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17-98

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SCOUT PLATOON

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PREFACE

This field manual describes how the scout platoon conducts reconnaissance and security missions. It focuses on the principles of platoon operations and the tactics, techniques, and procedures (TTP) the platoon uses to acquire battlefield information for its commander and to provide security on the battlefield. The manual also covers the supporting tasks and operations that the platoon must perform or coordinate as part of reconnaissance and security missions.

FM 17-98 is for leaders of scout platoons equipped with either the M3-series cavalry fighting vehicle (CFV) or the high-mobility multipurpose wheeled vehicle (HMMWV). This encompasses scout platoons of the armor battalion, the mechanized infantry battalion, the heavy division, the heavy cavalry regiment, and the light cavalry regiment. The principles and TTP are adaptable for use by scout platoons of the light division reconnaissance squadron.

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Unless otherwise stated, masculine nouns and pronouns do not refer exclusively to men.

CHAPTER 1

INTRODUCTION

The scout platoon is organized, equipped, and trained to conduct reconnaissance and security for its parent unit. It provides current battlefield information to help the commander plan and conduct tactical operations. It serves as the commander's eyes and ears on the battlefield. Although the platoon has antitank (AT) capability, it cannot perform its scouting roles when employed as an AT force.

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Section I. ORGANIZATION

The two most prominent scout platoons in the force are the CFV scout platoon and the HMMWV scout platoon. Both of these platoons consist of an officer and 29 enlisted soldiers. The platoons are organized by tables of organization and equipment (TOE) into a headquarters element and two or four scout sections (see Figures 1-1 and 1-2 on page 1-2). When executing missions, the platoon is organized according to the factors of mission, enemy, terrain (and weather), troops, and time available (METT-T) into an appropriate tactical organization consisting of a variable number of scout teams.

The CFV platoon is equipped with six M3 CFVs. It is found only in the cavalry squadrons of an armored or mechanized division or in an armored cavalry regiment. The HMMWV platoon is equipped with 10 Ml025/1026 HMMWVs. It is found in light cavalry regiments, in air cavalry and reconnaissance squadrons, and in mechanized infantry and armor battalions.

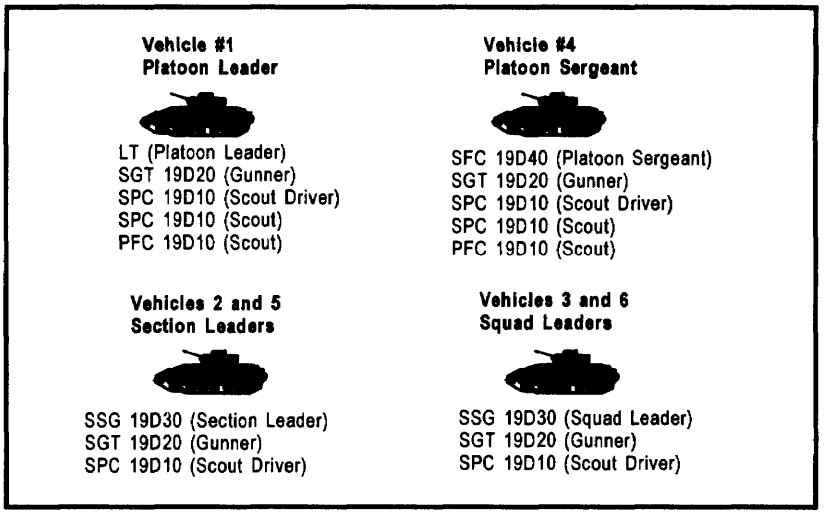


Figure 1-1. CFV scout platoon.

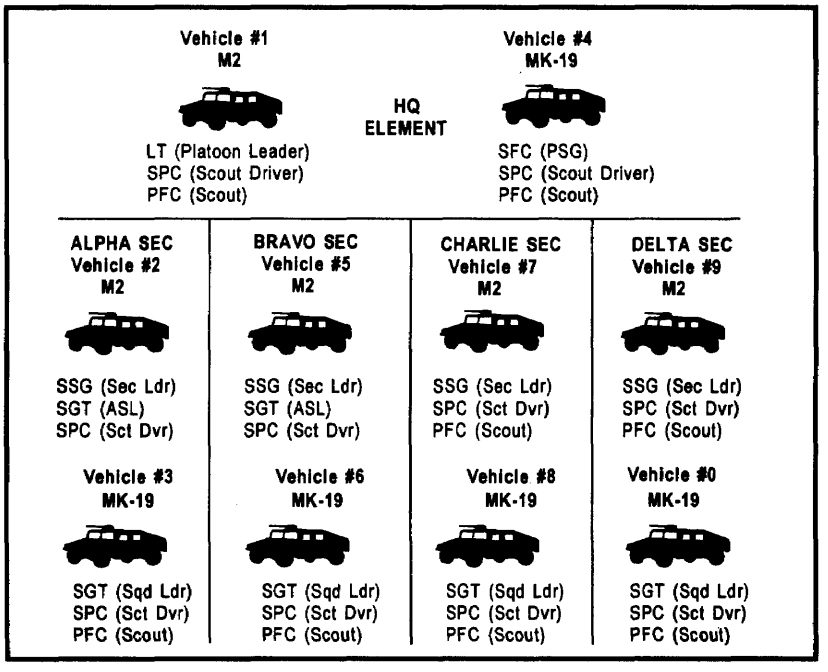


Figure 1-2. HMMWV scout platoon.

PLATOON HEADQUARTERS

The platoon headquarters element provides command and control for the scout platoon. It consists of the platoon leader, the platoon sergeant (PSG), and their respective vehicle crews. The CFV scout platoon rarely uses a headquarters element during tactical operations. The HMMWV scout platoon normally employs a headquarters element, but it usually is split into two subelements (platoon leader and PSG) and travels with scout teams for security.

SCOUT SECTIONS

Each scout section is made up of a section leader, squad leaders, and their crews manning two CFVs or HMMWVs. The section is not normally used as a tactical maneuver organization; rather, it is task organized into scout "teams" for maneuver (see Section VI of Chapter 2 for a discussion of tactical organization).

Section II. RESPONSIBILITIES

The platoon leader and noncommissioned officers (NCO) must be experts in the use of organic weapons, indirect fires, land navigation, supporting fires, demolitions, obstacles, communications, and reconnaissance and security techniques. They must be familiar with armor and infantry tactics and be able to react to rapidly changing situations. Because of the many missions the platoon must be capable of performing, the scout platoon leader and PSG must be proficient in all levels of MOS 19D tasks.

PLATOON LEADER

The platoon leader is responsible to the commander for the discipline, combat readiness, and training of the platoon as well as the maintenance of its equipment. The platoon leader must have a thorough knowledge of reconnaissance and security tactics. In the battalion scout platoon, as the task force's expert on reconnaissance and security, he works closely with the commander, S2, and S3 throughout the planning process. The platoon leader must be proficient in the tactical employment of the platoon. A solid understanding of troop-leading procedures and the ability to apply them quickly and efficiently in the field are essential. The platoon leader must also know the capabilities and limitations of the platoon's personnel and equipment. He must be an expert in enemy organizations, doctrine, and equipment. Most of all, the platoon leader must be versatile, able to exercise sound judgment and make good, quick decisions based on his commander's intent and the tactical situation.

PLATOON SERGEANT

The PSG leads elements of the platoon as directed by the platoon leader and assumes command of the platoon in the absence of the platoon leader. During tactical operations, he may assist in the control of the platoon. The PSG assists the platoon leader in maintaining discipline, as well as in training and controlling the platoon. He supervises equipment maintenance, supply, and other combat service support (CSS) matters.

SECTION AND SQUAD LEADERS

Section leaders are responsible to the platoon leader for the training and discipline of their sections. They are also responsible for the tactical employment and control of the scout teams. They are responsible for the maintenance and operation of all vehicles and equipment organic to their sections, Squad leaders have the same responsibilities for their squads as section leaders have for their sections. Section leaders normally assume the role of scout team leaders during tactical operations.

Section III. MISSIONS, CAPABILITIES, AND LIMITATIONS

MISSIONS

The scout platoon's primary missions are reconnaissance and security in support of its parent unit. It can perform its missions mounted or dismounted, day or night, in various terrain conditions, and under all weather and visibility conditions. In addition to its primary missions, the scout platoon can—

- Conduct liaison.
- Perform quartering party duties.
- Provide traffic control.
- Conduct chemical detection and radiological survey and monitoring operations as part of a nuclear, biological, and chemical (NBC) defense.
- Conduct limited pioneer and demolition work.
- Participate in area security.

CAPABILITIES AND LIMITATIONS

The scout platoon is a reconnaissance force that conducts operations as part of a larger combined arms force. Scouts in general have limitations and capabilities that must be considered when employing them; each type of scout platoon has characteristics specific to its TOE.

General Organizational Characteristics

Characteristics of the two types of scout platoon include the following:

- The scout platoon is dependent on its parent unit for combat support (CS) and CSS augmentation.
- The CFV scout platoon normally reconnoiters only a single route during route reconnaissance,
- The HMMWV scout platoon can reconnoiter up to two routes simultaneously (reconnoitering for trafficability only).
- The scout platoon reconnoiters a zone 3 to 5 kilometers wide. METT-T conditions may increase or decrease the size of the zone for either type of platoon.
- During screening operations, all scout platoons are limited in their ability to destroy or repel enemy reconnaissance units.
- The CFV scout platoon can man up to six observation posts (OP) for short durations (under 12 hours) or three OPs for long durations (over 12 hours).
- The HMMWV scout platoon can man up to eight OPs for short durations or up to three OPs for long durations.
- When properly organized, scouts can conduct effective reconnaissance and security patrols. The HMMWV scout platoon has a very limited dismounted capability. It must be carefully task organized to conduct dismounted operations. The CFV scout platoon has 12 dedicated dismounted scouts.
- The distance the scouts can operate away from the main body is restricted to the range of communications and the range of supporting indirect fire.

- Scout platoon leaders cannot operate continuously on all necessary battalion nets (battalion command, OI, A/L, mortar) while operating on the platoon net. The platoon leader can monitor only two nets at one time (see Figure 2-16, page 2-36 and Figure 2-17, page 2-38).
- The scout platoon has limited obstacle creation ability and carries a basic load of demolitions.
- The scout platoon has very limited obstacle breaching capability (limited to hasty point obstacles).

Platform-Specific Characteristics

To some degree, the scout's capability is dependent on his equipment. The two types of scout platforms, the M3 CFV and the Ml025/1026 HMMWV, have distinctly different characteristics. Both vehicles, when employed with the appropriate tactics, techniques, and procedures, are effective reconnaissance and security platforms. The scout must understand his mount, maximize its capabilities, and minimize its limitations (see Figures 1-3 and 1-4). Refer to Appendix F for information about future technological developments that will upgrade scout vehicle capabilities.

M3A2 CFV		HMMWV
3,750 m (TOW); 2,500 m (25-mm)	**WEAPONS RANGE**	1,500 m (CAL .50); 2,200 m (MK-19)
Can defeat tanks with TOW; can defeat light armor	**WEAPONS CAPABILITY**	Can suppress light armor
More than 3,750 m	**THERMAL SIGHT CAPABILITY**	3,000 to 4,000 m (system-dependent)
Can protect against 30-mm (direct fire) and 155-mm (near miss) rounds	**ARMOR PROTECTION**	None

Figure 1-3. Scout platform weapons, optics, and armor.

M3A2 CFV		HMMWV
EXCELLENT	**OFF-ROAD MOBILITY**	FAIR
FAIR	**ON-ROAD MOBILITY**	EXCELLENT
GOOD	**NIGHT MOBILITY**	POOR
POOR	**ACOUSTIC SIGNATURE**	GOOD
POOR	**PHYSICAL SIGNATURE**	GOOD
GOOD	**PERSONNEL CAPACITY**	POOR
GOOD	**HAUL CAPACITY**	POOR
POOR	**THERMAL SIGNATURE**	GOOD
GOOD	**FORDING CAPABILITY**	FAIR

Figure 1-4. Scout platform mobility, signature, and capacity.

CHAPTER 2

BATTLE COMMAND

Battle command is the process of assimilating thousands of bits of information to visualize the battlefield, assess the situation, and direct military action required to achieve victory. Thinking and acting are simultaneous activities for leaders in battle.

The command and control of combat elements on the modern battlefield are the biggest challenges faced by combat leaders. Command involves directing elements; control ensures the directions are carried out. The greatest tactician in the world would be ineffective if he did not properly use the methods available to direct and control his combat elements. Command and control must be kept extremely simple to be effective.

The scout platoon leader leads his platoon and is assisted by the PSG. He uses a variety of techniques to plan operations, issue orders, employ the platoon, and communicate. At platoon level, effective command and control depend mainly on leadership, training, a sound and thoroughly understood SOP, and the effective use of control measures and communications equipment and techniques.

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The primary function of the scout platoon is to gather information. The scout platoon is not designed to fight or to act as tank killers. It is designed to perform reconnaissance and limited security missions, using proper techniques of movement (both mounted and dismounted) and stealth.

Section I. COMMAND RELATIONSHIPS

BATTALION SCOUT PLATOON

The scout platoon in an armor or mechanized infantry battalion performs several critical tasks in support of the battalion commander's concept of the operation. The success or failure of the scout platoon often results in the success or failure of the main force. As the eyes and ears of the battalion, the scout platoon leader must stay in communication with the battalion tactical operations center (TOC). This is necessary to keep the platoon informed of the battalion and brigade situation as well as the current enemy situation and to ensure information gained by the platoon is transmitted to the battalion in a timely manner.

The battalion commander must personally provide the scout platoon leader with his intent. He must explain what is expected of the reconnaissance or security effort in each phase of the operation and give the priority intelligence requirements (PIR).

The battalion executive officer (XO) or S4 must monitor the maintenance and logistical status of the scout platoon. To help sustain the platoon's operating ability, they should ensure the scouts receive top priority for repair and resupply. They should specifically address medical evacuation and vehicle recovery. They must ensure that the battalion has a detailed and workable plan to support the platoon with Classes I, III, and V requirements during the conduct of its mission.

The scout platoon leader needs to understand how he and his platoon fit into the intelligence collection process. The S2 is a key player in the development of the battalion reconnaissance and surveillance (R&S) plan and the intelligence preparation of the battlefield (IPB) process.

The R&S plan is produced to organize the collection of information the commander needs to fight and win the battle. A maneuver brigade and its assigned battalions will all produce R&S plans. The brigade plan will task

the subordinate battalions, and these tasks will be incorporated into the battalion plan. Figure 2-1 shows how the R&S plan fits into the information gathering process.

NOTE: The R&S plan is developed very early in the planning process because it is critical to get the scout platoon and other R&S assets, such as ground surveillance radar (GSR) and engineers, into their missions as early as possible.

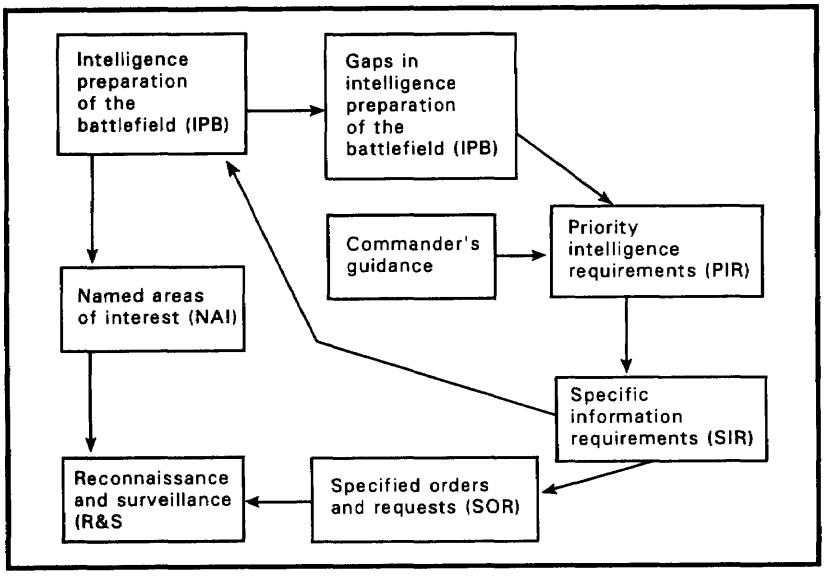


Figure 2-1. The information-gathering process.

IPB is the commander and staff's analysis of the enemy, weather, and terrain to determine and evaluate the enemy's capabilities, vulnerabilities, and probable courses of action in the defense and unit locations and strengths in the offense. **The scout platoon's mission is to confirm or deny the commander's IPB and provide information on the commander's PIR as assigned in the R&S plan** (see Figure 2-l).

In the defense, the S2 first conducts a terrain analysis to determine enemy routes, mobility corridors, and avenues of approach. In the offense, he determines how and where the enemy will fight, how enemy AT systems and obstacles are arrayed, and what counterattack routes the enemy is likely to take.

In both cases, he conducts his analysis by applying enemy doctrinal templates to specific terrain. This becomes a situational template (see Figure 2-2). With the situational template, he can develop an event template (see Figure 2-3). This template identifies projected significant events and enemy activities on the battlefield. A thorough analysis of the event template allows the S2 to visualize the enemy moving along a route or mobility corridor or to determine how the enemy will fight if he is defending. Critical areas where significant events can occur then become apparent. These are called named areas of interest (NAI). An NAI in the defense is a point or area along a mobility corridor where enemy activity or lack of activity will confirm or deny a particular enemy course of action. In the offense, an NAI depicts a likely unit location and/or counter-attack route.

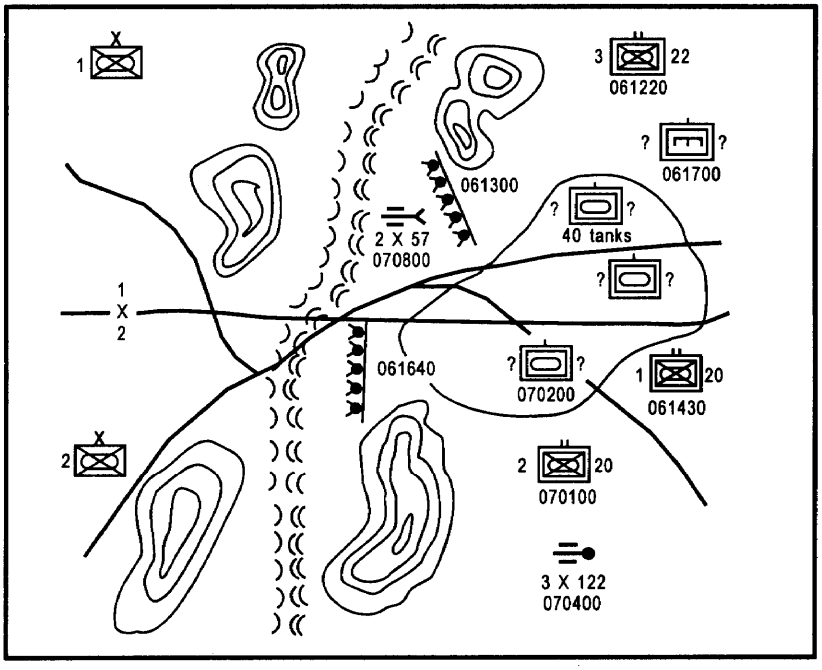


Figure 2-2. Situational template.

In addition, the event template serves as the basis for the decision support template (see Figure 2-4, page 2-6). This relates the details of event templates to decision points for the commander. A decision point is a time or a location on the ground at which enemy activity may require a tactical decision. The

decision support template also identifies areas along each avenue of approach or an area of interest where the commander can influence the action through fire or maneuver. These areas are called target areas of interest (TAI). The commander can use TAIs to force the enemy either to abandon a particular course of action or to use additional resources to continue movement. The commander must be prepared to initiate action at decision points and TAIs in time to achieve the desired effects, which may be the concentration of fires and/or maneuver of forces.

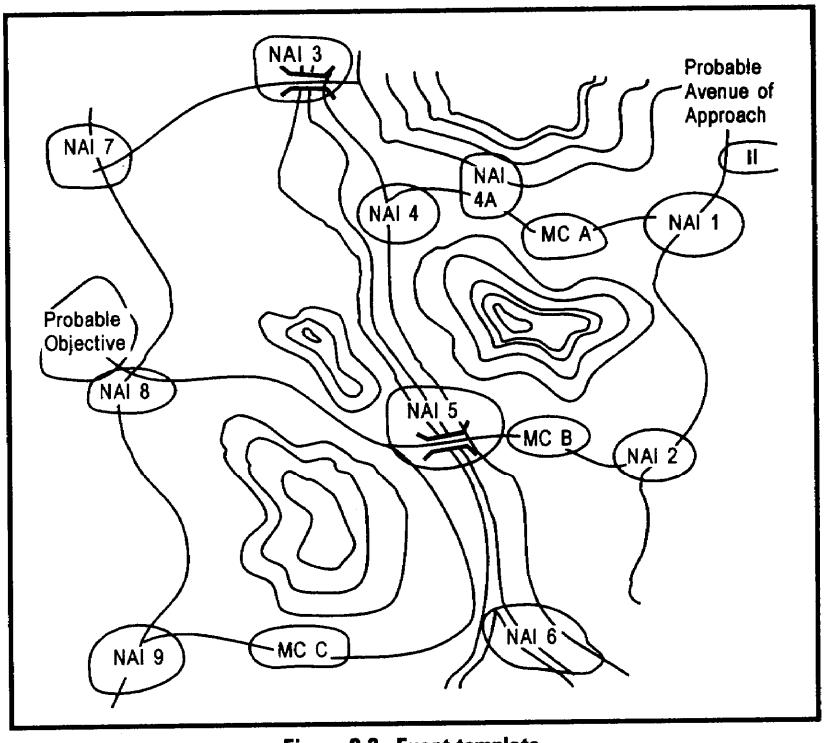


Figure 2-3. Event template.

From the decision support template, the S2, in coordination with the S3, prepares detailed R&S plan, which graphically depicts where and when reconnaissance elements should look for the enemy. The R&S plan must direct specific tasks and priorities to all R&S elements: company teams, scout platoons, GSR, and patrols. The battalion S3 translates the R&S plan into operational terms and graphics. For example, during reconnaissance operations, the S3

designates NAIs in terms of reconnaissance objectives for the scout platoon. The scout platoon leader designates checkpoints as control measures to guide his platoon's movement to these objectives.

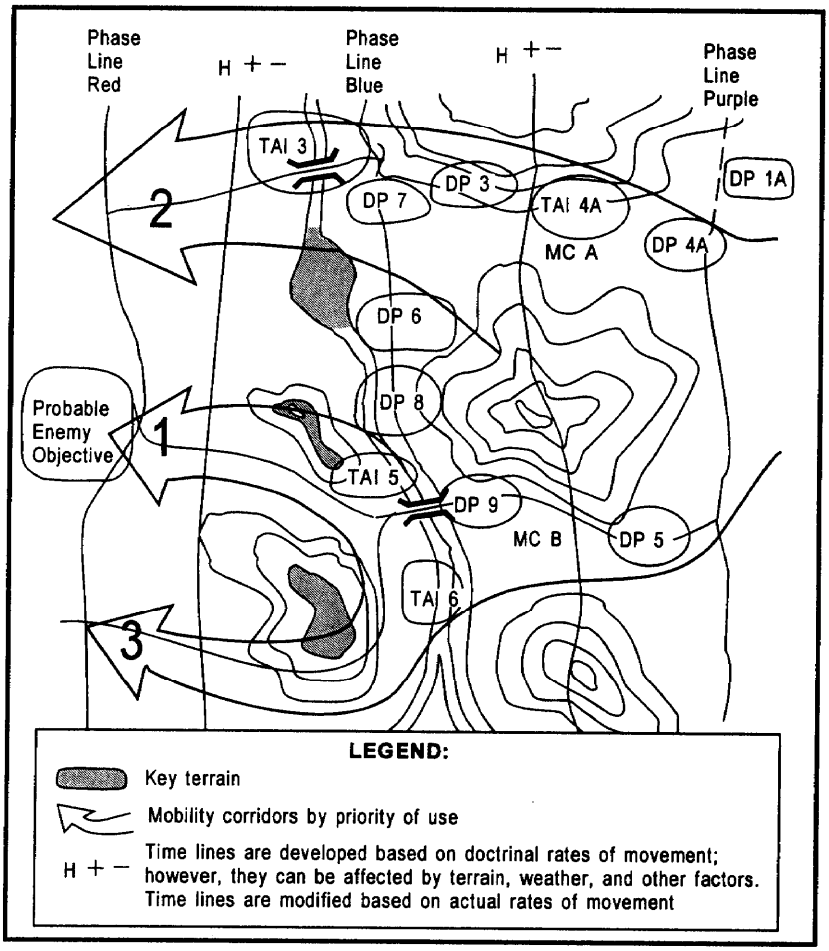


Figure 2-4. Decision support template.

Once in the vicinity of these objectives, the scouts confirm or deny the templated information. Additionally, if they find the enemy, the scouts look for possible weaknesses, gaps, and flanks of the enemy position. During screening operations, the S3 directs the scout platoon leader to report enemy

activity at designated NAIs. The scout platoon leader uses OPs to observe and report on these areas of command interest. The scouts must rapidly and accurately report all critical information they find during either reconnaissance or screening operations

The battalion S3 should brief the scout platoon leader on the disposition of friendly forces and the scheme of maneuver for the task force battle. The S3 provides the platoon leader with the current (and projected) R&S and operational graphics and terrain index reference system (TIRS) points to support additional graphics and fragmentary orders (FRAGO). If the commander does not brief the scout platoon leader, the S3 must ensure the commander's intent is accurately portrayed as he briefs the platoon leader. The S3 should plan for employment of the scout platoon throughout the entire course of the mission. He should provide guidance on when to report, what actions to take on enemy contact, and what CS is available. The S3 also reinforces the S2's guidance. The scout platoon leader should receive the S3's briefing before he departs the battalion area for his mission. He may also receive it as a FRAGO over the radio or from a messenger sent by the commander.

To ensure it can provide responsive fire support to the scout platoon, the fire support element (FSE) stays abreast of what the platoon is doing throughout the conduct of the mission. The scout platoon leader should coordinate with the fire support officer (FSO) to discuss his mission and the unique requirements the scout platoon has for fire support. The platoon leader finds out what support is available, where supporting units are located, and what fire support restrictions exist. He will then recommend preplanned targets and target priorities to be incorporated by the FSO into a scout platoon fire support plan. The platoon leader should depart the FSE with an approved target list and/or overlay.

The scout platoon leader may need to do additional coordination with the battalion signal officer if his mission will require communications support. He must request retrans or relay support from the battalion signal platoon if the mission dictates. Scouts should not perform relay duties as their primary platoon mission.

The scout platoon leader also coordinates available support with any attached or assigned elements such as engineers, air defense artillery (ADA), combat observation lasing team (COLT), GSR, and aeroscouts. This support is normally coordinated by the S3, but the platoon leader should be aware of how changes to the organization affect on his platoon. Ideally, this linkup should

occur at the TOC during daylight in sufficient time to conduct a thorough briefing and rehearsal with attached elements.

When the scout platoon leader leaves the TOC area to prepare for his mission he should, as a minimum, have the following materials:

- Operational graphics.
- R&S graphics.
- The situational template, event template, and notes on the current enemy situation.
- Fire support overlay.

CAVALRY TROOP SCOUT PLATOON

The command relationship of the scout platoon in a cavalry troop is similar to that of other platoons in a company-size organization. The scout platoon responds to its platoon leader, who receives guidance from the troop commander rather than from a battalion staff.

The primary difference in cavalry troop operations is the role of the troop XO. Unlike the "fighting XO" in the tank company, the troop XO is a battlefield manager for the troop commander. He operates from an M577 command post; this vehicle gives him the communications capability and facilities to receive, collate, and pass to higher headquarters the routine reconnaissance information processed by the troop's scout platoons. In this system, most of the routine reports are sent to the troop XO rather than to the troop commander. The troop commander's role is to monitor the routine actions, receive high-priority information to transmit on command nets, and fight the troop once contact is gained.

Section II. TROOP-LEADING PROCEDURES

DECISION-MAKING PROCESS

Decision-making is a conscious process for selecting a course of action from two or more alternatives. At platoon level, many decisions are based on SOPs and standard unit drills; these include evacuation of wounded soldiers, rearming and resupply procedures, and individual crew responsibilities. This allows the

platoon to operate quickly and efficiently without constant guidance from the platoon leader. SOPs are especially critical in helping to maintain combat preparedness when leaders are tired as a result of the stress of continuous operations. Because SOPs are so critical, it is absolutely necessary that everyone in the platoon know and understand them. FKSM 17-98-3 contains a sample platoon-level SOP applicable for both the battalion scout platoon and the cavalry troop scout platoon. Appendix D of this manual contains an outline for a platoon **SOP.**

Most tactical decisions are made by the commander. The platoon leader uses troop-leading procedures to put the operation into instructions his platoon members can understand. He then leads his platoon in the execution of the mission.

STEP-BY-STEP TROOP-LEADING PROCEDURES

These procedures are the platoon leader's most frequently used tool in mission preparation. **When employing them, the platoon leader should strive to use only one-third of the time available and give the other two-thirds to his platoon to prepare.** This is particularly important in the scout platoon. Scout teams will be operating independently, and the team leaders will require time to conduct their own troop-leading procedures and to issue orders and guidance to their teams. The eight steps in troop-leading procedures are—

- Receive and analyze the mission.
- Issue a warning order.
- Make a tentative plan.
- Initiate movement.
- Conduct reconnaissance.
- Complete the plan.
- Issue the order.
- Supervise and refine.

Receive and Analyze the Mission

The platoon leader normally receives his orders as a verbal operation order (OPORD) or as a FRAGO (see Appendix C for a discussion of orders). Upon

receipt of the order, his first task is to extract his mission from the commander's overall plan. If he is unable to understand the commander's intent, he should ask the commander for further clarification.

The platoon leader should then examine his platoon's specific tasks-what the commander told him to do in the order. In an OPORD, these tasks are contained in paragraph 3, which comprises the commander's intent, concept of the operation, specific instructions for the platoon, and coordinating instructions for the entire unit. The platoon leader should then identify his platoon's implied tasks, those that were not in the OPORD but that still must be done to complete the mission. These do not include tasks that are contained in the unit SOP. If the time is available, the platoon leader should confirm the implied tasks with his commander. **Finally, once all tasks are identified, the platoon leader should conduct reverse planning to ensure that all tasks can be accomplished in the time available and to make most efficient use of the time available.** The platoon leader then needs to restate his mission, answering the questions of who, what, when, where, and why.

Issue a Warning Order

After the platoon leader has analyzed his orders and worked out his mission and related tasks, he must quickly pass this information to his subordinate leaders. This is accomplished through the warning order. As a minimum, the following information must be included:

- To whom the warning order applies.
- The time and nature of the operation.
- The earliest time of movement.
- The time and place the OPORD will be issued.

If possible, the platoon leader should issue an overlay of the area of operations. In the absence of further orders, this gives the platoon an idea of the scope of the operation. Also, the platoon leader should inform his subordinates of the results of his reverse planning process and delegate appropriate preparatory tasks to the PSG and team leaders. If possible, the platoon leader should also include the task organization of the platoon. The reverse planning schedule, in addition to accounting for all required preparatory tasks, should include asleep plan. All elements should acknowledge receipt of the warning order.

Make a Tentative Plan

Once the warning order is issued, the platoon leader must determine how he will accomplish his mission. He puts the tasks he identified when he first received his order into battle sequence—the order in which he expects to meet each task. Working with the factors of METT-T, he makes a tentative plan for ultimate mission accomplishment. The following outline of METT-T factors should guide the platoon leader in his planning:

- Mission (most of this work has already been done).
  - -What tasks did the commander say must be accomplished (specified tasks)?
  - -What other tasks must be accomplished to conduct the mission (implied tasks)?
  - -What is the commander's intent?
  - -Based on the commander's intent, which of my tasks are absolutely essential?
- Enemy.
  - -What type of unit are we up against?
  - -Where is he?
  - -What is he doing?
  - -How strong is he?
  - -What kind of equipment does he have?
  - -What are his capabilities?
  - -Where is he vulnerable?
  - -Where are his kill zones and fire sacks?
  - -What are his intentions?
  - -What can he do in response to friendly actions?

- Terrain (and weather).
  - Where can I effectively observe and engage the enemy?
  - Where are the best covered and concealed routes?
  - Where are the natural obstacles and how can they affect maneuver?
  - Where are the likely areas for enemy-emplaced obstacles and how can they affect maneuver?
  - Are there bypasses or must obstacles be breached?
  - Where is the key terrain?
  - How can key terrain be used in support of the mission?
  - Where are the best avenues of approach for the enemy and for friendly forces?
  - How has the recent weather affected the area of operations?
  - Will the weather become better or worse during the mission?
  - How will fog, rain, dust, heat, snow, wind, or sand affect my men and equipment during the mission?
- Troops.
  - What is the present condition of the vehicles, equipment, and men?
  - What is the supply status of ammunition, fuel, and other necessary items?
  - What is the state of training of the platoon?
  - What is the state of morale?
  - How much sleep have the men had?
  - How much sleep can the men get before and during the operation?

- Does the platoon need any additional equipment to support or accomplish its mission?
- What attachments does the platoon have to accomplish its mission?

- Time available.
  - How much time is available to plan and conduct reconnaissance?
  - How much time is available for rearming, refueling, and resupply?
  - How long will it take the platoon to move to the line of departure (LD), the objective, or the OPs?
  - How will rehearsals be conducted?

This analysis of METT-T is by no means an all-inclusive list, but it should help the platoon leader in his planning process. Although the platoon leader does not perform an IPB, he may have received an IPB product (decision support template) along with his order. He should incorporate this information into his METT-T analysis and use it in developing one or more courses of action. He must choose the best course of action based on the advantages and disadvantages of each course.

Initiate Movement

After issuing a warning order and making a tentative plan, the platoon leader may choose to initiate movement. He may send a quartering party out to anew assembly area, or he may move his whole platoon to set up guides for the battalion movement. Whatever the case, the platoon leader should at least be able to determine when the platoon will move. He announces this in terms of a readiness condition (see FKSM 17-98-3).

Conduct Reconnaissance

This step of the troop-leading procedures allows the platoon leader to confirm the validity of his tentative plan. He should at least confirm his initial march route to the LD or start point (SP) and check initial positions. If possible, he should also check some of the area beyond the LD, taking his section leaders

with him so they too can see the ground. This may require permission of the commander. If the platoon leader cannot go personally, he should task his 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 time routes to the SP. The platoon leader must conduct the reconnaissance with an open mind; not everything he sees will match his tentative plan. He 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 his higher headquarters.

Complete the Plan

The platoon leader should be able to bring the tentative plan close to completion after his reconnaissance. He should continue to refine the plan based on new information from his parent unit commander, other platoon leaders, or his own troops.

Issue the Order

The platoon order should be issued to the squad leaders and team leaders. Once everyone has arrived at the place and time indicated in the warning order, the platoon leader should set up his vehicle commanders in the order in which they will maneuver in sector. To ensure everyone has the graphic control measures he will refer to, he should issue the revised operations overlay before he starts. He should have a copy of the graphics for each of his vehicle commanders. The PSG ensures all overlays match the platoon leader's overlay. To use his time most efficiently, the platoon leader should use a walk-through rehearsal as part of his briefing of paragraph 3 of the order.

If the order can be issued from a vantage point, the platoon leader can physically indicate the ground his scouts will maneuver across. if a vantage point is not available, a terrain cloth, sand table, or map may be used. The platoon leader should have a briefing kit available to build a model for his briefing. The kit might include the following items:

- Chalk.
- Colored sand.
- 3-by-5-inch index cards.

- "Micro" armor vehicles or other models.
- Yarn or string.
- Pens and markers.
- Stakes.
- Engineer tape.
- Operational symbol cutouts.

The platoon leader issues his finalized order in the five-paragraph OPORD format. He refers to notes while giving his orders to make sure he does not forget anything. He ensures that vehicle commanders and team leaders understand the entire plan as well as their particular portion of it. When time permits, the platoon leader should war-game the operation with his leaders. To ensure complete understanding of the operation, he should end the order with a brief-back of key points by his leaders.

Supervise and Refine

The platoon leader and PSG make sure all crew members have been briefed by their vehicle commanders and/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 chain of command conducts precombat checks and procedures in accordance with FKSM 17-98-3 or his own SOP.** These steps include the following:

- Perform before-operation maintenance checks and report or repair deficiencies.
- Perform prepare-to-fire checks for all weapons and report or repair deficiencies. Make sure weapons are boresighted and all sights are referred. Machine guns should be test-fired, if possible.
- Upload vehicles in accordance with SOP.
- Conduct resupply of rations, water, fuel, oil, all weapons, ammunition, pyrotechnics, first-aid kits, and equipment batteries (for such items as flashlights, night-vision devices, mine detectors, and NBC alarms).

- Make radio checks, when possible.
- Camouflage vehicles to match the area of operations.
- Make sure crew members are in the correct uniform and mission-oriented protective posture (MOPP) level.
- Conduct rehearsals to reinforce training and proficiency in mission-critical tasks.

The platoon leader and PSG should observe each crew during precombat checks. They should conduct an inspection once the team leaders report that their vehicles and crews are prepared.

Flexibility is the key to effective operations. The platoon leader must be able to refine his plan as new information becomes available. If he adjusts his plan, he must inform the platoon. Once the operation has begun, the platoon leader must be able to adapt quickly to new situations and new orders.

When there is not enough time to conduct all eight troop-leading steps in detail, the platoon leader must understand how to trim them to save time. Most troop-leading procedures can be done mentally. Once the order is received, the platoon leader conducts a quick map reconnaissance and analysis, then sends for the vehicle commanders. He makes sure they post the minimum required control measures on their maps and gives an abbreviated order consisting of a quick enemy and friendly situation, the mission of the platoon, and the concept of the operation. The service support and command and signal paragraphs can be deleted if covered by the SOP. The abbreviated order should not be the usual 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 FRAGOs 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.

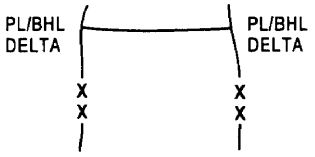
When time is available, however, there is no substitute for effective preparatory instructions, a thorough tactical plan, and a formal OPORD. The odds of success increase considerably when detailed planning and rehearsal are used prior to an operation, even when time is short. Successful platoon leaders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

Section III. GRAPHIC CONTROL MEASURES

Orders are a key element in the troop-leading process; they are critical to efficient command and control in the scout platoon. In turn, clarity is an essential element in proper understanding and execution of an order. Because orders in the scout platoon are generally issued orally, the graphics that accompany the order take on added significance. This section discusses common graphic control measures; they can provide clarity when an order is issued and assist in the command and control process once the scout platoon begins executing the order.

BATTLE HANDOVER LINE

The BHL depicts where responsibility for the conduct of combat operations is passed from one force to another. Scouts conduct hasty handover as well as deliberate handover as part of both reconnaissance and security operations. The BHL is also a phase line.



OBSERVATION POST

Very common in security missions, this graphic usually indicates the general area where the OP will be set. If these positions are not known or are adjusted after the mission begins, the graphic must be added or changed to reflect the actual location. Unless the leader has reconnoitered the location, the scouts manning the OP normally have the latitude to adjust the position to best observe the assigned objective.



CONTACT POINT

Contact points are places on the ground where friendly elements are required to meet. The element assigning the contact point must specify what is meant by "meet." The scout platoon is often required to execute contact points for its higher headquarters. In addition, it can use contact points to ensure control and unity of effort of scout teams as they execute their missions.



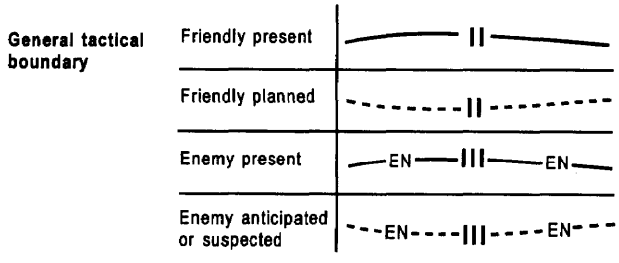
CHECKPOINT

Checkpoints are used to control and direct the maneuver of scout teams, They are placed on critical features of particular interest to the scout platoon. Generally, these are assigned to scout teams as part of the platoon order or in accordance with the unit SOP. Checkpoints may be used instead of boundaries by either the higher headquarters or the platoon to focus the operations of scouts. They can also be used in conjunction with boundaries.



BOUNDARY

Boundary lines are key control measures in scout platoon operations. In the battalion scout platoon, the platoon leader must determine whether the battalion boundary line is also his boundary line. In battalion operations, the scouts may not be fixed by a specific boundary line, instead focusing more on reconnaissance objectives (designated by checkpoints). Cavalry scout platoons normally operate within platoon boundary lines. The scout platoon may also use boundary lines to designate areas of responsibility for scout teams.



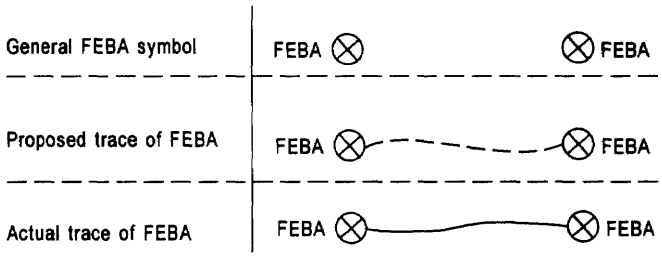
ROUTE

Routes of particular interest to the platoon or its higher headquarters should be indicated on the platoon's graphics. The route should be named, and key portions should have checkpoints. An SP and an RP (end point) should be designated.



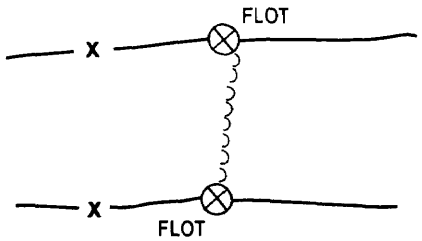
FORWARD EDGE OF THE BATTLE AREA

The FEBA is actually the forward edge of the main battle area. As such, the scout platoon will frequently be operating forward of this line or passing through this line to execute its missions.



FORWARD LINE OF OWN TROOPS

The FLOT designates the most forward-deployed friendly forces. It may be forward of the FEBA, and it frequently indicates the most forward positions of the scouts or other assets, such as long range surveillance patrols.



PASSAGE LANE

This is the designated lane used by a passing unit to move through and beyond the stationary unit. Scouts can designate and mark lanes or provide guides through them.



PASSAGE POINT

This is the point on the ground at which an element is considered to have passed through another. Scouts frequently are called upon to coordinate the location of passage points and to man them.



RALLY POINT

This is an easily identifiable point where an element can reorganize or consolidate. Scouts use rally points during both mounted and dismounted operations. During mounted operations, the platoon would use a rally point to consolidate for operations such as a passage of lines or CSS.



Section IV. NAVIGATION AND POSITION REPORTING

TERRAIN INDEX REFERENCE SYSTEM

TIRS is a tool that can be used routinely to maneuver the platoon. It should be used during combat operations. It can be used to identify battle positions (BP), to quickly pass out control measures (such as the LD, PLs, and boundaries), or to report friendly unit locations. It is not a method of encrypting

information. Repeated use of TIRS “in the clear” can compromise unit security and safety.

The parent unit normally issues the TIRS points to be used for the operation with the initial overlay received during the warning order. If the overlay with TIRS does not come with the warning order, the platoon leader should actively seek out the TIRS list. (TIRS should be transferred to graphics or directly onto a map as soon as possible. The written list of TIRS points must be kept for future reference.)

Each TIRS point is designated by a mark, in the shape of a cross or plus sign, located on a grid line intersection. Each point is given a designator of one letter and two numbers; the designator is placed in the upper-right quadrant of the mark. TIRS point designators area matter of SOP. Units may assign specific letters and numbers for specific unit sectors or areas of operations. For example, a TIRS point could be identified with the designator X56 and marked on a map at PA 130620 (using six-digit grid coordinates).

Referencing a location from a TIRS point is done in kilometers. For example, 500 meters is given as “POINT FIVE,” 1,000 meters as “ONE,” and 3,500 meters as “THREE POINT FIVE.” For shifts from the TIRS point, cardinal directions are used rather than “left,” “right,” “up,” or “down.” Shifts to the east or west are given first, followed by shifts to the north or south. Consider the following transmission: “FROM X-RAY FIVE SIX-EAST ONE POINT EIGHT—NORTH ONE POINT SEVEN.” This means, “From the tick mark for TIRS point X56, shift east 1,800 meters and north 1,700 meters. ” When a TIRS point is placed on a grid intersection, the use of shifts makes the TIRS point as accurate as a six-digit grid. For an example of using a TIRS point to locate a target, refer to Figure 2-5, page 2-22.

TIRS makes it easier for the platoon leader to identify his front line trace or OP positions. For instance, with the scout platoon setup in a screen line as depicted in Figure 2-6, page 2-23, the platoon leader would report his section locations as:

“ALPHA-SET FROM BRAVO TWO ONE—WEST ONE POINT ONE—NORTH POINT THREE. CHARLIE-SET FROM BRAVO TWO ONE-SOUTH POINT ONE. BRAVO-SET FROM CHARLIE THREE SIX—EAST ONE—SOUTH ONE POINT 0NE–OVER.”

The enemy will quickly figure out the TIRS locations if they are continually used in the clear on an unsecure net. Try not to use the same TIRS point more than twice. Instead, use a different TIRS point to reference the same location. The points can be encrypted using the numerical cipher/authentication system (authentication tables) and the operations code from the signal operation instructions (SOI). The letter in the TIRS point designator is given in the clear. The two-digit numerical portion is then encoded, making the designator for the TIRS point into a three-letter group. If the same TIRS point is used again, change the two-digit numerical designator. TIRS should never be used to give enemy locations.

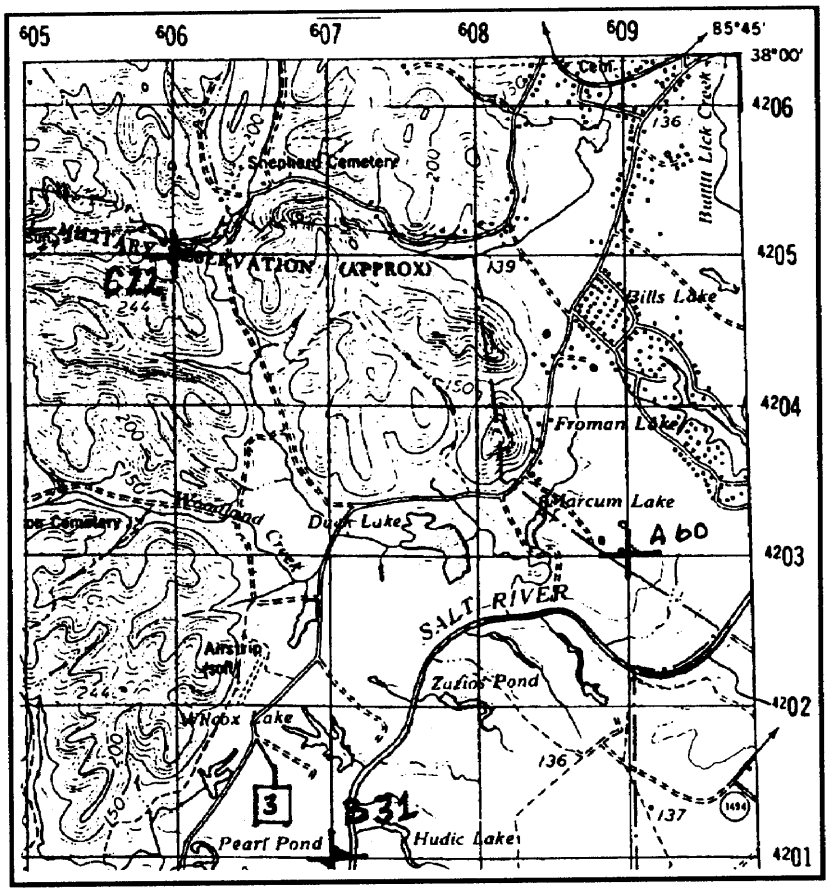


Figure 2-5. Placing a TIRS point on a map.

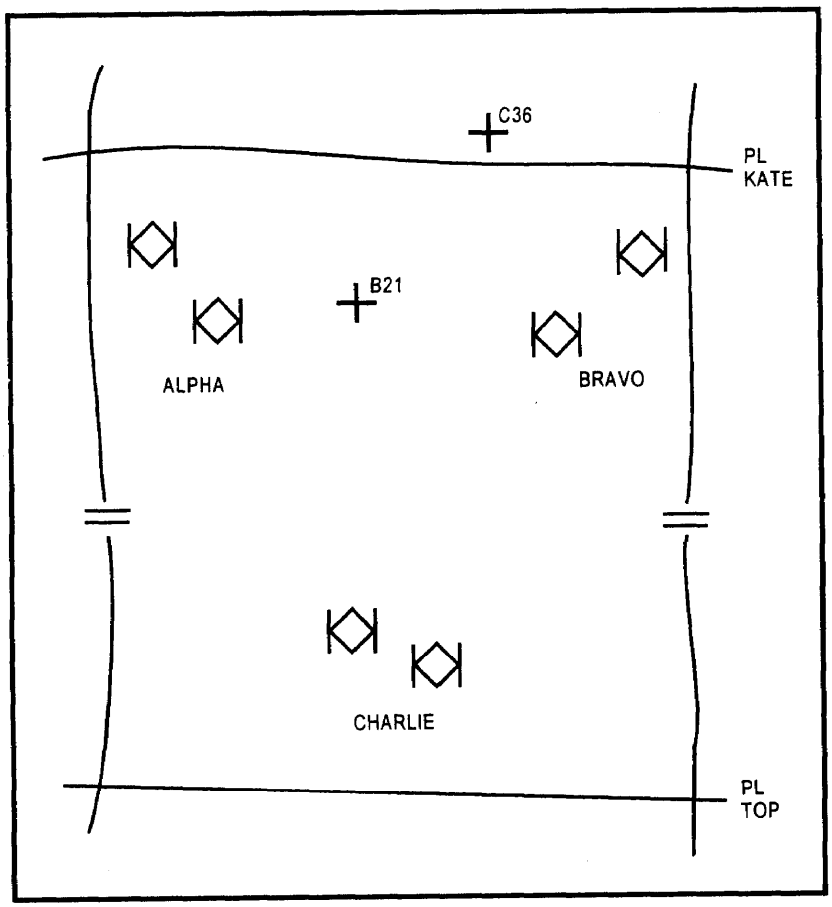


Figure 2-6. Screen line.

POSITION LOCATION DEVICES

If the platoon is equipped with a satellite global positioning system (GPS), the system becomes a key navigation tool. It does not, however, replace the map as the primary method of navigation.

The scout uses his map to plan movement based on his knowledge of the situation. As the scout executes his movement using the map, he uses GPS to check his location and prevent misorientation. The degree to which the scout

relies on GPS is dependent on terrain and the quality of the available maps. Generally, the greater the variations in terrain and in accuracy in his map, the less he will rely on GPS. In featureless terrain or when only poor quality maps are available, GPS maybe the primary navigation tool. In addition to navigation, GPS can assist the scout in reporting reconnaissance information accurately and in maintaining an accurate mental picture of the battlefield.

SECTION V. SITUATIONAL AWARENESS

Situational awareness is the ability to maintain a constant, clear mental picture of the tactical situation. This picture includes an understanding of both the friendly and enemy situations and of relevant terrain. It also includes relating events in time to form logical conclusions and make decisions that anticipate events. Since the platoon normally operates dispersed as individual teams, it is essential that all scout leaders maintain situational awareness so that they can make sound, quick tactical decisions. Situational awareness also permits the scout leader to anticipate events and relate separate pieces of information to form logical conclusions. One of the critical outcomes of situational awareness on the part of all scouts is a reduction in fratricide incidents.

BATTLEFIELD FRAMEWORK

The commander will structure the battlefield based on the conditions of METT-T and his commander's intent. How he does this affects the scout platoon leader's mission planning and his ability to maintain situational awareness. The framework of the battlefield can vary from a very rigid extreme with obvious front and rear boundaries and closely tied adjacent units to a dispersed and decentralized structure with few secure areas and unit boundaries and no definable front or rear. Between these extremes is an unlimited number of possible variations. Maintaining situational awareness becomes more difficult as the battlefield becomes less structured. Modem, highly mobile operations with small forces lend themselves to a less rigid framework that challenges the scout's ability to maintain an accurate "picture" of the battlefield.

"PICTURING" THE BATTLEFIELD

To have a clear picture of the battlefield, the scout must have virtually perfect knowledge of the friendly situation one level higher than his own. This means the cavalry scout platoon leader must know the troop situation and the

battalion scout platoon leader must know the battalion situation. It is also important that the platoon leader update the scout team leaders periodically regarding the higher situation. The platoon leader must have a relatively complete knowledge of the terrain, and he must know as much as possible about the enemy. The requirement to maintain a real-time picture of the battlefield one level higher does not relieve the scout of the requirement to understand the situation and commander's intent two levels higher. The difference is that the scout's understanding of the situation two levels higher than his own does not have to be as specific or in real time.

Most of the information the scout platoon leader needs comes in the form of reports over his FM communication system. He receives many reports as a result of his platoon graphics. Good graphics require that the subordinate elements report periodically as they accomplish requirements. The platoon leader must be aware of when the scouts report so he will be aware of how current his visualization of the situation is. If an element does not report in a timely manner, the platoon leader must quickly determine the situation of the overdue element.

Although many reports are not addressed specifically to him, particularly on the higher net, the scout platoon leader must monitor them by eavesdropping on the nets as traffic is sent. How effectively he can accomplish this is, to some degree, experience-dependent; however, there are techniques he can apply to relate the information he is receiving to his map and thereby track the tactical situation.

The scout platoon leader's map is the key to maintaining situational awareness (see Figure 2-7, page 2-26). He should plot all friendly position reports up to one level higher than his own. Information from spot reports should also be plotted. The scout should use different colors for friendly and enemy elements to allow quick distinction. To avoid cluttering the map, he should place a dot or symbol on his map where the element is located and label the point with a number. The same number should then be written in the map margin (or beyond the area of operations) with the complete spot report or unit ID next to it. This notation should also include the time. As positions or reports are updated, the old symbol is crossed off and a new one with a corresponding notation is added; it is critical that updates to previous reports be clearly identified as such during transmission. This simple system allows all scouts to easily track and monitor the tactical situation. This system can be augmented by a formal platoon log, kept on the platoon leader's or platoon sergeant's vehicle or on both.

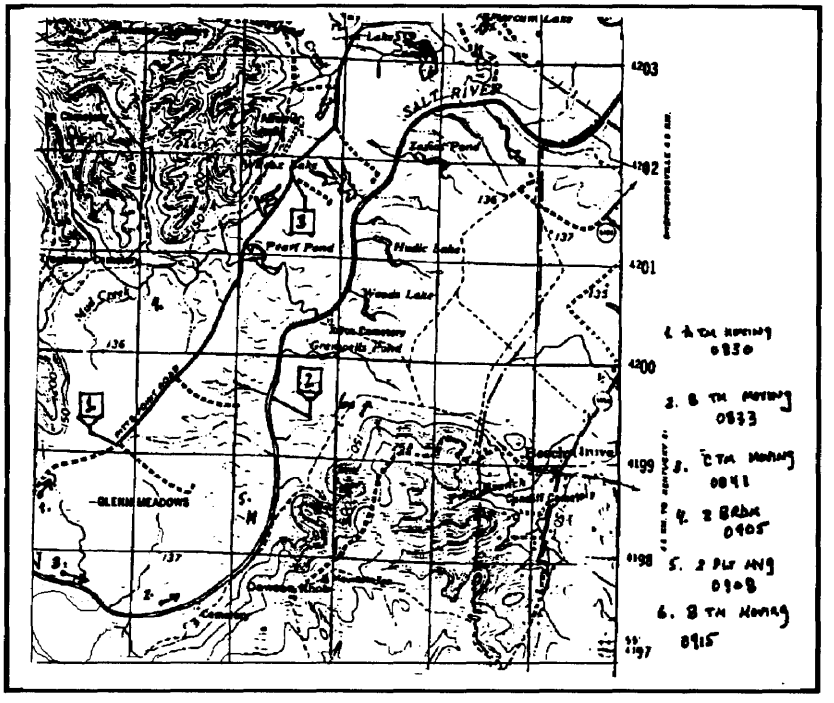


Figure 2-7. Sample situation map (cavalry scout platoon).

BATTLE SPACE

As discussed previously, an accurate picture of the battlefield provides the platoon leader with important tactical information, including friendly and enemy positions and relevant terrain. In turn, complete understanding of the military significance of this picture requires knowledge of the concept of battle space, the key element in the intellectual process of visualizing the battlefield.

At the most fundamental level, battle space is the three-dimensional "bubble" or area in which the platoon can acquire enemy forces and influence them with effective fires. This space is defined by numerous battlefield factors: the locations of friendly forces, including the platoon's individual scout teams, OPs, and patrols; the effects of terrain, weather, and movement; and the ranges of all available platoon weapons and sensing systems. Each scout team has its own battle space; the platoon battle space is the sum of individual team battle spaces (see Figure 2-8). Platoon battle space is not restricted by boundaries; it can overlap with the battle space of adjacent units.

Battle space has applications in all phases of mission planning and execution. During the planning process, it is a critical factor in selection of routes and tentative positions. Once mission execution begins, the platoon leader's knowledge of his battle space is critical to issuing timely and effective orders as the situation changes.

The importance of battle space demands that the platoon leader direct most of his battle command effort toward managing, and enhancing, his space. He must be aware at every moment how battle space is changing as friendly and enemy forces move and as terrain and visibility conditions change (see Figure 2-9, page 2-28). He must evaluate how these changes affect his scout teams.

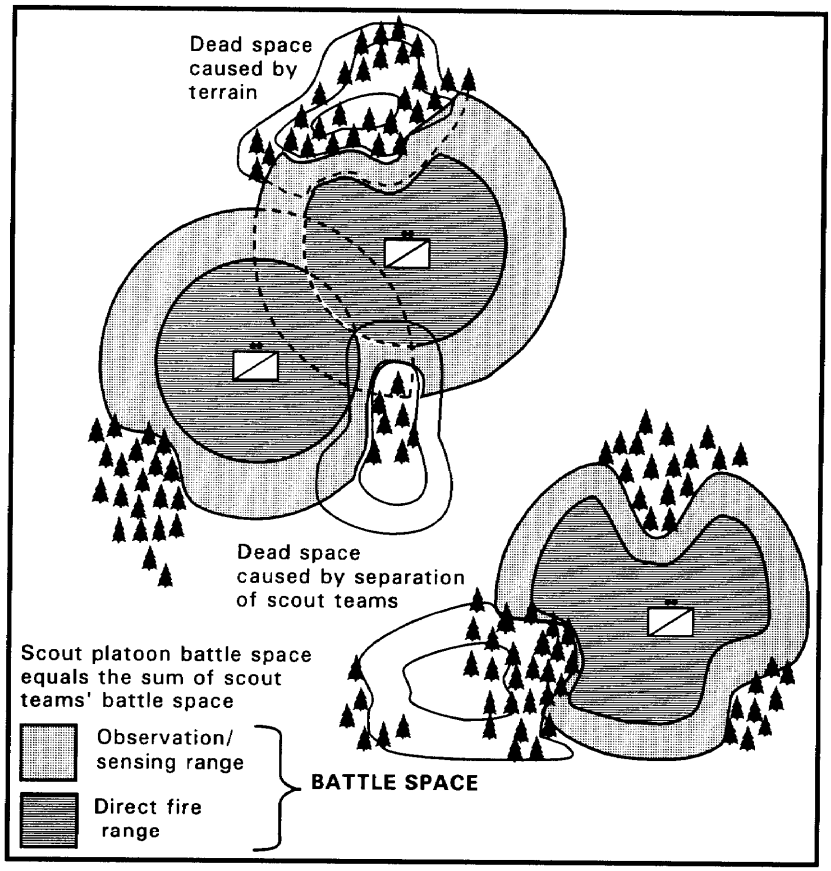


Figure 2-8. Scout platoon's battle space.

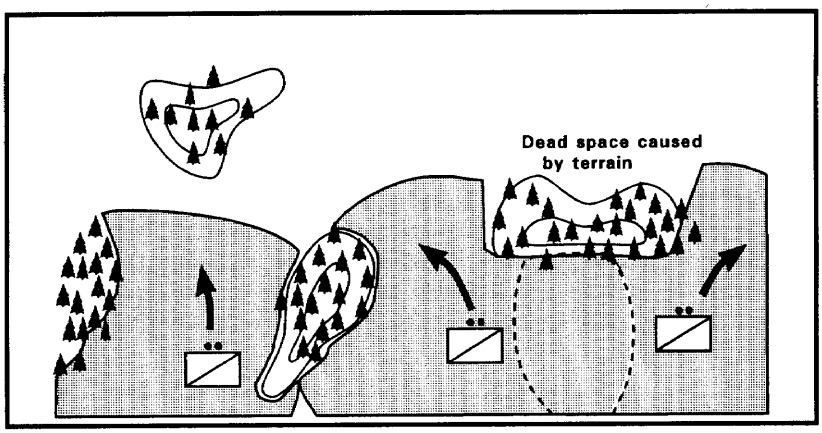


Figure 2-9A. Effects of movement on battle space.

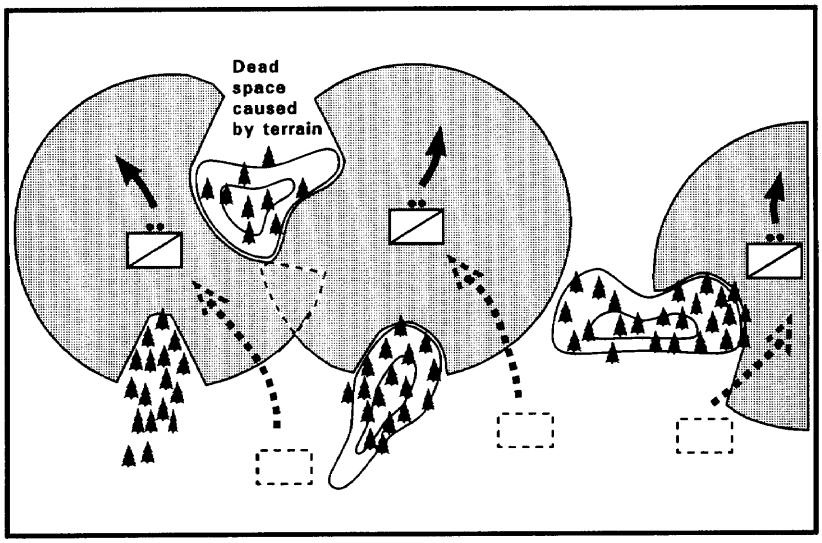


Figure 2-9B. Effects of movement on battle space (continued).

As the operation progresses, the platoon leader must take active measures to shape the battle space to his best advantage. One vital step in this process is to eliminate any gaps, or dead space, that exist within the "bubble." The platoon leader can accomplish this in several ways, including maneuvering scout teams, repositioning OPs, and deploying patrols or remote sensors (see Figure 2- 10).

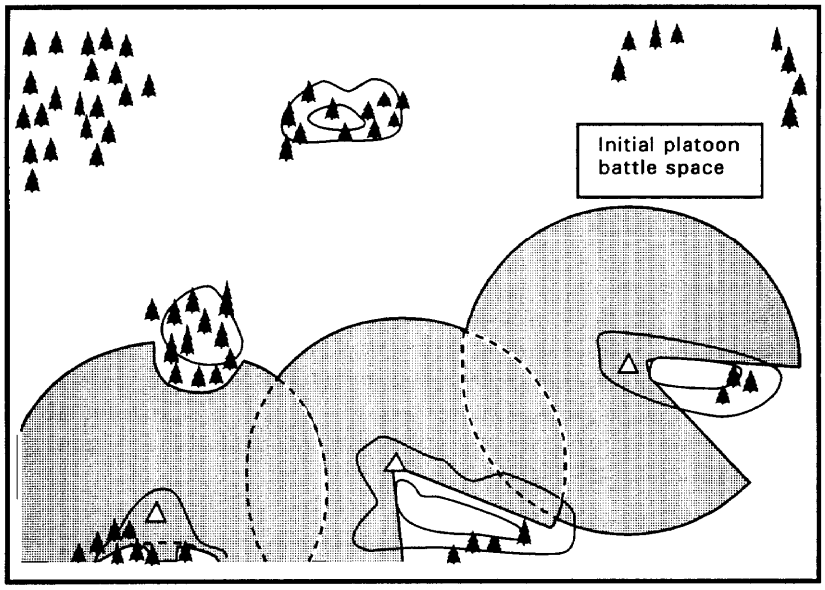


Figure 2-10A. Optimizing battle space.

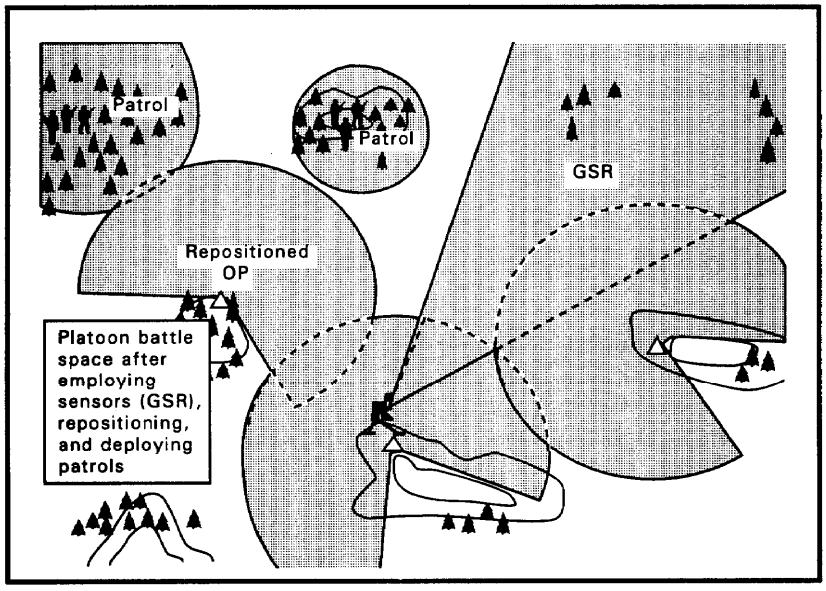


Figure 2-10B. Optimizing battle space (continued).

FRATRICIDE

Fratricide has been demonstrated to be a significant danger to all forces operating on a mobile battlefield where weapon system lethality is significantly greater than identification friend or foe (IFF) capability. Fratricide is the result of many factors including poor direct fire control plans, navigation errors, combat identification failures, and inadequate operational graphics.

More than any other maneuver element, scouts are at risk of being victims of fratricide. The scout platoon is particularly vulnerable because it often maneuvers in dispersed elements forward and to the flanks of other friendly combat forces. In a battalion, company teams often do not keep up with the plan or disposition of the scouts. For these reasons, situational awareness on the part of all scout leaders, particularly the platoon leader, is critical not only to mission success but also to survival.

In any tactical situation, it is critical that scouts know where other friendly elements are operating. With this knowledge, scouts must anticipate dangerous conditions and take steps to either avoid or mitigate them. The platoon leader must constantly be vigilant to changes and developments in the situation that may place his elements in danger. He must also ensure that all scout team positions are constantly reported to higher headquarters so that all other friendly elements are aware of where the scouts are and what they are doing. At troop and battalion level, no-fire zones can be designated to control friendly direct and indirect fire into areas in which scouts are or will be operating. When the platoon leader perceives a potential fratricide situation, he must personally use the higher net to coordinate directly with the friendly element involved.

Section VI. TACTICAL ORGANIZATION

The scout platoon leader task organizes his platoon to accomplish the mission based on the factors of METT-T. Unlike most other combat arms platoons, which maneuver together in formation, the scout platoon normally maneuvers as individual scout teams under the direction and control of the platoon leader. A scout team may consist of from one to five vehicles plus OPCON combat elements. Determining which organization best meets his mission requirements is one of the key decisions the platoon leader must make during his troop-leading procedures. Because of its higher vehicle density, the HMMWV scout platoon has several more organizational options than does its CFV counterpart.

CFV SCOUT PLATOON

The CFV scout platoon normally operates in one of three organizations (three-team, two-section, or six-vehicle) regardless of the formation, movement technique, or mission. The CFV scout platoon, with only six reconnaissance platforms, rarely has the luxury of operating a separate headquarters element.

Three-Team

The three-team organization is the basic organization for the CFV scout platoon (see Figure 2-11). This organization is a good compromise between the requirement of employing a maximum number of elements during the reconnaissance or security mission and the need for security. It is the ideal organization for the conduct of a route reconnaissance mission. In the screen mission, this organization allows occupation of three long-duration OPs and the simultaneous conduct of dismounted patrols. In this organization, the platoon leader and platoon sergeant are members of scout teams (C and B, respectively). As members of these teams, they have to perform both scout duties and the command and control requirements of their duty positions. To minimize their workload, these leaders must make maximum use of their gunners, and they should position themselves as the overwatch element within their teams.

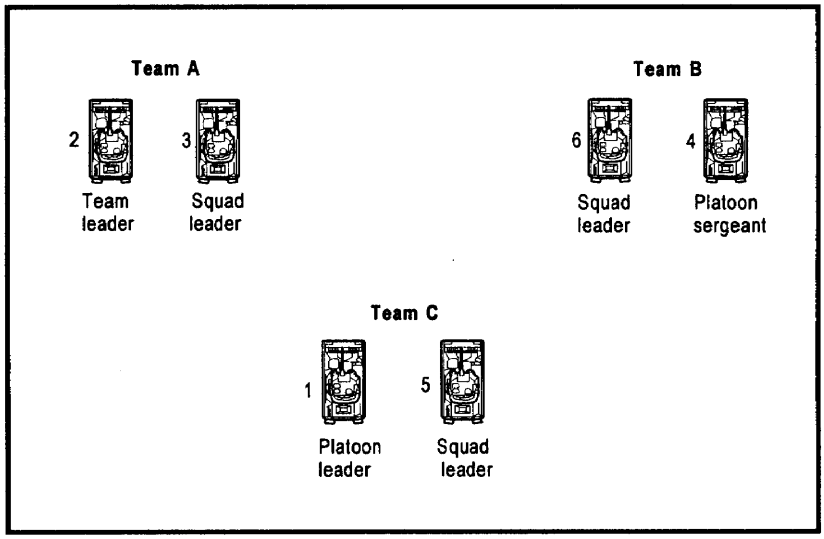


Figure 2-11. CFV scout platoon three-team organization.

Two-Team

The two-team organization is used when increased security is required, when the the area of operations can be covered efficiently with only two elements, or when operational strength (less than six vehicles operational) makes the three-team organization impossible. The two teams are formed by splitting the C element of a three-team organization as illustrated in Figure 2-12.

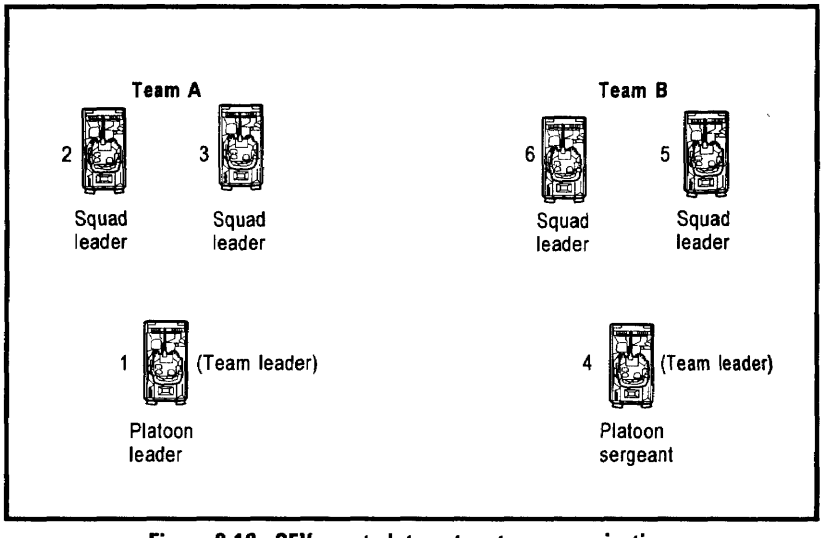


Figure 2-12. CFV scout platoon two-team organization.

Six-Vehicle

The six-vehicle organization is the most difficult to control (see Figure 2-13). The platoon leader employs this organization when he must have six separate information sources at the same time.

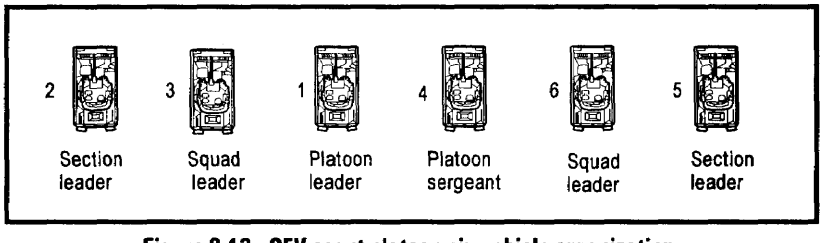


Figure 2-13. CFV scout platoon six-vehicle organization.

HMMWV SCOUT PLATOON

With 10 vehicles, the HMMWV scout platoon has a wide variety of organizational options. The platoon leader selects an organization based on his METT-T analysis. The basic maneuver element of this platoon, as in the cavalry scout platoon, is the scout team. The platoon also includes a headquarters element, which consists of both the platoon leader and the PSG or the platoon leader only. The headquarters element focuses on command and control of the platoon. It travels with the scout teams for security, but it positions itself as needed based on the METT-T analysis and command and control requirements of the mission. When both the platoon leader and PSG are in the headquarters element, the element will normally be split among the scout teams to disperse command and control capability throughout the platoon. The following are the basic organizations of the platoon. The platoon leader may combine organizations to match unique METT-T requirements and to accommodate attachments.

Two-Team Organization

This is an effective organization when only two maneuver corridors have to be observed or when two distinct reconnaissance missions are required. This organization maximizes security at the team level and gives the teams sufficient maneuver and command and control capability to conduct limited separate missions. This organization allows the platoon to put out two long-duration OPs; it is the best organization for dismounted operations. See Figure 2-14.)

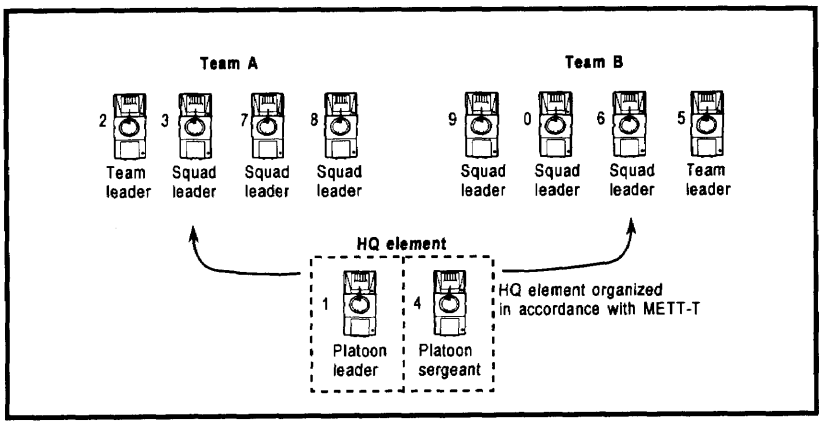


Figure 2-14. HMMWV scout platoon two-team organization.

Three-Team Organization

This organization is ideal for reconnaissance along a single route. Three long-duration OPs can be manned in this organization; however, the ability to concurrently conduct dismounted patrols is somewhat limited. (See Figure 2-15.)

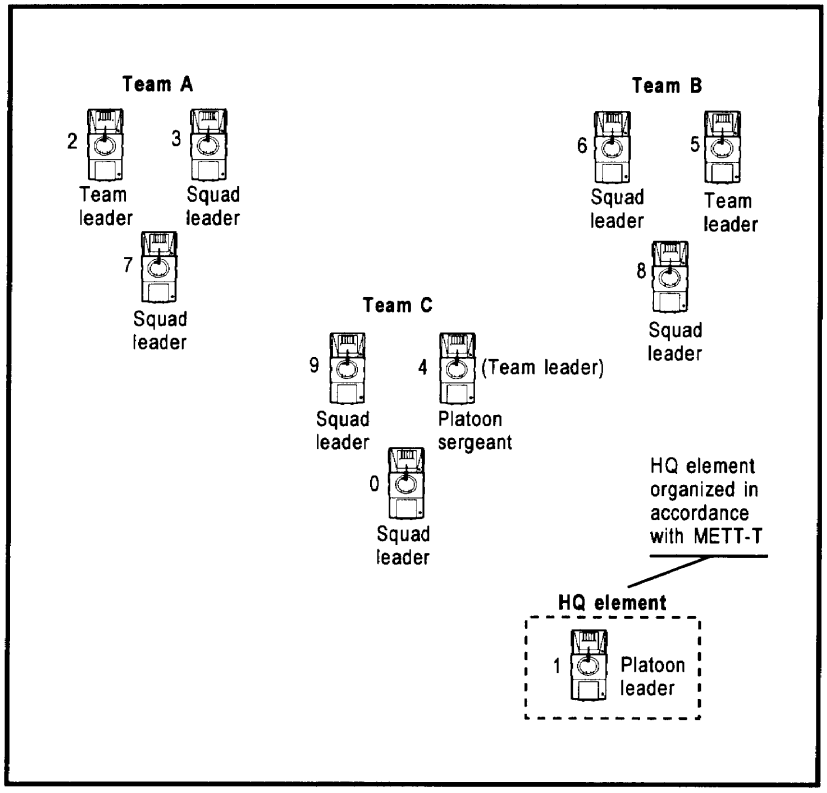


Figure 2-15. HMMWV scout platoon three-team organization.

Four-Team Organization

This organization is used in reconnoitering large areas or multiple maneuver corridors. Four short-duration OPs can be established, providing the capability to structure OPs in depth. In this organization, the team has dismounted capability to conduct local security only. (See Figure 2- 16.)

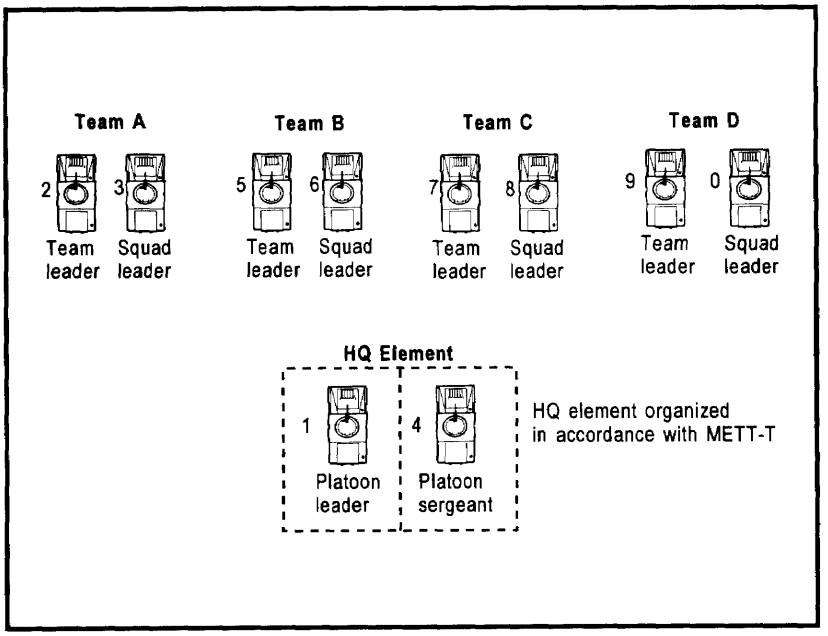


Figure 2-16. HMMWV scout platoon four-team organization.

Eight-Squad Organization

The eight-squad organization is rarely used because it creates very difficult command and control challenges. It gives the platoon an enhanced ability to conduct screening missions in depth, although only for short durations. It also provides the platoon with the ability to conduct numerous reconnaissance tasks simultaneously. In addition to command and control, this organization has two severe drawbacks: elements are extremely vulnerable to enemy contact due to lack of overwatch, and the platoon has virtually no ability to organize patrols of any type.

TASK ORGANIZATION

METT-T circumstances and attachments will often cause the platoon leader to employ variations of the basic platoon organizations discussed previously. For example, terrain or mission requirements may require that one scout team consist of four HMMWVs to enhance its dismounted capability while the rest of the platoon is organized into two-vehicle teams (see Figure 2-17, page 2-36).

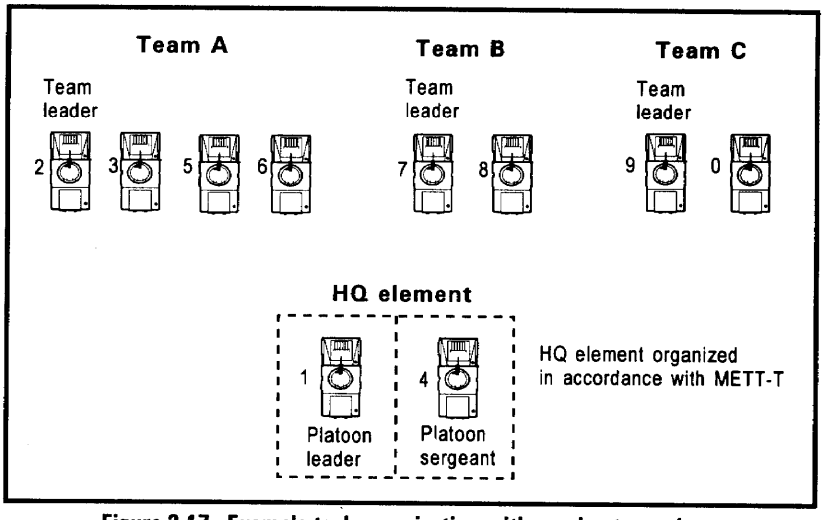


Figure 2-17. Example task organization with varying team sizes.

Attachments, such as infantry or engineers, may also change the composition and number of teams. A CFV scout platoon with these assets attached may task organize into four teams: two teams consisting of one CFV and one infantry or engineer squad each, and two teams of two CFVs each (see Figure 2-18). Later chapters contain further information regarding mission task organization.

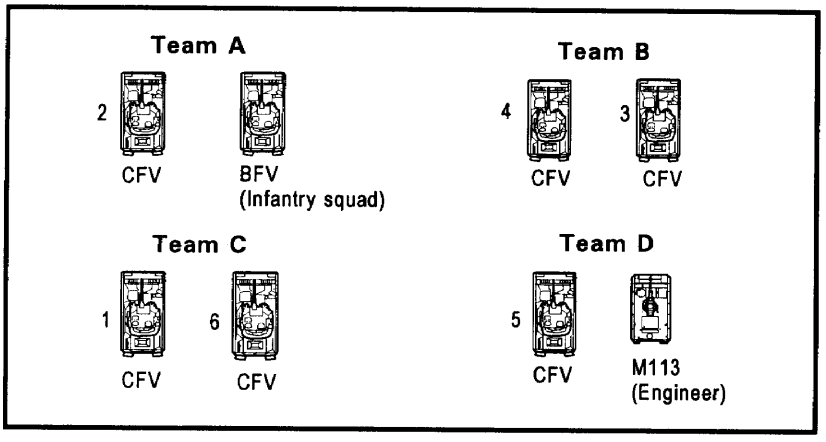


Figure 2-18. Example task organization with engineers and infantry.

Section VII. COMMUNICATIONS

Because of the extended frontages and distances over which the scout platoon operates, it must rely heavily on effective communication techniques. These techniques include not only the means of communication (wire, visual, radio), but also the proper way of using them, correct application of operational terms, and effective speech. The platoon leader must ensure all of his soldiers understand communications procedures and the different nets on which the platoon operates.

MEANS OF TACTICAL COMMUNICATION

The scout platoon always has several available means of communication. Whether it is using messenger, wire, visual, sound, or radio signals, the platoon must remain flexible enough to react quickly to new situations. Use of each of these means of communication must be carefully planned to avoid dependence on a single method.

SOPs help the platoon tremendously in its mission accomplishment. **Hand-**and-arm and flag signals aid in platoon movement. Clear and concise radio transmissions can reduce transmission times.

Messenger

This is the most secure means available to the scout platoon. Messenger service is generally very flexible and reliable. In an assembly area, it is the preferred means of communication. On an infrequent basis, the platoon maybe called on to act as messengers to the parent unit's higher headquarters.

Wire

This method of communication is especially effective in static positions or during the conduct of a screening mission. It is very versatile and can be used in many different situations. Using one of the many wire devices available, the scout platoon establishes hot loops to communicate within the platoon, with OPs, and with the parent unit command post (CP) in assembly areas.

Visual

Visual communications are used to transmit prearranged messages quickly over short distances. Since the scout platoon rarely operates over short distances, visual signals are not used across the platoon. Scout teams, however, may rely heavily on this type of communication. Signals must be clear enough to be understood by the vehicle commanders as they operate across the battlefield. In those cases when the entire platoon is together, such as in a coil, in an assembly area, or on a road march, all vehicle commanders must stay alert to pass on visual signals from the platoon leader to other vehicle commanders in the platoon.

Standard hand-and-arm or flag signals work well during periods of good visibility. Flashlights, chemical lights, or other types of lights are required during periods of limited visibility. The platoon must exercise extreme care when using lights to avoid alerting the enemy to friendly intentions.

Pyrotechnic ammunition can also be used for visual signaling. The meanings of these signals are identified in paragraph 5 of the OPORD and in the unit SOI. The main advantage of pyrotechnics is the speed with which signals can be transmitted. The main disadvantage is the enemy's ability to imitate them.

Sound

This form of communication is used mainly to attract attention, transmit prearranged messages, and spread alarms. Sound signals carry only short distances; in addition, range and clarity are greatly reduced by battle noise. Since they are open to enemy interception, use of sound signals maybe restricted for security reasons. They must be simple to prevent misunderstandings. Prearranged meanings for sound signals are in the unit SOP and SOI.

Radio

The radio is the platoon's most flexible, most frequently used, and least secure means of communication. The most effective way to use the radio is to follow standard radiotelephone procedures: brevity, proper use of authentication tables, and the use of approved operational terms. Radio signals can be traced by enemy direction-finding units. Once found, the transmitter can easily be destroyed. The scout platoon leader must strictly enforce radio discipline regardless of encryption devices; survival of the platoon depends on good habits.

Battalion Scout Platoon Nets

The following are the radio nets employed and/or monitored by leaders in the battalion scout platoon. (See Figure 2-19.)

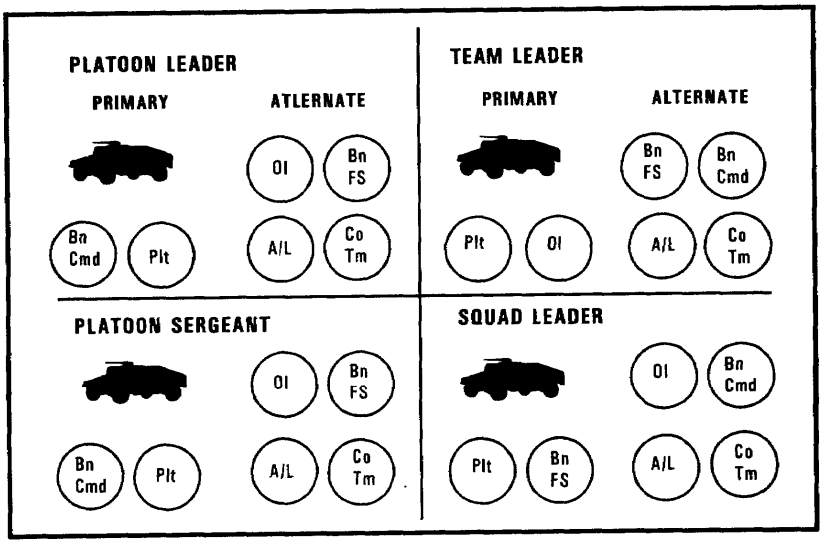


Figure 2-19. Battalion scout platoon nets.

Platoon. This net is used to conduct all platoon operations. 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 operations.

Battalion command. The battalion command net is the primary net used to direct the tactical operations of the battalion. It is monitored continuously by ail subordinate commanders in the battalion, as well as by key staff members and the TOC. As a key maneuver element of the battalion, the scout platoon must monitor this net continuously. The platoon leader and the PSG should both have the capability to monitor and transmit on this net when the battalion is conducting tactical operations.

Operations and intelligence. Many battalions operate this net to handle routine reports and thus make the command net more efficient. This net can also be used to control the R&S effort before the battalion main body begins tactical operations.

If the battalion has not begun tactical operations but the scouts are engaged in reconnaissance or surveillance operations, the scout platoon may use this as its primary net. In such a case, both the scout platoon leader and PSG should be able to monitor and receive on this net. Operating on the OI net should be a temporary situation. The scout platoon leader should always designate a scout to monitor the battalion command net to facilitate rapid transition to the command net once the battalion main body begins tactical operations.

Fires. Because rapidly coordinating for and adjusting indirect fires is vital in all R&S operations, the fires net is extremely critical to the success of scout platoon operations. The platoon should have all radios that are not on the higher command net or the platoon net preset to this net. All scouts, whether operating mounted or dismounted, and regardless of how many radios they have, must have the ability to quickly change to this net and coordinate indirect free. The scout platoon leader must ensure that he coordinates with the battalion FSO regarding the use of this net to ensure it is capable of receiving voice call for fire messages.

Company team. Al1 scouts must have the ability to rapidly change to any of the battalion company team nets. These nets are used to conduct coordination for handing off enemy targets once the scouts make contact.

Administrative/logistics. The scout PSG will usually monitor the 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 is also used to coordinate logistics resupply operations and evacuation of casualties.

Retrans. When the scout platoon operates at extended distances from the battalion TOC, it may use the battalion retrans net to facilitate effective communications between the scout platoon leader and the TOC. The platoon leader should request use of the retrans net during all missions requiring extended ranges of FM communications.

Cavalry Scout Platoon Nets

The following are the radio nets employed and/or monitored by leaders in the cavalry scout platoon. (See Figure 2-20.)

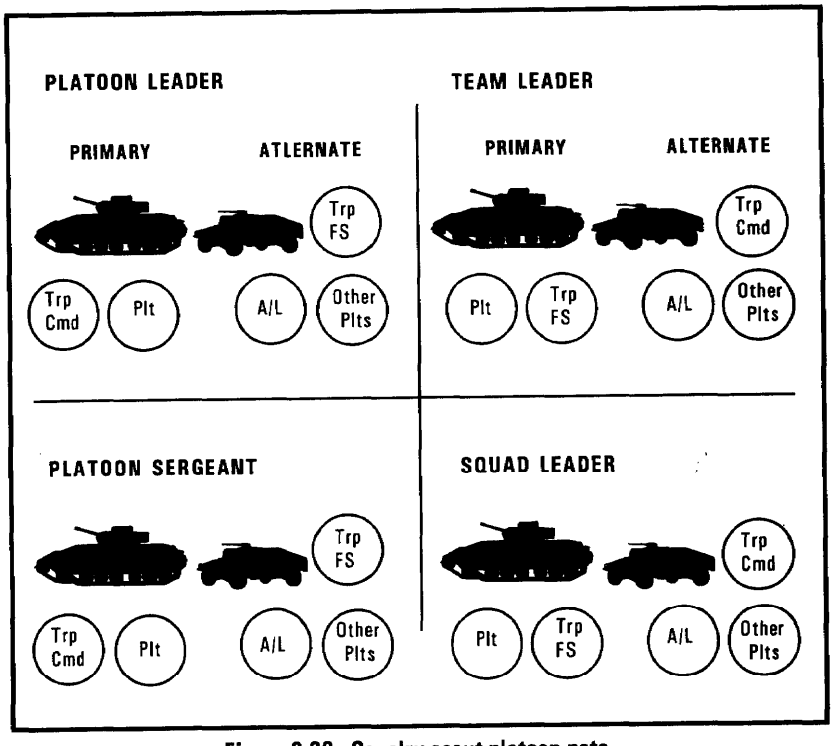


Figure 2-20. Cavalry scout platoon nets.

Platoon. This net isused to conduct all platoon operations. 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 operations. All scouts must also have the ability to rapidly change to any other platoon net as required to coordinate contact points or handover of enemy targets.

Troop command. This net is used to maneuver the cavalry troop as well as to process all routine A/L reports. The troop TOC is the net control station (NCS), and the scout platoon leader or PSG sends all routine reports to the

troop XO. This net can be used by scout and tank platoon leaders to 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 commander. 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 move to this net to send their reports and receive guidance if they are unable to contact their platoon leader or PSG.

Troop fires. Many troops operate a troop fires net. It is used to send calls for fire to the troop FSO or directly to the troop mortars. The platoon leader should direct all radios not actively operating on another net to enter this net. All scouts must have the ability to change to this net and coordinate indirect fire.

NET CONTROL

The scout platoon net is the key to command and control of the platoon. The smooth functioning of this net allows accurate information to be passed quickly to the platoon leader. This information flow is critical in maintaining the platoon leader's situational awareness and command and control. When contact is made, the volume of traffic on the scout platoon net will increase drastically. The platoon must be organized to control, understand, and process this vast amount of information while engaging the enemy and possibly being engaged in turn. The following methods can be used to ensure the information flowing over the net is organized and controlled to permit the platoon leader to both understand it and issue orders in response to it.

Flash Traffic

The platoon leader should, in either the platoon order or the unit SOP, establish criteria for flash traffic. An example of flash traffic criteria is PIR. When a scout observes evidence of the critical item, he interrupts any net traffic with a proword such as "FLASH-FLASH-FLASH." The use of such a proword immediately advises all other scouts to get off the net, thus clearing it for the critical traffic to be passed.

Net Discipline

The PSG is responsible for net discipline. In this capacity, he will challenge any violation of procedure as it occurs. Improper or inefficient radio procedures, even in routine administrative reports, inhibit effective command and control.

Effective Messages

The best way to ensure effectiveness of a radio message is to write it out before it is sent. This procedure yields greater accuracy and ultimately is more timely. It also ensures that the message is sent correctly, completely, and clearly in the shortest possible amount of time. The message is easier to understand, and the duration of the electronic signature of the sending station is minimized.

Radiotelephone Procedure

Proper RTP is the cornerstone of effective command and control in the scout platoon. All scouts must be expert in communications procedures. This not only ensures efficient communications within the platoon, but also allows all members of the platoon to communicate effectively with outside elements such as the battalion, squadron, troop, company, or other platoons.

TECHNIQUES OF EFFECTIVE COMMUNICATIONS

The platoon leader and PSG are responsible for ensuring that their scouts understand and adhere to these techniques, which can contribute to more effective, more secure tactical communications.

Minimize Duration

All messages sent within or from the scout platoon must be short and informative. The longer the message, the greater the opportunity of enemy elements to electronically determine the scout'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 a brevity code that reduces the need to explain the tactical picture in detail.
- Break long messages into several parts and send each separately.

Minimize Signature

When sending a message, every scout must be conscious of the size and nature of the electronic signature that he is emitting. He must consider the following methods for reducing the size of the signature:

- Use terrain to mask the signature from the direction of the enemy.
- Set the transmitter power to low if that provides sufficient range (as it often does within the platoon and team).
- Whenever possible (particularly in stationary operations), use an expedient directional antenna to restrict the enemy's ability to monitor the signal. See FM 17-98-1 for instructions on how to construct and use such an antenna.

Know the System

Each scout must be an expert at using and maintaining his FM communications system. In particular, he must understand its capabilities and limitations. He must also understand how to maintain the system and how to troubleshoot it whenever he suspects it is not functioning properly.

