or name of place).
- Line DELTA: DTG attack started, ZULU.
- Line FOXTROT: Location of attack (UTM coordinates) and vicinity of attack (actual or estimated, specify which is given).
- Line GOLF: Means of delivery and quantity (if known).
- Line HOTEL: (For CBRN 1 NUC reports) Type of burst (air, surface, unknown), type of toxic agent, or type of attack.

- Line INDIA: Release information (Number of shells, other data) not mandatory for RAD or NUC.
- Line INDIAR: (For CBRN 1 RAD reports) Release and sampling information on radiological incidents.
- Line JULIET: Flash-to-bang time (in seconds).
- Line KILO: Crater present or absent, diameter in meters (if known).
- Line LIMA: Cloud width (degrees or mils, specify which) five minutes after burst.
- Line MIKE: Description and status of chemical, biological, and radiological incidents. Cloud height (top or bottom, specify which) ten minutes after burst (degrees or mils, specify which).
- Line SIERRA: DTG of reading or initial detection of contamination (local or ZULU time).

Note. DO NOT DELAY REPORTS in an attempt to provide complete format information. Omit information that is not applicable or available. Items always reported are the type of report; lines D and H; and one of the following lines: B, C, F, or G. Carefully specify the units of measure used (such as degrees, mils, or grid azimuth).

CBRN-3—IMMEDIATE WARNING OF EXPECTED CONTAMINATION

A-30. The CBRN-3 report is by radio. The CBRN 3 report will be prepared by the CBRN cell and transmitted to provide warning to units in or near the expected area of contamination. The CBRN-3 report will contain the location of attack and grid coordinates for plotting the area of expected hazard area. report format is CBRN THREE, followed by pertinent information on these lines:

- Line ALPHA: Strike serial number (if known).
- Line DELTA: DTG when attack started.
- Line FOXTROT: Location of attack (actual or estimated, specify which).
- Line PAPA: Area of expected contamination.
- Line YANKEE: Bearing or azimuth of left, then right radial lines (specify degrees or mils, use four digits for each line).
- Line ZULU: Effective downwind speed (in kilometers per mile, use three digits), downwind effective distance of zone (in kilometers, use three digits), and cloud radius (in kilometers, use two digits).

CBRN-4—RECONNAISSANCE, MONITORING, AND SURVEY RESULTS

A-31. Units submit CBRN-4 report, used for reporting CBRN hazards as required by the OPORD. To send this report, state CBRN FOUR, followed by pertinent information on these lines:

- Line INDIA: Release information (not mandatory for RAD or NUC).
- Line INDIA: Release and sampling information on radiological incidents.

- Line QUEBEC: Location of reading or detection and type of detection, use friendly graphics or encryption. Omit this line when transmitting on a digital system.
- Line ROMEO: Dose rate in centigray per hour (cGy/hr) (average total dose rounded to the nearest 10 cGy). Specify whether the dose rate is INITIAL, INCREASING, PEAK, or DECREASING. Specify SHIELDED if the dose rate was measured inside a vehicle.
- Line SIERRA: DTG of reading. Specify the time zone.

Note. Repeat lines Q, R, and S as often as necessary. Ideally, measure radiation dose rates in the open one meter above the ground. If the rate is measured in a shielded location, it is converted (as accurately as possible) to a rate in the open.

CBRN-5—REPORT OF AREAS OF CONTAMINATION

A-32. The CBRN 5 report will be prepared by the CBRN cell or controlling headquarters and transmitted to distribute information about the contaminated area consolidated from CBRN 4 reports. Units may send other information including precedence of the report, date and time of the report (ZULU), and security classification with from and to for the length of time the classification is applicable. Provide all pertinent information on the following lines:

- Line ALPHA: Strike serial number, if known.
- Line OSCAR: Reference DTG for estimated contours of contaminated areas.
- Line SIERRA: DTG when detection of contamination occurred.
- Line TANGO: H+1 DTG or DTG of latest reconnaissance of contamination in the area.
- Line UNIFORM: Coordinates of contour lines marking dose rate of 1000 cGy/hr.
- Line VICTOR: Coordinates of contour lines marking dose rate of 300 cGy/hr.
- Line WHISKEY: Coordinates of contour lines marking dose rate of 100 cGy/hr.
- Line X-RAY: Coordinates of contour lines marking dose rate of 20 cGy/hr.