CHAPTER 3

BASIC SCOUT SKILLS

Scouts must be expert in a number of basic skills that individually or collectively are critical during all reconnaissance and security missions. This chapter covers movement fundamentals, formations, and techniques; vehicle positions; operations in danger areas; target acquisition; and actions on contact. A thorough understanding of these vital skills and principles is important both in the scout platoon leader's mission planning process and in mission execution by the platoon and its scout teams.

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Section I. FUNDAMENTALS OF MOVEMENT

Sound tactical movement is the essence of all scout platoon operations. By seeing the enemy first and by observing undetected, scouts can retain the initiative, bring indirect fire to bear on the enemy, help larger maneuver units to maneuver and destroy the enemy, and if necessary, use direct fire to kill the enemy. The platoon leader must understand how to maneuver the platoon to accomplish his assigned mission. The guidelines in this section apply during tactical movement.

USE THE TERRAIN FOR PROTECTION

Terrain offers natural concealment from enemy observation and cover from enemy fire. Scouts must make maximum use of this natural protection to survive and accomplish their mission; avoiding enemy detection is the key. Cover should be used whenever possible, but when there is no cover, scouts should use the concealment offered by trees, shadows, brush, and man-made structures (see Figure 3-1). The crest drills illustrated in Figure 3-2 are examples of using the terrain to protect the vehicle during movement.

DISMOUNT VEHICLES

METT-T factors require scouts to dismount to enhance survivability and mission accomplishment. Vehicles that can be seen can be killed. Scouts should dismount their vehicles and use binoculars whenever enemy contact is possible and vehicle movement is not necessary. For example, during reconnaissance operations forward of a main body, scouts should dismount beyond the direct-fire range of suspected enemy positions and weapon systems. Dismounted scouts can precede the vehicle using the cover and concealment of a dismounted avenue adjacent to the mounted route. Additionally, dismounts can occupy a dismounted OP while leaving the vehicle in a hide or overwatch position. Vehicles are easily identified because of their signatures; conversely, dismounted patrols and OPs are very difficult to detect. Dismounted scouts are able to provide critical information to the commander and survive to perform subsequent unit missions.

USE ALL AVAILABLE COVER AND CONCEALMENT

Despite its obvious advantage, moving along covered and concealed routes can present disadvantages that should be considered. Speed is often reduced, and control problems increase. The possibility of being ambushed by enemy infantry increases. Inmost situations, these limitations must be accepted because the accuracy and lethality of long-range weapons have made exposed movement too dangerous.

AVOID SKYLINING

During mounted or dismounted movement, individual vehicles and personnel should avoid becoming silhouetted against a skyline.

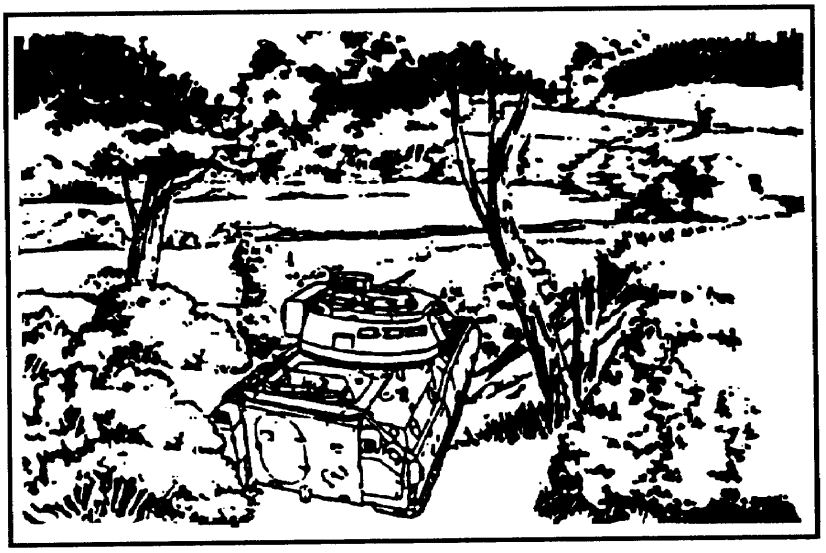
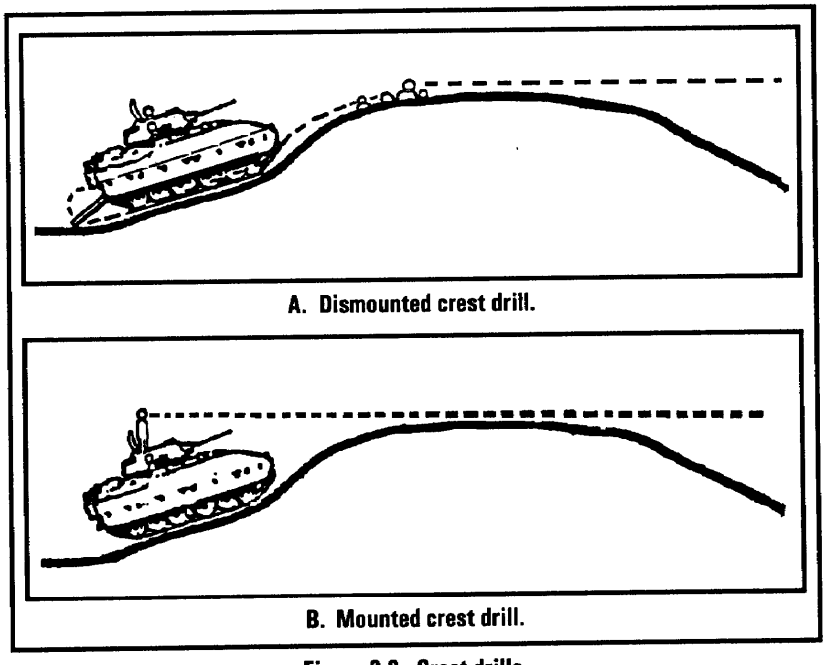


Figure 3-1. Concealment.



A. Dismounted crest drill.

B. Mounted crest drill.

Figure 3-2. Crest drills.

AVOID DIRECT FORWARD MOVEMENT

Do not move directly forward from a defilade position. Direct forward movement may enable the enemy to pinpoint the vehicle and engage it as it moves (see Figure 3-3). Instead, back up and move left or right around the previous position to get to the next position.

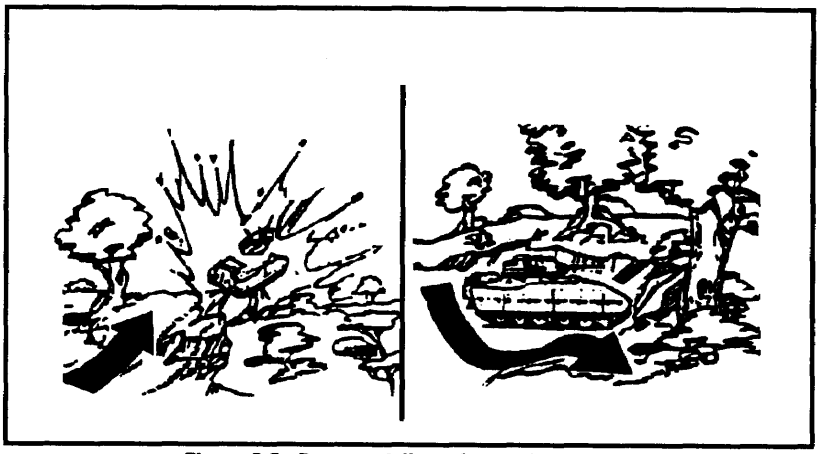


Figure 3-3. Danger of direct forward movement from a defilade position.

AVOID OPEN AREAS

Open areas must be crossed quickly, using overwatch and following the folds in the terrain. Vehicles should stop short of open areas and send dismounted scouts to a concealed position where they can observe the open area. From that position, scouts should carefully check the other side of the open area for enemy positions.

AVOID SUSPECTED ENEMY OBSERVATION SECTORS

Based on his own analysis and the IPB products he has, the scout platoon leader must consider where enemy reconnaissance assets will be focused and determine their fields of observation. The scout platoon leader can then avoid movement through these areas. This means scouts should combine proper terrain driving techniques with carefully selected routes to maximize security. The scout must be careful, however, to balance his security with his ability to observe and reconnoiter.

REDUCE VEHICLE-RELATED SIGNATURES

The major signatures emitted by the scout platform (audible, thermal, visual) can be reduced. Audible signature can be reduced simply by shutting off the vehicle and related systems, such as heaters or thermal sights, whenever the vehicle is not moving or the system is not needed. The visual and thermal signatures can be reduced in numerous ways:

- Erecting camouflage nets. This will help hide a stationary vehicle both visually and thermally; nets tied to the vehicle can reduce dust and exhaust signatures, as well as reduce the thermal signature while moving.
- Keeping side skirts down on tracked vehicles to reduce the dust signature.
- Keeping hatches closed to reduce noise and light signatures.
- Making careful precombat inspection of flashlights and dome lights to prevent white light displays at night.
- Reduce vehicle glass reflection from periscopes and windows by removing, covering, or camouflaging them (placing a net over the windshield, for example).

AVOID POSSIBLE KILL ZONES

Large open areas, especially those dominated by high ground or by terrain that affords the enemy cover and concealment, are likely kill zones and should be avoided (see Figure 3-4, page 3-6). Obvious avenues of approach into enemy positions will probably be covered by long-range fire. Conspicuous landmarks such as crossroads, lone buildings, and hilltops should be avoided because they attract enemy attention. They are also likely to have artillery registered on them or to be covered by direct-fire weapons. Obvious bypass routes of obstacles must also be avoided or examined carefully; they may have been intentionally left open to draw friendly forces into a kill zone or ambush.

Section II. VEHICLE POSITIONS

Between moves or while occupying an overwatch position, a scout vehicle occupies one of three hasty positions: hide, turret-down, or hull-down. The scout vehicle approaches the intended location from the rear along a covered route and occupies the desired position at the commander’s direction.

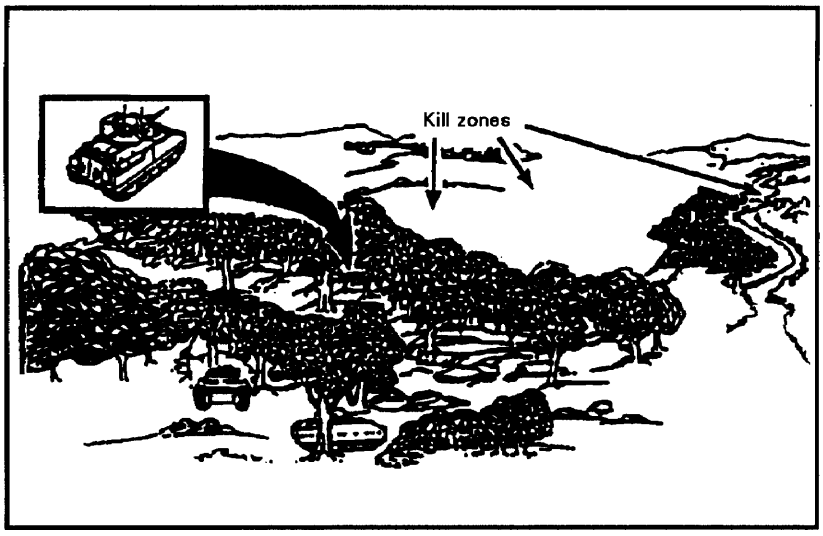


Figure 3-4. Possible kill zones.

HIDE POSITION

The vehicle commander hides the vehicle so that no part is exposed to the front. A dismounted observer must maintain visual contact with the assigned sector. This position is used when enemy engagement is not imminent and stealth is desired or when a vehicle is moving to avoid direct fire from an undetected enemy (see Figure 3-5).

TURRET-DOWN POSITION

The vehicle commander halts the vehicle when the entire vehicle is behind cover but the commander can still observe the assigned sector from his position (see Figure 3-6). This position is used when enemy engagement is imminent but stealth is still desired. When engagement is required, the vehicle moves into a hull-down position at the direction of the vehicle commander.

HULL-DOWN POSITION

The commander halts the vehicle as soon as the gunner can view and engage the target area. The rest of the vehicle remains behind cover (see Figure 3-7, page 3-8). This position is used to engage an enemy element.

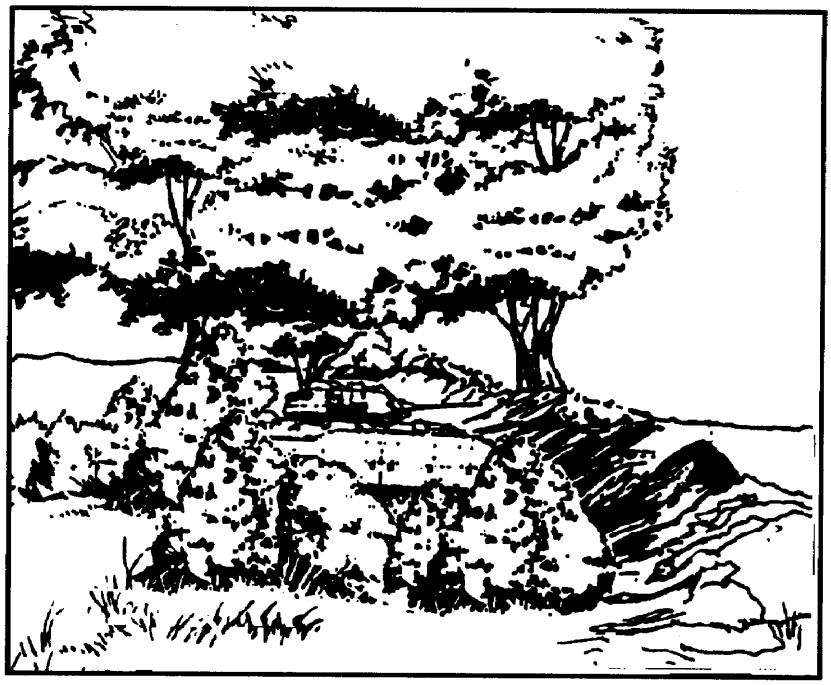


Figure 3-5. Hide position.

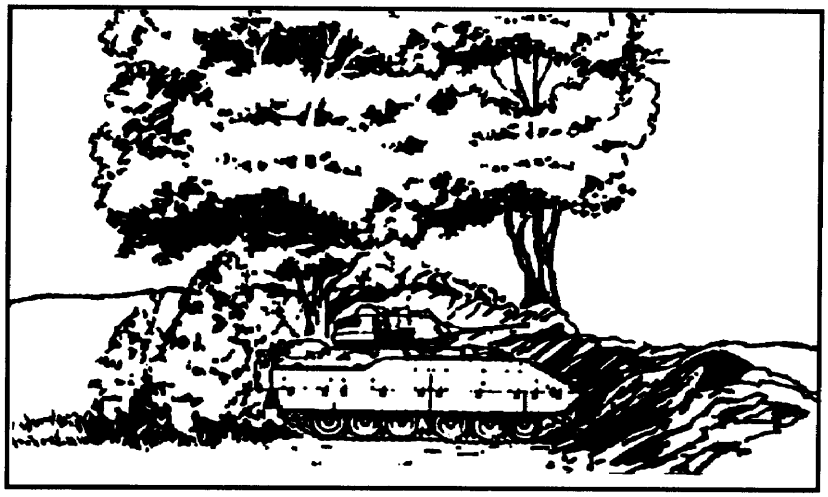


Figure 3-6. Turret-down position.

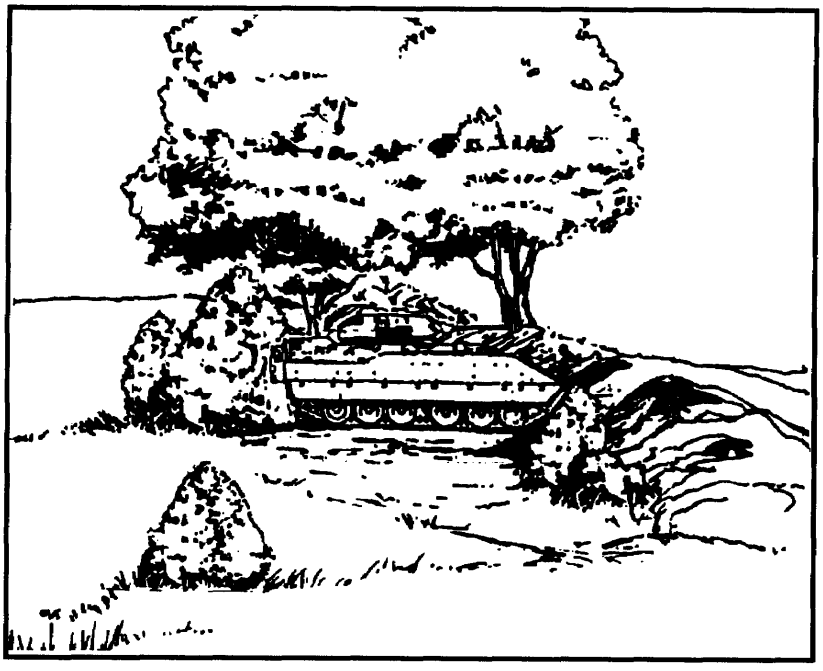


Figure 3-7. Hull-down position.

Platoons that are equipped with the HMMWV will use the hide and hull-down positions as required. In the hull-down position, only the vehicle gunner and weapon system are exposed (see Figure 3-8).

Section III. FORMATIONS

The platoon uses formations to facilitate positive command and control by the platoon leader, to increase speed in execution, and to reduce confusion. Formations provide a standard position for each team or squad in relation to other elements. Unlike the infantry or armor platoon, the scout platoon does not normally use formations to execute its tactical reconnaissance or security missions. This is because the platoon's primary maneuver element, the scout team, rarely maneuvers within mutually supporting distance of other teams. Rather, formations in the scout platoon are most often used in the execution of operations when enemy contact is not expected.

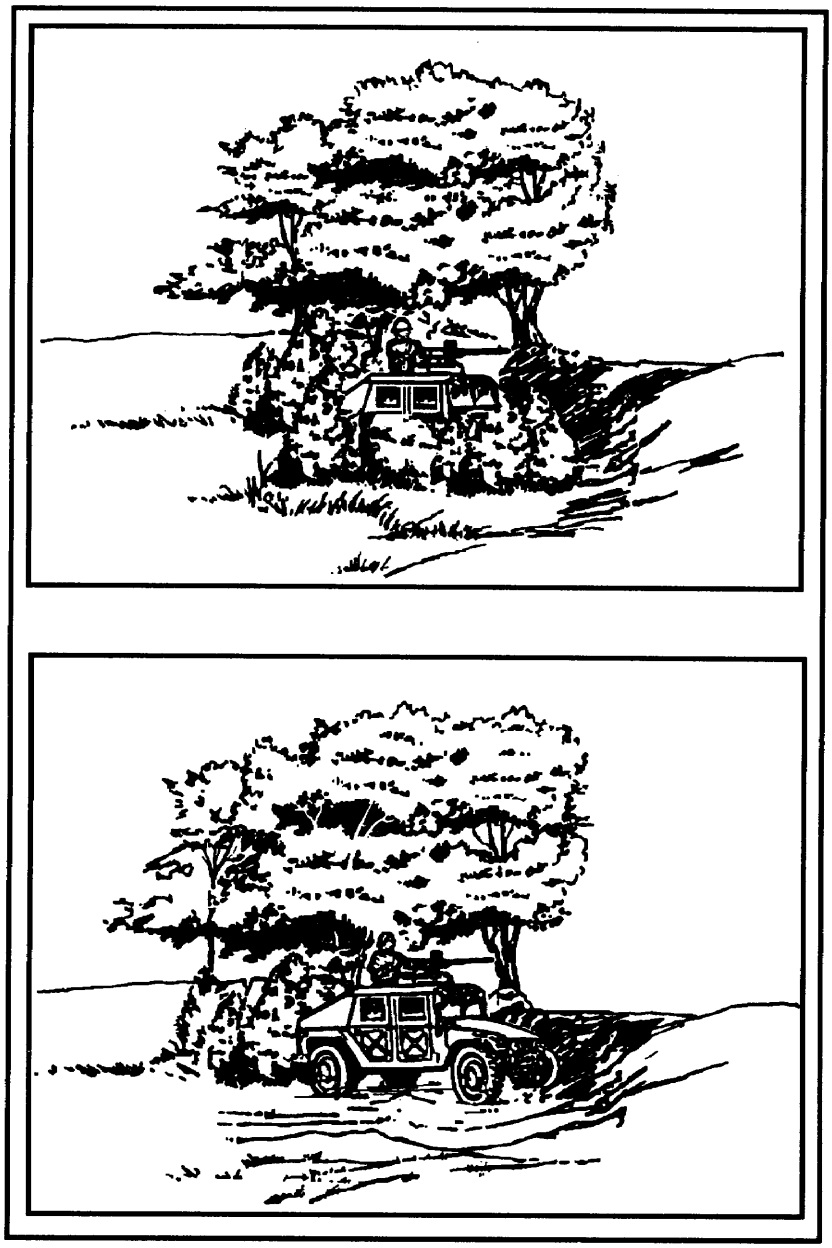


Figure 3-8. HMMWV hide and hull-down positions.

CFV SCOUT PLATOON

The CFV scout platoon most often uses formations at the platoon level when operating behind the FEBA where enemy contact is not expected. It may, however, employ combat formations when terrain supports their use, such as in desert operations; when the mission or reconnaissance objective is very focused, such as in a route reconnaissance; or when the platoon is participating in the combat mission of a higher headquarters, such as movement to contact or hasty attack. Normally, platoon formations are not appropriate to the execution of a reconnaissance or security mission. There are six CFV platoon formations: line, vee, column, staggered column, coil, and herringbone. Movement into and out of the various formations must be second nature to each squad. Formations are intended to be flexible and to be modified to fit the situation, terrain, and combat losses; they do not have exact geometric dimensions and design.

Line

This formation can be used regardless of the platoon organization and is applicable to most scout platoon missions. It allows the platoon to cover the most ground systematically, with maximum reconnaissance forward. (See Figure 3-9.)

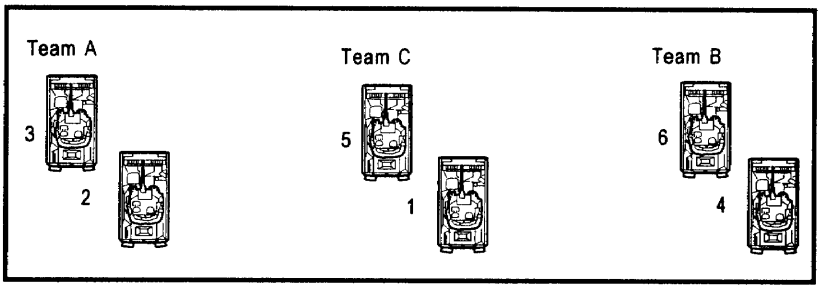


Figure 3-9. Three-team platoon line formation.

Vee

This formation uses the three-team organization. The platoon maintains relative positioning based on terrain and combat losses. The vee lends itself to immediate mutual support and provides depth; it is very flexible. Using any of the techniques of movement, the two forward teams perform all of the information gathering and reporting. The rear team provides overwatch and command and control. (See Figure 3-10.)

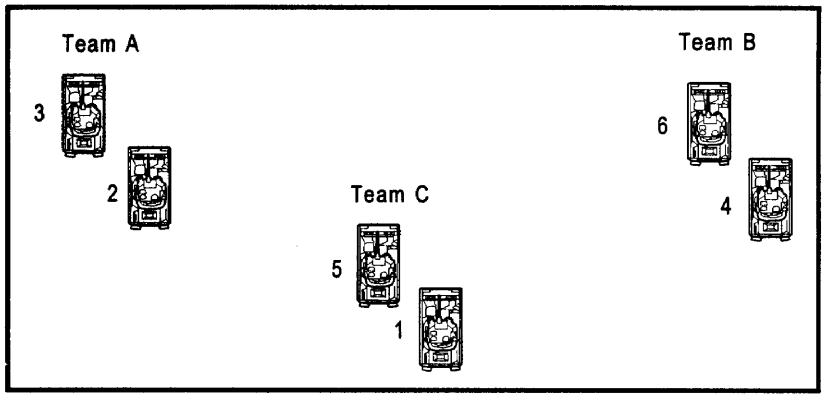


Figure 3-10. Three-team platoon vee formation.

Column

The platoon uses the column formation when speed is essential as it moves on a designated route (see Figure 3-11). The column offers protection to the flanks, but little to the front and rear. Normally, the platoon leader briefs the team leaders on the route and speed and allows the lead team to lead the column movement. This frees the platoon leader to concentrate on the subsequent mission, enhancing command and control. It does not, however, relieve him of the responsibility of tracking the move on his map. The order of march may depend on which organization the platoon will use at the end of the movement; in addition, the lead team can be adjusted based on METT-T considerations. When conducting movements in a secure area, an SOP order of march is appropriate.

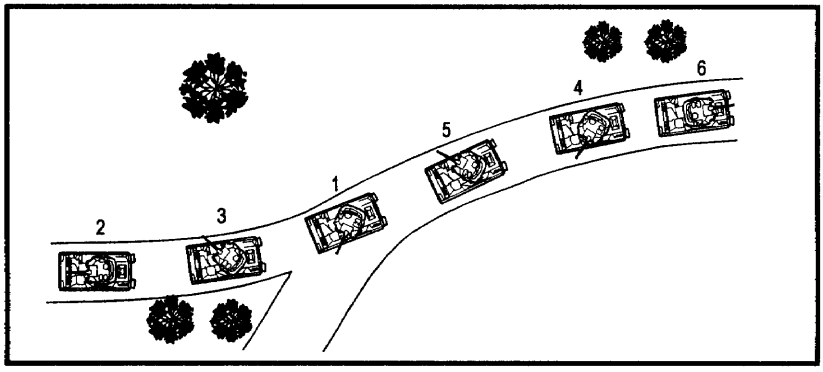


Figure 3-11. Platoon column formation.

Staggered column

The staggered column is used for rapid movement across open terrain. It affords all-around observation and fields of fire. Figure 3-12 shows the platoon in the staggered column in a two-team organization with Alpha team leading.

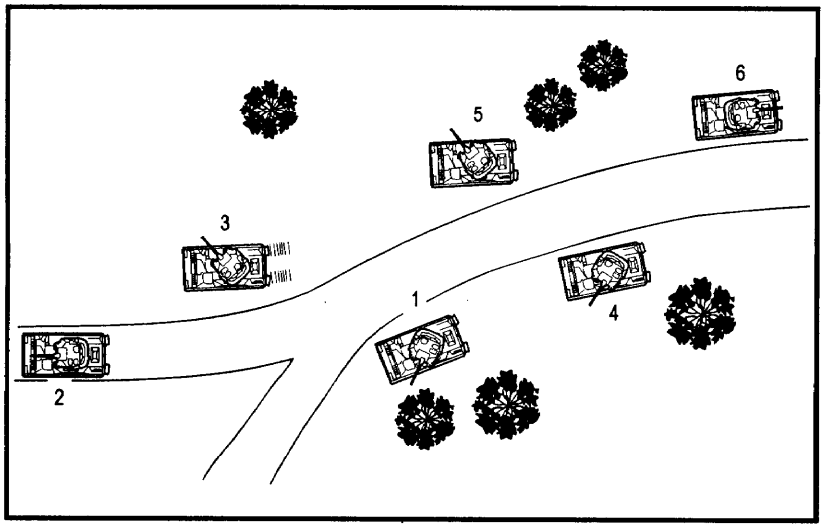


Figure 3-12. Platoon staggered column formation.

Coil

The platoon coil is used to provide all-around security during halts. Each vehicle has a particular position to occupy in the coil. The orientation of the coil is designated by the platoon leader using a cardinal direction; in the absence of orders, the direction of travel becomes 12 o'clock. Platoons must develop a coil SOP based on their mission essential task list (METL), war plans, and most frequently used organizations. The coil SOP should be practiced as a drill so that correct execution becomes automatic.

The coil is always executed from the column or staggered column, with the platoon using the six-vehicle organization. The lead vehicle occupies the 12 o'clock position. The other vehicles will occupy the 2, 10, 4, 8, and 6 o'clock positions in accordance with the order of march. The vehicles will be 100 to 150 meters apart. An example is illustrated in Figure 3-13.

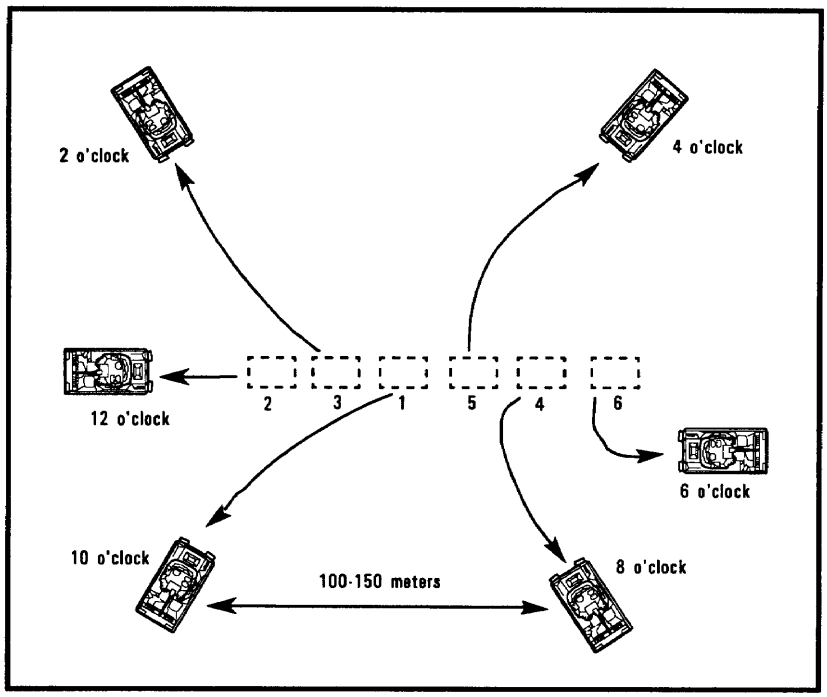


Figure 3-13. Example CFV platoon coil formation.

Herringbone

The herringbone is used to provide 360-degree security during a temporary halt from a march column (see Figure 3-14, page 3-14). The formation maybe widened to permit passage of vehicles down the center of the column. All vehicles should move completely off the road if terrain allows.

Team Formations

When the platoon operates in the two-team configuration with three vehicles in a team, the individual teams can adopt their own formations. Figure 3-15 (page 3-14) illustrates the two three-vehicle team formations: wedge and vee. The wedge formation provides maximum security overmatching the reconnoitering vehicle forward. The vee formation provides maximum reconnaissance forward and speeds the rate of reconnaissance while using a single vehicle for overwatch.

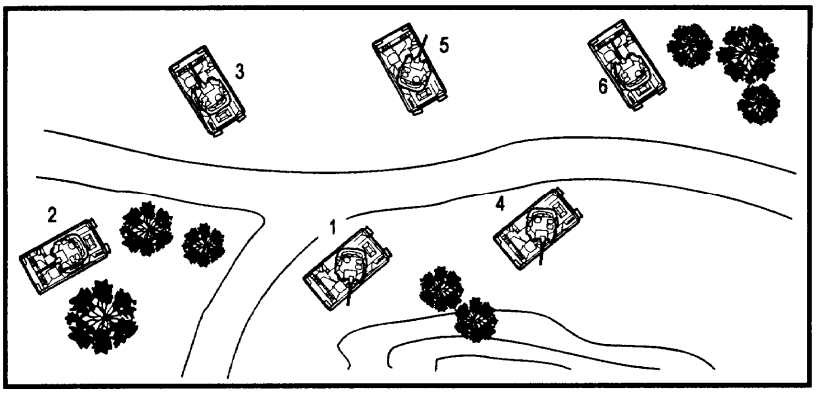


Figure 3-14. Platoon herringbone formation.

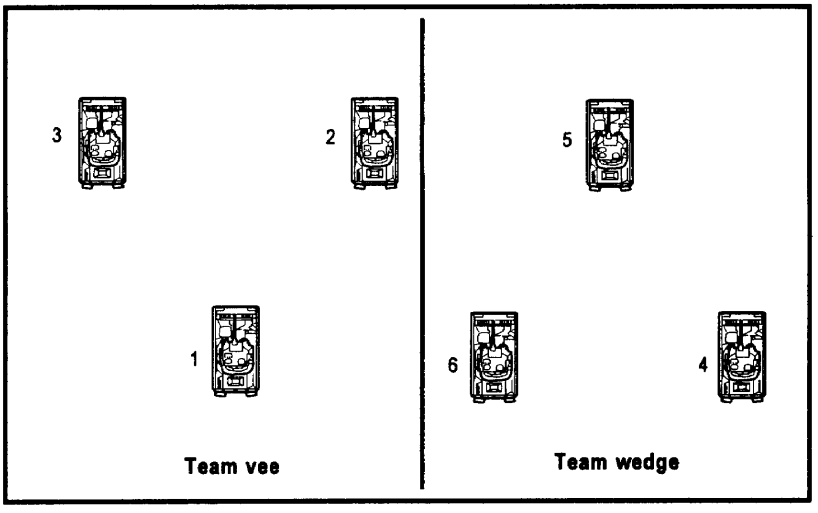


Figure 3-15. Team wedge and vee formation.

HMMWV SCOUT PLATOON

Although the HMMWV scout platoon has a greater number of vehicles, it relies on the same basic formations as the cavalry scout platoon to accomplish its mission. Unlike the CFV scout platoon, the HMMWV scout platoon should not be employed in combat missions such as hasty attack or movement to contact; therefore, it is even less likely than the CFV platoon to use platoon formations forward of the FEBA.

Line

The line formation has three variants: two teams on line; three teams on line; and four teams on line. The line formation is used when the width of the assigned sector requires maximum reconnaissance assets to be employed forward.

Vee

Used only in a three-team organization, it is ideal for the conduct of reconnaissance along one route.

Column

This formation is used when speed is essential as the platoon relocates on a designated route. This formation offers protection to the flank, but little to the front, The order of march depends greatly on METT-T considerations.

Staggered column

The staggered column formation is used for rapid movement across open terrain. It provides the platoon with all-around observation and fields of fire.

Coil

The coil formation is used for extended halts. It provides the platoon with 360-degree observation and fields of free. The coil is always executed from either the column or staggered column formation. The platoon uses the four-team organization.

The lead team assumes the 12 o'clock position (the direction of travel). The Bravo, Charlie, and Delta teams occupy the 3, 9, and 6 o'clock positions, respectively, facing in the appropriate direction. There will be 50 to 100 meters between team vehicles. Interval between teams will be 100 to 200 meters (terrain-dependent). The headquarters element occupies the center of the formation.

Figure 3-16 illustrates a version of the coil (see page 3-16). Each platoon must have its own SOP for the formation based on its METL, war plans, and most common organization; it should practice the SOP as a drill to ensure correct execution.

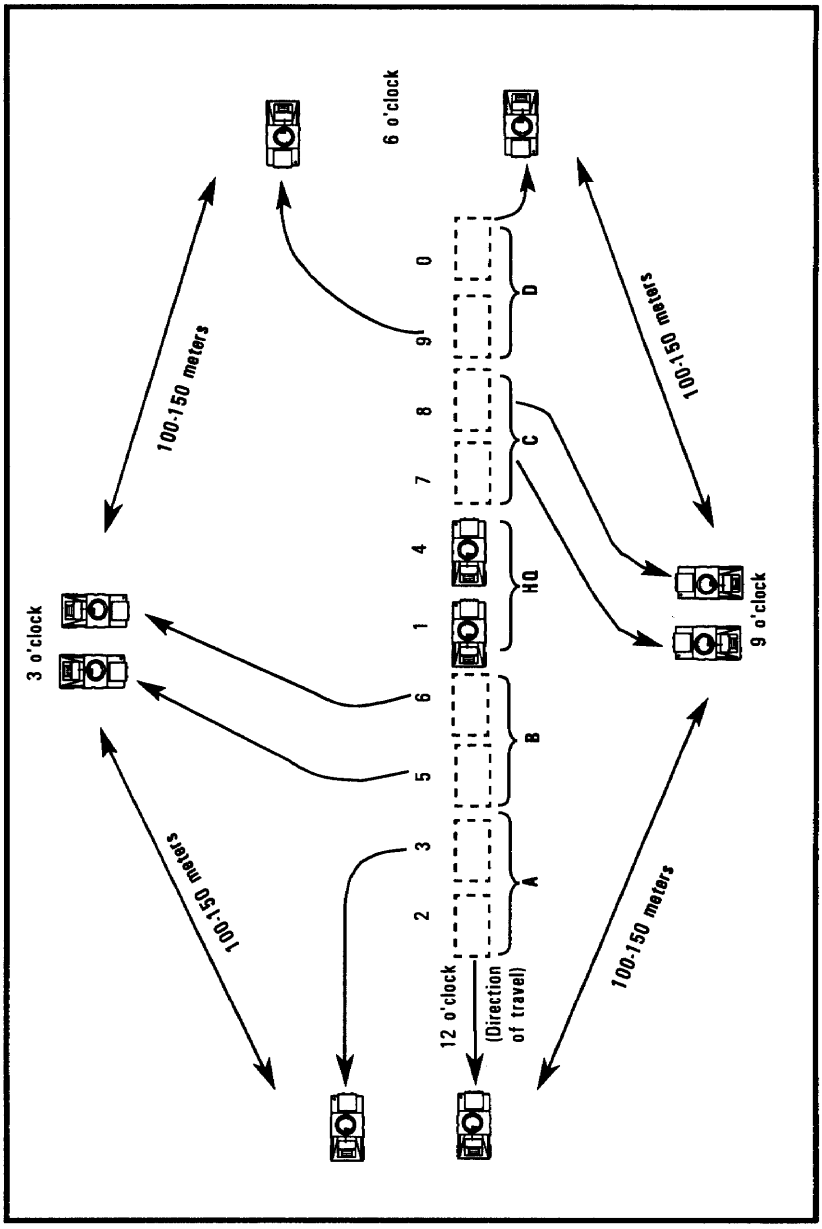


Figure 3-16. Example HMMWV platoon coil formation.

Herringbone

This formation is used for temporary halts from the march column. It provides the platoon with 360-degree observation and fields of fire.

Team Formations

The scout team is the basic maneuver element of the HMMWV scout platoon. The team frequently consists of three or more vehicles; when this occurs, the team will adopt a formation appropriate to the mission based on the team or platoon leader's METT-T analysis. The two basic formations available to the team leader are the wedge and the vee (see Figures 3-17 and 3-18). With a three-vehicle team, the wedge provides maximum security to the leading vehicle. With a four-vehicle team, it provides good security and maximum protective fires to the flanks of the bounding vehicles. In the vee formation, a three-vehicle team can accomplish movement and reconnaissance relatively quickly, but security is reduced. In a four-vehicle team, the vee formation provides maximum protective fires forward of the bounding vehicles.

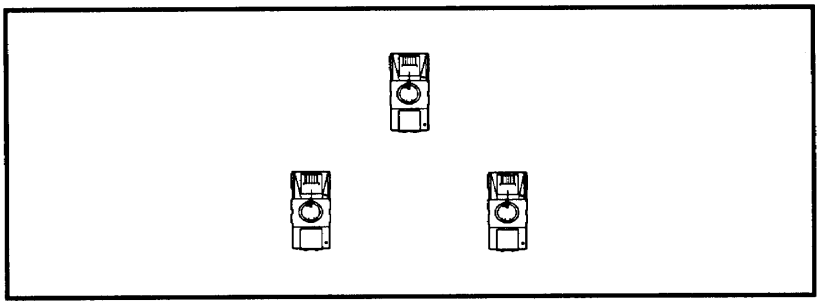


Figure 3-17. Three-vehicle team wedge formation.

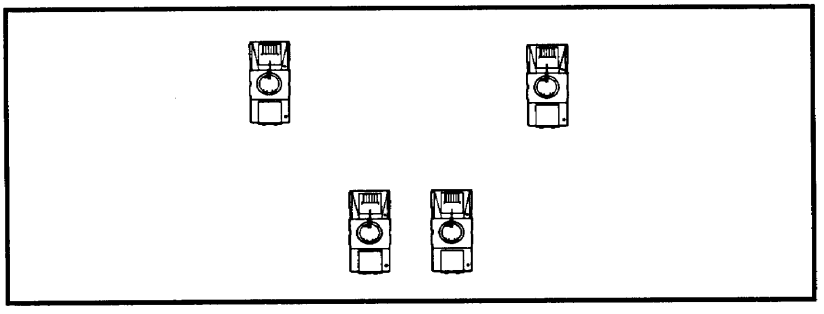


Figure 3-18. Four-vehicle team vee formation.

Section IV. MOVEMENT TECHNIQUES

Movement techniques are designed to minimize the platoon's exposure to enemy fire and to place the platoon in a good position to react to enemy contact. However, movement techniques alone are not enough. Scouts must make maximum use of all available natural cover and concealment when moving. Scouts must not become vehicle-bound. They should dismount to improve observation, prevent enemy detection, and provide security. Effective use of movement techniques should result in the scout making contact with the smallest platoon element: the dismounted scout.

Three techniques of movement are employed on the battlefield: traveling, traveling overwatch, and bounding overwatch. They provide a standard method of movement, but the scout must use common sense in employing them as he performs his missions and encounters different situations. The decision of which technique to use is based on terrain considerations and whether enemy contact is not likely (traveling), possible (traveling overmatch), or expected (bounding overmatch).

In the conduct of most tactical missions, the scout platoon will move as separate teams under the command and control of the platoon leader. Traveling overwatch and bounding overwatch, therefore, are most often executed at the team level. Traveling, which is usually employed behind the FEBA, is used equally at the team and platoon levels.

Regardless of which technique is used, the scout team leader gives the team an order explaining what each squad will do. This becomes more critical as the likelihood of enemy contact increases. If possible, the team leader should tell and show his squads—

- The enemy situation as he knows or suspects it to be.
- The next overwatch position (objective for the bounding element).
- The route of the bounding element to that position.
- What he wants the team to do after the bounding element gets to the next position.

TRAVELING

In this technique, the lead and trail elements move together as a unit. It is the fastest but least secure movement technique. It is used when speed is important and enemy contact is not likely. Movement is continuous, and interval and dispersion are maintained between squads as terrain and weather permit. **The** platoon does not intend to engage in combat, but it is dispersed to prevent destruction in case of unexpected-a; or ground attack. When using this technique, the platoon could be in a column formation or dispersed in its other formations (see Figure 3-19).

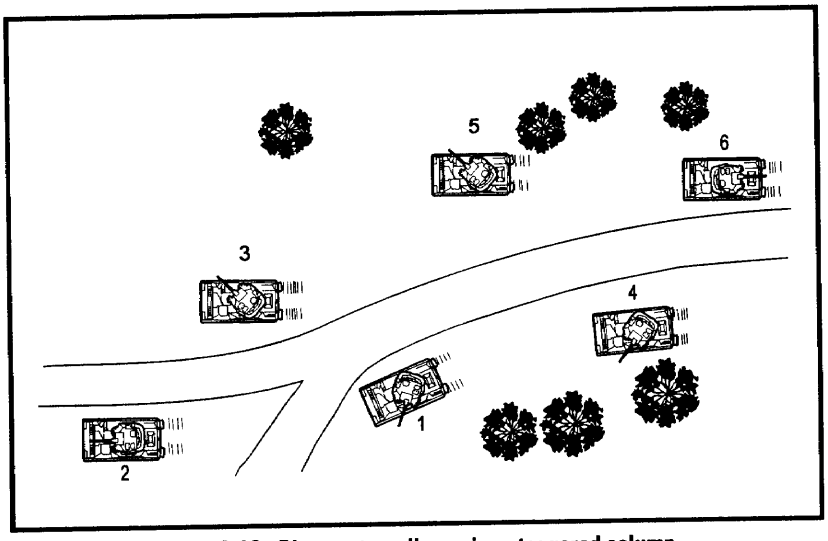


Figure 3-19. Platoon traveling using staggered column.

TRAVELING OVERWATCH

Traveling overwatch is used when contact is possible but speed is desirable (see Figure 3-20, page 3-20). The lead element moves continuously along the best covered and concealed routes for protection from possible enemy observation and direct fire. The trail element moves at variable speeds, continuously overwatching. It normally maintains contact with the lead element and may stop periodically for better observation. The trail element tries to stay one terrain feature behind the lead element but close enough to provide immediate suppressive fire and to maneuver for support. It must, however, be far enough to the rear to avoid contact with the same enemy force that is engaging the lead element.

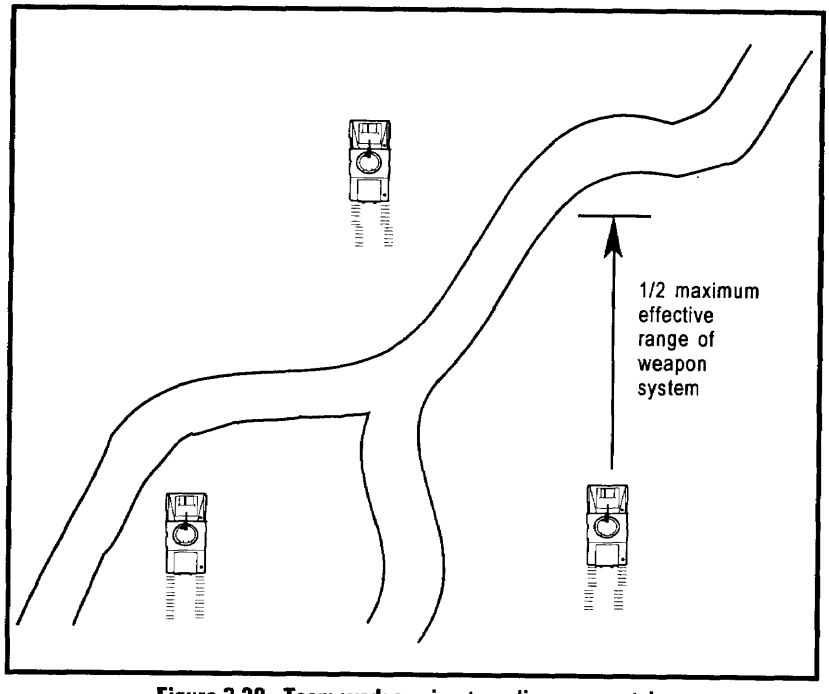


Figure 3-20. Team wedge using traveling overwatch.

BOUNDING OVERWATCH

In bounding overwatch, the trail element occupies a good covered and concealed position to overwatch the lead elements. This is the slowest but most secure movement technique. While one element moves, another is always stopped in position to overwatch the bounding element. Bounding overwatch is used when enemy contact is expected; it should always be used when time is available regardless of the likelihood of enemy contact. It provides for immediate, direct suppressive fire on an enemy force that engages the bounding element with direct fire. For example, a three-vehicle team uses the vee formation with bounding overwatch. The lead elements advance to a point (first move) where they can support the advance of the overwatch element (see Figure 3-21). On signal, the overwatch element moves forward to a position abreast of the lead elements (second move) and halts. During its move, it is overmatched by both lead elements. The lead elements then move forward, secured by overwatch. Maximum use is made of folds of the earth and concealment to mask movement from likely enemy positions.

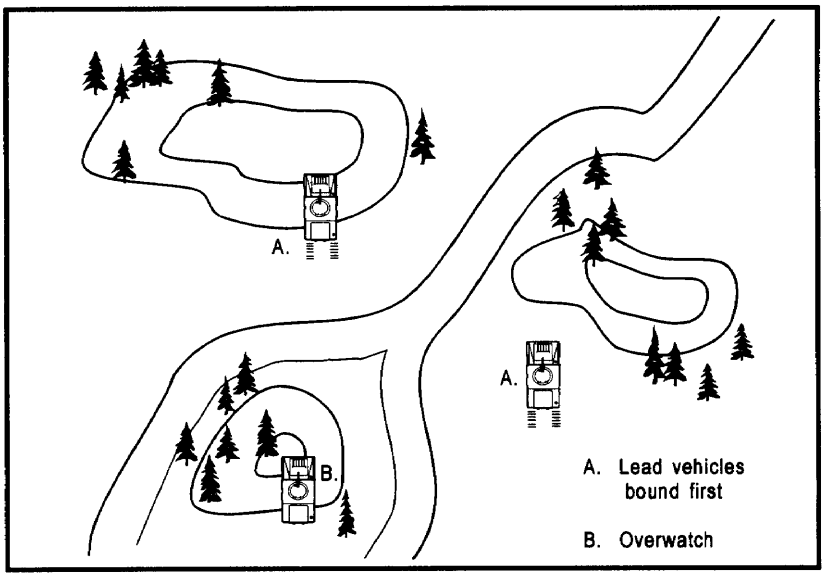


Figure 3-21. Team vee using bounding overwatch.

MOVE SET TECHNIQUE

This method of movement is simply an organized way of controlling the team when it moves in bounding overwatch. Set means that the element has arrived at its destination and has occupied a position from which it can observe to its front. As illustrated in the following paragraphs and Figures 3-22A through 3-22C, the technique allows for an absolute minimum of radio transmissions, positive control by the team leader, and maximum security within the team. Preferably, the team leader uses hand-and-am signals within the team for command and control. If the team leader must use the radio, squad leaders should keep their radios on the lowest possible power setting to reduce their signature and interference on the platoon net.

In this example, the three-vehicle team is in the vee formation and is moving through its zone. The team leader has decided to use bounding overwatch as his movement technique. He calls the lead elements and tells them to move forward to checkpoints D and T (see Figure 3-22A, page 3-22):

> "RED 2 AND RED 3—THIS IS RED 4—MOVE DELTA AND TANG0—OVER."

The lead elements respond:

"RED 4—THIS IS RED 2—WILCO—OUT."
"RED 4—THIS IS RED 3—WILCO—OUT."

The lead elements move up to checkpoints D and T and, once set in position and observing to the front, report:

"RED 4—THIS IS RED 2—SET DELTA—OVER,"
"RED 4—THIS IS RED 3—SET TANGO—OVER."

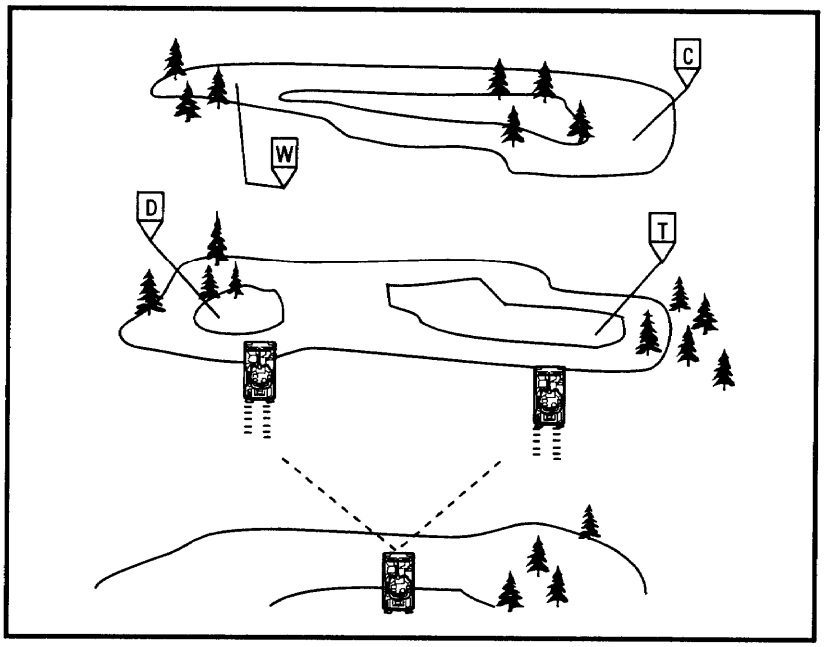


Figure 3-22A. Lead elements move to checkpoints D and T.

The team leader, who is providing overwatch, then calls the lead elements to advise them he is moving to a position on line with them between checkpoints D and T (see Figure 3-22B):

"RED 2 and 3—THIS IS RED 4—MOVING TANGO—OUT."

The overwatch element moves forward and, once set in position and observing to the front, reports:

"RED 2 and 3—THIS IS RED 4—SET TANGO-OVER."

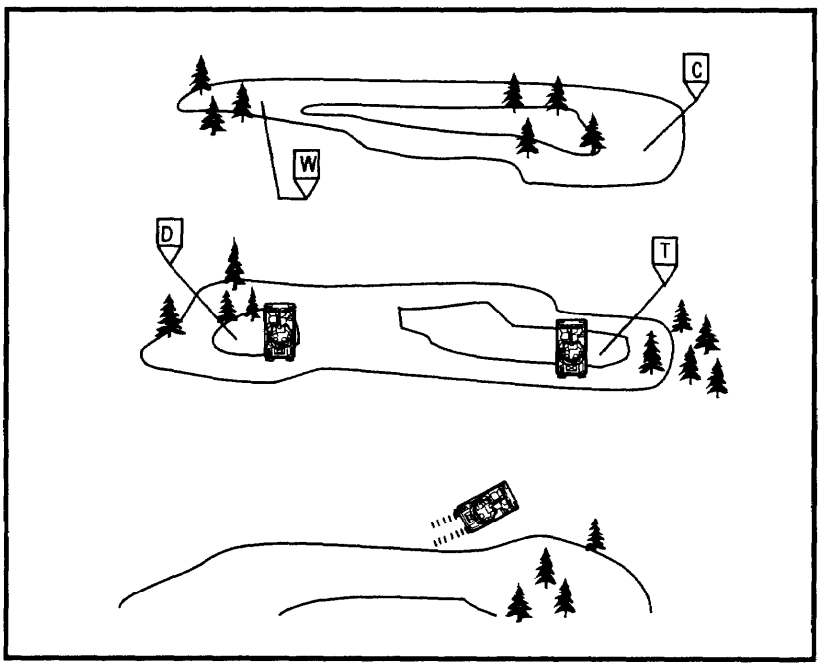


Figure 3-22B. Overwatch moves on line with lead elements.

Prepared to overwatch, the team leader can start the process again (see Figure 3-22C, page 3-24):

"RED 2 AND RED 3—THIS IS RED 4—MOVE WHISKEY AND CHARLIE-OVER."

The lead elements respond:

"RED 4—THIS IS RED 2—WILCO—OUT."
"RED 4—THIS IS RED 3—WILCO—OUT."

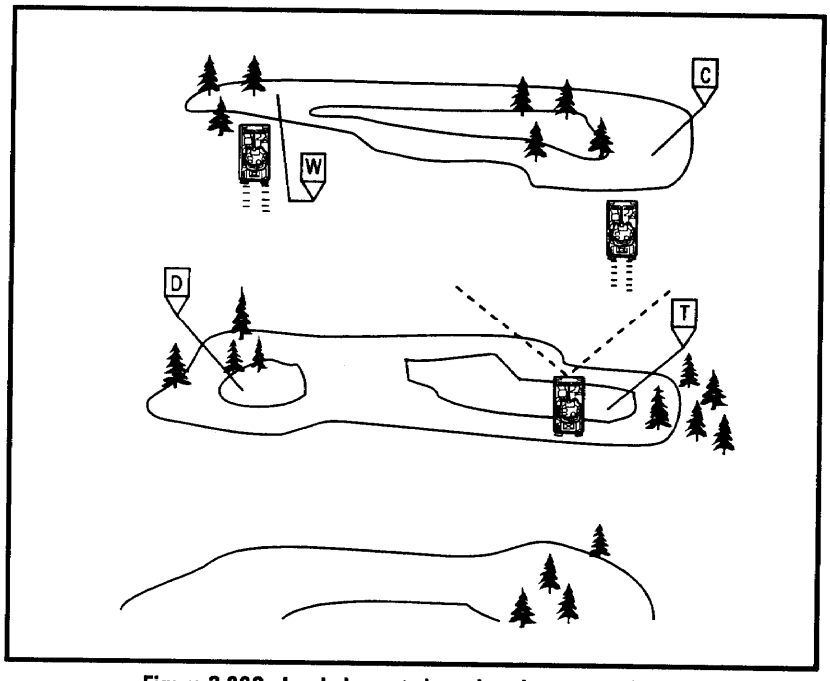


Figure 3-22C. Lead elements bound to the next position.

This method of controlling bounding overwatch within the scout team can be used regardless of the platoon organization. In this example, the team bounded with both lead elements simultaneously. Another acceptable variation would be to bound each of the two lead vehicles in succession, not bounding the second until the first had completed its bound. This is obviously slower but more secure. When terrain permits teams to be mutually supporting (such as in desert terrain) and other METT-T factors are favorable, the platoon leader can use this technique to control bounding by teams. In such a situation, the scout teams would not be operating independently, but rather would be directly controlled, and their movement coordinated, by the platoon leader.

Section V. DANGER AREAS

During the execution of reconnaissance and security missions, scouts will encounter specific types of terrain or features that expose them to enemy fire.

These areas are likely points of enemy contact due both to the vulnerability of the scout and to the cover, concealment, and observation offered to the enemy. These areas should be identified and highlighted when the platoon leader performs his map reconnaissance during troop-leading procedures. Once these areas are identified, the scout can employ specific reconnaissance methods and movement techniques to move through them quickly and with maximum security.

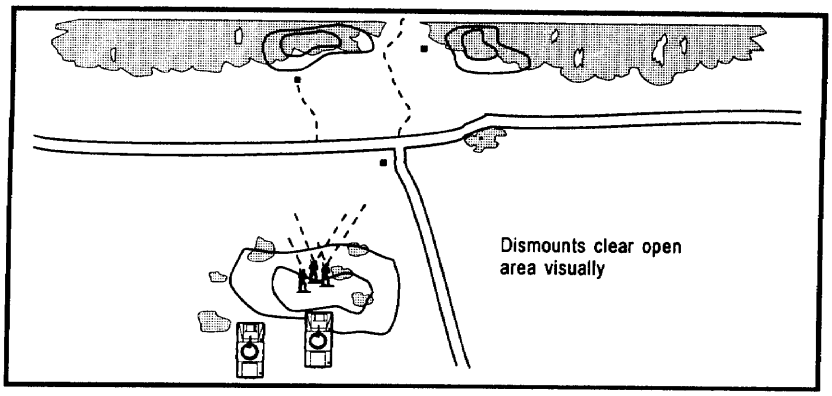
OPEN AREAS

Open areas frequently afford the scout the opportunity to observe the enemy from long ranges. Conversely, they often require that the scout be exposed to possible enemy observation and fire for long periods of movement. Therefore, the platoon must make maximum use of the terrain and employ effective observation techniques to avoid exposing itself to a well-concealed and camouflaged enemy.

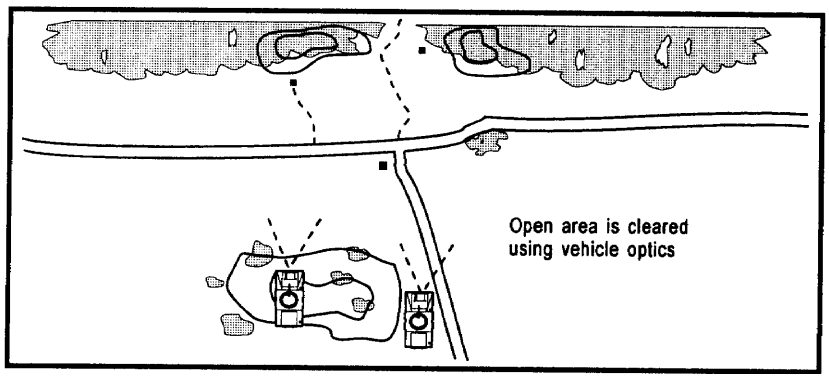
Before moving across a large open area, the scout must make a thorough visual scan of the area. This should be done both dismounted and mounted, using all available optics (see Figures 3-23A and 3-23B, page 3-26). This scan focuses not only on finding potential enemy positions, but also on locating covered and concealed routes for bounding and a covered and concealed position to move to. If time and terrain permit, dismounted scouts maybe used to move to the far side of the open area and secure it. In very large open areas, use of dismounts may not be feasible because of the distances between covered and concealed positions.

Once the area has been cleared using visual means and/for dismounts, the scout team moves across it. The scouts use bounding overwatch because of the likelihood of enemy contact. If the open area is very large, the overwatch vehicle should only remain stationary until the bounding vehicle has moved a distance equal to half the effective range of the overmatching vehicle's weapon system. When that point is reached, the overwatch vehicle must move out, even if the bounding vehicle has not yet reached a position of cover and concealment.

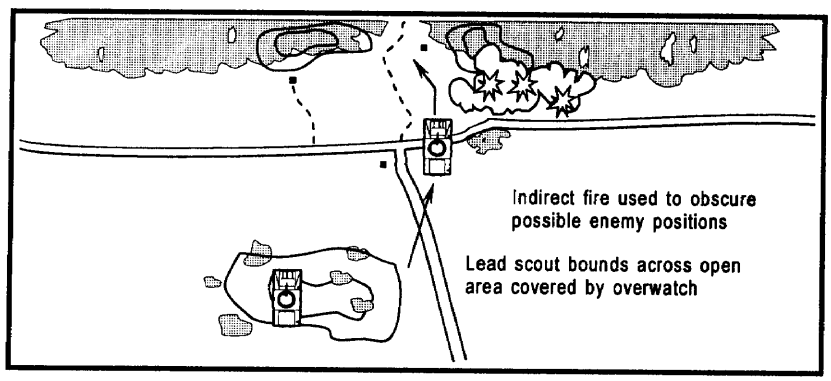
When moving across large open areas where cover and concealment are limited, the scouts should consider the use of reconnaissance by indirect or direct fire to provide additional security as they move (see Figure 3-23C, page 3-26). Additionally, indirect fire can provide concealment, with smoke either used alone or mixed with suppressive fires. However, using smoke is feasible only for limited periods because of Class V supply restrictions on supporting mortar or artillery units.



A



B



C

Figure 3-23. Crossing open areas.

WOODED AREAS

Wooded areas provide a high degree of concealment to forces that occupy them, particularly infantry. They must be approached and moved through with extreme caution. Visibility within wooded areas is very limited; therefore, reconnaissance of wooded areas is confined primarily to trafficable routes and trails through the forest. In densely wooded areas, mounted scouts are extremely vulnerable to dismounted enemy forces that can close on them undetected.

Scouts should use available terrain to scan the wooded area before entering (see Figure 3-24A, page 3-28). They should search for movement, reflections, smoke, and any irregular shapes or colors indicating camouflage. Whenever possible, the entire woodline should be reconnoitered with dismounts prior to mounted movement to the wooded area.

The scout team should move mounted to the wooded area using bounding overwatch. Once both vehicles are set inside the woodline (approximately 100 to 200 meters), engines will be shut off, dismounted security maintained, and a listening/security halt conducted (see Figure 3-24B, page 3-28). Crewmen who have CVCs will remove them. Radio speakers will be turned off. The halt will last approximately one to two minutes, with 360-degree security maintained throughout. These halts must be conducted at regular intervals while moving through the wooded area (approximately every kilometer).

During movement through a wooded area, scouts should move using traveling overwatch (see Figure 3-24C, page 3-29). This technique is appropriate because of the extremely short fields of view and the danger of dismounted ambush. Scout vehicles are most vulnerable in wooded areas when they are stopped, so halts should be kept to a minimum. Exposed scouts should maintain minimum silhouette in their vehicles because of the danger from close-in snipers and ambush. Scouts may encounter small clearings, buildings, or hills while moving through a wooded area. Each must be treated as a separate task. Small clearings may require crossing in the same manner as a large open area. Isolated buildings must be checked by dismounted scouts. Hills and curves must be approached cautiously; any dead space must be cleared by dismounted scouts.

Before leaving a wooded area, scouts must clear the open area to the front (see Figure 3-24D, page 3-29). They stop inside the woodline (ensuring they are still within the shadow line of the woods). Engines are turned off, and dismounted scouts move to the edge of the wooded area to observe. If the area is determined to be clear, vehicles are brought forward to observation positions. As the dismounts mount, the vehicles use their optics to again visually clear the open area. Once this is completed, the scouts resume movement using their chosen movement technique.

Figure 3-24. Moving through wooded areas.

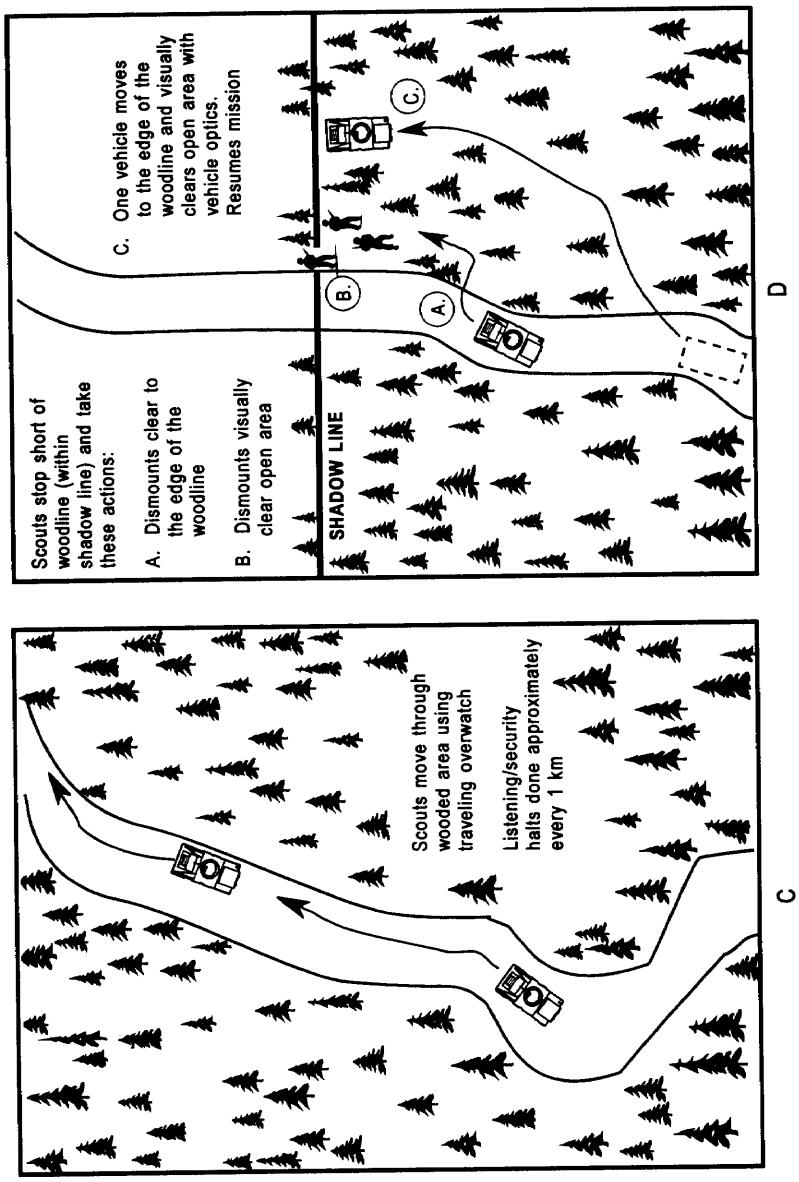


Figure 3-24. Moving through wooded areas (continued).

BUILT-UP AREAS

Towns and villages are built-up areas and are very dangerous. Troops can be garrisoned in villages, snipers can dominate approaches, and buildings and roads can be mined and booby-trapped. Cover and concealment are abundant, and it is easy for the enemy to remain undetected until he is at very close range. Built-up areas are ideal for effective ambush by small numbers of infantry. Whenever possible, scouts should reconnoiter built-up areas from a distance and then bypass them. Detailed reconnaissance of built-up areas is beyond the capability of the scout platoon.

Although scouts should bypass towns and villages whenever possible, they may sometimes be required to execute a hasty reconnaissance. They must always remember that this is a very dangerous task, especially if the enemy is occupying the built-up area in strength, and take steps to counter the dangers. Scouts should observe the town from a distance (see Figure 3-25A). They look for movement and evidence of enemy occupation, including track marks on pavement; lack of civilian activity; and sandbags, stakes, timber, intentional building damage, or any other sign of prepared fighting positions and obstacles. The scouts should attempt to observe the area from multiple vantage points. If the area appears clear, scouts move through it using traveling overwatch, ensuring that vehicles remain in mutual support and maintain 360-degree security. A listening/security halt should be conducted just inside the edge of the built-up area and periodically thereafter (see Figures 3-25B and 3-25C, pages 3-31 and 3-32, respectively).

Dismounts can be used to clear major intersections and provide security during halts. The scouts do not have the manpower or time to clear buildings, but they can be used for limited search and secure tasks as needed to support the movement of the mounted element or a particular reconnaissance mission. Vehicle-mounted crews must reduce their silhouette to a minimum when moving through a town. Once in the town, all scouts must be alert to additional signs of enemy activity, including tactical markings or signaling devices, antennas, spent shell casings and pyrotechnics, and damage to buildings and streets.

As they approach the far side of the town, the scouts should stop short and move dismounts to the edge of town (see Figure 3-25D, page 3-32). The dismounts will secure the local area and observe the open area beyond the town. When this has been completed, the vehicles will come forward and continue to observe from covered and concealed positions while the dismounted elements mount. The team is prepared to continue its mission.

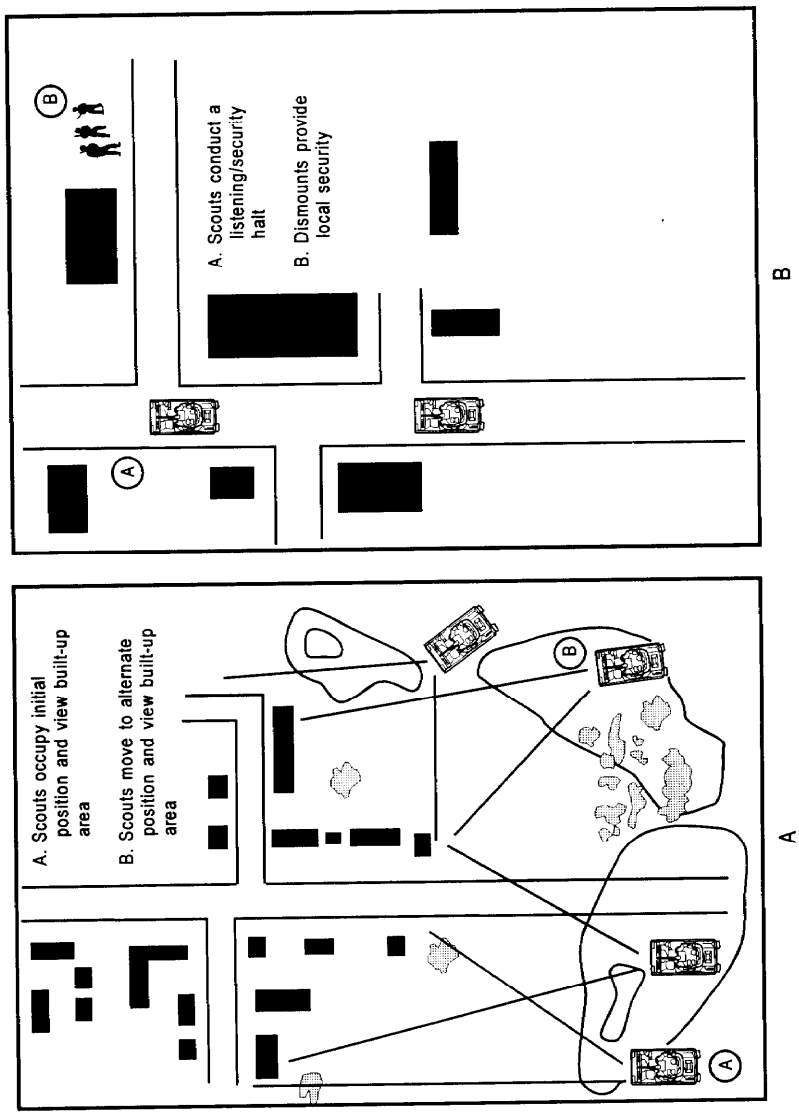


Figure 3-25. Moving through built-up areas.

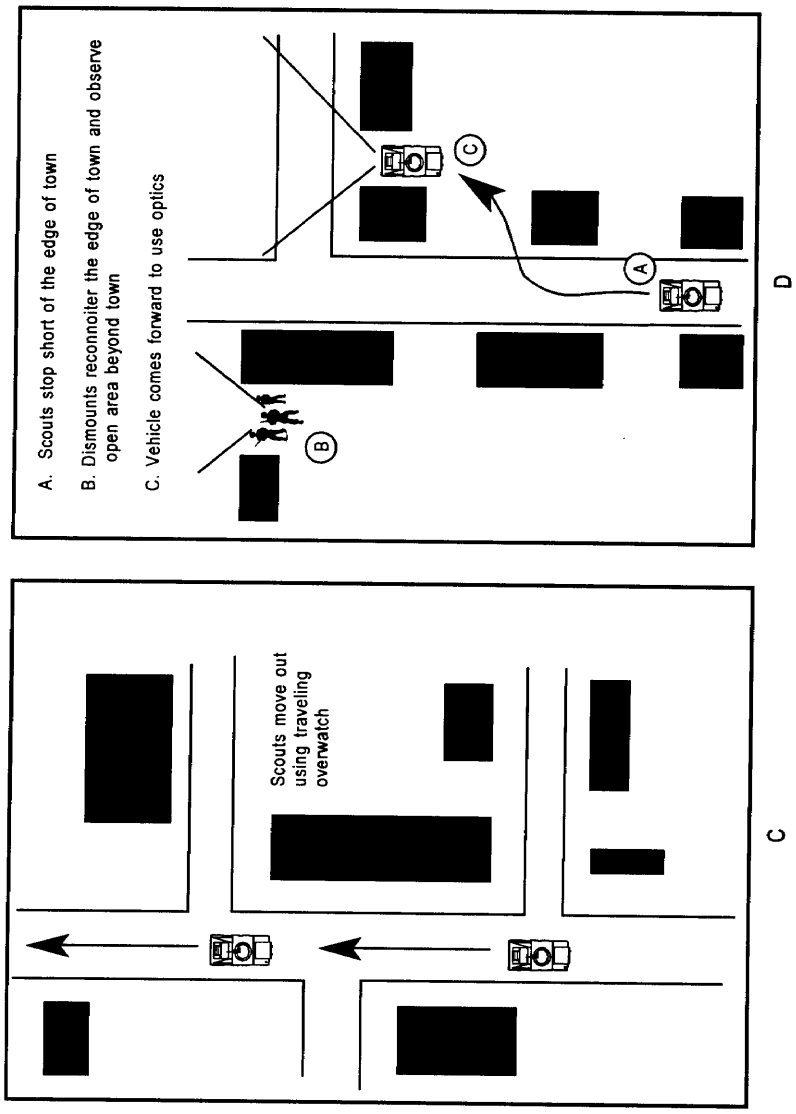


Figure 3-25. Moving through built-up areas (continued).

LATERAL OR BOUNDARY ROUTES

As scouts execute reconnaissance and security missions, they will encounter routes or mobility corridors that provide access into the area between the scouts and the friendly elements to their rear. These lateral corridors pose a security threat to both the scouts and other friendly elements. It is critical that the scouts maintain continuous surveillance of these mobility corridors to provide security against enemy forces that move into the sector after the scout platoon has moved on. This is especially critical when moving through an enemy security area where enemy forces are likely to move in response to friendly activity, when expecting a moving enemy force, or in a meeting battle situation.

To maintain surveillance, the platoon can use outposting to maximize the reconnaissance effort forward. This security technique involves the use of short-duration OPs consisting of two soldiers with equipment. A scout team should deploy an outpost when it is at risk of losing observation on a possible enemy approach route that no other team can cover. Once deployed, the outpost maintains surveillance of the avenue of approach until the rest of the scout team returns. In doing so, the outpost provides security through early warning of enemy activity that the mounted team would not have detected. (See Figure 3-26, page 3-34.)

Section VI. TARGET ACQUISITION

The target acquisition process is a series of progressive and interrelated steps by which a crew or squad acquires targets on the battlefield. It is a continuing requirement for all crew or squad members, whether conducting reconnaissance or security missions, moving or stationary, mounted or dismounted. There are six steps in the target acquisition process: crew or squad search; detection; location; identification; classification; and confirmation.

SEARCH

Crew or squad search (observation) is the act of carefully observing or watching the area of operations. Crewmembers use the unaided eye and vehicle optics to search or scan the predetermined sector to acquire (detect, locate, and identify) targets. Sectors will be assigned to crewmembers based on the scout team organization and scout platform being used (see Figure 3-27, page 3-35). Sectors must also be adjusted when the vehicle buttons up. Sectors of observation are best assigned in a unit SOP and then adjusted to mission requirements.

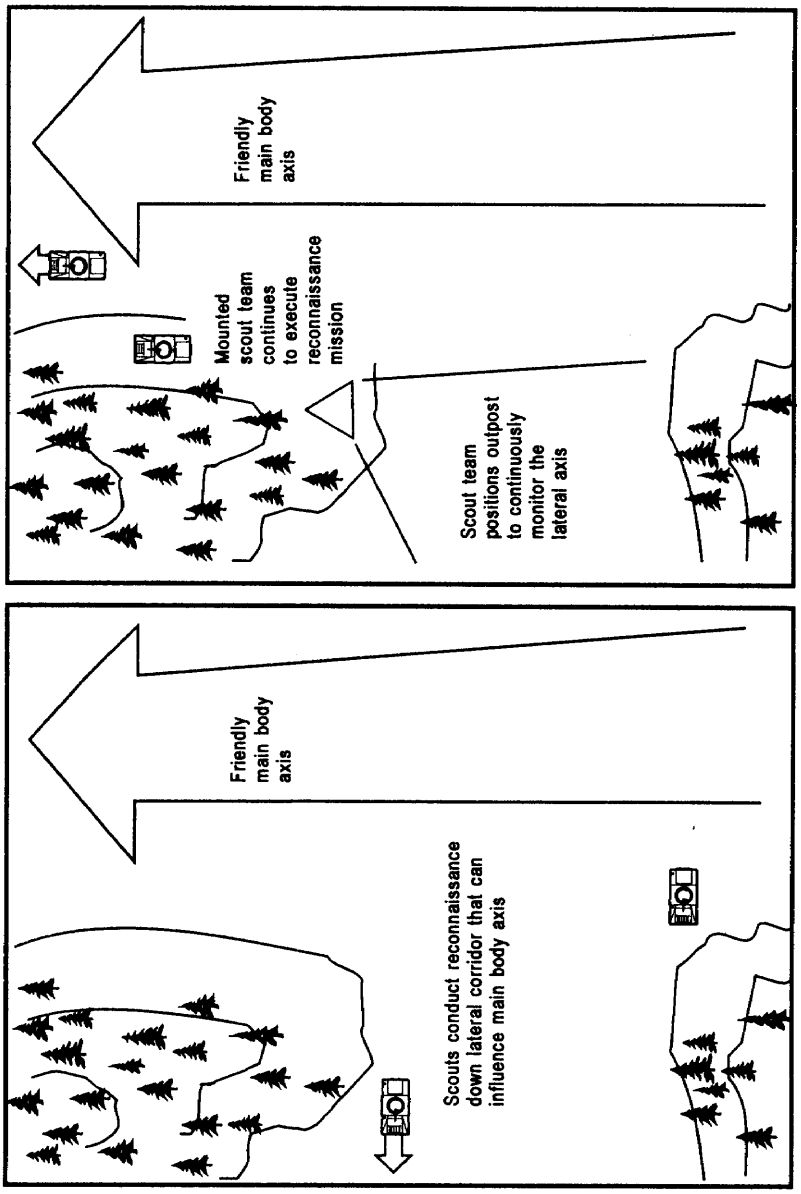


Figure 3-26. Outposting a lateral route.

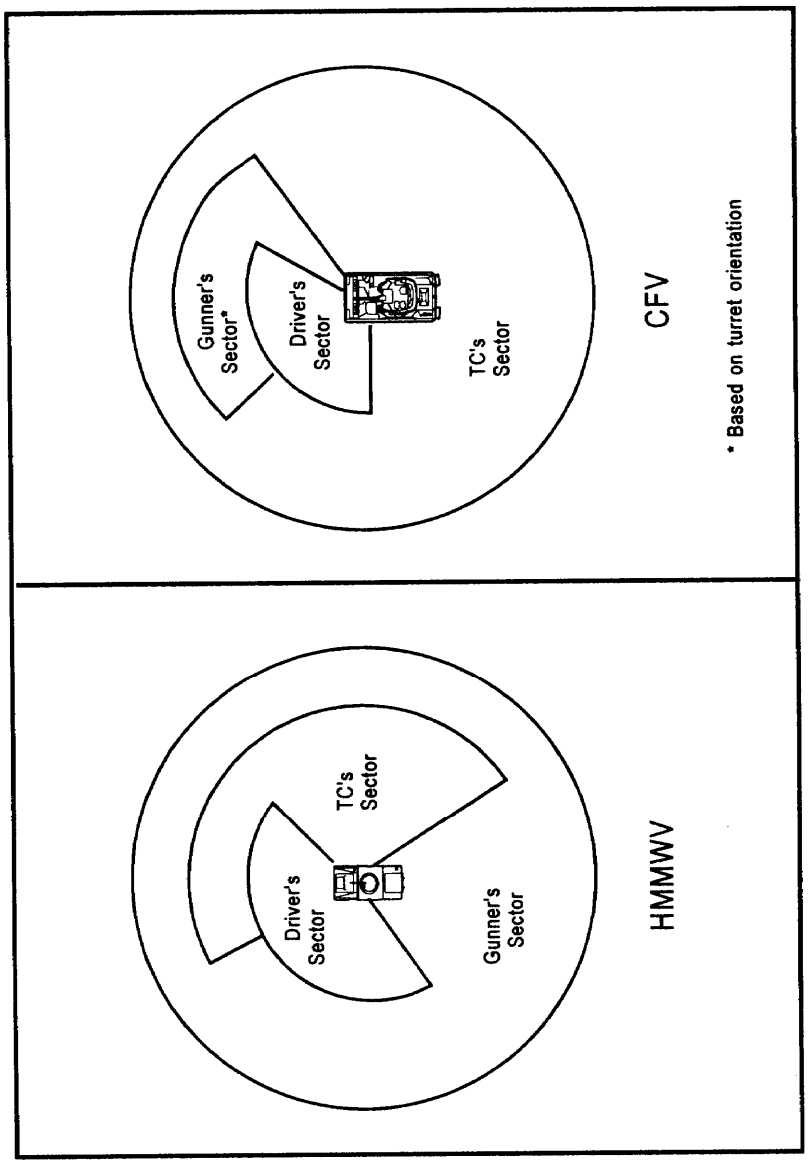


Figure 3-27. Example of assigned crew sectors of observation.

Ground Search Techniques

Crewmembers scan their areas of observation at all times to detect targets or possible target locations. There are three ground search techniques that enable crewmembers to quickly locate targets: rapid scan, slow (50-meter) scan, and detailed search. These techniques may be used by all crewmembers, using the unaided eye, binoculars, or vehicle optics, in either clear or limited visibility conditions.

Rapid scan. The rapid scan method is used to quickly detect obvious signs of enemy activity (see Figure 3-28). It 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 will use the unaided eye. Use the following steps in 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, 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.

Slow (50-meter) scan. If no obvious targets are identified in the rapid scan, crewmembers will conduct a more deliberate scan of the terrain using their optics or binoculars (see Figure 3-29, page 3-38). The slow scanning method is best used by the vehicle commander or gunner from a hull-down position or during a short halt. Use the following steps in 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.

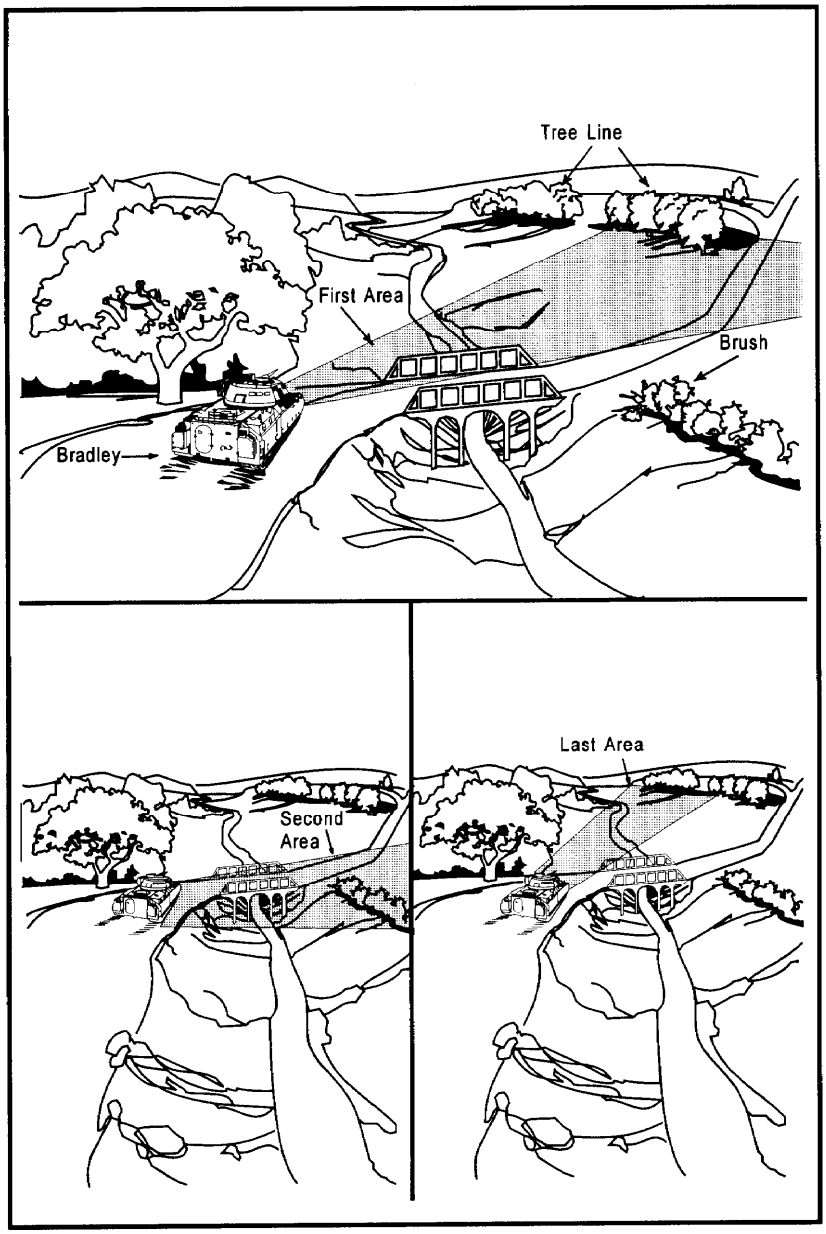


Figure 3-28. Rapid scan.

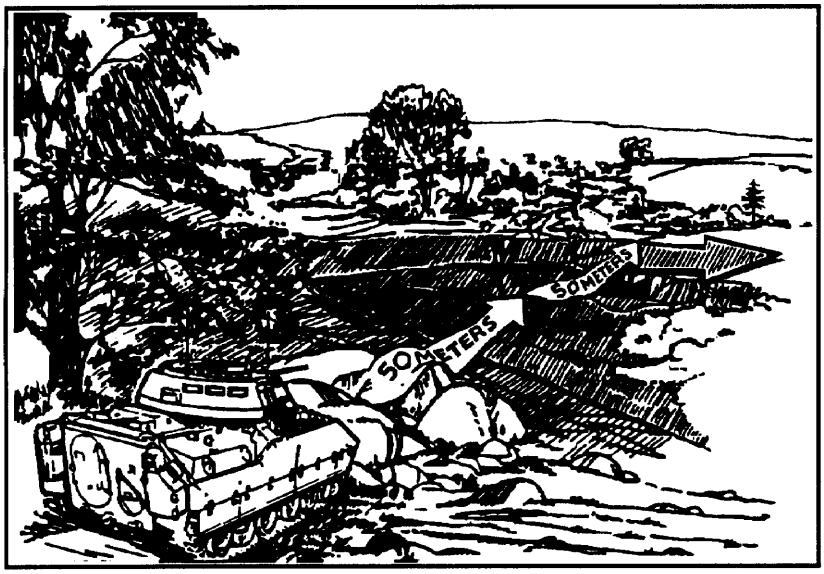


Figure 3-29. Slow (50-meter) scan.

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 3-30). This method is also used to search, in detail, small areas or locations with likely or suspected avenues of approach. Use the following steps in 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.

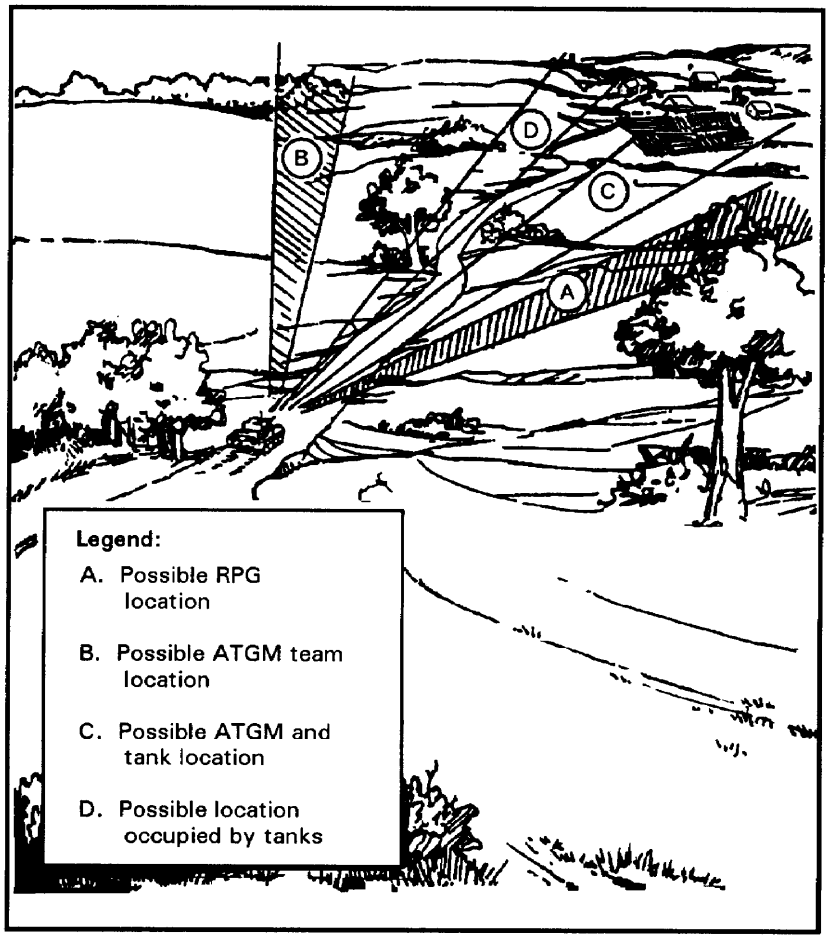


Figure 3-30. Detailed search.

Off-Center Vision Method

Day and night scanning techniques (rapid, slow, and detailed) are similar with one exception. At night, using daylight optics or the unaided eye, do not look directly at an object, but a few degrees off to the side of the target object. When scanning with off-center vision, move the eyes in short, abrupt, irregular movements. At each likely target area, pause a few seconds to attempt to detect a target or any movement. If an object is detected as a possible target, use off-center vision to observe it. While observing the object, frequent eye movement is necessary to prevent object fade-out. Cupping the hands around the eyes will also increase night vision.

Air Search Techniques

There are two methods to detect aerial targets quickly: flat terrain scan and hilly terrain techniques (see Figure 3-31). 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 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 far to near, low to high.

Crew Search Tips

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 maybe 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 his sector limits from his right to his left.
- Targets on the edge of the peripheral field of view are harder to locate.
- Operations under NBC 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, woodlines, 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.

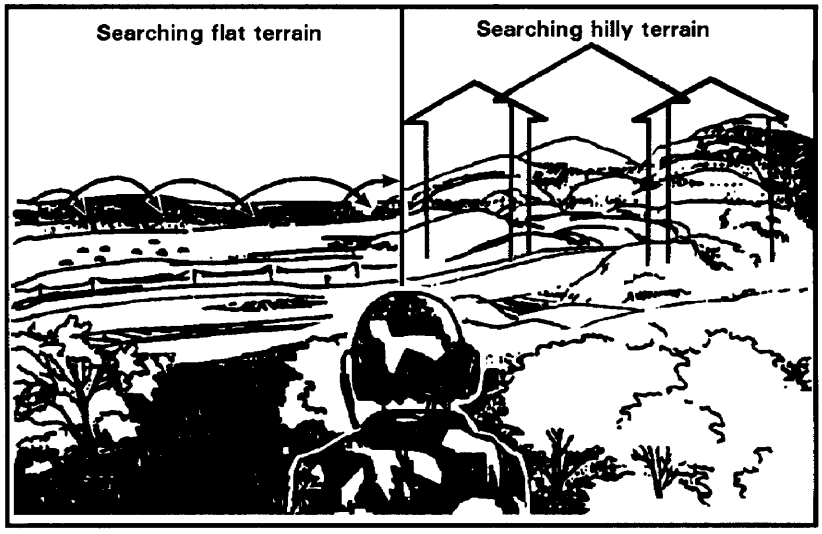


Figure 3-31. Air search techniques.

TARGET DETECTION

Target detection is the discovery of any target, including personnel, vehicles, equipment, or objects of potential military significance on the battlefield. Target detection occurs during the crew search as a direct result of observation. Detection may initially be by some other means, such as sound, smell, or radar, that ultimately results in visual observation.

TARGET LOCATION

Target location is the establishment or determination of where a potential target is on the battlefield. It occurs as a result of observation and detection during the search.

TARGET IDENTIFICATION

This is recognition of a particular target (such as personnel or a specific vehicle by type). As a minimum, identification must determine if the potential target is friendly or enemy (identify friend, foe, or neutral). Squads must know what to engage and what not to engage. Positive vehicle identification can be made only through visual means. As engagement ranges increase, camouflage techniques improve, and battlefield obscuration increases, the effectiveness of visual identification greatly diminishes. Being able to identify targets as quickly as possible after they are detected will give a scout the advantage in developing the situation.

TARGET CLASSIFICATION

To determine an appropriate method of dealing with an enemy target, the scout must evaluate the danger it represents. Correct classification is a key to avoiding fratricide. It requires making quick decisions as targets are observed and occurs virtually simultaneously with identification. It is as dependent on situational awareness as it is on recognizing vehicle types. This is particularly true in coalition warfare where allies and enemies maybe operating the same types of vehicles.

TARGET CONFIRMATION

Target conflation is the rapid verification of the initial identification and classification of the target. It is the final step in the target acquisition process.

TARGET ACQUISITION AND ACTIONS ON CONTACT

These are interrelated, mutually supporting processes. When a scout detects an enemy force or a signature indicating the possible presence of an enemy force, he must quickly complete the steps of both processes simultaneously. For example, the scout cannot send an accurate spot report, which is a subtask of actions on contact, unless he has located the target, a subtask of target acquisition. Figure 3-32 shows the relationship between target acquisition and actions on contact.

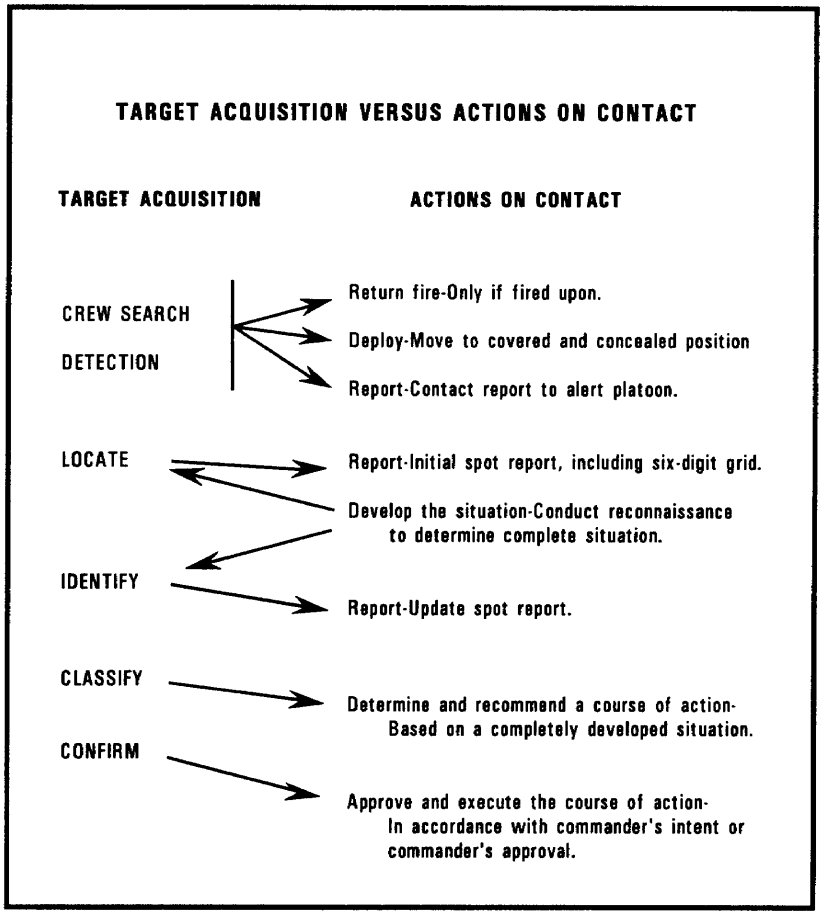


Figure 3-32. Relationship of target acquisition and actions on contact.

Section VII. ACTIONS ON CONTACT

When scouts encounter enemy forces during a reconnaissance or security mission, they must quickly execute actions on contact. Whether they remain undetected or are identified by the enemy, the scouts must first take measures to protect themselves, find out what they are up against, and then decide on a course of action. To properly execute actions on contact, the scout team and platoon must apply the fundamentals of reconnaissance and follow these guidelines:

- Remain focused on the reconnaissance objective.
- Report quickly and accurately.
- Maintain contact with the enemy.
- Retain the freedom to maneuver.
- Develop the situation rapidly.

THE FOUR STEPS OF ACTIONS ON CONTACT

The commander should specify actions on contact to the scout platoon. These specific instructions should include engagement criteria and the desired course of action, 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 course of action.

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 allows the platoon the greatest flexibility to maneuver and develop the situation. The four steps that makeup actions on contact must be thoroughly trained and rehearsed so that whenever a team or a squad encounters enemy forces, the platoon can react instinctively as a team. The steps are designed so that the scout can accomplish his mission in accordance with reconnaissance fundamentals.

Deploy and **Report**

When a scout makes contact with the enemy, he reacts according to the circumstances of the contact. There are five general categories of initial contact: visual contact (friendly elements not observed); physical contact with a superior or unknown enemy; physical contact with an inferior enemy; contact with aircraft; and contact with indirect free.

The scout squad or team that gains initial visual contact with the enemy deploys to covered terrain that affords good observation and fields of fire. If the scouts receive fire from the enemy, they return fire. The scout in contact sends a contact report (see FKSM 17-98-3) to the platoon leader and follows as soon as possible with a spot report using the SALUTE format. If the scout in contact is unable to report or cannot report quickly, another squad in the team must report. The scouts not in contact temporarily halt in covered terrain, monitor this report, and plot the situation on their maps. Once they determine that they cannot be influenced by the enemy 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 the spot report and updates.

Develop the Situation

Next the scouts concentrate on defining what they are up against. If they have not sent a spot report to this point, they initially focus on getting enough information to send one. If they have not been detected by the enemy and time is available, the scouts reconnoiter the enemy position, emphasizing stealth and dismounted reconnaissance. If the enemy is aware of their presence, the scouts use a combination of mounted and dismounted reconnaissance, as well as reconnaissance by fire. Dismounted reconnaissance will be conducted to get detailed information on enemy dispositions. Mounted reconnaissance will be used to move additional assets into the area to support the scout platoon element in contact. Indirect and direct fires are used to suppress the enemy while scouts maneuver to get information. The scouts attempt to confirm or determine in detail enemy size, composition, activity, orientation, and weapon system locations. They search for AT ditches, minefield, wire, or other obstacles that could force friendly forces into a fire sack. Scouts find the flanks of the enemy position and look for other enemy elements that could provide mutual support to the position. Once the scouts determine what they are up against, they update their spot report.

Choose a Course of Action

Once the team has developed the situation and the platoon leader has enough information to make a decision, he selects a course of action that is within the capabilities of the platoon, that allows the scouts to continue the reconnaissance as quickly as possible, and that meets the commander's concept of the operation, He considers various possible courses of action, including the five discussed in the following paragraphs.

Break contact and bypass. This course of action maybe selected when the scout 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 scouts' higher headquarters. Because breaking contact is a violation of reconnaissance fundamentals, the scout must be sure that his higher headquarters is informed of and approves this course of action.

Maintain contact and bypass. This course of action is appropriate when an enemy force, based on its current disposition, is not in a position to influence the scout's higher commander. An element (normally a squad or team) will be left to maintain contact while the rest of the platoon continues the reconnaissance mission. The element that remains in contact will maintain 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.

Maintain contact to support a hasty attack. This course of action is appropriate when the scouts discover enemy elements which the higher commander wants to destroy, but which the scouts cannot destroy, either because they do not have the combat power or because they have other tasks to perform. In this situation, the scouts maintain contact and continue to develop the situation, focusing on supporting the hasty attack by a friendly unit. The scouts conduct additional reconnaissance and monitor any changes in the enemy situation. They focus on requirements for a successful friendly attack:

- Locating covered and concealed movement routes for friendly attacking units.
- Locating attack positions.
- Establishing a contact point to link up with, brief, and guide the friendly unit as necessary.
- Designating an LD to use as a handoff line to the attacking unit.
- Preparing and coordinating fire support for the friendly attack.
- Locating and preparing to occupy base of fire positions, if required.

Because a team is left to execute this course of action, the platoon continues onto accomplish its other reconnaissance tasks. It is therefore essential that the squad or team in contact understand what needs to be accomplished, who will be executing the attack, and when the friendly unit anticipates being in position to receive handoff of the enemy. As the unit responsible for the attack moves

into position, the scouts in contact may come under the operational control of the attacking unit to ease command, control, and coordination.

Conduct a hasty attack. In most cases, the scouts cannot, or should not, mass their combat power to defeat an enemy force. If the scouts concentrate, they risk losing the capability to complete their mission and jeopardize their ability to conduct subsequent missions. If the scouts are permitted to attack an enemy, they should only attack lightly armored or unarmored reconnaissance vehicles, such as motorcycles or Soviet-style BRDMs and BTRs. Attacking more heavily armored vehicles should be avoided except in self-defense.

Establish a hasty defense. The platoon will establish a hasty defense if it cannot bypass the enemy, all the teams are fixed or suppressed, and the platoon no longer has the ability to move forward. A hasty defense will also be used when enemy executes a hasty attack. The platoon maintains contact or fixes the enemy in place until additional combat power arrives or the platoon is ordered to move. If the scout platoon is required to conduct a hasty defense, the commander then becomes responsible for continuing to develop the situation.

Recommend/Execute a Course of Action

The platoon leader updates his spot report to the commander with any new information, and he recommends a course of action to the commander. The commander approves or disapproves the recommended course of action based on how it will affect the parent unit's mission. If the commander and the S2 have anticipated the enemy situation the scout platoon is reporting, they will have addressed the contingency in the OPORD and given guidance to their subordinates on what course of action the scout platoon should execute. In such a case, the scout platoon leader evaluates the situation, chooses a course of action consistent with his higher commander's intent or concept, and executes it. He keeps the commander informed as to what he is doing as he executes.

EXAMPLES OF ACTIONS ON CONTACT

The following examples illustrate actions on contact in a variety of tactical situations, They are organized using the four-step process.

Actions on Contact With an Unknown or Superior Force

Figure 3-33 illustrates this situation.

Deploy and report. The scouts make contact as the lead scout vehicle is engaged (see Figure 3-33A, page 3-49). The lead scout and the overwatch see

the signature of the enemy weapon system; since they do not have a clear idea of the size of the enemy, they react as if it were a superior force. Simultaneously, the lead scout returns fire, sends a contact report, pops smoke grenades, and moves to the nearest hide position. The overwatch vehicle also engages the source of enemy fire and monitors to ensure the contact report is sent (see Figure 3-33B). As soon as the lead vehicle is in a covered and concealed position, the overwatch vehicle moves to an alternate firing position and occupies a hide position.

As soon as they are in cover and concealment, both vehicles dismount elements, who quickly establish a hasty OP to regain or maintain contact with the source of enemy fire (see Figure 3-33C, page 3-50). The scout leader follows upon the contact report with an initial spot report. This initial report may not be very detailed, but it will include a description of what happened and the approximate location of the enemy.

Develop the situation. Once the scout team is set in cover and concealment and has submitted its initial reports, the team must develop the situation. The objective is to determine exactly what the enemy situation is by dismounted reconnaissance. This can best be done by getting to the enemy's flank or rear. The team leader organizes a hasty reconnaissance patrol that will attempt to move to the flank or rear of the enemy and observe the enemy position. Simultaneously, the team maintains at least one hasty OP in contact with the enemy. As the dismounted team maneuvers, it is supported by direct fire from the scout vehicles, by indirect fire called for by the OP, or by both (see Figure 3-33D, page 3-50). These fires serve to suppress the enemy, reducing his ability to observe the scouts; they also fix his attention on the last known location of the mounted element.

In the course of attempting to develop the situation, the team may determine that it is unable to determine the exact enemy situation for a number of possible reasons: suppressive fires by the enemy; obstacles; combat losses; or the size and extent of the enemy position (see Figure 3-33E, page 3-51). This information is sent to the platoon leader as soon as possible in the form of updates to the original spot report. If this occurs, the platoon leader must decide whether to commit additional platoon assets to the contact to develop it further or to adopt a course of action based on the information he has discovered to that point. If the platoon leader determines he needs more information, he must commit additional assets (scout teams) to develop the situation further (see Figure 3-33F, page 3-51).

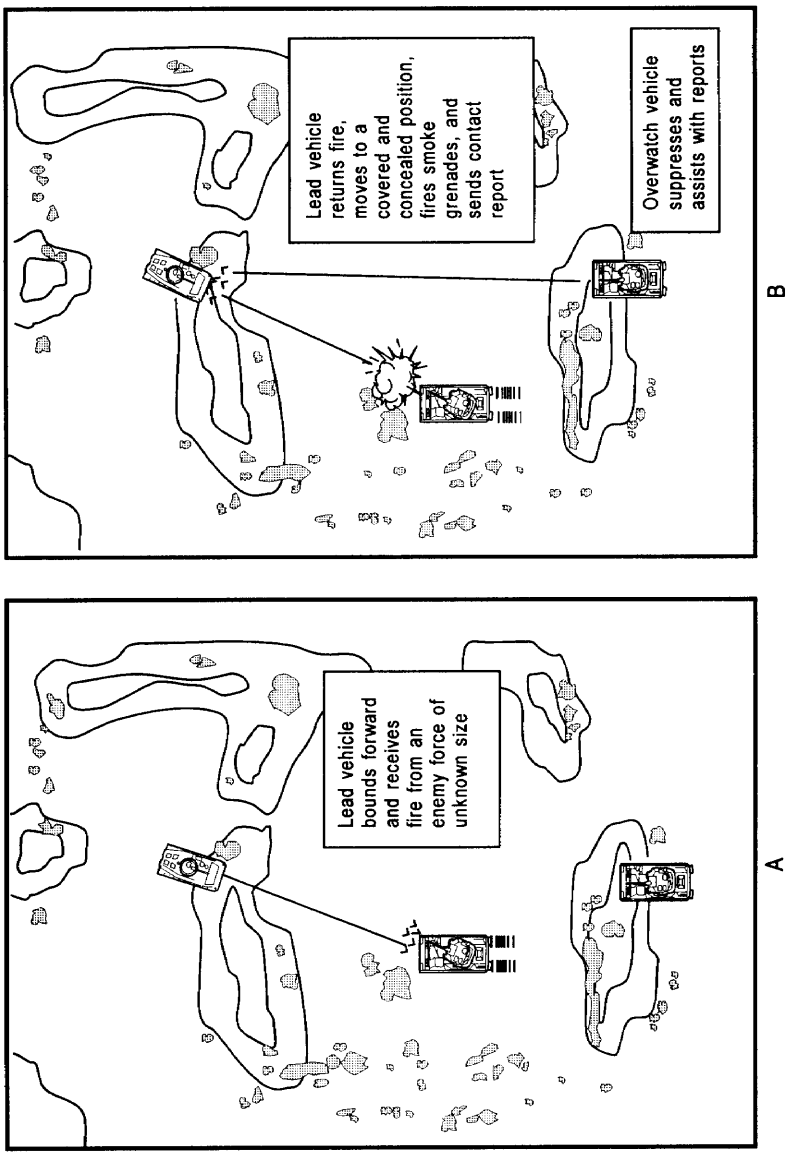


Figure 3-33. Actions on contact with an unknown or superior force.

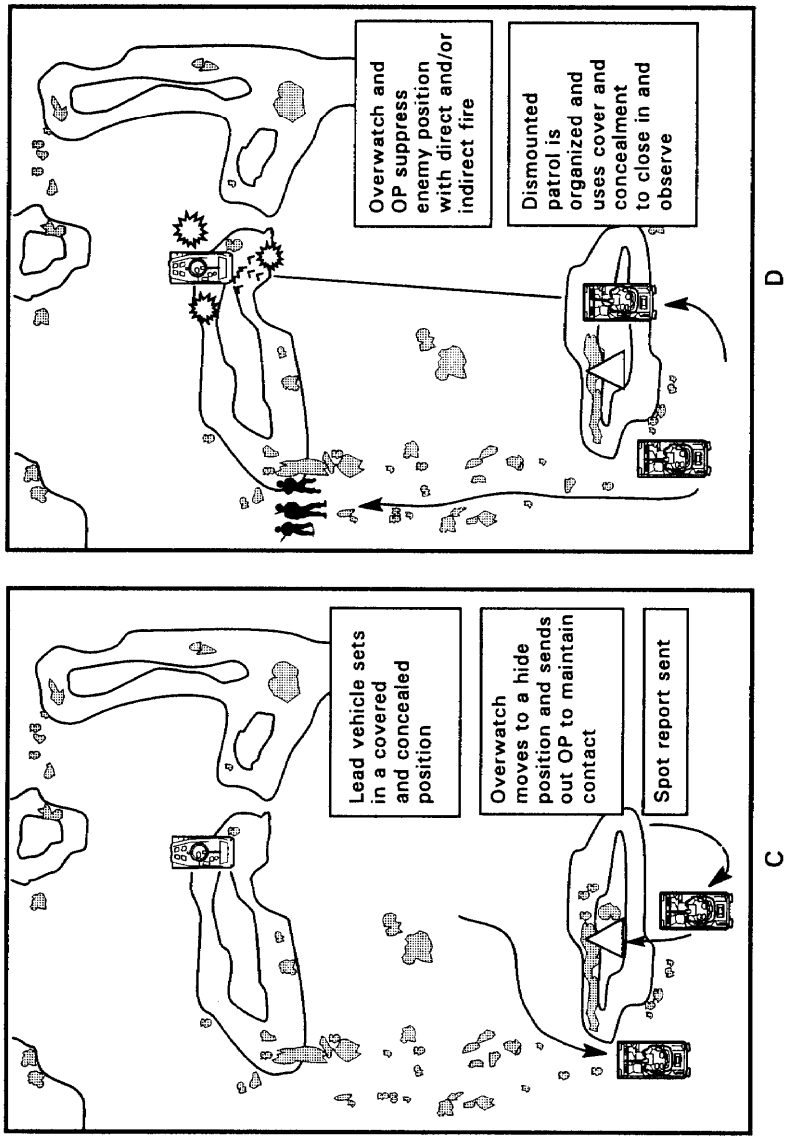


Figure 3-33. Actions on contact with an unknown or superior force (continued).

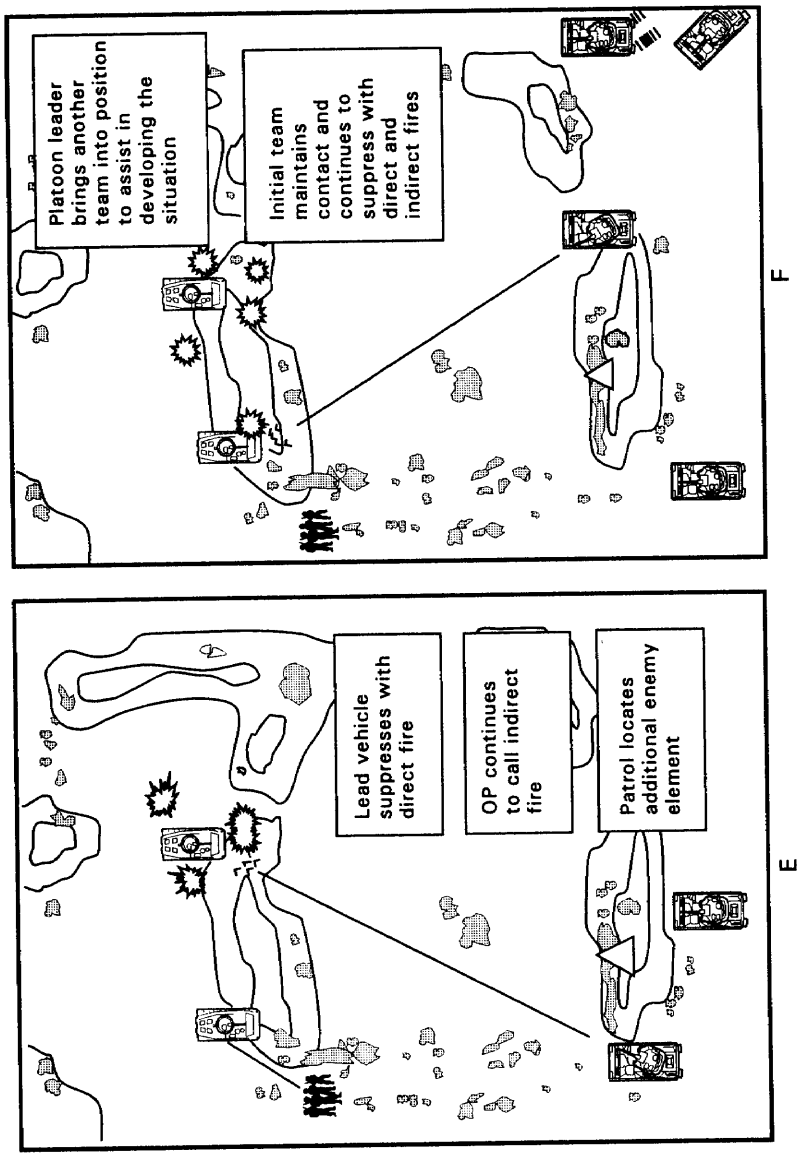


Figure 3-33. Actions on contact with an unknown or superior force (continued).

The earlier in the contact that the platoon leader can make this decision the better, but he must not commit unneeded resources to an action that will detract from other reconnaissance tasks. The platoon leader then gives orders to other teams not in contact to move to specific locations and assist in developing the situation.

As more than one team becomes involved in the situation, the platoon leader or PSG (whoever is in the best location to do so) takes control of coordinating their efforts. The second team moves mounted to a designated dismount point and organizes a dismounted patrol to develop the situation from a new direction (see Figure 3-33G). As this patrol discovers the enemy and adds additional information to the platoon leader's picture, the platoon leader may determine he has sufficient information to choose and execute a course of action or to make a recommendation to his commander.

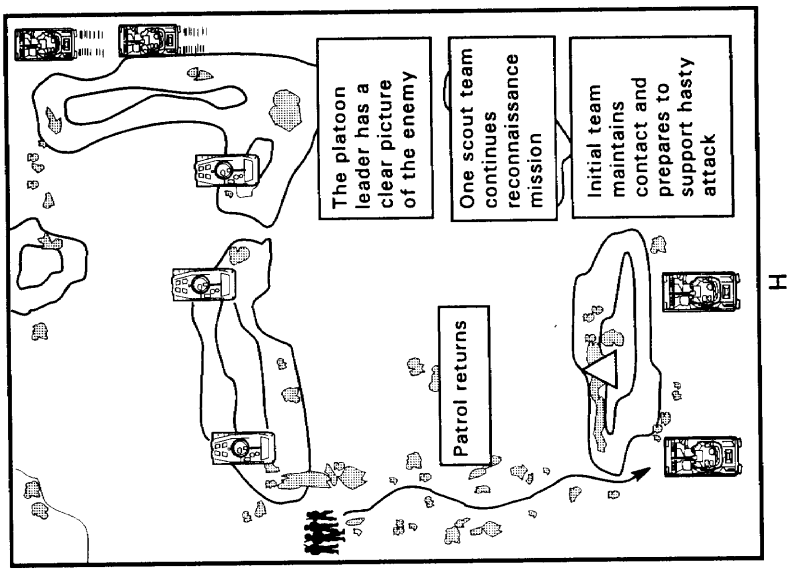
Choose a course of action. Based on the available information and his commander's intent and guidance, the platoon leader determines to leave one team in contact to support a hasty attack by a supporting tank platoon. His other teams continue their reconnaissance mission (see Figure 3-33H).

Recommend/execute a course of action. In this example, because the commander had specifically addressed the contingency the scout platoon has developed, the platoon leader neither makes a recommendation to his commander nor asks his permission to execute the course of action. Instead, the platoon leader immediately issues orders to his teams and contacts the tank platoon leader to initiate coordination for handover of the enemy and support of the tank platoon's hasty attack. He keeps the commander informed of his actions.

Actions On Contact With An Inferior Force

Figure 3-34 illustrates this situation.

Deploy and report. The lead scout identifies an enemy element, which consists of one reconnaissance vehicle (see Figure 3-34A, page 3-54). In the commander's order, he was tasked to destroy all wheeled reconnaissance patrols. He sends a contact report and quickly engages and destroys the enemy vehicle (see Figure 3-34B, page 3-54). After the engagement is complete, the scout sends an initial spot report.



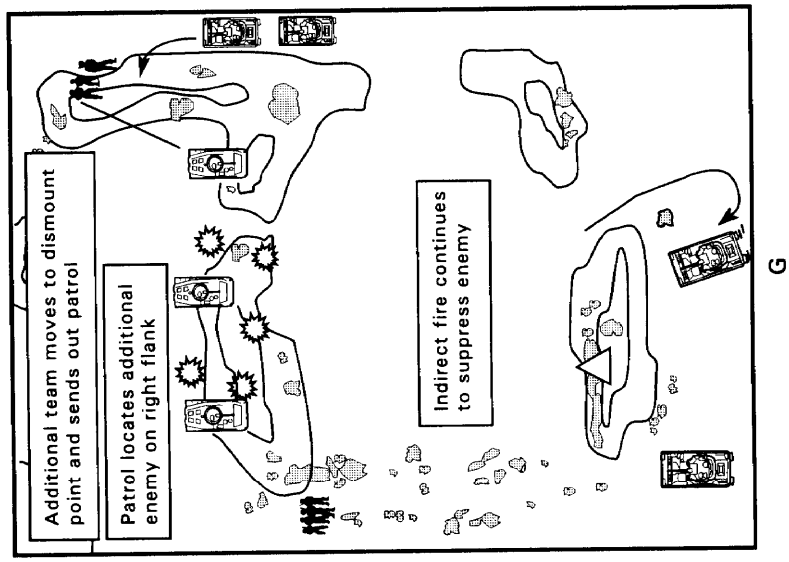


Figure 3-33. Actions on contact with an unknown or superior force (continued).

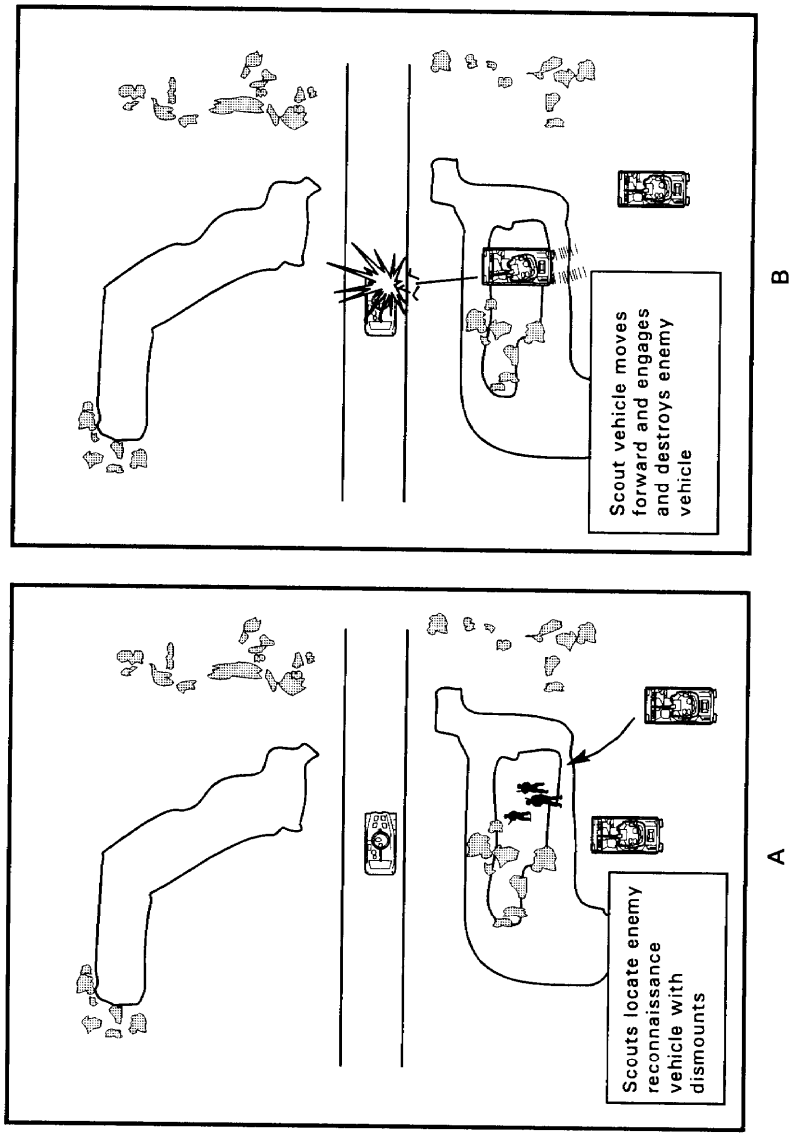


Figure 3-34. Actions on contact with an inferior force .

Develop the situation. The lead vehicle and the overwatch both occupy positions overmatching the destroyed vehicle. They observe for any other sign of enemy activity or any enemy response to the destruction of the vehicle. The lead vehicle then bounds past the destroyed vehicle and establishes far-side security (see Figure 3-34C, page 3-56). Once far-side security is established, a dismounted element moves to the destroyed vehicle and conducts a thorough search for items of intelligence value, prisoners, and any other information that can be gained from a close examination of the enemy (see Figure 3-34D, page 3-56). Once this is complete, an updated report is sent to higher headquarters.

Choose a course of action. When engagement is complete and the enemy is destroyed, the course of action is obvious: the team will continue its mission.

Recommend/execute a course of action. Since the destruction of the enemy is in accordance with the commander's order, the scout simply informs higher headquarters that he is continuing the mission.

Actions on Visual Contact (Undetected Contact)

Figure 3-35 illustrates this situation.

Deploy and report. The scout team makes contact when its dismounted element identifies enemy elements (see Figure 3-35A, page 3-57). A contact report is immediately sent indicating visual contact. This informs higher headquarters that the scouts are not being engaged. This report is quickly followed by an initial spot report.

Develop the situation. Based on the initial spot report of the scout team, the platoon leader determines that he has located his primary reconnaissance objective; he orders additional teams to maneuver into the area. The other scout teams move to dismount points, set their vehicles in hide positions, and send dismounted patrols from different directions into the area of contact (see Figure 3-35B, page 3-57). The teams move to multiple vantage points using dismounted reconnaissance techniques, with the emphasis on avoiding detection. The teams send in spot reports with new information as it is determined. The platoon leader moves his element to a covered and concealed hide position where he has good communication lower and higher. From this position, he establishes local security (hasty OP) and monitors and controls the efforts of his teams.

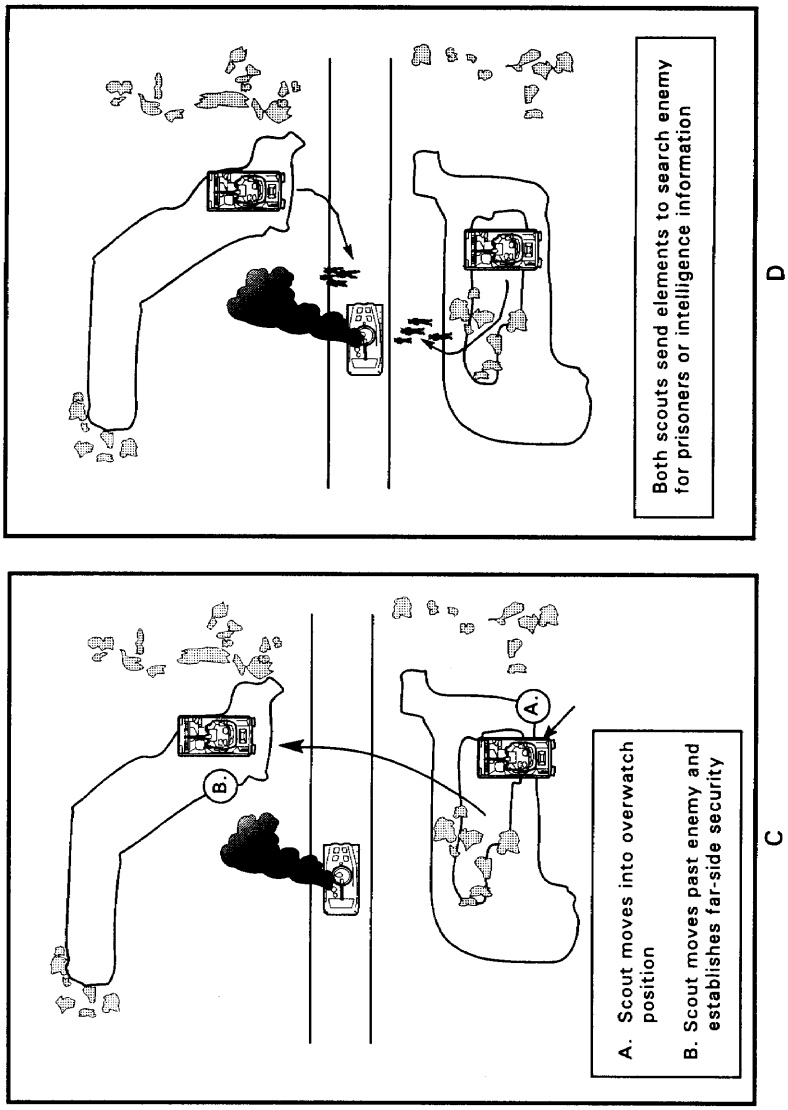


Figure 3-34. Actions on contact with an inferior force (continued).

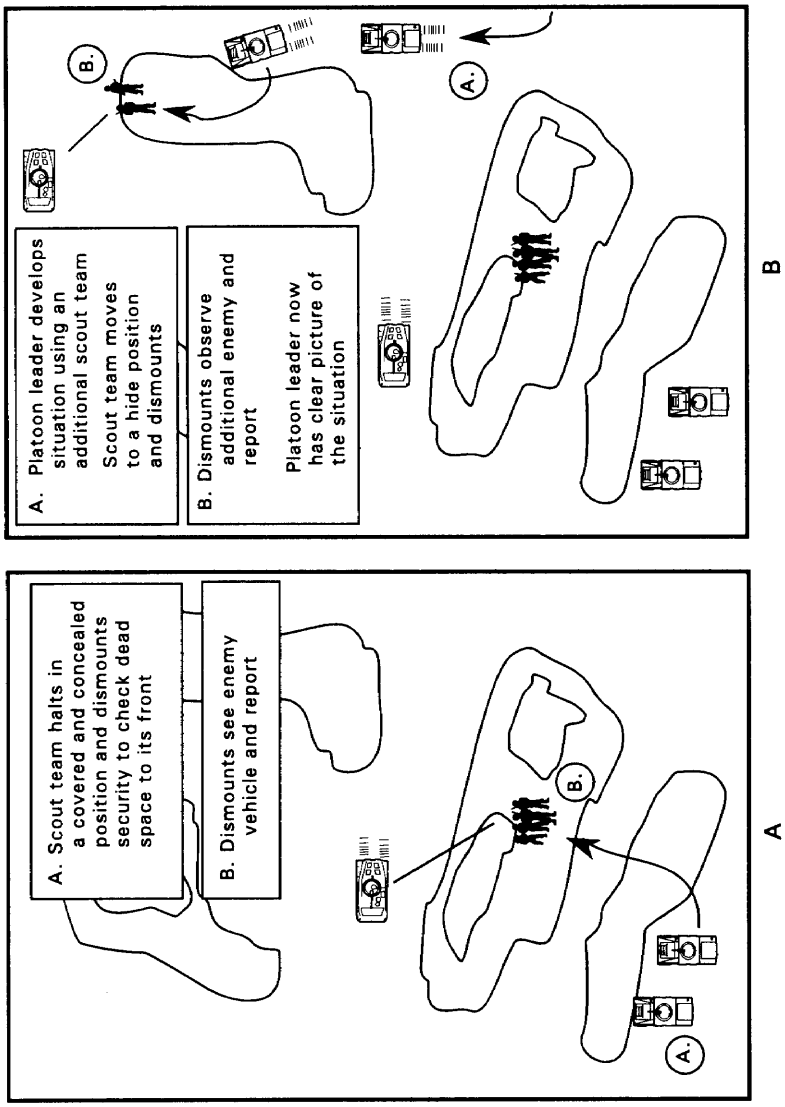


Figure 3-35. Actions on visual contact (undetected contact).

Chooses course of action. When the platoon leader receives sufficient reports to have a clear picture of the situation, he chooses to prepare to support a hasty attack. This choice is made because the platoon leader determines that the force he has located is the objective of his commander; therefore, this course of action is in accordance with his commander's intent.

Recommend/execute a course of action. The platoon leader gives appropriate orders to his subordinates and informs his commander of the enemy situation and his actions.

Other Types of Actions on Contact

Actions on contact are also initiated following contact with indirect fire and contact with enemy aircraft. The scout's actions in these situations are not significantly different from those of other types of maneuver elements.

On contact with indirect fire, the scout immediately buttons up his vehicle, mounts all dismounted personnel, and moves out of the impact area to a hide position. Movement to a hide position must be rapid but controlled. Exact location of the hide position can redetermined after the element is out of the impact area.

Once in the hide position, the scout tries to determine if the enemy fire was observed; he attempts to locate the observer. He then reports. If appropriate, given his mission objectives, the scout may attempt to destroy the enemy observer. If not, he continues his mission.

When contact is made with enemy aircraft, the scout freezes all movement and adopts a passive air defense posture. If the aircraft have definitely spotted the scout and indicate that they will engage, the scout moves quickly to a hide position while simultaneously engaging the aircraft with all available weapon systems. Once in the hide position, the scout reports. When the aircraft have departed the area, the scout will continue his mission.

CHAPTER 4

RECONNAISSANCE

Scout platoons conduct reconnaissance to provide their commander with information that has tactical value concerning terrain, the enemy, and the effects of weather within an area of operations. Scouts reconnoiter the terrain to determine movement and maneuver conditions. When they find the enemy, they determine his strengths and weaknesses. The scout platoon provides the information necessary to allow combined arms forces to maneuver against the enemy, strike him where he is most vulnerable, and apply overwhelming power to defeat him.

Reconnaissance is conducted as part of all scout missions and is performed both mounted and dismounted. Scouts conduct dismounted reconnaissance to gather detailed information, to enhance security, and to move with stealth or in rugged terrain. Mounted reconnaissance allows the scouts to maintain the fast tempo of combat operations and to make maximum use of the optics, firepower, communications, and protection of their scout vehicle. Scouts conduct mounted reconnaissance when time is critical and they need to cover a large area quickly.

Scouts must thoroughly understand how the enemy deploys his reconnaissance and security forces, as well as the sequence and timing of their entry into battle. The scouts' accurate and timely reporting of enemy locations and strength makes the difference between winning or losing the main battle. It is very important that scouts do not lose sight of their reconnaissance priorities and become involved in battles that invariably wear down reconnaissance forces.

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Section I. PURPOSE AND FUNDAMENTALS

PURPOSE

Based on their commander's intent and guidance, scouts conduct reconnaissance forward of other friendly forces to provide current, accurate information about the terrain, resources, and enemy within a specified area of operations. This provides the follow-on forces with an opportunity to maneuver freely and rapidly to their objective. Scouts keep the follow-on forces from being surprised or interrupted, and they prevent these forces from losing men and equipment along the way to the objective. Scout platoons perform three types of reconnaissance: route, zone, and area.

FUNDAMENTALS

Six fundamentals are common to all successful reconnaissance operations. All leaders should keep these fundamentals in mind during the planning and execution of reconnaissance missions.

- **Use maximum reconnaissance force forward.** In reconnaissance, every scout and every pair of eyes makes a difference. Do not keep scouts in reserve. This does not mean scouts must be on-line and oriented forward; rather, all available scouts must be employed executing reconnaissance tasks.

- **Orient on the reconnaissance objective.** The platoon's scheme of maneuver is focused toward a specific objective or set of objectives. The objective may be a terrain feature, a specific area, or an enemy force; it may be designated by an NAI, checkpoint, or objective symbol. The platoon must maintain its orientation toward the objective, regardless of what it encounters, until the mission is complete. For the battalion scout, the objective for a mission will normally be found in the commander's PIR, the R&S plan, or the commander's intent portion of the OPORD. The cavalry scout's objective will be discussed in paragraph 3 of the troop commander's OPORD. It is critical that the scout leader completely understand the mission focus before beginning his planning.

- **Report all information rapidly and accurately.** Commanders base their decisions and plans on the battlefield information that scouts find and report during reconnaissance. Information loses value over time. Scouts must report all information exactly as they see it and as fast as possible. They must never assume, distort, or exaggerate; inaccurate information is dangerous. Information that the enemy is not in a certain location is just as important as where the enemy is.

- **Retain freedom to maneuver.** Scouts must be able to maneuver on the battlefield. If the enemy fixes them, scouts must free themselves; otherwise, they can no longer accomplish their mission. Scouts must continually maintain an awareness of tactical developments. They must employ the proper tactical movement and react appropriately to unexpected situations. When contact is made, the platoon leader must seek to develop the situation at the lowest possible level, retaining the initiative, the ability to continue the mission, and the ability to maneuver his other elements.

- **Gain and maintain enemy contact.** Scouts seek visual contact with the enemy on favorable terms. They employ sound tactical movement, target acquisition methods, and appropriate actions on contact to see the enemy first and thereby retain the initiative and control of the situation. Once scouts find the enemy, they maintain contact using all available means (sensors, radar, sound, and visual) until their commander orders them to do otherwise or as required by their specific instructions.

- **Develop the situation rapidly.** Whether scouts run into an obstacle or the enemy, they must quickly determine what they are up against. If it is the enemy, the scouts determine the enemy's size, composition, and activity. They find the enemy flanks. They find any barriers or obstacles surrounding the enemy position and find out if any other enemy forces can support the position. If the scouts encounter an obstacle, they find and mark a bypass or, if appropriate, execute or assist in a breach. This all must be done quickly, with a minimum of guidance from higher. Time is the scout's most precious resource; he cannot waste it if he is to achieve mission success.

Section II. RECONNAISSANCE METHODS

Scouts employ reconnaissance methods that achieve a balance between the acceptable level of risk and the security necessary to ensure mission accomplishment. Often this is expressed as a tradeoff between speed and security. The faster the reconnaissance, the more risk the scout takes and the less detailed the reconnaissance he conducts. Scouts must use all available resources in the conduct of their mission. A scout's primary tools for reconnaissance are his five senses; his 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 his senses.

Sight. A scout looks for—

- Enemy personnel.
- Enemy vehicles and aircraft.
- Sudden or unusual movement.
- 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.
- Lights, fires, or reflections.
- Muzzle flashes.

Hearing. A scout listens for—

- Running engines.
- Track sounds.
- Voices.

- Metallic sounds.
- Gunfire sounds (by type of weapon).
- Unusual calm or silence.
- Dismounted movement through brush or woods.

Touch. A scout feels for—

- Warmth of coals.
- Freshness of tracks.
- Age of discarded food or trash.

Smell. A scout smells for—

- Cooking food.
- Vehicle exhaust.
- Burning petroleum, oils, and lubricants (POL).
- Age of discarded food or trash.
- Human waste.

To reduce their vulnerability on the battlefield, scouts use reconnaissance methods that they have trained and rehearsed in detail. They take every opportunity during peacetime and on the battlefield to hone their skills. Scouts, by the nature of their mission, cannot achieve perfect security and still accomplish their mission; however, thorough knowledge of the various reconnaissance methods and their employment, combined with an understanding of a mission's particular METT-T requirements, allows the scout leader to mix and choose the reconnaissance methods that maximize security and mission accomplishment.

This section discusses several reconnaissance methods that scouts can employ. These methods have proven effective in a variety of situations and form a foundation for how to conduct reconnaissance. Scouts must use their experience, professional judgment, and common sense to analyze a given situation and employ the appropriate method. Usually, a mission will require that these methods be applied using a variety of techniques, combinations, and variations.

MOUNTED RECONNAISSANCE

Mounted reconnaissance is one of the most frequently employed methods. It allows scouts to conduct fairly detailed reconnaissance while maintaining speed and momentum in an operation. It is used when—

- Time is limited.
- Very detailed reconnaissance is not required.
- Enemy locations are known,
- Minefield and obstacles are not expected.
- Enemy contact is not likely.

Speed and momentum are rarely necessary in a reconnaissance operation, but they are often critical to the successful execution of offensive operations that the reconnaissance mission supports (see Figure 4-1). In addition to speed, mounted reconnaissance offers scouts the advantages of their reconnaissance vehicle. These advantages depend on the specific vehicle employed, but they can include firepower, armor protection, increased navigation and communications capability, and thermal optics. The disadvantages of mounted reconnaissance include the loss of stealth due to the visual, noise, and thermal signatures of the vehicle and the loss of some detail because of restricted vision and impairment of the senses of smell and hearing. These disadvantages increase the risk to scouts as they conduct reconnaissance.

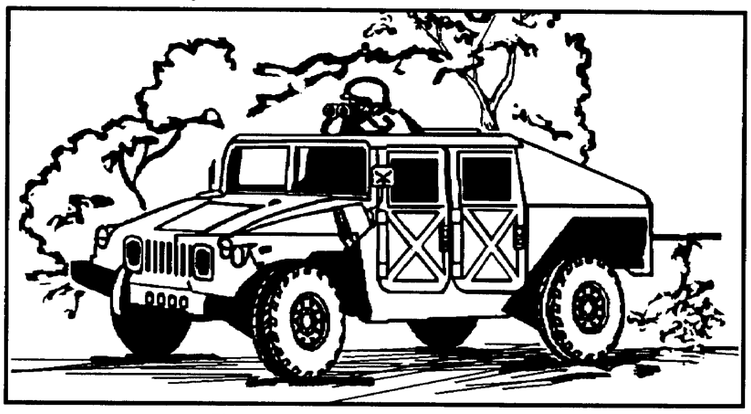


Figure 4-1. Mounted reconnaissance.

DISMOUNTED RECONNAISSANCE

Scouts conduct dismounted reconnaissance when—

- Detailed reconnaissance is required.
- Stealth is required.
- Enemy contact is expected or visual contact has been achieved.
- Vehicle movement through an area is restricted by terrain.
- Time is not limited.
- Security is a primary concern.

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 hilltops, curves, or other blind spots on the battlefield (see Figure 4-2). They also dismount to set up short- or long-duration OPs. Dismounted scouts provide security for each other as they move. Ideally, two scouts work together when operating dismounted. When only a single scout dismounts, he should never move out of supporting distance of the vehicle.

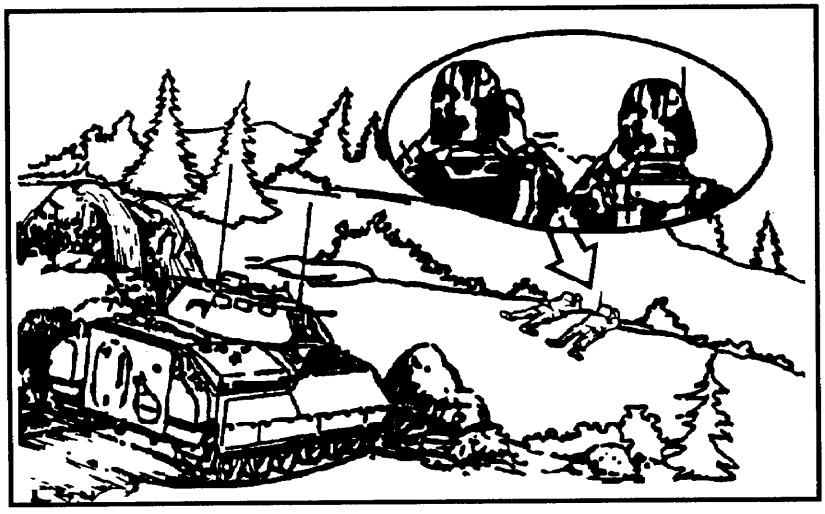


Figure 4-2. Dismounted scouts providing security forward of a cavalry fighting vehicle.

As a minimum, dismounted scouts carry—

- SOPs.
- Personal weapons.
- Communications equipment.
- SOI extracts.
- Maps.
- A compass.
- Binoculars (and night-vision devices, if necessary).
- Seasonal uniform and load-bearing equipment (LBE).

This equipment gives the scouts the capability to report information accurately and to call for and adjust indirect fires (see Appendix B for a detailed discussion of dismounted reconnaissance operations).

RECONNAISSANCE BY FIRE

In reconnaissance by fire, scouts place direct and/or indirect fire on positions where there is a reasonable suspicion of enemy occupation; the goal is to cause the enemy to disclose his presence by movement or by returning free. Scouts use reconnaissance by fire when enemy contact is expected and time is limited or when the scouts cannot maneuver to develop the situation. This method eliminates any element of surprise the scouts may have had, and it is likely to give 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 work in all cases. For example, disciplined troops in prepared positions will not react to the scouts' fires. Examples of situations in which reconnaissance by fire may be employed 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 that may or may not be occupied.

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

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

Reconnaissance by fire does not mean the indiscriminate use of direct and indirect fires at all woodlines and hilltops in the hopes of causing the enemy to react. The enemy will recognize this for what it is; he will not react to it. This also wastes valuable ammunition.

Indirect Fire

Scouts can employ reconnaissance by indirect fire (see Figure 4-3). This technique provides security for the scouts because they do not disclose their exact position and all scouts are available to observe the effects of the fire.

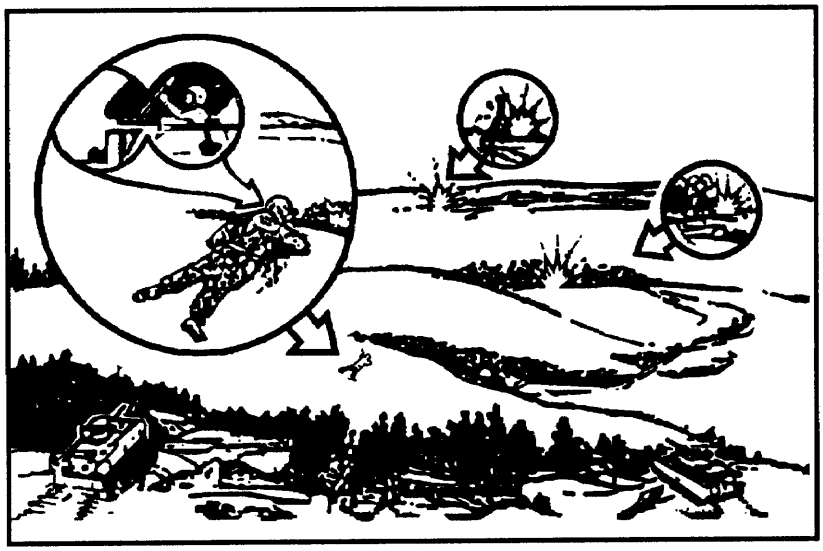


Figure 4-3. Reconnaissance by indirect fire.

Reconnaissance by indirect fire has disadvantages as well. Indirect fire requires more coordination and communication than direct fire, and 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.

Direct Fire

Scouts can use their organic weapons to place accurate direct fires on suspected enemy positions. This technique is likely to provoke a rapid enemy response, but it discloses the scouts' position. Direct fire is limited by the maximum effective range of the weapon used and by the limited supply of ammunition. Scouts must work together when employing direct fire. The scout who fires is not in the best position to observe because of obscuration and the necessity to move to a covered position after firing. Another scout, in another position, must observe for an enemy reaction. The observing scout remains undetected and can accurately report enemy information. When using direct fire, the scout platoon leader should also plan to place indirect fires on suspected positions for use as suppression if the enemy responds in strength.

AERIAL RECONNAISSANCE

Aerial reconnaissance is not normally available to ground scouts except in division cavalry organizations. When available, however, aerial reconnaissance can be employed to complement and augment ground reconnaissance; therefore, the ground scout must understand the capabilities and limitations of this reconnaissance method. Aerial reconnaissance, as conducted by air cavalry elements, is the fastest form of reconnaissance. It is also terrain-independent and thus able to access areas that may be difficult or impossible for ground scouts to reach. Aerial reconnaissance is limited by weather conditions, the night-vision capability of the particular aircraft's sensors, fuel requirements, ADA threats, and the detail with which terrain can be observed. Generally, aerial reconnaissance will not identify stationary enemy elements smaller than platoon size or moving elements squad size or smaller, although this can vary widely depending on the terrain and equipment. (See Chapter 7 for further details on air/ground reconnaissance integration.)

AGGRESSIVE VERSUS STEALTHY RECONNAISSANCE

In executing his mission, the scout uses methods that reflect the approach to reconnaissance appropriate to the particular mission or reconnaissance element, The approach the scout takes can be generally characterized as stealthy or aggressive. A stealthy approach is time-consuming and emphasizes avoiding contact with and engagement of the enemy. To be effective, a stealthy approach must rely on dismounted reconnaissance and maximum use of covered and concealed terrain. Aggressive reconnaissance emphasizes rapid identification of the enemy's combat power. It is characterized by mounted reconnaissance and reconnaissance by fire. Because of the nature of their organizations, HMMWV scouts will tend more frequently to take a stealthy approach to reconnaissance, while CFV scouts are more likely to take an aggressive approach. Regardless of the type of scout platoon, scouts must be familiar with all the reconnaissance methods and become expert at applying them on the ground.

Section III. OBSTACLE/RESTRICTION RECONNAISSANCE

One of the high-frequency tasks associated with reconnaissance missions is location and reconnaissance of obstacles and restrictions that may affect the trafficability of a particular route or axis. Obstacles and restrictions can be either natural or man-made. Doctrine associated with the former Soviet Union emphasizes the use of man-made obstacles to reinforce natural obstacles and of restrictions to slow, impede, and canalize friendly forces. These obstacles and restrictions include the following:

- Minefields.
- Bridges.
- Log obstacles such as abatises, log cribs, stumps, and posts.
- AT ditches.
- Wire entanglements.
- Defiles.
- Persistent agent contamination.

The scout platoon's ability to deal with an obstacle or restriction is somewhat limited. It has the capability to clear small obstacles. This is generally limited to point obstacles that are not integrated into the enemy defense and are not covered by enemy fire and observation. The scouts' most important function is reconnaissance of deliberate obstacles, including supporting enemy positions and possible breaching sites. When scouts encounter obstacles that support an enemy defense, they have the capability to assist in breaching. Another important reconnaissance task for scouts is to locate bypasses around obstacles and restrictions.

THE STEPS OF OBSTACLE/RESTRICTION RECONNAISSANCE

How the scout approaches obstacle and restriction reconnaissance is highly dependent on METT-T factors. In general, however, the process of conducting this type of reconnaissance can be reduced to five steps that undermost METT-T conditions will ensure an organized and efficient operation:

- Detection.
- Area security and reconnaissance.
- Obstacle reconnaissance.
- Selection of a course of action.
- Recommendation/execution of a course of action.

Detection

During reconnaissance operations, scouts must locate and evaluate mines, obstacles, and man-made and natural restrictions to support the movement of their parent unit. Detection of obstacles and restrictions begins in the planning phase of an operation when the S2 conducts IPB. The scouts combine the S2's work with the reconnaissance conducted during the troop-leading process (normally a map reconnaissance only) to identify all possible obstacles and restrictions within their area of operations. The scouts then plan their reconnaissance based on the orders they receive, the S2's IPB, and their own map reconnaissance.

The scouts use visual and physical means to detect mines and obstacles while conducting their mission. They visually inspect terrain for signs of mine

emplacement and reinforcing obstacles, They also must be alert to dangerous battlefield debris such as bomblets from cluster bomb units (CBU) or dual-purpose improved conventional munitions (DPICM). Mines and other types of obstacles can be difficult for mounted scouts to detect; therefore, they must also conduct obstacle detection while dismounted. They may need to dismount their vehicles several hundred meters short of a suspected obstacle and approach the obstacle on foot to conduct their reconnaissance. Scouts look for disturbed earth, unusual or out-of-place features, surface-laid mines, tilt rods, and tripwires. They can incorporate their vehicle-mounted thermal sights into the search to help detect surface-laid mines.

Physical detection methods include detonating, probing, and using a mine detector. Detection occurs when a vehicle, soldier, or countermine system physically encounters a mine. This method does not indicate the boundaries of the obstacle. The scouts must probe or conduct additional visual inspection to define the extent of the minefield.

Area Security and Reconnaissance

Enemy forces cover their obstacles with observation and fire. Whenever scouts encounter an obstacle, they must proceed with their reconnaissance assuming the enemy can observe and engage them. The scout element that detects the obstacle or minefield establishes overwatch before it proceeds with the reconnaissance. The scouts in overwatch look for signs of enemy forces in and around the obstacle or in positions that allow observation of the obstacle. They visually search the dominant terrain on the far side of the obstacle for evidence of enemy positions or ambushes. Once they confirm the enemy situation from the near side, the scouts not in overwatch move mounted and/or dismounted to find bypasses around the obstacle. If they find a bypass, they move around the obstacle and establish OPs on the far side to provide 360-degree security of the obstacle. If the scouts are unable to find a bypass, they must conduct their reconnaissance from the near side under the security of the overwatch elements.

Obstacle Reconnaissance

Once security is established, scouts then move dismounted to the obstacle. The scouts must be cautious when reconnoitering the obstacle. Tripwires or

other wire may indicate the enemy is using booby traps or command-detonated mines to prevent friendly forces from determining—

- Location and orientation of the obstacle.
- Types of mines in the minefield or types of obstacles.
- Length and width of the obstacle area.
- Existence of enemy coverage, including enemy strength, equipment, and fire support.
- Breaching requirements.

The scout reconnoitering the obstacle prepares an obstacle report with this information and forwards the report through the platoon leader or PSG to the commander.

Choosing a Course of Action

The scout platoon leader analyzes the situation and the factors of METT-T to determine what course of action to select. He has a choice of four courses of action: bypass; hasty breach; support of a deliberate breach; or continuing the mission.

Bypass. A bypass is the preferred method when it offers a quick, easy, and tactically sound means of avoiding the obstacle. A good bypass must allow the entire force to avoid the primary obstacle without risking further exposure to enemy ambush and without diverting the force from its objective. Bypassing conserves breaching assets and maintains the momentum of the moving unit. If the platoon leader decides to bypass and his commander approves, the scouts must mark the bypass and report it to their commander. They maybe required to provide guides for the main body if the bypass is difficult to locate or visibility conditions are poor.

NOTE: In some cases, bypassing is not possible and breaching maybe the best, or only, tactical solution. These situations might include the following:

- The obstacle is integrated into a prepared defensive position and the only available bypass canalizes friendly forces into afire sack or ambush.
- The scout platoon mission specifically tasks the platoon to clear the original route for follow-on forces.

- The best available bypass route will not allow follow-on forces to maintain their desired rate of movement.
- Improving the bypass may require more time and assets than breaching the primary obstacle(s).

Hasty breach. A hasty breach of an obstacle significantly degrades the platoon's ability to maintain the momentum of either the reconnaissance or the follow-on forces. Obstacles within the scouts' hasty breaching capability include small minefield, simple wire, hasty roadblocks, craters, and similar point-type obstacles. For other types of obstacles, the scouts can support the breaching effort. See Annex E, covering operations other than war, for more information on hasty breaching.

Support of a deliberate breach. When the scouts locate a large obstacle that cannot be easily bypassed, the alternative is to support a deliberate breaching operation. Scouts perform additional reconnaissance and security tasks in support of a deliberate breach. These tasks include determining the assets and time needed to breach the obstacle and location of the best breach site. The commander may have engineers move with the scouts to determine much of this information if he expects to encounter large obstacles during an operation. The scouts' reconnaissance effort focuses on the following features:

- Trafficable routes to the breach site and routes from the far side leading to the objective.
- Fighting positions for support force weapons on the near side of the obstacle.
- Fighting positions on the far side once a foothold is established.
- Dispersed covered and concealed areas near the breach site.
- Work areas on the near side for breach assets of the breach force.
- Positions on both sides of the obstacle that could provide enemy observation of the breach site.
- Trafficability and soil conditions near the breach site.

- Width, depth, and bottom condition of wet and dry gaps.
- Bank height, slope, and soil stability of wet and dry gaps.
- Water velocity of wet gaps.
- Wind direction for obscuration of the obstacle.

Determining the information necessary for a deliberate breach can be made much easier if engineers are working closely with the scouts. If large obstacles are anticipated during a mission, the scout platoon leader should request an attached engineer squad or, as a minimum, an engineer NCO to serve as a technical advisor.

After the scouts report the necessary information to the commander, they maintain security of the obstacle and serve as guides, if necessary, for the breaching assets. The information they provide is used by the commander and his engineers to prepare the suppression, obscuration, security, and reduction (SOSR) plans for the breach. The scouts maintain security during the breaching operation and call for and adjust indirect fires, as necessary, in support of the breaching effort. The scouts must be in position to move rapidly through the obstacle once the breach is complete so they can continue their mission.

Continuing the mission. When the scouts encounter a restriction, such as a bridge or defile, they may find that the restriction is not an obstacle to movement and is not covered by enemy fire or observation. Scouts may also discover dummy minefield or obstacles that are incomplete and easily passed through. Under these conditions, the scouts' course of action maybe to report, then continue their reconnaissance mission.

Recommending/Executing a Course of Action

Once the scout has determined the course of action best suited to the situation, he either executes it or recommends it to his higher headquarters for approval. Generally, the scout will execute a particular course of action without specific approval if it is addressed in the OPORD he received from higher or in his unit SOP. In such a case, the scout will execute and then inform his commander of his actions. If the situation the scout discovered is not covered by previous guidance, he determines the best course of action and recommends it to his commander prior to execution.

EXAMPLES OF OBSTACLE/RESTRICTION RECONNAISSANCE

The following examples illustrate reconnaissance of obstacles and restrictions in two tactical situations. They are organized using the five-step process.

Reconnaissance of a Restriction (Not Covered by Fire or Observation)

Figure 4-4 illustrates this situation.

Detection. The scout team detects a bridge when a dismounted element observes it from an overwatch position (see Figure 4-4A, page 4- 18). The bridge was expected because it was also identified during the scout's map reconnaissance. The dismounted scout confirms the bridge is there and is intact.

Area reconnaissance and security. The dismounted scouts bring the team's vehicles into covered and concealed overwatch positions; the team establishes near-side security of the bridge. A dismounted patrol is organized and conducts reconnaissance up to the bridge, overmatched by the vehicles (see Figure 4-4B, page 4-18). The dismounted element reconnoiters for both mounted and dismounted bypasses. The dismounted team must determine quickly if it is possible to bypass the bridge through the use of a ford in the local area. The platoon leader monitors the situation and may direct other teams to assume the mission of locating other bridges or fords to serve as bypasses, if necessary.

If the water obstacle can be forded, the dismounts use the ford to move to the far side. On the far side, they reconnoiter the terrain that dominates the bridge. They establish far-side security on terrain where they can observe enemy approach routes to the bridge. Once the far side is secure, the team is ready to reconnoiter the bridge itself.

If the water obstacle cannot be easily forded in the local area, the scouts may have to cross on the bridge itself. Before attempting to cross, the dismounted scouts visually examine the bridge for structural damage and rigged explosives. If the bridge appears intact, the dismounted element then crosses the bridge one scout at a time. The scouts move quickly to the far side and take up covered and concealed positions that provide local security on the opposite approach to the bridge. Once the entire dismounted element is secure on the opposite side, it continues beyond the immediate bank area to secure the far side.

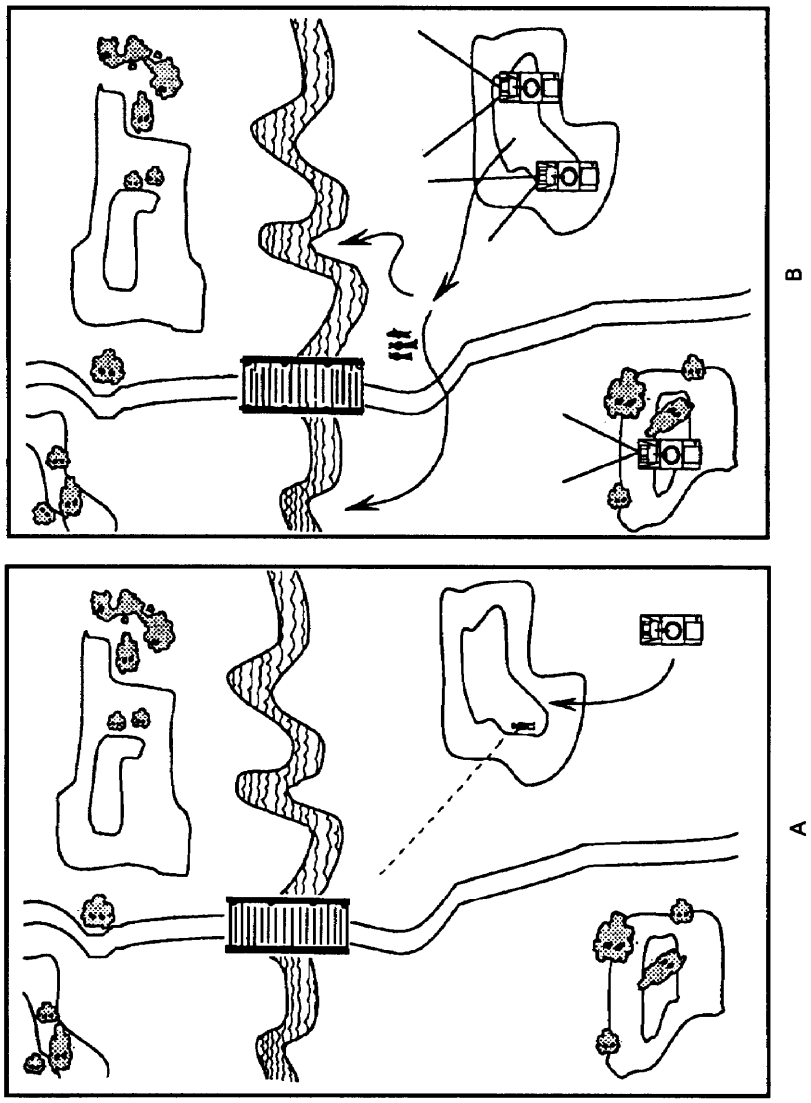


Figure 4-4. Reconnaissance of a restriction.

Obstacle reconnaissance. Once the area has been reconnoitered and secured, a dismounted element moves to the bridge under the supervision of the senior scout and does a detailed examination of the bridge (see Figure 4-4C, page 4-20). The scouts examine the bridge to—

- Ensure the bridge is cleared and free of demolitions. This requires examination of underwater pilings and the underside of the bridge for hidden explosives. In addition, the scouts should take a detailed look at the far side to find any electrical cables or wires connecting the bridge to the shore.

- Find any structural damage. The scouts look for obvious signs of enemy destruction efforts as well as for less obvious signs of structural damage, including cracks or fractures in stringers or supports and twisted or untrue alignments of stringers or supports.

- Conduct a hasty classification of the bridge. The scouts determine if it will support the largest vehicle in the unit.

The team leader consolidates all appropriate and relevant reports (for example, the bridge, ford, and bypass reports) and sends them higher.

Choosing a course of action. Based on the results of the bridge reconnaissance, the team leader determines that the restriction is secure, that he can safely move the team across it, and that he can continue his mission.

Recommending/executing a course of action. In accordance with the platoon SOP, the scout team leader now moves the remainder of his element across the bridge. The lead scout vehicle moves across the bridge, overmatched by the other vehicles (see Figure 4-4D, page 4-20). The vehicle crosses with only the driver on board. The crossing is observed by the team leader, who watches for any signs of damage or stress on the bridge.

Once the lead vehicle is across, it moves to link up with the dismounted element and assists in providing far-side security. At this point, the overwatch vehicles can cross the bridge, and the team can continue its mission. The team leader also advises his platoon leader that he is continuing his mission.

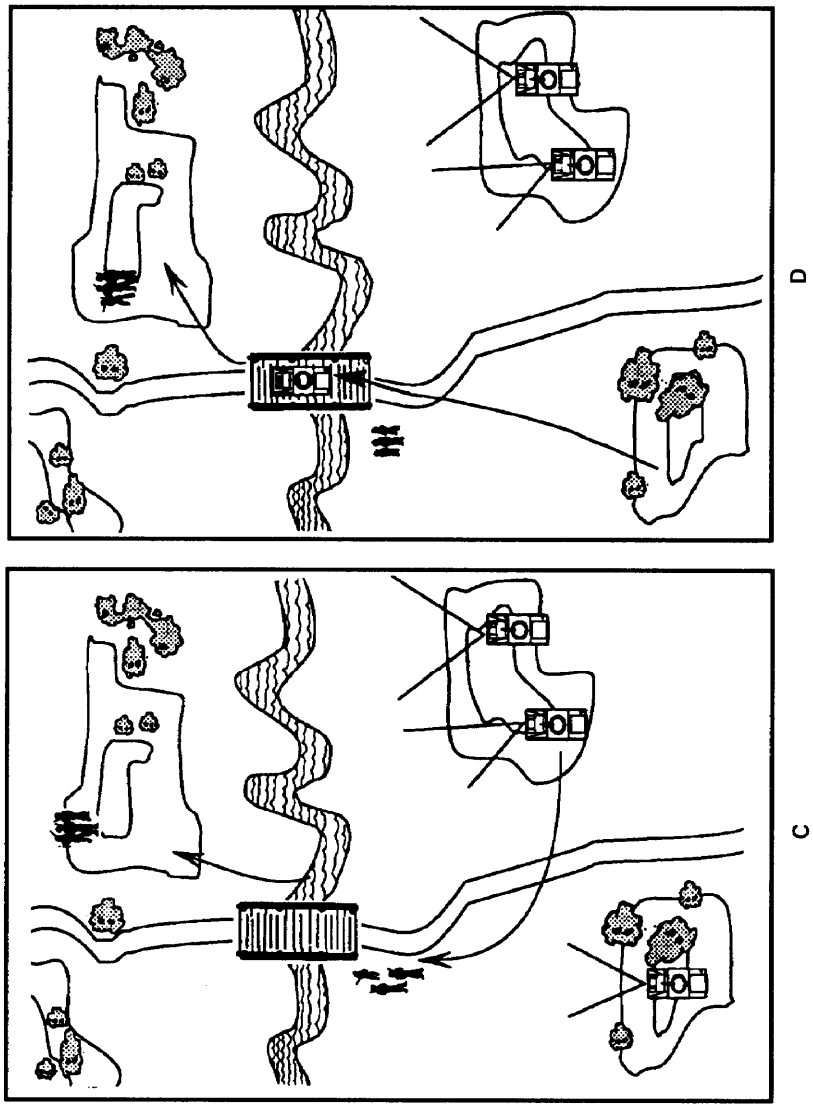


Figure 4-4. Reconnaissance of a restriction (continued).

Reconnaissance of Deliberate Obstacle (Covered by Fire)

Figure 4-5 illustrates this situation.

Detection. Dismounted scouts detect an extensive wire obstacle from a covered and concealed position. From its vantage point, the scout team cannot determine any additional details.

Area reconnaissance and security. The scout team brings its vehicles up to covered and concealed positions to overwatch the obstacle. The team then organizes a dismounted element to attempt to locate a bypass and secure the far side. Because of the size of the obstacle, the team also informs the platoon leader that it will take considerable time for the team to reconnoiter the obstacle by itself. In the process of executing the patrol, the team discovers that the left flank of the obstacle is tied into an impassable swamp (see Figure 4-5A, page 4-22).

Based on this initial evaluation, the platoon leader attempts to increase the speed of the reconnaissance by sending two additional teams to find a bypass around the right flank of the obstacle. One team moves to a dismount point and sends a patrol around the right flank. The patrol is engaged by enemy machine guns. The overwatch vehicles suppress the machine guns and then are engaged by enemy vehicles in defensive positions. The team reports that it can maintain contact with the enemy but can no longer maneuver (see Figure 4-5B, page 4-22), The remaining team finds a position where it can observe into the rear of the enemy; it reports a company-size element in defensive positions over-matching the obstacle. It also reports that there are no trafficable routes around the right flank of the enemy (see Figure 4-5C, page 4-23). At this point, the platoon leader determines that he does not have the combat power to secure the far side of the objective. He also determines that the only trafficable bypass is covered by enemy direct fires. He now must conduct a detailed reconnaissance of the obstacle before he can recommend a course of action to his commander.

Obstacle reconnaissanc. The scout team that originally detected the obstacle is in the best position to do the reconnaissance of it. It organizes a dismounted element to move to the obstacle and reconnoiter it. Because there is enough light for the enemy to visually cover the obstacle, the platoon leader coordinates indirect fire to support the patrol. As the patrol moves out, mortars lay suppressive fires on the known enemy positions, and artillery fires smoke into the area between the enemy positions and the obstacle (see Figure 4-5D, page 4-23).

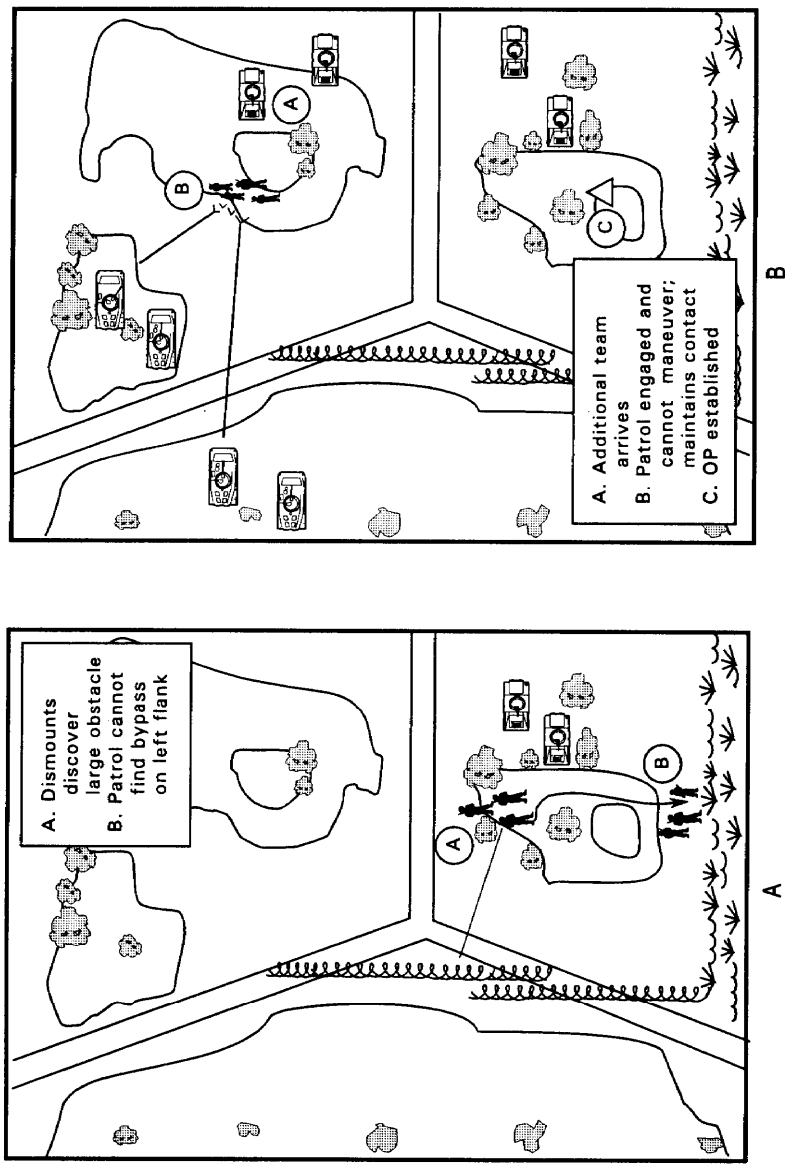


Figure 4-5. Reconnaissance of a deliberate obstacle.

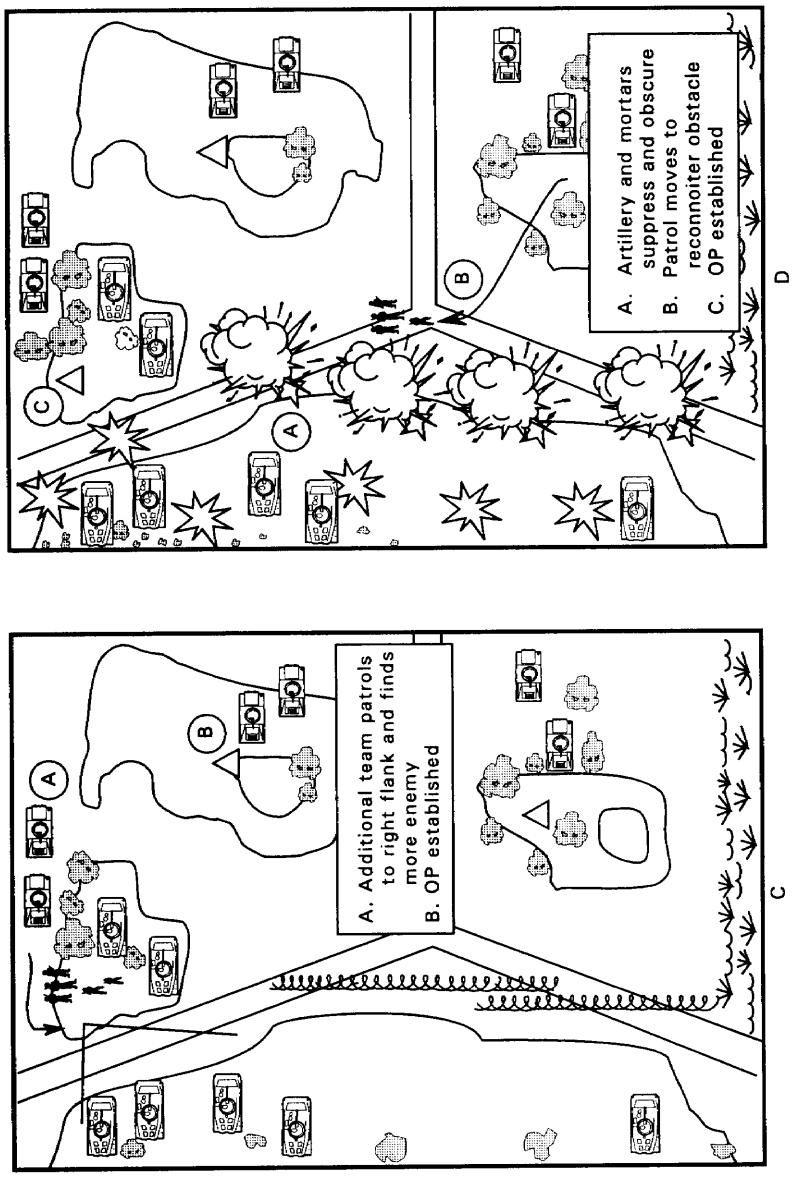


Figure 4-5. Reconnaissance of a deliberate obstacle (continued).

The scouts move by covered and concealed dismounted routes to the obstacle; through probing and visual observation, they determine that the wire obstacle is reinforced with buried mines. They are able to determine that there is a mix of AT and tank mines with antihandling devices. The scouts also determine that there is a 30-meter belt on the near side of the wire and another on the far side. Once this information is acquired, the scouts move laterally along the obstacle to determine its length and find out if its composition is uniform. They look for the most favorable breaching location (see Figure 4-5E).

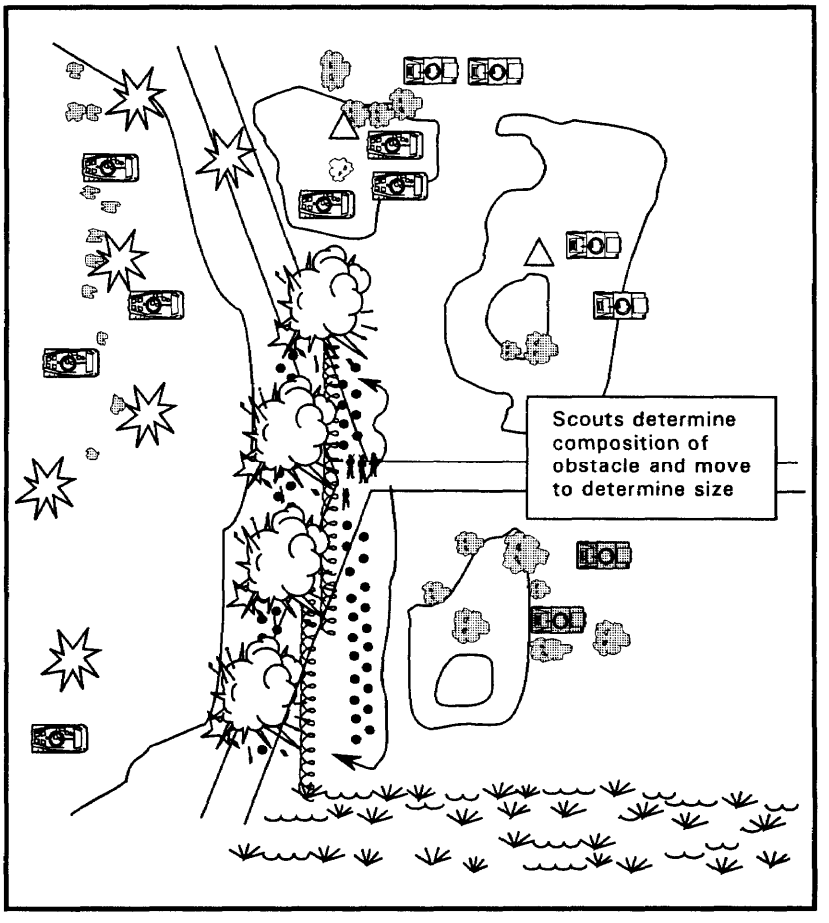


Figure 4-5E. Reconnaissance of a deliberate obstacle (continued).

Choosing a course of action. The platoon leader evaluates the situation and determines that he cannot bypass the obstacle and does not have the capability to breach it. He decides to recommend a deliberate breach.

Recommending/executing a course of action. The platoon leader recommends to his commander that the platoon prepare to support a deliberate breach. With higher approval, he orders the platoon to continue the reconnaissance and security tasks necessary to support a deliberate breach operation. He also begins coordinating with, and passing information to, the element responsible for conducting the deliberate breach operation (see Figure 4-5F).

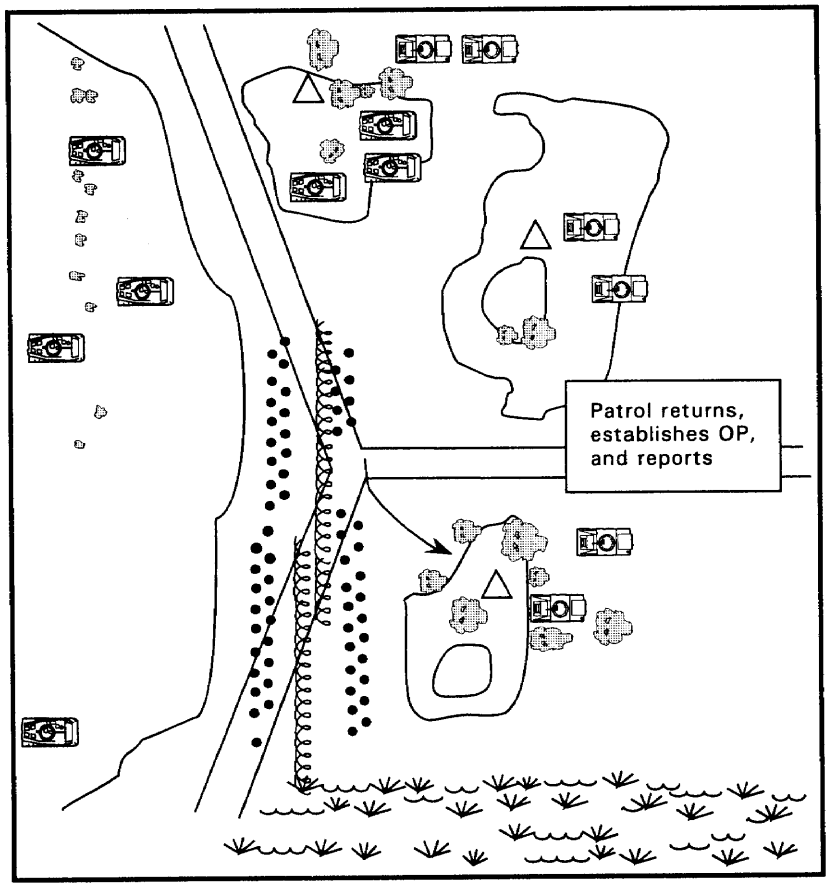


Figure 4-5F. Reconnaissance of a deliberate obstacle (continued).

Section IV. ROUTE RECONNAISSANCE

Scouts conduct a route reconnaissance to gain detailed information about a specific route or axis and the terrain on both sides of the route that the enemy could use to influence movement on the route. A scout platoon conducts a route reconnaissance when the commander wants to use a certain route, but first wants to make sure the route is clear of obstacles and enemy forces and will support the movement of his vehicles.

CRITICAL TASKS

During a route reconnaissance, a scout platoon must accomplish a specified number of tasks unless directed to do otherwise. Based on time available and the commander's intent, the scout platoon may be directed to conduct a route reconnaissance to acquire specific information only. The scout platoon leader must clearly understand the following critical tasks that must be accomplished.

- Determine the trafficability of the route.
- Reconnoiter, to the limit of direct fire range, terrain that dominates the route.
- Reconnoiter all built-up areas along the route.
- Reconnoiter, to the limit of direct fire range, all lateral routes.
- Inspect and classify all bridges on the route.
- Locate fords or crossing sites near all bridges on the route.
- Inspect and classify all overpasses, underpasses, and culverts.
- Reconnoiter all defiles along the route.
- Locate mines, obstacles, and barriers along the route.
- Locate a bypass around built-up areas, obstacles, and contaminated areas.
- Report route information.
- Find and report all enemy forces that can influence movement along the route.

TECHNIQUES

Because of the number of critical tasks that must be accomplished, a cavalry scout platoon can conduct a detailed reconnaissance of only one route. A battalion scout platoon may be able to handle two routes if the reconnaissance is limited to trafficability only. A scout platoon can reconnoiter a route by itself or may operate as part of a larger force such as a cavalry troop.

The following discussion outlines one technique of getting all the tasks accomplished as rapidly and securely as possible. The order the platoon leader receives specifies the route the platoon must reconnoiter and defines the route from SP to RP. Additionally, the order may specify platoon boundaries, PLs, an LD, and a limit of advance (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 boundaries are drawn on both sides. They include the terrain that dominates the route, usually extending out about 2.5 to 3 kilometers. This ensures that the scouts reconnoiter all terrain the enemy could use to influence movement along the route. The LD is drawn from one boundary to the other behind the SP. This allows the platoon to cross the LD and be fully deployed before reaching the route. The LOA or objective is placed beyond the RP on the last terrain feature that dominates the route or out to about 3 kilometers (see Figure 4-6, page 4-28).

The platoon leader may add additional PLs, contact points, and checkpoints to the graphics he received from his commander. PLs are used to help control the maneuver of the platoon. The contact points ensure that the teams maintain contact at particular critical points. Checkpoints are used along the route or on specific terrain to control movement or to designate areas that must be reconnoitered.

In coordination with the FSO, the platoon leader plans artillery targets on known or suspected enemy positions and on dominant terrain throughout the area of operations. The platoon leader evaluates the factors of METT-T to select a platoon organization. He must ensure that at least one team has responsibility for reconnoitering the route. The three-team organization is usually the type best suited to reconnoiter one route. Team A reconnoiters the terrain left of the route, Team B covers the terrain on the right side of the route, and Team C reconnoiters the route and controls the movement of the other two teams. In this organization, the platoon leader's team has specific responsibility to clear the route. (See Figure 4-7, page 4-29.)

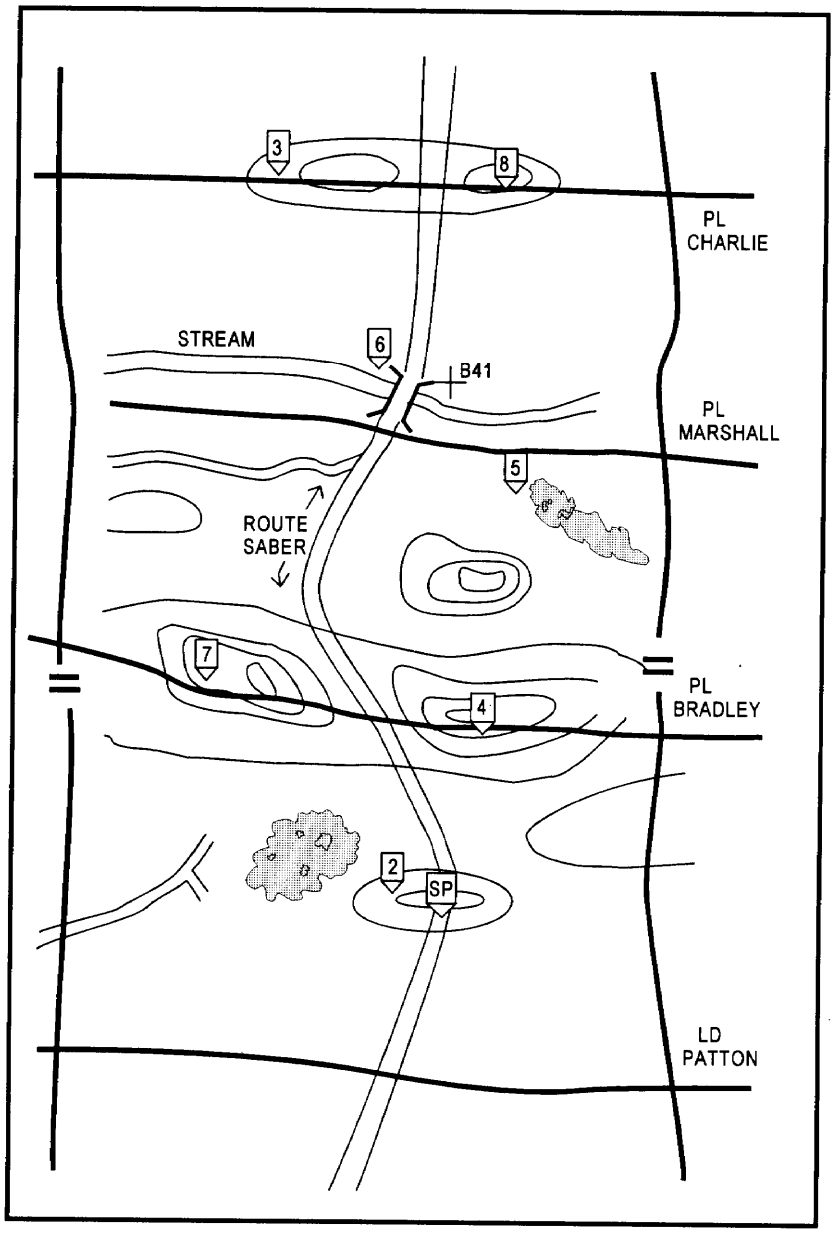


Figure 4-6. Control measures.

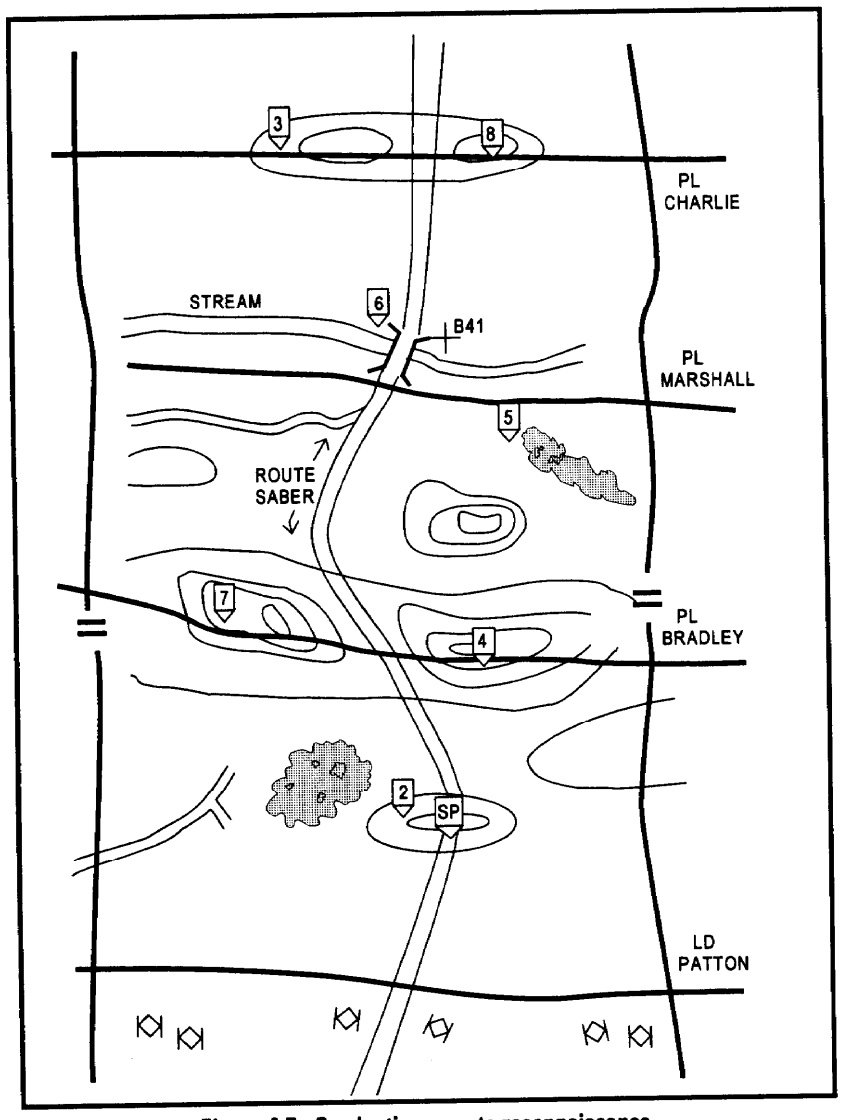


Figure 4-7. Conducting a route reconnaissance.

EXAMPLE OF A ROUTE RECONNAISSANCE

The following example of route reconnaissance is for a cavalry scout platoon. Figure 4-8 illustrates this situation.

When the scout platoon conducts a route reconnaissance, it often deploys in a vee formation because of the very focused nature of this mission. Team A is positioned to the left of the route, Team B to the right, and Team C in the center of the zone along Route SABER. The platoon should deploy into the formation prior to reaching LD PATTON so that it crosses the LD at the specified time. The platoon leader reports crossing the LD when the first element crosses it (see Figure 4-8A).

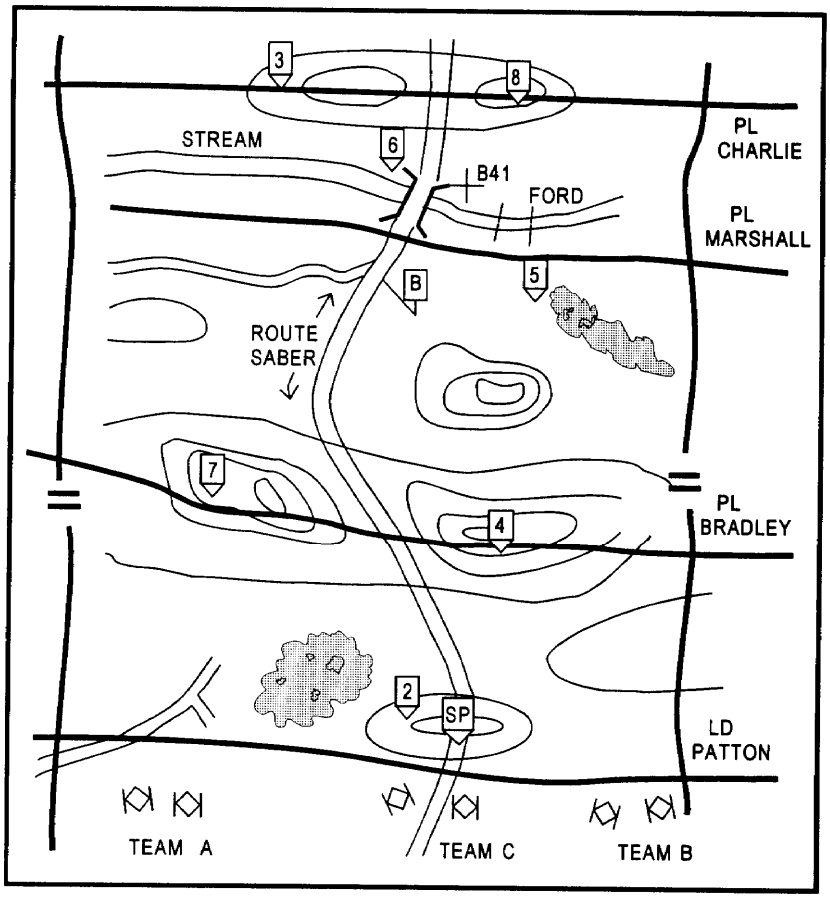


Figure 4-8A. Route reconnaissance.

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

Team C should be positioned along the route so it can observe the route, and one element of the team must physically drive the entire route. Unless the sector is very small or very open, the platoon will move as individual teams. As the sections move to the checkpoints, they maneuver in a zigzag pattern to clear the sector and accomplish all critical tasks of a 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 Team C travels it provides for better security and allows Team C to concentrate on the critical reconnaissance tasks. As the teams maneuver toward the checkpoints, they maintain visual contact with the route (see Figure 4-8B).