Appendix B
Platoon Operating Distances

Platoon leaders develop platoon operating distances for planning considerations based on manning, available weapons systems, and the desired amount of depth. The primary considerations are the mission variables of METT-TC. Additional considerations to emphasize when developing planning distances include enemy, friendly optics and laser capabilities, weapons ranges, and terrain.

Platoon leaders may apply the following basic equations prior to mission execution to calculate an approximate operating area for their platoons. Using the formula described below, leaders can make tentative plans for positions and fires coverage.

Below are several examples platoon leaders can use as a reference to develop operating distances specific to their particular mission. Many factors of METT-TC are not available in these generic examples. Leaders must apply all planning specifics to their mission.

ARMORED BRIGADE COMBAT TEAM SCOUT PLATOON

B-1. An ABCT scout platoon maximizes its capabilities in firepower and optics. The scout platoon has protection allowing for greater risk against ABCT-arrayed threats. An ABCT platoon leader can use the following method to calculate their planning distances and depth for unrestricted terrain for a six-vehicle scout platoon:

- Disperse vehicles based on enemy fires capability yet still within friendly fires coverage; 500 meters between vehicles is the minimum recommended planning factor to provide force protection against enemy indirect fire.
- Optics available usually allows acquisition of enemy targets up to 10 km and identification at 3 km.
- Weapons systems vary across formation types and significantly influence distance-planning considerations. As an example, the M242 25-mm cannon would allow over 1000 meters between vehicles while maintaining mutual support and sufficient weapons range beyond the supported vehicle.

B-2. Analyze terrain as unrestricted, restricted, or severely restricted. (Refer to ATP 2-01.3.) Unrestricted terrain is free of any restriction to movement. Unrestricted terrain for armored or mechanized forces is typically flat to moderately sloping terrain

with scattered or widely spaced obstacles such as trees or rocks. As an example, in desert terrain, troops are able to screen more area by maximizing the use of optics and weapons capabilities.

B-3. Given the planning factors above, to find the planning screen front, take half of the maximum effective range of the weapons system and multiply that by three quarters the number of vehicles to account for mutually supporting position. Incorporate a factor of one for the terrain classification. Finally, add in the maximum effective range of the weapons system to cover the flank security factor to establish a front of 9 km. To find the planning screen depth, divide the front in half to establish a depth of 4,500 meters. By changing the planning factors to meet their variables, commanders can rapidly estimate their fires protection and planning distance. (See figure B-1.)