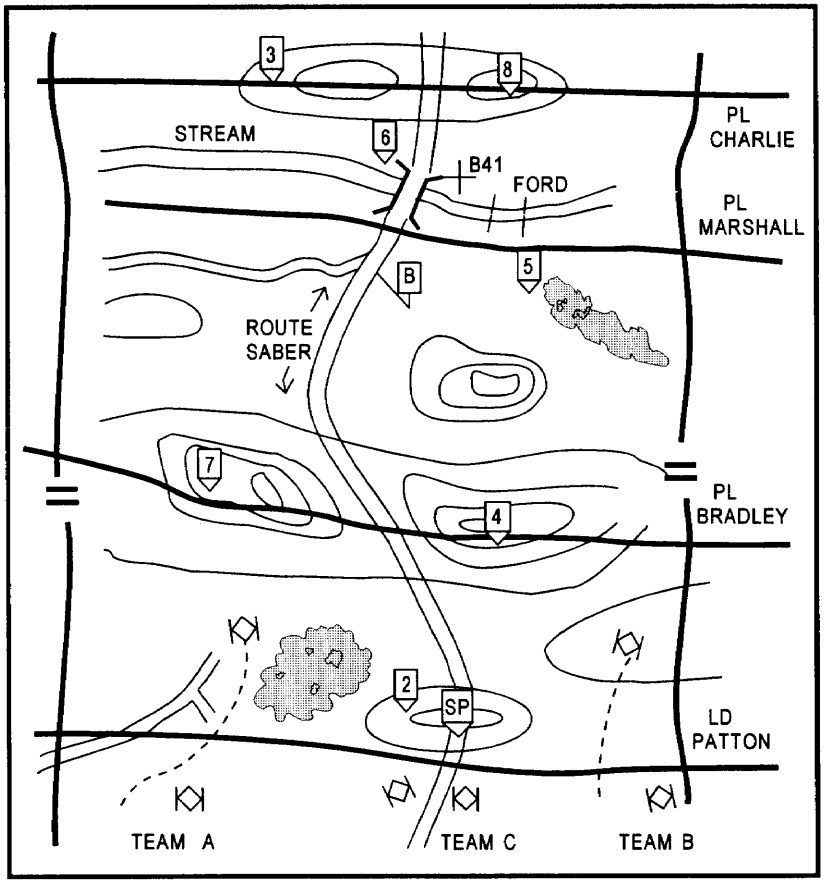


Figure 4-8B. Route reconnaissance (continued).

After both lead teams report “SET” and are in overwatch positions, Team C begins the route reconnaissance (see Figure 4-8 C). As the platoon leader moves along the route, his wingman maneuvers to provide overwatch for the platoon leader’s reconnaissance. As the platoon leader travels along Route SABER, he is normally required to send a route classification of the trafficability at intervals designated by the commander. A route report maybe required only if there is a significant or unexpected change in the route’s makeup.

As Team C clears the route, the other teams move ahead, clearing and reconnoitering critical and dominant terrain. The platoon leader controls and coordinates the movement of the teams. He must ensure that the flank teams remain far enough forward of Team C to provide security. The flank teams have also been assigned responsibility for covering lateral routes. Team A is executing a lateral route and will use contact point B to tie in with Team C on Route SABER (see Figure 4-8D).

The platoon order must address actions on the approach to the stream. In this case, the two flank teams have been given the task of locating bypasses in the form of fords or unmapped bridges. Team B is successful in locating a ford; Team A is not. Team B conducts a ford reconnaissance, following the steps used for obstacle and restriction reconnaissance, and then continues its mission (see Figure 4-8E, page 4-34).

Team C 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. Team A occupies an overwatch position while Team C reconnoiters the bridge. Team B continues its reconnaissance one terrain feature beyond the stream and then occupies a short-duration OP (see Figure 4-8F, page 4-34).

Team C completes its bridge reconnaissance and establishes local security on the approaches to the far side of the bridge. Once this is complete, Team A passes across the bridge and through Team C, continuing its reconnaissance to clear dominant terrain on the left flank of the route (see Figure 4-8G, page 4-35). Once Team A is set in sector, the platoon resumes its route reconnaissance to the LOA (see Figure 4-8H, page 4-35).

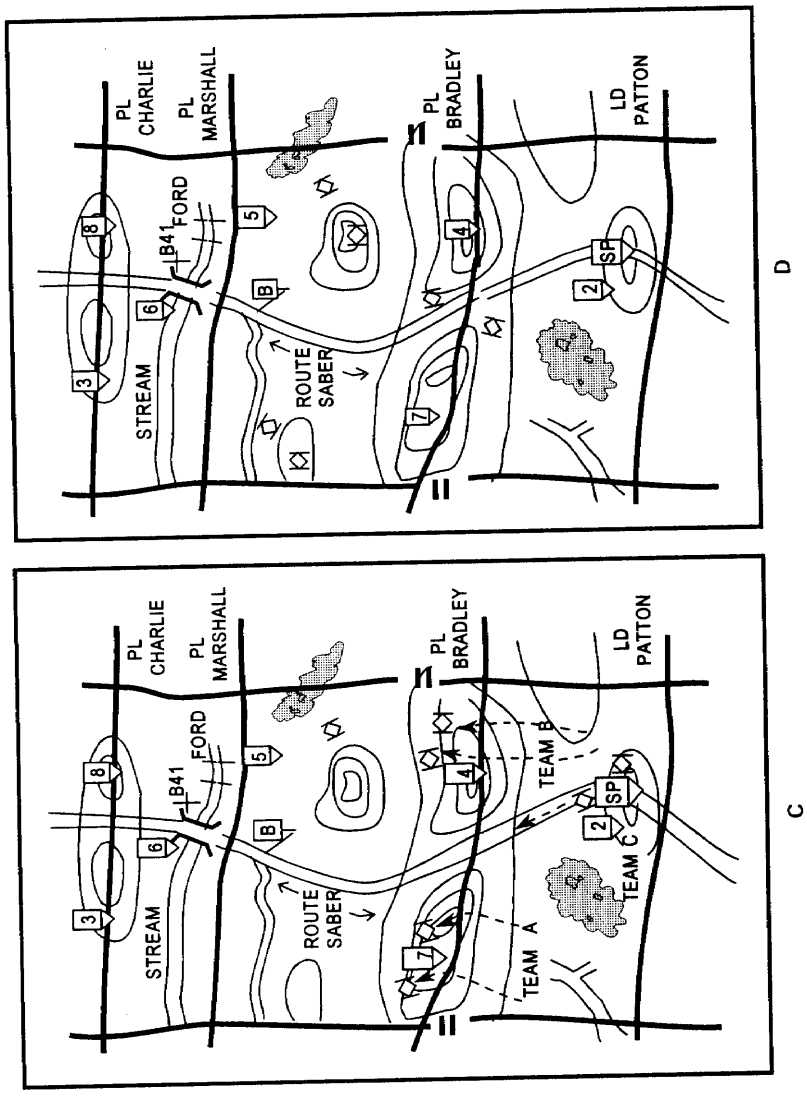


Figure 4-8. Route reconnaissance (continued).

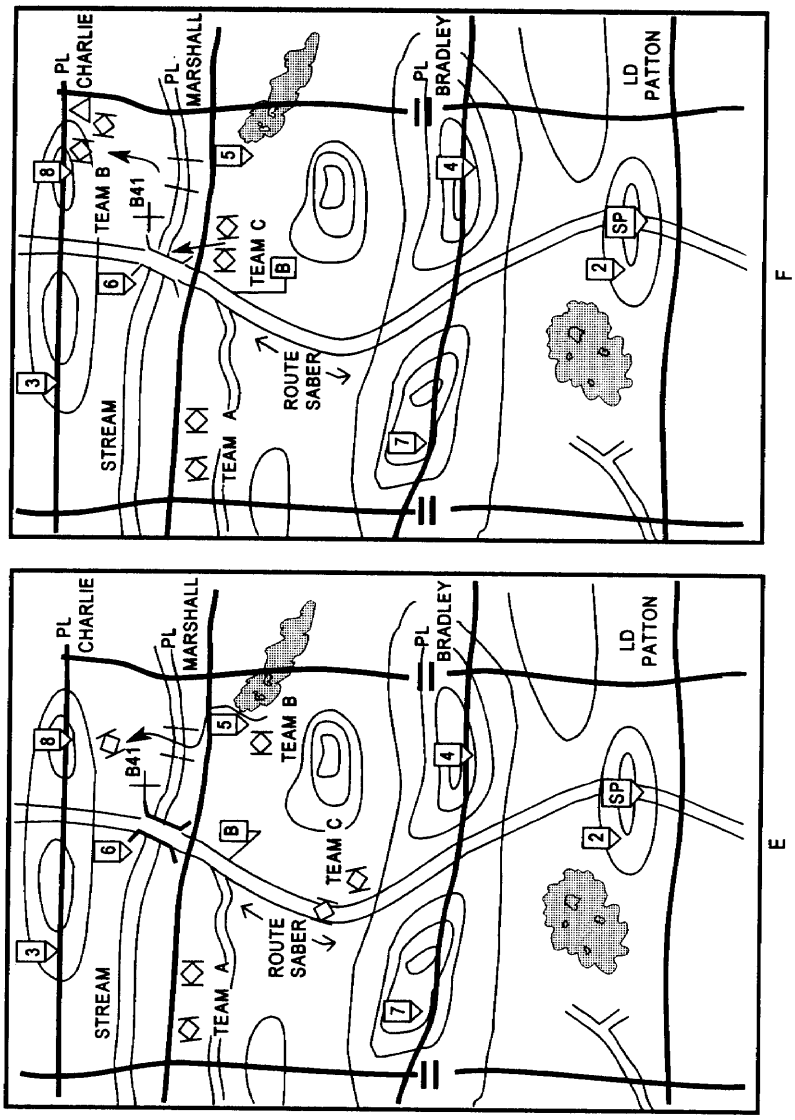


Figure 4-8. Route reconnaissance (continued).

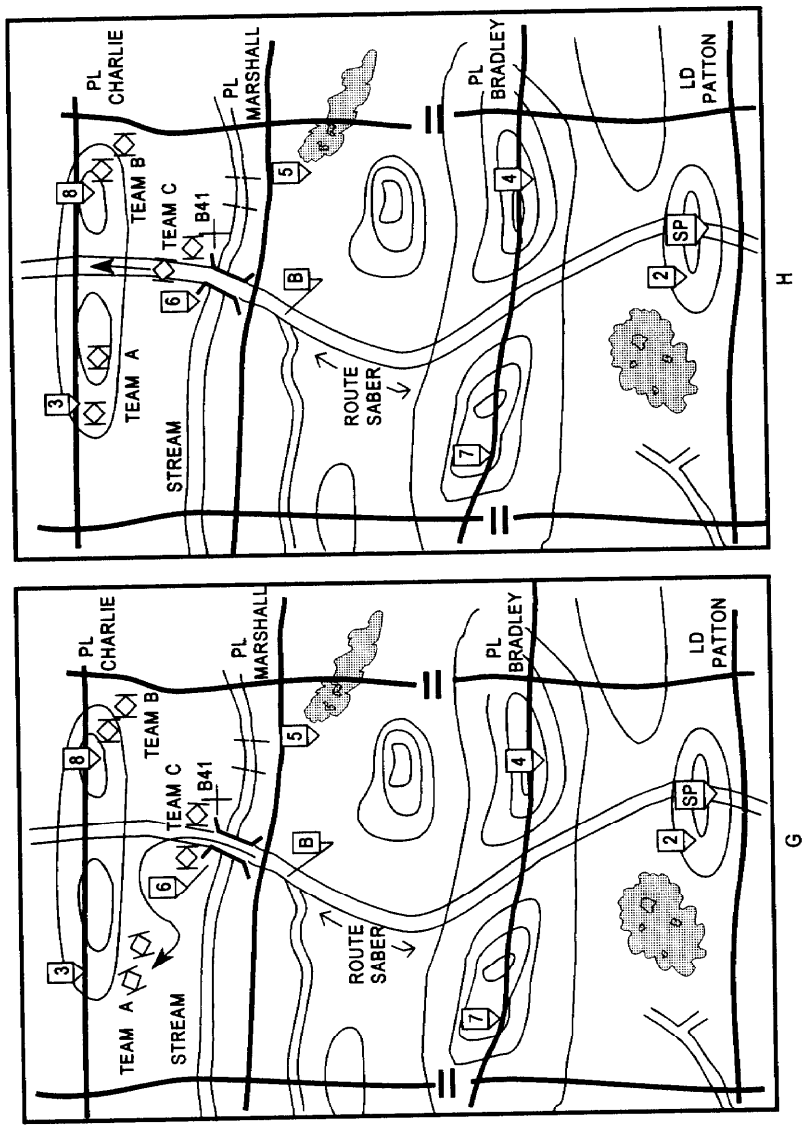


Figure 4-8. Route reconnaissance (continued).

Section V. ZONE RECONNAISSANCE

Scouts conduct zone reconnaissance missions to gain detailed information about routes, terrain, resources, and enemy forces within a zone defined by lateral boundaries. Commanders normally assign a zone reconnaissance mission when they need information before sending their main body forces through the zone. The reconnaissance produces information about the enemy situation and about routes and cross-country trafficability within the zone. This is the most thorough and complete reconnaissance mission and therefore is very time-intensive. It is common for scouts executing a zone reconnaissance to advance at only about 1.5 kilometers per hour.

CRITICAL TASKS

Scouts must accomplish the following critical tasks during a zone reconnaissance unless the commander directs them to do otherwise:

- Reconnoiter all terrain within the zone.
- Inspect and classify all bridges within the zone.
- Locate suitable fording or crossing sites near all bridges within the zone.
- Inspect and classify all overpasses, underpasses, and culverts.
- Locate mines, obstacles, and barriers in the zone.
- Locate bypasses around built-up areas, obstacles, and contaminated areas.
- Find and report all enemy forces within the zone.

TECHNIQUES

A zone reconnaissance is a very time-consuming operation. Unless the orders specify otherwise, all the critical tasks listed above are implied in the zone reconnaissance mission statement. Commanders who want a faster tempo of operations need to modify the mission statement or prioritize the critical tasks for the platoon leader. A scout platoon can effectively reconnoiter a zone that is

3 to 5 kilometers wide. The width of the zone is determined by the road network, terrain features, anticipated enemy activity, and time available to accomplish the mission. If the platoon is stretched any farther than 3 to 5 kilometers, it quickly loses the capability to accomplish the critical tasks and to move securely.

When a scout platoon leader receives a zone reconnaissance mission, the order will define the zone by lateral boundaries, an LD, and an LOA or objective. The parent unit may include additional PLs or other graphic control measures within the zone to help control the maneuver of the units.

The platoon leader analyzes the mission to determine what must be accomplished. He analyzes any information he has received about the enemy in the IPB to determine what enemy activity he should expect to encounter. He then analyzes the terrain by conducting a map reconnaissance and by examining any aerial photographs or information from other units to determine what types of terrain the platoon must operate over. This reconnaissance is important in identifying areas the enemy could occupy based on fields of fire, natural obstacles, and observation capability.

The platoon leader completes his troop-leading procedures and comes up with a course of action to best accomplish his assigned mission. He may add additional PLs on easily identifiable terrain through the zone to assist in controlling the maneuver. He places checkpoints in any specific areas that must be reconnoitered or used in controlling the operation. If the terrain is mixed, with a lot of dead space and with easily identifiable features, he may want to use boundaries to designate areas of responsibility for each team. He will place contact points at critical areas where he wants to ensure that teams maintain contact.

The platoon leader works with the FSO to plan indirect-fire targets to support the platoon's scheme of maneuver. As a minimum, they should plan targets on known or suspected enemy positions.

Depending on the type of scout platoon and the METT-T considerations, the platoon can conduct the zone reconnaissance using a two-, three-, or four-team organization. It must deploy to cover the entire zone. It usually operates in a zone it knows very little about, so the course of action must allow for flexibility, responsiveness, and security as it moves. The platoon leader deploys the scout teams online across the LD. He uses PLs, checkpoints, contact

points, or TIRS points to ensure that the platoon reconnoiters the entire zone and that teams maintain contact with each other. He ensures that the scout teams remain generally on line; this prevents development of significant gaps that a moving enemy could exploit. Scouts dismount as necessary to gather detailed information, clear danger areas, or move through areas that are not accessible to the vehicles. The platoon continues to reconnoiter the zone until it reaches the LOA or the final reconnaissance objective.

EXAMPLE OF A ZONE RECONNAISSANCE

The following example of zone reconnaissance is for a battalion scout platoon. Figure 4-9 illustrates this situation.

Although strict formations will not generally be used by scout platoons forward of the FEBA, the platoon leader in this example starts out with his platoon on line. The platoon leader will attempt to generally maintain this relationship even though the teams will not be mutually supporting much of the time. The platoon should deploy into formation prior to crossing the LD, with Team A on the left, Team B on the right, and Team C in the center of the zone (see Figure 4-9A).

The platoon crosses the LD at the time prescribed in the commander's OPORD, using the bounding overwatch technique of movement within teams, In this mission, the platoon leader has chosen to position himself with Team A because of the importance of the route and bridge in Team A's area of operations, The teams maneuver through the zone in a zigzag pattern to ensure the zone is properly reconnoitered and to accomplish all critical tasks of a zone reconnaissance. Security is provided within teams because the width and terrain of the zone prevent the teams from providing mutual support (see Figure 4-9B).

Depending on the factors of METT-T, the platoon leader chooses the movement technique best suited for command and control. He may choose to have the teams clear and set at all checkpoints, or he may have them bound through the checkpoints, report clear, and then set at the PLs. If the platoon leader has not assigned teams a particular checkpoint to orient on, the team leaders must plan their own measures to control the movement. They move team elements to contact points to ensure the move is tied in with that of the other teams. The platoon leader does not allow any element to cross PL DICK until all elements have reported set (see Figure 4-9C, page 4-41).

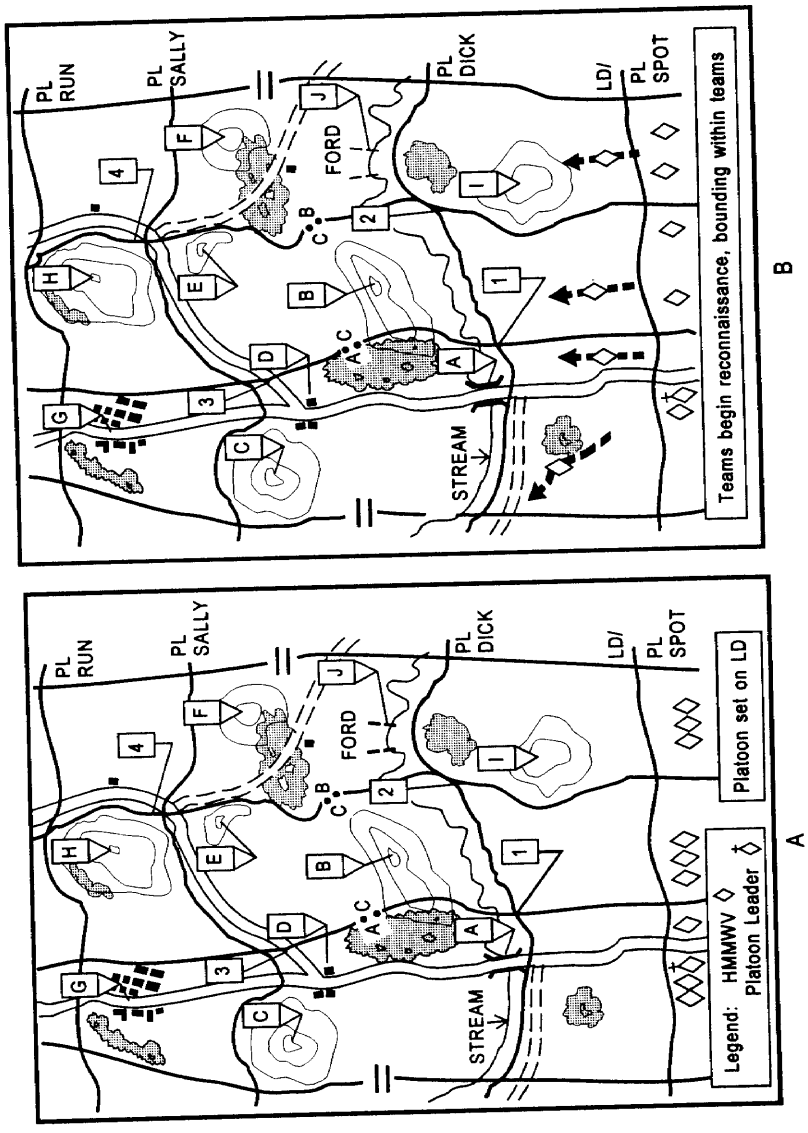


Figure 4-9. Zone reconnaissance.

When the platoon is set on PL DICK, the leader gives the teams permission to execute DICK and move to PL SALLY. The teams immediately begin reconnaissance of natural and man-made obstacles, including the stream to their front. Team A must execute a bridge reconnaissance and reconnoiter the stream for possible unmarked fords as well. Team C reconnoiters the stream for possible unmarked fords. Team B reconnoiters the stream for possible unmarked fords and conducts a ford reconnaissance at the known ford in the zone.

Once Team C completes its reconnaissance of the stream and reports negative results, it moves to the vicinity of contact point 2 and awaits permission to cross the stream at Team B's ford. Team C is also prepared to cross at Team A's bridge, if necessary (see Figure 4-9D).

As Teams A and B complete their reconnaissance tasks at the bridge and ford, they revert to the bounding overwatch movement technique and continue reconnaissance. Team C moves across the team boundary and prepares to cross the stream at the ford (see Figure 4-9E, page 4-42).

The zone reconnaissance continues with Teams A and B clearing checkpoints D and F. The platoon leader holds the teams at those control measures to allow time for Team C to clear checkpoint B and get on line with the other teams at checkpoint E. This prevents dangerous gaps from developing between the teams (see Figure 4-9F, page 4-42).

Once Team C sets at checkpoint E, the platoon leader has all elements on line and set along PL SALLY. Teams A and C ensure that they make contact at contact point 3. The platoon leader gives permission for all elements to execute PL SALLY, then move to and set at PL RUN (see Figure 4-9G, page 4-43).

As the teams move across PL SALLY, Teams C and B make contact at contact point 4. The platoon uses bounding overwatch within each team as the movement technique. The teams continue the zone reconnaissance in this manner, accomplishing all critical tasks and reporting all control measures and other reconnaissance information, until they reach the LOA or reconnaissance objective (see Figure 4-9H, page 4-43).

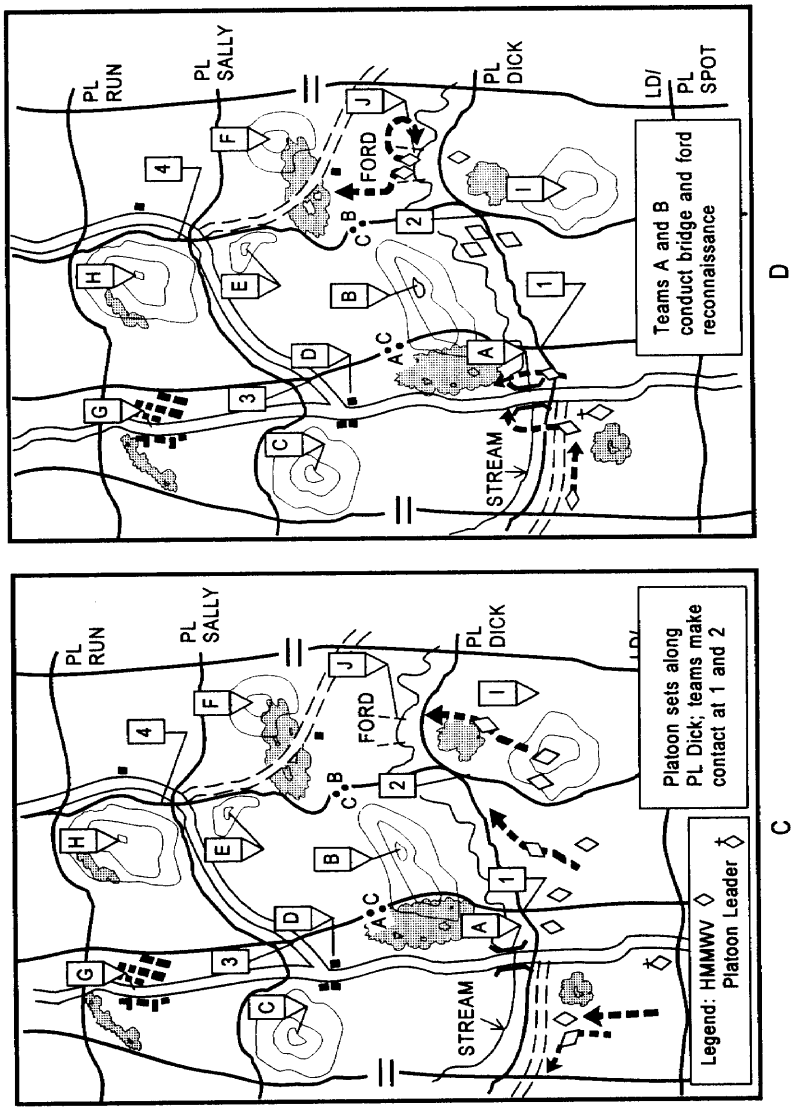


Figure 4-9. Zone reconnaissance (continued).

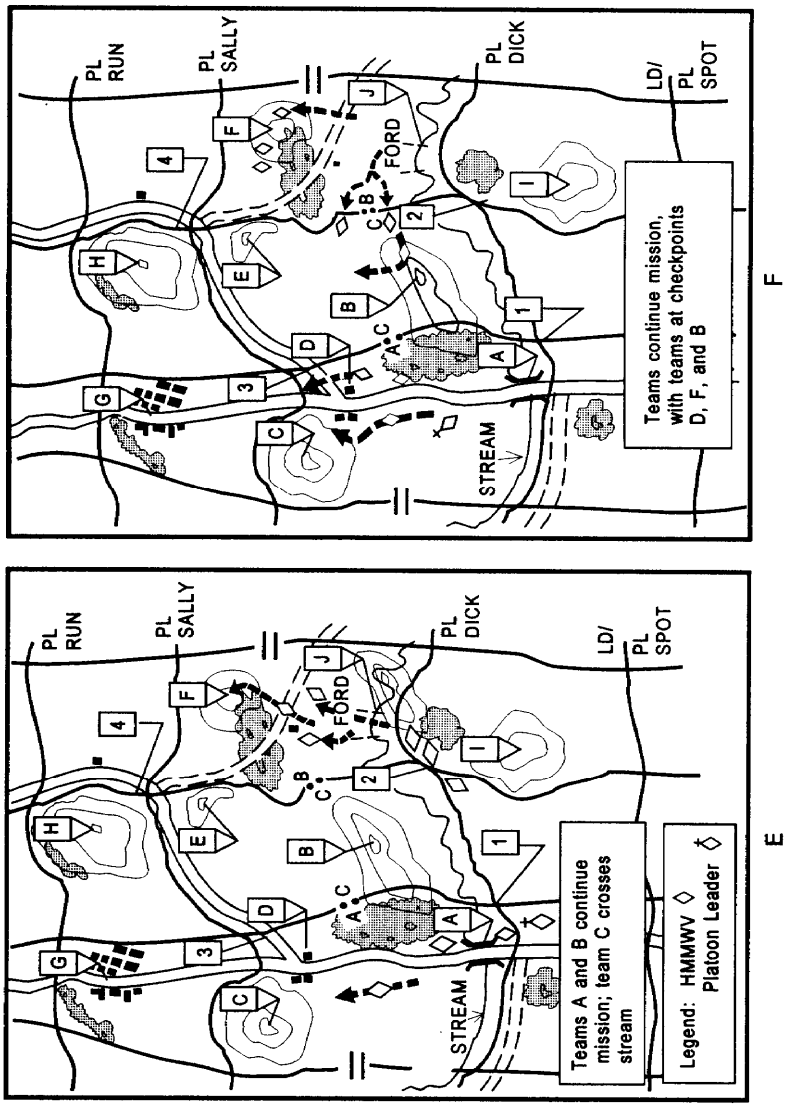


Figure 4-9. Zone reconnaissance (continued).

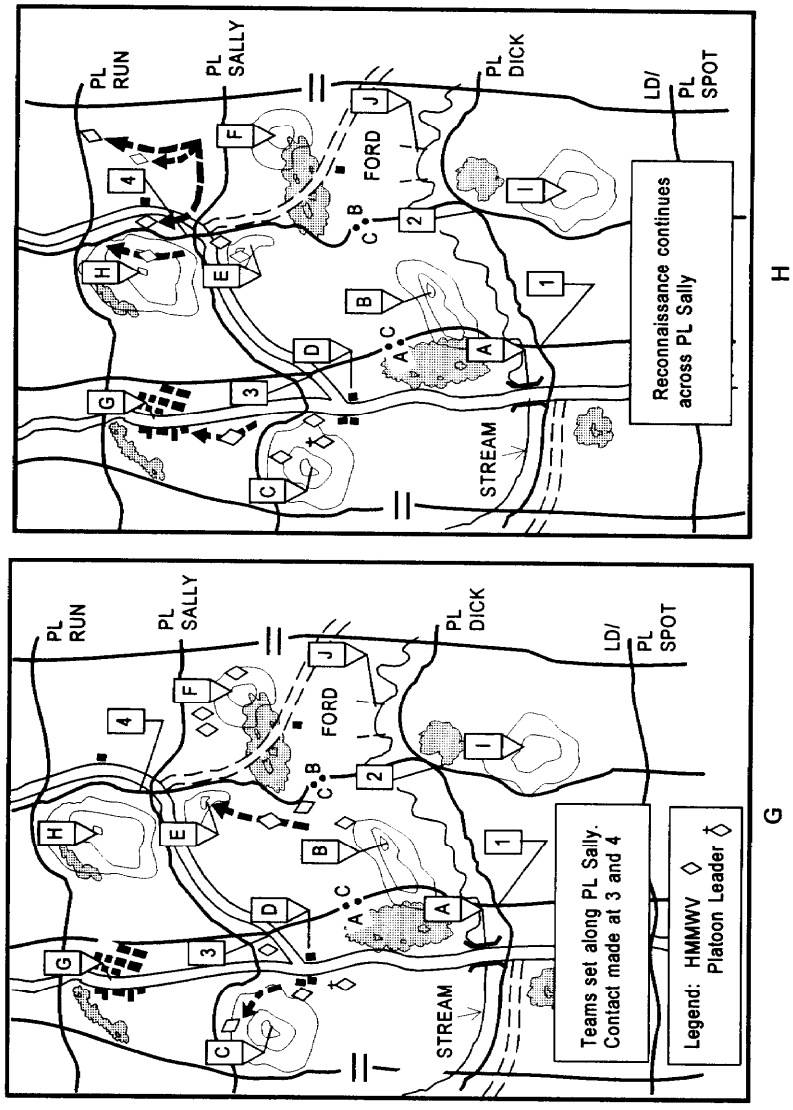


Figure 4-9. Zone reconnaissance (continued).

Section VI. AREA RECONNAISSANCE

Before moving forces into or near a specified area, commanders call on their scouts to conduct an area reconnaissance to avoid being surprised by unsuitable terrain conditions or unexpected enemy forces. The area could be a town, ridge line, woods, or another feature that friendly forces intend to occupy, pass through, or avoid. Area reconnaissance is frequently required for objective areas to confirm the IPB templates and to provide detailed information regarding enemy dispositions. In addition, area reconnaissance within a zone of operations can be used to focus the scouts on the specific area that is critical to the commander. This technique of focusing the reconnaissance also permits the reconnaissance to be accomplished more quickly (see Figure 4-10). Thus area reconnaissance can be a stand-alone mission or a task to a team or platoon within the larger context of a platoon or troop reconnaissance mission.

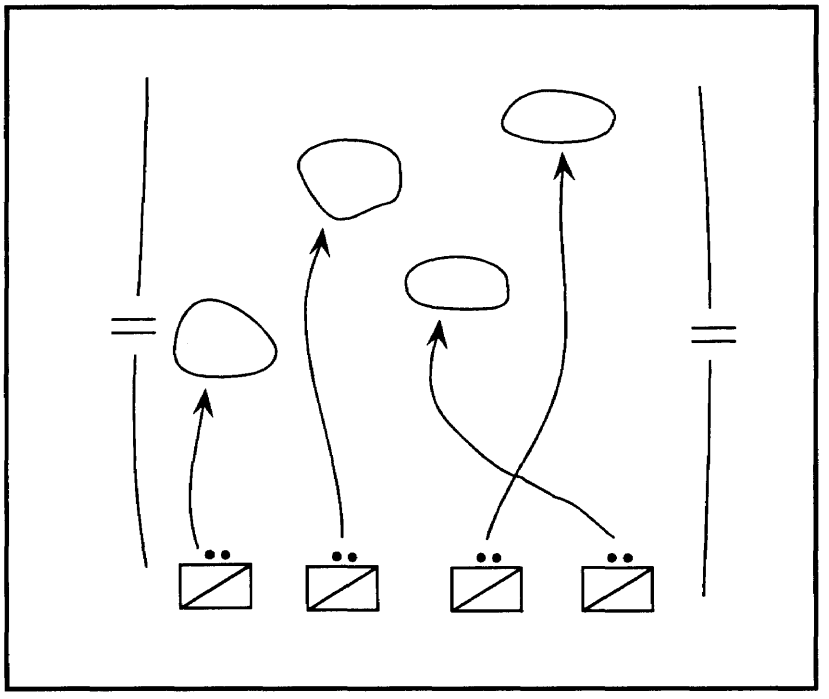


Figure 4-10. Zone of operations divided into a series of team area reconnaissance assignments.

CRITICAL TASKS

Scouts must accomplish the following critical tasks during an area reconnaissance unless the commander orders them to do otherwise:

- Reconnoiter all terrain within the area.
- Inspect and classify all bridges within the area.
- Locate suitable fording or crossing sites near all bridges within the area.
- Inspect and classify all overpasses, underpasses, and culverts.
- Locate mines, obstacles, and barriers in the area.
- Locate bypasses around built-up areas, obstacles, and contaminated areas.
- Find and report all enemy forces within the area.

TECHNIQUES

The order to conduct an area reconnaissance mission identifies the area to be reconnoitered within a continuous boundary. The platoon leader analyzes the mission, enemy, and terrain and completes his troop-leading procedures. He also plans the movement to and, if necessary, from the area, following the basic rule of using different routes to and from the area. The routes are specified for the platoon when it works as part of a larger unit, such as a cavalry troop. The platoon's primary concern during movement to the area is security rather than reconnaissance. In the absence of a specified route, or if the platoon leader feels there may be enemy forces along the route to the area to be reconnoitered, the platoon should deploy and execute a tactically sound move. During movement to the area, it may be appropriate (depending on the commander's intent) for the platoon to avoid contact.

The platoon leader encloses the given area within a platoon zone; he uses boundaries, an LD, and an LOA. The platoon leader can divide the area into team zones by placing boundaries on identifiable terrain; this ensures that each team has responsibility for specific pieces of terrain. The platoon leader may also choose to orient and focus teams on checkpoints for both movement and reconnaissance. PLs may also be used to help control the movement of the platoon to the area. The platoon leader places contact points at the intersections

of PLs and boundaries and any other places he wants physical contact and coordination between his scout teams. He uses TIRS as necessary. The platoon leader works with the FSO to plan indirect fires to support the platoon's scheme of maneuver.

The platoon can conduct the area reconnaissance using any of the platoon organizations. The platoon leader deploys his teams abreast across the LD to accomplish their reconnaissance tasks. Formations are often not appropriate to this mission because of the irregular shape of the area and the wide variety of METT-T considerations.

EXAMPLE OF AN AREA RECONNAISSANCE

The following example of area reconnaissance is for a battalion scout platoon. Figure 4-11 illustrates this situation.

In this example, the battalion scout platoon has been given the mission of performing an area reconnaissance of Objective LEAD and Objective IRON. The platoon has not been assigned a specific route, and enemy dispositions are vague. The platoon leader decides, after analyzing the factors of METT-T, to deploy his platoon to maximize security.

The platoon leader analyzes the terrain and his mission requirements and decides to use the four-team organization. He assigns Teams A, B, and C respective checkpoints on Objective IRON. Because of Objective LEAD's smaller size, he assigns only Team D to reconnoiter it. The platoon leader decides that he will move with Team C and thus provide close control of the reconnaissance of Objective IRON. The PSG will move with Team D and observe the reconnaissance of Objective LEAD. The platoon leader decides to move the platoon using checkpoints that make maximum use of cover and concealment between the LD and the objectives (see Figure 4-11A).

Using the four-team organization, the platoon crosses PL BOB at the time specified in the commander's OPORD. The platoon crosses in sequence, with the two lead teams executing and the following teams waiting until initial checkpoints are cleared before proceeding. No platoon formation is used. The lead teams, which have the longest distance to move to their reconnaissance objectives, use bounding overwatch to ensure maximum security (see Figure 4-11B).

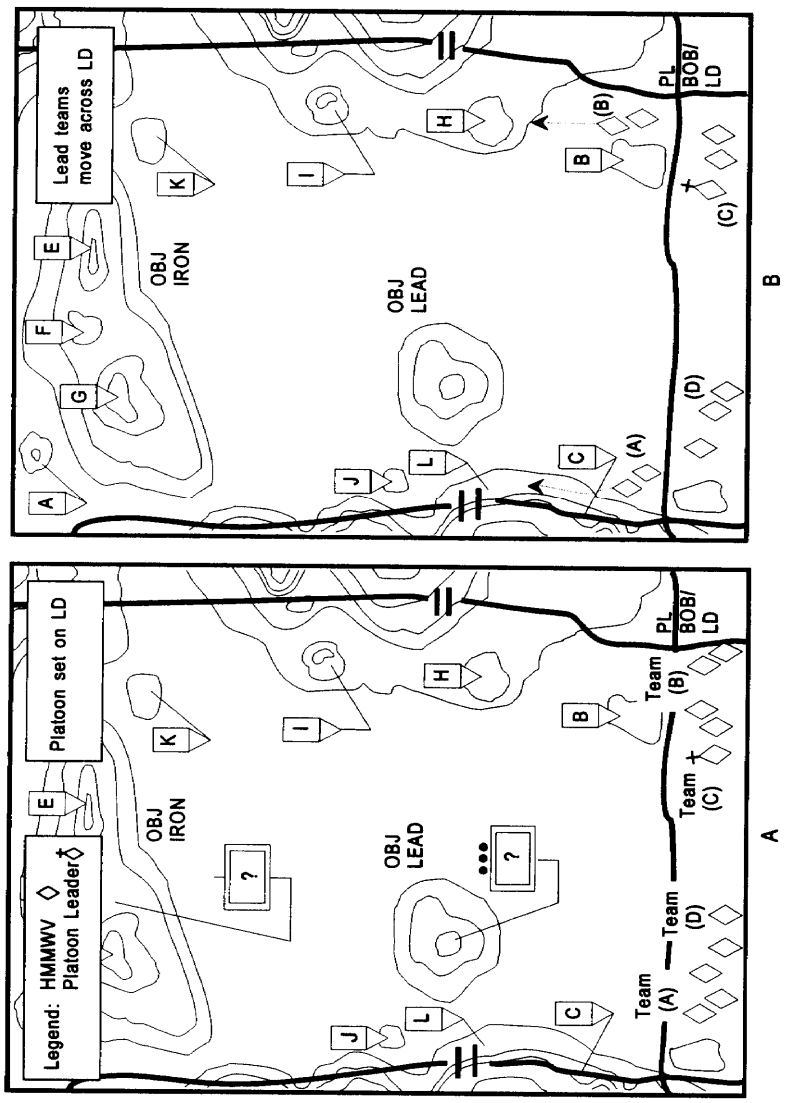


Figure 4-11. Area reconnaissance.

As the lead teams execute checkpoints C and H, the trail teams cross the LD. The movement technique is bounding overwatch within teams (see Figure 4-11C).

The scout teams continue their move to the designated dismount points. Team D occupies its dismount point, checkpoint L. The team sets its vehicles in hide positions, organizes a patrol, and deploys local security (see Figure 4-11D).

Team D's patrol moves on covered and concealed dismounted routes to Objective LEAD and conducts a dismounted reconnaissance. The patrol uses the fan dismounted reconnaissance technique to thoroughly reconnoiter the objective. Teams A and B occupy their dismount points (checkpoints A and D, respectively). Team C continues to move (see Figure 4-11E, page 4-50).

Team D's patrol completes its reconnaissance of Objective LEAD. The team submits its report and establishes an OP in the vicinity of checkpoint J from which it can observe the objective area. Teams A and B dispatch their patrols to conduct dismounted reconnaissance on Objective IRON. The platoon leader has designated checkpoints on the objective to focus each team's patrol. Teams A and B reconnoiter checkpoints G and F, respectively. Team C occupies its dismount point in the vicinity of checkpoint K (see Figure 4-11F, page 4-50).

Teams A and B complete their reconnaissance of Objective IRON; they establish OPs from which they can observe into the objective area and monitor any changes in the enemy situation, They also submit detailed reports on enemy dispositions through the platoon leader to their commander. Team C executes a dismounted patrol of checkpoint E, its portion of Objective IRON (see Figure 4-11G, page 4-51).

Team C completes its dismounted reconnaissance of checkpoint E. All teams observe the objective area and send updated spot reports as necessary. The platoon continues to observe the objective until relieved or assigned subsequent tasks by its higher headquarters (see Figure 4-11H, page 4-51).

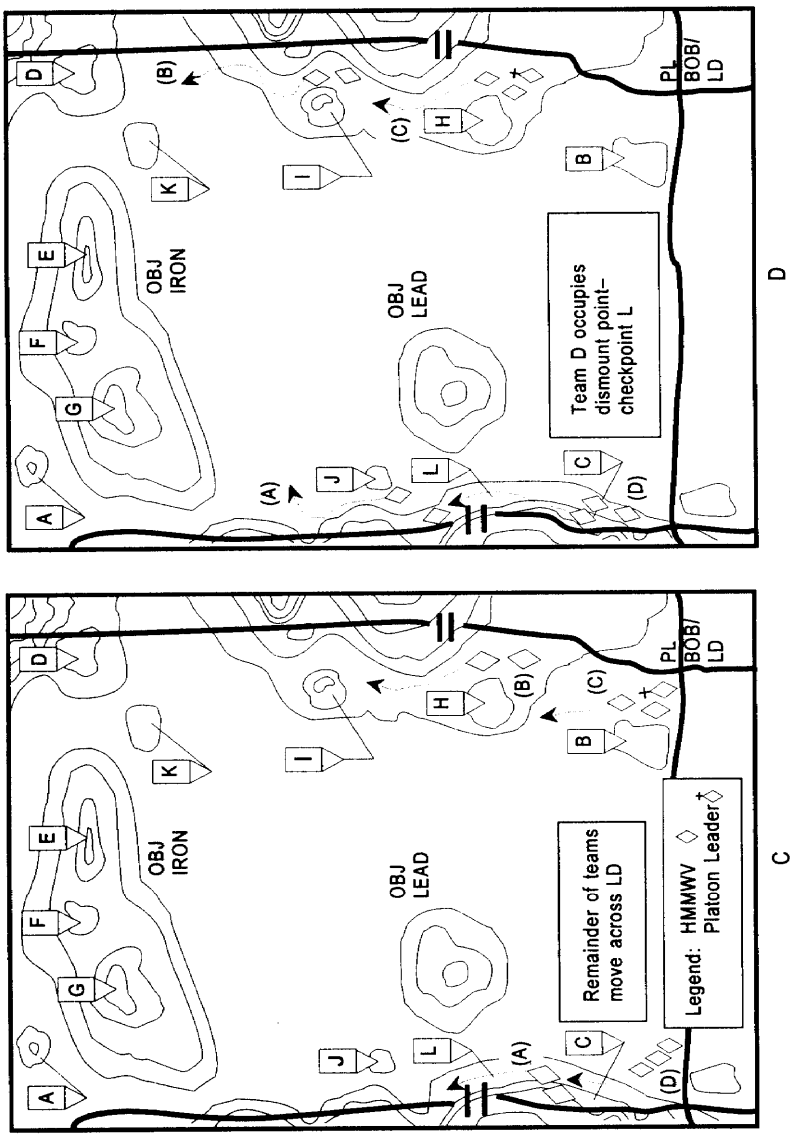


Figure 4-11. Area reconnaissance (continued).

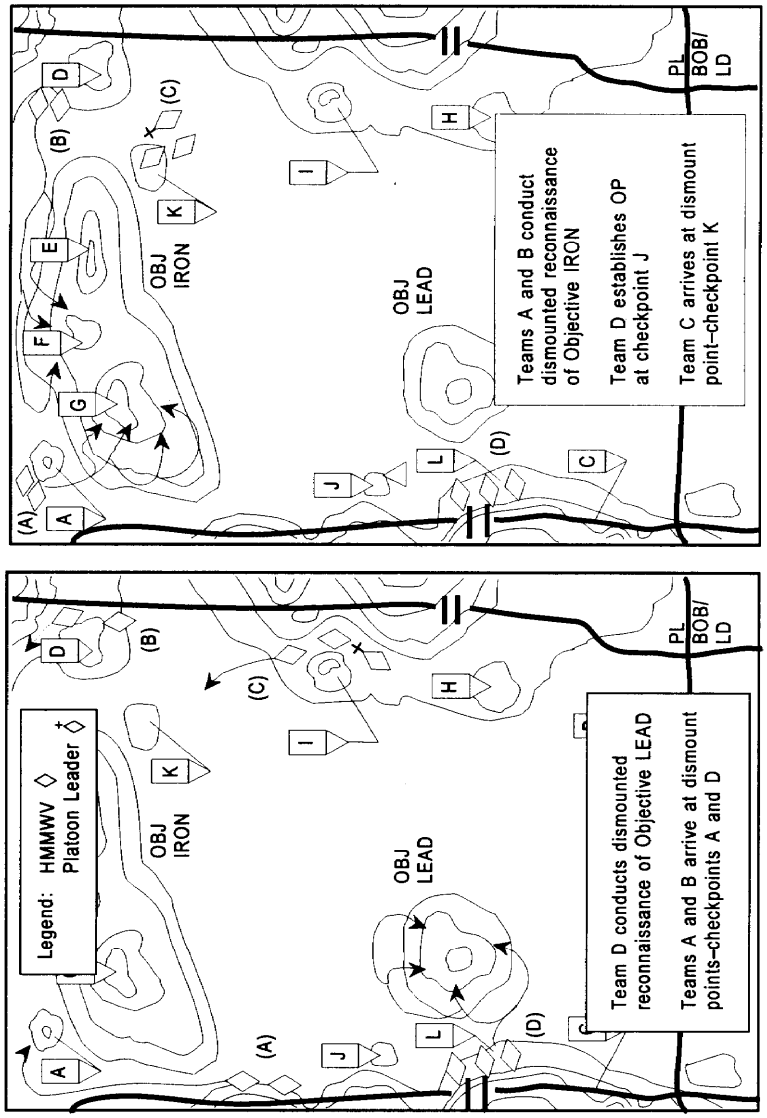


Figure 4-11. Area reconnaissance (continued).

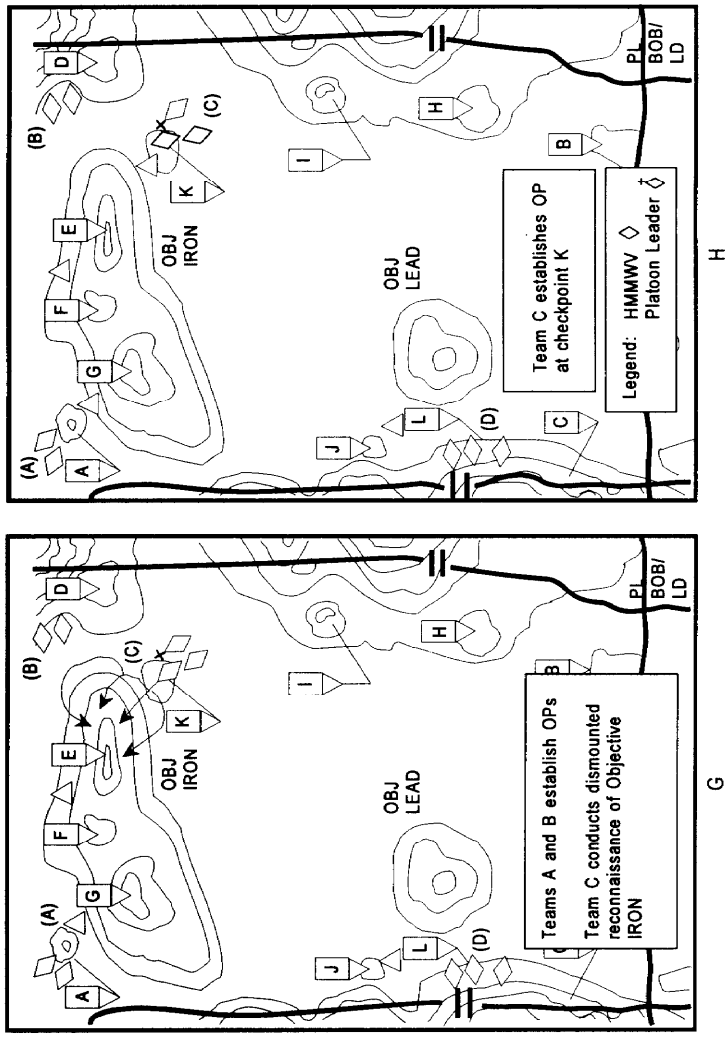


Figure 4-11. Area reconnaissance (continued).

CHAPTER 5

SECURITY OPERATIONS

In security operations, security forces protect the main body from enemy observation and surprise attack. They provide the main body commander with early warning, allowing him to concentrate his combat power at the right place and time to defeat the enemy. There are four types of security missions: screen, guard, cover, and area security. Scout platoons can conduct screening missions independently or as part of a larger force.

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Section 1. PURPOSE AND FUNDAMENTALS

PURPOSE

All security missions serve the same general purpose: they prevent the main body from being observed or attacked unexpectedly by the enemy. These operations are conducted forward, to the flanks, or to the rear of the main body. The platoon may operate at considerable distances from the main body it is screening (limited only by the range of indirect fire support). This provides the main body with time and space to react and to position forces to fight the enemy.

A scout platoon can conduct screening operations independently or as part of a larger force such as a cavalry troop or a company team. In guard and cover missions, a scout platoon works as part of a larger unit such as a battalion or

squadron; the platoon conducts screening or reconnaissance missions in support of the larger unit's guard or cover mission.

Screen

A screening force maintains surveillance, provides early warning to the main body, and impedes and harasses the enemy with artillery fires. Within its capabilities and based on the commander's guidance, it destroys enemy reconnaissance units in coordination with other combat elements.

Screening operations are defensive in nature and focus on the enemy. They are conducted to the front, flanks, and rear of a stationary force and to the flanks and rear of a moving force. A screening force normally operates within the range of the supporting artillery.

Guard

A guard force accomplishes all the tasks of a screening force. Additionally, it prevents enemy ground observation of and direct fire against the main body. A guard force reconnoiters, attacks, defends, arid delays as necessary to accomplish its mission. It normally operates within the range of the supporting artillery. Guard operations are not conducted below task force or squadron level.

Cover

A covering force accomplishes all the tasks of screening and guard forces. Additionally, it operates apart from the main body to develop the situation early. It deceives, disorganizes, and destroys enemy forces. Unlike screening or guard forces, a covering force is tactically self-contained. It is organized with sufficient CS and CSS forces to operate independent of the main body. A covering force is normally a reinforced separate brigade or cavalry regiment.

Area Security

When conducting area security, a unit is responsible for preventing the enemy from observing and placing direct and indirect fire on a specific geographic area, point, or activity. Units conducting area security operations do so within friendly indirect fire range.

FUNDAMENTALS

Five fundamentals are common to all security missions. Scouts must keep these fundamentals in mind as they plan and execute their mission.

- **Orient on the main body.** If the main body moves, the scouts must be aware of its move and must reposition their forces. Scouts must understand the main body commander's scheme of maneuver and where he wants his screening force in relation to his movement. The screen must be positioned where it can provide the needed security.
- **Perform continuous reconnaissance.** The scout platoon conducts continuous reconnaissance during security operations to gain as much information as possible about the area of operations and the enemy.
- **Provide early and accurate warnings.** Early and accurate warning of enemy approach is essential to successful operations. The main body commander needs this information to shift and concentrate his forces to meet and defeat the enemy. Scouts occupy OPs and conduct patrols to provide long-range observation, to observe enemy movement, and to report the enemy's size, location, and activity to the main body commander.
- **Provide reaction time and maneuver space.** The scout platoon works at sufficient distance from the main body to identify and report on the enemy so the main body commander has time to react accordingly. The platoon provides additional reaction time by employing indirect fires to slow the enemy's rate of advance.
- **Maintain enemy contact.** Scouts gain and maintain contact with the enemy to provide the commander with continuous information. If they lose contact, they take steps to regain it. They then maintain contact until ordered to do otherwise.

Section II. SCREENING MISSIONS

Scouts conduct screen missions for their parent unit or other combined arms forces to provide early warning of enemy approach and to provide real-time information, reaction time, and maneuver space for the main body.

A commander calls on scouts to screen for him when he needs advance warning of when and where the enemy is attacking. Operating over an extended area the platoon fights only for self-protection and remains within its capabilities. It denies enemy reconnaissance units close-in observation of the main body.

CRITICAL TASKS

During a screen mission, the scout platoon must accomplish the following critical tasks:

- Maintain continuous surveillance of all assigned NAIs or high-speed avenues of approach into the sector.
- Provide early warning of enemy approach.
- Within its capabilities and based on the commander's guidance, identify enemy reconnaissance units and, in coordination with other combat elements, destroy them.
- Gain and maintain contact with the enemy main body and report its activity.
- Impede and harass the enemy main body by controlled use of indirect fires.

Scouts maintain surveillance from a series of OPs along a screen line or in depth. The screen line, normally a phase line on a map, designates the most forward location of the OPs. Commanders must carefully weigh time and distance factors when choosing where to place this line. If a scout does not receive a screen line location from his commander, he should ask for it. The scouts should never accept vague "lightning bolt" locations (see Figure 5-1). They conduct active patrolling to extend their observation range or to cover dead spaces and the area between OPs. Unless they have to, scouts do not fight with their direct-fire weapons when executing a screen mission. Indirect fire is their primary means of engaging the enemy. They use their direct-fire weapons primarily for self-defense.

PLANNING CONSIDERATIONS

When planning a screen mission, the scout platoon leader uses the following critical task requirements as a guide to prioritizing and sequencing the mission. He must address each of the requirements.

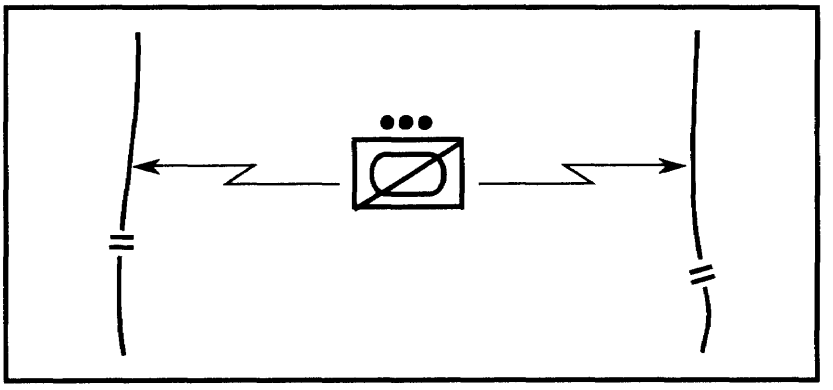


Figure 5-1. Unacceptable screen line location.

Conduct Surveillance of Assigned Area

The first task that must be accomplished is to provide surveillance of the assigned area of operations. Generally, the scout is assigned to screen along a lateral line (the screen line). This, however, can be misleading. The scout screen is actually set to observe specific avenues of approach or, more specifically, NAIs. The screen line merely indicates the limit of the forward positioning of the scouts. Along with the screen line graphic, the scout platoon leader must have a decision support overlay indicating the areas he must observe. These areas should be identified in either the reconnaissance and security plan he receives or his higher headquarters' OPORD. If the scout does not receive an IPB product, the higher OPORD must specifically state where the scout platoon must focus on the screen. If he is assigned multiple requirements, his higher headquarters must prioritize them.

In a task force, the scout's understanding of his commander's intent is the most important aspect of planning the screen mission. More important than the specifics of where to orient is the focus on what to look for. There are three choices for the scout's focus: the enemy main body, the enemy reconnaissance effort, or both. The commander's intent should specify which one the scout will focus on or, if he requires both (as is often the case), which has priority. This guidance will then determine where the platoon will orient and how it will allocate resources. If the commander's priority is locating the main body, the scout will focus most of his assets on the main avenues of approach and accept risk on the reconnaissance avenues of approach (RAA). If the commander's priority is on counter-reconnaissance, the scout will put priority on the RAA and

accept some risk on the main avenue. If the commander wants both, with equal priority, the scout must plan to transition from the RAA to the main avenue at a designated point in the battle. This transition will usually be ordered by the commander based on the enemy situation.

Once the scout platoon leader has a thorough understanding of what his surveillance requirements are, he must next determine what assets he has available to execute these requirements. Assets such as GSR, infantry squads, engineer squads, and artillery forward observers increase the platoon's surveillance capability. What assets are available is dependent on how long the screen must remain in place and how the platoon is task organized. If the screen will be of short duration (less than 12 hours), individual scout squads can emplace and man separate OPs. This permits up to eight OPs per HMMWV scout platoon and up to six per CFV scout platoon. If the duration of the screen is unknown or longer than 12 hours, the platoon leader must consider assigning a two-vehicle team (CFV scout platoon) or three-vehicle team (HMMWV scout platoon) for each OP. This allows continuous operation of the OPs.

To ensure that the critical task of surveillance of assigned targets is accomplished, the platoon leader and his higher headquarters apply a combination of techniques to make the most efficient use of their assets.

Task organization. The platoon leader will task organize the platoon and any other assigned assets to achieve the most effective surveillance of an NAI or avenue. This may include adjusting the number of scout squads in a particular team; mixing scouts and other assets such as engineers, artillery, GSR, or infantry into the same team; or maintaining elements in pure teams under the platoon leader's control. The platoon leader must consider the characteristics of the target when task organizing for surveillance. These considerations include the likelihood of needing to call for fire, the need to conduct dismounted patrols, and the field of view and applicability of GSR. See Figure 5-2.

Augmentation. The screen may be augmented with assets not under the platoon leader's control, but rather under the command of the troop or battalion. These assets could be tank platoons or companies, GSR, artillery observers, or infantry. Although the platoon leader does not control them, he must ensure that his dispositions complement those of the other forces in the screen and do not duplicate them unnecessarily. In addition, he must ensure all scouts understand where these forces are and what role they are playing. See Figure 5-3.

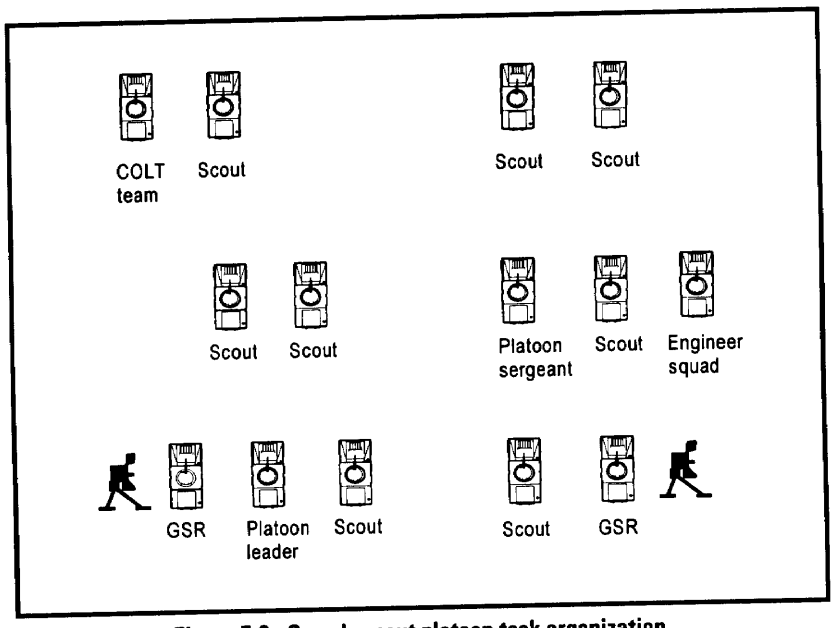


Figure 5-2. Sample scout platoon task organization.

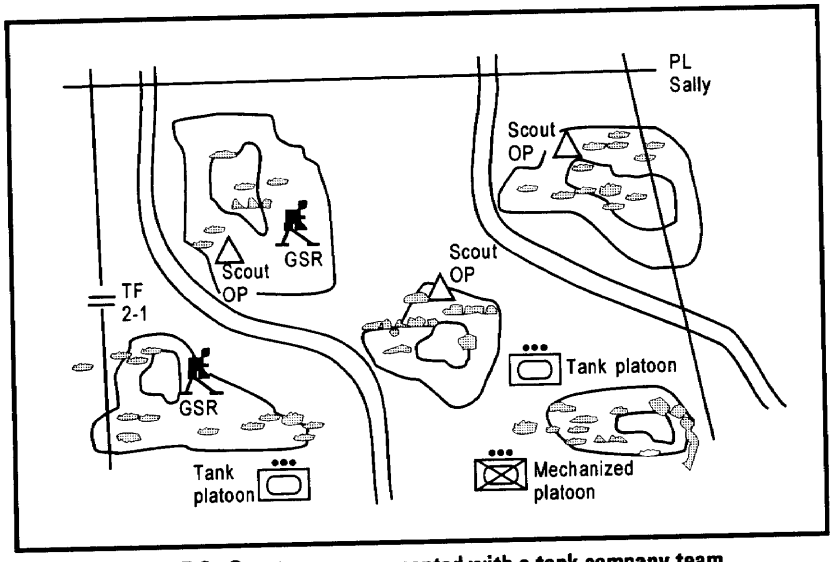


Figure 5-3. Scout screen augmented with a tank company team.

Redundancy. The platoon leader may task more than one element to observe a particular assigned avenue or NAI. Assigning more than one element to a target is based on the nature of the target in terms of size, terrain, or importance. Avery large avenue may require multiple teams to ensure all aspects of the avenue are covered. Terrain that is very broken or mixed with areas of thick vegetation may require more than one team to ensure that adequate continuous coverage is achieved. Finally, if a particular target is assigned significant priority by the commander, the scout platoon leader may assign multiple teams to cover it. Redundancy not only ensures that a target is adequately observed, but also allows the mission to be accomplished despite compromise of some teams by enemy forces. See Figure 5-4.

Cueing. Cueing is a technique the scout platoon leader can use to cover a target when assets are limited and he lacks the capability for redundancy. He plans contingency tasks that will increase surveillance on a particular target; his teams execute the tasks when "cued" by activity at that target. The target is covered initially either by a single team or by a remote or electronic signaling device such as a trip flare or the platoon early warning system (PEWS). When activity is detected, other teams move into preselected positions to add their capabilities to the surveillance of the target. See Figure 5-5.

Provide Early Warning

The scout platoon's second critical task is to provide early warning of the approach of the enemy. Effective early warning requires planning for communications in detail. The platoon leader looks at communications distances and significant terrain features to determine the likelihood of FM communications problems. If he anticipates problems, he can address them by requesting support from higher (in the form of battalion retrans) or by planning for radio relays and directional antennas. See Figure 5-6, page 5-10.

Perform Counterreconnaissance

Once the platoon leader has planned surveillance of assigned targets and has ensured he can provide early warning, he must next consider enemy reconnaissance and his assigned role in the conduct of counterreconnaissance operations. Counterreconnaissance operations consist of two elements: acquiring and killing. The most appropriate role for the scout platoon in counterreconnaissance is acquiring enemy reconnaissance assets rather than killing them, although it does have limited killing capability.

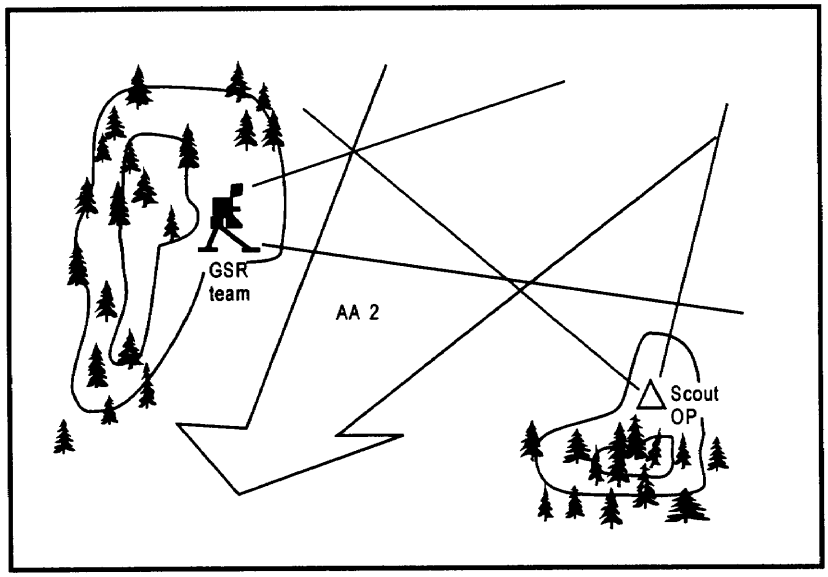


Figure 5-4. Redundant target coverage.

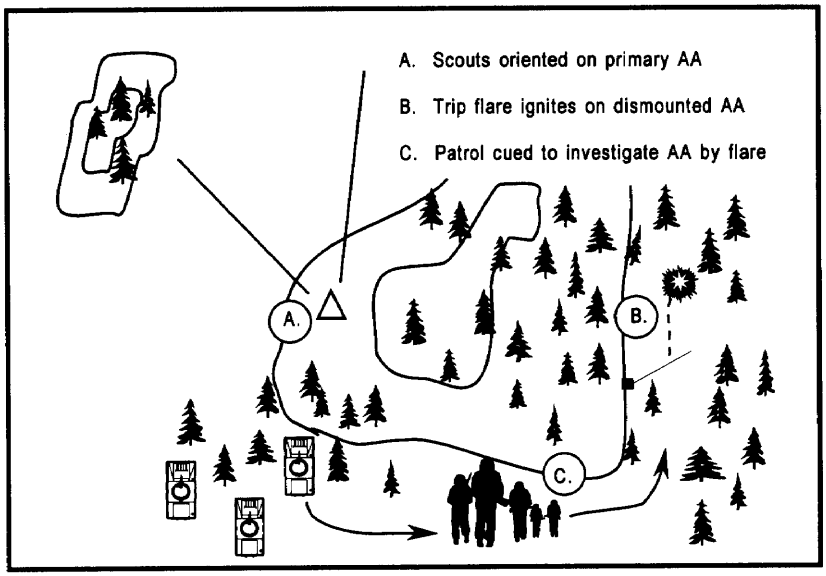


Figure 5-5. Trip flare cues a patrol.

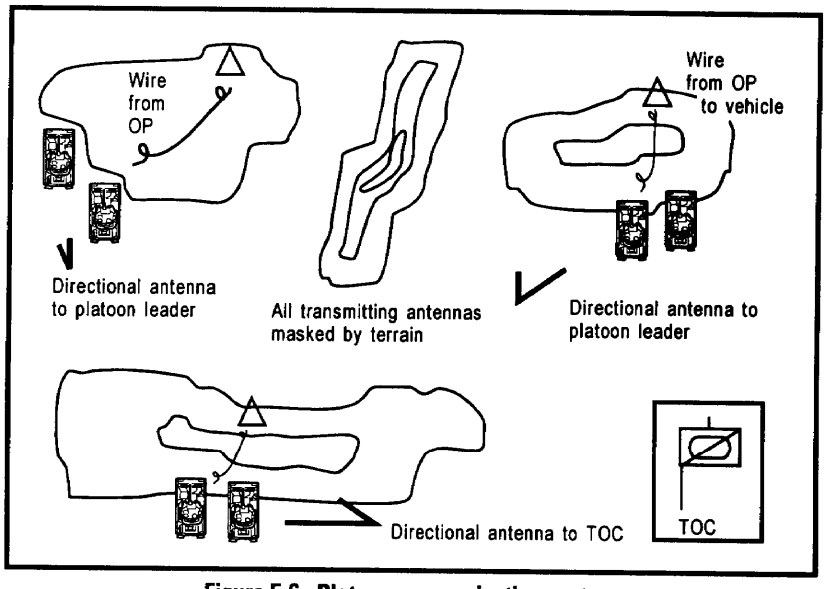


Figure 5-6. Platoon communications setup.

The commander's guidance must specifically define the role of the scout in counterreconnaissance operations. Once he has a thorough understanding of his commander's intent, the scout platoon leader must consider four factors when planning to acquire enemy reconnaissance elements: enemy RAAs; when and under what conditions enemy reconnaissance is likely to be encountered; the likely composition of the enemy reconnaissance in terms of size, organization, and equipment; and the identity and location of friendly reconnaissance-killing forces.

Enemy reconnaissance forces are not likely to use primary avenues of approach to execute their mission. To acquire reconnaissance targets, the scouts must be oriented on trails, rough terrain, and dead space that allow mounted movement, but only for small teams of vehicles, They must also realize that enemy reconnaissance is most likely to move during darkness and periods of limited visibility. A thorough understanding of the composition of enemy reconnaissance elements will allow the scout to more accurately determine what their likely RAAs are and how best to acquire them. Other assets in the troop or battalion will be given the specific mission of killing enemy reconnaissance behind the screen line where initial acquisition occurs. Once the scouts locate the enemy reconnaissance, they must use their thorough knowledge of the terrain and of the location and capabilities of the friendly killing force to coordinate battle handover of the enemy forces.

The counterreconnaissance task is very resource-intensive. It is generally most effective when conducted by an element larger than a single scout platoon. Most often, the scout platoon by itself does not have sufficient assets to both acquire and kill the enemy. In addition, it may not be able to cover all the reconnaissance avenues and still maintain surveillance on the main avenues of approach. The commander's intent is critical to resolving this dilemma.

When the scout platoon must acquire both enemy reconnaissance elements and the main body, the priority in the early stages of the mission will be to acquire reconnaissance, focusing on the RAAs. The platoon will then track the echeloned arrival of enemy elements on the battlefield and shift priority to the main avenues of approach at the appropriate time. This technique permits the platoon to time-phase its priorities based on battlefield conditions. The platoon leader, however, must recognize when to change priority to the main avenue and then execute the change successfully. See Figures 5-7A and 5-7B, page 5-12.

Maintain Contact

After locating the main body of the enemy, the scout platoon must maintain contact with it until authorized to hand over contact to another friendly element. This is one of the most difficult tasks for the individual scout team to accomplish and therefore is best accomplished through a platoon effort. The preferred method of maintaining contact with a moving enemy main body is to position echeloned OPs in depth along the avenue of approach. This allows contact to be handed off from one OP to another without the requirement for the OPs to physically displace. This technique requires that the scout platoon have enough assets to pre-position the OPs in depth. See Figure 5-8, page 5-13.

Another technique used to maintain contact is to displace in front of a moving enemy. This technique is very difficult because the scouts must move to the rear faster than the enemy is moving forward. This often exposes the scouts to enemy fire. Additionally, if they attempt to use covered and concealed routes only, they risk moving too slowly, being overrun or outrun by the enemy, and losing contact. See Figure 5-9, page 5-14.

A third technique, which is a combination of the two already discussed, is to maintain contact by moving teams to positions in depth after initial contact is made. This technique allows contact to be maintained without displacing the scouts in contact. The risk of this technique is the difficulty of quickly repositioning the teams not in contact along the appropriate avenue of approach. See Figure 5-10A and 5-10B, page 5-15.

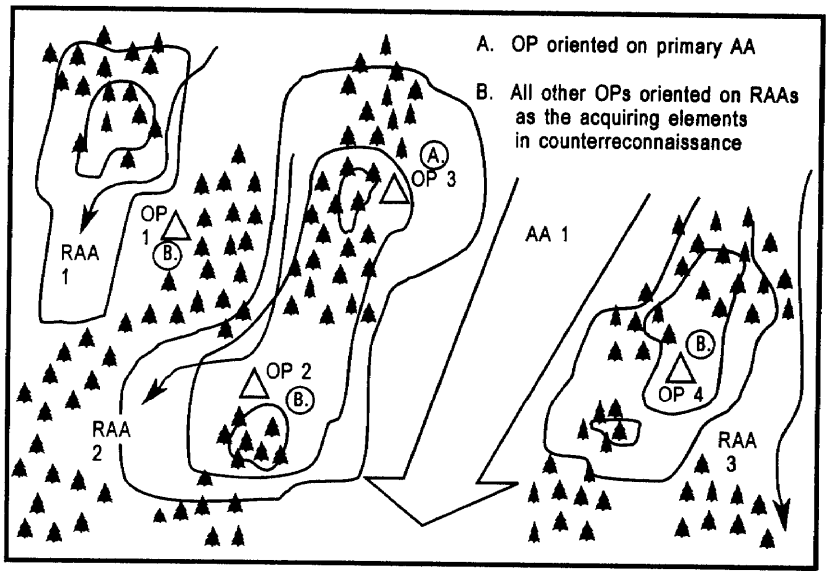


Figure 5-7A. Changing the screen priority (priority to counterreconnaissance).

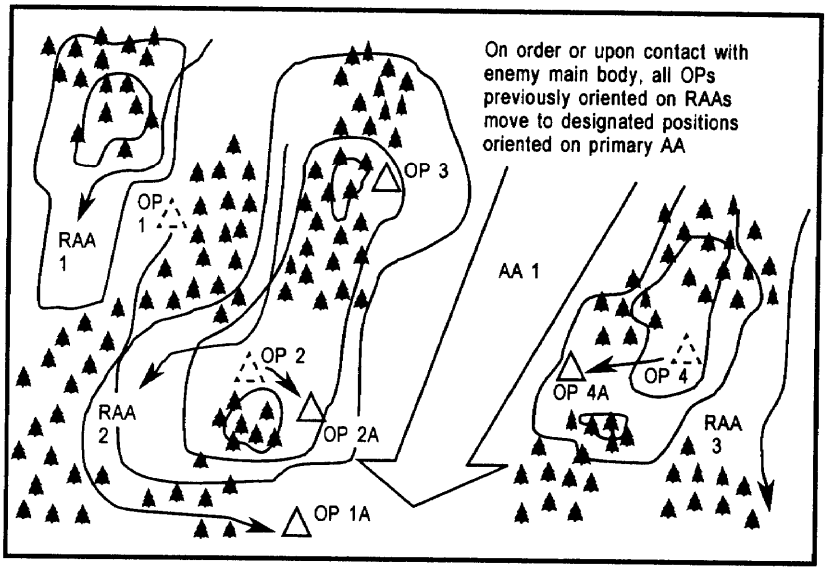


Figure 5-7B. Changing the screen priority (priority to primary avenue of approach) (continued).

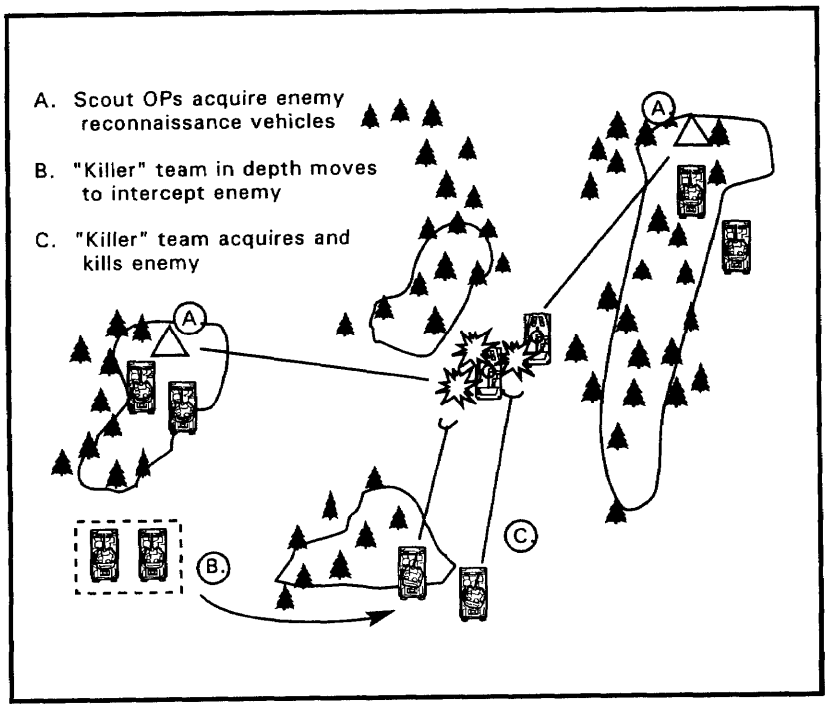


Figure 5-8. Positioning the OPs in depth.

Harass and impede

Scouts should attempt to harass and impede the enemy using indirect fire. It is difficult, however, to effectively engage a moving armored element with indirect fire. Through careful planning that focuses on expected avenues of approach, chokepoints, the enemy rate of march, and artillery time of flight, the platoon leader can determine trigger lines (or points) that allow the enemy to be accurately engaged.

Accurate artillery fire will have an immediate effect on the enemy main body. Formations will be disrupted as individual vehicles change speed and button up. Command and control will be hindered as vision is restricted and antennas are lost; the ability to spot displacing friendly forces will be restricted by this loss of vision and command and control. The enemy may also compromise his momentum and combat power if he attempts to locate the element directing the fire. See Figure 5-11, page 5-16.

Figure 5-9. Displacing while in contact.

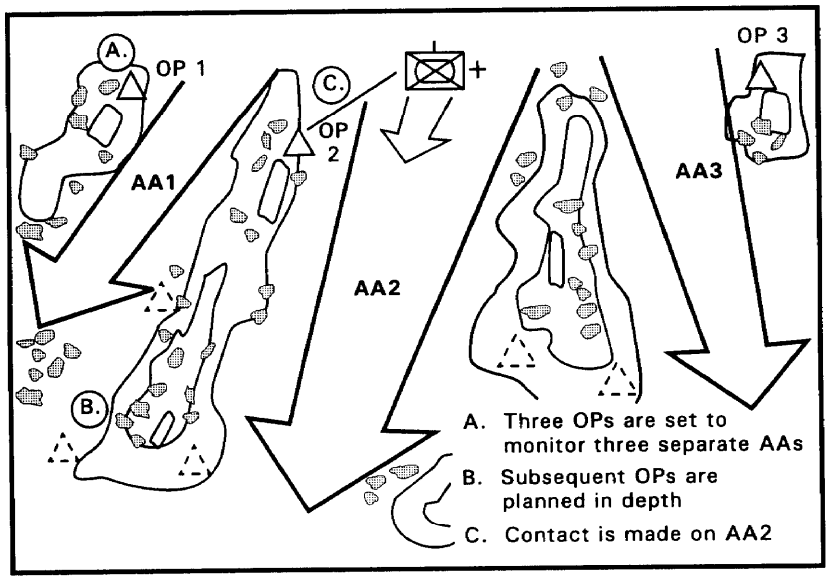


Figure 5-10A. Repositioning OPs in depth.

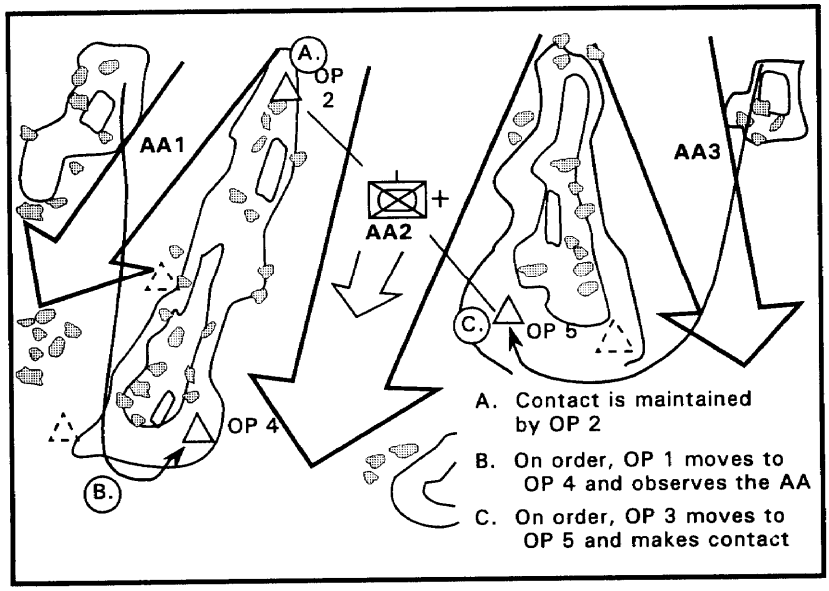


Figure 5-10B. Repositioning OPs in depth (continued).

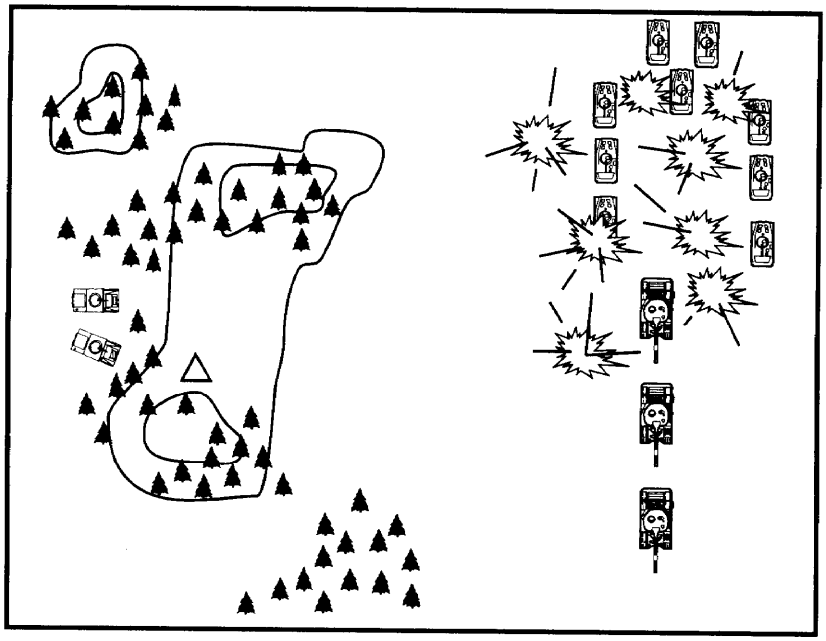


Figure 5-11. Artillery harassing an enemy main body.

SURVEILLANCE METHODS

Surveillance is the systematic observation of a specific area. Scouts watch. listen, and employ electronic devices to observe their area of responsibility: The scout platoon can employ three techniques to conduct surveillance of an assigned area.

Observation Posts

The OP is the most common method used to maintain surveillance of an assigned avenue or NAI. It can be executed either mounted or dismounted. The dismounted OP provides maximum stealth and thus has the greatest likelihood of remaining undetected by the enemy. The disadvantages of the dismounted OP are the time it takes to mount and move if necessary and, if a ground-mounted thermal device is not available, the lack of optics capability. If rapid movement or displacement is anticipated, the OP should mount or remain mounted. Mounted OPs offer the advantages of rapid movement and vehicle optics, but they can be detected more easily by enemy elements and thus are much less

effective than dismounted OPs. The platoon can array OPs either in linear positions or in depth. Depth is the preferred method when attempting to maintain contact with a moving enemy. Linear placement is effective when the enemy is not moving; it provides maximum eyes on the enemy. See Appendix B for a detailed discussion of OP techniques.

Patrols

Patrols are used during security operations to perform three functions: reconnaissance (observation) patrols of specific targets as part of the platoon's surveillance requirements; reconnaissance patrols designed by the platoon to ensure local security and integrity of the platoon's positions; and combat patrols as part of the counterreconnaissance effort.

Reconnaissance patrols are normally tasked at platoon level or higher to gather detailed information on specific NAIs or avenues of approach. A reconnaissance patrol objective might be a small mounted avenue of approach that the platoon does not have assets to cover continuously. Reconnaissance patrols can also ensure the security of OPs and the integrity of the platoon's area of operations. A team can send out a reconnaissance patrol after establishing an OP to check all locations from which the enemy can observe the OP; this will ensure the OP position was not detected as it was occupied. A combat patrol may be conducted by the platoon as part of the counterreconnaissance effort, though this type of patrol is not common because of the personnel and resources required. As an example, the platoon might use a combat patrol to establish an ambush on a dismounted enemy avenue of approach and prevent dismounted infiltration of the screen line. If combat patrols are routinely required, however, infantry elements should be tasked to conduct them.

Extensive patrolling is possible only if the scout teams are organized with sufficient personnel to execute it. To both man an OP and execute a patrol, a team requires at least two CFV-equipped squads or three HMMWV-equipped squads. See Figure 5-12, page 5-18. Appendix B contains a detailed discussion of the organization and execution of patrols.

Remote Electronic/Mechanical Surveillance

In some cases, the scout platoon will not have the resources to observe a particular area that is either tasked to the platoon or important to its internal security. Other times, the terrain will not permit such observation. In these

situations, the platoon can use mechanical warning devices such as trip flares or electronic devices such as PEWS to monitor the area. As a general consideration, remote surveillance devices allow the platoon to put maximum effort in the commander's or scout's primary area of concern while still maintaining surveillance on secondary targets. The platoon will backup these devices with patrols to investigate any alarms. An example of the use of mechanical devices is an OP that uses trip flares in dead space along the avenue of approach it is monitoring. When activated, the trip flare gives early warning of enemy infiltration. A patrol will then be dispatched to verify the warning. See Figure 5-13.

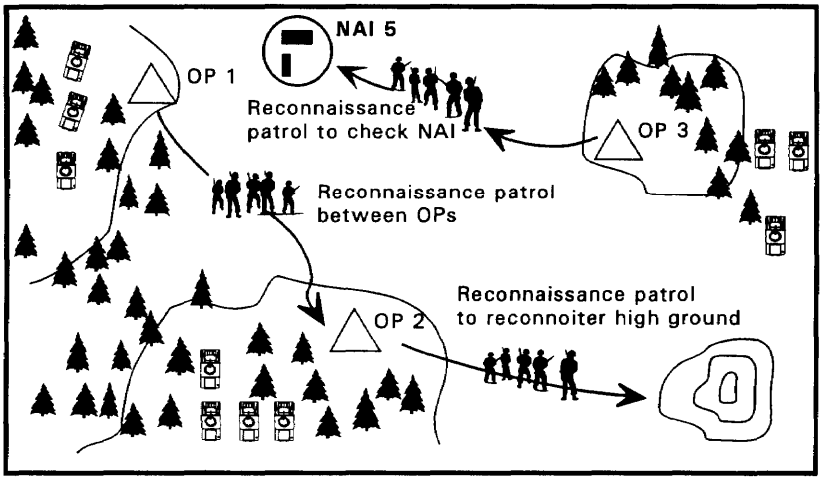


Figure 5-12. Integration of patrols into the screen.

COUNTERRECONNAISSANCE TECHNIQUES

Counterreconnaissance is a directed effort to prevent visual observation or infiltration of friendly forces by enemy reconnaissance elements. It is a critical task of all cavalry or battalion scout platoon security missions. Countering the enemy's mounted reconnaissance is the first and possibly most important step in ensuring the main body can successfully execute its mission. This task is most successfully executed when it is approached as a combined arms effort at troop and battalion level. The scout platoon plays a vital role in the battalion task force and cavalry troop counterreconnaissance fight. Although counterreconnaissance is mostly discussed in terms of battalion operations, it is equally applicable to the cavalry troop and squadron.

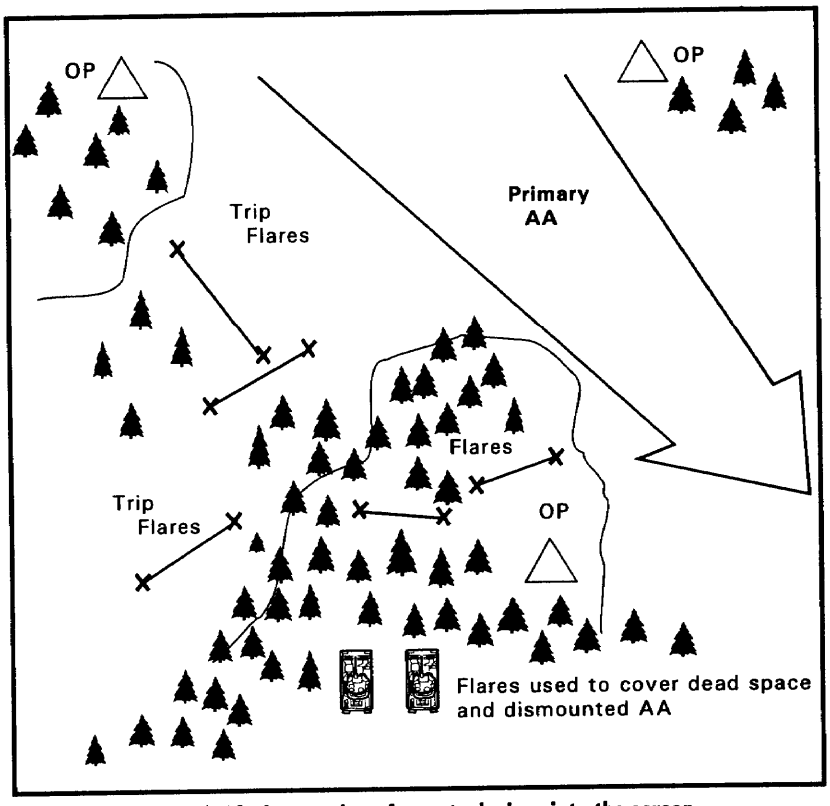


Figure 5-13. Integration of remote devices into the screen.

Planning Considerations

The task force or troop concept of executing counterreconnaissance must address how the unit will accomplish the two elements of counterreconnaissance: acquiring the enemy and then killing him. At squadron and battalion level, the S2 provides key input in this determination. He identifies where RAAs into the unit sector are located, what type of enemy reconnaissance elements might be used in the sector, and when they are most likely to move into the sector. This information is integrated into the R&S plan and is part of the unit's IPB. The R&S plan is not normally sufficient to provide detailed guidance for the conduct of counterreconnaissace; the commander or S3 should supplement it with a FRAGO indicating in tactical terms how elements will organize and conduct counterreconnaissance operations throughout the depth of the task force area of operations.

In all counterreconnaissance operations, the goal is to kill the enemy reconnaissance forces after they have penetrated the initial screen line. The scout platoon's role in these operations will usually be to conduct a screen mission to acquire and identify enemy reconnaissance forces. This requires that the acquiring teams of the platoon be well hidden to prevent enemy templating of the screen line, The S3 may also task maneuver units to conduct patrols to find the enemy. Inmost cases, the scout platoon cannot be expected to have the capability to acquire, identify, and defeat the enemy reconnaissance by itself. Other combat elements will be tasked to fight and kill the enemy reconnaissance.

Several organizational options are available to the commander or S3 to counter the enemy reconnaissance effort:

Scout platoon. This technique puts the entire burden for counterreconnaissance on the scout platoon and attached CS assets. It requires maximum use of the CS assets to acquire the enemy, freeing the scouts to perform the killing function of counterreconnaissance. The scout platoon leader places acquiring assets along the screen line and positions his designated killing teams in depth. The killing assets of the platoon occupy positions on likely enemy reconnaissance routes; however, they must be flexible to respond to reconnaissance elements moving on other routes. This technique requires that the teams reconnoiter alternate positions and routes that permit quick repositioning once contact is made by the acquiring elements. When it is used, counterreconnaissance tasks must be prioritized in the early stages of the screen mission. CFV scout platoons using this technique have an effective combat system; however, they will have difficulty successfully executing all requirements due to the small size of the platoon. The HMMWV scout platoon's larger size will enable it to allocate more resources to the killing and acquiring tasks, but the HMMWV's relatively weak firepower and protection make it a poor direct-fire weapon system. Because of these problems, this is the least preferable counterreconnaissance technique regardless of the type of scout platoon. See Figure 5-14.

Scout and tank team. The team technique requires the close integration of a scout platoon and a tank platoon to execute counterreconnaissance tasks. The scout platoon is the acquiring element, and the tank platoon is the killing element, The scout platoon leader, as the element that makes first contact, commands the counterreconnaissance effort; the tank platoon is under his operational control (OPCON). In the cavalry troop, the troop commander may control and coordinate the effort. The scouts acquire the enemy through the use

of surveillance techniques. The tanks occupy a BP along likely reconnaissance avenues, but they are prepared to move to prereconnoitered alternate positions based on reports coming from the scout platoon. This technique is very well suited to cavalry troop and squadron counterreconnaissance operations because it mirrors the regimental cavalry troop organization. It is also easily executed by a battalion scout platoon and a designated tank platoon. In a battalion, the tank platoon should be predesignated, with a habitual relationship established between the two platoons. See Figure 5-15, page 5-22.

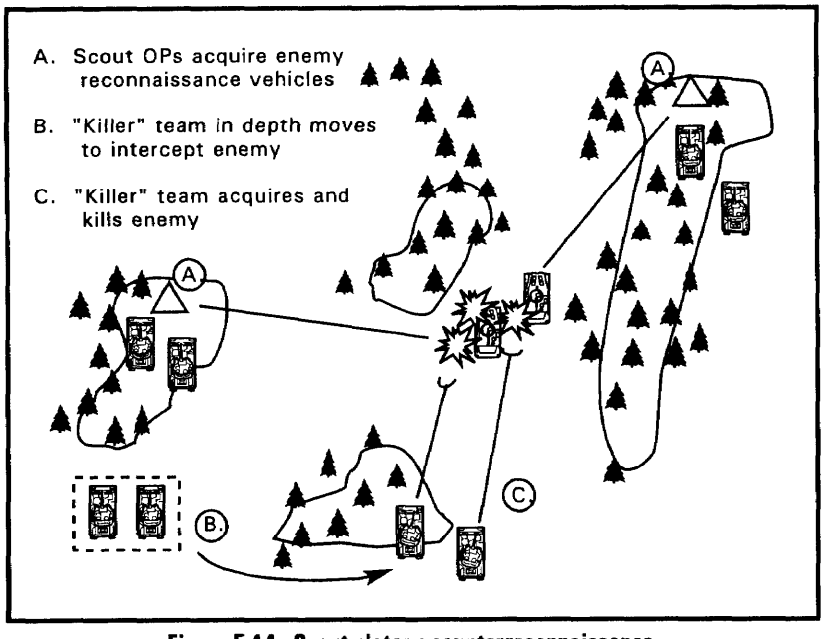


Figure 5-14. Scout platoon counterreconnaissance.

Scout and company team. In this technique, a combined arms task force uses a company team with an attached or OPCON scout platoon to execute counterreconnaissance and security operations. The company team commander controls the security effort. The scout platoon is the primary acquiring element, but it can be augmented with infantry assets from the company team and CS assets from the battalion. The company uses all other assets as the killing element. This is the most robust counterreconnaissance technique and has the combat power to be very effective. It also has organic CSS assets, making service support operations quicker and more responsive. The major disadvantages of

this technique are the combat power it diverts from the main battle area and the execution problems that may result if the scouts and the killing elements have not trained together, See Figure 5-16. When using this technique, the company team may eventually conduct a rearward passage of lines and become the task force reserve once the counterreconnaissace effort is complete. The scout platoon, however, will remain on the screen line and revert to task force control.