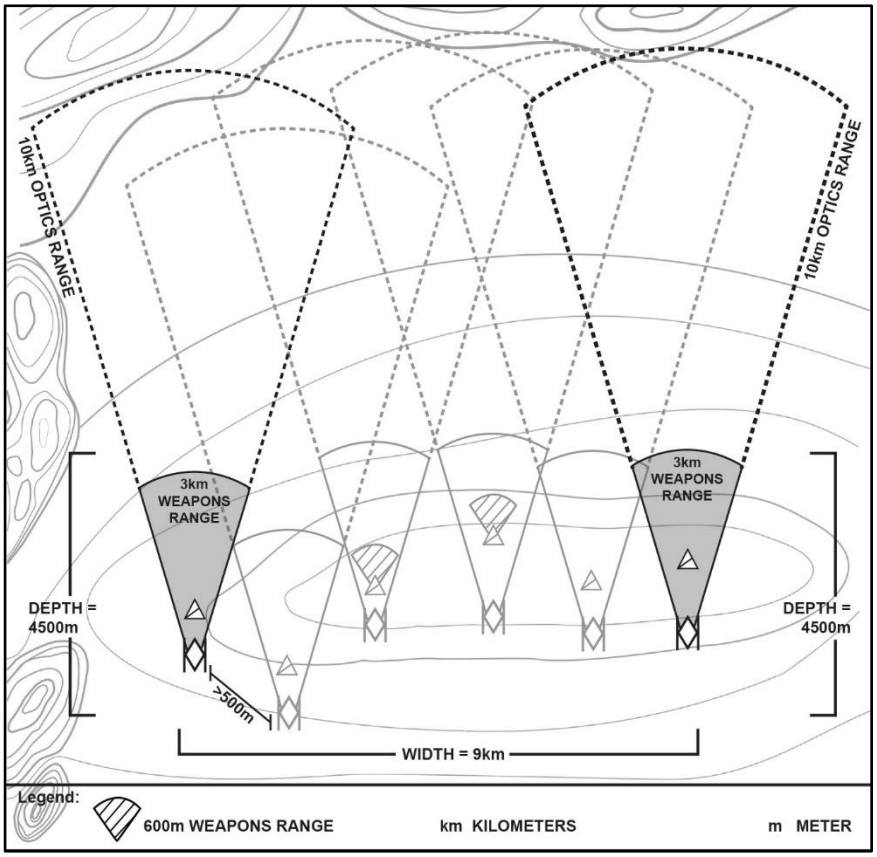


Figure B-1. ABCT scout platoon operational distance (unrestrictive terrain)

INFANTRY BRIGADE COMBAT TEAM MOUNTED SCOUT PLATOON

B-4. The firepower, mobility, and mix of weapons systems allows leaders the flexibility to array forces in an IBCT scout platoon to meet the mission variables of METT-TC. An IBCT platoon leader can use the following method to calculate their planning distances and depth starting for severely restricted terrain for a six-vehicle scout platoon:

- Disperse vehicles based on enemy fires capability yet still within friendly fires coverage; 500 meters between vehicles is the minimum recommended planning factor to provide force protection against enemy indirect fire.
- Optics available allows acquisition of enemy targets up to 10 km and identification at 3 km.
- Weapons systems (the combination of the .50 caliber heavy machine gun, MK19 grenade launcher, and TOW II) allow for up to 1000 meters between vehicles to maintain mutual support and sufficient weapons range beyond the supported vehicle.
- Severely restricted terrain severely hinders or slows movement in combat formations. Commanders may attempt to enhance mobility by committing engineer assets to improving mobility or deviating from doctrinal tactics, such as moving in columns instead of line formations or at speeds much lower than those preferred.

B-5. Given the planning factors above, to find the planning screen front, take half of the maximum effective range of the weapons system and multiply that by three quarters of the number of vehicles, which will account for the mutually supporting position. Incorporate a factor of 0.25 for the terrain classification. Finally, add in the maximum effective range of the weapons system to cover the flank security factor, which will establish a front of 3 km. To find the planning screen depth, divide the front in half, which establishes a depth of 1,500 meters. (See figure B-2, page B-4.)

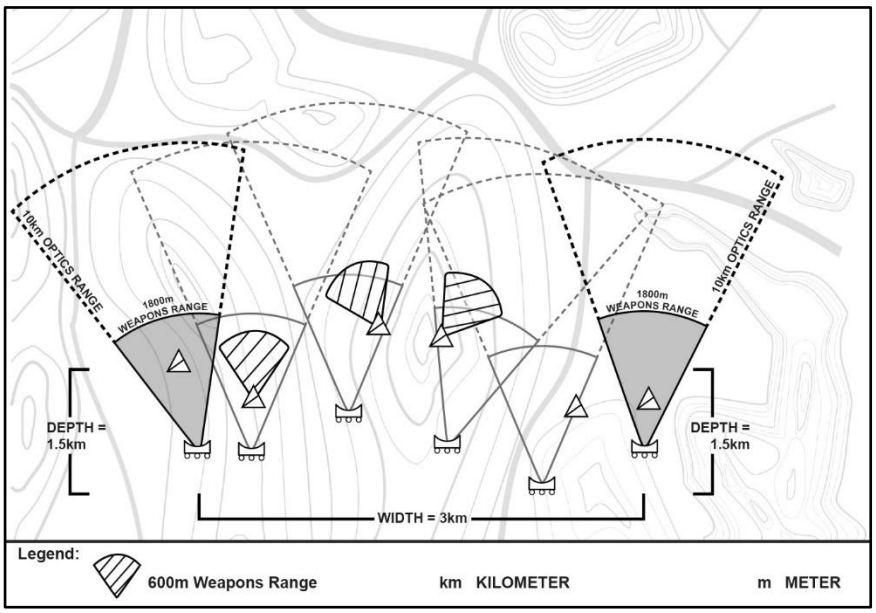


Figure B-2. IBCT scout platoon operational distances (severely restrictive)

INFANTRY BRIGADE COMBAT TEAM DISMOUNTED SCOUT PLATOON

B-6. The IBCT dismounted scout platoon allows discreet, stealthy execution of reconnaissance and security tasks. An IBCT platoon leader can use the following method to calculate their planning distances and depth, starting for severely restricted terrain. For this example, an area reconnaissance is demonstrated using NAIs.

- Disperse based on enemy fires capability yet still within friendly fires coverage; 250 meters between observation posts is the minimum recommended planning factor to provide force protection against enemy indirect fire.
- Optics available allows acquisition of enemy targets up to 10 km and identification at 3 km.
- Weapons systems vary across formation types and significantly influence distance-planning considerations. For example, the M240B/L allows 400 meters between positions to maintain mutual support and sufficient weapons range beyond the supported observation post.
- Severely restricted terrain severely hinders or slows movement in combat formations unless the commander makes some effort to enhance mobility. (See figure B-3.)

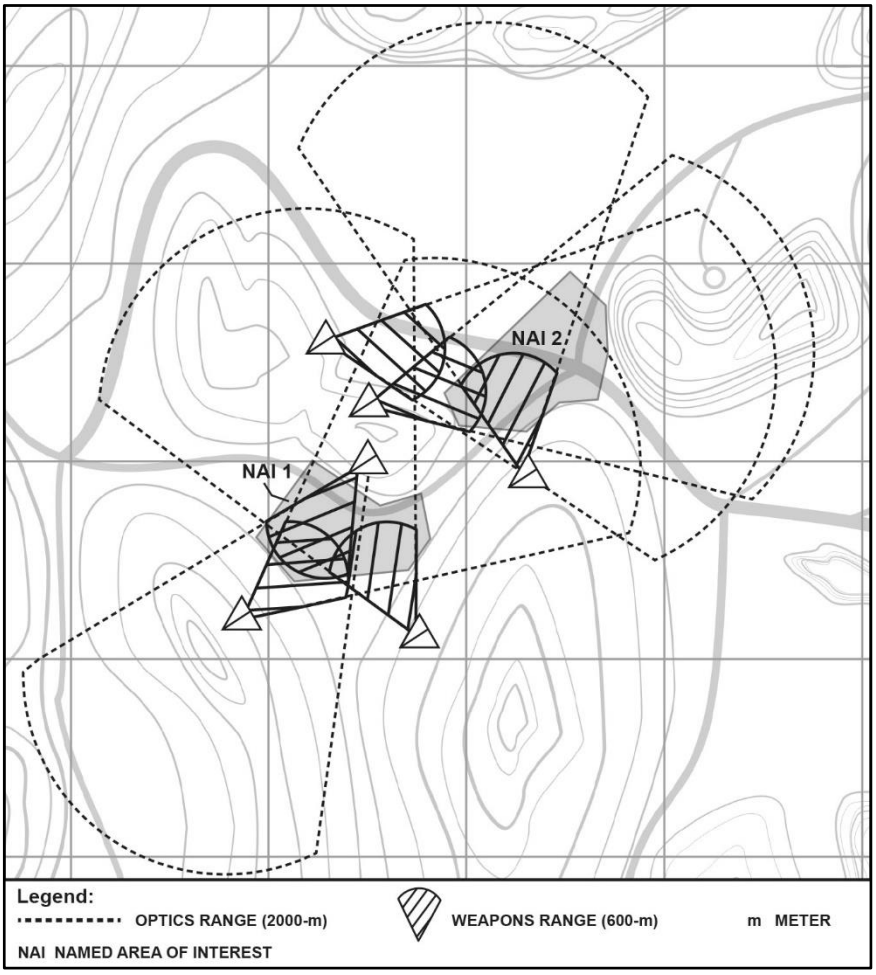


Figure B-3. IBCT dismounted scout platoon

STRYKER BRIGADE COMBAT TEAM SCOUT PLATOON

B-7. The SBCT scout platoons platform commonality allows commanders simplicity in planning. SBCT platoon leader can use the following method to calculate their planning distances and depth starting at the platoon level for restricted terrain for a six-vehicle scout platoon:

- Disperse vehicles based on enemy fires capability, yet still within friendly fires coverage; 500 meters between vehicles is the minimum recommended planning factor to provide force protection against enemy indirect fire.