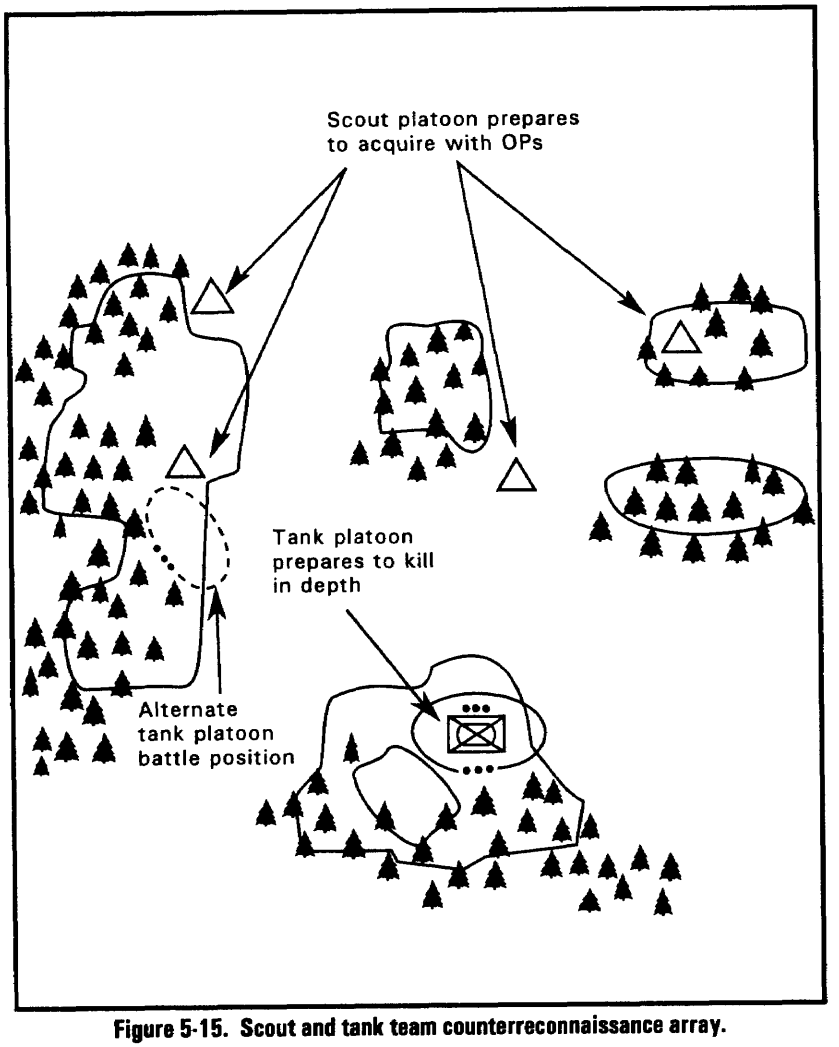


Figure 5-15. Scout and tank team counterreconnaissance array.

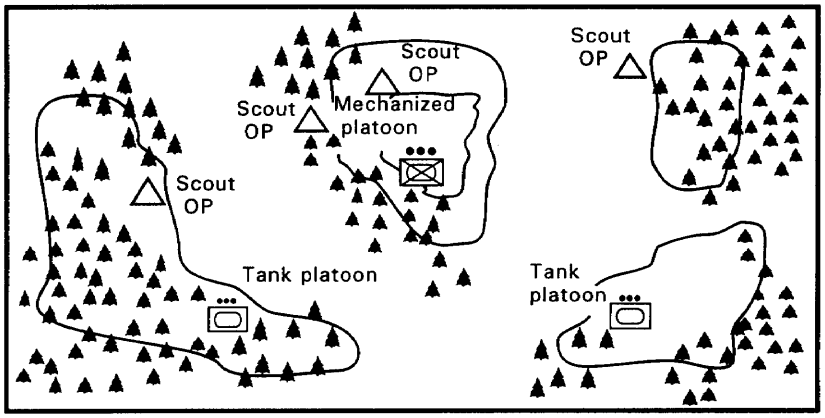


Figure 5-16. Scout and company team counterreconnaissance array.

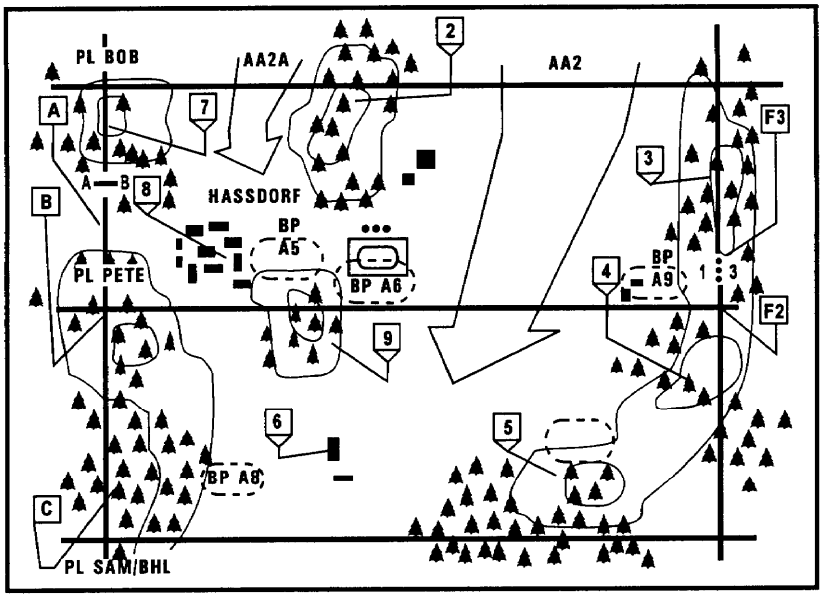
EXAMPLES OF SCREEN OPERATIONS

Cavalry Scout Platoon Screen

The cavalry scout platoon normally screens as part of a troop operation. This example focuses on lst Platoon, Troop B, part of a regimental cavalry squadron (see Figure 5-17, page 5-24). The troop commander has been assigned the mission to screen in his sector along PL BOB and between PL BOB and FL SAM. The troop will hand over enemy contact as the enemy crosses PL SAM. The troop commander decides to screen with his two scout platoons on line and his tank platoons in depth behind the scout platoons. The primary focus of the 1st Platoon is on acquiring enemy main body elements moving along avenue of approach 2 or 2A (AA2 and AA2A in the figure). The platoon will also locate as much enemy reconnaissance as possible. Because of the width of the sector, the scout platoons have permission to engage enemy reconnaissance patrols smaller than platoon size, but only under favorable conditions. The tank platoon's primary task is to destroy enemy reconnaissance elements of platoon size or larger. In the 1st Platoon's area of operations, the 2d Platoon (tank) has been positioned in BP A6 and is prepared to occupy any other BP on order.

With his troop commander's guidance, the 1st Platoon leader evaluates the resources available to accomplish his tasks. Because there is no assigned time limit to the mission, he plans for long-duration OPs. This consideration drives him to a three-team organization. He places one team to observe AA2A from OP A and applies redundancy along the most dangerous avenue, AA2, by positioning teams at OPs C and E. The positioning of these OPs is critical.

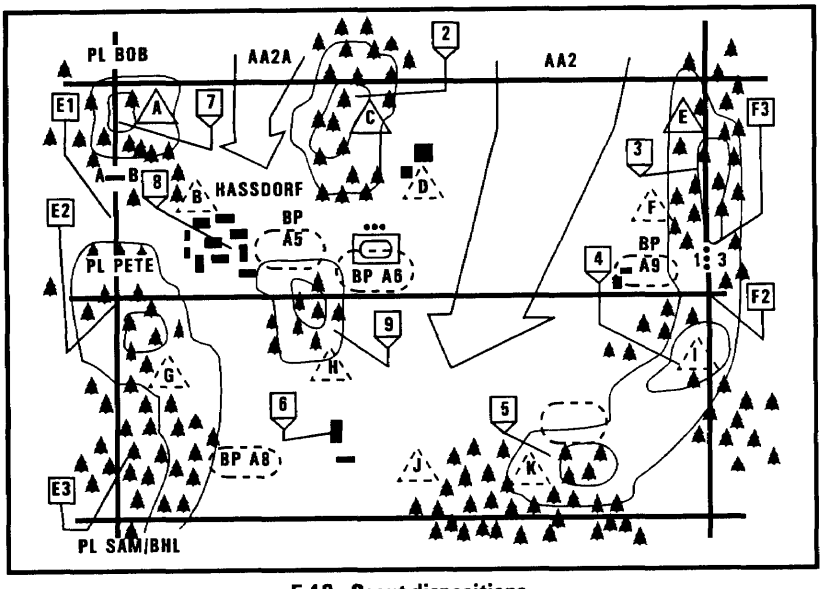
A map reconnaissance indicates that RAAs are probably located along the platoon's boundaries and through the wooded area in the center of the platoon screen (in the vicinity of checkpoints 7, 2, and 3). Careful positioning of the OPs will allow continuous coverage of AA2 and AA2A and some coverage of the RAAs. The platoon leader plans to mount patrols for further surveillance of the RAAs. In addition to his primary positions, the platoon leader plans alternate and subsequent OPs throughout the depth of his sector. He selects these positions based on his requirements to reposition if an OP is compromised and to maintain contact with the main body throughout the depth of his sector (see Figure 5- 18). If time permits, the platoon leader will report all his planned positions to the troop TOC. As a minimum, he will send the exact locations of the initial positions.



5-17. Troop screen concept.

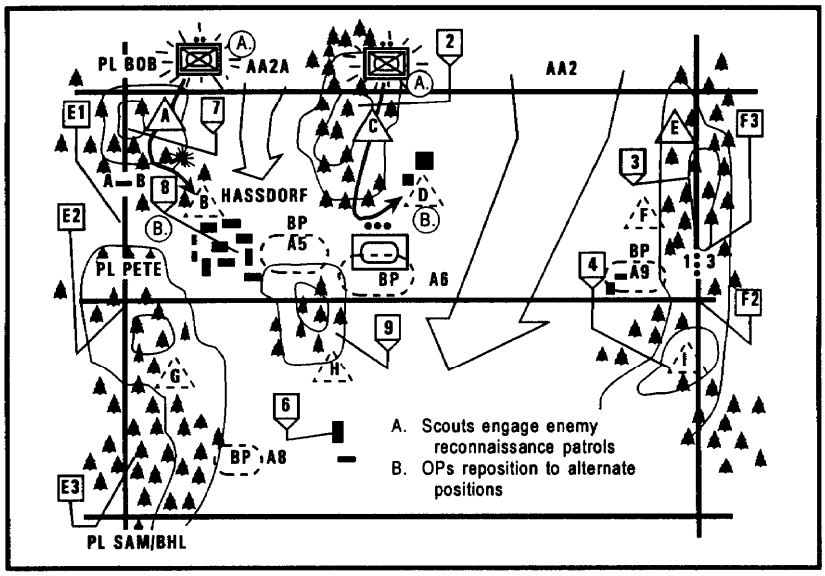
As the scout teams arrive at their assigned positions (OPs A, C, and E), they adjust them to best meet the intent of the platoon leader, Upon arriving, the teams report "SET"; after the OP is completely installed, they report "ESTABLISHED." Once established, the scout teams begin executing patrols in accordance with the platoon patrol plan. After a period of time, OP A reports contact with an enemy reconnaissance patrol consisting of two BRDMs (see Figure 5-19, page 5-26). Based on the platoon leader's guidance, the CFVs

supporting the OP engage and destroy the enemy vehicles. The scouts send the appropriate reports and, with the platoon leader's permission, displace to alternate OP B. Later, scouts at OP C also make contact with an enemy reconnaissance patrol, take the same actions that occurred at OP A, and reposition to their alternate site, OP D.



5-18. Scout dispositions.

The scout teams that repositioned report set and established as they occupy their alternate OPs (B and D). After a period of time, the team at OP D reports contact with three BMPs and a BRDM, moving south just west of AA2 (see Figure 5-20, page 5-26). It also reports artillery striking in the vicinity of OP C, the position it had vacated. Based on the platoon leader's guidance, the scouts take no action, remain hidden, and continue to report. The platoon leader forwards the report to the troop commander and receives instructions to coordinate target handover with the 2d Platoon in BP A6. A short time later, the scouts in OP B report artillery impact in the vicinity of OP A and then contact with two BMPs and a tank, moving south just east of AA2A. The tank platoon engages the first enemy contact from BP A6 and destroys it. Having monitored the developing enemy situation, the troop commander may order the tank platoon to quickly reposition to BP AS. The tank platoon coordinates with the scout platoon leader, moves to a new position if necessary, engages the second enemy platoon, and destroys it.



5-19. Scouts engage reconnaissance patrols.

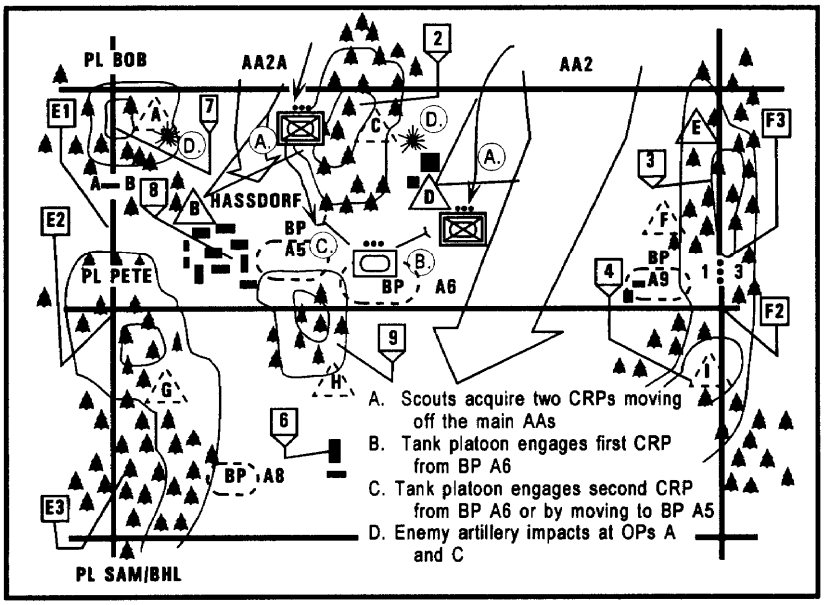


Figure 5-20. Scouts acquire combat reconnaissance patrols (CRP); tanks kill CRPs.

Having engaged a significant number of enemy elements from BP A6 ard/or BP A5, the tank platoon is ordered by the troop commander to reposition to BP A8. As that occurs, the team at OP E identifies the first element of the enemy main body, a company-size element. The platoon leader decides to take a risk along AA2A by ordering the displacement of OP B to OP H. This gives him additional depth along AA2 and will make maintaining contact with the enemy main body easier (see Figure 5-2 1).

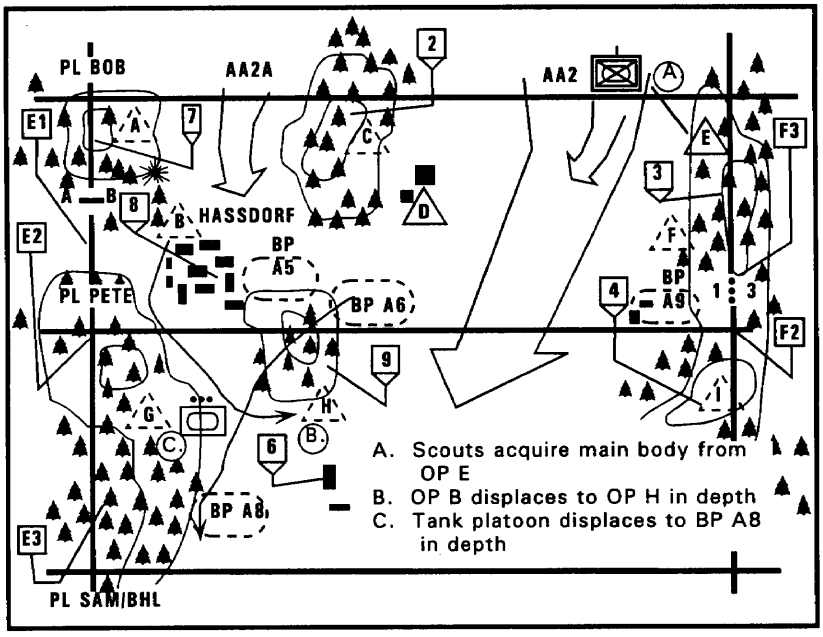


Figure 5-21. Scouts acquire enemy main body.

The scouts at OP E maintain contact with the enemy main body until it can be observed by the scouts at OP D (see Figure 5-22, page 5-28). Once that occurs, target handoff is made between the two OPs, and the scouts at OP E begin to displace in depth to OP J. The scouts at OP D begin to harass the enemy main body by calling for indirect fire. This fire not only breaks up the momentum of the main body, but also helps cover the displacement of OP E. OP D also reports enemy artillery impact in the vicinity of BP A6. The team formerly at OP B now reports set at OP H. On the troop net, the scout platoon eavesdrops that 2d Platoon is set at BP A8.

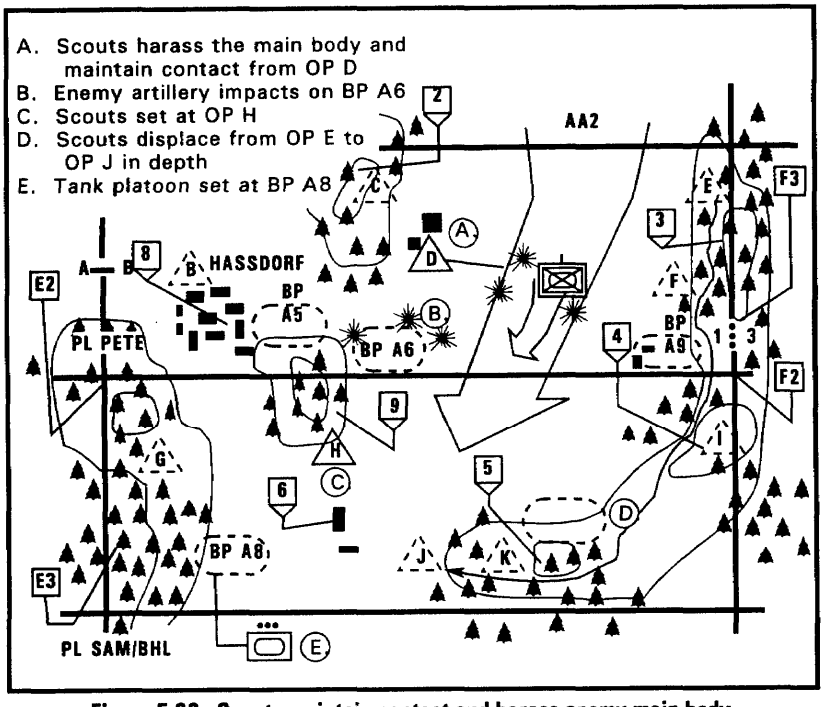


Figure 5-22. Scouts maintain contact and harass enemy main body.

As the enemy main body moves down AA2, target handover occurs between OP D and OP H (see Figure 5-23). OP H maintains contact with the enemy and continues to harass him with indirect fire. As the enemy main body continues to move, it is engaged with direct fire by the tank platoon in BP A8. The effect of these combined fires disrupts and significantly slows the enemy main body. Meanwhile, the scouts at OP D displace laterally toward the A Troop area to conduct rearward passage. Scouts also report set at OP J and begin coordinating battle handover to the friendly unit south of PL SAM.

After the initial engagement of the enemy main body, the tank platoon displaces laterally toward Troop A to conduct rearward passage (see Figure 5-24). OP H conducts target handover with OP J, and also moves toward Troop A. OP J maintains contact with the moving enemy main body until battle handover with the friendly unit to the south is complete. The team at OP J then moves east to pass to the rear.

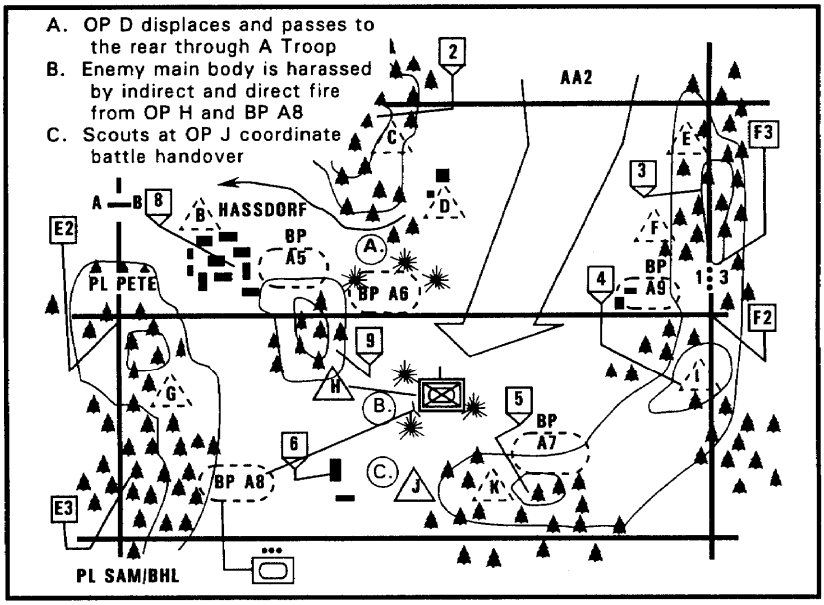


Figure 5-23. Tanks and scouts engage enemy main body.

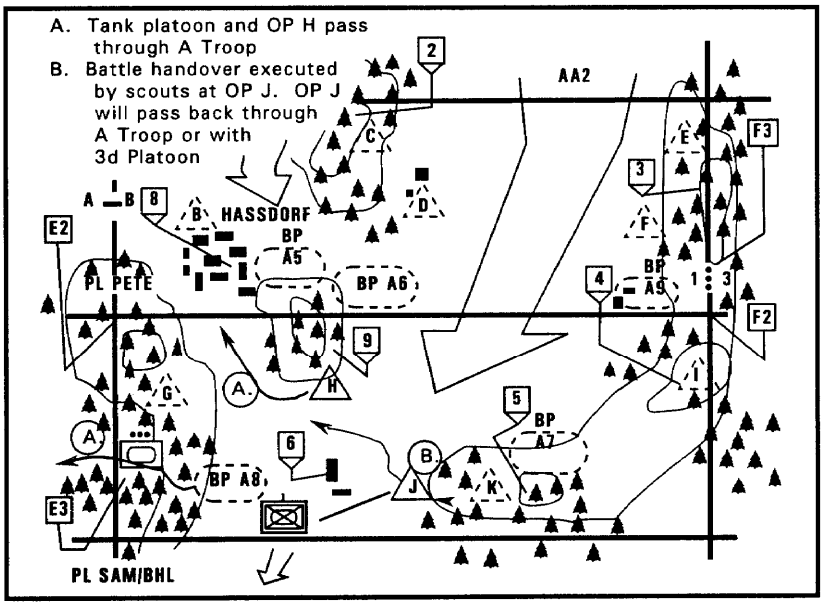


Figure 5-24. Scouts execute battle handover to incoming unit.

Battalion Scout Platoon Screen

A high-frequency mission for the battalion scout platoon is to screen while the task force defends. In this example, the scout platoon has been task organized to be attached to a company team. This decision was made by the task force commander to ensure coverage of both the main avenue of approach and the various RAAs and to facilitate an effective counterreconnaissance operation. The task force commander gives the company team (with attached scouts) the mission of screening along PL SUE to locate all enemy elements moving into the battalion sector. He also orders the company to ensure all enemy reconnaissance is destroyed north of PL MARY. The company team is told to be prepared to destroy the lead elements of the main body from either BP 7 or BP 8 and to occupy BP 4 as the task force reserve. Further guidance to the company is that AA2 is the most dangerous, followed by AA 1 and AA3. Surveillance of AA3 is tasked to the company at BP 6. The battalion will defend from BPs 1, 5, and 6 to destroy the enemy in EA SAM (see Figure 5-25).

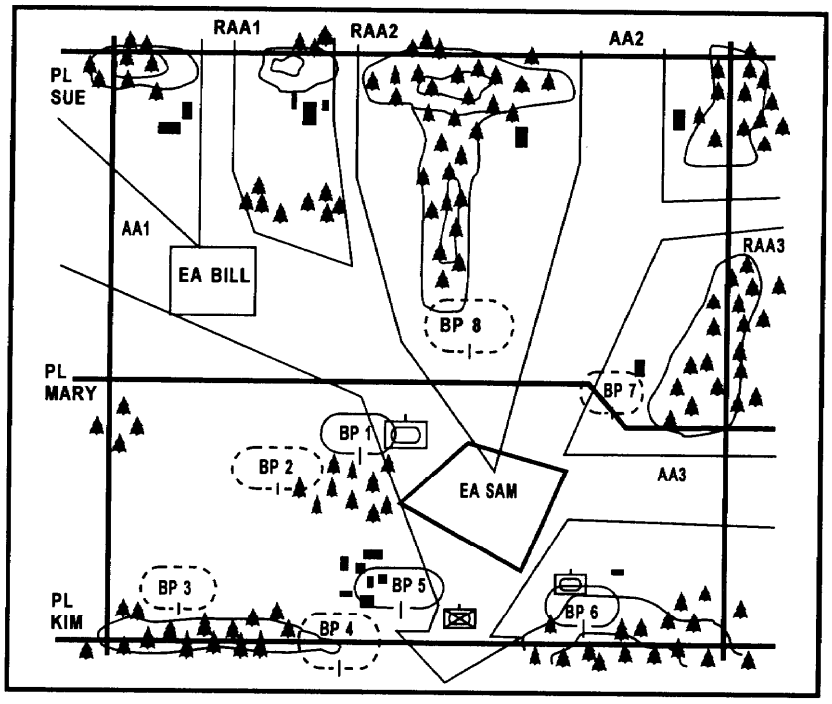


Figure 5-25. Task force dispositions.

The company commander determines that he will use the scout platoon to screen and use his other three platoons to fight counterreconnaissance. Because of the numerous avenues of approach and the requirement to locate all enemy units (reconnaissance and main body), the scout platoon receives attachments: a GSR team (consisting of two radar squads), a COLT team, and an infantry squad. The scout platoon's mission is to screen along PL SUE, oriented on AA 1, AA2, and RAAs 1, 2, and 3. The scout platoon will engage only dismounted reconnaissance elements within its capability. The infantry squad will be used to prevent dismounted infiltration between RAA2 and AA2; it will patrol all forested areas. The mission of the two tank platoons and the infantry platoon is to occupy BPs lC, lE, and lK in depth behind PL SUE and to destroy all mounted reconnaissance elements of platoon size or smaller as they are located by the scouts. These platoons will be prepared to consolidate if required (see Figure 5-26).

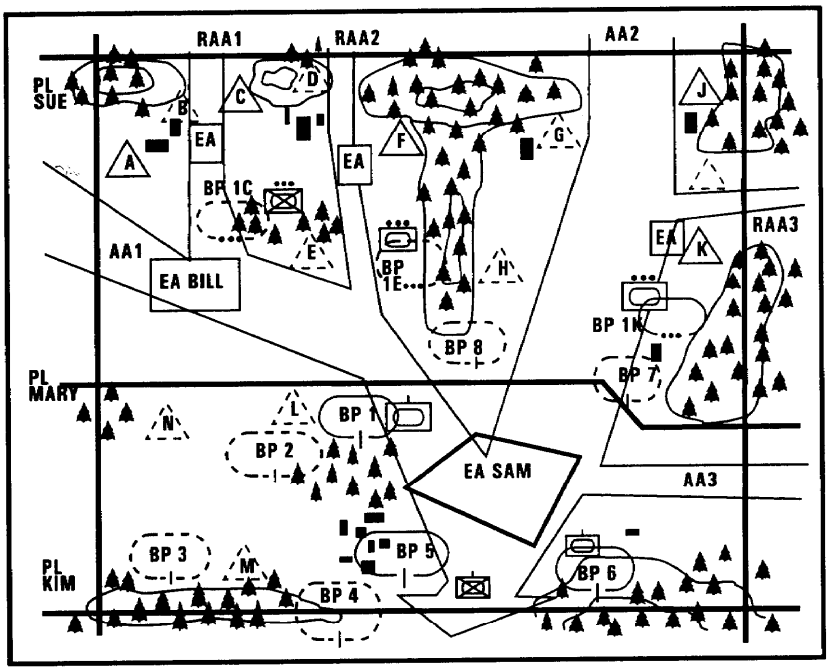


Figure 5-26. Scout and team dispositions.

With a clear understanding of both the company commander's intent for the platoon and the battalion's intent for the company team, the scout platoon

leader begins his mission analysis. Because he has been assigned no time limit for his mission, he must plan long-duration positions. He has also been tasked to do extensive patrolling. These two requirements lead him to determine that each position must be manned by a minimum team of nine personnel. With the attached resources, including his headquarters element, the platoon leader is able to form five teams of varying capabilities (see Figure 5-27). He matches them against the surveillance requirements he has identified. Teams A and B each have GSR and therefore are tasked with surveillance of the main body avenues of approach, AA1 and AA2. Team C, with the infantry squad, is tasked to execute surveillance of RAA2 and prevent dismounted infiltration. Team D, with the COLT element, is positioned in depth to monitor RAA3 and provide depth along AAl, the most dangerous avenue of approach. Team E, with the platoon leader, will monitor RAA1. The platoon leader, though not the leader of Team E, will be able to provide manpower assistance to the team, enabling it to perform continuous operations. Because Team E is monitoring the least likely approach, command and control from that position is least likely to be disrupted. The platoon leader will control his platoon on the platoon net and submit his reports to the company team commander on the company team net. The company commander is responsible for reporting to the task force commander.

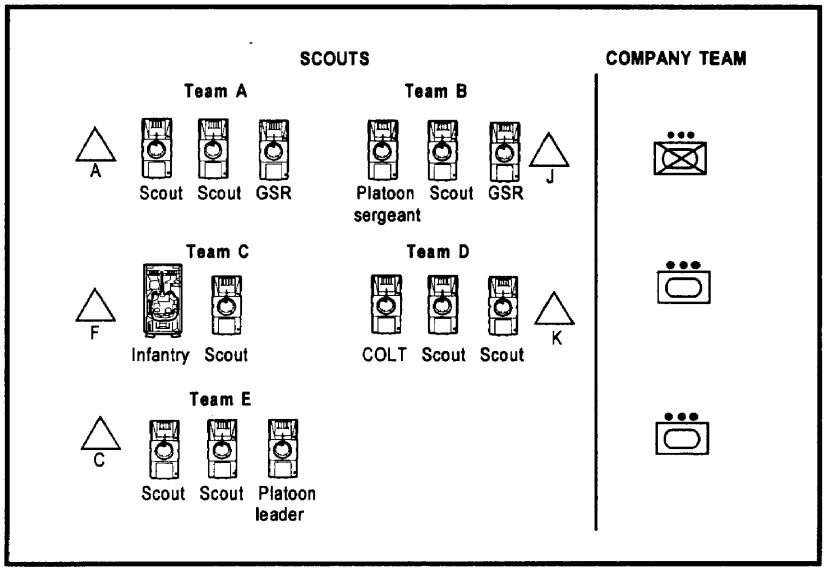


Figure 5-27. Scout and company team organization.

The scout platoon sets in five separate OP positions; simultaneously, the combat platoons set in the respective BPs. Team C, at OP F, dispatches a patrol to set an ambush along the dismounted avenue of approach between OP F and OP G (see Figure 5-28). Team B, at OP J, makes first contact with an enemy reconnaissance patrol consisting of two BMPs, moving on a route parallel to AA2. OP J tracks the enemy, but in accordance with the company commander's guidance, it does not engage. OP J conducts target handover with OP K and alerts the tank platoon in BP 1K. OP K continues to maintain contact without revealing its position until the enemy patrol enters the EA of the tank platoon. There, the BMPs are engaged and destroyed by the tank platoon. Soon afterward, contact is reported by OP F along RAA2. OP F observes and maintains contact with one BRDM and one BMP, then conducts target handover with tanks in BP 1E. The tanks destroy the enemy vehicles when they enter the engagement area.

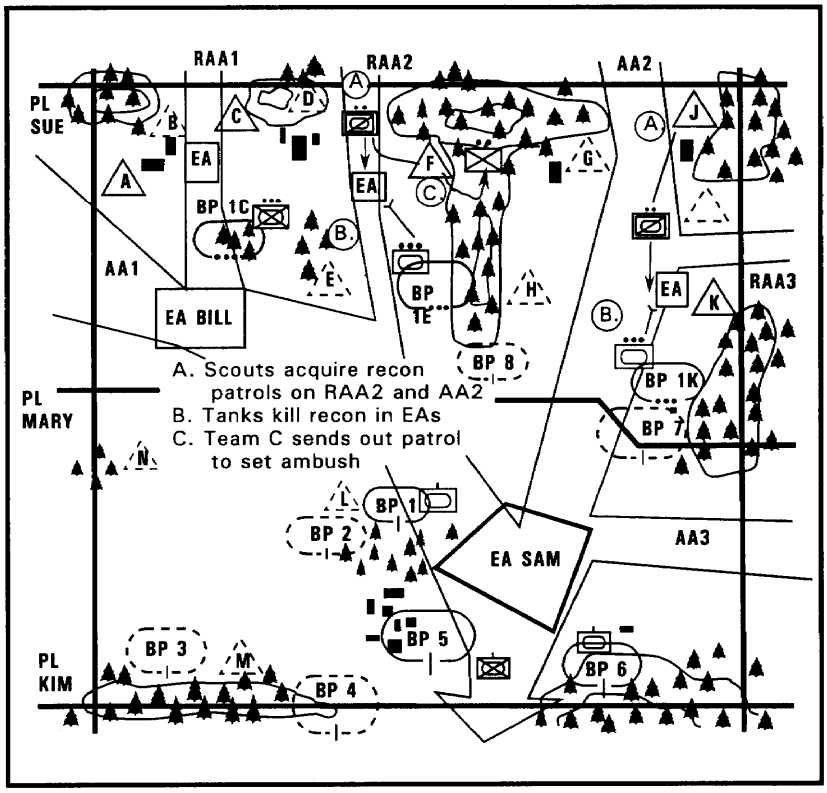


Figure 5-28. Acquiring and destroying enemy reconnaissance patrols.

Upon completion of their engagements, the tank platoons reposition to alternate BPs (see Figure 5-29). Contact with two BMPs is reported by OP C. Contact is also reported by the ambush in the vicinity of OP F. The scouts at OP C remain concealed, maintain contact with the enemy, and execute target handover with the infantry platoon in BP lC. The infantry platoon engages and destroys the enemy as he enters the engagement area. At the ambush site, the infantry squad engages and kills five dismounted enemy soldiers who were attempting to infiltrate the screen line.

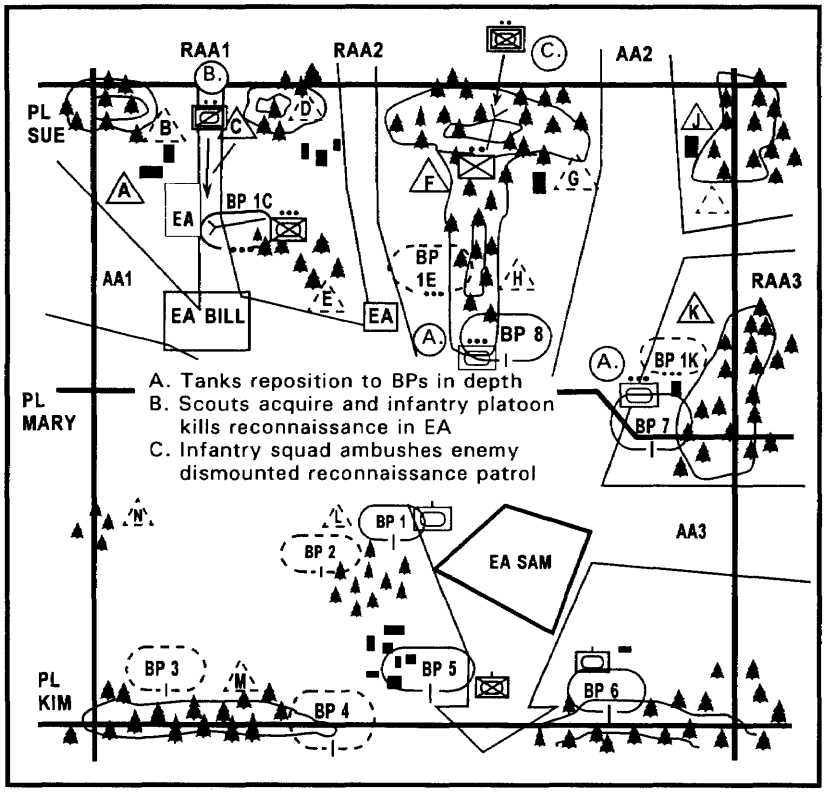


Figure 5-29. Repositioning and acquiring additional reconnaissance patrols.

At completion of the ambush, the infantry squad returns to OP C. Because the scouts have not made a mounted move or engaged targets, their positions remain uncompromised. The scouts acquire two platoon-size elements moving

down AA2 and RAA2 (see Figure 5-30). They report artillery impact on BP lE and BP 1 K. The scouts at OP F maintain contact as long as possible and then, with permission, break contact as the enemy moves south. Positive handover to the tanks is not possible because the tanks have repositioned. Displacement while in contact was not attempted in this situation because of the difficuty of that task and the likelihood that the tanks would soon acquire the enemy from their alternate position. The tank platoon is alerted to the direction, location, and speed of the enemy. With this information, the tank platoon monitors its engagement area and, as the enemy is acquired, destroys him. On AA2, OP J and OP K track a platoon-size enemy force and hand it over to the tank platoon for destruction. In addition, OP K has dispatched a patrol into the wooded area south of the OP and located an enemy OP position. The patrol destroys the position with indirect fire.

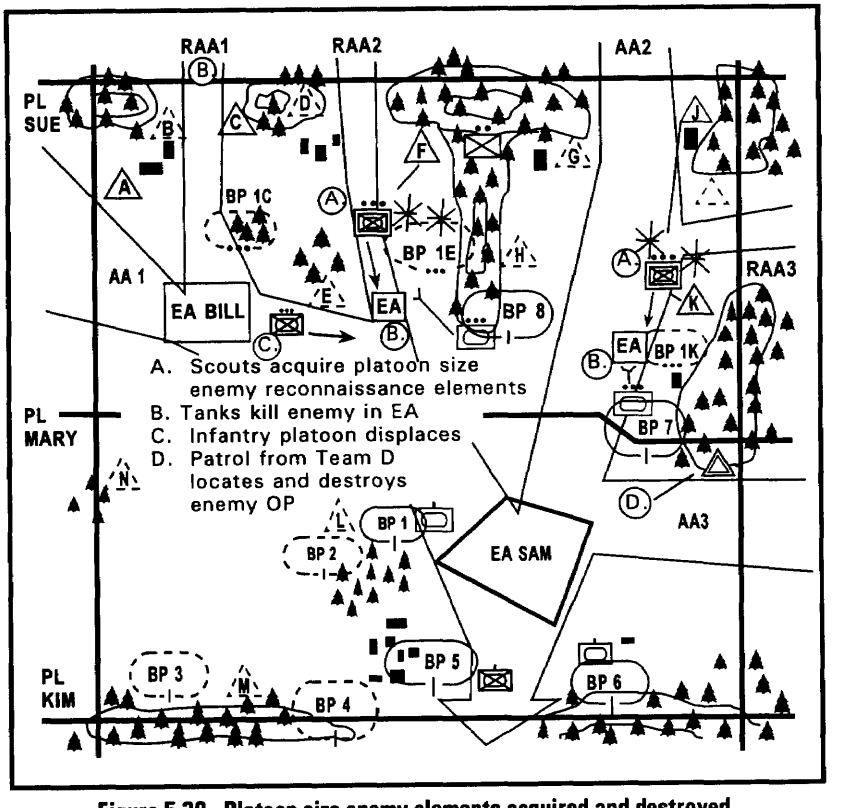


Figure 5-30. Platoon-size enemy elements acquired and destroyed.

After the destruction of the enemy OP, the scout screen no longer has any enemy contact. All the combat platoons are consolidated into a single position at BP 8 in anticipation of the imminent arrival of the enemy main body. The next contact is made by GSR from OP J. The radar report indicates a company-size force moving down AA2. Within a short time, this force is observed by the scouts at OP J (see Figure 5-31). OP J sends the appropriate reports, maintains contact with the enemy, and hands the enemy off to OP K. OP K maintains contact and begins to harass the enemy force with artillery as it approaches the company engagement area (see Figure 5-32). The COLT team at OP K coordinates all indirect frees, using its ground-emplaced laser designator (GELD) to designate key targets for Copperhead munitions. As the lead element of the enemy main body enters the engagement area, it is destroyed by direct and indirect fires. As this is happening, OP J reports another contact. GSR is now reporting a battalion-size force moving rapidly down AA2.

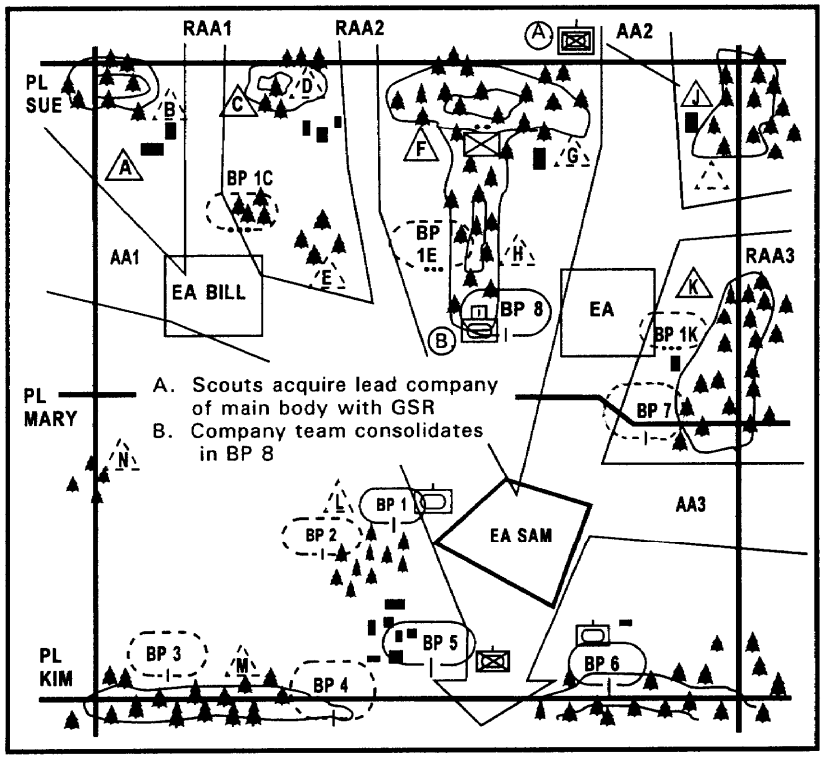


Figure 5-31. Scouts acquire company-size element of enemy main body.

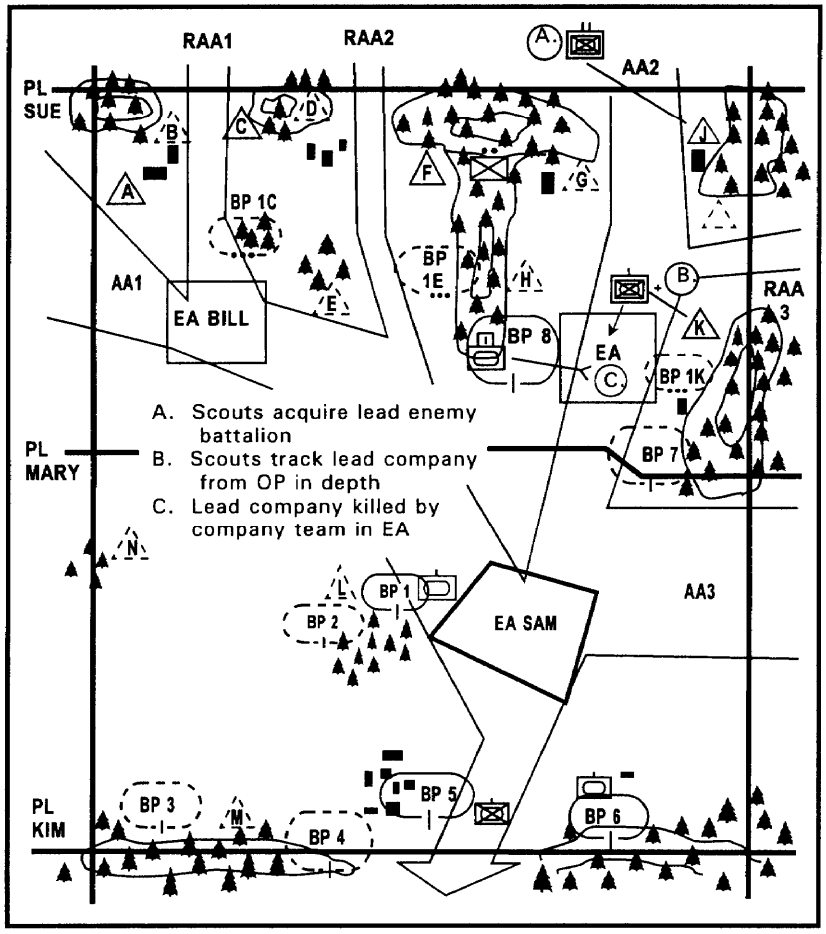


Figure 5-32. Scouts acquire battalion-size enemy main body; company team destroys enemy company.

When the location of the advance battalion of the enemy main body is reported, the friendly battalion commander orders the company to move to BP 4 and revert to battalion reserve (see Figure 5-33, page 5-38). On this order, the scout platoon goes back under battalion control. The scouts maintain contact with the enemy and harass him with indirect fire in depth through OPs J and K. They maintain surveillance on the other avenue of approach until they receive a change-of-mission FRAGO from battalion. The scouts maintain contact until the enemy is engaged by the battalion in EA SAM.

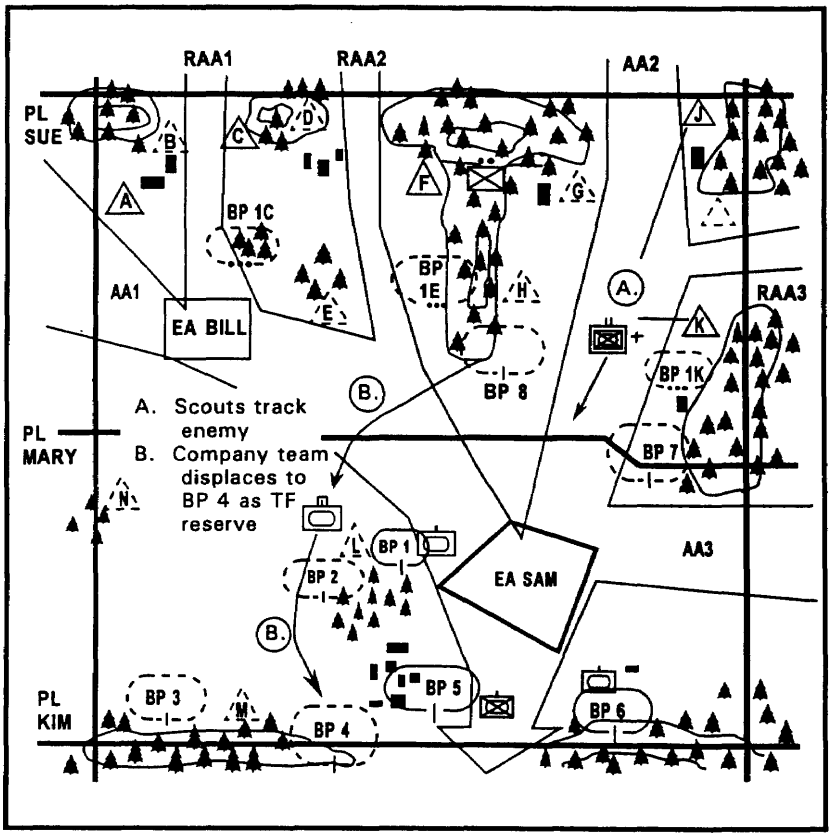


Figure 5-33. Scouts track enemy main body to EA SAM.

Section III. AREA SECURITY OPERATIONS

Area security operations are designed to protect specific critical and vulnerable assets or terrain from enemy direct fire and observation. They can involve escorting friendly convoys; protecting critical points such as bridges, command and control installations, or other key and vulnerable sites; or participating in protection of large areas such as airfields. They are normally performed when conventional security or combat operations are not appropriate to the situation. The scout platoon may perform area security operations as part of a larger force or as an independent platoon mission.

CONVOY AND ROUTE SECURITY

Convoy or route security missions are performed by company teams, cavalry troops, and larger organizations. Convoy security provides protection for a specific convoy. Route security aims at securing a specific route for a designated period of time, during which multiple convoys may be using the route. These missions include numerous tasks for elements such as escort, reconnaissance, and combat reaction forces (see Figure 5-34). These tasks become missions for the subordinate units. The scout platoon is particularly well suited for route reconnaissance and outposting missions and may perform convoy escort as well. The size of the unit performing the convoy or route security operation is dependent on a number of factors, including the size of the convoy, the terrain, and the length of the route.

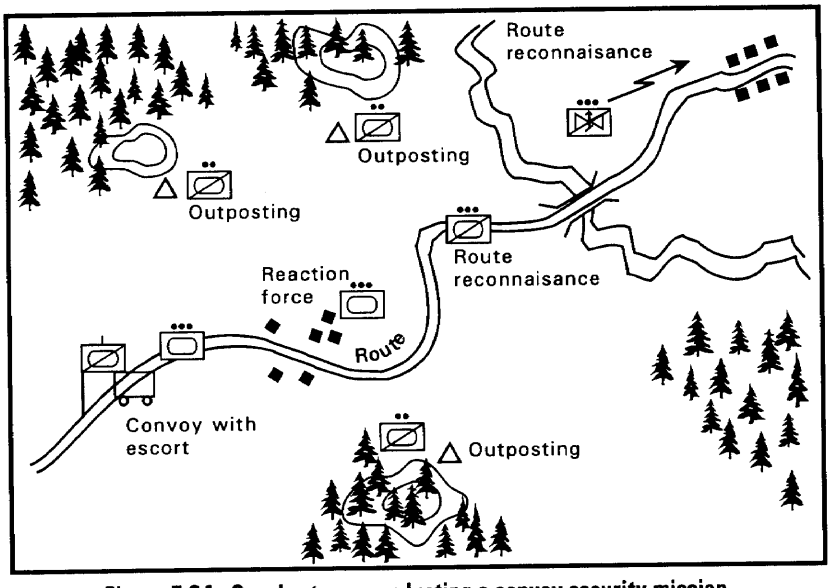


Figure 5-34. Cavalry troop conducting a convoy security mission.

Route Reconnaissance

When route reconnaissance is conducted as part of a route security operation, it is done in the same manner as discussed in Chapter 4. In this mission, scouts focus on the trafficability of the route and enemy forces that might influence the route. The scout platoon must plan to call for engineer assets

to assist in breaching point-type obstacles. Command-detonated devices are a major threat during route reconnaissance.

Outposting

Outposting is a technique used during route security to screen the route after it has been reconnoitered. Its use is similar to the technique for reconnaissance operations covering lateral and boundary routes discussed in Section V of Chapter 3. Outposting as part of route security, however, is generally done by all elements of the platoon for the specific purpose of helping to secure a route or convoy; it provides early warning of enemy elements attempting to interdict a route or convoy through the use of OPs on critical portions of the route or key avenues of approach to the route. Outposting differs from a conventional screen 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 (see Figure 5-35). 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 him.

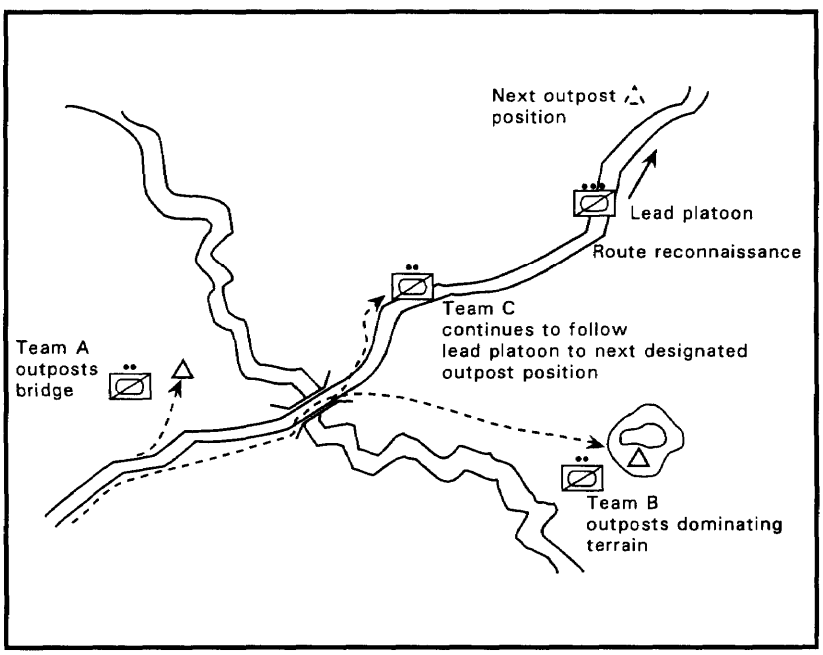


Figure 5-35. Cavalry scout platoon outposting a route.

Convoy Escort

The scout platoon may perform a convoy escort mission either independently or as part of a larger unit's convoy security mission. The convoy escort mission requires that the platoon provide a convoy with close-in protection from direct fire. The platoon can protect 5 to 10 convoy vehicles per escort vehicle. These vehicles can be military CSS or command and control vehicles or civilian trucks or buses. CFV-equipped platoons are better suited to this mission than are HMMWV platoons because of their firepower and armor protection from direct fire, indirect fire, and mines. Careful evaluation of the threat must be undertaken prior to assigning convoy escort to HMMWV- equipped scout platoons. The following considerations apply during convoy escort operations.

Command and control. Command and control during convoy escort is especially critical due to the inherent task organization of this mission. When the scout platoon is executing the escort mission, it operates under the control of the convoy commander. The relationship between the scout platoon and the convoy commander must provide for unity of command and effort if combat operations are required during the course of the mission.

The platoon leader must ensure that a complete OPORD is issued to all vehicle commanders in the convoy prior to execution of the mission. This is vital because the convoy may itself be task organized from a variety of units and because many of the vehicles may not have tactical radios. The order should follow the standard five-paragraph OPORD format, but special emphasis should be placed on the following subjects:

- Order of march.
- Actions on contact.
- Chain of command.
- Communications and signals.
- Actions on vehicle breakdown.
- Actions at a halt.
- Route of march (to include a sketch for each vehicle commander).

Tactical disposition. Security during convoy escort missions must be in all directions and throughout the length of the convoy. This requires that the elements of the scout platoon and any combat or CS attachments be dispersed throughout the convoy formation. Engineer assets should be located toward the front to respond to obstacles; the FIST or COLT should be located near the platoon leader. The platoon will normally use the column formation due to its inherent speed and ease of movement (see Figures 5-36 and 5-37). If a HMMWV unit is used as the escort, a tracked armored vehicle should reattached to lead the convoy whenever possible because of its superior protection against mines.

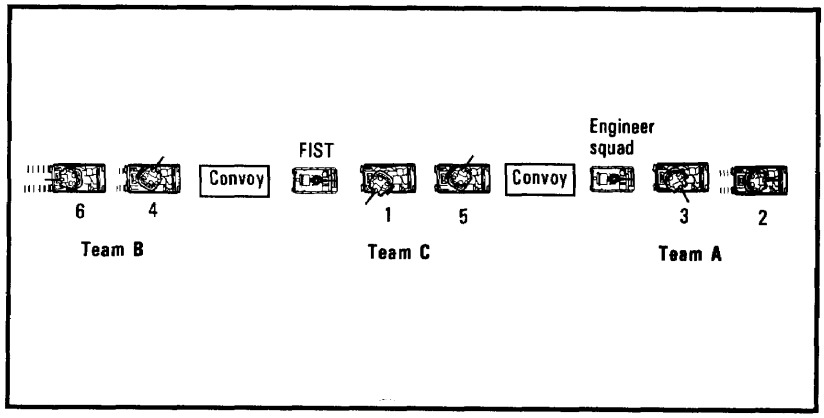


Figure 5-36. CFV scout platoon escorting convoy.

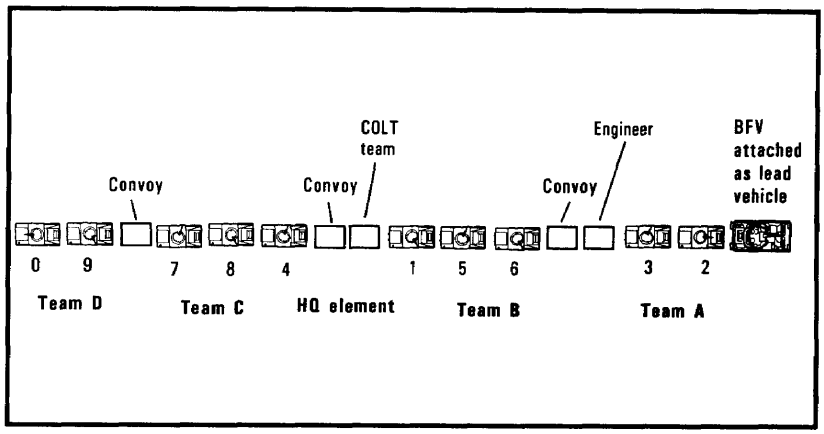


Figure 5-37. HMMWV scout platoon escorting convoy.

Actions at an ambush. Ambush is one of the most effective ways to interdict a convoy and is therefore a threat the convoy escort must be prepared to counter. Reaction to an ambush must be quick, overwhelming, and decisive. It must be executed as a drill by all escort and convoy elements, with care taken to avoid fratricide. The following actions should be included in the convoy escort drill:

- Upon detection of an enemy force, escort vehicles action toward the enemy. They seek covered positions between the convoy and the enemy and suppress the enemy with the highest possible volume of fire. Contact reports are submitted higher (see Figure 5-38A, page 5-44).
- The convoy commander retains control of the convoy vehicles and continues to move them on the route at the highest possible speed,
- Convoy vehicles, if armed, may return fire only until the escort has imposed itself between the convoy and the enemy.
- Any damaged or disabled vehicles are abandoned and pushed off the route (see Figure 5-38B, page 5-44).
- The escort leader (scout platoon leader) submits spot reports. If necessary, he requests reinforcement and calls for and directs indirect fires and air support if they are available.
- Once the convoy is clear of the kill zone, the escort chooses one of the following-courses of action based on the composition of the escort and the strength of the enemy force:
  - Continue to suppress the enemy while combat reaction forces move to support (see Figure 5-39A, page 5-45).
  - Assault the enemy (see Figure 5-39B, page 5-45).
  - Break contact and move out of the kill zone (see Figure 5-39C, page 5-45).

Generally, CFV-equipped scout platoons will continue to suppress the enemy or execute an assault because of their vehicles' capabilities. HMMWV units are more likely to move out of the kill zone as soon as the convoy is clear. Contact should be broken only with the approval of the scout platoon's higher commander.

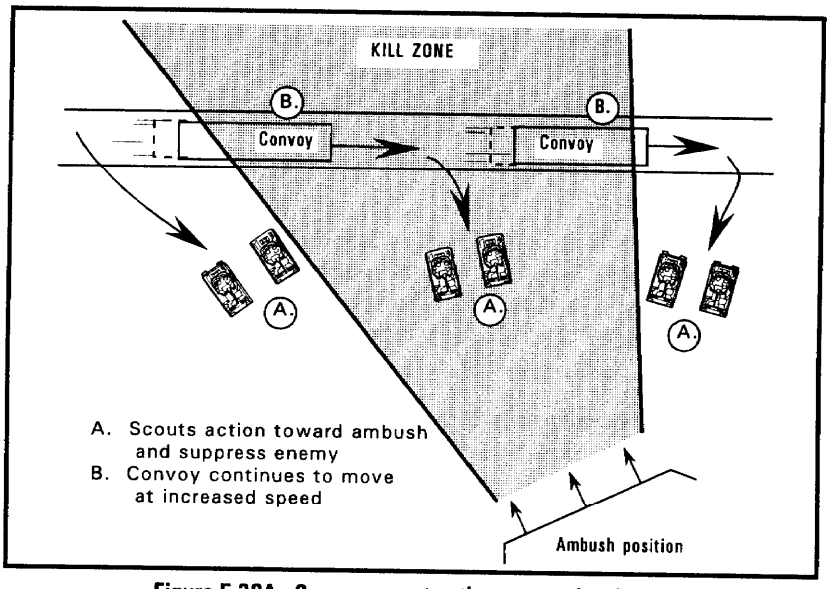


Figure 5-38A. Convoy escort actions toward ambush.

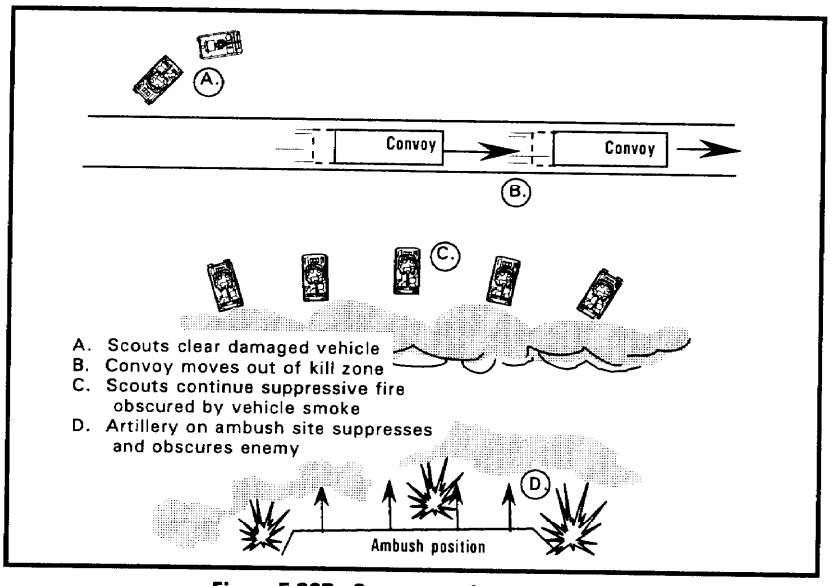


Figure 5-38B. Convoy continues to move.

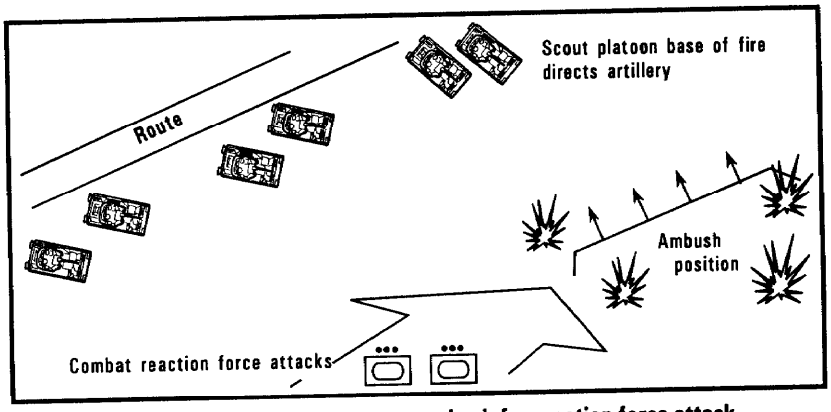


Figure 5-39A. Escort suppresses ambush for reaction force attack.

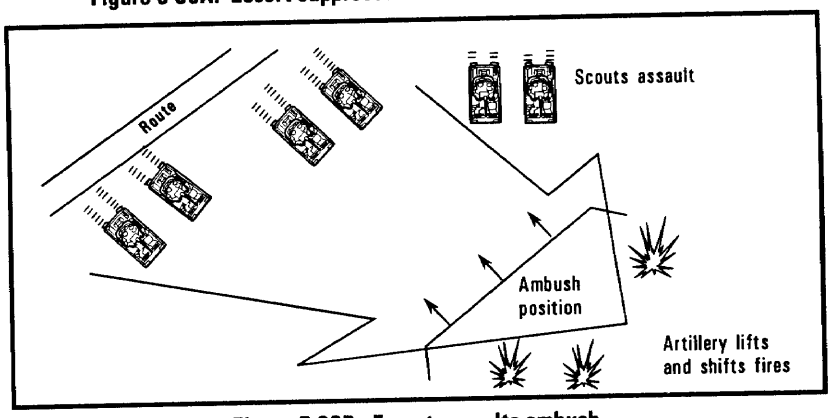


Figure 5-39B. Escort assaults ambush.

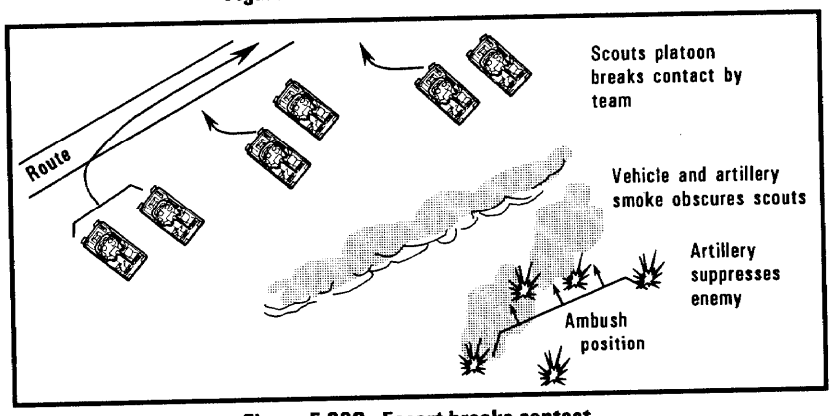


Figure 5-39C. Escort breaks contact.

Actions during a short halt. Short halts maybe required for a number of reasons during the execution of a convoy. During a short halt, the escorting unit is at REDCON 1 regardless of what actions the convoy vehicles are taking. If the halt is for any reason other than an obstacle, the following actions should be taken:

- The convoy commander signals the short halt and transmits the order via tactical radio. All vehicles in the convoy assume a herringbone formation.
- If possible, escort vehicles assume a herringbone formation up to 100 meters beyond the convoy vehicles, which are just clear of the route. Escort vehicles remain at REDCON 1 but establish local security (see Figure 5-40A).
- When the order is given to move out, convoy vehicles first reestablish the column formation, leaving space for the escort vehicles (see Figure 5-40B). Once the convoy is in column, the escort vehicles join the column, leaving local security dismounted (see Figure 5-40C, page 5-48).
- Once all elements are in column, local security personnel mount, and the convoy continues to move.

Actions at an obstacle. Obstacles are a major threat to convoys. The purpose of the route reconnaissance ahead of the convoy is to identify obstacles and either breach them or find bypasses. In some cases, it is not possible to mount a route reconnaissance ahead of the convoy; in other cases, the enemy or its obstacles may avoid detection by the reconnaissance element. In either situation, the convoy must take actions to reduce or bypass the obstacle.

Obstacles can be used to harass the convoy by delaying it; if the terrain is favorable, the obstacle may be able to stop the convoy altogether. In addition, obstacles can be used to channel or stop the convoy as a setup for an ambush. When a convoy is dealing with an obstacle, it faces a two-sided problem: it is more vulnerable because it is stopped, and its escort force is occupied with tasks required to overcome or bypass the obstacle. For these reasons, security becomes critical, and actions at the obstacle must be accomplished very quickly.

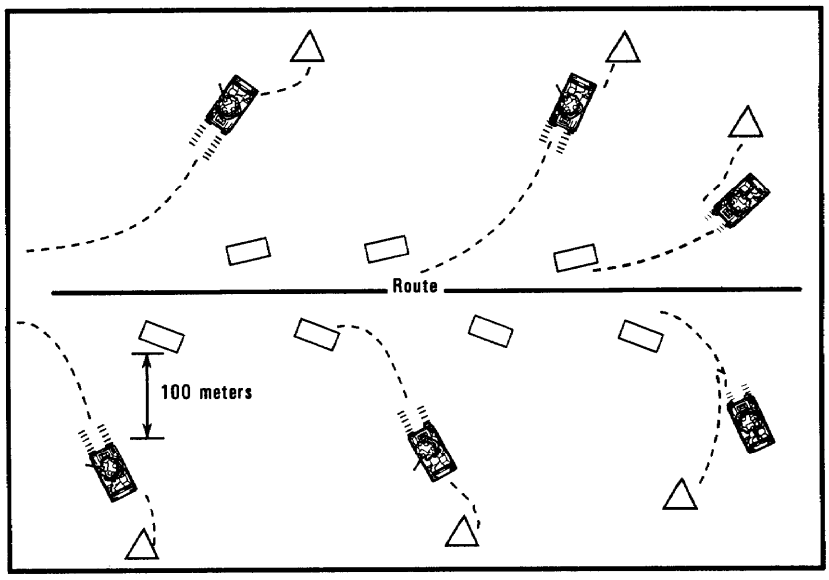


Figure 5-40A. Convoy assumes herringbone formation.

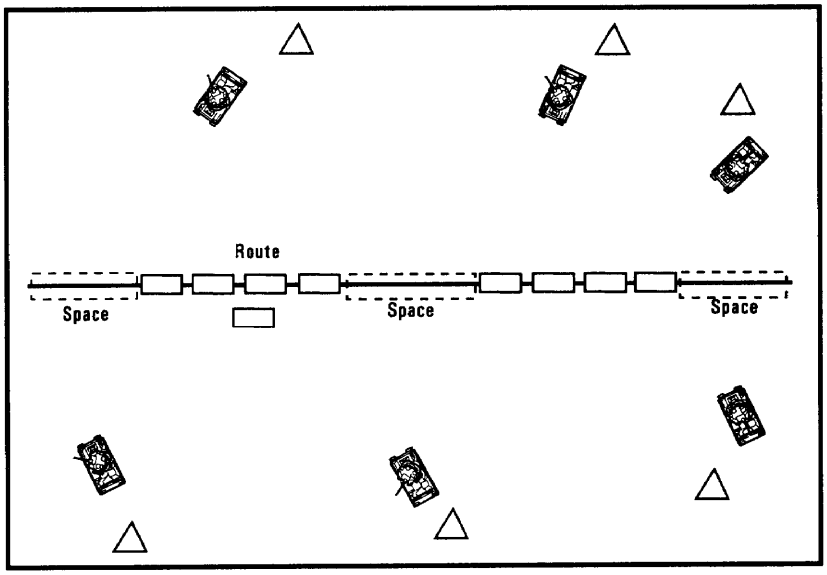


Figure 5-40B. Convoy moves back into column formation.

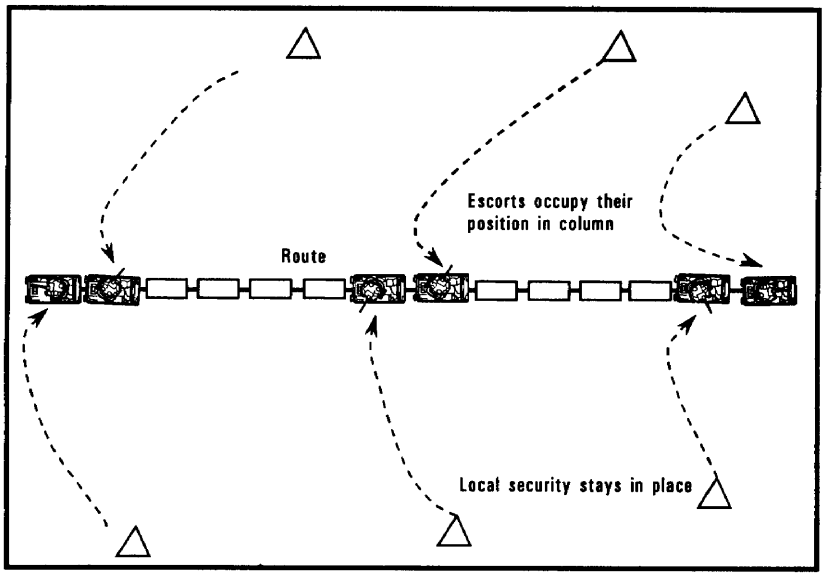


Figure 5-40C. Escort vehicles rejoin column.

The following actions should be taken when the convoy escort encounters a point-type obstacle:

- The lead security element identifies the obstacle and directs the convoy to make a short halt and establish security. The convoy establishes overwatch of the obstacle (see Figure 5-41A).

- The convoy commander relays a spot report higher and requests support by combat reaction forces, engineer assets (if they are not already part of the convoy), and aerial reconnaissance elements. In addition, artillery units are alerted to be prepared to provide fire support. These steps are designed to reduce the time the convoy is halted and thus to reduce its vulnerability. The convoy commander must assume that the obstacle is overmatched and covered by the enemy.

- The escort forces form a reconnaissance team and begin reconnaissance for a bypass while maintaining 360-degree security of the convoy (see Figure 5-41B, page 5-50).

- Simultaneously, an additional reconnaissance team made up of escort elements and/or engineers moves forward to conduct an obstacle reconnaissance. Because of limited time and assets, far-side security need not be established prior to reconnaissance of the obstacle (see Figure 5-4lB, page 5-50).
- Once all reconnaissance is completed, the convoy commander determines which of the following courses of action he will take:
  - Bypass the obstacle.
  - Breach the obstacle with the assets on hand.
  - Breach the obstacle with reinforcing assets.
- The convoy commander executes the best course of action and continues the mission.

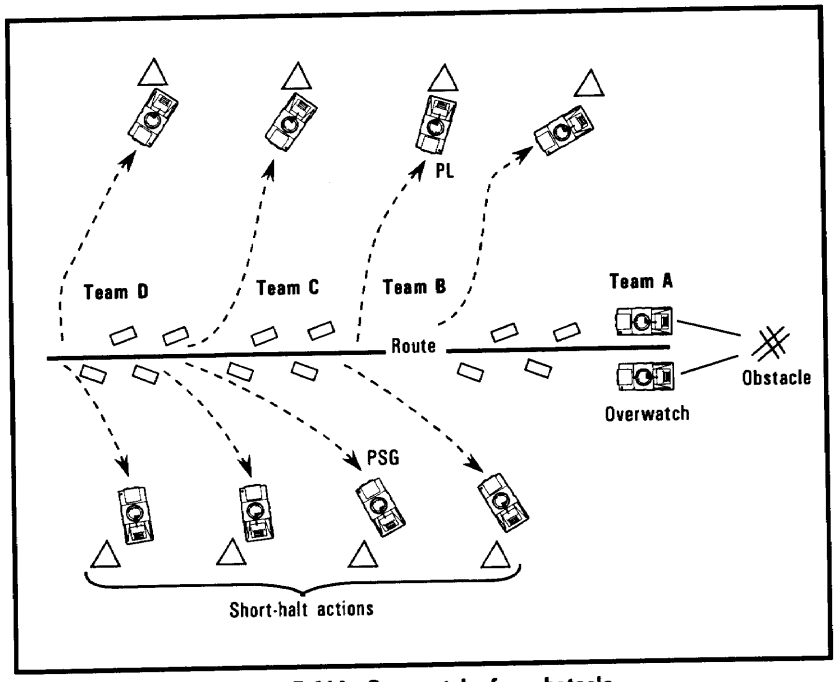


Figure 5-41A. Overwatch of an obstacle.

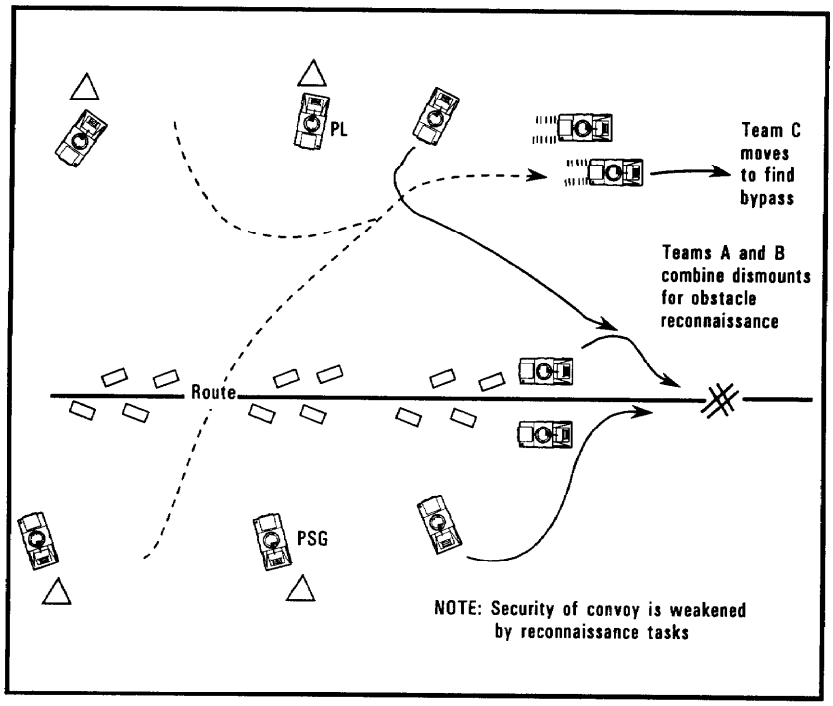


Figure 5-41B. Developing the situation at an obstacle.

AREA SECURITY

Area security missions require that the scout platoon protect a designated key and vulnerable area from enemy direct fires and observation. The requirement for protection is in all directions unless otherwise specified. Area security operations make use of a variety of techniques and may include reconnaissance, security, defensive, and offensive tasks.

When deploying for area security, the platoon generally adopts a three-or four-team organization in coil formation around the point, area, or asset to be secured. Vehicle positions are adjusted to orient on likely enemy avenues of approach. In HMMWV-equipped platoons, the headquarters element is positioned in the center of the coil to facilitate command and control and to ensure enhanced protection. The smaller size of CFV platoons will usually require all vehicles to be positioned in the coil.

Scout teams dig two-man fighting positions and, if engineer support is available, vehicle positions. If engineer support is not available, vehicles occupy hasty fighting positions. An automatic weapon is placed in each two-man position; these weapons complement vehicle-mounted plunging fire with ground-mounted grazing fire, which is more effective against dismounted threats. To further improve the position, the platoon employs hasty protective minefield and wire and other obstacles as appropriate and available. Consideration should be given to employing chain-link fencing as an RPG screen around hasty vehicle positions to assist in thwarting enemy light antitank weapons. Once vehicle positions and obstacles are established, the platoon develops a fire plan, including integrated indirect fires, and submits it to its higher headquarters (see Figure 5-42).

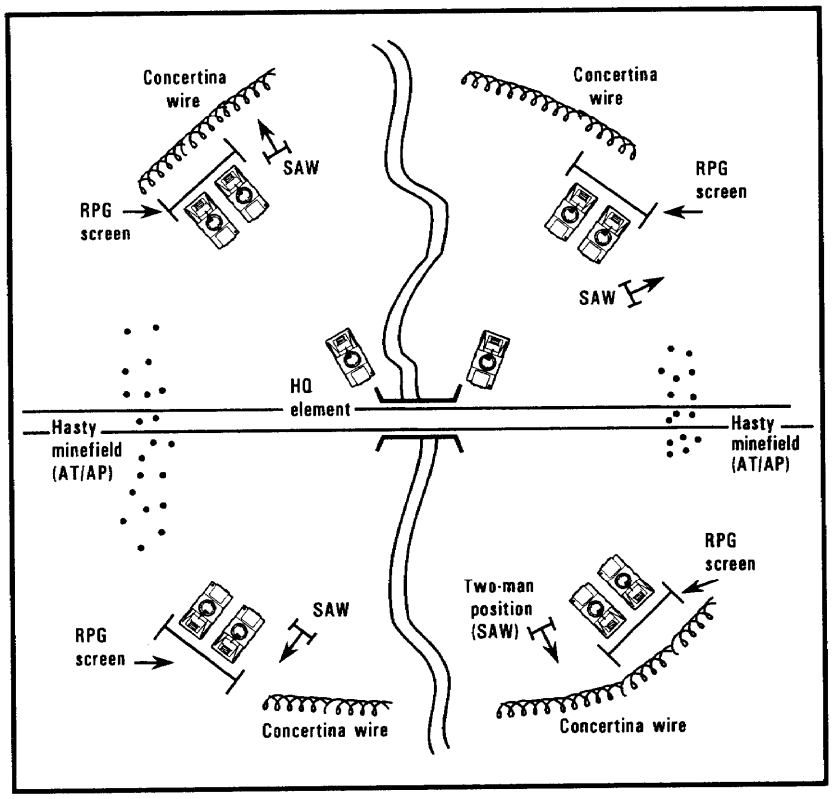


Figure 5-42. HMMWV platoon coil defense sketch.

In addition to setting up the platoon position around the asset to be secured, the platoon also employs patrols and OPs to enhance security. It employs reconnaissance patrols and ambush patrols as needed to become familiar with the area of operations, to gain information on enemy forces, and to destroy small enemy dismounted reconnaissance elements. OPs are deployed to observe likely avenues of approach, to provide early warning of enemy activity, and to assist in controlling indirect fires (see Figure 5-43).

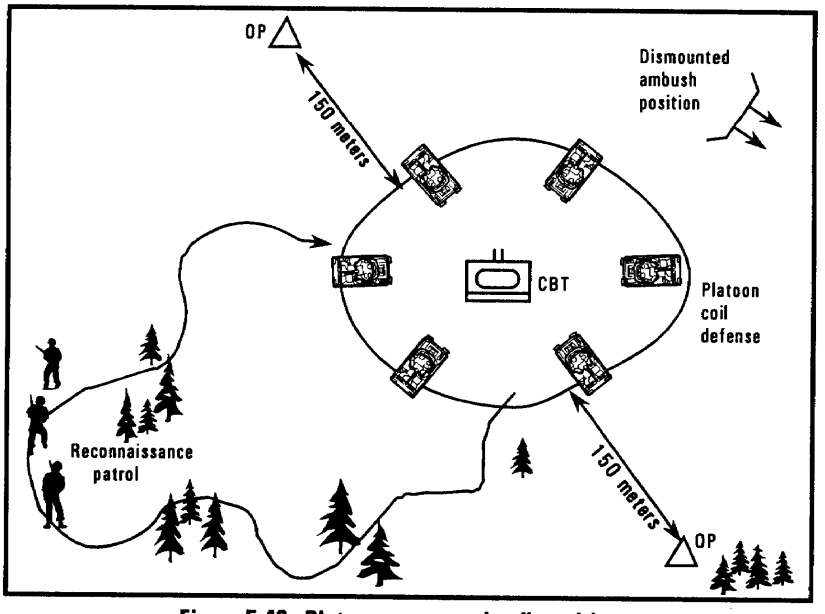


Figure 5-43. Platoon area security dispositions.

CHAPTER 6

OTHER TACTICAL OPERATIONS

Several combat operations are routinely associated with the successful accomplishment of the reconnaissance and security missions described in Chapters 4 and 5. These operations require special planning and training considerations because of their complexity. Scout platoons must execute them based on standardized procedures and must support their parent units' execution of these operations.

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Section I. ASSEMBLY AREAS

An assembly area is a site where a unit regroups or prepares for future operations. Normally, a scout platoon occupies an assembly area as part of its parent unit, but it may occupy one independently. Once in the assembly area, the platoon prepares and issues orders, conducts resupply operations, repairs and maintains vehicles and equipment, and feeds and rests its soldiers.

CHARACTERISTICS

The scout platoon is often directed to find, clear, and occupy an assembly area. There are certain characteristics to look for when selecting an area:

- Concealment from overhead observation.
- Cover from direct fire.

- Good drainage and aground surface that will support the platoon's or the parent unit's vehicles.
- Good exits, entrances, and roads.
- Enough space for adequate dispersion of vehicles, personnel, and equipment.
- Defensibility and fields of fire.

QUARTERING PARTY

As part of its parent unit or on its own, the scout platoon may have to assume quartering party duties. Understanding these duties makes occupying the assembly area much easier. The quartering party's mission is to reconnoiter the area for enemy presence and booby traps, designate vehicle locations, prepare the area for occupation, and assist units with occupation. The platoon leader or PSG designates the vehicles and personnel from the platoon to be part of a battalion or troop quartering party. The entire platoon maybe given this task.

The quartering party moves to the new assembly area under the control of the battalion headquarters and headquarters company (HHC) commander, battalion S1, troop XO, or troop first sergeant (1SG). The following discussion outlines the primary responsibilities of the quartering party.

Reconnoiter and Clear the Area

Even in a supposedly secure location, the assembly area must be cleared by security patrols. Initially, the scout element conducts an area reconnaissance of the assembly area to find enemy forces, obstacles, and NBC contamination. This is a time-consuming process that must be planned for by the parent unit. Once the area is cleared, it must be secured to prevent enemy infiltration. To do this, the quartering party establishes OPs or security patrols. If the enemy situation warrants it, the officer in charge (OIC) or NCO in charge (NCOIC) may need to enlarge the quartering party to provide adequate security personnel while others organize and mark the assembly area.

Determine if the Area is Suitable

Once the area is secure, the OIC or NCOIC must conduct a reconnaissance to verify the area's suitability and to position guides and markings. This task can

be conducted in conjunction with the initial area reconnaissance. When checking the position for suitability, the quartering party analyzes cover and concealment, drainage, routes into and out of the area, internal routes, defensibility, and fields of fire. If the area is unsatisfactory, the scouts should immediately begin looking for an alternate site to recommend to the commander. The OIC or NCOIC should notify the commander immediately, reporting his actions and recommendations and requesting further instructions.

Organize the Area

Designate positions on the ground for the various elements within the assembly area. The siting should be consistent with the commander's guidance, unit SOP, and follow-on missions. The frontages selected for the various elements must be consistent with terrain considerations and must provide adequate defensive coverage.

Improve and Mark Entrances, Exits, and Internal Routes

Once the organization of the assembly area is complete, mark the positions. Reconnoiter and mark routes from the RP to the assembly area. The actual entrance and exit for the assembly area must be well marked to facilitate easy movement. Designate and mark internal routes to prevent excessive movement that could create a large unit signature. Unit SOP should dictate the marking system to be used. Examples of markings include them lights, engineer tape, unit tactical signs, flashlights, VS- 17 panels, and thermal tape.

Mark or Remove Obstacles and Mines

Ideally, the commander should have some indication of current or past presence of an enemy in the proposed area. If there is a possibility of mines or CBUs in the assembly area, additional scouts or combat engineers with mine-detecting equipment should be requested before the quartering party departs. Obstacle and mine removal requires prior planning to ensure sufficient quantities of the proper equipment are available. This equipment may include pioneer tools, demolitions, or combat engineer vehicles (CEV). Sufficient time must also be allocated to allow the quartering party to accomplish this mission before the main body arrives, If the area contains numerous obstacles, an alternate area should be reconnoitered.

Perform Guide Duties

The quartering party prepares the assembly area to make the occupation of the new positions swift and efficient. This can be a wasted effort if the guides do not perform their duties properly. Because the quartering party is familiar with the area and the vehicle positions, the vehicle commanders rely, at least initially, on the guides to position the platoon; therefore, guides must be thoroughly briefed prior to the mission. The guides are positioned between the RP and the assembly area entrance so that they can meet their unit as it crosses the RP. They must know the proper route from the RP to the new positions; they quickly move their units through the RP and into the assembly area. They do not stop until vehicle positions are occupied. Once in the new area, the guides direct the vehicles to their tentative positions. Immediately afterward, they walk the platoon leader through the positions, briefing him on the vehicle positions, adjacent units, fields of fire, location of the CP, and any other essential information.

Accomplish Additional Assigned Tasks

If the commander assigns any additional tasks, the quartering party must accomplish them. The commander should prioritize these tasks; if he does not, the quartering party leader must arrange a priority of tasks that allows for the most important to be accomplished first. Examples of such additional tasks include establishing priorities of work, providing security for the command group, test-firing weapons, and assisting in traffic control.

OCCUPATION

When a unit arrives at an assembly area, all elements move off the route of march and clear it without slowing or halting. The platoon leader should keep this in mind as he posts guides, selects routes, and allocates space in the assembly area. After a march serial has cleared the route, it can adjust vehicle positions without holding up traffic.

ACTIONS IN THE ASSEMBLY AREA

As soon as the platoon occupies its area, it must automatically execute the priority of tasks outlined in FKSM 17-98-3. The initial tasks include the following:

- Position vehicles.
- Establish local security.

- Establish lateral contact with vehicles on the flanks.
- Develop range cards or sector sketches and submit them to the platoon leader for inclusion in the platoon fire plan. Scouts may have to adjust their positions accordingly.
- Camouflage positions.
- Perform preventive maintenance checks and services (PMCS).

Security is a constant concern in assembly areas. Noise and light discipline are especially important. Limit the number of vehicles that enter and exit the assembly area. The local security that is initially established will be replaced by more permanent OPs once the platoon is established in position. Establish these OPs in accordance with procedures outlined in Section III, Appendix B, of this manual. The platoon leader or higher commander may also require patrols (mounted and dismounted) within the assembly area, especially during darkness. Wire and messengers are the primary means of communications. How many wire lines are laid depends on how long the platoon will be in the assembly area. Radio is used only in an emergency when no other means of communication is available.

DEPARTING THE ASSEMBLY AREA

Departing an assembly area is a critical and often overlooked task. A well-organized departure sets up the platoon for its next mission. A poorly organized departure can cause delays and other problems that may adversely affect the platoon's mission before it begins.

The departure requires thorough planning and preparation, including a walk-through rehearsal. As part of the preparation, a thorough police call must be conducted. This ensures that all evidence of the unit's occupation is removed and denies the enemy any equipment, supplies, or other items that might be of military or intelligence value. Leaders must carefully supervise execution of the departure to ensure that no delays occur.

Section II. ROAD MARCHES

Units not engaged in combat may have to travel long distances to position themselves for future operations. These movements are planned at battalion,

squadron, and company/troop level, but they are executed by the platoons. Success depends largely on unit discipline and the platoons' ability to execute the plan with strict adherence to SOP.

The road march differs from other forms of movement in that—

- The purpose is relocation, not making contact.
- The primary consideration is rapid movement of vehicles.
- It is conducted at a prescribed speed.
- A prescribed interval is maintained between vehicles.

As part of a battalion task force, a scout platoon may perform various duties during a road march: manning traffic control points (TCP), serving as road guides or as a quartering party, or conducting route reconnaissance.

TCP personnel should be employed in pairs, with one directing traffic while the other provides security. They need to know the exact number of vehicles in each march serial, the markings for each serial, and the passing times so that they can adequately control and report the movement of their unit. Considerations for manning the TCP include weather, the marking system for the TCP and route (to include critical turns), limited visibility procedures, and recovery of the TCPs. The platoon leader or PSG has several options in deciding how to man the TCP, to include manning with individual vehicles (up to 6 or 10 TCPs, depending on the configuration of the platoon), dropping off platoon personnel with FM communications at each TCP, or requesting augmentation if needed.

PREPARING FOR ROAD MARCHES

The basic considerations in planning any road march are the enemy situation, the mission, the march order, and the type, number, and characteristics of vehicles available for the movement. When preparing for a tactical road march, the platoon should use the following planning sequence if time permits:

- Prepare and issue the warning order as early as possible to allow maximum time for preparation,
- Prepare an estimate of the situation and organization of the march column.

- Organize and dispatch reconnaissance and quartering parties.
- Prepare the detailed movement plans based on the organization of the march column and a review of available reconnaissance information.
- Prepare and issue the march order.
- Prepare and issue overlays to all track commanders. The road march overlay should include, as a minimum, the location of the SP, RP, scheduled halts, and checkpoints at critical points along the route.

MARCH COLUMNS

A tactical march maybe conducted in close column or open column or by infiltration. In dusty conditions, vehicles must be spaced so that the dust from one does not blind the driver of the next.

Close Column

Close column is normally used for marches during limited visibility conditions. Under these conditions, vehicles are spaced so the driver can see the two lights in the blackout marker of the vehicle ahead, about 25 to 50 meters apart. Close column marching takes advantage of the traffic capacity of the routes, but it provides little dispersion. Traffic density is approximately 20 to 30 vehicles per kilometer along the route of march.

Open Column

Open column is generally used during daylight. The distance between vehicles is increased to provide greater dispersion; it varies from 50 meters to 100 meters, or more if the situation requires. Open column may also be used at night with inbred lights, blackout lights, or passive night-vision equipment. Normal vehicle density is 15 vehicles per kilometer when vehicles are 50 meters apart, 12 vehicles per kilometer when the distance is 75 meters, and 10 vehicles per kilometer when the distance is increased to 100 meters. The increased dispersion of the vehicles in open column movement enhances security.

Infiltration

Infiltration provides the best possible passive defense against enemy observation and attack, but it maybe difficult to control. It is suited to tactical marches when sufficient time and road space are available and maximum security, deception, and dispersion are desired. The advance party usually infiltrates. Vehicles are dispatched individually, in small groups, or at irregular intervals at a rate that reduces traffic density and prevents undue massing of vehicles.

MARCH COLUMN CONTROL

Column control is maintained through the chain of command. Each scout vehicle has a prescribed place in the platoon march column as described in Section III of FKSM 17-98-3.

Start Point

An SP provides all vehicles of a march column a common point for starting their movement. When vehicles use more than one route, each route has an SP. The SP is a recognizable place along the route of march, such as a road intersection. It should not be in a defile, on a hill, or at a sharp curve in the road that could cause movement to slow. It should be far enough from assembly areas to allow vehicles to be organized and moving at the prescribed speed when they reach it. Before starting a march, elements of the platoon should reconnoiter the route to the SP to determine times for major units of the serial to arrive at and clear the serial SP.

Release Point

An RP gives all vehicles of the march column a common point for reverting to control of the platoon leader. It is a point on the route of march that is easy to recognize on the map and on the ground. Guides should meet vehicles as they arrive at the RP and lead them to the new areas. Multiple routes and cross-country movement from the RP to assembly areas allow vehicles to disperse rapidly. In selecting an RP, avoid hills, defiles, and sharp curves that may cause elements to slow or stop on the route. No vehicle should be required to countermarch or pass through another element to reach its new position.

Checkpoints

Checkpoints on a route are used for reference in providing instructions and identifying places where interference with movement might occur or where timing might be critical.

Restrictions

Restrictions are points along the route of march, such as bridges, intersections, ferries, or bypasses, where movement maybe limited or obstructed during certain time periods. The march planner should start the move early enough to pass such a point before a restriction begins, delay the start of the move to pass a restriction after it has ended, or plan to halt the column along the route until the restriction is lifted.

Traffic Control

Traffic control is normally provided by the parent unit controlling the march. TCPs manned by military police maybe located at critical points along the route. Among the factors that can increase traffic control problems are movement on multiple routes during periods of poor visibility and the existence of major intersections, defiles, and detours along routes. In a battalion task force, the scout platoon may act as road guides to assist the military police. Road guides may lead serials or march units on a particular route or portion of a route or through a critical area. These guides must follow the same procedures and guidance as other TCP personnel.

Speed Control

Vehicles in a column of any length may simultaneously encounter many different types of routes and obstacles. This causes different parts of the column to move at different speeds at the same time, producing an undesirable accordion or whip effect. The movement order gives march speed, rate of march, and maximum safe catch-up speed to reduce “column whipping.” The lead vehicle must not exceed the authorized maximum speed of the slowest vehicle in the column. To minimize vehicle congestion on the nearside of an obstacle, vehicle commanders and drivers must be alert and maintain the prescribed minimum following distance. Vehicles should make only gradual speed changes. All vehicles must maintain their prescribed interval. Vehicle commanders must constantly be aware of the vehicle interval to their front and rear and adjust their speed accordingly.

Halts

Halts are made to allow following traffic to pass and to provide time for rest, personal comfort and relief, mess activities, refueling, maintenance and inspection of equipment, and adjustments in schedule. The time and duration of

halts are usually specified in the movement order or prescribed in unit SOP. The SOP should also prescribe actions to be taken during halts. Vehicle crews perform maintenance at scheduled halts.

A short rest halt of 15 minutes is usually taken after the first hour of marching. A 10-minute short halt is taken every two hours thereafter. The prescribed rate of march includes the time required for short halts. When possible, march elements using the same route stop at the same time. Route characteristics, however, may make it necessary to halt at a particular point on the route rather than simultaneously at a fixed time.

Long halts are planned in advance. The length of the halt is added to the total travel time. Locations for long halts are normally selected to allow all vehicles to clear the road and to permit proper dispersion. Halts for refueling should be scheduled in advance by the unit commander.