- Optics available allows acquisition of enemy targets up to 10 km and identification at 3 km.
- For weapons systems, the 50 caliber heavy machine gun and MK19 grenade launcher would allow up to 1,000 meters between vehicles to maintain mutual support and sufficient weapons range beyond the supported vehicle.

B-8. Restricted terrain hinders movement to some degree. Units may have difficulty maintaining preferred speeds, moving in combat formations, or transitioning from one formation to another. Restricted terrain slows movement by requiring navigating through vegetation or frequent detours. Restricted terrain for armored or mechanized forces typically consists of moderate-to-steep slopes or moderate-to-densely spaced obstacles such as trees, rocks, or buildings. (See figure B-4 and tables B-1 through B-7 on pages B-7 to B-11.)

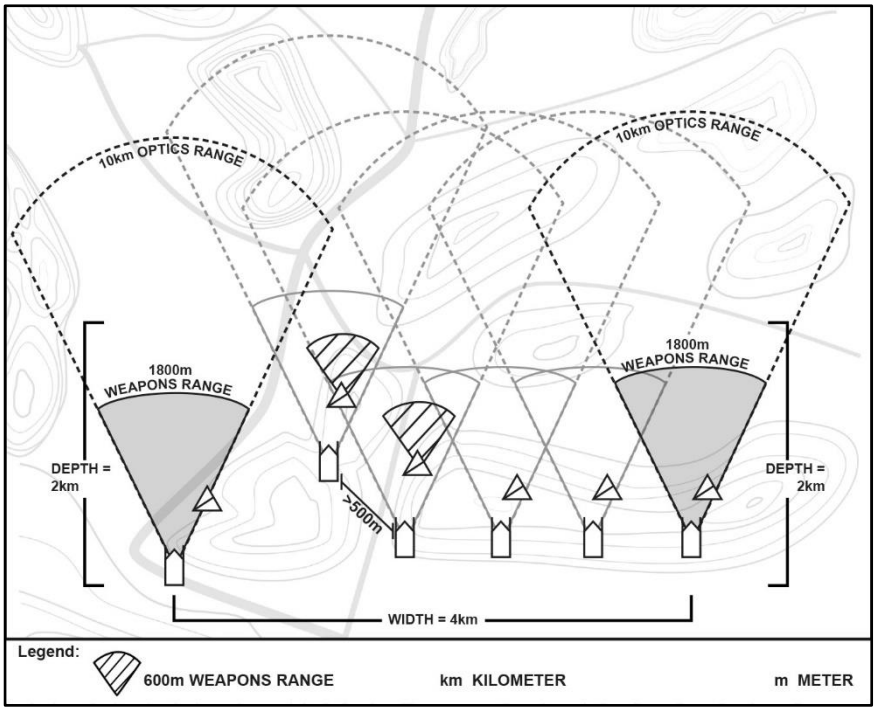


Figure B-4. SBCT scout platoon operational distances (restrictive)

Table B-1. Scout platoon width/depth formula

The same width and depth formula is expressed below two different ways:

Width Formula

Width = (0.5 weapons system maximum effective range) x (0.75 number of vehicles) x terrain + flank security

Depth = width/2

Expressed another way:

([(.5R)(.75Nv)] x t) + F = W

.375 RNvT + F = W

Depth Formula

D = W/2 (depth will not be greater than 1/3 maximum effective range of internal indirect fire assets

Legend

R – Maximum effective range of weapon system

Nv – Number of vehicles in formation

T – Terrain

T – 1 for unrestricted

T – .5 for restricted

T – .25 for severely restricted

F – Flank security. Calculated by using maximum effective range of weapon system

W – Width

D – Depth

Number of Vehicles

Nv x .75

6 x .75 = 4.5

5 x .75 = 3.75

4 x .75 = 3

3 x .75 = 2.25

2 x .75 = 1.5

Table B-2. ABCT scout platoon operational distances in unrestrictive terrain

Unrestrictive – 1
Restrictive – 0.5
Severely Restrictive – 0.25

1. M242 Bushmaster maximum effective range = 3000
2. Number of vehicles = 6
3. Type of terrain = unrestrictive
4. Flank security. Calculated by using maximum effective range of weapons system