The herringbone formation is used to provide security for the march column during unscheduled halts (see Figure 3-14, page 3-14). All vehicles should move completely off the road to permit passage of vehicles down the center of the column. Movement commanders give permission to execute unscheduled halts.

The first priority at a halt is local security. OPs are established and sectors of fire assigned to each vehicle. These actions should be automatic and part of the unit SOP (see Section III of Chapter 5 covering area security operations).

Miscellaneous Factors

Disabled vehicles must not obstruct traffic. Their crews must move them off the road and report their status immediately to the PSG. Crews must immediately signal the follow-on vehicles to bypass and continue movement. They then establish security and post guides to direct traffic. If possible, the crews repair their vehicles and rejoin the rear of the column just ahead of the trail element. Vehicles that have dropped from the column should return to their positions only when the column has halted. Vehicles that cannot be repaired by their crews are recovered by the trail party.

Vehicle commanders must remain alert and exercise caution whenever they start to move. Vehicles that move too soon or too late can cause confusion in the formation. Lead vehicles must keep speeds low until all vehicles have moved onto the route of march.

Vehicle commanders assign sectors of observation to their personnel to provide 360-degree observation. Each vehicle commander designates an observer as air guard to provide air security. Each vehicle has a sector of observation as shown in Figure 6-1.

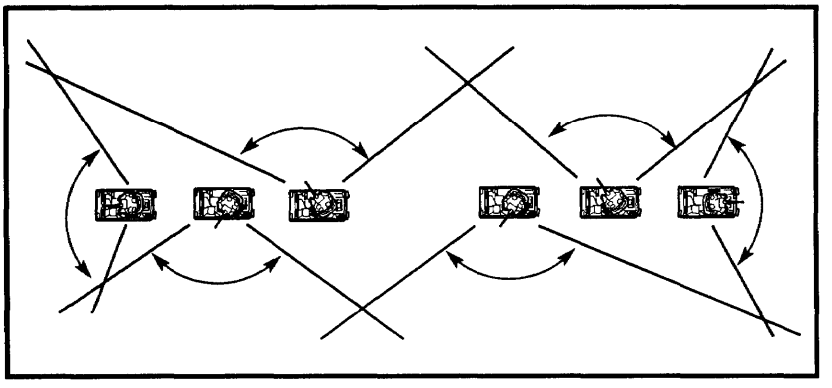


Figure 6-1. Sectors of observation in a road march.

ROAD MARCH TRAINING

The overall success or failure of a mission could depend on the ability of units to march rapidly and efficiently over long distances. The unit's level of training inroad marching is thus a major factor in determining mission success. Important factors in training for tactical road marches include the following:

- Driver training. The vehicle driver can make or break a road march. He must know the proper march interval and following distances; he must understand the effect the speed of his vehicle can have on the rest of the serial. Drivers can use man-made features (such as utility poles) or time/distance factors to gauge distance between vehicles. For example, at 15 miles per hour (mph) with a 100-meter interval, there are 15 seconds between vehicles; 20 mph and a 100-meter interval equals 11 seconds between vehicles.
- NBC. All members of the organization must be trained in NBC countermeasures and driving in NBC gear.
- Air guards. Each vehicle commander designates an air guard responsible for detecting enemy aircraft. A further discussion of active and passive air defense measures can be found in Section IV, Chapter 7, of this manual.

- Actions on contact. The platoon must be ready to execute immediate action drills in accordance with unit SOP at any time during the road march. A detailed discussion of actions on contact can be found in Section VII, Chapter 3.

- Constant practice, Road march training must be conducted at every opportunity; road march techniques can be practiced even in routine situations, such as two vehicles moving together outside a motor pool.

- Systematic training. The unit should first master road march techniques under good conditions (in the daytime, over short distances, and with good communications). It then must work toward mastering these skills under difficult conditions, including operations involving limited visibility, blackout, long distances, and radio listening silence.

Section III. BATTLE HANDOVER AND PASSAGE OF LINES

Battle handover is an operation conducted by stationary and passing units in a close-in battle to transfer responsibility for fighting an enemy force from one unit to another. It is designed to sustain continuity of the combined arms fight and to prevent the enemy from moving unopposed on the battlefield as one force picks up the fight from another. It is also designed to preserve the fighting capabilities of both friendly units.

Passage of lines is a tactical event associated with battle handover. It is the controlled movement of one unit through the positions of a stationary unit, conducted so that neither unit interferes with the other's scheme of maneuver. A passage of lines will often be needed because the combat situation does not permit one unit to bypass another unit's position.

A unit may conduct either a rearward or forward passage of lines. When a unit moves toward the enemy through a stationary unit, it is considered a forward passage. In a rearward passage, the unit moves away from the enemy through friendly units.

A passage of lines maybe conducted to—

- Continue an attack or counterattack.
- Envelop an enemy force.
- Pursue a fleeing enemy.
- Withdraw security forces or MBA forces.
- Facilitate route, zone, or area reconnaissance.
- Execute a defense or a delay.
- Execute a screen or guard operation.

A scout platoon may perform some of these operations independently (screen and reconnaissance); otherwise, it usually will take part in a passage of lines as part of a larger force.

CRITICAL TASKS

There are three key elements in battle handover and passage of lines: the stationary unit, the passing unit, and the common commander.

The commander exercising command authority over both the stationary unit and the passing unit must designate the BHL, a PL forward of the stationary unit that is recognizable on the ground. He normally does this in coordination with the stationary unit commander, who will recommend the BHL. The line is forward of the FEBA in the defense or the FLOT in the offense. It is drawn where elements of the passing unit can be effectively protected by direct fires of the forward combat elements of the stationary unit until passage of lines is complete. The area between the BHL and the stationary force belongs to the stationary force commander. The common commander will also provide the graphic control measures that depict the BHL and contact points on an overlay issued to subordinate units with the OPORD or FRAGO (see Figure 6-2, page 6-14).

Battle handover begins on order of the common commander. Defensive handover is complete when the passing unit is clear and the stationary unit is ready to engage the enemy. Offensive handover is complete when the passing unit has deployed and crossed the BHL. The common commander prescribes

the specific criteria that mark completion of handover; he ensures both subordinate commanders understand these criteria.

The scout platoon, acting independently or as part of a troop or battalion passage, may be either the stationary or the passing unit. The platoon will normally assist in some portion of the passage of lines and maybe required to coordinate the passage. In many cases, the scout platoon will be required to conduct a passage separate from its higher headquarters.

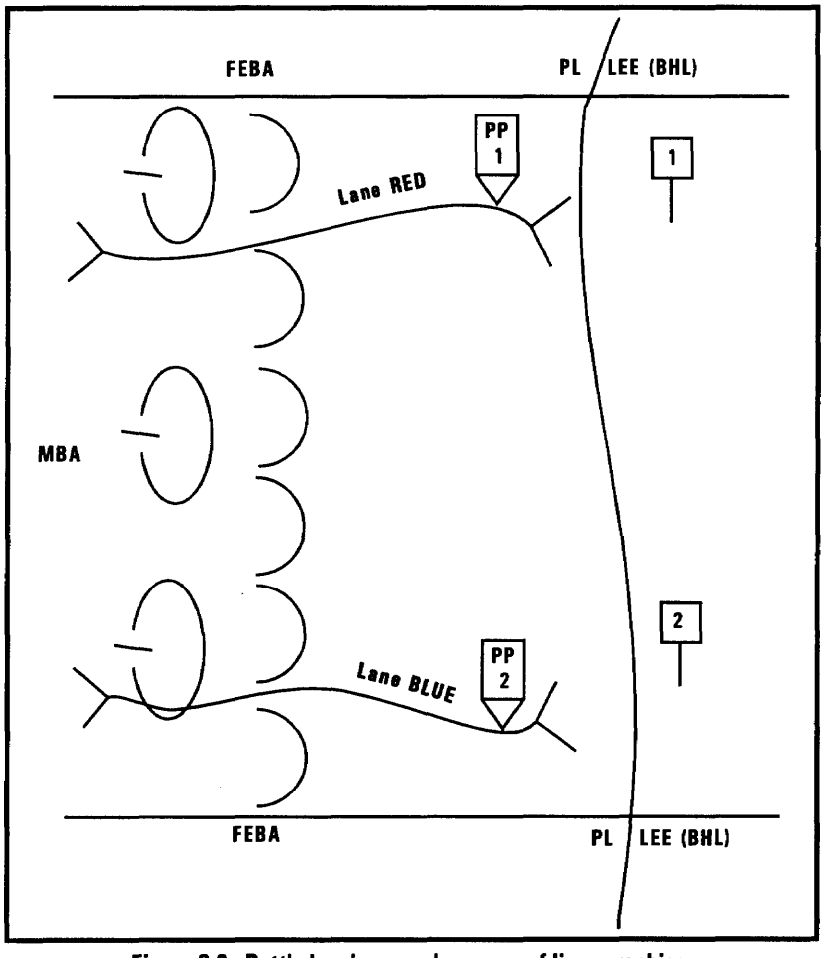


Figure 6-2. Battle handover and passage of lines graphics.

Passing Unit Critical Tasks

The passing unit must accomplish several critical tasks during battle handover and passage of lines. It must—

- Immediately establish communications with the stationary unit. It enters the command, 01, and fire support nets of the stationary unit.
- Collocate a team or vehicle (platoon leader or PSG) with the tactical command post (TAC CP) or TOC of the stationary unit as soon as possible to enhance communications and unity of effort.
- Continuously report to the stationary unit the location, size, and composition of all enemy forces, as well as the enemy's current activity. If the enemy is attacking, the passing unit reports his direction of movement, movement formation, and estimated rate of advance. If the enemy is defending, passing unit reports include his locations, orientation, composition, fire sacks, reserves (if known), obstacle systems, and flanks.
- Continuously report to the stationary unit the location, size, and activity of all parent unit elements, to include CS, CSS, and command and control facilities.
- Given the current disposition of the parent unit and scout teams, coordinate with the stationary unit and determine contact points at which each designated section will physically coordinate handover and passage of lines with representatives of the stationary unit. Once contact points are determined, the passing unit sends a FRAGO to all teams specifying where they will physically coordinate passage with the stationary unit. The passing unit also confirms recognition signals that must be displayed during passage.
- Ensure that each team acknowledges where it must physically coordinate the passage and dispatches representatives to assigned contact points to coordinate passage for the team. At the contact points, the representatives confirm recognition signals and exchange required information with counterparts from the stationary unit.
- Maintain visual contact with all enemy units and delay back to the BHL, avoiding decisive engagement.

- During the passage, display correct recognition signals and use correct challenge and password as specified in the SOI.
- Maintain proper weapons orientation.

Stationary Unit Critical Tasks

The stationary unit must accomplish a variety of critical tasks when ordered to conduct battle handover and passage of lines. It must—

- Establish communications with the passing unit, coordinate necessary contact points, and direct the passing unit to the contact points based on current dispositions of the designated units.
- Ensure that contact points are manned and that passing elements have established personal communications with their representatives.
- Ensure that representatives at the contact points assign each passing element a passage point into the area of operations and a route that extends from the passage points to the rear boundary or to an assembly area.
- Ensure that representatives at the contact points exchange required information with the passing unit as outlined in FKSM 17-98-3.
- If security forces are working with the platoon, position them along the BHL where they have the best possible observation of enemy avenues of approach, adjusting as necessary for limited visibility conditions.
- If obstacles are emplaced between the FEBA and the BHL, ensure that routes through the obstacle system are clearly marked and physically controlled by guides or that escorts are provided to the passing unit.
- Ensure that all routes of withdrawal obligated to the passing unit are unobstructed and facilitate rapid movement to the RP.
- Ensure that obligated routes of advance, attack positions, and routes to the BHL are unobstructed and facilitate rapid movement.

COORDINATION

Units are particularly vulnerable during a passage of lines. Personnel and subordinate elements may be concentrated, fires of the stationary unit may be masked temporarily, and the passing unit may not be disposed properly to react to enemy action. Detailed reconnaissance and coordination are critical in overcoming such situations and ensuring the passage is conducted quickly and smoothly.

Coordination occurs at a preplanned contact point where critical information is exchanged and coordinated. Coordination for battle handover normally flows from the commander out of contact to the commander in contact. Coordination for the handover and for the passage of lines should be conducted simultaneously.

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

During his reconnaissance, the platoon leader must confirm—

- The disposition of the stationary force through which his platoon, troop, or battalion must pass.
- 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 and that also facilitate a smooth and continuous passage. Areas selected for the passage should be unoccupied or on the flanks of units in position. If possible, the platoon leader should reconnoiter multiple routes that can reduce vulnerability during the operation.
- The location of an assembly area or attack position (for forward passage). This position should provide cover and concealment and be located where the passing unit will not interfere with the stationary unit.
- The initial location for CS and CSS elements of the platoon's parent unit.

Based on his reconnaissance, the platoon leader coordinates the following information:

- Contact points (primary and alternate).
- Passage points.
- Passage lanes, including the SP, RP, and critical points.
- The LD.
- Location and number of guides and guide vehicles.
- Routes through obstacles.
- Alternate routes.
- CSS plans, including Class III, Class V, maintenance, medical evacuation (MEDEVAC), and disposition of enemy prisoners of war (EPW).
- Traffic control and number of vehicles by type.
- Time of the passage.
- Rally points, assembly area, and attack position (forward passage).
- Actions on contact if required during the passage.
- Time of transfer of responsibility for control of the sector and of handover of the enemy and BHL.
- Exchange of enemy and friendly information.
- Fire support during the passage.

The parent unit commander provides some of this information as part of his order to the platoon.

Given the capabilities of the scout platoon, many commanders require the platoon to assist other units in the passage of lines. Primarily, the scout platoon enhances the command and control function for the commander. The platoon

may be required to conduct one or all of the critical tasks of a stationary or passing unit or may assist its parent unit in the following ways:

- Elements of the scout platoon may assist in securing contact and passage points where passing units will meet and pass.
- The scout platoon may reconnoiter possible passage lanes (primary and alternate), clearing them of obstacles and marking their locations.
- The scout platoon may guide units from contact points to or through passage lanes. The platoon may also control traffic at the passage point and in the lane.
- Elements of the scout platoon maybe positioned in the passage area to act as a communication link when passing units have trouble with communications.
- The scout platoon may conduct area reconnaissance of attack positions (forward passage) and assembly area locations (rearward passage). Included in this reconnaissance effort is the need to check for NBC contamination.
- The scout platoon may assist the commander by occupying OPs or conducting patrols to provide a continuous flow of information about the enemy situation.

CONDUCT OF THE PASSAGE

In a forward passage of lines, the platoon leader or unit commander normally performs the coordination. For a rearward passage of lines, the PSG or the commander's liaison officer normally performs the coordination. The stationary unit is responsible for designating passage points and passage lanes and for providing guides. If contact points have not been designated by higher headquarters, the stationary unit should coordinate their locations with the passing unit. For ease of control, the passing unit's command group (TAC CP or TOC) temporarily collocates with the stationary unit's command group (TAC CP or TOC).

After coordination is made and the passage begins, guides pick up the passing unit at the contact point or passage point. Guides exchange recognition

signals with the passing unit and move it along the route(s) without pausing, with the stationary unit overmatching the movement. Guides leave the unit either at the RP or after the movement has passed the last stationary unit position.

Disabled vehicles are recovered by self-recovery methods or by organic recovery vehicles. The stationary unit provides the required medical assistance, POL, and maintenance as far forward as possible. As a minimum, the stationary unit should provide emergency medical support.

NBC CONSIDERATIONS

Because of potential congestion of units at passage points and along routes, it is essential that stationary and passing units take protective measures against NBC attack. Some techniques to reduce vulnerability include the following:

- To minimize exposure time, passing units move as rapidly as possible through passage points and along passage routes to RPs.
- Passing and stationary units conduct radiological and chemical monitoring.
- Stationary units disperse by using hide positions and posting one or two vehicles in primary firing positions. Units in hide positions prepare for nuclear attack.
- Passing and stationary units put on chemical-protective clothing as prescribed by the commander.
- Stationary units request assistance through channels for decontamination of the passing unit, if required. Units normally conduct a hasty decontamination and then move to a rear assembly area for deliberate decontamination. A scout platoon does not have the internal assets for a deliberate personnel or equipment decontamination; it requires assistance from a chemical defense company.

FRATRICIDE AVOIDANCE

Since battle handover and passage of lines are usually conducted in contact with the enemy, extreme care must be taken to avoid fratricide. Thorough coordination is critical; all units involved must know the correct recognition signals as well as the exact number of vehicles and time of passage. There will

be times when not all elements have received the necessary information or when stragglers are unaware of the current operation. Planning and coordination must take into account the following considerations:

- Fratricide assessment.
- Vehicle marking systems.
- Navigational aids.
- Enemy situation and composition.
- Obscuration (limited visibility).
- IFF expedients for ground forces.
- Effective SOPs.
- Communications procedures and potential problems.

Chapter 2 (Section V) and Appendix G discuss fratricide avoidance and risk reduction measures in more detail.

Section IV. RELIEF IN PLACE

A relief in place is an operation in which one unit replaces another unit in combat. It may be accomplished during offensive or defensive operations. The primary purpose of the relief is to sustain the combat effectiveness of committed units. It may also be conducted to allow a relieved unit to rest, reconstitute, or decontaminate or to change missions. For the scout platoon, the relief operation may entail serving as road guides for the battalion task force, performing liaison with the relieved unit, or participating in the relief with its parent unit.

Relief in place is difficult to plan and conduct because of the nature of the operation and the command, control, communication, and coordination required. It is important that the operation not be disclosed to the enemy; security, secrecy, and speed are critical. Though the scout platoon cannot always wait for optimum conditions, relief in place is best conducted during periods of limited visibility and during lulls in battle. Limited visibility may be achieved by using smoke to obscure the enemy's vision. Using smoke over a large area can confuse the enemy as to the platoon's actual location.

The relief must be conducted as quickly and as secretly as possible. The relieving scouts must avoid sustaining casualties, hampering the operation of the scouts being relieved, or allowing the enemy to detect the operation. To reduce confusion and maintain security, the incoming platoon leader must attempt to obtain the following information:

- The time that responsibility for the sector or zone is to pass.
- Operations security (OPSEC) considerations.
- Deception plans.
- The time, method, and sequence of relief.
- Routes and critical control measures.
- Graphics depicting alternate and subsequent fighting positions.
- Contingency plans for changes of mission.
- Actions on enemy contact, if required before completion of the relief.
- Handoff procedures for artillery and ADA.
- Obstacle locations and procedures for transfer of responsibility.
- Procedures for transfer of ammunition, wire lines, POL, and other materiel between the outgoing and incoming units, if necessary.

Radio traffic must be kept to a minimum; light and noise discipline must be strictly enforced. If possible, the relieving scout platoon leader conducts a reconnaissance of the new positions. This is usually accomplished with the relieved platoon leader.

Once the reconnaissance is complete and orders are finalized, the platoon executes its mission. If it is participating in the relief, one of several methods of relief in place may be used:

- One vehicle at a time. This is the slowest, but most secure, method.
- All vehicles simultaneously. This is the quickest, but least secure, method.

- Occupying adjacent or in-depth positions that cover the same area of responsibility.
- Exchange of vehicles and equipment. This is done when secrecy is the overriding factor. This is the most difficult and time-consuming method.

The actual relief in place can be conducted from a hide position behind the relieved platoon, with individual relieving vehicles moving forward. The platoon can also occupy alternate positions within the relieved platoon's sector or zone. In some cases, the platoon may move into the primary positions as soon as the relieved vehicles back out.

The most important transmission during the relief process is the completion call to the incoming platoon's commander. This is made when the incoming platoon is fully set into position and prepared to conduct operations.

CHAPTER 7

COMBAT SUPPORT

A scout platoon must take full advantage of available CS assets to accomplish its mission and to reduce its vulnerability on the battlefield. CS may be provided by mortars, field artillery (FA), ADA, combat engineers, GSR, and aviation assets. None of these assets are organic to the scout platoon, but they may be available through its parent battalion or cavalry troop. Scouts must understand the capabilities and limitations of the CS assets.

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Section I. INDIRECT FIRE SUPPORT

Mortars and FA are the primary means of indirect fire support available to scout platoons. FSOs at troop and battalion/squadron levels plan and coordinate indirect fires. In addition to understanding the capabilities and limitations of these assets, scouts must know what fire request channels to use to request fires. FM 6-30 explains how to call for and adjust fires.

MORTAR SUPPORT

A 4.2-inch mortar platoon of six tubes is organic to armor and mechanized infantry battalions. A 4.2-inch mortar section is organic to the armored cavalry

troop (two tubes) and divisional cavalry troop (three tubes). The 4.2-inch mortar has a maximum effective range of 6,740 meters.

Mortars provide indirect fire support that is immediately responsive to the scouts' needs. They can provide a heavy volume of accurate, sustained frees. They are ideal weapons 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. Mortars are most effective for—

- Suppression. High-explosive (HE) rounds can be used to force the enemy to button up or move to less advantageous positions. Unless a direct hit is achieved, however, HE mortar rounds will not destroy armored vehicles.
- Smoke. White phosphorus rounds are used for obscuration and screening. Mortar smoke builds up more rapidly than artillery smoke. Obscuration is achieved by placing smoke on or just in front of enemy positions to obscure their vision. Screening is achieved by placing smoke between the enemy and the scout platoon position to conceal movement. Mortar smoke can also be used to mark enemy positions to enhance friendly maneuver and orient direct fires. Scouts must be careful, however, not to allow smoke to work against them by marking their own positions for enemy gunners.
- Illumination. Illumination rounds are used to light an area or enemy position during periods of limited visibility. Scouts can increase the effectiveness of their image intensification devices by using illumination. This helps them gather information, adjust artillery, or engage enemy targets. Ground-burst illumination can also be used to mark enemy positions and to provide a thermal target reference point (TRP) for control of fires. As with smoke, illumination is a double-edged sword; care must be taken not to illuminate friendly positions. Also, because US night-vision devices are superior to those of most potential adversaries, illuminating the battlefield may be unnecessary or even counterproductive.

Mortars are limited because—

- They have only short-range capability.
- Only limited types of ammunition are available.

- Mortar elements can carry only limited amounts of ammunition.
- Their fire direction center (FDC) and tubes are not linked to the tactical fire direction system (TACFIRE).

Mortar capabilities include—

- A close working relationship with scouts.
- Fast response time.
- Availability for low-density targets.
- The destructive target effects of the 107-mm mortar round.

FIELD ARTILLERY

Scouts must fully understand how to use artillery support to their best advantage. It is often their primary means of impeding and disrupting enemy formations and suppressing enemy positions. FA can provide immediate, responsive, accurate fires with a wide variety of munitions.

FA support is normally provided by an artillery battalion in direct support (DS) of a committed maneuver brigade or an armored cavalry regiment (ACR) or squadron. The armored cavalry squadron also has its organic howitzer battery to provide dedicated indirect fire support. Scouts generally receive FA support through the FSO.

Capabilities

In support of the scout platoon, FA elements can—

- Provide fire support in all weather conditions and types of terrain.
- Shift and mass fires rapidly.
- Support the battle in depth with long-range fires.
- Provide a variety of conventional shell and fuze combinations.
- Provide continuous fire support by careful positioning and timely displacement.
- Be as mobile as the supported unit.

Limitations

FA support has the following limitations:

- Limited capability against moving targets.
- Limited capability to destroy point targets without considerable ammunition expenditure.
- Vulnerability to detection by enemy target acquisition systems because of its firing signature.

Available Munitions

FA employs a wide variety of munitions that can be tailored for the engagement of different types of targets. These ammunition types include—

- HE, for use against personnel, field fortifications, and vehicles.
- Smoke, for obscuration and screening.
- Illumination.
- White phosphorus, for obscuration and burning.
- Chemical, for use against troops and for area denial.
- Nuclear.
- Cannon-launched guided projectiles (Copperhead), for use against armored vehicles.
- Improved conventional munitions (ICM), for antipersonnel (AP) use, and DPICM, for use against personnel and light armored vehicles in the open. The danger to friendly troops in areas where AP munitions are fired must be considered. The high dud rate of ICM makes maneuver in the area of an ICM field hazardous.
- Family of scatterable mines (FASCAM). These include area denial munitions for use against personnel and remote antiarmor mines for use against armored vehicles. It takes a dedicated FA battery to fire a FASCAM mission. The mission requires slightly more lead time than other FA-delivered munitions.

THE FIRE SUPPORT TEAM

A fire support team (FIST) is attached to companies or troops for combat operations; it may be pushed forward with the scout platoon in support of security operations when on-target designation is required for special munitions engagements. However, the FIST is a valuable resource because of its command and control link with the artillery; it should not be exposed to direct fire except when absolutely necessary. A FIST is organized, equipped, and trained to provide—

- A fire support advisor and coordinator.
- A communications link to all available fire support.
- On-the-spot support for infantry companies (10-man team) or for armor companies and cavalry troops (4-man team).

The armor/mechanized infantry FIST normally monitors these four radio nets:

- Attached unit command net (battalion, company, or scout platoon).
- Battalion mortar fire direction net.
- DS battalion fire direction net (digital).
- Battalion fire support net (voice).

The armored cavalry troop FIST monitors these four radio nets:

- Troop command net.
- Troop fire support net.
- Supporting artillery fire direction net (digital and voice).
- Squadron fire support net.

The FIST serves as the net control station (NCS) on the troop fire support net. The FSE serves as the NCS on the maneuver battalion fire support net. The FIST relays the call for fire to supporting artillery on a digital net (TACFIRE) or sends the fire mission to the mortar platoon or section. The command net allows the FIST to monitor operations and links the FIST to the commander and platoon leaders for planning and coordination.

Battalion Scout Platoon

There are several ways the scouts can request indirect fire. The battalion task force SOP should specify which method they will use. The scout platoon leader must coordinate with the battalion FSO/FSE on which of the methods described in the following paragraphs will be used.

The platoon can send requests for mortar fire directly to the mortars on the battalion heavy mortar net; the FSE monitors the requests (see Figure 7-1).

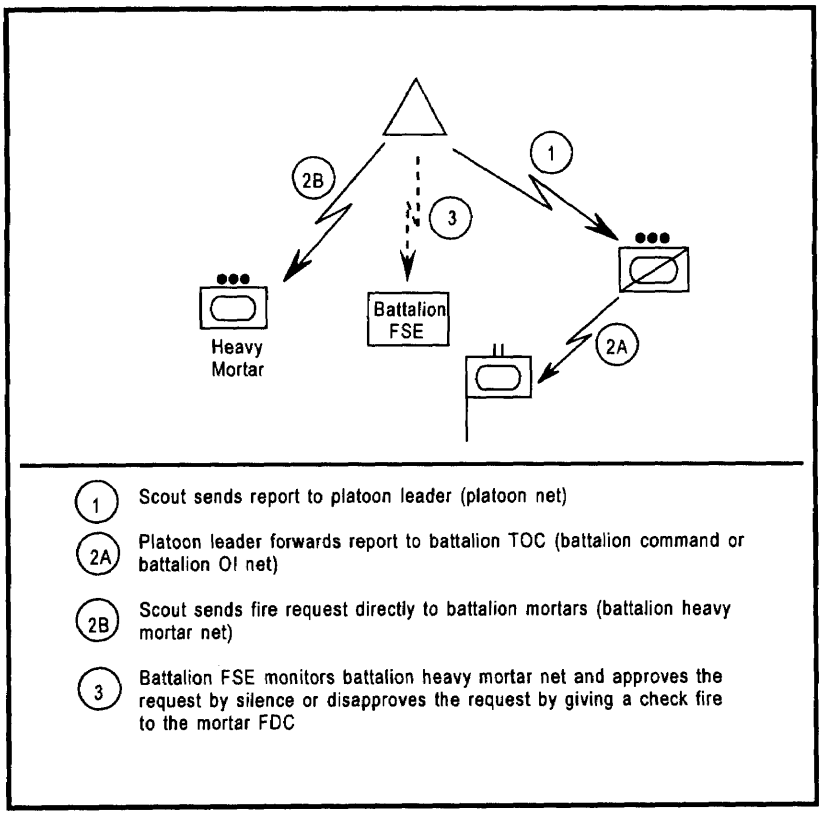


Figure 7-1. Battalion scouts request fire from battalion mortars.

The platoon can send requests for artillery fire directly to the FA battalion on a fire direction net; the FSE monitors the requests (see Figure 7-2).

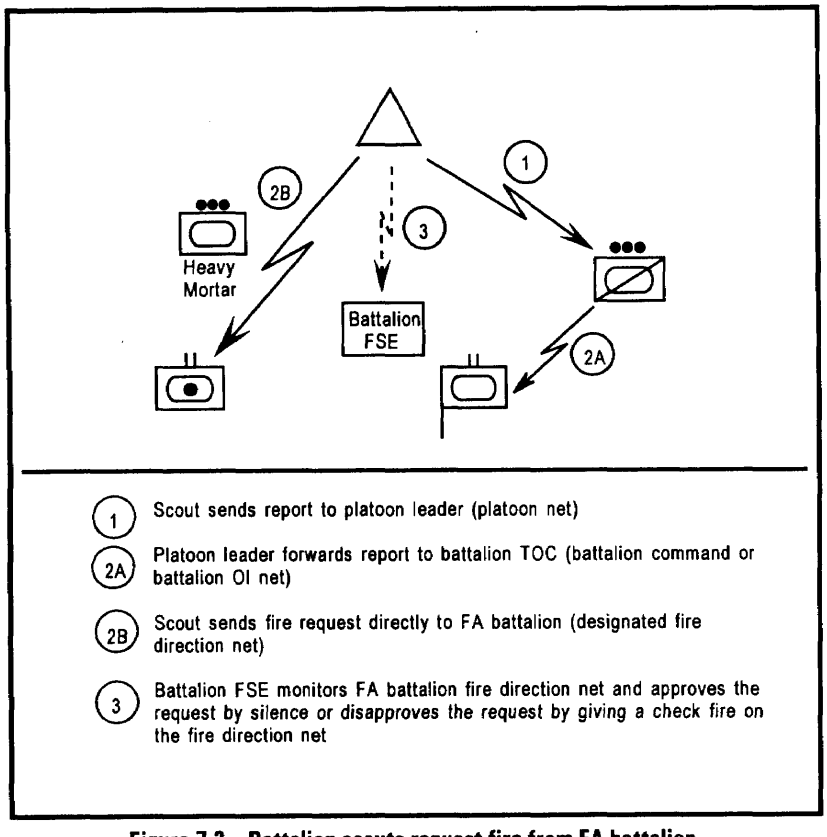
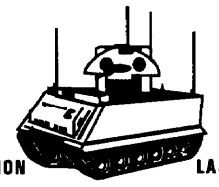


Figure 7-2. Battalion scouts request fire from FA battalion.

Requests for indirect fire can also be sent through the COLT, which has a secondary mission of processing these requests for the scouts. The COLT monitors the scout platoon net and handles the fire request and subsequent adjustments as a normal FIST. It has the primary mission of lasing targets for Copperhead rounds and close air support (CAS). It can enter the lasing information directly into TACFIRE channels. A COLT is organic to each of the three DS 155-mm FA battalions of the armor or mechanized infantry and to the howitzer battery of the armored cavalry squadron. The cavalry squadron has one organic COLT. From company/troop to brigade level, a COLT is placed under

the control of a fire support coordinator to augment the lasing capability of the FIST and to function as a dedicated observation platform (see Figure 7-3). When pushed forward with the scouts, the COLT should collocate with one of the scout platoon OPs for local security and protection.



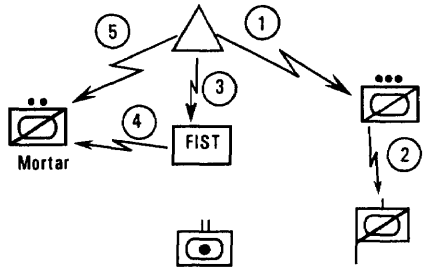
COMBAT OBSERVATION LASING TEAM

UNIT	PERSONNEL		
	Number	Rank	Title
Mechanized Infantry/Armored Division	1	E5	Fire Support Sergeant
	1	E4	Fire Support Specialist
	1	E3	Fire Support Specialist
	EQUIPMENT		
	Number	Item	
	1	Full-tracked personnel carrier (FIST vehicle)	
	1	Radio set AN/GRC-160	
	1	Radio set AN/VRC-46	
	1	Digital message device	

Figure 7-3. Combat observation lasing team.

Cavalry Scout Platoon

The scouts in an armored cavalry troop normally request all indirect fire support through their troop FIST on the troop fire support net. The FIST selects the best available fire support to engage the target. If the FIST passes the fire mission to the troop mortars, the scouts send all adjustments of the fire mission directly to the mortars (see Figure 7-4). If the FIST passes the fire mission to a supporting artillery unit, the scouts send all adjustments of the fire mission to the FIST. The FIST relays the message to the artillery unit on a digital fire direction net (see Figure 7-5).



(1) Scout sends report to scout platoon leader (platoon net)

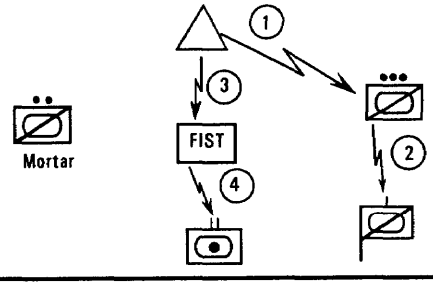
(2) Scout platoon leader forwards spot report to troop CP (troop command net)

(3) Scout sends call for fire to troop FIST (troop fire support net)

(4) FIST selects mortars to engage target (troop fire support net)

(5) Scouts call mortars to adjust fire and end mission (troop fire support net)

Figure 7-4. Cavalry scouts request fire from mortars.



(1) Scout sends report to scout platoon leader (platoon net)

(2) Scout platoon leader forwards spot report to troop CP (troop command net)

(3) Scout sends call for fire to troop FIST (troop fire support net)

(4) FIST forwards fire mission to supporting artillery (fire direction net)

Figure 7-5. Cavalry scouts request fire from artillery.

CALL FOR FIRE

Initial Call for Fire

The standard call for fire consists of three basic transmissions consisting of six elements: observer identification and warning order (first transmission); target location (second transmission); and description of target, method of engagement, and method of fire and control (third transmission).

Observer identification and warning order (first transmission). The observer identification tells the FDC who is calling. It also clears the net for the rest of the call. The warning order tells the FDC the type of mission and the method of locating the target. The types of missions are—

- 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 should always try first-round fire for effect if he is sure that his target location is correct. He should also be sure that the rounds of the first volley will have the desired effect on the target so that little or no adjustment will be required. The observer says, "FIRE FOR EFFECT."
- Suppress. The word "SUPPRESS" is used to quickly bring fire on a preplanned target only. This is a simplified call for fire and is sent in one transmission. Example: "G24—THIS IS G59—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. The observer says, "G24—THIS IS G57—IMMEDIATE SUPPRESSION AF2402—OVER." Target description is not announced.

Target location (second transmission). 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, and shift from a known point. Only the polar and shill 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: "H24—THIS IS H67—FIRE FOR EFFECT—POLAR-OVER."

When using the grid method, the target location is normally sent in six digits (example: "180739"). The direction from the observer to the target (in mils, if possible) must be given to the FDC after the call for fire, but before the first adjusting rounds are shot.

The polar-plot 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 (OT) line and the distance (to the nearest 100 meters) from his position to the target (see Figure 7-6).

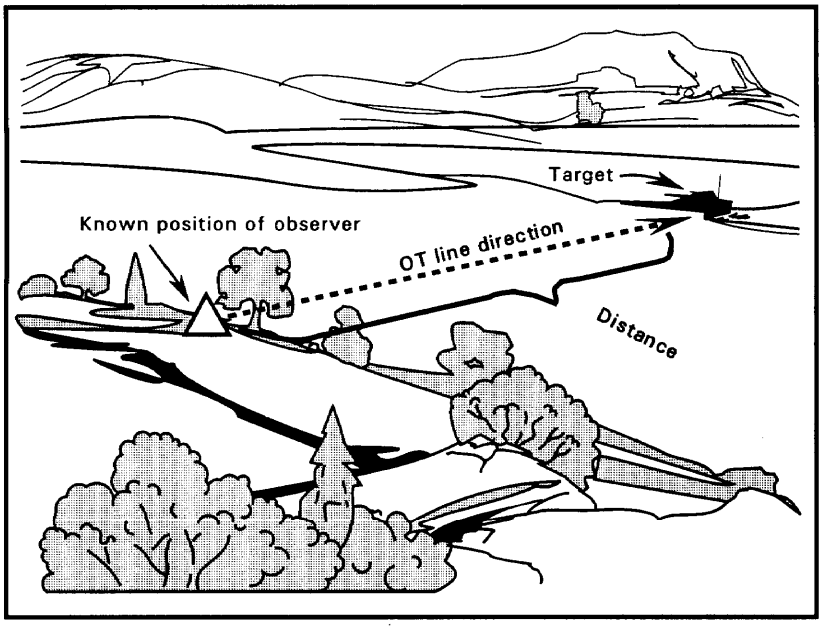


Figure 7-6. Polar plot.

The shift-from-a-known-point method can be used if the observer and the FDC have a common known point (see Figure 7-7, page 7-12). This point must have been previously established as an artillery target. To locate the target, the observer must first determine the direction to the nearest 10 mils. If the observer has no compass, he can determine the direction by using a map and protractor or by using his binocular reticle pattern and a known direction to the known point. He should remember to apply the RALS rule (right add, left subtract) in determining direction to the target.

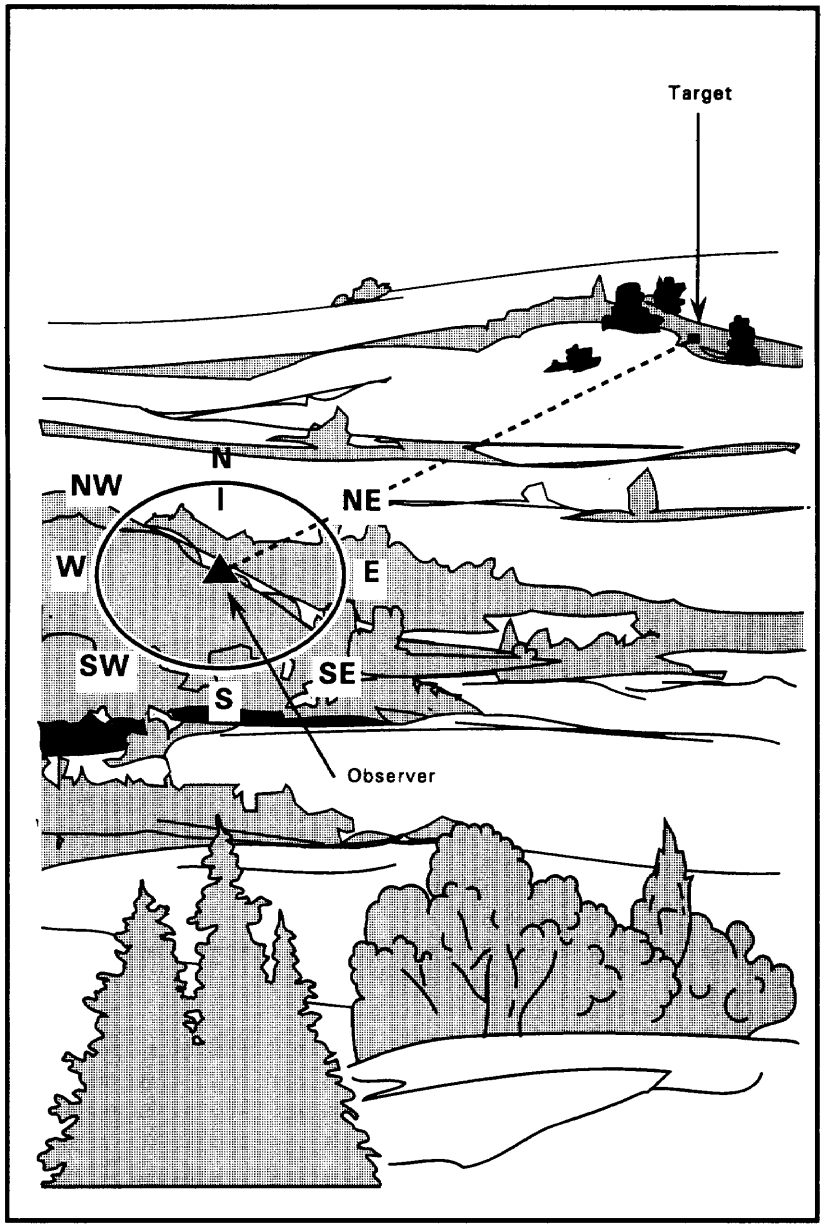


Figure 7-7. Shift from a known point using cardinal direction.

The observer then determines the lateral and range shifts (see Figure 7-8). 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. FM 6-30 explains in detail how to determine the lateral and range shifts.

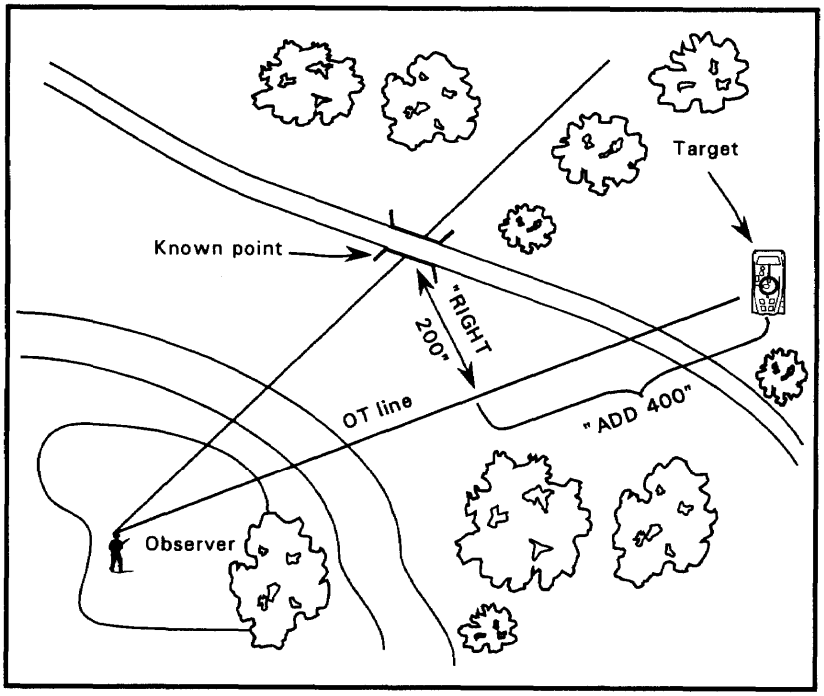


Figure 7-8. Lateral and range shifts.

Description of target, method of engagement, and method of fire and control (third transmission). The observer includes these elements in his call for fire using the guidelines discussed in the following paragraphs.

Description of target. The observer describes the target to the FDC (see Figure 7-9, page 7-14). The FDC then determines the type and amount of ammunition needed. The target description should be brief yet accurate. This is the last required element in the call for free.

	EXAMPLES	
What the target is:	Tanks and dismounted infantry, or truck convoy, or artillery battery	
What the target is doing:	Attacking, or digging in, or moving on route 45, or firing	
Strength of the target:	Company or infantry with 10 tanks, or 20 trucks, or 6 guns	
Degree of protection:	In the open, or dug in, or in bunkers with overhead cover	
Target shape and size:	Generally used for linear (trenchlines or roads), circular (assembly areas or strongpoints), or rectangular targets. Examples:	
	SHAPE	**SIZE**
	Linear	Grid 186278, length 800 meters, attitude 2,150 (azimuth of target's long axis)
		or
	Circular	Grid 186278 to 192284, radius 200
		or
	Rectangular	400 by 200, attitude 3,450 (azimuth of target's long axis)

Figure 7-9. Target description.

Method of engagement. The observer tells how he wants to attack the target (type of ammunition, fuze, distance from friendly troops). Ammunition type and fuze may be altered by the FDC based on ammunition constraints. If the target is within 600 meters of friendly troops, the observer announces "DANGER CLOSE" to supporting mortars and artillery. When "DANGER CLOSE" is called, the initial rounds in adjustment should use a delay fuze.

Method of fire and control. The observer states who will give the command for fire to begin. If the observer wants to control the time of firing, he will say, "AT MY COMMAND." The FDC will tell the observer when the unit is ready to free. At the proper time, the observer will say, "FIRE." If the observer does not say, "AT MY COMMAND," the FDC will fire as soon as the platoon/battery is ready.

Adjusting Indirect Fire

Once the call for fire has been made, the observer's next concern is to get the fire on the target. If he can locate the target accurately, he will request fire for effect in his call for fire. When the observer cannot accurately locate the target for any reason (deceptive terrain, lack of identifiable terrain features, poor visibility, or an inaccurate map), he must conduct an adjustment to get the fire on target. Normally, one artillery piece or mortar is used in adjustment.

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. For a further discussion of adjusting mortar and artillery fire, see FM 6-30.

Deviation spotting. As applied to deviation (left or right), spotting involves measuring the horizontal angle (in mils) between the burst and the adjusting point (see Figure 7-10). A burst to the right (or left) of the target is spotted as "(number) MILS RIGHT (LEFT)."

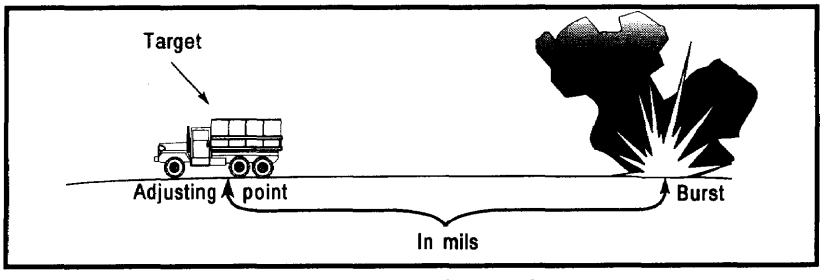


Figure 7-10. Deviation spotting.

An angle-measuring device or technique, such as the mil scale on military binoculars or the hand-and-fingers method, is required to determine deviation. The reticle in binoculars is shown in Figure 7-11. The horizontal scale, divided into 10-mil increments, is used for measuring horizontal angles. The vertical scales in 5-mil increments in the center and on the left side of the reticle are used for measuring vertical angles. The scale on the right, if present, is no longer used. The hand-and-fingers technique may be used as shown in Figure 7-12.

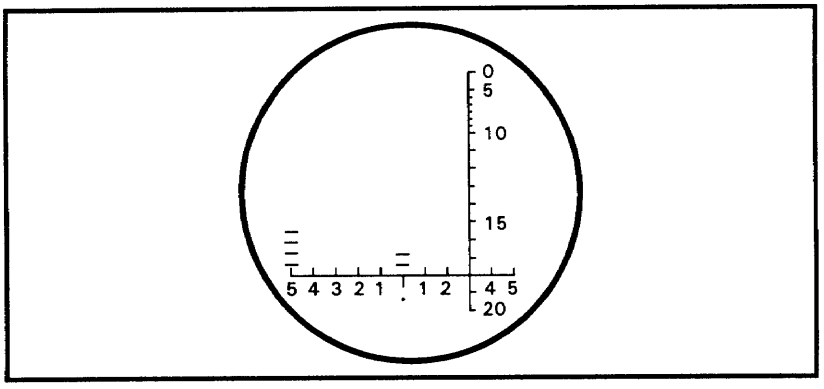


Figure 7-11. Mil scale on binoculars.

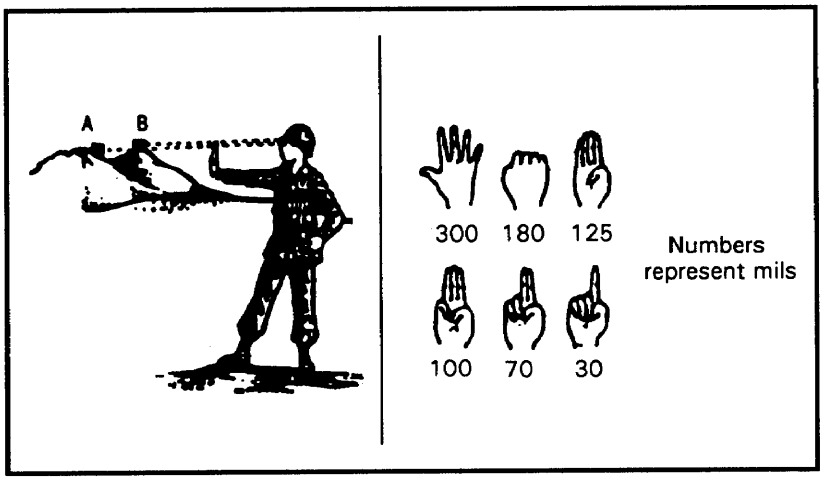


Figure 7-12. Using hand and fingers to determine deviation.

A burst on the OT line is spotted as “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. Deviation for a destruction mission (precision fire) is estimated to the nearest mil. In the example shown in Figure 7-13, the adjusting point is at the center of the binoculars’ horizontal scale.

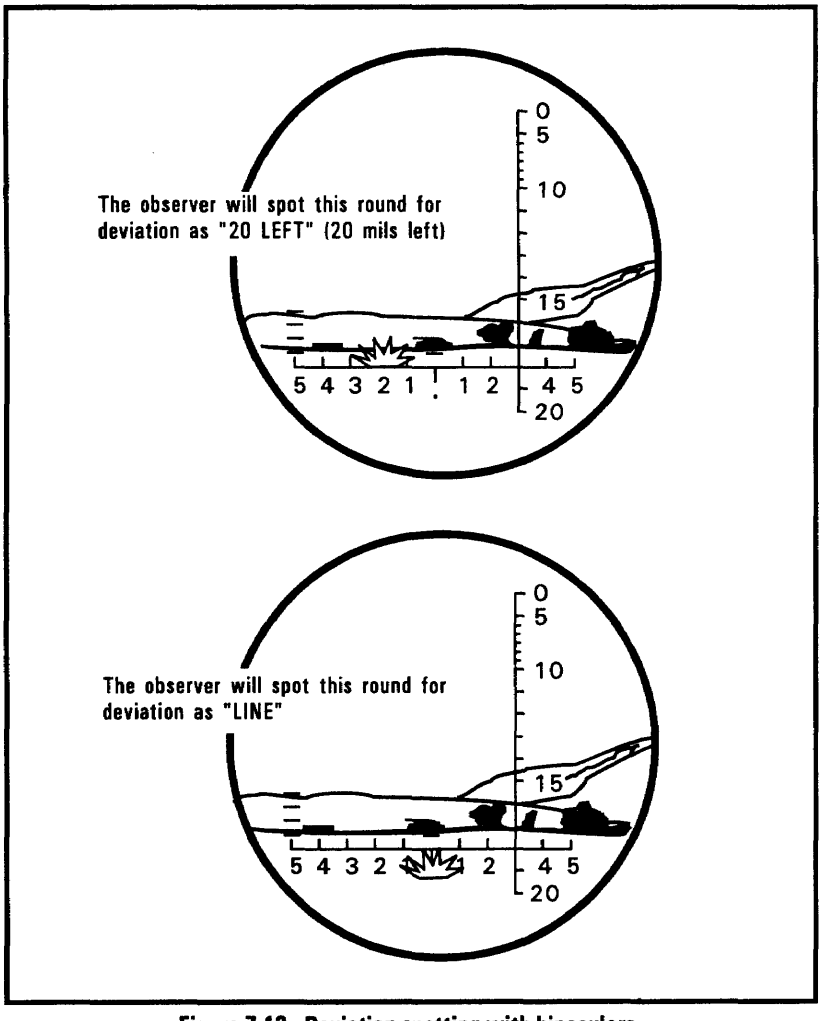


Figure 7-13. Deviation spotting with binoculars.

Deviation correction. Once the mil deviation has been determined, the observer must convert it into a deviation correction (in meters). Deviation correction is the distance in meters the burst must be moved to be on 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. Deviation correction is determined by multiplying the observed deviation in mils by the distance from the observer to the target in thousands of meters. This distance is expressed as the OT factor (see Figure 7-14). The correction is expressed to the nearest 10 meters (see Figure 7-15).

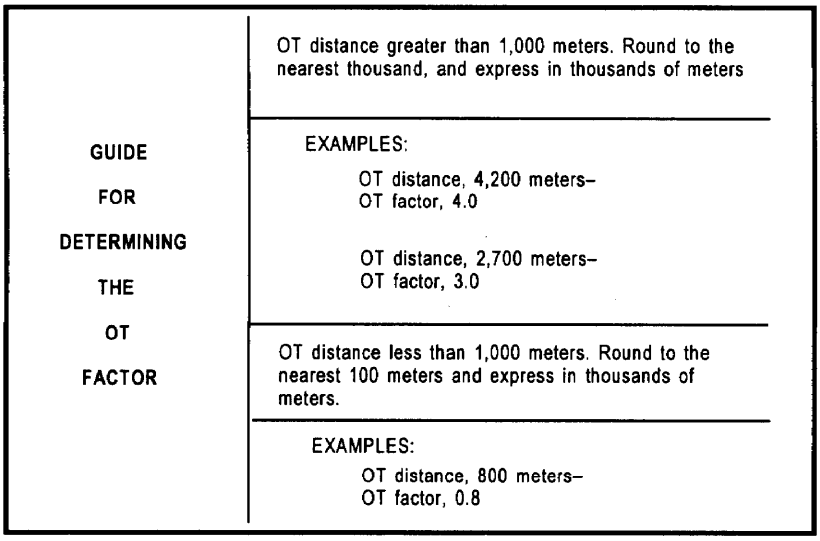


Figure 7-14. Determining the OT factor.

Minor deviation corrections (10 to 20 meters) are necessary in adjustment of precision fire. In adjustment of area fire, however, small deviation corrections **(20** meters or less) should be ignored except when such a small change is necessary to determine a definite range spotting. Throughout the adjustment, the observer should move the adjusting rounds close enough to the OT line so that range spotting can be made accurately.

Range spotting. As applied to range (short or over), spotting is required to make adjustments to get fire on the target (see Figure 7-16, page 7-20). Any range spotting other than "DOUBTFUL" or "LOST" is definite. Usually, an adjusting round's burst that is on or near the OT line will give a definite range spotting.

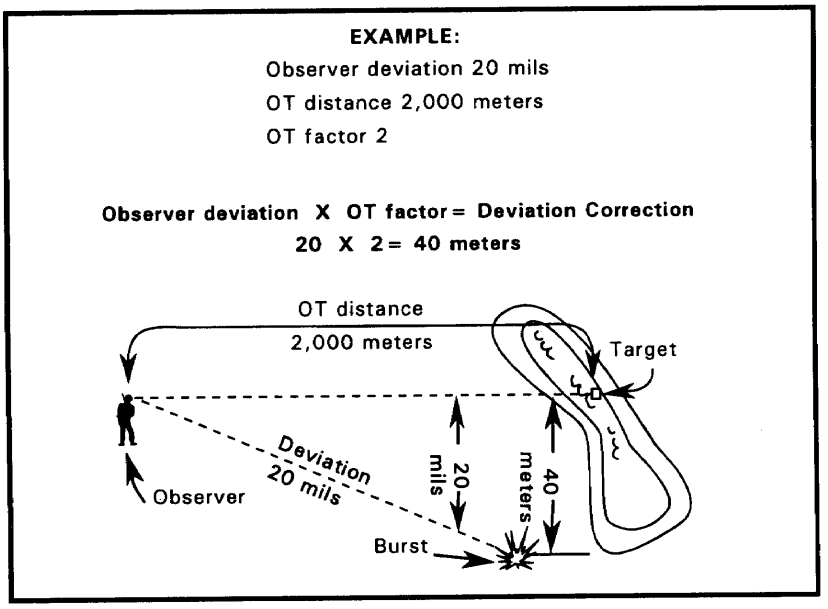


Figure 7-15. Converting mil deviation to deviation correction.

The observer can make a definite range spotting even when the burst is not on or near the OT line. He uses his knowledge of the terrain or wind and observes debris scattered by the explosion. However, if the observer is not sure ("DOUBTFUL"), the correction he sends to the FDC should be for deviation ("LEFT" or "RIGHT") only. This is done to bring the burst on line to get a definite range spotting ("OVER," "SHORT," or "TARGET").

Range correction. The observer gives range corrections so that, with each successive correction, the adjusting round intentionally hinds over or short of the adjusting point, closing on the target. Fire for effect is called for when a range correction would bring the next round within 50 meters of the adjusting point. This technique is called bracketing (see Figure 7-17, page 7-21).

Bracketing is a safe technique in that it is sure to bring fire on the target. Time is important, especially when targets are moving or may move to seek cover when they find fire coming their way. Accurate initial location data speed adjustment and make the requested fire more effective. To shorten adjustment time, the observer should try to bracket the target quickly (in the first two or three adjusting rounds), then try to adjust on the target with as few subsequent rounds as possible.

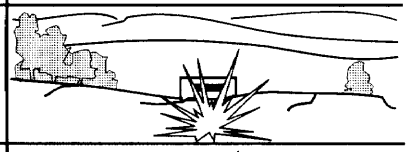
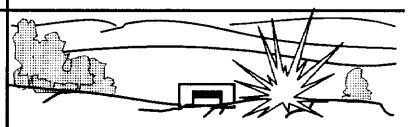
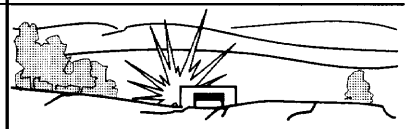
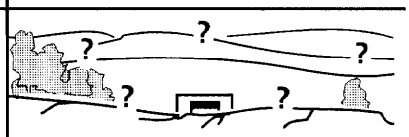
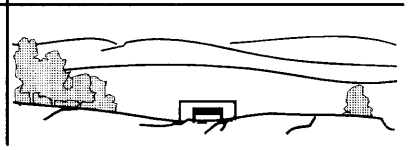
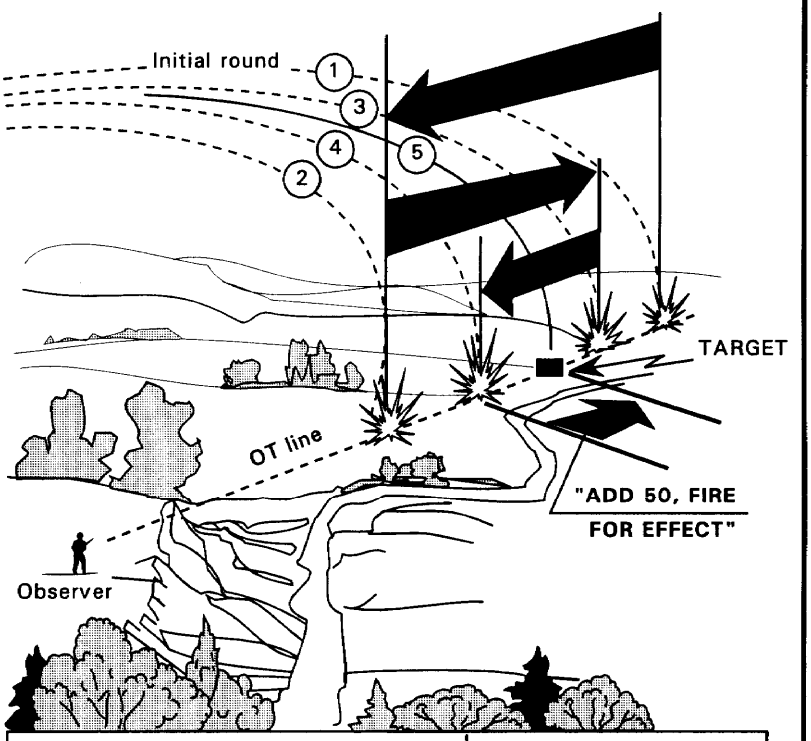
TRANSMISSION/ EXPLANATION	SIGHT PICTURE
"OVER." A burst that appears beyond the adjusting point	
"SHORT." A burst that appears between the observer and the adjusting point	
"TARGET." A burst that hits the target. This spotting is used only in precision fire (destruction missions)	
"RANGE CORRECT." A burst that appears to be at the correct range	
"DOUBTFUL." A burst that can be observed but cannot be spotted as OVER, SHORT, TARGET, or RANGE CORRECT	
"LOST." A burst whose location cannot be determined	
"LOST OVER." or "LOST SHORT." A burst that is not observed but that is definitely known to be beyond or short of the adjusting point	

Figure 7-16. Range spotting.



When bracketing, the observer should use the following guide to determine the first range correction

If OT range is-	Add or drop a minimum of-
1,000 to 2,000 meters	200 meters
Over 2,000 meters	400 meters

The observer should call for fire for effect when a 100-meter bracket has been split

EXAMPLE:

"DROP 50, FIRE FOR EFFECT."

Figure 7-17. Bracketing.

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 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. The success of hasty bracketing depends on a thorough terrain analysis that gives the observer an accurate initial target location. The observer obtains a bracket on his first correction in a manner similar to that used for successive bracketing. Once the observer has this initial bracket, he uses it as a yardstick to determine his subsequent correction. He then sends the FDC the correction to move the rounds to the target and fire for effect (see Figure 7-18). Hasty bracketing improves as the observer gains experience and judgment. Every observer must strive to improve his abilities and increase his responsiveness on the battlefield.

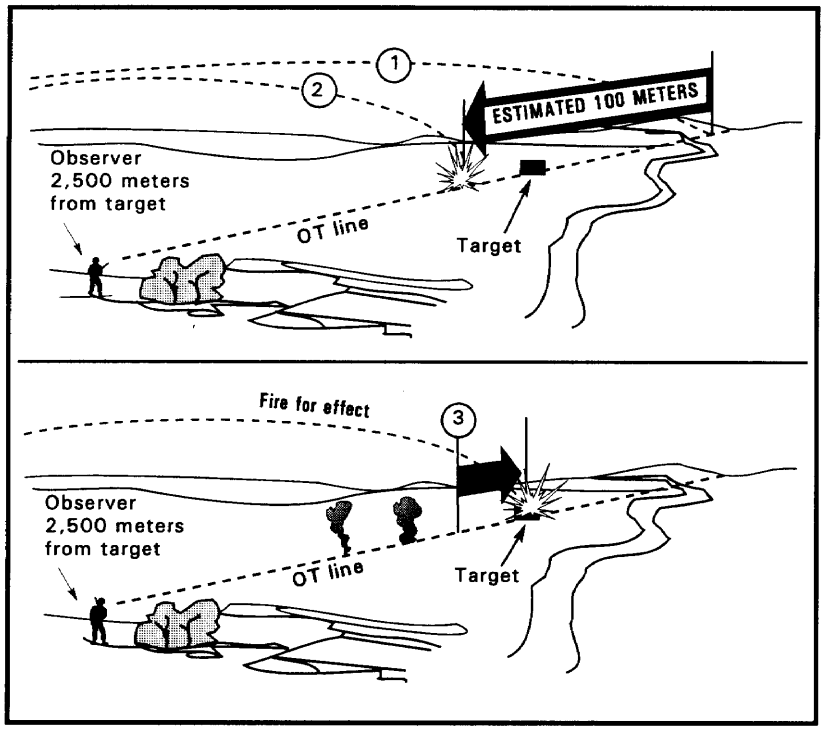


Figure 7-18. Hasty bracketing.

The creeping method of adjustment is used in "DANGER CLOSE" situations. Here, the initial round is fired beyond the target. Adjusting rounds are brought in 100 meters or less until the target is engaged (see Figure 7-19). 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.

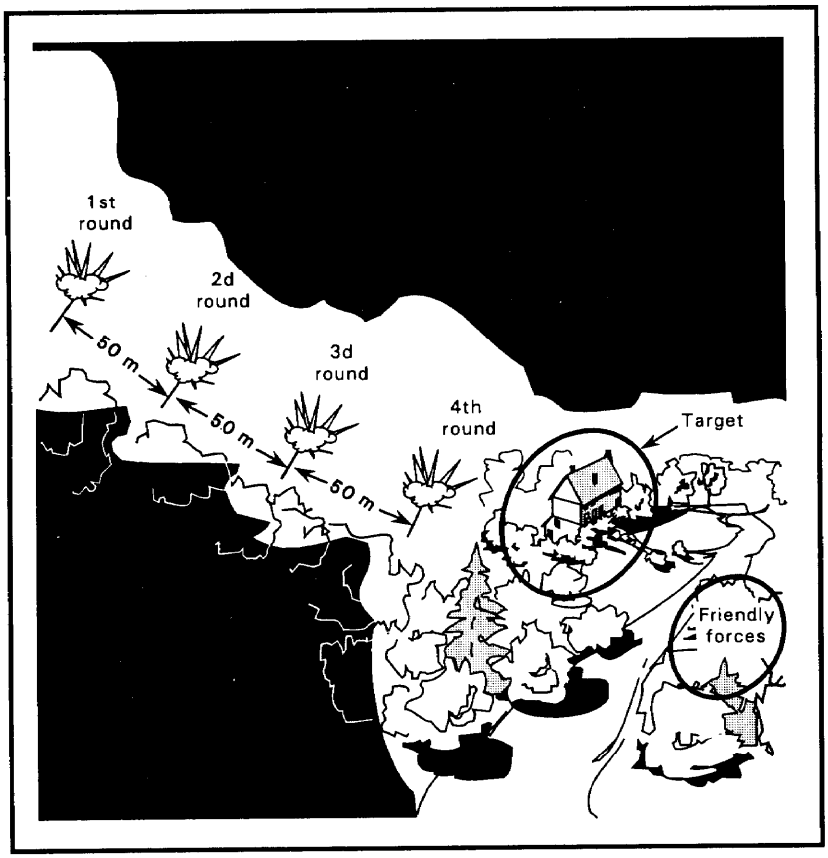


Figure 7-19. Creeping.

Refinement and Surveillance

The observer should note the results of the fire for effect and then take whatever action is necessary to complete the mission. Figure 7-20, page 7-24, shows the observer's actions after the fire-for-effect rounds have been fired.

RESULTS OF FIRE FOR EFFECT	OBSERVER'S ACTIONS (RADIO TRANSMISSIONS 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")

Figure 7-20. Observer's actions after fire for effect.

SCOUT PLATOON FIRE PLANNING

Scout platoons conducting security or reconnaissance operations may be required to execute the LX) prior to the completion of the maneuver and fire support plan. When this happens, scouts must coordinate with the battalion FSO to develop a fire support plan. This fire planning should take into account the enemy situational template, key terrain that affects the platoon's maneuver, and enemy battalion-size RAAs. During security operations, it is particularly important to plan fires in support of point obstacles. These fires should be registered whenever possible to ensure maximum effect when they are executed.

Section II. ARMY AVIATION

AIR CAVALRY

Scout platoons in regimental squadrons and divisional cavalry or reconnaissance squadrons must establish a close working relationship with air cavalry troops. Air cavalry gives the ground commander or scout platoon flexibility through its mobility and speed, increasing the speed with which reconnaissance is conducted. It also can screen between and forward of OPs established by the platoon. (See Figure 7-21.)

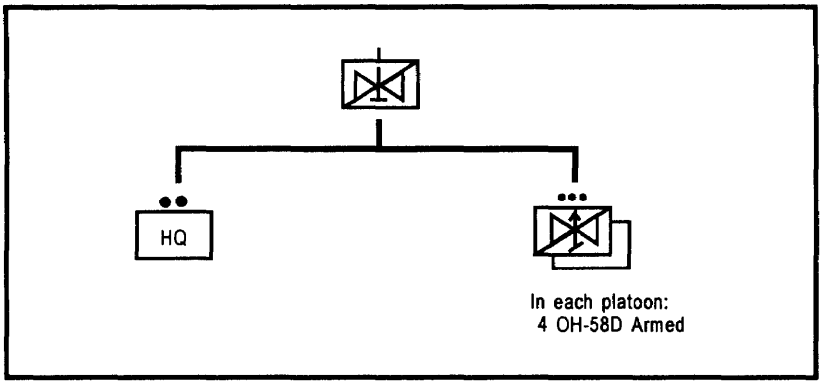


Figure 7-21. Air cavalry troop.

The major aircraft found in air cavalry units is the OH-58D. This helicopter provides substantial limited visibility and all-weather acquisition capability. The aircraft features a stabilized mast mounted sight (MMS) with a low-light TV camera, thermal imaging system, and laser range finder/designator. It can acquire armored vehicle targets at night at ranges up to 10 kilometers. It is also armed with a wide assortment of weapons and thus can be configured for a variety of threat situations. (See Figure 7-22, page 7-26).

ATTACK HELICOPTERS

The attack helicopter is primarily an antiarmor weapon system. Attack helicopter companies are maneuver units and are normally integrated into the ground scheme of maneuver. When working with ground maneuver units, the

attack helicopter unit maybe placed OPCON to the ground force. Normally, it is OPCON to a maneuver brigade or regiment; on rare occasions, it is OPCON to a battalion or squadron. (See Figure 7-23.)

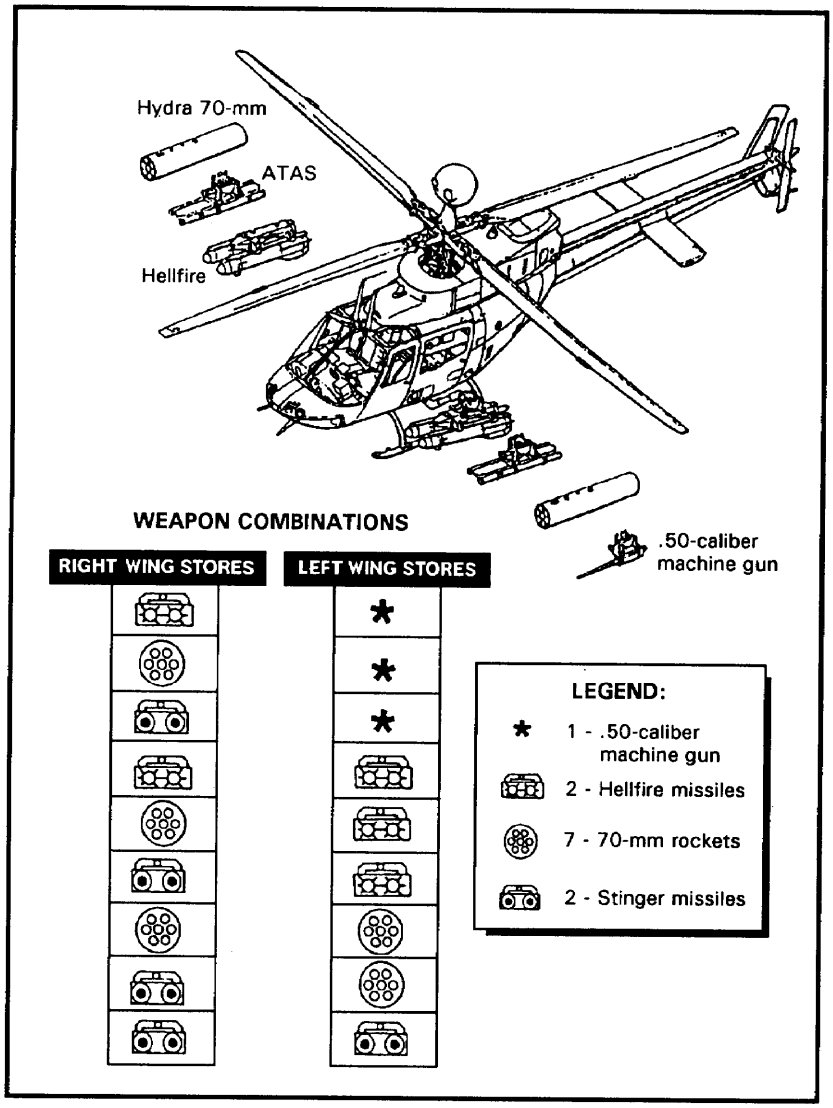


Figure 7-22. OH-58D armed helicopter.

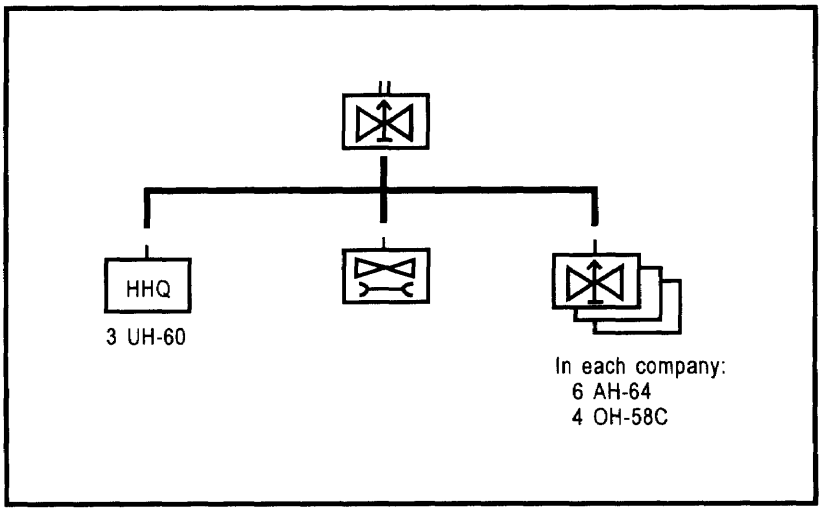


Figure 7-23. Attack helicopter battalion.

Aeroscouts usually arrive before attack aircraft and establish communication with ground forces to get the situation and mission from the commander. The aeroscouts identify targets, choose general BPs, and control attack helicopter fires. During the conduct of a passage of lines, scout platoons may direct attack helicopter fires into known enemy locations and may receive target information not visible from the ground.

AIR CAVALRY AND THE SCOUT PLATOON

The Army aviation element the scout platoon is most likely to deal with is the air cavalry platoon or air cavalry troop. When operating with ground scouts, air cavalry is normally under the operational control of the battalion or squadron. To be successful, the air cavalry platoon must communicate and coordinate directly with the most forward ground scouts. Air scouts can be used to support the ground commander's requirements in two ways: they can augment the ground scouts' effort, or they can complement the ground effort. Augmentation of ground scouts with air cavalry maximizes the capabilities of both elements and minimizes their limitations (see Figure 7-24, page 7-28). Both elements work together to accomplish the same goal or objective. When augmenting the scout platoon, air cavalry elements normally operate forward of the ground elements.

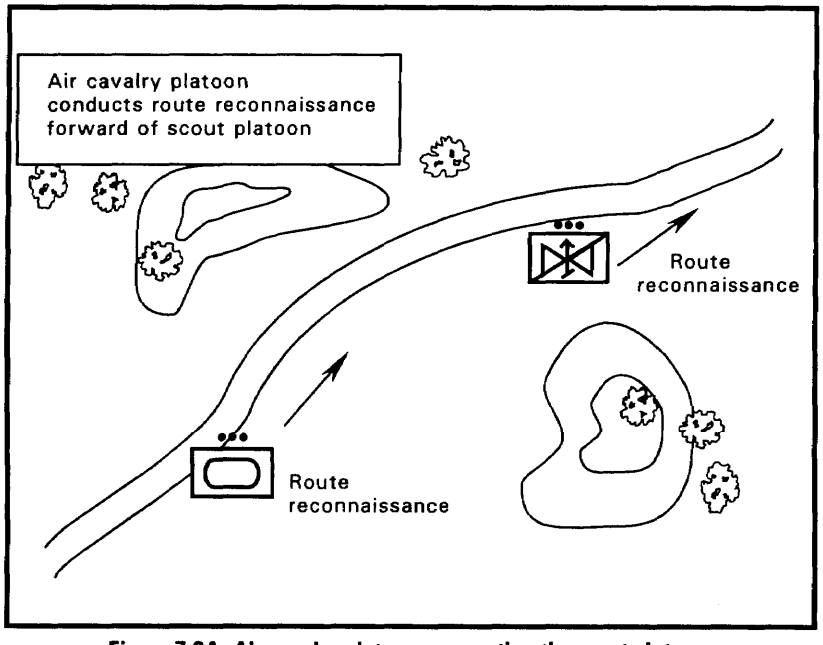


Figure 7-24. Air cavalry platoon augmenting the scout platoon.

In a complementary relationship, air cavalry and ground scouts are assigned different objectives or tasks; they work independently as required to support their common commander. This permits a greater number of tasks or separate missions to be accomplished simultaneously. Often air cavalry complements ground scouts by performing missions to the flank of or adjacent to the scout platoon (see Figure 7-25).

COMMAND AND CONTROL

Command and control is essential to effective air-ground coordination. The command relationship is particularly critical when air elements are augmenting ground units (or visa versa). Three different command relationships can be used to coordinate the efforts of air cavalry and the scout platoon: the air element under the operational control of the scout platoon; the scout platoon under the operational control of the air element; or both elements working independently for a common higher commander. The situation will determine whether the air leader is the air cavalry troop commander or an air cavalry platoon leader.

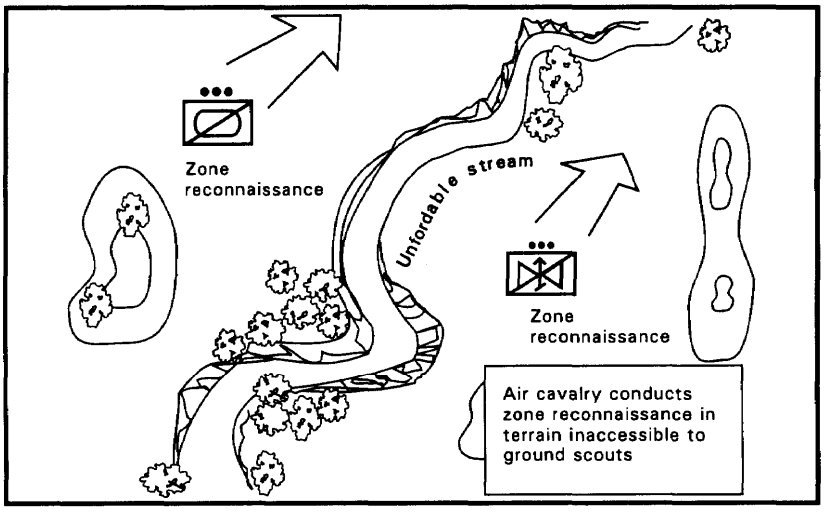


Figure 7-25. Air cavalry platoon complementing the scout platoon.

Air Element Under Operational Control of the Scout Platoon

This command relationship may be used when the availability of air cavalry is only temporary or when the scout platoon is in close contact with the enemy at the time air scouts arrive in the area.

Scout Platoon Under Operational Control of the Air Commander

This relationship would be used when the scout platoon is operating separately from its parent unit with an air cavalry troop. The air cavalry troop has the preponderance of combat power, leadership, and command and control resources in the area of operations. In addition, the air cavalry troop has superior long-range communications capability.

Air and Ground Scouts Under Control of Common Commander

This relationship is the most common and is usually the most effective. With the air and ground scouts operating independently, they can freely and quickly employ their elements to take maximum advantage of their unique capabilities. Further, the common commander, normally at battalion or squadron level, can ensure that guidance is provided to both elements so that their efforts are coordinated. In this relationship, informal coordination also occurs directly between the ground scout and the air cavalry platoon. This is done over the ground scout platoon net.

RECONNAISSANCE OPERATIONS

When the scout platoon is augmented by air cavalry during reconnaissance operations, the air cavalry normally operates forward of the scout platoon. Air cavalry will focus on areas that will impede ground movement. Also, air cavalry will conduct detailed reconnaissance of areas that are particularly dangerous to ground reconnaissance elements, such as clearings and defiles. Upon contact, air cavalry will provide early warning for the following scout platoon and then maintain contact until the scout platoon moves up for handover.

SECURITY OPERATIONS

Air cavalry can augment the scout platoon during security operations by assisting in identifying enemy reconnaissance and main body elements and providing early warning forward of the platoon. Because of the range of its sensors, air cavalry does not require positions forward of the scout platoon to acquire enemy elements. During daylight operations, the air scouts generally will be forward of the scout platoon; during limited visibility, they will deploy on line or slightly to the rear of ground elements. Positioning will always ultimately depend on the specific METT-T situation. In addition to acquiring enemy elements, air cavalry can play a critical role in providing position security through the depth of the screen by observing dead space between OPs (see Figure 7-26).

AREA SECURITY

Air cavalry elements can augment or complement the scout platoon during area security missions by screening or conducting reconnaissance. An air screen can provide early warning for a scout platoon executing convoy escort or securing a critical point (see Figure 7-27). Air reconnaissance can identify enemy ambush positions forward of the convoy or bypasses the convoy can use to move around an obstacle (see Figure 7-28, page 7-32).

AIR-GROUND BATTLE HANDOVER

When an air cavalry platoon makes contact, particularly during reconnaissance operations, it attempts to hand off the contact to ground scouts as quickly as possible. A speedy handover allows the air scouts to avoid enemy air defense weapons and also helps to maintain the tempo of the operation. During the handover, the air cavalry platoon is in charge and provides direction to the ground scout team charged with establishing contact with the enemy. The air cavalry also is responsible for ensuring the protection of both ground and air scouts; it must maintain contact with the enemy until the ground unit is in position and has also established contact.

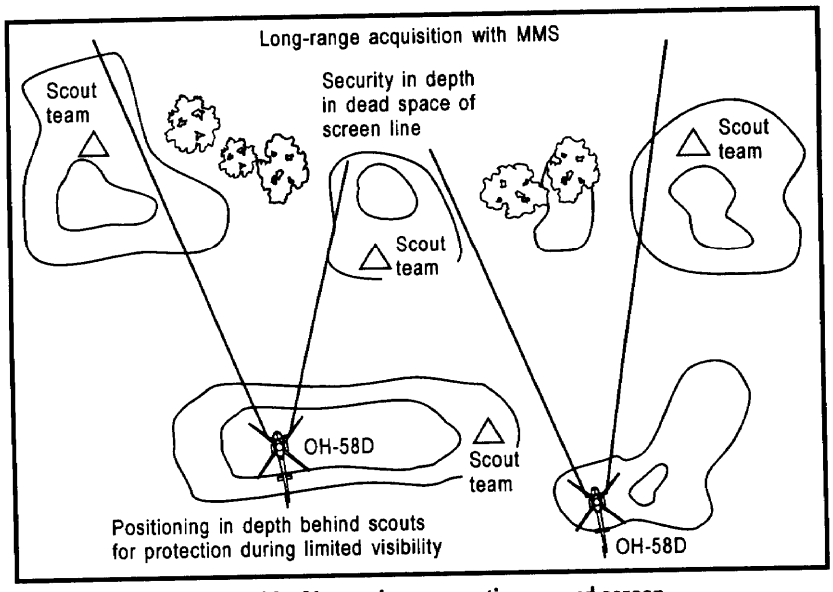


Figure 7-26. Air cavalry augmenting ground screen.

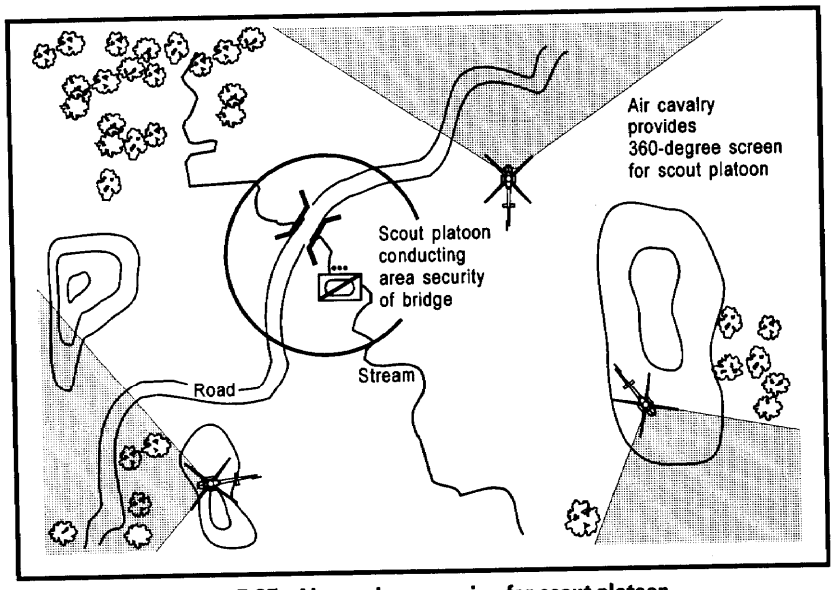


Figure 7-27. Air cavalry screening for scout platoon.

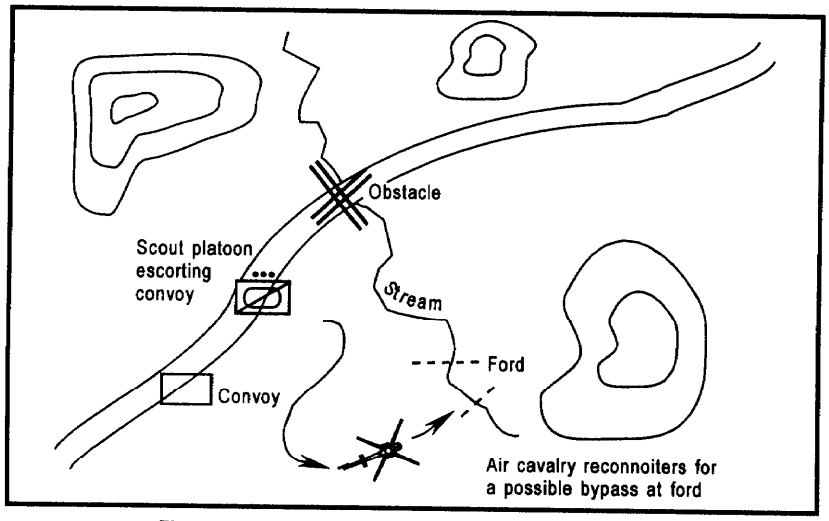


Figure 7-28. Air cavalry reconnoitering for a bypass.

The first action in the handoff process is a spot report and situation report from the air cavalry platoon team leader to the ground scout team leader. The two leaders also determine the time and place for linkup between their elements (see Figure 7-29A).

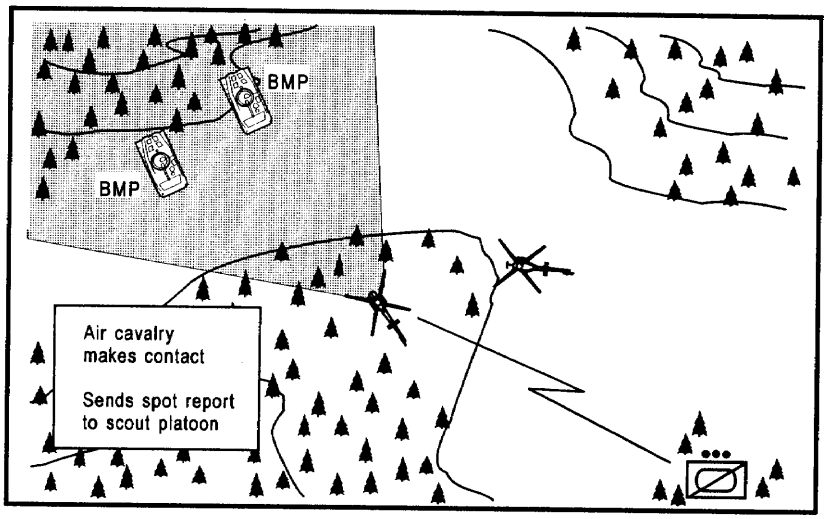


Figure 7-29A. Air-ground battle handover.

Next, the air cavalry platoon leaves an element in contact with the enemy while it scouts the area for secure positions for the ground scouts. The air cavalry platoon identifies hide positions, overwatch positions, OP positions, and mounted and dismounted routes into the area (see Figure 7-29B).

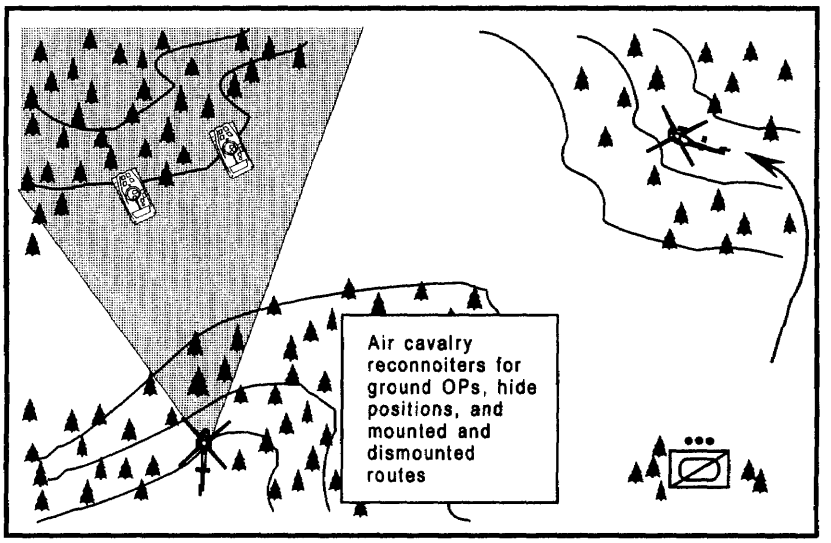


Figure 7-29B. Air-ground battle handover (continued).

Once this is complete, the air cavalry platoon moves to link up with the ground scouts. Ideally, the air cavalry team leader should land and brief the scout team leader face-to-face. If this is not possible because of time constraints, the briefing is done over the radio. Linkup is complete when both elements have visually identified each other (see Figure 7-29C, page 7-34).

After linkup, the ground team moves to its initial hide positions along the route selected by the air cavalry platoon. Scouts then move dismounted to make contact with the enemy. Once contact is established, the ground team leader sends a spot report to the air team leader. When the air leader confirms that the ground scouts can observe all enemy elements and have a clear picture of the situation, he announces that handover is complete; the ground team leader acknowledges the transmission. The air scouts then continue their mission, bypassing the enemy elements that have been handed off (see Figure 7-29D, page 7-34).

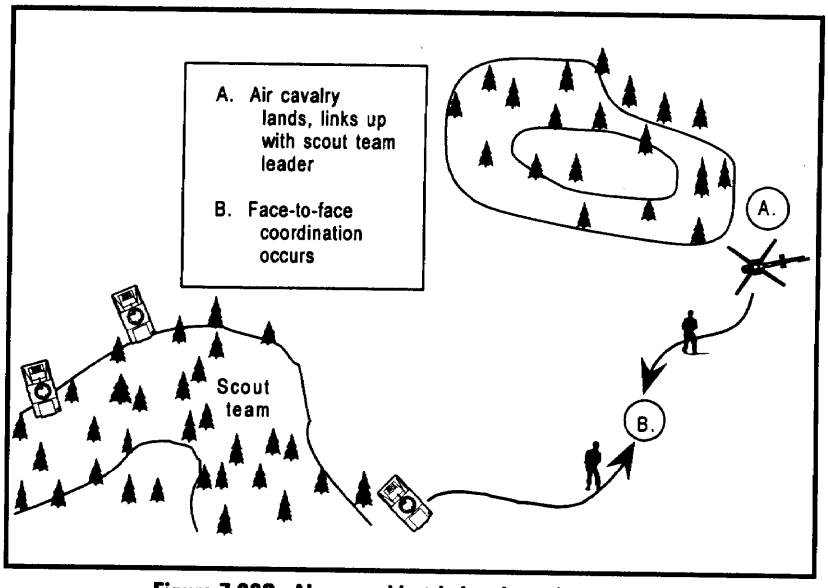


Figure 7-29C. Air-ground battle handover (continued).

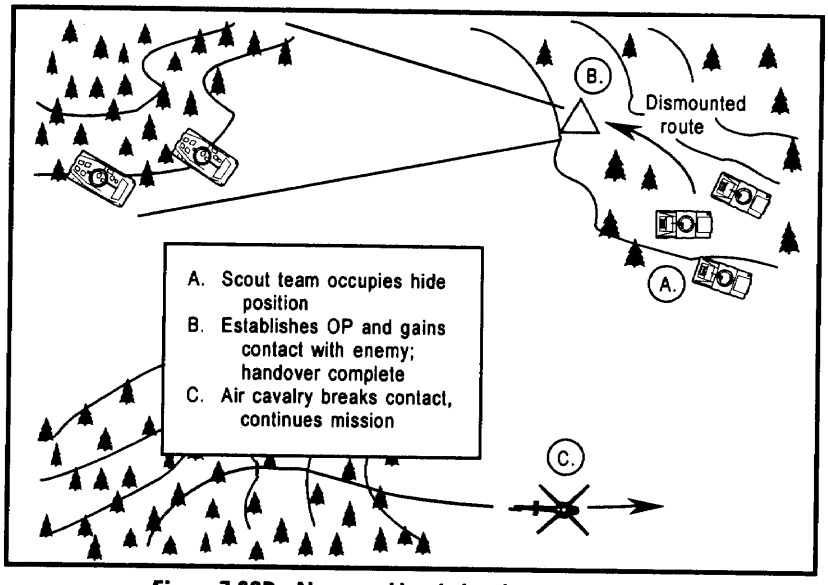


Figure 7-29D. Air-ground battle handover (continued).

Section III. COMBAT ENGINEERS

Brigade/regiment and battalion/squadron commanders decide how best to employ their engineer assets: as a distinct unit, attached to their subordinate elements, or in DS of the subordinate elements. In fast-moving offensive operations, one technique is to attach engineers to the lead company team or to troops in counterobstacle team configurations. In the defense, commanders generally keep engineer units intact to construct major obstacles, designating a priority of work to be accomplished. Engineers are trained to fight as infantry as a secondary mission; however, they are employed as infantry only if absolutely necessary. This decision should be authorized by the next higher commander. The basic engineer unit with which the scout platoon is likely to operate is the combat engineer platoon (see Figure 7-30).

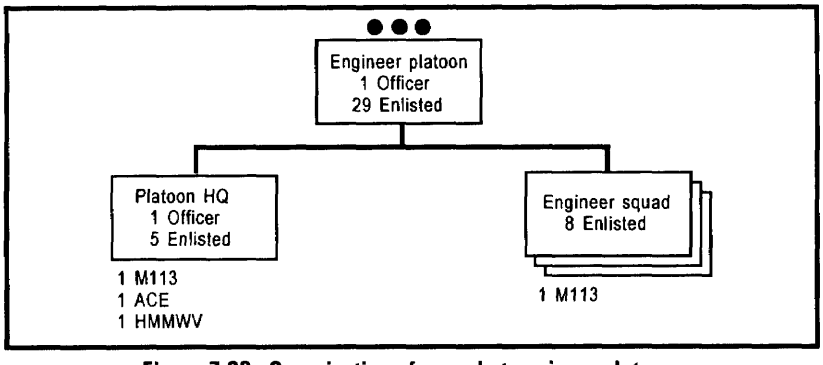


Figure 7-30. Organization of a combat engineer platoon.

CAPABILITIES

A combat engineer platoon is uniquely equipped and trained to conduct mobility, countermobility, and survivability operations in support of ground operations. The engineers' specific tasks and responsibilities in these three roles are determined by the higher unit commander.

In mobility operations, the engineer platoon can provide—

- Obstacle reduction. The engineers can reduce or negate the effects of obstacles, thereby improving their parent, unit's maneuver capability.
- Route construction. The engineers can construct, improve, and maintain roads, bridges, and fords.

In a countermobility role, the engineers can assist with obstacle construction. They can reinforce terrain with obstacles that will disrupt, fix, turn, or block the enemy force to support the scheme of maneuver.

In survivability operations, the engineers can improve positions by constructing berms, dug-in positions, and overhead protection to reduce the effectiveness of enemy weapons.

The combat engineer platoon consists of three squads mounted in Ml13s. Each squad has a demolition set, chain saw, and mine detector. The platoon headquarters is authorized one M9 armored combat earthmover (ACE), which is highly mobile, armored, and amphibious (see Figure 7-31). The platoon may also be supplemented with equipment from the engineer company, such as an armored vehicle launched bridge (AVLB) or CEV.