Width = (0.5 weapons system maximum effective range) x (0.75 number of vehicles) x terrain + flank security
Screen width = 0.5 of 3000 times 0.75 of 6 times 1 + 3000
Screen width = 1500 times 4.5 times 1 + 3000
Screen width = 9750

Screen depth = width/2
Screen depth = 4875

Table B-3. IBCT scout platoon operational distances in severely restricted terrain

Unrestrictive – 1
Restrictive – 0.5
Severely Restrictive – 0.25

1. M2 .50 caliber maximum effective range = 1830
2. Number of vehicles = 6
3. Type of terrain = severely restrictive
4. Flank security. Calculated by using maximum effective range of weapons system

Width = (0.5 weapons system maximum effective range) x (0.75 number of vehicles) x terrain + flank security
Screen width = 0.5 of 1830 times 0.75 of 6 times 0.25 + 1830
Screen width = 915 times 4.5 times 0.25 + 1830
Screen width = 2860

Screen depth = width/2
Screen depth = 1430

Table B-4. SBCT scout platoon operational distances in restricted terrain

Unrestrictive – 1 Restrictive – 0.5 Severely Restrictive – 0.25
1. M2 .50 caliber maximum effective range = 1830
2. Number of vehicles = 6
3. Type of terrain = restrictive
4. Flank security. Calculated by using maximum effective range of weapons system
Width = (0.5 weapons system maximum effective range) x (0.75 number of vehicles) x terrain + flank security
Screen width = 0.5 of 1830 times 0.75 of 6 times 0.5 + 1830
Screen width = 915 times 4.5 times 0.5 + 1830
Screen width = 3860
Screen depth = width/2
Screen depth = 1945

Table B-5. Scout platoon optics systems estimated distances

Daysights	*Target Recognition*	*Target Identification*
Binocular: Modular Construction Mil Scale Reticle 7X50mm W/E	2000 meter	*Not tested
Telescope: Straight – ELCAN M145 Straight Telescope	900 meters with M240B	No data
Soldier Carried		
Laser Target Locator Module (LTLM)	4.2 km day / 900 meter night	2.7 km day / .45 km night
Crew System		
Range Finder-Target Designator: Laser ANPED-1 Lightweight Laser Designator Rangefinder (LLDR)	No data	4.3 km day / 1.4 km night
Command Launch Unit (Javelin) 13305405-119	2000 meters Block D 2500 meters Block I	No data
Soldier Weapon Sight		
Sight: Night Vision (SNS) AN/PVS-30 Clip-on Sniper Night Sight	600 meters ½ Moon	No data
Sight: Thermal AN/PAS-13B(V)1	820 meters	No data
Medium Weapon Thermal Sight (MWTS): AN/PAS-13(V2)	1200 meters (MWTS I) 1430 meters (MWTS II)	No data
Heavy Weapon Thermal Sight (HWTS): AN/PAS-13(V3)	2200 meters (HWTS I) 2753 meters (HWTS II)	No data
Legend: ITAS – improvised target acquisition system, km – kilometer, Mil – milliradians, mm – millimeters, RF – radio frequency, TOW – tube launched, optically tracked, wire guided, W/E – with equipment		

Table B-6. ABCT scout platoon weapon system list

Weapon	*Max Range*
M242 25mm	1,600 m to 3,000 m
M320A1 Grenade Launcher	150 m to 300 m
M2 MG .50 caliber	1,500 m to 1,830 m
MK 19 MOD III MG 40-mm Grenade	100 to 2,212m
M240B/240L MG 7.62 mm	600 m to 1,800 m
M9 9 mm	50 m
M4 5.56 mm	600 m
12 gauge Shotgun	50 m
120 mm Mortar	7,200 m
TOW Missile	3,750 m to 4,250 m
CLU Javelin	2,000 m
Legend: CLU – command launch unit, max – maximum, m – meter, mm – millimeter, MG – machine gun, MOD – module, TOW – tube-launched optically-tracked wire-guided missile	