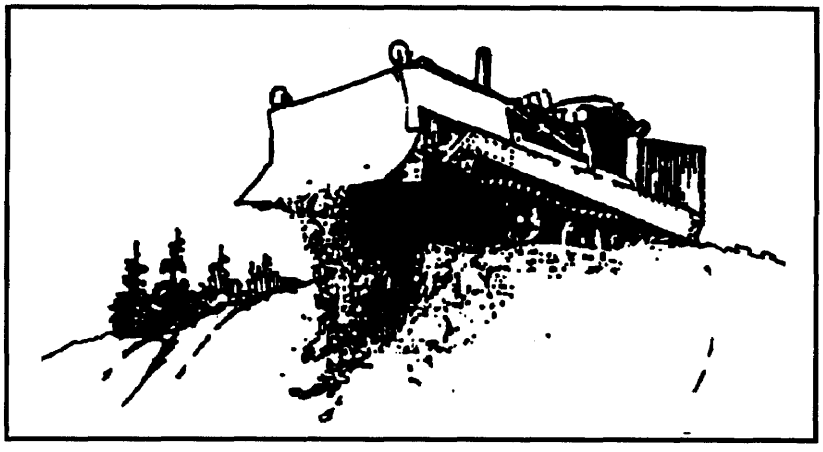


Figure 7-31. M9 armored combat earthmover.

An AVLB is a tank chassis modified to transport, launch, and retrieve a 60-foot bridge. The bridge is capable of supporting military-load class 60 tracked vehicles across a 17-meter gap and military-load class 70 tracked vehicles across a 15-meter gap (see Figure 7-32).

The CEV is an armored vehicle, built on an M60A1 tank chassis, with a hydraulically operated dozer blade, a 165-mm turret-mounted demolition gun, a retractable boom, and a winch (see Figure 7-33).

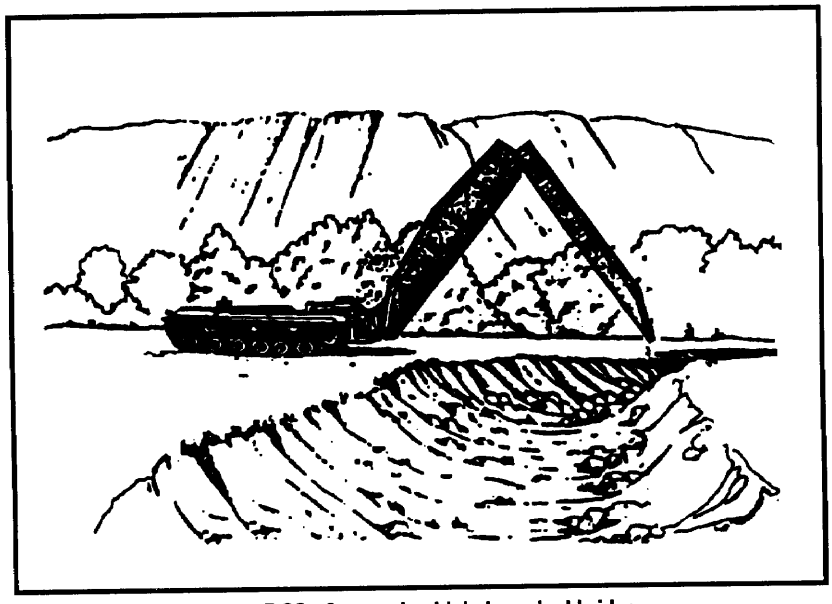


Figure 7-32. Armored vehicle launched bridge.

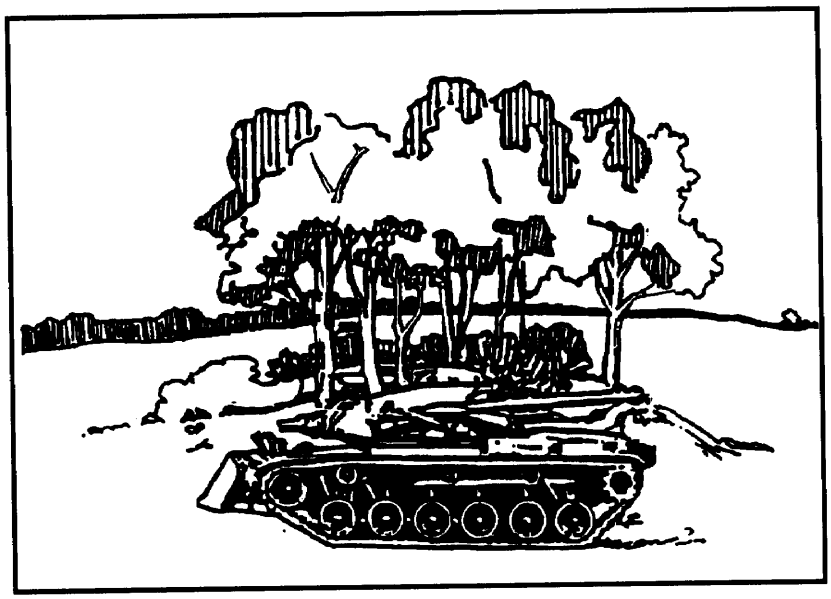


Figure 7-33. Combat engineer vehicle.

ENGINEER SUPPORT TO THE SCOUT PLATOON

Reconnaissance Operations

In reconnaissance operations, an engineer squad may be placed in DS to a scout platoon. The engineers should remain attached to the scout platoon for the duration of the reconnaissance. The squad can assist in mobility operations and provide technical advice to the scout platoon leader as to what effort and equipment are required to breach a particular obstacle. This information can be relayed back to the main body to facilitate its breaching preparations. The actual breaching capabilities of an engineer squad are limited to manual and explosive methods. The engineer squad may—

- Conduct route and bridge classification.
- Assist in locating bypasses around obstacles.
- Conduct limited breaching operations through log cribs, abatises, and minefields. The scouts must provide security for the engineer squad while it is conducting breaches.
- Identify the exact composition and dimensions of the obstacle.
- Conduct tactical or technical reconnaissance.

Engineers conduct tactical reconnaissance in the offense as part of the combined arms team reconnaissance effort; normally, they are attached to scout elements to facilitate command and control and logistical support. The engineers' key tactical reconnaissance objective is to provide the commander with obstacle intelligence (OBSINTEL) within the area of operations. This information, combined with intelligence obtained by the scouts, allows the combined arms force to maneuver more effectively against the enemy. It tells the commander whether a bypass is possible or, if not, how to conduct breaching operations with the right equipment at the right location.

Engineers conduct technical reconnaissance to collect specialized information about a designated target, area, or route. This mission is usually conducted under a low level of threat in areas physically controlled by friendly forces to the rear of the FLOT. Technical reconnaissance is normally a specified task from higher headquarters or is derived from mission analysis.

Whenever possible, engineer elements should have a habitual relationship with the scouts to whom they are attached. They should be task organized with scouts as early as possible in an operation so they can be integrated into the scout platoon leader's troop-leading procedures, rehearsals, OPORD, and movement plans.

Security Operations

Insecurity operations, the scout platoon does not usually have any engineer assets working under its control. Engineer assets normally work under battalion, squadron, or troop control. The scout platoon leader must have access to the battalion, squadron, or troop obstacle plan, including locations of lanes and gaps. Scout platoons may be designated to guard and execute reserve demolition targets that engineer units have prepared. This is called target turnover, and the procedures for this mission are as follows:

- Prior face-to-face coordination between the senior member of the emplacing unit (normally an engineer squad leader) and the demolition guard commander (normally a scout squad leader) speeds the turnover process. Prior coordination is always conducted if the tactical situation permits.
- The senior member of the emplacing unit requires positive identification of the demolition commander by means of sign/countersign procedures or by personal recognition.
- Once identification is established, the emplacing unit gives the demolition guard commander a completed target folder for the target being turned over. The folder contains orders to the demolition guard commander and the firing party commander. The demolition guard commander reviews the orders to ensure he thoroughly understands them and then signs the orders.
- The senior member of the emplacing unit then describes the obstacle in detail to the demolition guard commander.
- Once the demolition guard commander fully understands his responsibilities and he (or the firing party commander, if separately designated) is capable of executing the target, the emplacing unit may depart to conduct further operations.

Section IV. AIR DEFENSE

Air defense assets are scarce; maneuver units cannot plan on always receiving dedicated air defense protection. Consequently, scout platoons must be able to protect themselves from enemy air attacks during all combat operations. Air defense measures include actions to avoid enemy air attack, actions to limit the damage if attacked, and if necessary, fighting back.

PASSIVE AIR DEFENSE

Passive air defense is the scouts' first line of defense against enemy air attack. It includes all measures, other than active defense, taken to minimize the effects of hostile air action. There are two types of passive air defense: attack avoidance and damage-limiting measures.

Attack Avoidance

If the enemy pilot cannot find you, he cannot attack you. Scouts use concealment, camouflage, deception, and any other necessary action to prevent the enemy from seeing them.

Scout positions must provide effective concealment. When concealment is not available, vehicles must be camouflaged to blend into the natural surroundings. Track marks leading into the position must be obliterated. All shiny objects that could reflect light and attract attention must be covered.

Damage-Limiting Measures

Dispersion is one of the most effective ways to reduce the effects of enemy air attack. It is essential when a unit is occupying static positions such as assembly areas or is preparing to cross a water obstacle or a breached obstacle. When the platoon is on the move and air guards identify an enemy air attack, vehicles disperse quickly, move to concealed positions if possible, and stop (a stationary vehicle is more difficult to see than a moving vehicle).

Another damage-limiting measure is the use of natural or man-made cover to reduce the effects of enemy munitions. Folds in the earth, depressions, buildings, and sandbagged positions can provide this protection.

ACTIVE AIR DEFENSE

Although passive measures are the first line of defense against air attack, the scout platoon must be prepared to engage enemy aircraft. The decision to fight back against an air threat is based on the situation and the capabilities of organic w capon systems. All platoon members must understand that they can defend against a direct attack but cannot engage aircraft that are not attacking them unless the weapon control status allows it.

Scouts have several weapon systems (chain guns, machine guns, and small arms) that can be used against aircraft when they must fight back. Engaging aircraft with volume fire is the key to effective use of small arms and machine gun fires against an air attack. These fires must be coordinated to be effective. Delivered on the platoon leader's command, they are directed at an aim point in front of the target (see Figure 7-34, page 7-42); gunners do not attempt to track the target. The rules for selecting the aim point are listed in Figure 7-35, page 7-43. They are simple and logical; they must be learned and retained by everyone in the platoon.

The Bradley's 25-mm gun is effective against helicopters when used with the integrated sight unit and armor-piercing discarding sabot (APDS) ammunition at a high rate of fire (20-to-26-round bursts). Gunners use the standard aim points to engage a moving helicopter; they aim just above the fuselage to engage a hovering helicopter.

MAN-PORTABLE AIR DEFENSE SYSTEMS

Although other forward area air defense (FAAD) systems support both divisional and regimental units, scout platoons with dedicated ADA systems are most likely to be supported by man-portable air defense systems (MANPADS). Figure 7-36, page 7-44, shows the Stinger MANPADS, designed to counter high-performance, low-level, ground attack aircraft; helicopters; and observation and transport aircraft. The missile system is employed by a two-man crew (crew chief and gunner). The MANPADS crew will normally have a wheeled vehicle (HMMWV) or a Bradley Stinger fighting vehicle (BSFV) as its assigned transportation. Unit leaders must carefully consider the consequences before separating a Stinger team from its vehicle. Stinger teams operating away from their vehicles will have no more than two missiles available for resupply.

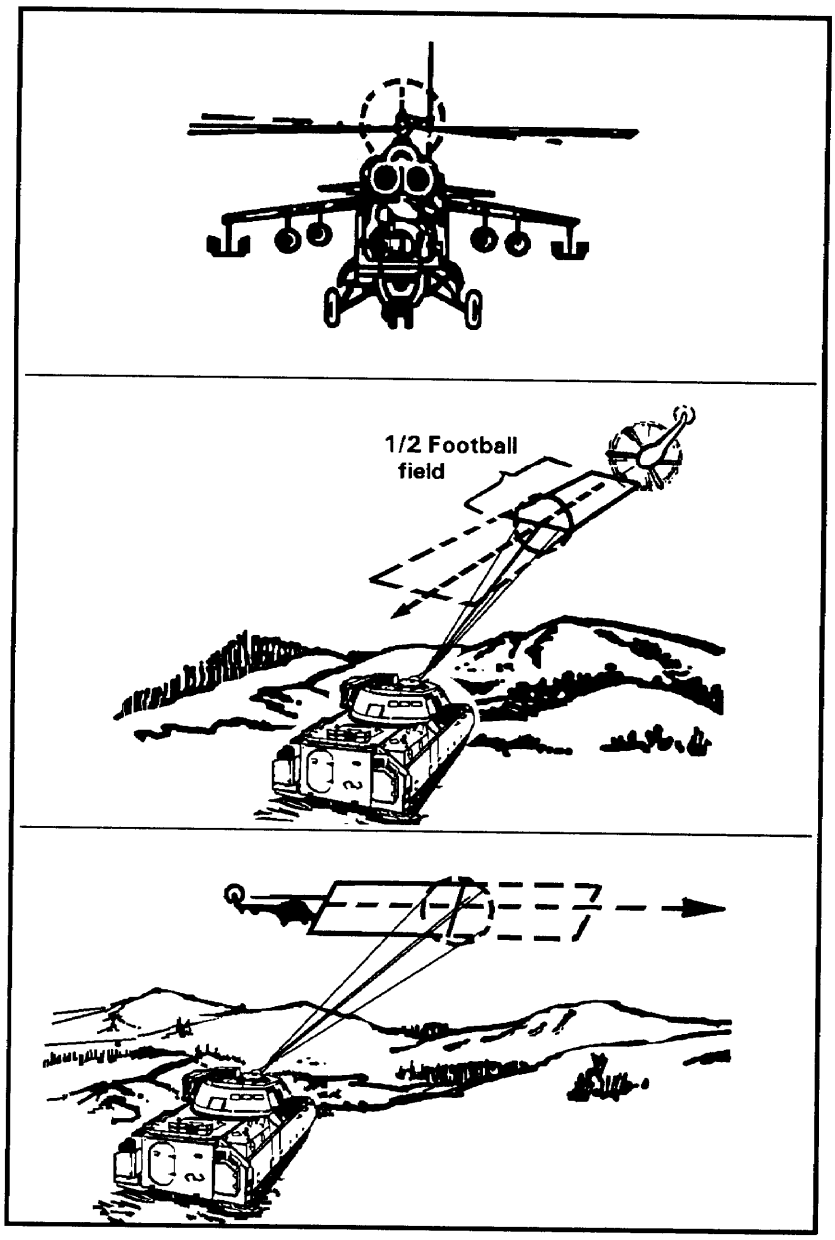


Figure 7-34. Aim points.

TYPE AIRCRAFT	COURSE	AIM POINT
Jet	Crossing	Two football fields in front of nose
Jet	Overhead	Two football fields in front of nose
Jet	Directly at you	Slightly above aircraft nose
Helicopter	Crossing	One-half football field in front of nose
Helicopter	Hovering	Slightly above helicopter body
Helicopter	Directly at you	Slightly above helicopter body

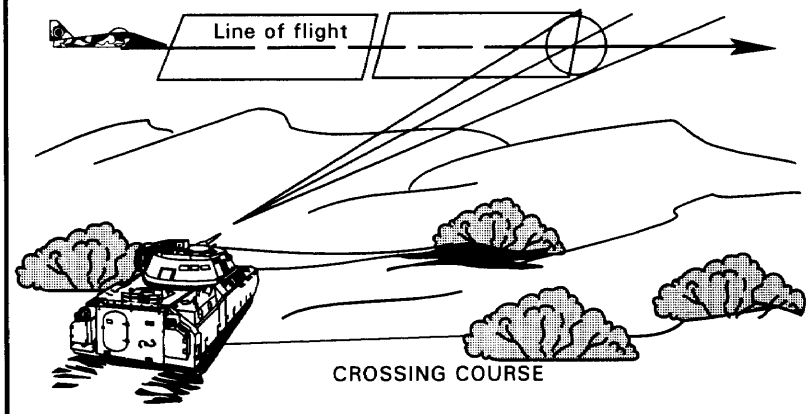
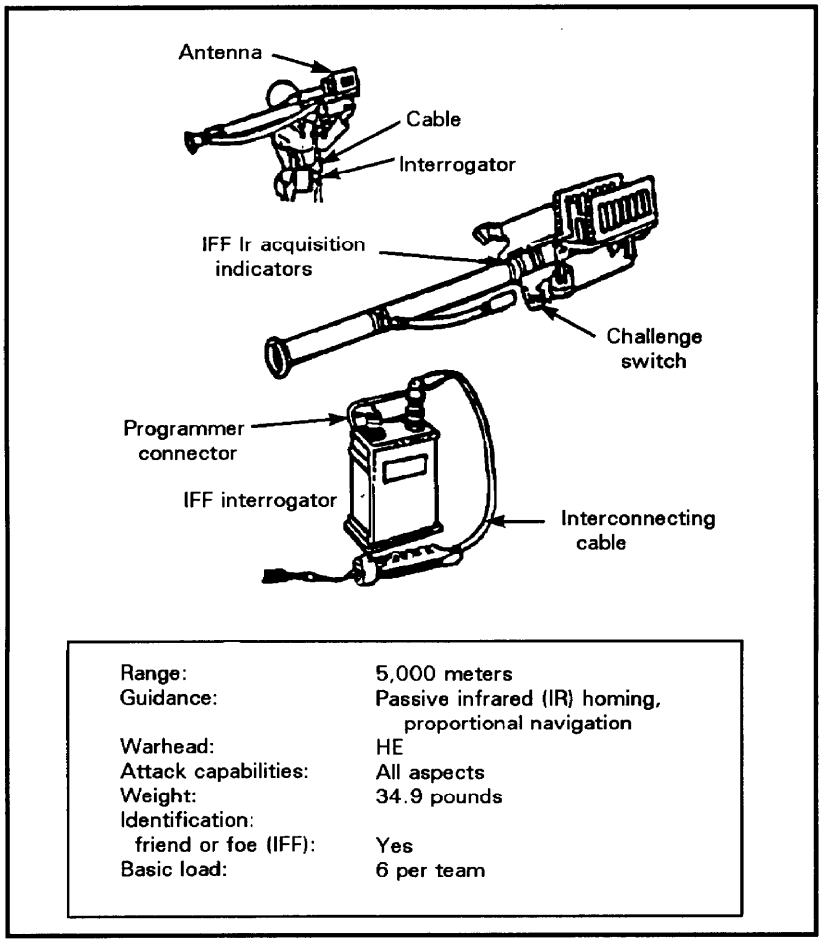


Figure 7-35. Selecting aim points.



Range:	5,000 meters
Guidance:	Passive infrared (IR) homing, proportional navigation
Warhead:	HE
Attack capabilities:	All aspects
Weight:	34.9 pounds
Identification: friend or foe (IFF):	Yes
Basic load:	6 per team

Figure 7-36. Stinger air defense system.

Section V. AIR SUPPORT

CLOSE AIR SUPPORT

CAS is provided by the Air Force. It can be employed to destroy large enemy armor formations. CAS strikes can be either preplanned (at battalion or squadron level) or requested on an immediate-need basis through the battalion forward air controller (FAC). The FAC on the ground or in the air acts as a link between the ground element and the CAS aircraft.

Army air cavalry is best equipped to coordinate with Air Force assets in joint air attack team (JAAT) and attack helicopter operations. The air cavalry can see the battlefield and the target better than ground forces can, and it has the radio equipment needed to talk to Air Force aircraft. The attack aircraft organic to air cavalry can assist CAS aircraft in suppressing the enemy ADA threat.

Although planning normally begins at battalion/squadron level, the scout platoon may be called upon to provide information for CAS employment. Scouts should familiarize themselves with the procedures to call for CAS. If CAS assets are working for their battalion, the scouts should provide suppressive fires on any known or suspected enemy ADA locations.

MARKING FRIENDLY POSITIONS

Friendly positions should always be marked during close air strikes. Marking is almost always necessary when friendly troops are within 300 meters of the target. Resources for marking positions include the following:

- Smoke. The smoke grenade is the most commonly used marker, but it has limitations. Wind may cause smoke to drift above trees, and some colors can blend with the background. Violet or white smoke shows up well with most backgrounds.

- Flares. Rocket or 40-mm flares are good for attracting attention at night; they are sometimes effective during the day.

- Mirrors. Signal mirrors are probably the best ground-to-air devices for attracting attention. If the sun is shining and the operator is skillful, pilots can see a mirror flash miles away. VS- 17 signal panels are also good visual references for pilots.

- Lights. Pocket-size, battery-powered strobe lights produce brilliant white or blue flashes at about 1 1/2-second intervals. The flash is visible at night for 1 to 3 miles. Vehicle lights, such as an unshielded red taillight, are visible to a pilot for several miles at night. Chemical glow lights can be used to mark friendly positions. Another technique that can be used at night is to tie an infrared (IR) or green chemical light on a 10-foot string. When aircraft are in the area, a scout can swing the rope in a circular motion to mark the location.

Section VI. GROUND SURVEILLANCE RADAR

GSR teams can augment the surveillance capability of scout platoons by detecting targets and providing accurate range and azimuth readings to enemy locations during limited visibility conditions. A team consists of three soldiers, one AN/PPS-5 radar unit, and an armored personnel carrier (APC) or HMMWV.

For combat operations, GSR teams are usually attached to battalions and squadrons. The teams may be attached or OPCON to companies/troops or scout platoons for specific missions. When GSR is attached or OPCON to a scout platoon, the platoon leader must plan its employment. He should work with the intelligence officer to position GSR assets in conjunction with scout OPs to provide local security and protection.

CAPABILITIES AND LIMITATIONS

GSR teams provide mobile, all-weather battlefield surveillance. When employed in pairs, they can provide observation from a given vantage point 24 hours a day.

The AN/PPS-5 has a line-of-sight range of 10,000 meters against vehicles and 6,000 meters against personnel. It can detect targets through light camouflage, smoke, haze, light snow and rain, and darkness. Foliage and heavy rain and snow seriously restrict its radar detection capability.

GSR is designed to detect targets moving against a background. It is generally ineffective against an air target unless the aircraft is flying close to the ground. It is vulnerable to enemy direction-finding and jamming equipment. The GSR team is normally equipped with a single radio. If forward with the scouts, it should send all reports to the scout platoon leader to be passed higher.

EMPLOYMENT

The GSR team should be assigned a specific sector of surveillance and frequency of coverage. Because the enemy can detect radar signals, however,

GSR cannot be used for continuous surveillance. The tasks assigned to GSR teams in their surveillance mission may include the following:

- Searching avenues of approach or possible enemy positions on a scheduled or random basis to determine the location, size, and composition of enemy forces and the nature of their activity.
- Monitoring point targets such as bridges, defiles, or road junctions and reporting quantity, type, and direction of enemy vehicles and personnel moving through the target area.
- Extending the observation capabilities of the scouts by enabling them to survey distant points and areas of special interest.
- Vectoring patrols to keep them oriented during periods of limited visibility.

GSR must be positioned in an area that is free of ground clutter such as trees, thick vegetation, and buildings and that affords long-range observation and a wide field of view. Normally, the team will be assigned a general area, and the GSR team leader will select the specific position. To avoid enemy suppressive fires, the team should be prepared for rapid displacement and have several alternate positions selected and reconnoitered.

During reconnaissance, GSR is best employed to the flanks of the scout platoon or oriented on potential enemy locations. Since reconnaissance is a moving operation, the GSR teams will have to move as necessary to support the scouts.

During security operations, GSR teams can be used to provide redundancy in surveillance of NAIs and to add depth to the scout screen line by augmenting scout OPs.

CHAPTER 8

COMBAT SERVICE SUPPORT

CSS elements arm, fuel, fix, feed, clothe, and provide transportation and personnel for the platoon. The platoon leader is responsible for supervising CSS within the platoon. The PSG is the CSS operator for the platoon, as the 1SG is for the company and troop. The PSG advises the platoon leader of logistical requirements during preparation for combat operations. He also keeps the platoon leader informed of the platoon's status. During combat operations, he coordinates directly with the 1SG, informing him of requirements and problems. The PSG is assisted by the other vehicle commanders and the gunners on the platoon leader's and PSG's vehicles.

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Section I. ORGANIZATION

The platoon has no organic CSS assets. The PSG coordinates directly with his supporting 1SG for all CSS. The PSG is the primary recipient of all maintenance, supply, and personnel reports. He is assisted by the scout team leaders, but it is his responsibility to keep the platoon leader informed of the current status of the platoon.

BATTALION TASK FORCE SUPPORT

The scout platoon presents complex logistical problems for the battalion staff. As explained in previous chapters, the platoon normally operates to the front of the battalion task force. It will probably move earlier and stay away longer than any other battalion element. It can be resupplied in one of several ways.

A maintenance team and/or logistics package (LOGPAC) can be dedicated to the scout platoon. This team responds to the needs of the platoon and is brought forward by the headquarters company 1SG, the support platoon leader, the headquarters company XO, or another responsible individual. The support package is tailored specifically to the scout platoon's requirements and is small and flexible. The LOGPAC links up with the scout PSG at a specifically designated RP as far forward as possible. The PSG is then responsible for distribution of supplies to the scout teams. He may distribute supplies by himself or be assisted by the individual who brought the LOGPAC forward. The latter method is significantly faster. This method is best for the scout platoon but difficult for the battalion because of its limited CSS resources.

The scout platoon can also use the nearest company team's CSS assets for its resupply and maintenance. If this technique is used, the HHC commander and scout platoon leader should coordinate with the company team commander for support. The HHC commander and battalion S4 should ensure that the supplies dedicated for the resupply of the scout platoon are forwarded with the company team's regular LOGPAC. If possible, scout supplies pushed forward with the company team LOGPAC should be separated to ensure rapid resupply of the scouts. In any case, the company team commander must realize the importance of refueling and rearming the scouts before his unit receives supplies. This also applies when the scout platoon arrives during a resupply operation; it must receive priority for resupply.This method strikes a balance between the scouts' ability to pull back for resupply and the battalion's ability to send scout supplies forward.

Another method is to make the scouts responsible for their own supplies. Not only must the PSG coordinate for supplies, but he also must pick up the LOGPAC, distribute the supplies, and return the LOGPAC to its parent-unit location. This stretches the platoon to its limit because it must operate without the PSG for extended periods of time. This method also does not provide dedicated CSS assets for the scout platoon. **It is the easiest method of resupply for the battalion but the worst for the scout platoon.**

Whatever support the scout platoon receives must be keyed to a fast transfer of supplies. The scouts must be able to pull in, resupply, and leave as quickly as

possible. The actual time when the scouts need to resupply does not often coincide with the standard LOGPAC times for the rest of the battalion. The battalion S4, the support platoon leader, the scout platoon leader and PSG, and any other key leaders must anticipate events to coordinate for the best time of resupply.

SQUADRON SUPPORT

The scout platoon in a divisional or regimental squadron receives all of its CSS through its parent troop. The PSG coordinates with his 1SG for everything his platoon requires. The 1SG is thus the key operator in the service support chain. He does most of the coordination with the squadron combat trains command post (CTCP) and controls the LOGPAC and its operation. Based on the tactical situation, the 1SG will also choose the techniques of resupply.

Section II. SUPPLY OPERATIONS

Each platoon has a large amount of equipment and requires frequent resupply to accomplish its mission. Periodic checks are required by all leaders to make sure the platoon's equipment, especially high-use items, is accounted for and ready to use. Leaders must anticipate expenditures and request supplies before an operation begins.

BASIC LOAD

For classes of supply other than ammunition, basic loads are supplies kept by units for use in combat. The quantity of each item of supply in a basic load is based on the number of days the combat unit may have to sustain itself without resupply. For ammunition, the basic load is the quantity of nonnuclear ammunition required to be on hand to meet combat needs until resupply can be accomplished. The basic ammunition load is specified by the theater army and is expressed in rounds, units, or units of weight, as appropriate.

CLASSES OF SUPPLY

Class I

This class includes subsistence items and gratuitous-issue health and welfare items. MRE rations are stocked on each vehicle, usually a 3- to 5-day supply. Hot meals are brought forward when possible, if only to supplement MREs.

Potable water should be replenished daily, either by refilling from the water trailer or by rotating 5-gallon cans with the 1SG or supply sergeant. Each combat vehicle should maintain a minimum of 10 gallons of potable water, more during operations in arid climates or in MOPP gear. The platoon should also maintain a minimum amount of nonpotable water for vehicle maintenance.

All meals should be eaten in shifts, and they should never be served at one centralized location. The platoon leader and PSG must make sure not only that the platoon is fed, but also that the scouts eat nutritious meals to maintain the energy levels required in combat. During continuous or cold-weather operations, soldiers will eat more than three meals per day. This extra allowance must be planned for.

Class II

This class includes items of equipment, other than principal items, that are prescribed in authorization and allowance tables. Individual tools and tool sets, individual equipment and clothing items, them lights, batteries, engineer tape, tentage, and housekeeping supplies are requested through the supply sergeant.

Class III and Class V

Class III comprises all types of POL products. Class V is ammunition, to include small arms, artillery and tank rounds, mines and demolitions, fuzes, missiles, and bombs. For optimum security, rearming and refueling should occur simultaneously under the cover of darkness. This resupply usually occurs daily or at the conclusion of major operations. The two techniques of refueling and reaming, tailgate and service station, are covered later in this section.

Cavalry units and battalions that have air assets OPCON to them have the flexibility to resupply by helicopter. This is done when distance or time would severely tax conventional resupply methods. Leaders should consider location and security of the resupply site, types of supplies to be delivered, signals, and assistance required to help the delivering unit deliver its load quickly.

The platoon leader must control the redistribution of supplies when fuel and ammunition cannot be delivered or when only limited supplies are available. The PSG continually monitors the platoon's supply status through logistical reports (see FKSM 17-98-3). He notifies the platoon leader when a specific vehicle or the platoon as a whole is critically short of these major classes of

supply. The PSG should make sure ammunition is equally distributed throughout the platoon before any tactical operation and during consolidation on an objective.

When planning for refueling, the platoon leader should keep the range and fuel capacity of his vehicles and the requirements of future operations in mind; the amount of fuel required determines how much time it will take to refuel. The platoon leader must realize that the cruising range and estimated fuel consumption of a vehicle are only approximations, subject to the effects of weather, terrain, and other factors. The platoon must top off vehicles whenever the tactical situation permits. When time is limited, the platoon leader must choose between topping off vehicles that need the most fuel first or giving limited amounts to each. Each vehicle crew needs to maintain a stock of oil, grease, and hydraulic fluid, replenishing these POL products every time refueling takes place.

Class IV

This class includes construction and barrier materials. Barrier materials such as lumber, sandbags, concertina or barbed wire, and pickets are used by the platoon to construct OPs and obstacles and to improve fighting positions. These materials are requested through the troop headquarters or, in a battalion scout platoon, through the HHC or directly from the S4.

Class VI

This class covers personal demand items. Tobacco products, candy, and toiletry articles are normally sold through the exchange system during peacetime or for units not in a combat environment. In a combat environment, these items are sent with Class I as sundry packs.

Class VII

This class includes major end items. These are major pieces of equipment, assembled and ready for intended use, such as combat vehicles, missile launchers, artillery pieces, and major weapon systems. Major end items that are destroyed are reported immediately by means of logistical reports (see FKSM 17-98-3). They will be replaced by the parent unit as they are reported.

Class VIII

This class includes medical supplies, which are provided through the battalion or squadron medical platoon and ordered through the MEDEVAC team supporting the platoon or troop. These supplies include individual medical supplies such as first-aid dressings, refills for first-aid kits, water purification tablets, and foot powder.

Class IX

This class comprises repair parts. These basic load supplies are part of the combat prescribed load list (PLL). PLL items carried by the platoon usually include spare track, road wheels, assorted bolts, machine gun parts, and light bulbs. Class IX supplies are requisitioned through the company or troop maintenance section.

TECHNIQUES OF RESUPPLY

The tactical situation and type of scout platoon will dictate which technique of resupply the platoon will use: tailgate, service station, a variation of one type, or a combination of both types. The situation will also dictate when to resupply. Generally, scouts attempt to avoid resupply during reconnaissance operations; resupply should be done during mission transition. Resupply is unavoidable during security missions of long duration.

In the tailgate technique, fuel and ammunition are brought to the scout teams by the PSG or another responsible individual who is assisting him (see Figure 8-1). This method is used when routes leading to vehicle positions are available and the unit is not under direct enemy observation and fire. This technique is time-consuming, but it is useful in security missions when the scouts are not moving because stealth is more easily maintained. If necessary, supplies can be hand-carried to vehicle positions to further minimize signatures.

In the service station technique, vehicles move to a centrally located rearm and refuel point, either by team or as an entire platoon (see Figure 8-2). Service station resupply is inherently faster than the tailgate method; because vehicles must move and concentrate, however, it can create security problems. During screening missions, the platoon must be careful not to compromise the location of OPs.

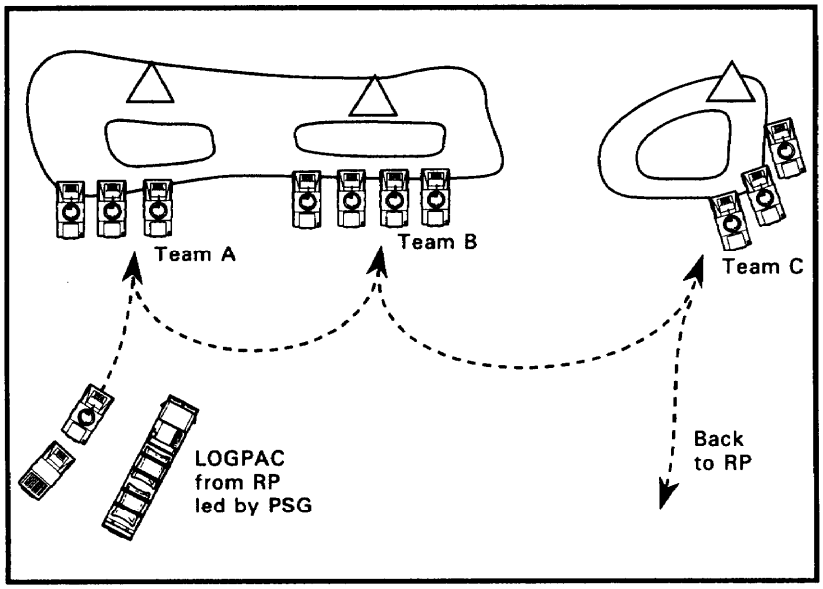


Figure 8-1. Tailgate resupply technique.

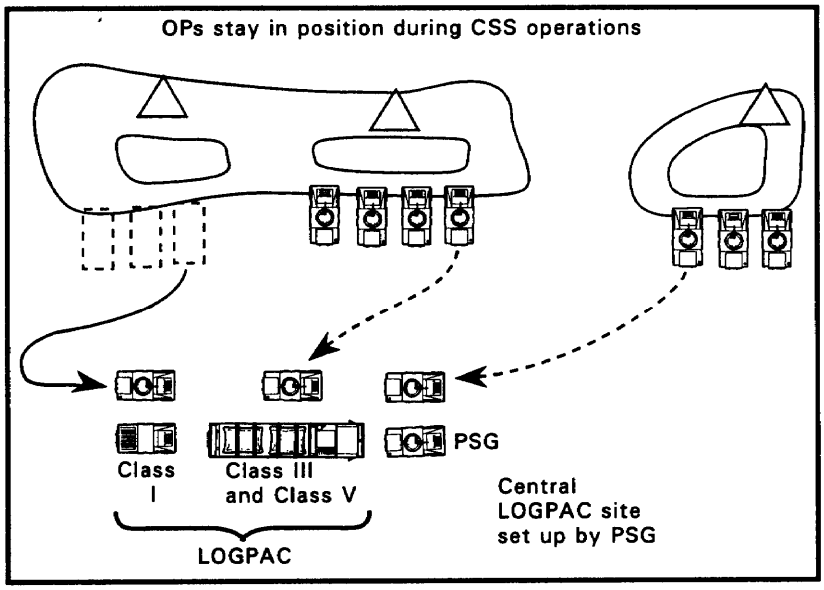


Figure 8-2. Service station resupply technique.

A platoon leader can vary the specifics of the two basic techniques, or he can use them in combination. During a screening mission, for example, he may use the tailgate method for his most forward OPs and the service station method for his OPs in depth (see Figure 8-3).

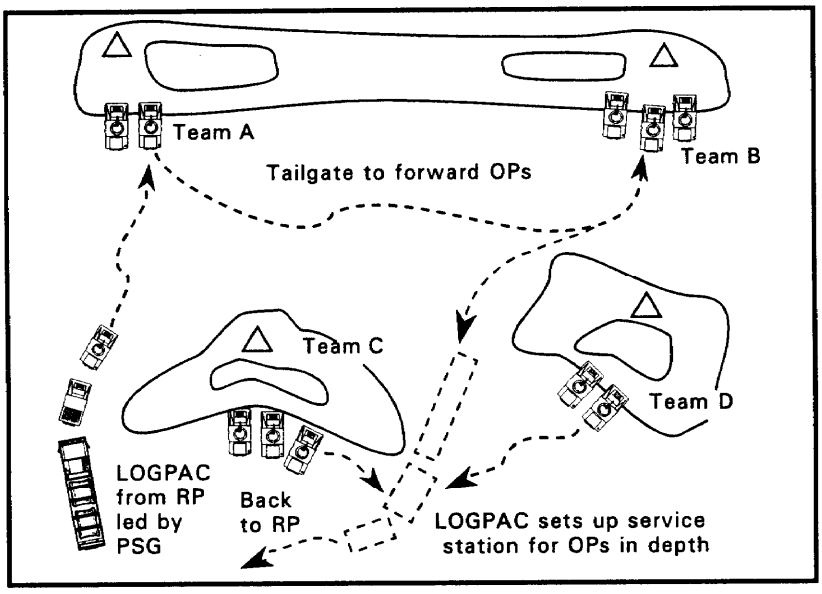


Figure 8-3. Combination of techniques.

Section III. MAINTENANCE OPERATIONS

Proper maintenance keeps equipment and materiel in serviceable condition. It includes PMCS, as well as the functions of inspecting, testing, servicing, repairing, requisitioning, recovering, and evacuating equipment and materiel whenever necessary.

Maintenance tasks are divided into unit (operator and organizational), intermediate (DS and general support), and depot levels. The platoon leader is concerned primarily with unit maintenance and repair of equipment in intermediate (DS) maintenance.

Repair and recovery are accomplished as far forward as possible. When equipment cannot be repaired on the site, it is moved to the rear (but only as far as necessary for repair) to a unit maintenance collection point (UMCP).

LEADER RESPONSIBILITIES

Platoon Leader

The platoon leader has ultimate responsibility for the condition and performance of the platoon's equipment and materiel. In that role, his duties include the following:

- Ensuring that all platoon vehicles, weapon systems, and equipment such as night observation devices (NOD), mine detectors, and communications equipment are combat-ready at all times, within the platoon's maintenance capabilities. The platoon leader also ensures that equipment that cannot be repaired at platoon level is reported to the commander as soon as possible.
- Knowing the present status of equipment, to include document numbers, job order numbers, and the stage of maintenance of his vehicles. The platoon leader keeps his higher commander informed of the current maintenance status.
- Coordinating with the maintenance officer in planning, directing, and supervising unit maintenance for the platoon.
- Developing and supervising an ongoing maintenance training program.
- Ensuring crews have the appropriate technical manuals and are trained and supervised to complete the required level of maintenance properly.
- Ensuring unit-level PMCS are performed on all assigned equipment in accordance with the appropriate operator's manuals.
- Ensuring that drivers and assistant drivers are trained and licensed to operate platoon vehicles and equipment.
- Planning and rehearsing a maintenance evacuation plan for every mission.

Platoon Sergeant

The PSG has primary responsibility for most of the platoon's maintenance activities. His duties include the following:

- Directing and supervising unit maintenance of platoon equipment, vehicles, and weapon systems.
- Helping the platoon leader comply with his responsibilities and assuming these responsibilities in his absence.
- Coordinating with the maintenance representative or motor sergeant to arrange unit repairs or to request intermediate (DS) maintenance.
- Supervising and accounting for platoon personnel during maintenance periods.
- Ensuring repair parts are used or stored in a timely fashion as they are received.
- Collecting and consolidating the platoon's maintenance status in the fuel and sending the appropriate reports to maintenance personnel.
- Ensuring that vehicles are always topped off with fuel in garrison and that they receive fuel in the fuel.
- Keeping the platoon leader informed of the platoon's maintenance and logistics status.

Vehicle Commander

The vehicle commanders are the platoon's fret-line maintenance supervisors. In large part, the platoon's maintenance status, and thus its combat

readiness, depends on their commitment to proper maintenance procedures. The vehicle commander's duties in this area include the following:

- Ensuring that DA Form 2404 (Equipment Inspection and Maintenance Worksheet) and DA Form 2408-14 (Uncorrected Fault Record) are filled out and updated in accordance with DA Pam 738-750.
- Ensuring that the crew is properly trained in PMCS procedures and that PMCS are performed on the vehicle in accordance with the appropriate technical manuals.
- Ensuring that, as a minimum, the assigned vehicle driver or equipment operator is properly trained and licensed. In preparing for continuous operations, the vehicle commander must ensure that all crewmembers are training and licensed as drivers.
- Ordering parts for the vehicle.
- Ensuring repair parts are installed upon receipt or are stored in authorized locations.
- Ensuring that all tools and basic issue items are properly marked, stored, maintained, and accounted for.
- Ensuring that the vehicle is always topped off in garrison and that it receives as much fuel as possible at every opportunity in the field.
- Constantly updating the PSG on the maintenance and logistics status of the vehicle.

UNIT MAINTENANCE (OPERATOR LEVEL)

Operator maintenance includes proper care, use, and maintenance of assigned vehicles and crew equipment such as weapons, NBC equipment, and night-vision devices. The driver and other crewmembers perform daily services on the vehicle and equipment, to include inspecting, servicing, tightening, performing minor lubrication, cleaning, preserving, and adjusting. The driver and gunner are required to record the checks and services, as well as all equipment faults that they cannot immediately correct, on DA Form 2404. The driver's and gunner's reports are the primary means of reporting equipment faults through the vehicle commander to the PSG, platoon leader, and ultimately to organizational maintenance personnel.

Checks and services prescribed for the automotive system, weapon systems, and turret (CFV only) are divided into three groups:

- Before-operation checks.
- During-operation checks.
- After-operation checks.

These services are explained in every operator's manual and should be conducted as stated in the manual. Although operators must learn to operate equipment without referring to the manual, maintenance must be performed using the appropriate technical manual-not from memory!

UNIT MAINTENANCE (ORGANIZATIONAL LEVEL)

Organizational maintenance is the responsibility of the unit assigned the equipment. It is performed by the operators and unit mechanics. Because the CFV's design allows rapid modular replacement of parts, many faults can be corrected, and the vehicle returned to the platoon, rapidly.

When the operator identifies a problem that is beyond his level of maintenance capability, he notifies his chain of command so the problem can be isolated and corrected. The company or troop maintenance team has trained mechanics who are authorized to perform unit maintenance tasks as prescribed in the technical manuals for the vehicle. When company, troop, battalion, or squadron maintenance teams are not authorized to make a particular repair, they will arrange to have it done by DS maintenance assets.

INTERMEDIATE (DIRECT SUPPORT) MAINTENANCE

This level is performed by personnel from the intermediate (DS) maintenance company, which normally supports a brigade or regiment. It consists of repair ardor replacement of parts, assemblies, and components. Maintenance support teams from intermediate (DS) units are usually located forward with the squadron or battalion field trains. These support teams may go forward to fix disabled equipment on site, but they are limited in what they can fix and where they can go.

EVACUATION

Evacuation is necessary when a vehicle is damaged and cannot be repaired on site within two hours or when it is the only means available to prevent capture or destruction by the enemy. With the exception of an entire vehicle, most damaged equipment can be transported by the platoon until it can be picked up by the troop or battalion support elements. It is then evacuated by troop or battalion maintenance personnel or by the DS maintenance unit.

When a vehicle needs to be evacuated, the platoon leader or PSG reports its exact location, the vehicle type, and the extent of damage, if known, on the troop net or battalion A/L net to personnel designated in the unit SOP. Two soldiers should remain with the vehicle to assist in evacuation and repair, provide security, and deliver the repaired vehicle back to the platoon as soon as possible. A recovery vehicle from the troop, company, squadron, or battalion maintenance team will evacuate the damaged vehicle. It is vital that the damaged vehicle be placed in a covered position that allows the recovery vehicle to reach it without exposing the recovery crew to enemy fire.

In the battalion task force, an evacuation vehicle, possibly a five-ton wrecker truck, must be dedicated to support the scouts. This vehicle should be positioned as far forward as possible; in many cases, it can be located with the nearest company team combat trains.

If a recovery vehicle is not available or if time is critical, other platoon vehicles can evacuate the damaged vehicle for short distances. The decision to do this rests with the platoon leader. Procedures for towing are contained in the operator's manual. If the damaged vehicle will be lost for an extended period, the platoon can replace other vehicles' damaged equipment (such as weapons and radios) with properly functioning items from the damaged vehicle. The damaged equipment can then be repaired or replaced while the vehicle is being repaired. Self-evacuation by the platoon is a last resort that should be considered only to avoid losing the damaged vehicle to the enemy.

DESTRUCTION

When evacuation of damaged or inoperable equipment is impossible, it must be destroyed. Platoon leaders must make sure crews are trained to destroy the vehicle rather than allow it to fall into enemy hands. Instructions for destroying each item of equipment are included in the operator's manual.

The platoon leader should get the commander's permission before destroying any equipment. When communications fail, however, the platoon leader must use his judgment to decide whether or not evacuation is possible. Every reasonable effort must be made to evacuate secure equipment, classified materials, and all weapons.

Section IV. PERSONNEL OPERATIONS

SERVICES

Personnel services include clothing exchange and showers, awards and decorations, leaves and passes, command information, mail, religious services, financial services, legal assistance, welfare, rest and relaxation, and any other service designed to maintain the health, welfare, and morale of the soldier. Many of these services are provided automatically by higher-level support elements; nonetheless, the platoon leader is ultimately responsible for arranging for and providing them to his platoon.

MANAGEMENT

Personnel management includes classification, assignment, promotions, and reenlistments. Although the platoon leader requests these actions through the company or troop, they are normally performed by the battalion or squadron staff or by a division-level organization. The platoon leader must submit accurate strength reports to make sure critical personnel shortages, such as vehicle commanders and gunners, are filled with qualified personnel.

Section V. MEDICAL TREATMENT AND EVACUATION

HEALTH AND HYGIENE

Leaders must emphasize high standards of health and hygiene. Soldiers must shave daily so their protective masks will seal; bathing and changing clothes regularly are necessary to prevent disease. Each crewman should carry shaving equipment, soap, a towel, and a change of clothing in a waterproof bag inside his pack.

During cold weather, soldiers must check their hands and feet regularly to prevent frostbite, trench foot, or immersion foot. They must also learn that the effects of windchill on exposed skin are equal to those of temperatures much lower than the thermometer shows. A moving vehicle will cause a windchill effect even if the air is calm.

WOUNDED SOLDIERS

Battlefield positioning and dispersion make the treatment and evacuation of wounded personnel two of the most difficult tasks the scout platoon must execute. This is particularly true for the battalion scout platoon. To ensure successful handling of wounded scouts, task forces must specifically allocate CSS assets to the scout platoon to assist in evacuation. In addition, operational planning or SOPS must cover evacuation procedures in detail.

In both types of scout platoon, it is the vehicle commander's responsibility to make sure that wounded crewmen receive immediate first aid and that the platoon leader or PSG is notified of all casualties. The use of scouts who are trained as combat lifesavers is absolutely critical. As a minimum, one member of each scout squad must be trained as a combat lifesaver. If wounded crewmen require evacuation, the platoon leader or PSG can take one of these steps:

- Coordinate with the closest troop or company team for ground evacuation.
- Request that the battalion task force or troop task organize a dedicated ambulance to the platoon for operations forward of the larger element. In the case of the HMMWV platoon, the ambulance should be a HMMWV variant located, for security, with the nearest company team.
- Conduct self-evacuation with organic platoon assets.
- Coordinate for aerial evacuation through the troop or battalion.

Aerial evacuation, if it is available, is preferred because of its speed. The scouts coordinate with their higher command 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 landing zone (LZ). The location should be given to the aircraft by radio 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.

Regardless of the method of evacuation, all scout leaders must have the necessary CSS graphics available, to include battalion casualty collection points. Evacuation procedures must be part of the platoon plan and should be rehearsed as part of mission preparation.

A wounded crewman's individual weapon becomes the responsibility of the vehicle commander. Personal effects, weapons, and equipment are turned in to the company or troop supply sergeant at the earliest opportunity. The crewman's protective mask stays with him at all times. All sensitive items, such as maps, overlays, and SOPs, should also remain with the vehicle.

SOLDIERS KILLED IN ACTION

The remains of personnel killed in action (KIA) will be placed in a body bag or sleeping bag or rolled in a poncho and evacuated by the PSG or 1SG. The company/troop commander will designate a location for collection of KIA soldiers. If as a last resort the body must be left on the battlefield, the name, exact location, and circumstances are reported through channels with the appropriate SOP report. The lower dog tag is removed for turn-into the PSG or 1SG. The personal effects of a KIA soldier remain with the body. The KIA soldier's weapon, equipment, and issue items become the responsibility of the vehicle commander until they can be turned over to the supply sergeant or 1SG.

As a rule, the bodies of KIA soldiers should not be placed on the same vehicle as wounded soldiers. If evacuation cannot be expedited by the PSG or 1SG, however, dead and wounded personnel maybe carried on board a vehicle to its next stop. In the attack, this maybe the objective. In the defense, it may be the next BP. Crews must be prepared to give first aid and to continue the mission with a limited crew without stopping.

Section VI. PRISONERS

EPWs are excellent sources of combat intelligence information; they must be processed and evacuated to the rear quickly. If enemy soldiers want to surrender, it is the crew's responsibility to take them into custody and control them until they can be evacuated.

The platoon leader directs scouts to take the EPWs to an area designated by the commander. The prisoners are then evacuated to the rear for interrogation.

If an EPW is wounded and cannot be evacuated through medical channels, the **XO** or 1SG is notified. The EPW will be escorted to the company or troop trains, or the 1SG will come forward with guards to evacuate him.

HANDLING PRISONERS OF WAR

The basic principles for handling EPWs are covered by the "five-S" procedures: search, segregate, silence, speed, and safeguard. See Figure 8-4 for an outline.

SEARCH	Remove and tag all weapons and documents. Return to the EPW those personal items of no military value. The EPW keeps his helmet, protective mask, and gear to protect him from immediate dangers of the battle area.
SEGREGATE	Break the chain of command; separate EPWs by rank, sex, and other suitable categories. Keep the staunch fighters away from those who willingly surrender.
SILENCE	Prevent EPWs from giving orders, planning escapes, or developing false "cover stories."
SPEED	Speed EPWs to the rear to remove them from the battle area and to obtain and use their information.
SAFEGUARD	Prevent EPWs from escaping. Protect all EPWs from violence, insults, curiosity, and reprisals of any kind.

Figure 8-4. The "five-S" principles for handling EPWs.

Never approach an enemy soldier. He may have a weapon hidden nearby, or he may be booby-trapped. Gesture for him to come forward until it is clear that he is honestly surrendering and not trying to lure friendly troops into an ambush. Use a thermal sight to locate possible ambushes. When searching the prisoner, always have another friendly soldier cover him with a weapon. Do not get between the enemy and the soldier covering him. Search procedures are covered in detail in Appendix E.

The rights of EPWs have been established by international law, and the United States has agreed to obey these laws. Once an enemy soldier shows he wants to surrender, he must be treated humanely. It is a court-martial offense to physically or mentally harm or mistreat a EPW or needlessly expose him to fire. In addition, mistreated EPWs or those who receive special favors are not good interrogation subjects.

The senior officer or NCO on the scene is legally responsible for the care of EPWs. If the unit cannot evacuate a prisoner within a reasonable time, he must be provided with food, water, and medical treatment.

Before evacuating the EPW, ensure that a tag is attached to him listing all pertinent information and procedures. Tags may be be obtained through supply channels or made from materials available on the battlefield. An example is illustrated in Figures 8-5A and 8-5B, pages 8-19 and 8-20.

CAPTURED ENEMY DOCUMENTS AND EQUIPMENT

Captured enemy documents (such as maps, orders, records, and photographs) and equipment are excellent sources of intelligence information. If captured items are not handled properly, however, the information in them may be lost or delayed until it is useless. These items must be evacuated to the next level of command as rapidly as possible.

The platoon should tag each captured item (see Figure 8-6, page 8-21, for an example). If the item is found in the EPW's possession, include the prisoner's name on the tag and give the item to the guard. The guard delivers the item with the EPW to the next higher headquarters.

CIVILIANS

Civilians who are captured as the result of curfew violations or suspicious actions are treated the same as EPWs. The platoon evacuates them quickly to higher headquarters using the "five-S" principles discussed earlier in this section.

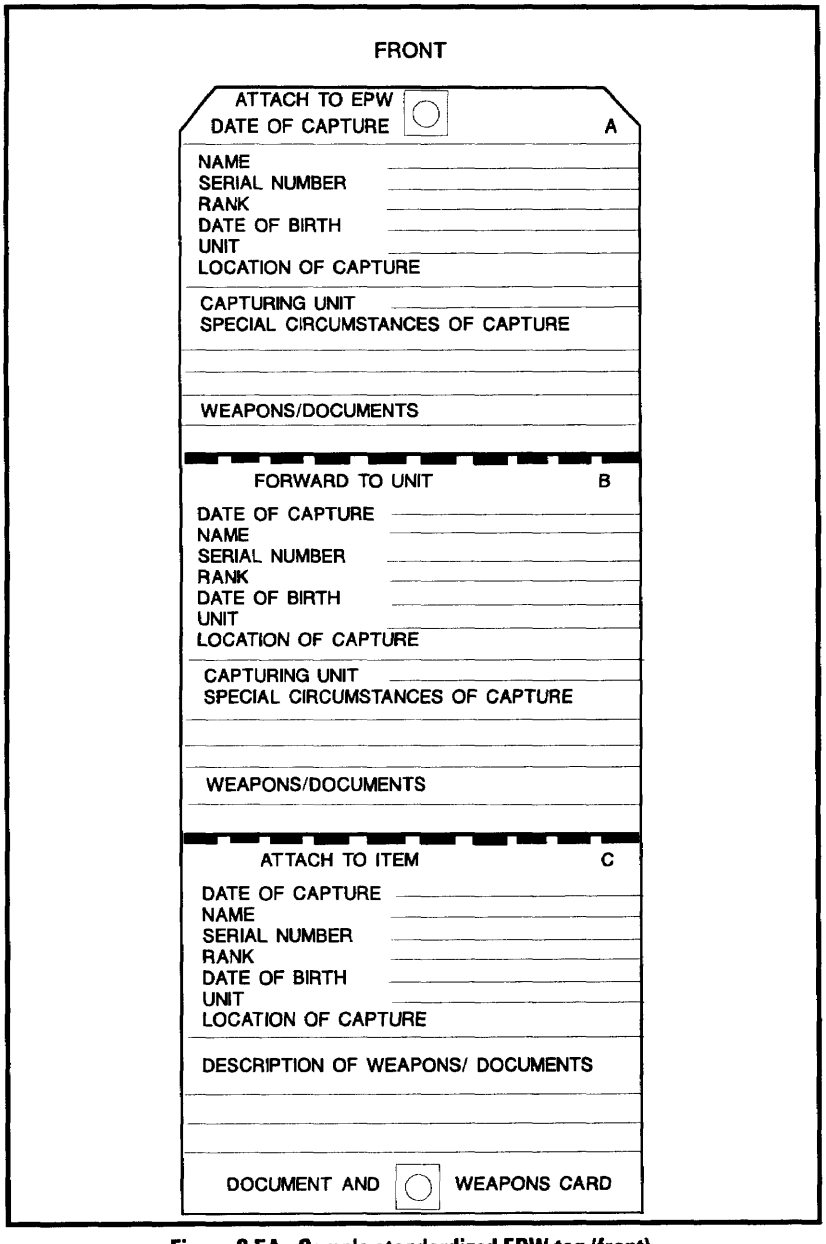


Figure 8-5A. Sample standardized EPW tag (front).

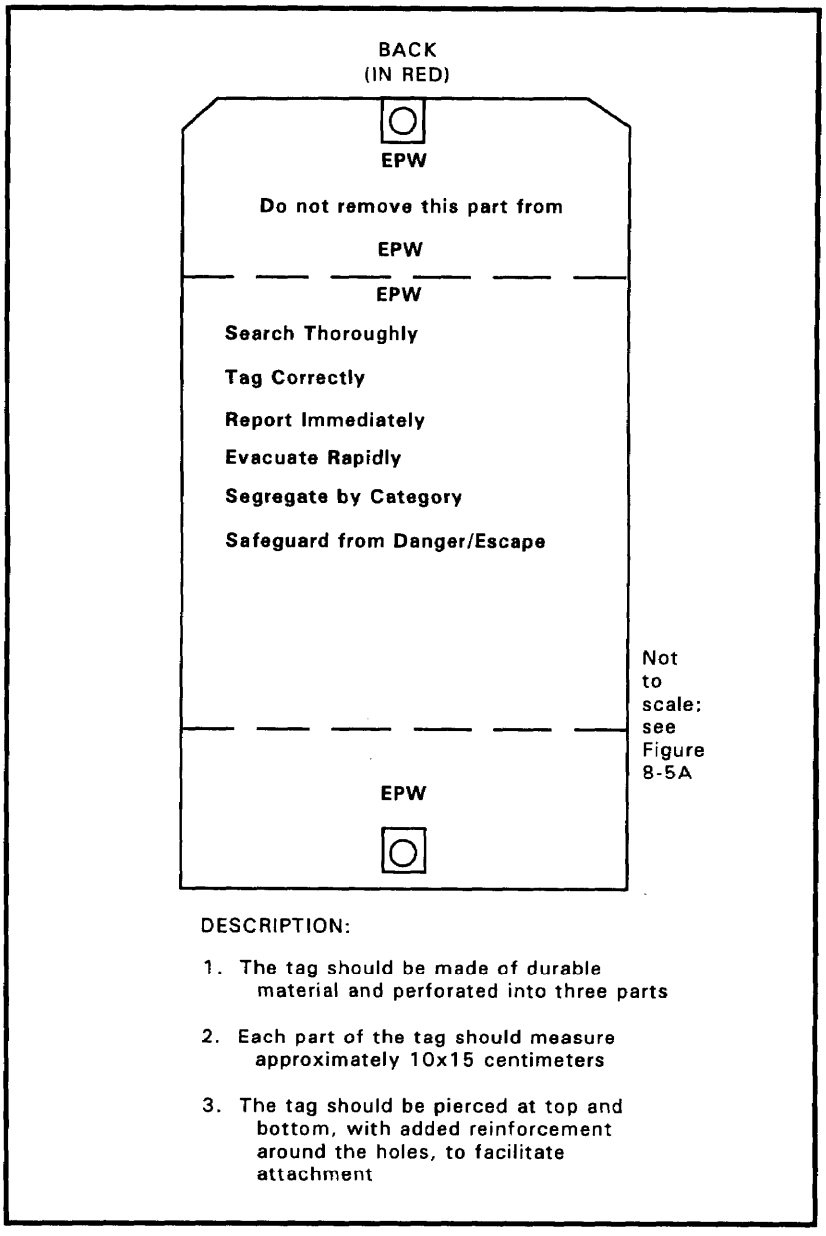


Figure 8-5B. Sample standardized EPW tag (back).

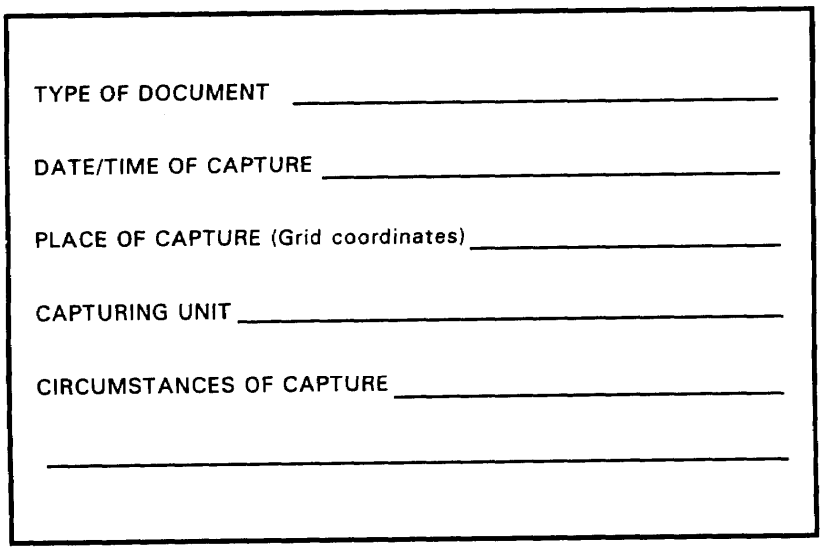


Figure 8-6. Sample tag for captured documents and equipment.

APPENDIX A

NUCLEAR, BIOLOGICAL, AND CHEMICAL OPERATIONS

Because many potential adversaries have the capability to employ chemical and nuclear weapons, scouts must prepare to fight in an NBC environment. Collecting, processing, and disseminating needed NBC hazard information are also vital. To survive and remain effective on the integrated battlefield the scout platoon must be proficient in the three fundamentals of NBC defense: contamination avoidance, protection, and decontamination.

Additional-duty NBC personnel should be designated by the platoon SOP for operations in an NBC environment. The crews of the team leaders' vehicles should be designated and trained as chemical agent detection and radiological survey and monitoring teams. The squad leaders' crews should be designated as decontamination teams and trained to operate all decontamination equipment organic to the battalion or squadron.

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Section I. CONTAMINATION AVOIDANCE

Avoidance is the most important fundamental of NBC defense because the best way to survive is to avoid being the object of a chemical or nuclear attack. Avoiding contaminated areas minimizes the risk of additional casualties and the

degradation of combat power caused by operating in MOPP level 3 or 4 for extended periods of time. In addition, the unit is not required to spend the time and resources needed for decontamination. Contamination avoidance measures include using passive avoidance measures, locating contaminated areas, identifying NBC agents, warning other members of the platoon as well as other units, and reporting NBC threats to higher headquarters.

Passive avoidance measures can decrease the possibility of NBC attack or reduce the effects of an attack already underway. Effective use of concealment, dispersion, prepared positions, OPSEC, and signal security lessen the chances of being acquired as a target. The scout platoon should continually analyze its vulnerability to chemical or nuclear attack and take appropriate protective measures.

Attacks and contamination must be detected quickly and reported to adjacent units and headquarters elements. The scout platoon must have an effective method of quickly passing the alarm in the event of an NBC attack. The alarm could be passed by radio, audible signals, or hand-and-arm signals. The SOP should specify automatic procedures for employing detection teams and submitting the required NBC reports after an NBC attack or when contamination is encountered.

All movement routes and future positions should be reconnoitered for nuclear and chemical contamination whenever possible. Reconnaissance and quartering parties should be prepared to encounter, detect, identify, report, and mark contamination. By finding the location and type of hazard (nuclear radiation or chemical agent), the scout platoon can determine the best plan for bypassing, crossing, or operating in the hazard. The platoon must be prepared to locate and evaluate the hazard based on available information from fallout predictions (simplified and detailed), chemical downwind hazard predictions, monitoring data, and contamination overlays. Based on the situation, the platoon leader and parent unit commander must be able to implement protective measures specified in the SOP to minimize personnel losses and limit the spread of contamination.

DEFENSE BEFORE A NUCLEAR ATTACK

The best defense against a nuclear attack is to dig in. Unit defensive positions, which vary from individual foxholes to improved defensive positions, should be prepared whenever the tactical situation permits.

Scouts should keep their individual weapons, equipment, clothing, and other issue items in their vehicles. Equipment must be secured because the blast

wave will convert unsecured items into lethal missiles. Supplies, explosives, and flammables should be dispersed and protected.

Reverse slopes of hills and mountains give some nuclear protection. The initial radiation and the heat and light from the fireball of a nuclear blast tend to be absorbed by hills and mountains. The use of gullies, ravines, ditches, natural depressions, fallen trees, and caves can reduce nuclear casualties.

Tables A-1 through A-3 outline the protective measures to be taken in each of the three nuclear defense levels (A, B, C).

Table A-1. Nuclear defense level A.

NUCLEAR DEFENSE LEVELS LEVEL A - POSSIBLE	
OFFENSE	**DEFENSE**
PERSONNEL	
Inform personnel and continue with mission.	Inform personnel.
	Increase priority of preparing fighting positions with at least 18 inches of dirt overhead cover.
	Remain near fighting positions or vehicles.
RADIOS	
Turn off all nonessential radios.	Turn off all nonessential radios.
Disconnect antennas and matching unit cables of unused radios.	Disconnect antennas and matching unit cables of unused radios.
	Use wire or messenger whenever possible.
EQUIPMENT	
Secure all loose equipment.	Secure equipment by tying it down or placing it inside the vehicle or fighting position.
Close and latch all hatches not required to be open.	Close and latch all hatches not required to be open.
Turn off all electrical equipment when not in use.	Turn off all electrical equipment when not in use.

Table A-2. Nuclear defense level B.

NUCLEAR DEFENSE LEVELS LEVEL B - LIKELY	
OFFENSE	**DEFENSE**
PERSONNEL	
Inform personnel.	Inform personnel.
Restrict movement away from fighting position or vehicle except for mission-essential tasks.	Complete fighting positions with at least 18 inches of dirt overhead cover.
	Initiate periodic monitoring with radiacmeter.
	Remain near fighting positions or vehicles.
RADIOS	
Use one radio per scout squad; turn off other radios.	Use no more than two radios per platoon.
	Use wire or messenger whenever possible.
Remove unused antennas, disconnect lead-ins, and stow in vehicle.	Remove unused antennas, disconnect lead-ins, and stow in vehicle.
EQUIPMENT	
Secure all loose equipment.	Secure equipment by tying it down or placing it inside vehicle or fighting position.
Move in defilade and avoid forests or urban areas if possible.	Move in defilade.
Close and latch all hatches not required to be open.	Close and latch all hatches not required to be open.

Table A-3. Nuclear defense level C.

NUCLEAR DEFENSE LEVELS LEVEL C - IMMINENT	
OFFENSE	**DEFENSE**
PERSONNEL	
Inform personnel.	Inform personnel.
Prepare to cover face with cloth or handkerchief (do not use protective mask).	Prepare to cover face with cloth or handkerchief (do not use protective mask).
Place all personnel in armored vehicles.	Have all personnel in fighting positions or vehicles.
RADIOS	
Use visual signals to control movement.	Turn off all radios.
Use one vehicle radio per squad.	Use wire communications.
	Remove unused antennas, disconnect lead-ins, and stow in vehicle.
EQUIPMENT	
Secure all loose equipment.	Secure equipment by tying it down or placing it inside vehicle or fighting position.
Move in defilade.	Move to a defilade position, avoiding forests or urban areas if possible.
Close and latch all hatches not required to be open.	Close and latch all hatches.
	Traverse turrets to rear and lock.
Turn off all electrical equipment when not in use.	Turn off all electrical equipment.

BIOLOGICAL DEFENSE

The key protective measure against a biological attack is maintaining a high order of health, personal hygiene, and sanitation discipline. Biological attacks are hard to detect. If an attack occurs, the chances of survival are better if crewmembers are healthy and physically fit and maintain good personal hygiene. Keeping the body clean helps to prevent ingestion of chemical agents. Keep small cuts or scratches covered and germ-free by using soap, water, and first-aid measures. Since insects carry biological agents, prevent insect bites by keeping clothes buttoned and covering the skin.

Do not eat food or drink water that maybe contaminated. After an attack, you must assume that all surfaces have been exposed to germs. Eat or drink only food that has remained sealed; consume it only after you have washed and cleaned the outside of the container. All water must be boiled at least 15 minutes.

DEFENSE BEFORE A CHEMICAL ATTACK

Make sure all personnel have their protective masks available, and make sure each mask fits and functions properly. All personnel should wear the proper protective clothing in accordance with the MOPP level designated by the commander.

Inform everyone to remain alert and constantly aware of the chemical threat. Protect all equipment and supplies from liquid chemical contamination by keeping them organized and covered.

Activate the automatic alarm system. It will be the primary means of detecting an upwind chemical attack. The system provides two essential elements of survival: detection of a toxic agent cloud and early warning to troops in the monitored position.

The platoon leader decides where to place the chemical alarm. In stationary operations, he first determines the wind direction, then places available detector units upwind of the nearest position to be protected. The detector unit should be no more than 400 meters upwind from the alarm unit. The optimum distance is 150 meters. Operation of the alarm can be affected by blowing sand or dust, rain, sleet, snow, temperatures below 40 degrees Fahrenheit (4.5 degrees Celsius), and tropical conditions.

Space the available detector units approximately 300 meters apart, and make sure each detector unit is connected to each alarm unit by telephone cable (WD-1). Position the alarm units near radiotelephone communications; this makes it easy to alert the unit of an attack.

Section II. PROTECTION

If the NBC hazard cannot be avoided, the scout platoon must be prepared to protect personnel and equipment from the effects of exposure. The type and degree of protection required will be based on the unit's mission and the hazard. Note that the line between avoidance and protection is not distinct. Many actions contribute equally to contamination avoidance and protection.

Soldiers on the integrated battlefield will face a combination of nuclear, chemical, and conventional attacks. The key to effective protection in an NBC environment is the scout platoon's proficiency in automatically and correctly implementing an effective NBC defense SOP. Individual and unit protection against chemical attack or contamination hinges on effective use of the MOPP and on individual proficiency in basic NBC skills. The five levels of MOPP, illustrated in Figure A- 1, page A-8, should be listed in the SOP.

DEFENSE DURING A NUCLEAR ATTACK

Dismounted Defensive Actions

Never run for cover! Immediately drop flat on the ground (face down) or to the bottom of a foxhole, facing away from the fireball. Cover exposed skin as much as possible. Close your eyes. Remain down until the blast wave has passed and debris has stopped falling. Stay calm, check for injury, check weapons and equipment for damage, and prepare to continue the mission.

Mounted Defensive Actions

If time permits, take the following actions:

- Position your vehicle behind the best available cover with the front of the vehicle toward the blast.
- Point the gun away from the blast.

- Lock the brakes.
- Secure loose equipment inside the vehicle to prevent injuries and equipment damage.
- Secure all exterior components that could be damaged by the blast (such as water cans, duffel bags, and antennas) inside the vehicle.
- Close and lock all hatches, including ballistic shields.
- Wear your helmet and protect your eyes.

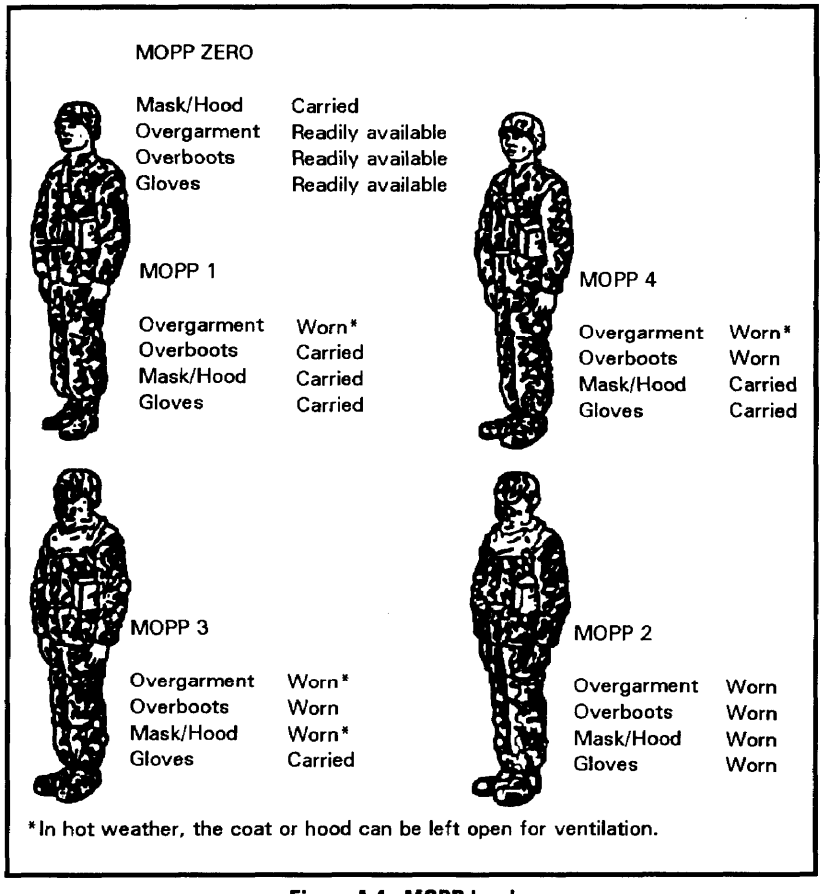


Figure A-1. MOPP levels.

DEFENSE AFTER A NUCLEAR ATTACK

Once the attack has ended, forward an NBC-1 nuclear report, organize the survivors, secure and organize equipment, repair and reinforce the BP, assist casualties, improve protection against possible fallout, and begin continuous monitoring. If the radiation dose rate reaches a hazardous level after fallout is complete, be prepared to move, on order, to a less hazardous area.

Fallout Warning

The first person to detect the arrival of fallout is usually the radiological monitor operating a radiacmeter. As soon as he notes a dose rate of 1 centigray per hour (cGy/hr or rad per hour) or higher, he warns unit personnel. All personnel hearing the warning relay it to others. If the mission allows, soldiers should get in a shelter with overhead cover and stay there until given an "ALL CLEAR' signal or until otherwise directed to move. If the mission does not allow the unit to take cover, decontamination becomes more important and perhaps more difficult.

Supervision of Radiological Monitoring

Designate a point in your area where readings will be taken, and note the grid coordinates of that point. Check the operator to make sure he takes readings at least once each hour from this point, zeroes the radiacmeter before taking each reading, and uses the radiacmeter properly. Make sure the operator immediately reports all readings showing the presence of radiation, as well as the time of these readings. Use this information and the location of the readings to prepare an NBC-4 report. Have the operator monitor continuously if any of the following conditions occur:

- A reading of 1 cGy/hr or more is obtained.
- A fallout warning is received.
- A nuclear burst is seen, heard, or reported.
- An order to monitor is received.
- The unit begins to move.

Continue these operations until directed to stop or less than 1 cGy/hr is detected.

Supervision of Tactical Dosimetry Operations

A scout platoon will normally be issued two dosimeters. Select two soldiers, one from the vehicle of each team leader, to wear them. Check all dosimeters to be used for the operation; any that do not read zero should be turned in for recharging. If a charger is not available, note the original reading. Make sure dosimeter readings are reported accurately. Collect readings at least once daily. Average these readings, round to the nearest 10, and report this average to higher headquarters.

For operating in or crossing radiologically contaminated areas, follow the individual actions for nuclear defense level C (see Table A-3, page A-5). Vehicles should be closed tightly; cargoes should be covered by tarps or tenting. Mission permitting, speed should be kept down to prevent dust, and vehicles should maintain adequate distance to stay out of the dust raised by preceding vehicles. After the unit exits a contaminated area, personnel, equipment, and cargo should be checked for contamination and decontaminated, if necessary. Dose rates should be monitored closely to ensure compliance with operational exposure guidance (OEG). Radiation exposure status should be updated, if appropriate.

DEFENSE DURING A CHEMICAL ATTACK

Give the alarm. Have all unmasked soldiers put on their protective masks and other MOPP gear. Use chemical agent detector kits (M256) to determine the type of agent, and forward an NBC-1 chemical report. Continue the mission.

DEFENSE AFTER A CHEMICAL ATTACK

Forward an NBC-1 chemical report, treat casualties, perform emergency decontamination as required, and mark the contaminated area.

PASSING ALARMS AND SIGNALS

When an NBC attack is recognized, everyone must receive the warning and assume appropriate MOPP level (see Figure A- 1, page A-8). Soldiers in immediate danger need warnings they can see or hear. The alarm or signal must be simple and unmistakable for quick and correct reaction. Units not immediately affected need the information to prepare for the hazard or to change plans. When an NBC hazard has been located, the contaminated area should be marked. The

NBC warning and reporting system (NBCWRS) and contamination markers contribute to orderly warning procedures.

Vocal Alarms

To give a vocal alarm for any chemical or biological hazard or attack, the person detecting the hazard stops breathing, masks, and shouts "GAS!" as loudly as possible. Everyone hearing this alarm must immediately mask, repeat the alarm, and take cover from agent contamination and fragmentation of munitions. It may also be necessary to pass the alarm over the radio or telephone. Visual signals must supplement vocal alarms.

Automatic Alarms

If an M8 automatic chemical agent alarm sounds or flashes, the first person to hear or see it stops breathing, masks, and yells "GAS!" This alarm is relayed throughout the unit by voice, signal, and if required, radio.

Nonvocal Signals

Since one person yelling "GAS!" may not be heard over the sounds of combat, sound signals by means other than voice may be required to warn unit personnel. These signals must produce noise louder than, and not easily confused with, other sounds of combat. The NBC hazard warning alarm will be specified in the unit SOP. Following are some suggestions:

- Rapid and continuous beating together of any two metal objects to produce a loud noise. Sample SOP entry: "The audible warning of a chemical attack is rapid and continuous beating of metal on metal."

- A succession of short blasts on a vehicle horn or other suitable device. Sample SOP entry: "While in convoy, five short blasts on a vehicle horn is the audible signal for a chemical attack."

- An intermittent warbling siren sound. Sample SOP entry: "The audible alarm for impending chemical attack is the sounding of the installation siren as follows: 10 seconds on, 5 seconds off; sequence repeated for 2 minutes."

Visual Signals

Visual signals may replace sound alarms when the sound may be lost amid battlefield noises or when the situation does not permit the use of sound signals. The standard hand-and-arm signal for an NBC hazard is illustrated in Figure A-2. Signaling is done by extending both arms horizontally to the sides with fists closed and facing up, then rapidly moving the fists to the head and back to the horizontal position. This is repeated until other elements react. Colored smoke or flares may also be designated as visual signals for an NBC hazard but must be specified in unit SOPs.

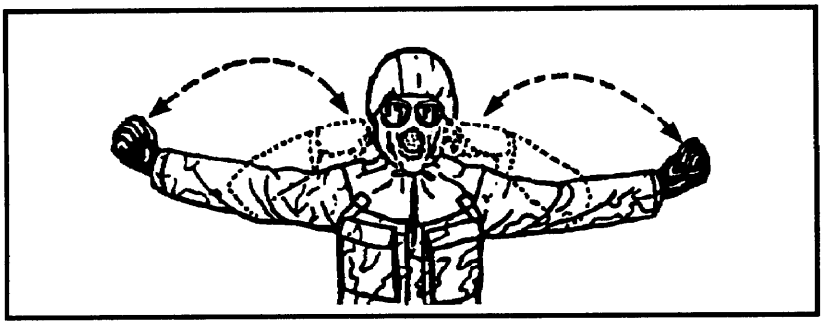


Figure A-2. Hand-and-arm signal for NBC hazard.

SYMPTOMS AND TREATMENT OF NBC CASUALTIES

Soldiers must be able to recognize symptoms and conduct self-aid and buddy-aid. The basic steps in first aid apply in any combat environment.

Nuclear Casualties

Blast injuries. Blast injuries can range from minor cuts and broken bones to severe lacerations and critical damage to vital organs. The first-aid treatment will be the same as that used for conventional combat casualties suffering similar injuries.

Thermal radiation injuries. The intense heat generated by a nuclear detonation can cause burn injuries. First-degree burns should heal without special treatment, and there will be no scar formation. Second-degree burns resemble a severe sunburn with blistering; they should be treated as a burn to prevent infection. In third-degree burns, the full thickness of the skin is destroyed; the victim should be treated as a burn casualty and evacuated.

Biological Casualties

It is necessary to isolate soldiers showing symptoms of disease to prevent spreading infection to others. Casualties resulting from live biological agents or toxins require medical treatment as soon as possible. One indication of a live biological agent attack is large numbers of soldiers developing an unexplained illness over a short period of time. A wide variety of toxins is available to potential adversaries for use on the modem battlefield. These can be dispensed alone or with other carriers or agents. Symptoms associated with some toxins mimic those of other types of illness or chemical casualty symptoms. Toxin symptoms may include any of the following:

- Dizziness, mental confusion, or double or blurred vision.
- Formation of rashes or blisters.
- Coughing.
- Fever, aching muscles, and fatigue.
- Difficulty in swallowing.
- Nausea, vomiting, and/or diarrhea.
- Bleeding from body openings or blood in urine, stool, or sputum (spit).
- Shock.

These symptoms may appear within minutes after the toxin attack, or they may be delayed several hours. Appropriate self-aid and buddy-aid vary, depending on the agent. Soldiers should first mask to prevent inhaling or ingesting agents. Then they should remove agents from exposed skin, either by washing with soap and water or by using the M258A1 kit. Buddy-aid consists of soldiers helping each other clean exposed skin, observing each other for early symptoms of toxic exposure, and requesting medical assistance.

Chemical Agent Casualties

A chemical casualty presents a special situation. The first important step is to recognize symptoms so proper treatment can be administered. Chemical agents can kill or incapacitate. Their primary routes of attack upon the body are

through the respiratory system and the skin. These agents fall into four major categories: nerve, blister, blood, and choking agents.

Nerve agents. Nerve agent poisoning can lead to a quick death; recognizing its symptoms is crucial. Immediate self-aid or buddy-aid is needed if most or all symptoms appear. Early symptoms usually appear in the following progression:

- Runny nose.
- Red, tearing eyes.
- Sudden headache.
- Excessive flow of saliva (drooling).
- Tightness in the chest, leading to breathing difficulty.
- Impaired vision.
- Muscular twitching in the area of exposed or contaminated skin.
- Stomach cramps.
- Nausea.

Severe nerve agent poisoning is likely when any of the early symptoms are accompanied by all or most of the following symptoms:

- Strange or confused behavior.
- Gurgling sounds when breathing.
- Severely pinpointed pupils.
- Loss of bladder and/or bowel control.
- Vomiting.
- Convulsions.
- Absence of breathing.

No effective drug exists to remedy the effects of nerve agents on vision. If soldiers experience any of the other mild symptoms of nerve agent poisoning, they must perform the following self-aid measures:

Step 1. Put on your protective mask.

Step 2. Remove a Mark I nerve agent autoinjector kit (NAAK) from your protective mask carrier (see Figure A-3, page A-16).

Step 3. Inject one thigh with the first injector from your kit (atropine in the small autoinjector). Hold the injector against your thigh for at least 10 seconds. Remove the injector.

Step 4. Immediately inject your thigh with the second injector (pralidoxime chloride in the large injector). Hold the injector against your thigh for at least 10 seconds.

Step 5. Remove the injector and place each injector needle through the jacket pocket flap of your overgarment, bending each needle to form a hook.

Step 6. Massage the injection area, if time permits and your suit is not contaminated.

Step 7. If symptoms persist or recur, wait 10 to 15 minutes and repeat both injections. Repeat again if needed, Allow 10 to 15 minutes between each set of injections. Do not administer more than three NAAK sets. Medical support personnel must authorize the administration of more than three sets.

If a soldier experiences severe symptoms from nerve agent poisoning and is unable to administer self-aid, another soldier must perform the following buddy-aid measures:

Step 1. Mask the casualty.

Step 2. Using the victim's NAAK, administer three sets immediately and in rapid succession in the thigh muscle of either leg. Do not wait between injections.

Step 3. Administer the back-pressure armlift method of artificial respiration if the casualty's breathing is labored or has ceased.

Step 4. Hook the expended autoinjectors to the casualty's overgarment jacket pocket flap.

Step 5. Obtain medical attention for the victim as soon as possible.

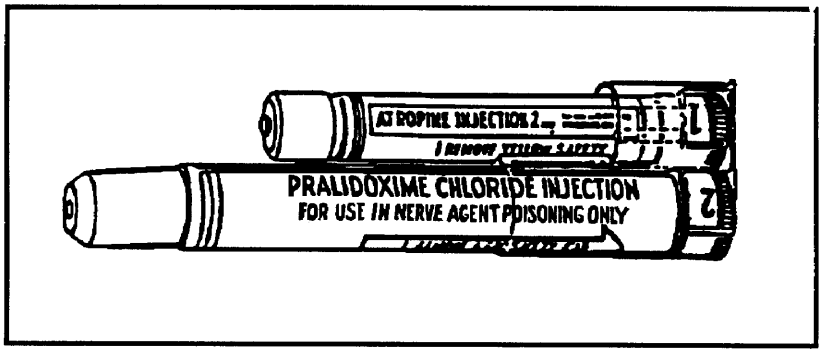


Figure A-3. Mark I nerve agent autoinjector kit.

WARNING:

If your heart beats very rapidly and your mouth becomes very dry within 5 minutes after the administration of the first NAAK, ***do not*** give yourself another set of injections. This may indicate a serious reaction. Seek medical treatment as soon as possible.

Blister agents. Casualties resulting from blister agents may not be noticeable immediately. Symptoms may take several hours or days to appear. They include the following:

- Redness or inflammation of the eyes,
- Temporary blindness or, with severe poisoning, permanent blindness.

- Itching, burning, or reddening of the skin.
- Welts or, in an advanced state, blisters on the skin.
- Hoarseness.
- Coughing.
- Difficult or labored breathing.
- Stomach pain.
- Nausea.
- Vomiting
- Diarrhea.

If blister agents come in contact with skin or eyes, remove the agents immediately. To remove agent from the eyes, flush repeatedly with plain water. Decontaminate the skin using the M258A1 kit. If severe blisters form, seek medical attention as soon as possible.

Blood agents. A seemingly mild case of blood agent poisoning can progress to death within 10 minutes. Symptoms include the following:

- Rapid or shallow respiration (panting).
- Headache.
- Dizziness or giddiness.
- Red or pink color change in light-colored skin.
- Convulsions.
- Coma.

There is no self-aid or buddy-aid treatment for blood agent poisoning. Victims should seek medical attention.

Choking agents. These agents produce casualties through inhaled vapors. They damage blood vessels in the lung walls, causing body fluid to slowly fill

the lung cavity. Ordinary field concentrations do not cause death, but prolonged exposure to high concentrations of the vapor and neglect or delay in masking can be fatal. Maximum damage will occur between 12 and 24 hours after exposure. In most cases, the excess fluid in the lungs will absorb back into the body. Slow recovery will begin approximately 48 hours after exposure.

During and immediately after exposure, symptoms may include the following:

- Coughing.
- Choking.
- Tightness in the chest.
- Nausea.
- Headache.
- Tearing of the eyes.

Following the early symptoms, a symptom-free period of 2 to 24 hours is likely. This period will be followed by signs of fluid collecting in the lungs, including—

- Rapid, shallow breathing.
- Painful coughing.
- Blue lips and fingernails.
- In severe cases, clammy skin and rapid heartbeat.

No self-aid or buddy-aid treatment exists for choking agent symptoms, If only minimum amounts were inhaled, the soldier may continue normal duties. If definite symptoms occur, the soldier should keep warm and seek immediate medical attention and rapid evacuation to an aid station.

MARKING CONTAMINATION

Contamination must be marked so unsuspecting personnel will not be exposed to it. Markers are shown in Figure A-4. When platoon detection,

monitoring, or reconnaissance teams detector suspect NBC hazards, they mark all likely entry points into the area and report the contamination to higher headquarters. The only exception to this policy is if marking the area would help the enemy. If this exception is made by the commander, the hazard must still be reported to protect friendly units.

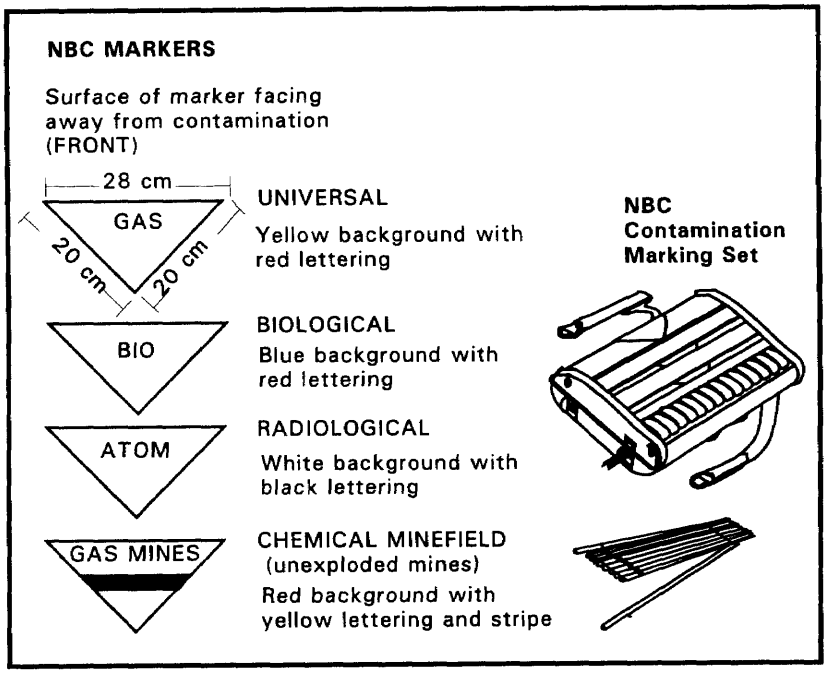


Figure A-4. NBC marking devices.

Marking Procedures

Markers face away from the contamination. For example, if markers are placed on the edge of a contaminated area to mark a radiological hot spot, they face away from the point of the highest contamination reading. Markers are placed at roads, trails, and other likely points of entry. When time and mission permit, additional markers should be emplaced. The distance between signs varies. In open terrain, they can be placed further apart than in hilly or wooded areas. You should be able to stand in front of a marker and see the markers to the left and right of it.

Units discovering a marked contaminated area do not have to conduct elaborate, time-consuming surveys. The new unit checks the extent of contamination and alters its plans, if necessary. If the size of the hazard is reduced, they relocate the signs. If the hazard is gone, they remove the signs. Changes are reported to higher headquarters.

Types of Markers

US forces use NATO standard markers to make it easier for allies to recognize the hazards. These markers are in the standard NBC marking set. The colors and inscriptions on a marker indicate the type of hazard (see Figure A-4, page A-19). Any additional information is written on the front of the sign.

UNMASKING PROCEDURES

Soldiers should unmask as soon as possible except when a live biological or toxin attack is expected. The following procedures determine if unmasking is safe.

With M256/M256A1 Kit

If an M256/M256A1 detector kit is available, use it to supplement the unmasking procedures. The kit does not detect all agents; therefore, proper unmasking procedures must also be used. These procedures take approximately 15 minutes. If all tests with the kit (including a check for liquid contamination) have been performed and the results are negative, the senior person should select 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. The selected soldiers unmask for 5 minutes, reseal, and clear their masks. Observe them for 10 minutes. If no symptoms appear, it is safe to give the all-clear signal and unmask. Continue to watch the soldiers for possible delayed symptoms. Always have first-aid treatment immediately available in case it is needed.

Without M256/M256Al Kit

If an M256/M256A1 kit is not available, the unmasking procedures take approximately 35 minutes. Find a shady area. Use M8 paper to check the area for possible liquid contamination. When a reasonable amount of time has passed after the attack, the senior person should select one or two soldiers. They take a

deep breath and break the mask seals, keeping their eyes wide open, for about 15 seconds. They then clear and reseal their masks. Observe them for 10 minutes. If no symptoms develop, they again break the seals and take two or three breaths; they then clear and reseal their masks. Again observe them for 10 minutes. If no symptoms appear, the selected soldiers unmask for 5 minutes and then remask. If no symptoms appear in 10 minutes after remasking, everyone can unmask. Continue to observe the selected soldiers in case delayed symptoms develop.

ALL-CLEAR SIGNAL

The all-clear signal is given by word of mouth through the chain of command. This signal is given by leaders after testing for contamination proves negative. If required, standard sound signals maybe used, such as a continuous, sustained blast on a siren, vehicle horn, or similar device. When "ALL CLEAR" is announced on the radio, it must be authenticated before compliance. The commander designates the specific all-clear signal and includes it in his SOP.

OPERATING WARNING AND REPORTING SYSTEMS

The NBCWRS is a rapid means of sending reports of an NBC attack. These reports inform other affected units of clean areas and possible contamination. They also report contaminated areas up and down the chain of command and to adjacent units. Each report has a specific purpose and uses standard codes to shorten and simplify the reporting process. The formats and letter codes for the standard NBC reports are found in FKSM 17-98-3.

Section III. DECONTAMINATION

Since continued operation in the presence of nuclear or chemical contamination will cause casualties and severe combat degradation, decontamination is essential. To get the maximum benefit of the time and decontamination resources available, the scout platoon should decontaminate—

- As soon as possible.
- Only to the extent necessary to ensure safety and operational readiness.
- As far forward as possible.
- By priority.

These principles are consistent with doctrine that places the burden of decontamination at battalion or troop level. For this reason, the scout platoon must use all available decontamination assets to their maximum benefit and develop a thorough SOP covering decontamination methods and priorities.

Refer to FM 3-5 for more detailed information on NBC decontamination.

BASIC SOLDIER SKILLS

Skin decontamination is a basic soldier survival skill. Any contact between chemical or toxic agents and bare skin should be treated as an emergency. Some agents can kill if they remain on the skin for longer than a minute. The best technique for removing or neutralizing these agents is to use the M258A1 skin decontamination kit. Leaders must ensure soldiers are trained to execute this technique automatically, without waiting for orders.

Personal wipedown should begin within 15 minutes of contamination. The wipedown removes or neutralizes contamination on the hood, mask, gloves, and personal weapon. For chemical and biological contamination, soldiers use packets from the M280 decontamination kit. For radiological contamination, soldiers wipe the contamination off with a cloth or simply flush or shake it away.

Operator's spraydown should begin immediately after completion of personal wipedown. The spraydown removes or neutralizes contamination on the surfaces operators must frequently touch to do their mission. For chemical and biological contamination, operators use on-board decontamination apparatuses like the M11. For radiological contamination, they brush or scrape the contamination away with whatever is at hand or flush with water and wipe.

HASTY DECONTAMINATION

Hasty decontamination allows a force to continue fighting and sustain its mission after being contaminated. It limits the hazard of transferring contamination by removing most of the gross contamination on equipment and nearly all the contamination on soldiers. This speeds the weathering process and allows clean areas (people, equipment, and terrain) to stay clean. Following hasty decontamination, soldiers who have removed sources of vapor contamination from their clothing and equipment can use hazard-free areas to unmask temporarily to eat, drink, and rest.

Hasty decontamination is accomplished using assets of the parent unit. It makes use of two decontamination techniques: vehicle washdown and MOPP gear exchange. These procedures can be performed separately from each other; both are best performed at squad level. Vehicles and personnel that are not contaminated should not go through either technique.

Vehicle washdown is conducted as far forward as possible and is performed by the battalion decontamination specialist with assistance from the squad decontamination crew. It is most effective if started within 1 hour after contamination. There are two steps in vehicle washdown:

Step 1. Button up the vehicle and secure equipment.

Step 2. Wash down the vehicle and equipment with hot, soapy water for 2 to 3 minutes.

Because speed is important, do not check vehicles for contamination after vehicle washdown. Remove only gross contamination.

MOPP gear exchange is best performed using the buddy system. The company assists the platoon by bringing replacement overgarments and decontaminants to the exchange site. There are eight steps in a MOPP gear exchange:

Step 1. Decontaminate and drop gear.

Step 2. Decontaminate hood and gloves, and roll up hood.