Table B-7. IBCT scout platoon weapon system list

Weapon	*Max Range (depending on Ammo type)*
M2 MG .50 caliber	1,500 m to 1,830 m
MK 19 MOD III MG 40-mm grenade	100 to 2,212 m
M320A1 grenade launcher	150 m to 300 m
M240B/240L MG 7.62-mm	600 m to 1,800 m
M249 5.56-mm link	650 m
M9 9-mm	50 m
M4 5.56-mm	550 m
12 gauge shotgun	50 m
120-mm mortar	7,200 m
M225 60-mm mortar	3,649 m
ITAS TOW missile	3,750 m to 4,200 m
CLU javelin	2,000 m
Legend: cal – caliber, CLU – command launch unit, ITAS-- improvised target acquisition system, max – maximum, m – meter, mm – millimeter, MG – machine gun, MOD – module, TOW – tube-launched optically-tracked wire-guided missile	

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Glossary

The glossary lists acronyms and terms with Army or joint definitions. Where Army and joint definitions differ, (Army) precedes the definition. Terms for which ATP 3-20.98 is the proponent are marked with an asterisk. The proponent manual for other terms is listed in parentheses after the definition.

SECTION I – ACRONYMS AND ABBREVIATION

Acronym	Definition
1SG	first sergeant
AB	abatis
ABCT	Armored brigade combat team
ADP	Army doctrine publication
AFTTP	Air Force tactics, techniques, and procedures
AMD	air and missile defense
AO	area of operations
ARS	attack reconnaissance squadron
ATP	Army techniques publication
BCT	brigade combat team
BHL	battle handover line
BLUES	• B: Blend in with the surrounding area. Does the site look natural? Does it attract unwanted attention? • L: Low-to-the-ground constructed sites. Does the site provide protection against small arms and direct weapons fire? • U: Unexpected sites. Does the enemy expect Soldiers to look out the window, or out the small hole in the wall? • E: Evacuation routes planned during site selection. Where is the link-up location with friendly forces?
BP	battle position
BMP	Russian amphibious tracked infantry fighting vehicles
BRDM	Russian combat reconnaissance patrol vehicle

BRIDGEREP	bridge report
BTR	Russian class of armored vehicles
CASEVAC	casualty evacuation
CAS	close air support
CBRN	chemical, biological, radiological, and nuclear
CCIR	commander's critical information requirement
CCN	combination class number
cGy	centigray per hour
CLS	combat lifesaver
COA	course of action
CCP (s)	casualty collection point
CROSSREP	crossing report
CW	concertina wire
CWORMS	• C: Compass and navigation equipment. • W: Weapons, such as personal, crew-served and anti-tank. • O: Optics, binoculars, spotting scope, thermal sights and night observation devices with spare batteries. • R: Radios and report formats. Signal operating instructions. • M: Map of the area with operational graphics. • S: Seasonal equipment. Wet weather gear, gloves, sleeping bags, chemical, biological, radiological, nuclear, and high-yield explosive equipment based on weather and threat.
DA	Department of the Army
DD	Department of Defense form
DIDEA	detect, identify, decide, engage, and assess
DOD	Department of Defense
DODD	Department of Defense Directive
DTG	date-time group
EEFI	essential elements of friendly information
EPW	enemy prisoner of war
ERT	engineer reconnaissance team
EW	electronic warfare
FDC	fire direction center
FM	field manual, frequency modulation

FO	forward observer
FPOL	forward passage of lines
FRAGORD	fragmentary order
FSO	fire support officer
gal	gallon
GOTWA	● G: Going – where is the leader going? ● O: Others – others going with leader? ● T: Time (duration) – how long will the element be gone? ● W: What – what happens if the leader fails to return? ● A: Actions – what actions does element and main body plan to execute on enemy contact?
GPS	Global Positioning System
HMMWV	high mobility multipurpose wheeled vehicle
HUMINT	human intelligence
IBCT	Infantry brigade combat team
IED (s)	improvised explosive device
IPB	intelligence preparation of the battlefield/battlespace
IR	infrared
IV	intervisibility
JP	joint publication
JTAC	joint terminal attack controller
KIA	killed in action
km	kilometer
lb	pound
LD	line of departure
LD	line of departure
LOGPAC	logistics package
LRAS3	Long-Range Advance Scout Surveillance System
LRP (s)	logistic releast point
LTIOV	latest time information is of value
LZ	landing zone
MCOO	modified combined obstacle overlay
MCP	maintenance collection point
MCRP	Marine Corps reference publication
MCWP	Marine Corps warfighting publication

MEDEVAC	medical evacuation
METT-TC	mission, enemy, terrain and weather, troops and support available, time available and civil considerations
MF	minefields
mils	milliradians
MIST	mechanism of injury, injury type, signs, treatment
MLC	military load classification
MLRS	Multiple Launch Rocket System
mm	millimeter
MOPP	mission oriented protective posture
NAI (s)	named area of interest
NCO	noncommissioned officer
NTTP	Navy tactics, techniques, and procedures
OAKOC	observation and fields of fire, avenues of approach, key terrain, obstacles, and cover and concealment
OPORD	operation order
OT	observer-target
PACE	primary, alternate, contingency, and emergency
PAM	pamphlet
PCC	precombat check
PCI	precombat inspection
PIR	priority intelligence requirement
PMCS	preventive maintenance checks and services
POL	petroleum, oils, and lubricants
PSG	platoon sergeant
Psi	pounds per square inch
pt	pint
RALS	right add, left subtract
RC	road crater
REDCON	ready condition
RHO	reconnaissance handover
ROUTEREP	reconnaissance report
ROZ	restricted operations zone
RPOL	rearward passage of lines
RP	release point

RTO	radio telephone operator
S-2	battalion or brigade intelligence staff officer
S-3	battalion or brigade operations staff officer
S-4	battalion or brigade logistics staff officer
SALUTE	size, activity, location, unit, time, and equipment
SAS	squadron aid station
SBCT	Stryker brigade combat team
SENSEREP	sensitive items report
SBF	support by fire
SITREP	situation report
SIR	specific information requirements
SLLS	stop, look, listen, smell
SOP	standard operating procedure
SPOTREP	spot report
SP	start point
STANREP	stand-to report
SQDLDR	squad leader
TAI (s)	target area of interest
TASKORG	task organization
TC	training circular
TD	tank ditch
TIRS	Terrain Index Reference System
TL	team leader
TLE	target location error
TLP	troop leading procedures
TOW	tube launched, optically tracked, wire guided
TRP (s)	target referrence point
TTP	tactics, techniques, and procedures
UAS	unmanned aircraft system
U.S.	United States
UTM	universal transverse Mercator
WARNORD	warning order
XO	executive officer
ZULU	Universal Time (DOD)

SECTION II – TERMS

adversary

A party acknowledged as potentially hostile to a friendly party and against which the use of force may be envisaged. (JP 3-0)

area security

A type of security operation conducted to protect friendly forces, lines of communications, and activities within a specific area. (ADP 3-90)

command and control

The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. (JP 1)

commander's critical information requirement

An information requirement identified by the commander as being critical to facilitating timely decision making. (JP 3-0)

enemy

A party identified as hostile against which the use of force is authorized. (ADP 3-0)

essential element of friendly information

A critical aspect of a friendly operation that, if known by a threat would subsequently compromise, lead to failure, or limit success of the operation and therefore should be protected from enemy detection. (ADP 6-0)

friendly force information requirement

Information the commander and staff need to understand the status of friendly force and supporting capabilities. (JP 3-0)

key terrain

(Army) An identifiable characteristic whose seizure or retention affords a marked advantage to either combatant. (ADP 3-90)

latest time information is of value

The time by which an intelligence organization or staff must deliver information to the requester in order to provide decisionmakers with timely intelligence. This must include the time anticipated for processing and disseminating that information as well as for making the decision. (ATP 2-01)

mission command

The Army's approach to command and control that empowers subordinate decision making and decentralized execution appropriate to the situation. (ADP 6-0)

priority intelligence requirement

An intelligence requirement that the commander and staff need to understand the threat and other aspects of the operational environment. (JP 2-01)

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)

threat

Any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland. (ADP 3-0)

unified action

(DOD) The synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort. (JP-1)

unified land operations

The simultaneous execution of offense, defense, stability, and defense support of civil authorities across multiple domains to shape operational environments, prevent conflict, prevail in large-scale ground combat, and consolidate gains as part of unified action. (ADP 3-0)

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