Step 3. Remove overgarment.

Step 4. Remove overboots and gloves.

Step 5. Put on new overgarment.

Step 6. Put on new overboots and gloves.

Step 7. Secure hood.

Step 8. Secure gear.

Step 1 is performed by both soldiers. Steps 2 through 7 are performed first by one soldier, then by the other. Step 8 is performed by both soldiers.

DELIBERATE DECONTAMINATION

Deliberate decontamination operations reduce contamination to negligible risk levels. They restore combat power by removing nearly all contamination from unit and individual equipment. This allows troops to operate equipment safely for extended periods at reduced MOPP levels. A contaminated unit conducts detailed troop decontamination under supervision of the chemical unit. Ordinarily, the chemical unit selects a site, sets it up, and performs the detailed equipment decontamination with assistance from the contaminated unit. A small risk from residual contamination remains, so periodic contamination checks must be made after this operation.

Deliberate decontamination is conducted as part of an extensive reconstitution effort in brigade, division, and corps support areas; support sites at lower levels cannot provide the quantities of decontamination resources (such as water, decontaminants, and time) required for such an extensive process. In some cases, a contaminated unit could conduct a deliberate decontamination operation with organic decontamination assets, but support from a chemical unit is usually required. After deliberate decontamination, the unit moves into an adjacent assembly area for reconstitution. Support elements from the brigade, division, or corps support areas replenish combat stocks, refit equipment, and replace personnel and equipment. The newly reconstituted unit leaves the assembly area fully operational and fit to return to battle.

Deliberate decontamination does the most thorough job of getting rid of contamination and its hazards, but it often is not possible. It requires large quantities of valuable resources that may not be immediately available. The next best solution is to decontaminate only what is necessary to sustain the force and continue to fight.

Section IV. THE NBC RECONNAISSANCE PLATOON

ORGANIZATION

NBC Reconnaissance Vehicles

M93 Fox. The M93 NBC reconnaissance system (NBCRS) is a six-wheeled, light-armored vehicle specifically designed to perform NBC reconnaissance and

operate in a contaminated environment. The vehicle allows crewmembers to conduct soil and air sampling, as well as area marking, without dismounting. Its overpressure air purification system permits the crew to conduct NBC reconnaissance in a contaminated environment while maintaining a degraded MOPP level (see Figure A-5).

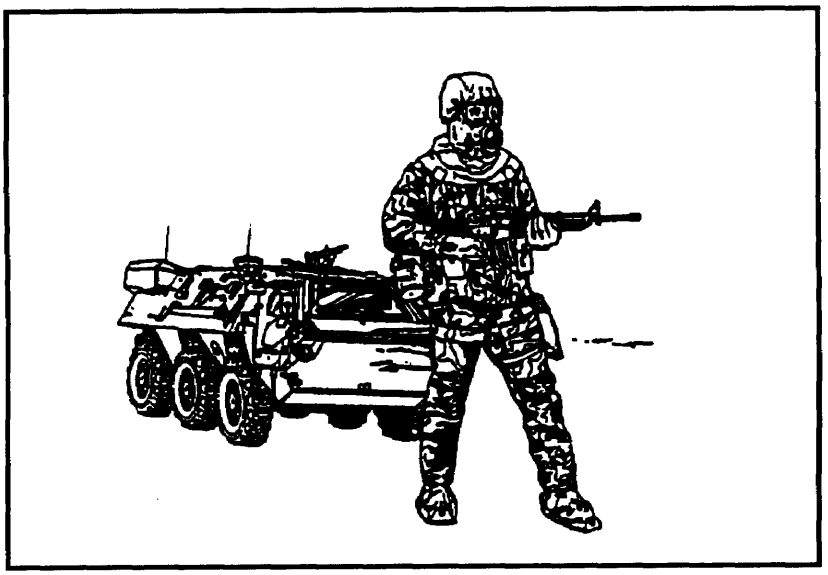


Figure A-5. M93 NBC reconnaissance system.

HMMWV and M113A2. These vehicles are identical to those found in the scout platoon. They are armed with the caliber .50 machine gun.

Heavy Division NBC Reconnaissance Platoon

The heavy division NBC reconnaissance platoon consists of an officer and 19 enlisted soldiers. It is organized with a platoon headquarters and three reconnaissance squads (see Figure A-6, page A-26). The platoon is equipped with six vehicles, either M93 NBCRSs or M113A2 APCs.

The platoon headquarters provides command and control for the platoon. It consists of the platoon leader and the PSG; during operations, they ride in two of the squad vehicles. Each squad is composed of a squad leader, an assistant squad leader, and the crews manning two M93s or M113A2s.

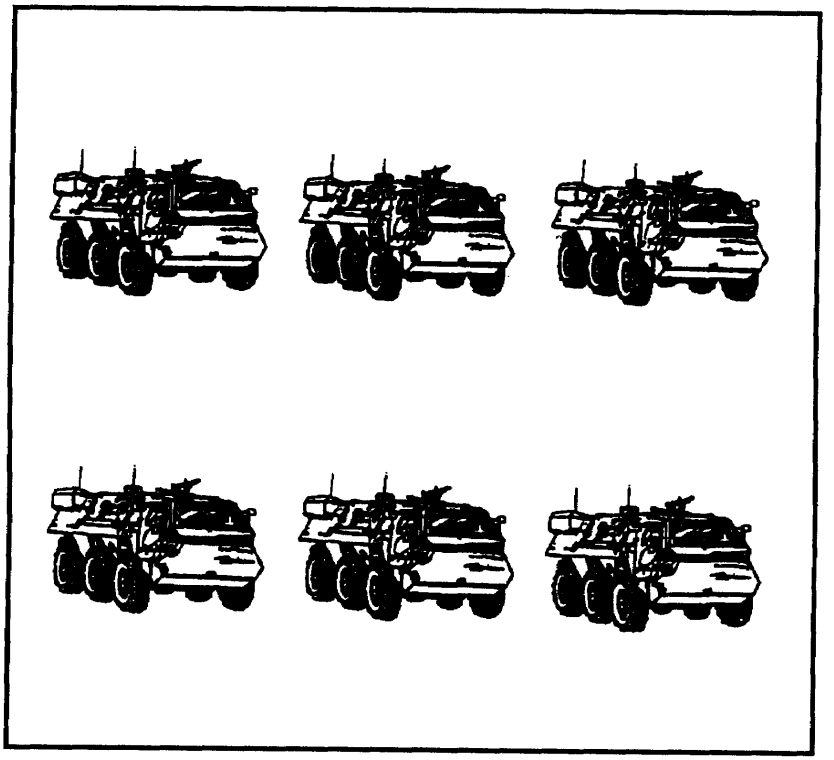


Figure A-6. Heavy division NBC reconnaissance platoon.

Armored Cavalry Regiment NBC Reconnaissance Platoon

Each chemical company assigned to an ACR has an organic NBC reconnaissance platoon. This platoon is equipped with M93s and is organized identically to the heavy division platoon.

Light Cavalry Regiment NBC Reconnaissance Platoon

The light cavalry regiment's chemical company contains two NBC reconnaissance platoons, each consisting of one officer and 13 enlisted men. The platoons are similar in organization to the heavy division and ACR platoon, but with only two squads each (see Figure A-7). They are equipped with four M93s.

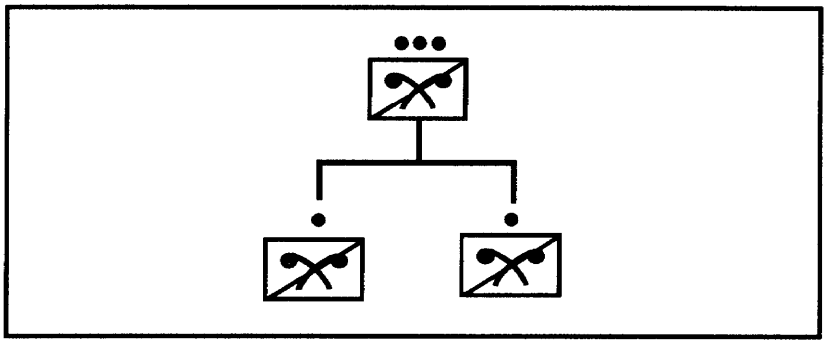


Figure A-7. Light cavalry regiment NBC reconnaissance platoon.

NBC Reconnaissance Company

There are two types of NBC reconnaissance companies. One is equipped with the M93, the other with the HMMWV. The authorized personnel strengths of the two types differ slightly, but both contain 24 dedicated NBC reconnaissance vehicles.

The NBC reconnaissance company operates in the corps or division area to provide reconnaissance support for elements of a corps or theater army. Each corps is allocated one of these companies. Normally, the company is deployed as a separate company in the corps under control of the chemical brigade; however, the company may be attached to a corps chemical battalion.

Each NBC reconnaissance company consists of a headquarters and three platoons (see Figure A-8). Each platoon consists of an officer and 25 enlisted men, organized into four squads of two vehicles each.

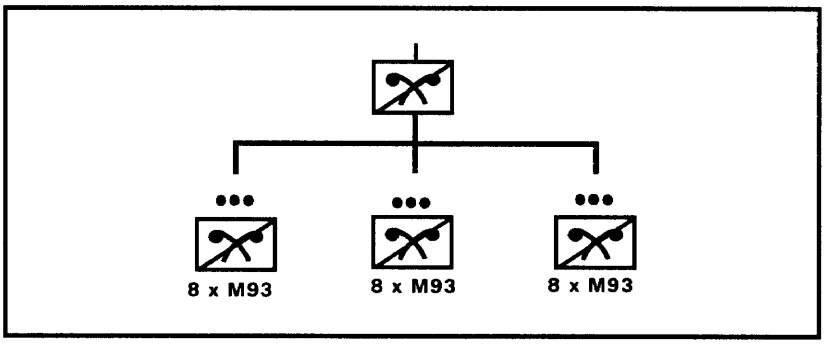


Figure A-8. Chemical company (reconnaissance).

CAPABILITIES

The capabilities of an NBC reconnaissance platoon equipped with HMMWVs or M113A2s are not significantly different from those of the scout platoon. Platoons equipped with the M93, however, have several unique capabilities, including the following:

- They can conduct NBC reconnaissance and survey operations on the move without halting or dismounting to take samples.
- The M93 has a built-in vehicle navigation system.
- M93-equipped platoons can detect and identify all known chemical agents.
- The vehicle's overpressure system allows the crew to operate in degraded MOPP.
- The M93 swims easily with little preparation.
- The M93's air conditioner allows operation of detection equipment in extreme conditions.
- Contaminated areas can be marked without dismounting.
- Unknown contamination agent data can be stored for future analysis.

LIMITATIONS

The M93 NBCRS is a very capable vehicle, but the following limitations must be considered in its employment:

- The M93 can easily be mistaken for an enemy vehicle.
- It requires specialized maintenance support.
- It is lightly armed and armored.
- The crew must spend 15 to 20 minutes to initially prepare on-board chemical detection equipment for operation.
- Because it is not tracked, the vehicle is restricted in some terrain.

RELATIONSHIP WITH THE SCOUT PLATOON

The NBC reconnaissance platoon, particularly in the division and cavalry regiment, often works closely with either battalion or cavalry scout platoons. When the two organizations are working together, their capabilities should be used to complement each other. The command relationship between the platoons should be based on METT-T factors, but it can be one of the following:

- The scout platoon OPCON to the NBC reconnaissance platoon.
- The NBC reconnaissance platoon OPCON to the scout platoon.
- The two platoons working together under the control of a common commander.

As an example, if the primary focus of the platoons' reconnaissance mission is to locate contaminated areas, the NBC reconnaissance platoon leader maybe selected to lead the operation. On the other hand, the scout platoon leader may be selected to lead and coordinate the mission if enemy presence is significant, if extensive dismounted operations are anticipated, or if the mission is enemy force-oriented.

In all cases when the two types of platoons are operating together, the NBC platoon's primary task should be NBC reconnaissance. The scout platoon has capabilities for which it is better equipped or organized; it should perform tasks related to those capabilities, such as the following:

- Overwatch and security for NBC reconnaissance elements.
- Dismounted operations in conjunction with NBC reconnaissance.
- Reconnaissance of bypasses once a contaminated area is identified.
- Initial location of contaminated areas, followed by handoff to the NBC reconnaissance platoon for detailed reconnaissance and marking.
- Liaison or command and control linkup between the NBC reconnaissance platoon and the commander of the scouts.

Section V. RECONNAISSANCE AND SECURITY IN AN NBC ENVIRONMENT

In an ideal situation, all NBC reconnaissance will be performed by an NBC reconnaissance platoon. Given the very limited number of these platoons available and the likelihood of chemicals being used on the battlefield, the scout platoon not only must be able to perform its own missions in a contaminated environment, but also must have the capability of conducting NBC reconnaissance.

RECONNAISSANCE

Crossing a Contaminated Area

As with other combat elements, one of the basic requirements for the scout platoon is to be able to move tactically across a contaminated area. Upon identifying a contaminated area, each scout team makes preparations to cross. While one vehicle provides security, the other vehicle, positioned in a covered and concealed location, removes all externally stowed equipment. The crew mounts and tests M8A1 alarms and M9 paper, The crew adopts MOPP level 4. Once preparations are complete, the vehicle moves into an overwatch position; the other vehicle moves to a covered and concealed position and follows the same procedures.

When both vehicles have been prepared, they use standard tactical movement techniques (such as bounding overwatch) to cross the contaminated area. During this movement, the driver's and gunner's hatches remain closed, and the crew continuously monitors the M8A1 and the M9 paper. Drivers and vehicle commanders attempt to avoid low ground, overhanging branches, and brushy areas as must as possible. Dismounted operations are still conducted, but they are kept to the absolute minimum necessary to perform the mission while maintaining security. While the team is in the contaminated area, all personnel observe each other for signs of chemical poisoning.

Once the team has successfully crossed the contaminated area, it temporarily halts. During this halt, each squad in turn executes hasty decontamination of its vehicle and, with higher headquarters' approval, unmasking procedures. Once this is complete, the team continues its mission.

Detecting and Marking a Contaminated Area

US doctrine requires that combat missions be accomplished quickly and effectively, under all conditions and at any time. One of the reasons an enemy would use persistent and nonpersistent chemicals is to cause confusion and thus slow down the tempo of friendly operations. The effectiveness of these agents can be reduced if the friendly commander knows the exact location of contaminated areas. Within a division or regiment, specialized NBC reconnaissance platoons can accomplish this; however, as noted, very few of these platoons exist. All scout platoons must therefore understand how to systematically locate and designate suspected contaminated areas.

When assigned a mission or task to locate and mark a suspected contaminated area, the scout platoon must ensure that it prepares properly for the mission. Preparation for an NBC reconnaissance mission begins with inspection of personnel and team equipment. As a minimum, each squad must have on hand the equipment listed in Figure A-9.

EQUIPMENT	INDIVIDUAL	VEHICLE
M8 paper	X	
M9 paper	X	
M256 kit		X
M8A1 alarm		X
CAM		X
Marking kit		X
M13 DAP		X
M258A1	X	
MOPP	X	
Mark I NAAK	X (3)	
VS 17 panel		X

Figure A-9. NBC reconnaissance equipment list.

In addition to ensuring that the proper equipment is on hand, leaders must ensure that alarms and paper are properly mounted and functioning and that all external equipment is stowed. The platoon leader includes a rehearsal of NBC reconnaissance techniques in his mission preparation. The platoon leader will also coordinate with the unit chemical officer for any special instructions,

ensuring that deliberate decontamination support is available at the conclusion of the mission.

Once mission preparation is complete, the platoon moves to the suspected contaminated area (designated as a reconnaissance objective) using movement techniques and organization appropriate to the tactical situation. As the platoon approaches the suspected objective area, it stops short and reorganizes, assuming a three-team organization in the cavalry scout platoon and a four-team organization in the battalion scout platoon. The teams are deployed on line, with no more than 400 meters between vehicles and no more than 400 meters between teams. All elements go to MOPP 4. The platoon leader directs the platoon to close hatches and begin movement in the direction of the contaminated area.

The platoon moves by bounding overwatch within teams. Lead vehicles bound no more than 200 meters. As they move forward, they move slowly to avoid stirring up dust and running over or under foliage. The lead elements move to the limit of their bound, halt, and sample the soil and air for contamination. Air sampling is conducted automatically by the functioning M8A1 alarm. Ground sampling is done without dismounting, using M8 paper mounted on a stick or using the chemical agent monitor (CAM). The team leaders report their results to the platoon leader; they do not proceed further without permission. The platoon leader strictly controls the movement of the teams. If all teams report negative samples, the platoon leader gives permission for the overwatch vehicles to move up. As long as the results remain negative, the platoon continues to move in this manner through the suspected contaminated area and up to 3 kilometers beyond it. The platoon leader reports the negative results of the reconnaissance to his higher headquarters (see Figure A- 10).

If a squad makes positive contact with contamination, it immediately reports to the platoon leader. As the platoon leader sends his initial report to higher headquarters, the squad leader rechecks to confirm the positive sampling and determine the type of contamination; he sends an updated report. Upon confirmation of the sample, the squad with the positive sample is designated by the platoon leader as the base vehicle; its direction of movement becomes the reconnaissance direction of travel. The platoon leader also designates the initial near side line from the base vehicle's last negative sample location. The platoon leader then sends an NBC-4 report to his commander. This report includes type of agent, location, and time.

Upon report of a positive sample, all elements of the platoon halt in place and await confirmation of the sample. Once this is completed, the platoon leader reorganizes the platoon to conduct reconnaissance to define the boundaries of the contaminated area. This operation requires a single three-vehicle team (organized around the base vehicle's team) that includes either the platoon

leader or PSG. Other elements of the platoon will not participate in this task; they can be used to reconnoiter a bypass, provide security, or execute other tactical missions under the control of the platoon leader or PSG. Once the platoon leader has issued a FRAGO that reorganizes the platoon, the vehicles that are no longer needed in the NBC reconnaissance make a 180-degree turn, move to a secure rally point, and reorganize for their next task (see Figure A-11, page A-34).

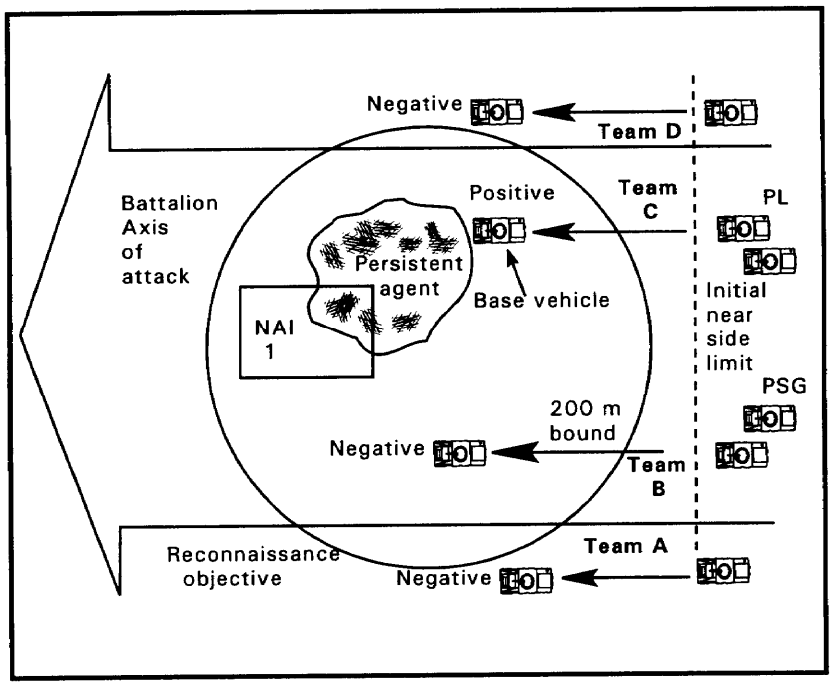


Figure A-10. Platoon moves to locate a contaminated area.

The three-vehicle team charged with reconnoitering the contaminated area uses a line formation, with a 400-meter lateral distance between vehicles. The team, supervised by either the platoon leader or PSG, then begins a systematic reconnaissance to locate the limits of the contaminated area. The goal of the reconnaissance is to define the contaminated area only to the degree necessary to provide the scouts' commander with the information he needs to maneuver the main body. The minimum information the commander needs is a four-sided box enclosing the contaminated area.

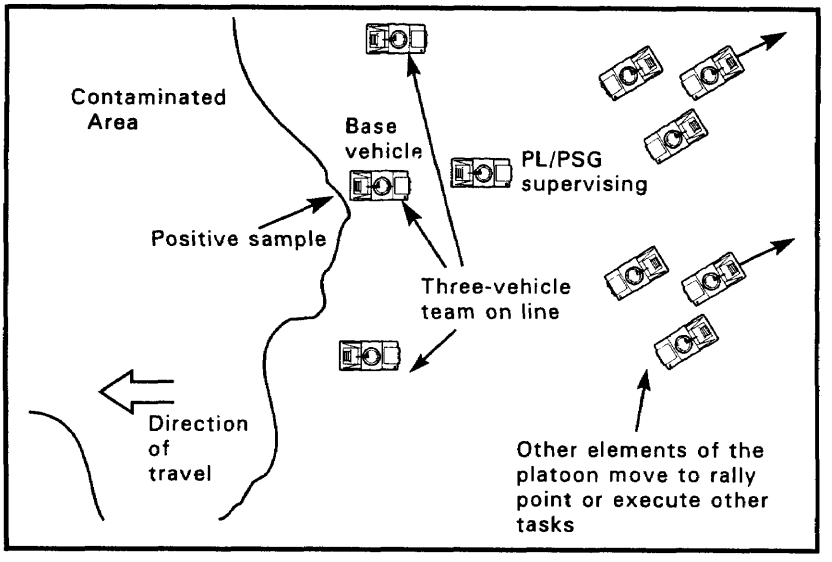


Figure A-11. Platoon conducts reconnaissance of a contaminated area.

The process used to ensure that the contaminated area is completely reconnoitered is fairly complicated and requires flawless execution. Therefore, detailed rehearsals are absolutely essential. The process includes these steps:

- The reconnaissance team assumes a team line formation with the base vehicle in the center.
- The base vehicle moves in bounds and takes a sample every 200 meters. The vehicle commander resets the M8A1 after every bound, if applicable. The vehicle moves across the contaminated area in the direction of travel until taking a negative sample (this establishes the baseline). When a negative is reported, the following actions take place:
  - The vehicle commander rechecks to verify the negative sample.
  - The base vehicle bounds 200 additional meters and takes another sample.
  - If the new sample is negative, the base vehicle halts and reports to the platoon leader or PSG.

- If the sample is positive, the base vehicle continues until receiving two consecutive negative samples.

- The platoon leader or PSG designates the initial far side limit at the second consecutive negative sample (see Figure A-12, page A-36).

- Left and right wing vehicles bound and sample every 200 meters in the direction of travel until they take a positive sample or reach the initial far side limit.

- If a wing vehicle takes a positive sample, the vehicle commander rechecks it and reports to the platoon leader/PSG. The following actions take place, as directed by the vehicle commander:

  - Step A. The driver turns 90 degrees away from the baseline, moves 200 meters, and takes a sample.

  - Step B. If the new sample is negative, the driver turns 90 degrees back to the direction of travel and continues to bound and sample every 200 meters until again receiving a positive sample or reaching the initial far side limit. If the vehicle receives another positive sample, the vehicle commander repeats Step A.

  - Step C. If the new sample is positive, the driver turns 90 degrees again, now opposite the direction of travel, and then continues to bound and sample every 200 meters until receiving a negative sample. If this movement takes the vehicle past the initial far side limit, the platoon leader or PSG adjusts the near-side limit back through the new negative sample location. The vehicle then repeats Step A.

- Once the wing vehicles reach the far side limit, they report to the platoon leader or PSG. The following actions take place:

  - Step A. The platoon leader or PSG projects a line from each wing vehicle location back to the near side line and designates these as the initial left and right limits.

  - Step B. The platoon leader or PSG directs wing vehicles to turn 90 degrees back toward the baseline and sample every 200 meters along the initial far side limit until reaching the base vehicle.

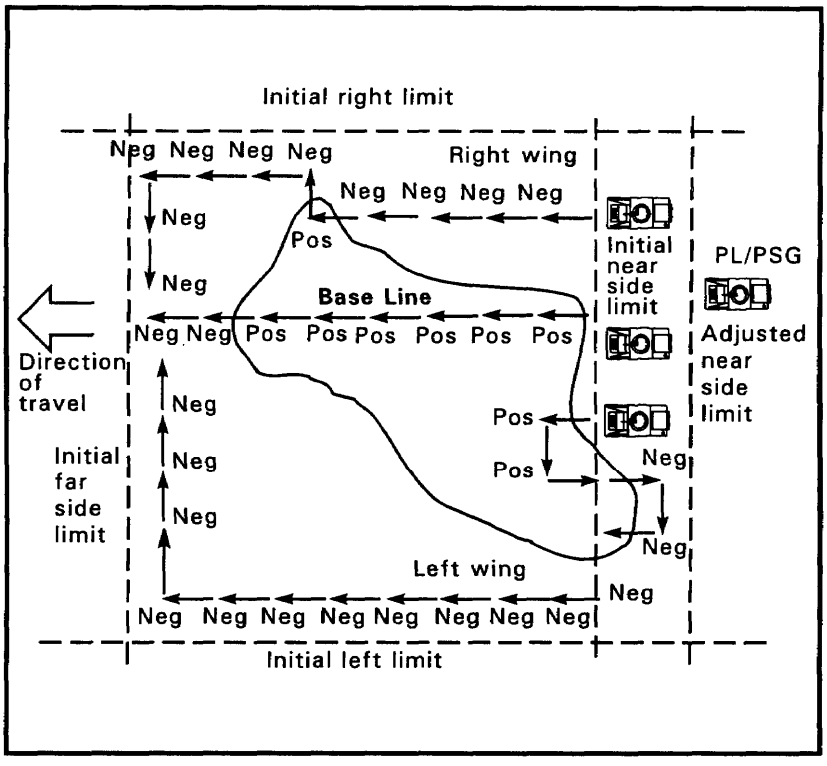


Figure A-12. Platoon designates far side limit and adjusts near side limit.

Step C. If all samples are negative, the team has boxed in the contaminated area and the reconnaissance is complete. It skips steps D through J and begins the concluding process.

Step D. If a wing vehicle receives a positive sample, the commander backs up to his last negative sample location, turns 90 degrees back in the direction of travel, moves 200 meters, and samples.

Step E. If the sample is negative, the vehicle commander repeats steps B, C, and D until reaching the base vehicle. In this case, the base vehicle must also bound and sample in the direction of travel for each bound of the wing vehicles (see Figure A-13). The platoon then skips step F through J and begins the concluding process.

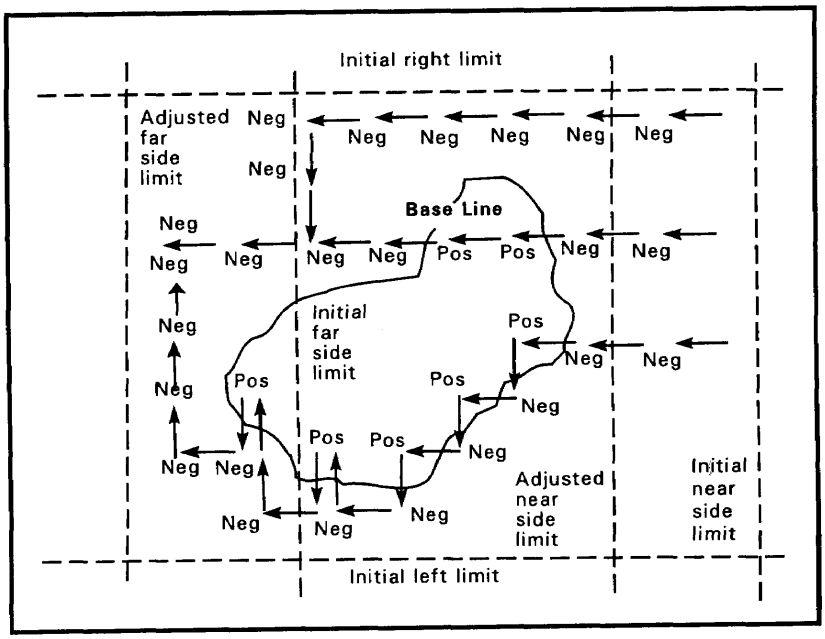


Figure A-13. Adjusting the far side limit.

- Step F. If the sample is positive, the vehicle commmder directs his driver to turn 90 degrees away from the baseline, bounds, and samples every 200 meters until receiving a negative sample.

- Step G. The vehicle commander then directs the driver to turn 90 degrees back in the direction of travel, bounds 200 meters, and samples (see Figure A-14, page A-38).

- Step H. If the new sample is negative, the vehicle commader repeats the process starting with Step B.

- Step I. If the sample is positive, the vehicle commander repeats the process starting with step F.

- Step J. The platoon leader or PSG adjusts the initial far side limit and the respective initial right or left limit farther out (not in) for every bound of the wing vehicles. The team has now boxed in the contaminated area.

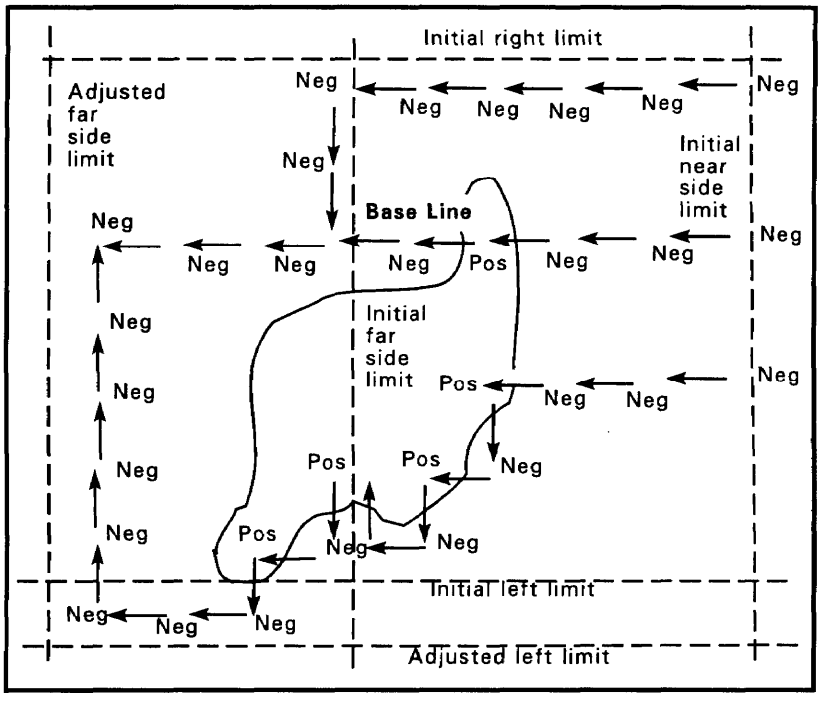


Figure A-14. Adjusting the initial wing lines.

- Concluding process. Once the contaminated area is located and its limits determined, the reconnaissance team takes the following actions:

  - The platoon leader or PSG sends a follow-up NBC 4 report, including type of agent, locations of the four box corners, and time.

  - The platoon leader or PSG recommends a suitable bypass to the commander.

  - The team marks the area and bypass with appropriate tactical markings or VS-17 panels. Chem lights can be used to mark the area during periods of limited visibility.

  - The team conducts hasty decontamination, if required.

- The team may be directed to conduct a screen mission for security or to provide guides to assist in the bypass of the contaminated area.

- If no further tasks are required of the team, it can move to a deliberate decontamination site, if required.

SECURITY

Screen missions are not usually conducted in known contaminated areas. However, an area may become contaminated after the platoon has already occupied it. The enemy may contaminate an area with two general categories of chemicals: persistent or nonpersistent.

The use of persistent chemicals may indicate that the enemy force does not plan to move through that area; this should prompt the platoon to reposition out of the contaminated area and to begin decontamination.

The use of nonpersistent chemicals should trigger maximum alertness on the part of the scout platoon. Nonpersistent chemicals may signal that the enemy is attempting to degrade friendly combat capability prior executing an offensive action. In addition, the enemy may use nonpersistent chemicals to degrade the scouts' performance during a screen mission.

To ensure maximum readiness, OPs must be positioned and occupied in such away that they can react quickly to a chemical attack. These preparations include the following:

- Position M8A1 alarms to cover both the OP site and the hide position (see Figure A-15, page A-40).

- Ensure soldiers at the OP have complete MOPP equipment regardless of MOPP status.

- Ensure that both the OP and vehicle teams have a complete set of NBC equipment, to include M8 paper, M9 paper, M256 chemical agent detector kits, M8A1 alarms, M13 decontamination apparatus, M258A1 personal decontamination kit, and Mark I NAAKs.

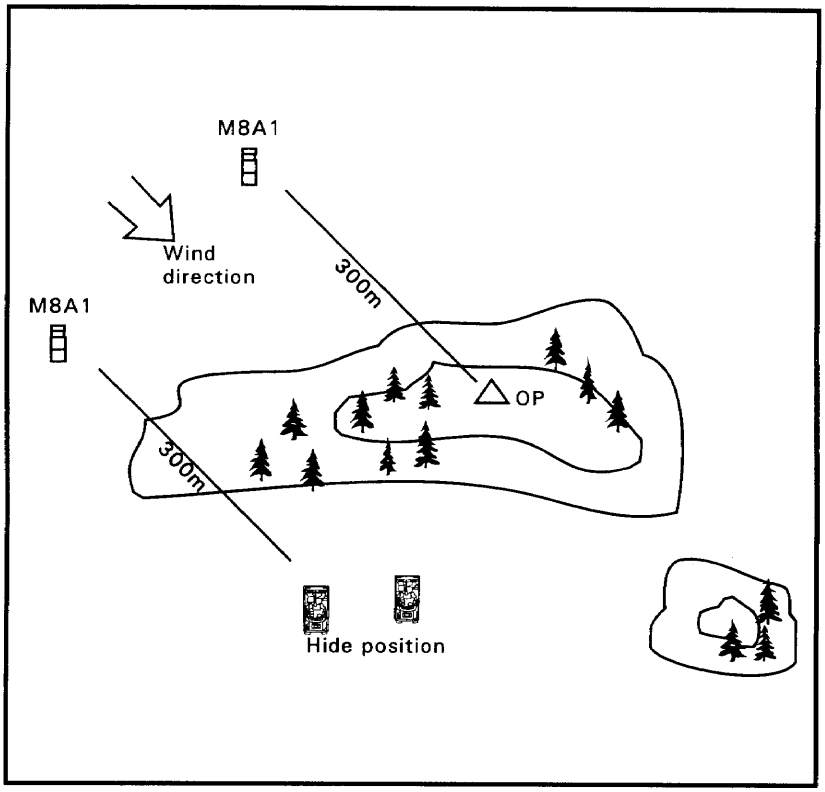


Figure A-15. Positioning M8A1 alarms to support an observation post.

These precautions are necessary for several reasons: the OP may be the first element to experience and react to a chemical attack; there may not be time to obtain needed equipment from the vehicles; and the tactical situation could cause the OP and vehicle teams to become separated. In the event of a chemical attack, the following actions must occur at the OP (see Figure A- 16):

- All personnel go to MOPP 4.
- All dismounted personnel, except OP teams, mount.
- Vehicles button up and start.
- Appropriate reports are sent to higher headquarters as quickly as possible.

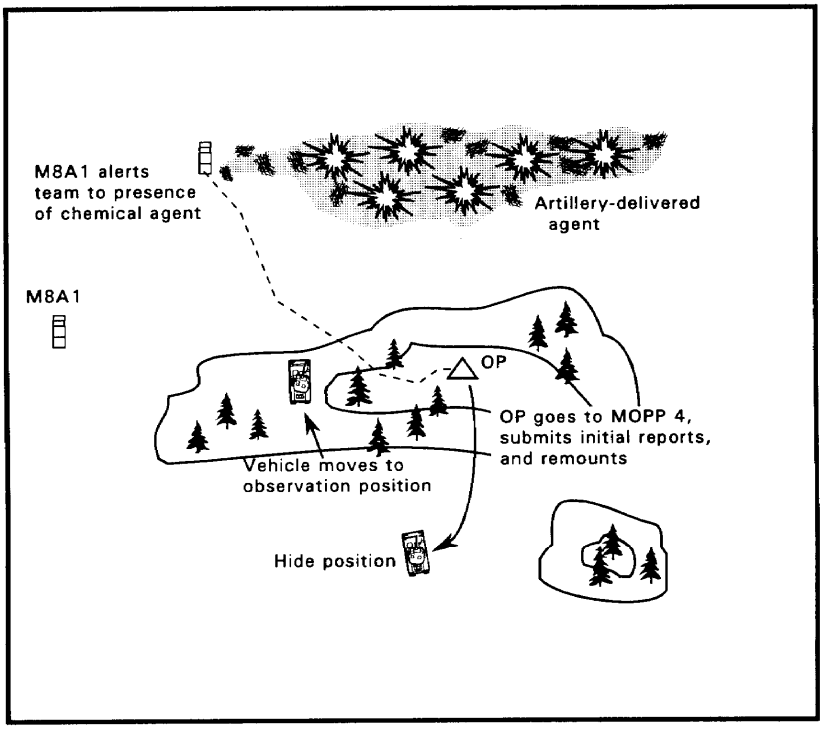


Figure A-16. Observation post reacts to chemical attack.

The team leader must evaluate the situation and decide if it is appropriate to mount the OP team and move vehicles into observation positions as mounted OPs. He bases this decision on a number of factors. As a minimum, he must consider and evaluate the following:

- What is the enemy situation? Is the OP currently in contact? Is it receiving indirect fire?
- Is there effective cover and concealment for the vehicles?
- What are the visibility conditions?

Once the team leader makes his decision, he reports his recommended course of action to the platoon leader and continues to execute the screen mission in accordance with the platoon plan.

APPENDIX B

DISMOUNTED OPERATIONS

Dismounted operations are the key to successful scout missions. The best scouting is done dismounted. It is essential that all scout leaders understand when and how to employ dismounted scouts to enhance their element's ability to conduct reconnaissance and security tasks. Dismounted operations are appropriate, in some form, to virtually all scout missions. There are three major types: local security tasks, OPs, and patrols.

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Section I. HASTY DISMOUNTING

The first step in many dismounted operations is exiting the vehicle. Fast and efficient dismounting is critical to effective tactical movement. A dismount drill allows quick, effective dismounting to establish local security, set an OP, or conduct reconnaissance. As a minimum, standard dismount procedures will indicate what the mission is, who dismounts, equipment to be dismounted based on the situation, and individual crew actions.

Although dismounting may occur in an almost unlimited number of unique situations, drills can be developed for situations that the platoon expects will be most common. These should include dismounting to establish local security, to establish a hasty OP, to conduct a hasty reconnaissance patrol, and to

reconnoiter a danger area. Once the platoon has determined what its high-frequency hasty dismount tasks are, it can develop a chart, similar to the one in Figure B-1, that specifically allocates individual tasks and equipment.

DISMOUNTING FOR HASTY RECONNAISSANCE		
CREW POSITION	EQUIPMENT	ACTIONS
Team leader	Standard, map, and SOI	Orders hasty dismount. Dismounts with equipment. Briefs gunner/squad leader. Moves forward and does reconnaissance.
Gunner 1	Standard	Moves to commander's position. Assumes command of vehicle. Overwatches dismount element.
Driver 1	Standard	Maintains appropriate level of vehicle readiness (idle or engine off). Observes his assigned sector.
Dismount 1A	Standard and radio	Dismounts vehicle. Performs patrol duties.
Dismount 1B	Standard	Dismounts vehicle. Performs patrol duties.
Squad leader	Standard	Receives briefing from team leader. Assumes duties as mounted team leader. Overwatches dismount element as appropriate.
Gunner 2	Standard	Dismounts vehicle. Assumes duties as assistant dismount team leader.
Driver 2	Standard	Maintains appropriate level of vehicle readiness (idle or engine off). Observes his assigned sector.
Dismount 2A	Standard and radio	Dismounts vehicle. Performs patrol duties.
Dismount 2B	Standard	Dismounts vehicle. Performs patrol duties.

Figure B-1. Sample drill chart for hasty dismount.

An example of the execution of a standardized dismount format is illustrated in Figure B-2. In this example, a CFV scout team approaches the edge of a wooded area. Using a dismount drill, the team dismounts elements to assist in clearing the danger area and to provide local security for the vehicles while they execute a short halt. The team leader issues a hand-and-arm signal to his wingman indicating his intention to clear the danger area. Both vehicle commanders then issue brief instructions to their crews via the vehicle intercom system.

The members of the team, without further instructions, now execute a standardized drill (see Figure B-2A). The drivers occupy the best covered and concealed positions possible and lower their ramps; dismounted scouts on the team leader's vehicle take a standard hasty dismount load (personal equipment, weapons, and dismounted radio) and dismount to move to the front of the vehicle. The team leader dismounts with map and SOI and moves to the front of the vehicle; the team leader's gunner moves to the commander's position. Dismounts from the squad leader's vehicle move to assume local security on the dismounted avenues of approach (flank or rear depending on the situation); the squad leader takes charge of the mounted element and focuses on overmatching the dismounted element as it moves forward (see Figure B-2B, page B-4).

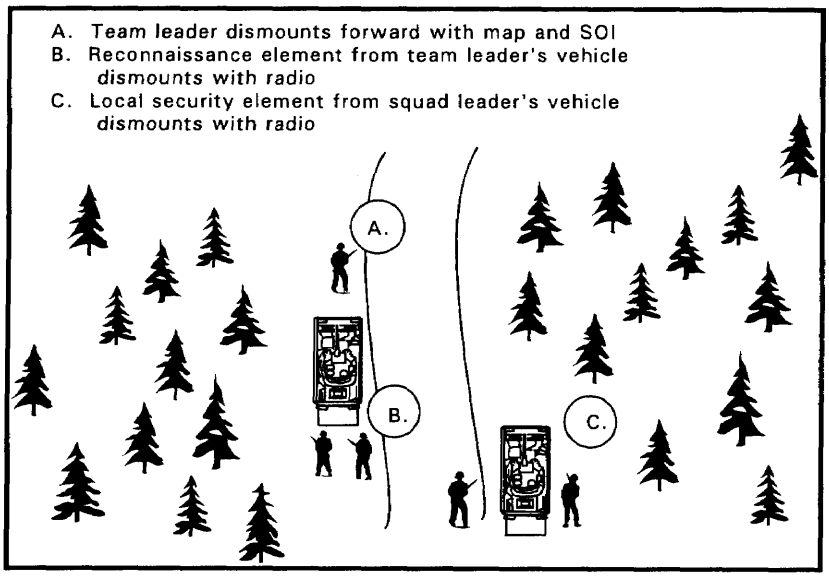


Figure B-2A. Initial dismounting of vehicles.

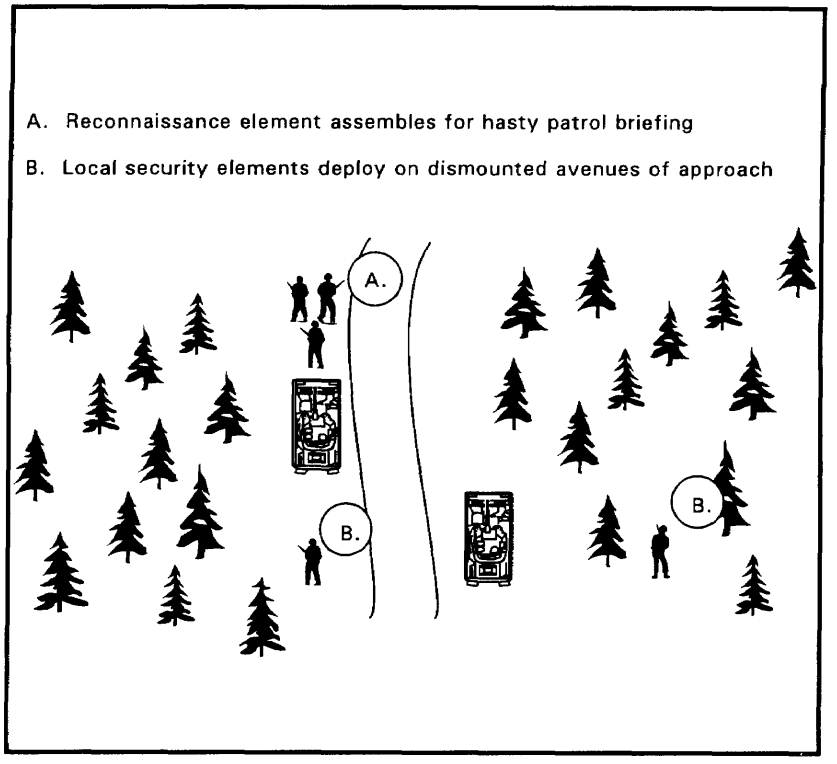


Figure B-2B. Dismounts execute missions.

Section II. LOCAL SECURITY

The most common dismounted task performed by any scout element is local security. The primary purpose is to prevent close-in surprise of a mounted squad or team when it is halted for any period of time. Local security is also employed in a variety of other situations, such as during forward reconnaissance or as part of an OP.

Whenever a scout vehicle or team halts for any time, it should deploy local security. Local security should never be out of visual range of the element for which it is providing security. The primary means of communications between an element and its local security should be hand-and-arm signals, with voice and FM as the primary backups. Wire communications can also be employed;

however, wire is usually not necessary or practical because of the proximity of an element to its local security. Wire is also time-consuming to establish.

When executing a reconnaissance mission, the lead squad in a team will frequently deploy local security to provide 360-degree observation and early warning. Typically, this involves one or, preferably, two dismounts, who move forward of the vehicle to investigate a danger area such as a clearing or dead space beyond a rise. The security personnel remain within the overwatch range of the mounted element and communicate via hand-and-arm signals. If they discover possible enemy presence, they signal the dismounted element, which takes appropriate actions on contact. If all is clear, they signal the mounted element to move forward, then remount.

This type of local security task is fundamental to a properly executed reconnaissance mission; however, it can be very disruptive to the pace and tempo of the operation. A scout platoon minimizes the disruption, and maximizes speed, by executing a dismount drill.

Section III. OBSERVATION POSTS

Surveillance is the systematic observation of a specific area. Scouts watch, listen, and employ electronic devices to observe their area of responsibility. The OP, the primary means of maintaining surveillance, is a position from which scouts observe the enemy and direct and adjust indirect fires against him. From the OP, scouts report the enemy's size, activity, location, and disposition to their commander. A CFV scout platoon can occupy up to six short-duration OPs, one per squad, for up to 12 hours if the squads are at full strength. For extended periods of time, the CFV scout platoon occupies long-duration OPs by teams, which limits OPs to a maximum of three. HMMWV scout platoons can occupy three long-duration OPs and up to eight short-duration OPs.

SELECTING AN OP SITE

Based on his commander's guidance, the platoon leader selects the general location for the platoon OPs after analyzing the factors of METT-T. From his analysis, he determines how many OPs he must establish; he also decides where they must be positioned to allow long-range observation along the avenues of approach assigned by his commander and to provide depth through sector. The

team and squad leaders select the exact position for each OP when they are on the ground. An OP should have the following characteristics:

- Good observation of the assigned area or sector. Ideally, the fields of observation of adjacent OPs overlap to ensure full coverage of the sector.
- Effective cover and concealment. Scouts select positions with cover and concealment to reduce their vulnerability on the battlefield. Scouts may need to pass up a position with favorable observation capability but no cover and concealment to get a position that provides better survivability.
- Covered and concealed routes to and from the OP. Scouts must be able to enter and leave their OP without being seen by the enemy.
- A location that will not attract attention. OPs should not be sited in such locations as a water tower, an isolated grove of trees, or a lone building or tree; these positions draw enemy attention and maybe used as enemy artillery TRPs.
- A location that does not skyline the observers. Avoid hilltops. Position OPs further down the slope of the hill or on the side, provided there are covered and concealed routes into the position. Stay away from the highest hills in the area; they will be key terrain for enemy reconnaissance.

OCCUPYING THE OP

The scout platoon leader selects a technique to move to the screen line based on his analysis of METT-T. Unless the area has already cleared, the platoon should conduct a zone reconnaissance to the screen line. This is the most secure method of moving to the screen line, but also the most time-consuming. The following is an example of how CFV-equipped scouts occupy an OP.

The team stops short of its OP site. The team leader places the vehicles in a position to overwatch the general OP site and any terrain the enemy could use to dominate movement into or out of the position (see Figure B-3A).

The team leader dismounts with four scouts, two from each vehicle (see Figure B-3B). The squad leader stays with the vehicles. The drivers and gunners remain on their vehicles to overwatch the dismounted personnel as they move forward to reconnoiter the OP.

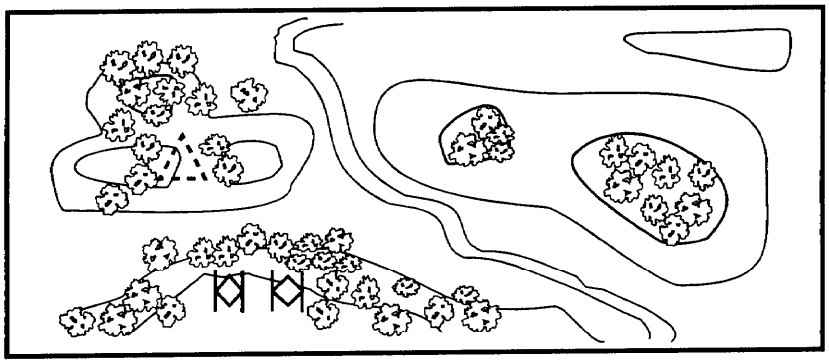


Figure B-3A. Cavalry fighting vehicles overwatch observation post site.



Figure B-3B. Team leader and scouts prepare to reconnoiter observation post site.

The team leader moves the dismounted scouts to the OP site, establishes security overmatching the far side of the OP, and checks the OP site for mines, booby traps, and enemy personnel. He verifies that he can observe his sector or area of responsibility from this site and determines which exact position is best for the OP (see Figure B-3C). The team leader selects fighting positions for his two vehicles and identifies hide positions.

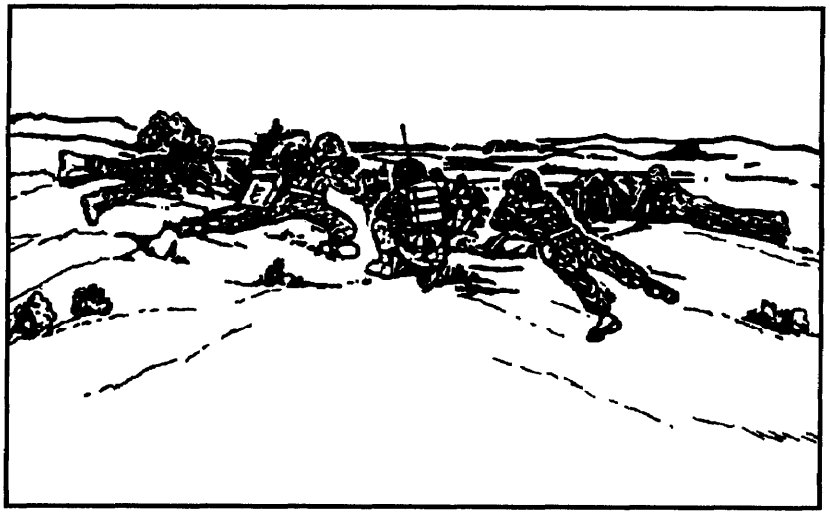


Figure B-3C. Team leader ensures observation post can observe avenue of approach.

Once the position is cleared and secure, the team leader signals the vehicles forward to move into their fighting positions. The driver and a dismounted scout from each vehicle mark their vehicle position with a ground stake (see Figure B-3D). The stake, which enables a vehicle to reoccupy the fighting position at a later time, is centered on the driver's station. It must be tall enough for the driver to see as he drives into position. The driver uses engineer tape or luminous tape on the stake so he can see it during limited visibility operations.

While the driver marks his position, the gunner and vehicle commander complete and check their sector sketch. The vehicle then moves back out of the fighting position and into a hide position. The team leader checks the sketches to ensure they provide complete coverage of the sector. The sector sketch or range card allows the OP to use the CFV's thermal sights for observation; it also can be a valuable reference if the vehicle is ordered to fight.

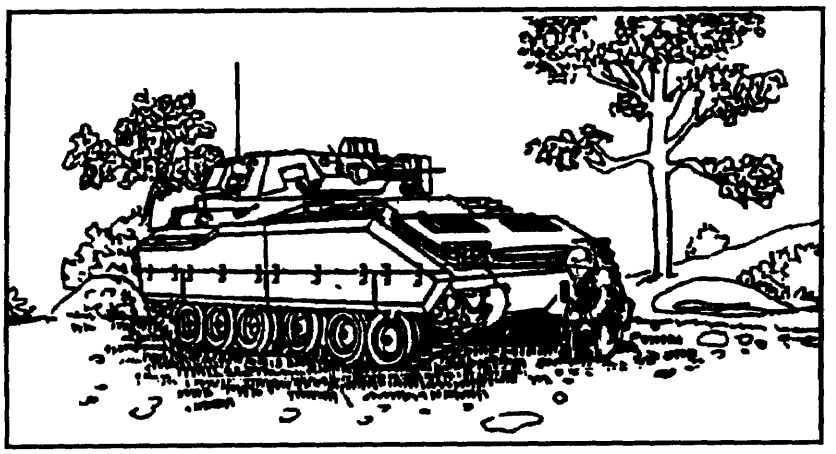


Figure B-3D. Scouts mark vehicle position.

MANNING THE OP

A minimum of two scouts man each OP. They must be equipped to observe the area, report information, protect themselves, and call for and adjust fire. One scout observes the area while the other provides local security, records information, and sends reports to the team leader or platoon leader. The two scouts should switch jobs every 20 to 30 minutes because the observer's effectiveness decreases quickly after that time. Essential equipment for the OP includes the following:

- Map of the area.
- Compass.
- Communications equipment (wire and radio).
- Observation devices (binoculars, observation telescope, and night-vision devices).
- SOI extract.
- Report formats contained in the SOP.
- Weapons (personal, crew-served, and light AT weapons; mines are included, if necessary).
- Seasonal uniform and LBE.

IMPROVING THE POSITION

Once the team leader has set in the OP and assigned the scouts their sectors of observation, the team improves the position. The team leader prepares an OP sketch. This sketch is similar to a fighting position sketch but with some important differences. As a minimum, the sketch will include the following: a rough sketch of key and significant terrain; the location of the OP; the location of the hide position; the location of the vehicle fighting and observation positions; alternate hide, fighting, and OP positions; routes to the OP and fighting positions; sectors of observation; preplanned artillery targets; TRPs for direct fire; and prepared spot reports and calls for free, based on trigger lines and projected locations where the enemy will first be seen. Figure B-4 shows a sample of a team leader's OP sketch.

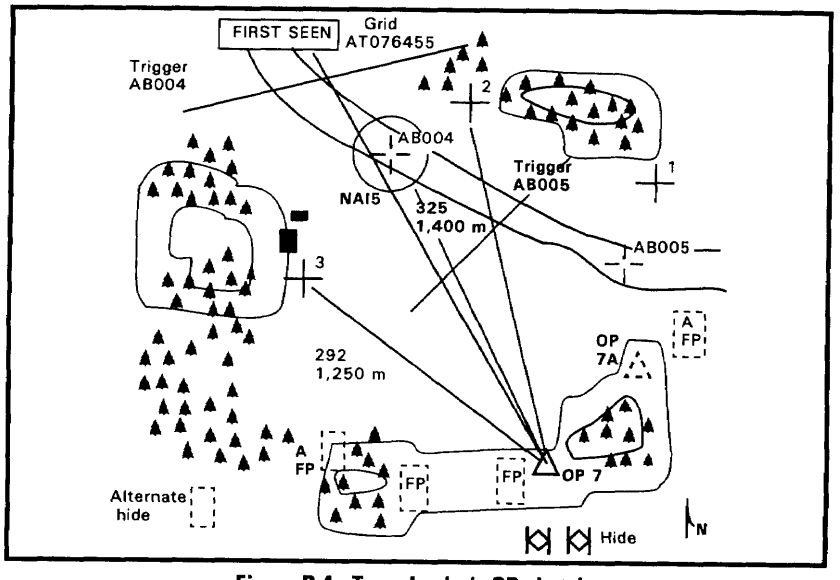


Figure B-4. Team leader's OP sketch.

Personnel manning the OP site begin digging in to provide protection from indirect and direct fires. They also camouflage the position; install wire communications equipment and directional antennas for FM communications; and employ hasty obstacles for local protection. Vehicle commanders (or gunners) and drivers reconnoiter the routes to their fighting/observation positions and alternate positions, perform maintenance, and camouflage vehicles and positions.

OP COMMUNICATIONS

The scouts occupying the OP use wire, radio, or both as their primary means of communications. Wire is preferred because it is secure and is not vulnerable to enemy direction-finding equipment or jamming. The scouts can conceal the wire so it cannot be seen by the enemy.

Wire is the best way for the scouts in the OP to communicate with their team/squad leader or his representative, who is located with his vehicle in the hide position behind the OP. The scout in the vehicle in turn relays reports or information to the platoon leader by radio. Ideally, if the vehicles are in a hide position, their signals are masked from the enemy by terrain. If they anticipate being in the position for a long time, scouts should construct a directional antenna to reduce their vulnerability to enemy jamming or direction-finding. The scouts in the OP should carry a radio as a backup means of communications; they can use it to send reports or to talk directly to their FSO for indirect from support.

OP SECURITY

Scouts are extremely vulnerable in an OP; their best self-defense is not to be seen or otherwise located by the enemy. They employ active and passive measures to protect themselves from enemy detection and direct and indirect fires.

The first step is to locate the OP in a covered and concealed position to reduce the chance of being seen by the enemy. The scouts add camouflage to the position to enhance natural concealment. If they have enough time, they dig in the position and add overhead cover to increase survivability against enemy fires. The team enforces strict light and noise discipline and reduces activity in and around the OP to essential movement only.

Wire communications reduce the scouts' signature in the OP. If they must use radio, they use a directional antenna whenever possible and mask the antenna from the enemy. They keep all vehicles hidden because their large signatures can be identified easily by the enemy. To provide early warning of enemy movement around the screen line or OP position, scouts emplace their PEWS in areas that they cannot observe or in the dead spaces between OPs. Trip flares or antipersonnel (AP) mines provide additional early warning and protection from enemy personnel. Active patrolling around and between OPs also enhances

security. Patrols give scout platoons the ability to observe areas that cannot be observed from the OPs and to clear the area around the OP of enemy elements.

OPs cannot always avoid being seen by the enemy, so they must take actions to limit their vulnerability. Covered positions provide protection from enemy fires; vehicle dispersion further reduces the effects of these fires. The vehicles in the fighting positions are used to extricate the scouts from the OP when the position has been identified and attacked by the enemy.

The team executes security patrols as soon after occupation of the position as possible to discover enemy elements that might have observed the occupation. The patrol reconnoiters favorable observation positions that might be occupied by the enemy. Route selection is critical when organizing these patrols because the team must assume that the OP position is under observation. The following section provides an in-depth discussion of patrol procedures.

Section IV. PATROLLING

A patrol is a detachment sent out by a larger unit to conduct a reconnaissance or combat operation. The operation itself is also called a patrol. The leader of the detachment conducting a patrol is referred to as the patrol leader.

Patrolling plays an extremely important role in scout operations. Patrol missions are normally conducted by a squad or team, but there are specific situations in which the entire platoon maybe dedicated to patrolling. This section examines both deliberate patrolling (executed at team and platoon level) and hasty patrolling (conducted at squad and team level).

ORGANIZING A PATROL

The patrol leader must decide what elements and teams are needed for the patrol, select men for these elements and teams, and decide what weapons and equipment are needed. He should use his platoon's normal organization (squads and teams) and chain of command (squad leaders and team leaders) as much as possible to meet these requirements.

The scout platoon conducts two types of patrols: reconnaissance and combat. A reconnaissance patrol is used to collect information or to confirm or deny previously reported information. It also can provide security by covering the dead space around and between OPs. Combat patrols are executed only when necessary. They normally are assigned to infantry elements; scouts who are

tasked to conduct intensive combat patrols should be augmented with an infantry squad. Scouts, however, must be prepared to conduct combat patrols with organic assets under certain circumstances, such as when an ambush and raid is required and infantry elements are not available. Refer to FM 7-8 for more information on combat patrols.

A platoon-size patrol is organized into the following elements to ensure that all required duties are carried out:

- Patrol headquarters. This consists of the patrol leader, assistant patrol leader, radiotelephone operators (RTO), and any other troops required to control and support the patrol. A headquarters element is normally used only when a majority of the scout platoon is involved in a single patrol.
- Reconnaissance element. This element, consisting of at least two soldiers, is tasked to reconnoiter and collect information for the patrol. During a zone or area reconnaissance patrol, there maybe several of these elements.
- Security element. This element is formed to provide security for the entire patrol. It protects the patrol once the objective is reached.

A squad or team routinely uses its own equipment and men in executing a patrol mission; it has little flexibility to change organization or equipment. As a result, it may not be organized into specific patrol elements.

PREPARING FOR A PATROL

Scouts execute deliberate and hasty patrols. If time permits, the patrol leader prepares for a deliberate patrol, following the troop-leading procedures discussed in Chapter 2. Often, however, the scouts are in contact and must execute a patrol quickly to develop the situation. In such a case, the patrol leader will prepare a hasty patrol. Figures B-5A and B-5B, page B-14, show examples of deliberate and hasty patrol organization.

DELIBERATE PATROL

A deliberate patrol generally involves more personnel and equipment than does a hasty patrol and is tasked to cover a larger tactical area. Another key difference is in the preparation stage; a deliberate patrol is much more thoroughly planned, coordinated, and rehearsed. As noted, the deliberate patrol leader uses troop-leading procedures during his preparations. The following discussion is organized using the eight steps of the procedures.

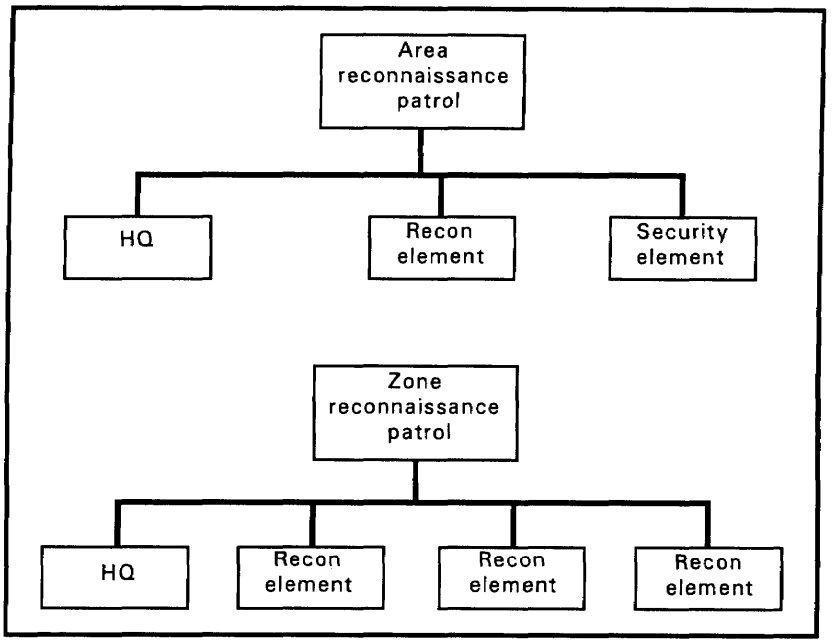


Figure B-5A. Examples of deliberate patrol organization.

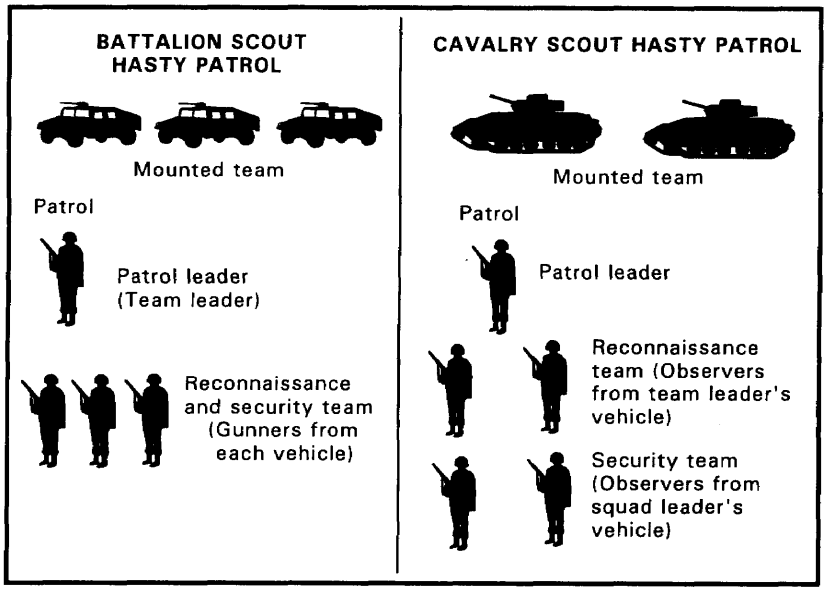


Figure B-5B. Examples of hasty patrol organization.

Receive and Analyze the Mission

Orders come in two forms: as written OPORDs and as FRAGOs. Once he receives an order, the first thing the patrol leader must do is to make sure he clearly understands what is required to accomplish the mission.

First, he looks at the order and jots down the task the commander told him to do, such as conduct reconnaissance of a bridge; this is called a specific task. Next, he identifies the tasks that must be accomplished even though the commander did not tell him to do them, such as cross a stream and an open area en route to the patrol objective; these are called implied tasks. The patrol leader does not list tasks that are part of the SOP.

The leader then evaluates the list of specific and implied tasks and puts a check mark by those that must be done for the unit to accomplish its mission. These are called essential tasks. The patrol leader reviews the commander's intent to ensure that he understands it and that he has accurately identified the essential tasks in accordance with the intent. He then restates the patrol mission, using the elements of who, what, when, where, and why.

Issue a Warning Order

The patrol leader issues the warning order to all patrol members or, as a minimum, to key members of the patrol. The warning order should cover the following points:

- Personnel to whom it applies. It identifies the scouts involved in the patrol, allowing them to begin their preparations.
- The time and nature of the operation. This is a brief, clear statement of what the patrol must accomplish. It may include the elements of who, what, when, where, and why.
- The earliest time of movement. This helps the patrol members prepare, inspect, and organize for movement by a specified time.
- The time and place the OPORD will be issued.

The patrol leader also gives instructions to special-purpose teams and key personnel so they can take care of their unique requirements, such as preparing explosives, checking radios, and making a map study (point and compass men).

Make a Tentative Plan

After the warning order is issued, the patrol leader develops a sound course of action. In doing this, he must consider all the things that will influence his patrol's ability to accomplish the assigned mission(s). The primary influence on his decisions are the factors of METT-T: mission, enemy, the terrain and weather in his area of operations, the troops or combat power he has available, and the time available to prepare, conduct, and complete the mission.

The plan should consider how each aspect of METT-T will influence the others and how all the factors, taken together, will affect mission accomplishment. The patrol leader should give special consideration to the terrain the patrol must traverse, the enemy it will pass near or through en route to its objective, the effects of extensive dismounted work on the scouts, and the amount of time available to conduct the mission.

One method the patrol leader uses to organize his time is to back-plan from mission completion to the present time. This helps patrol members plan the mission by giving them a projected schedule of events that may occur before and during the patrol. Figure B-6 gives an example of back-planning.

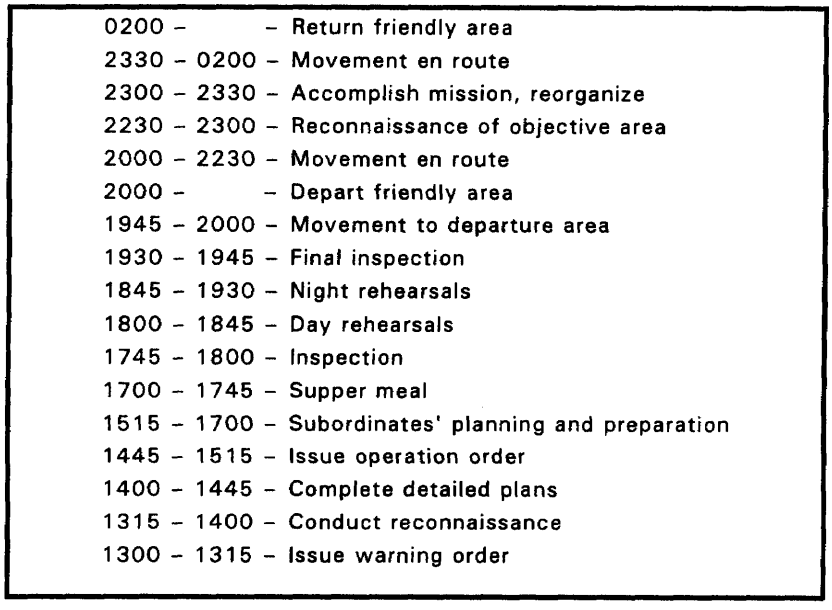


Figure B-6. Patrol time schedule (back-planning).

Coordination. The patrol leader must coordinate certain items during the formulation of his plan. He may perform some of this coordination personally, or his superior may do it for him. When the entire platoon is tasked to patrol, the necessary coordination may be extensive. The following paragraphs cover some of the specific details the patrol leader may have to coordinate.

Intelligence. Coordination may cover the following

- Changes in the enemy situation.
- Special equipment requirements.
- Terrain conditions.
- Weather considerations.

Operations. Coordination may cover the following:

- Changes in the friendly situation.
- Route selection.
- Linkup procedures.
- Transportation.
- Resupply (in conjunction with the S4).
- Signal plan (including call signs, frequencies, codes words, pyrotechnics, and challenges and passwords).
- Departure and reentry across friendly lines, especially if the patrol must pass through a different unit.
- Other patrols operating in the area.
- Attachment of specialized elements (such as demolition teams, scout dog teams, and interpreters).
- Rehearsal areas, including the following details:
  - Terrain (ideally, terrain should be similar to that of the objective site).
  - Security of the area.
  - Use of blanks, pyrotechnics, and live ammunition.

- Available fortifications.
- Time the area is available.
- Transportation.

Combat support. Coordination may cover the following:

- Mission and objective of the patrol.
- Routes to and from the objective (including alternate routes).
- Time of departure and expected time of return.
- Fire plan (including targets en route to and from the objective and fire on and near the objective).
- Communications (including primary and alternate means, emergency signals, and code words).

Primary and alternate routes. The patrol leader selects a primary route to and from the objective. The return route should be different from the route to the objective. The patrol leader also selects an alternate route that maybe used either to or from the objective. This route is used when the patrol has made contact with the enemy on the primary route. It may also be used when the patrol leader knows or suspects that the patrol has been detected (see Figure B-7).

Times of departure and return. Times of departure and return are based on the amount of time needed to accomplish the following:

- Reach the objective. This is determined by considering the distance, terrain, anticipated speed of movement, friendly and enemy situation, and (if applicable) what time the mission must be accomplished.
- Accomplish essential tasks in the objective area. This includes the leaders' reconnaissance, movement of elements and teams into position, and accomplishment of the patrol's mission.
- Return to a friendly area. This may be difficult to determine because casualties, EPWs, or captured equipment may slow the patrol. The use of a different return route may change the time needed.

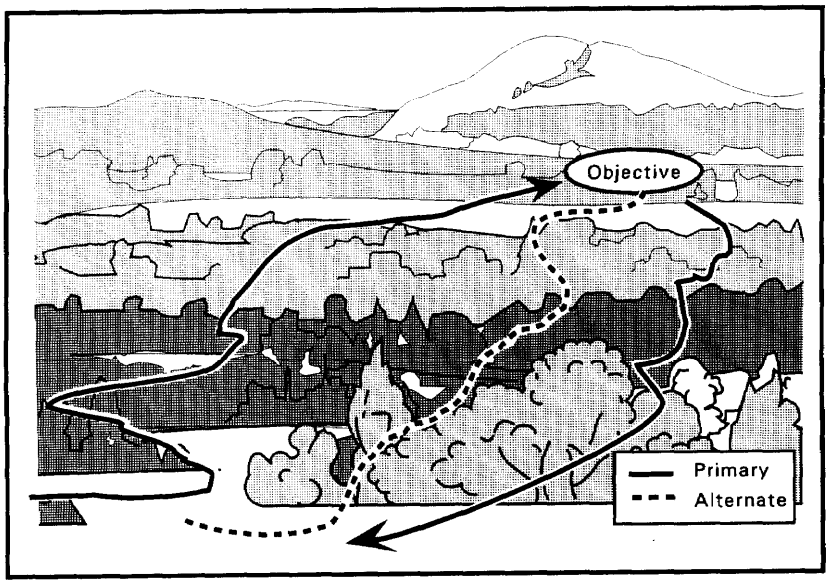


Figure B-7. Primary and alternate routes.

The patrol leader divides the routes into legs, with each leg starting, if possible, at a point that can be recognized on the ground (see Figure B-8, page B-20). A pace count and azimuth are used between points. This makes it easier for the patrol to stay oriented. When it is not possible to start and stop legs at recognizable points, a continuous pace count and azimuth maybe used.

Rally points. A rally point is a place where a patrol can accomplish the following:

- Reassemble and reorganize if dispersed during movement.
- Temporarily halt to reorganize and prepare for actions at an objective.
- Temporarily halt to prepare to depart from friendly lines.
- Temporarily halt to prepare to reenter friendly lines.

The patrol leader should pick rally points either during the patrol or by a map study before the patrol. Sites selected before the patrol are tentative and

will remain so until confirmed on the ground. The patrol leader should look for places that—

- Are large enough for the patrol to assemble.
- Are easily recognizable.
- Have adequate cover and concealment.
- Are defensible for short periods.
- Are away from normal routes of troop movement.

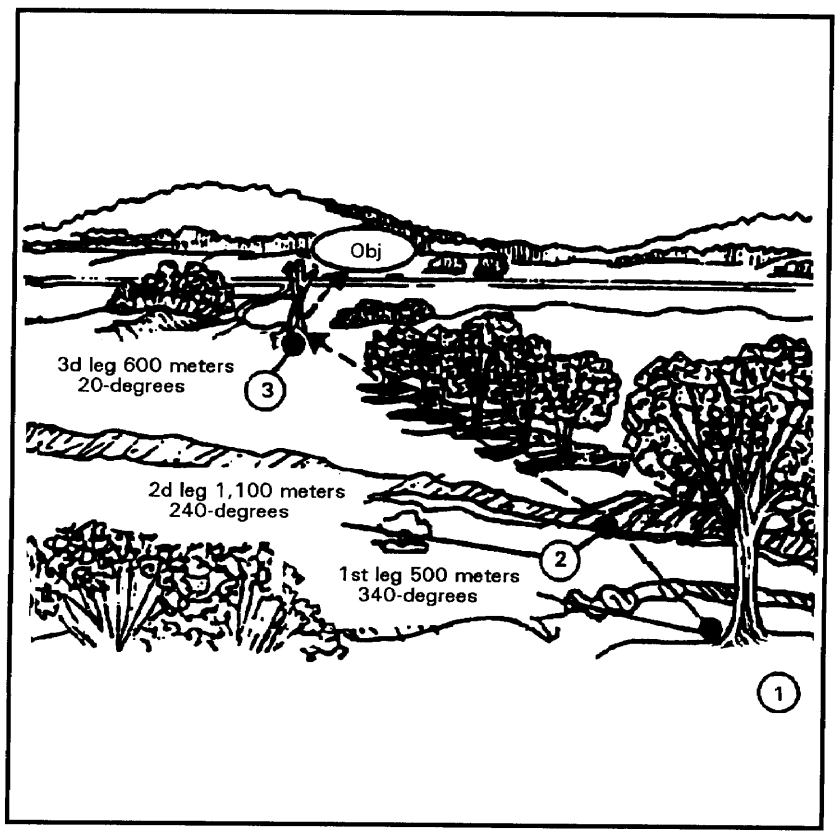


Figure B-8. Route divided into legs.

The patrol leader is responsible for selecting rally points that will be used in several types of situations, including the following:

- An initial rally point on the friendly side of a forward unit's lines. This is where a patrol, if dispersed, rallies before departing friendly lines or before reaching the first rally point en route. It is located within friendly lines.
- Rally points on both the near and far sides of danger areas.
- En-route rally points where a patrol rallies if dispersed along the route to or from its objective. There maybe several en-route rally points along the patrol's route between friendly lines and an objective.
- An objective rally point (ORP). An ORP is where a patrol halts to prepare for actions at its objective or where it returns after completing actions at the objective. The ORP must be located near the objective, but far enough away that the patrol's activities in it will not be detected by the enemy. It must also be far enough from the objective that it will not be overrun if the patrol is forced off the objective.
- A reentry rally point on the enemy side of a forward unit's lines. This is where a patrol halts to prepare to reenter friendly lines. It is located just short of friendly lines and out of sight and sound of friendly OPs.

Initiate Movement

The patrol leader may have to order the patrol to start moving after he issues the warning order but before he has finished developing his plan. For example, this movement might involve securing a passage point or moving to the SP.

Reconnoiter

The patrol leader must make a map, ground, or aerial reconnaissance prior to completing his plan. This allows him to confirm his tentative plan and gives him an idea of the ground he will initially traverse. The patrol leader must keep an open mind during the reconnaissance; not everything he sees will match the tentative plan.

Complete the Plan

After issuing the warning order and making the necessary reconnaissance, the patrol leader completes his plan while patrol members are preparing themselves and their equipment. He first assigns essential tasks to be performed in the objective area by elements and individuals. He then plans and assigns tasks that will help the patrol reach the objective and return; these tasks include navigation, security during movement and halts, actions at danger areas, actions on enemy contact, and stream crossing. Other factors the patrol leader must cover in the completed plan include the following:

Rations. The patrol leader must determine whether the men should carry rations. If so, he specifies the type and amount and whereto get them.

Weapons and ammunition. This applies if the patrol must carry items (or quantities) that are out of the ordinary, such as significant amounts of demolitions.

Signals. The signals to be used during the patrol must be planned and rehearsed. Signals may be needed to lift or shift supporting fires, to order withdrawal from the objective, to signal "ALL CLEAR," and to stop and start movement of the patrol. Visual and audible signaling methods available to the patrol include hand-and-arm signals, flares, spoken or shouted vocal signals, whistles, radio transmissions, and IR equipment. Each patrol member must know all signals that may be used.

Location of leaders. The patrol leader designates locations for himself and the assistant patrol leader for all phases of the patrol, such as during movement, at danger areas, and at the objective. Considerations include the following:

- The patrol leader plans to position himself where he can best control the patrol during each phase,
- The assistant patrol leader maybe given a special job for each phase of the patrol. He may help the patrol leader control the patrol by being where he can best take command, if required. In the objective area, the assistant patrol leader may be positioned—
  - At the ORP when the patrol is conducting an area reconnaissance.
  - With a reconnaissance element that has been directed to move to and establish the point at which all elements will link up after reconnoitering. This applies when the patrol is conducting a zone reconnaissance.

Communications with higher headquarters. The plan must include radio call signs, primary and alternate frequencies, times to report, and codes.

Challenge and password. The challenge and password specified in the SOI should not be used when the patrol is beyond the FEBA. The patrol leader may devise his own challenge and password system for use beyond the FEBA. An example of this is the odd-number system. Any odd number can be used. If the patrol leader specifies 11 as the odd number, the challenge could be any number between 1 and 10. The password would be the number which, when added to the challenge, equals 11 (such as challenge 8, password 3).

Chain of command Every member of the patrol must understand where he fits into the chain of command of the patrol or of his element.

Issue the Order

The order is issued in standard five-paragraph OPORD format. The patrol leader should use terrain models, sketches, or blackboards to illustrate the plan; he can also draw sketches of planned actions in the sand, dirt, or snow. Patrol members may make notes but should hold questions until the order is completed. This prevents interruption of the patrol leader's train of thought.

Supervise and Refine

Rehearsals and inspections are vital to proper preparation, even for experienced patrol members. They must be thoroughly planned and effectively controlled by the patrol, element, and team leaders. Coordination is made with the commander or S3 for use of a rehearsal area resembling the objective area.

Plans must provide for inspections by the leaders to determine the patrol's physical and mental state of readiness. Inspections conducted before rehearsals help to ensure that uniforms and equipment are complete and ready for use. Each patrol member is questioned to determine whether he understands the following:

- The plan.
- What he is to do and when he is to do it.
- What other patrol members are to do.
- Challenges and passwords, signals, codes, radio call signs, frequencies, and reporting times.

An inspection after the final rehearsal and just before departure ensures that all equipment is still working, that nothing is being left behind, and that the men are ready.

Rehearsals help to ensure the proficiency of the patrol. They allow the patrol leader to check his plans, verify the suitability of equipment on hand, and make any needed changes. Patrol members become familiar with the duties and responsibilities they will have during the patrol.

If the patrol is to be executed at night, it is advisable to have both day and night rehearsals. They should be conducted on terrain similar to that over which the patrol will operate. All actions are rehearsed when time permits. When time is short, only the most critical actions are rehearsed. Actions in the objective area are the most critical and should always be rehearsed.

An effective rehearsal method is to have the patrol leader walk and talk the entire patrol through each action. He describes the actions of elements, teams, and individuals and has them perform these actions. In this "dry run," patrol members take their positions in formation at reduced distances. This can all be done with little or no distance separation so the members get the "feel" of the patrol. When patrol members and elements are familiar with their individual actions, a complete (normal speed) rehearsal is conducted with the entire patrol. This is a "wet run." The patrol goes through as many "dry runs" and "wet runs" as are necessary to gain proficiency. When possible, element and team leaders rehearse their units separately before the final rehearsal of the entire patrol. Supervision is continuous by all leaders.

HASTY PATROL

Hasty patrolling is conducted when a patrol must be dispatched with little or no warning. It often used develop the situation after contact is made or when contact is expected, such as at a danger area or obstacle. Hasty patrols are usually smaller than deliberate patrols, and their mission is more limited. They usually work in close proximity to supporting vehicles or under overwatch of the vehicles.

In a hasty patrol, the patrol leader does not have the opportunity to execute the troop-leading process because time is not available. Instead, he issues a FRAGO containing all the critical information required by patrol members. The FRAGO is issued in the five-paragraph OPORD format; any portion of the five paragraphs that does not apply or is already covered in existing instructions will

be omitted. The primary consideration in issuing the FRAGO is that it must be given quickly. The patrol leader should be thorough and cover all relevant subjects, but he uses a minimum of notes and references. The process should not ordinarily take longer than a few minutes.

When preparing for a hasty patrol, the patrol leader must ensure not only that members of the patrol have a thorough understanding of the concept but also that the mounted element that stays behind understands what is happening. The easiest way to accomplish this is to have the leader of the mounted element (this is usually either the senior squad leader or the team leader) attend the hasty patrol FRAGO. If this is not possible, the patrol leader must ensure that the leader of the mounted element is briefed separately before the patrol departs.

Figure B-9, page B-26, summarizes the types of information that will normally be included in a patrol FRAGO. It is organized in the five-paragraph format.

COMMON PATROLLING TASKS

Scouts who work dismounted must be able to perform a variety of tasks that are different from the tasks involved in mounted operations. Although not every patrol requires the same tasks, those discussed in the following paragraphs are common to most patrols. The specifics of how these tasks are accomplished depend on the individual situation, including the size of the patrol. In vitually all situations, however, scouts must adhere to the principles described here.

Departure from Friendly Lines

A patrol's departure through another unit's lines can be confusing and dangerous if it is not thoroughly planned and coordinated. Before conducting the passage, the patrol leader must coordinate the departure with the forward unit to learn of recent enemy activity or situation changes that may require adjustment in his plan. He ensures that all units involved in the passage have been briefed on the plan.

When the patrol is ready to conduct the passage, it moves up and halts at the initial rally point, short of the forward friendly lines. A guide from the forward unit then leads the patrol through his unit and through any obstacles forward of the unit. The forward unit may have OPs to its front that can help to provide security for the patrol as it moves. When the patrol has moved beyond the range of the friendly unit's small arms and final protective fires (FPF), it halts briefly to adjust to the sights and sounds of the battlefield.

TASK ORGANIZATION. Explain the organization of the patrol and confirm the composition of each team and element.

1. SITUATION.

   A. Enemy situation: expected size, location, and disposition of enemy forces the patrol may encounter.

   B. Friendly situation: activity and location of the mounted element of the team, other teams in the area, and the platoon.

   C. Attachments/detachments: any special personnel or elements (such as engineers, medics, or artillery) who will accompany the patrol.

2. MISSION. Specifically state the type of patrol (reconnaissance or security) and the reason for the patrol (for example, to secure an area from which the enemy might be able to observe an OP site).

3. EXECUTION.

   A. Scheme of maneuver: primary and alternate routes, RPs, and ORPs, as well as any other critical graphic control measures. These should be listed sequentially as they will occur in the patrol, with reference to a map or dirt sketch.

   B. Subordinate team instructions: primary mission statements for individual subordinate teams.

   C. Coordinating instructions, focusing on the following key considerations:

      1) Special equipment.
      2) Actions on contact.
      3) Movement techniques.
      4) Linkup with the mounted element.
      5) PIR (if applicable).

   4. SERVICE SUPPORT. Key considerations include the following:

      A. Method of handling dead and wounded personnel.

      B. Method of handling EPWs.

   5. COMMAND AND SIGNAL.

      A. Command.

         1) Chain of command.
         2) Location of leaders.

      B. Signal.

         1) Challenge and password.
         2) Key hand-and-arm signals.
         3) Code words or reports due.

Figure B-9. Information for patrol FRAGO.

Use of Rally Points

As the patrol moves along its route, the patrol leader verifies rally points. If dispersed between rally points en route, the patrol reassembles at the last rally point (see Figure B-10).

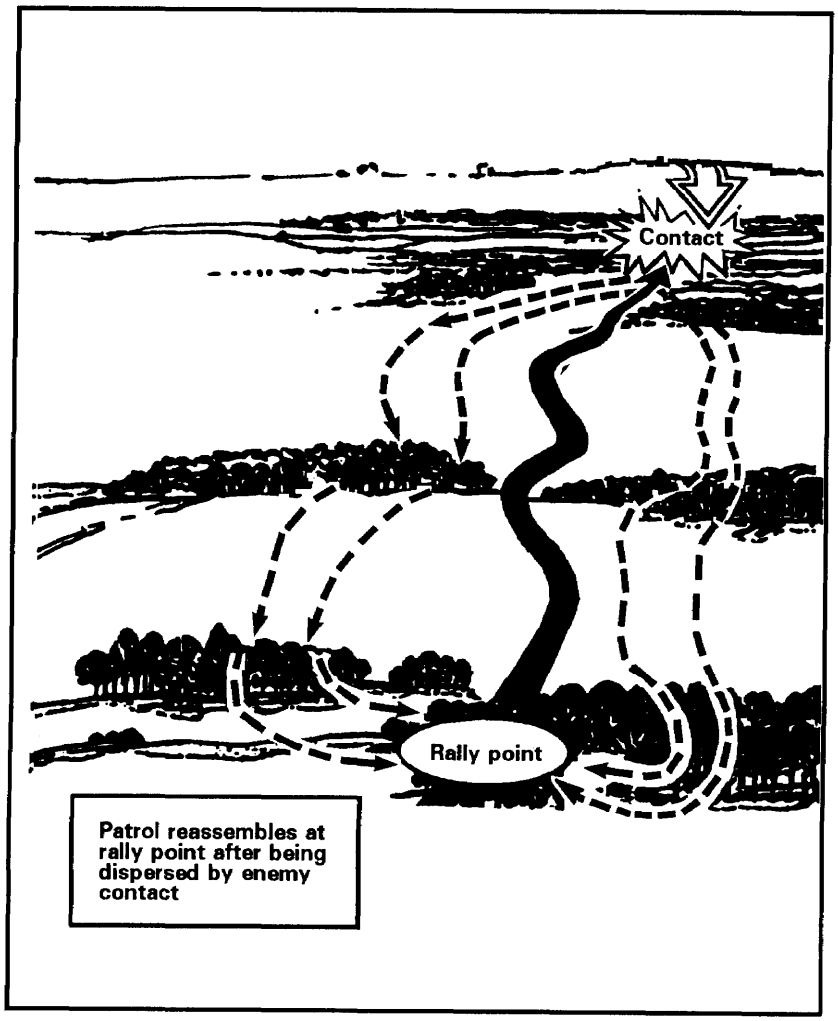


Figure B-10. Reassembling at a rally point.

Actions at rally points must be planned in detail. The plan must provide for the continuation of the patrol as long as there is a good chance to accomplish the mission. The following are examples of how a patrol can operate using rally points:

- The assembled patrol members wait until a specified number of scouts arrive and then continue the mission under control of the senior man present. A reconnaissance patrol may use this plan when two or three men may be able to accomplish the mission.

- The assembled patrol members wait for a set period; the senior man present then decides, based on the available personnel and equipment, whether to continue the patrol. This may be the best plan when a minimum number of men, certain items of equipment, or both are needed to accomplish the mission.

- A reconnaissance patrol occupies an ORP as directed in the patrol leader's plan. This rally point provides the patrol with security while it makes final preparations before executing actions on the objective.

The patrol halts as it nears the tentative ORP. A reconnaissance element moves forward to see if the site is suitable as an ORP and to make sure no enemy troops are near. When the patrol leader is satisfied, two men are sent back to bring the rest of the patrol into the ORP. The patrol then sets up a perimeter for all-around security (see Figure B-11).

When the ORP is occupied and secure, the patrol leader, compass man, and element leaders continue on a leaders' reconnaissance. The assistant patrol leader remains in the ORP. Before the patrol leader departs, he briefs the assistant patrol leader on these points:

- Personnel and elements he is taking with him.
- How long he will be gone.
- What to do if he fails to return.
- What to do if the patrol leader makes enemy contact.
- What to do if the assistant patrol leader makes enemy contact.

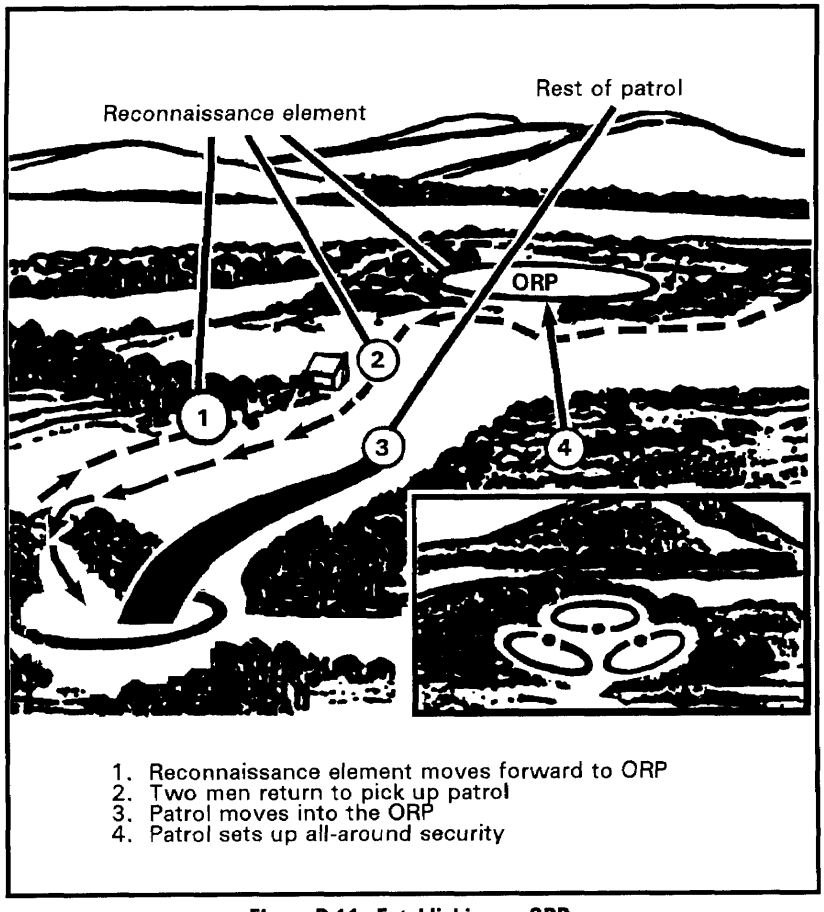


Figure B-11. Establishing an ORP.

The leaders' reconnaissance is conducted to pinpoint the objective, to pick positions for the patrol's elements, and to get information to confirm or change the plan (see Figure B-12, page B-30). After the reconnaissance, the leaders return to the ORP to complete the plan and disseminate information. One or more men may stay behind to watch the objective. If the patrol leader obtains enough information about the objective during the leaders' reconnaissance, the mission is accomplished, and the patrol returns to friendly lines. If the patrol leader does not get enough information, the patrol reconnoiters as planned until it has sufficient information to satisfy the mission requirements.

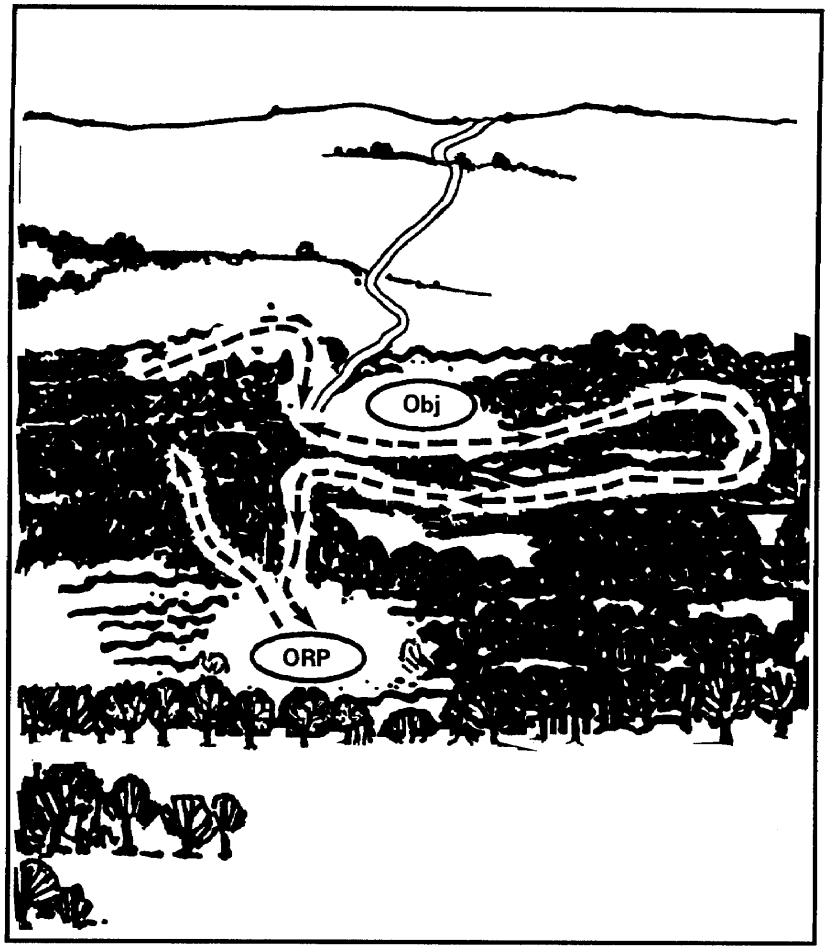


Figure B-12. Leader's reconnaissance.

If the patrol is to move out of the ORP as one group, the leader may pick an RP where patrol elements will separate. Each element will proceed on its own route from the RP to its assigned position (see Figure B-13).

When the mission is accomplished, the patrol reassembles at the ORP, and the patrol leader disseminates information to all patrol members. The patrol then returns to friendly lines.

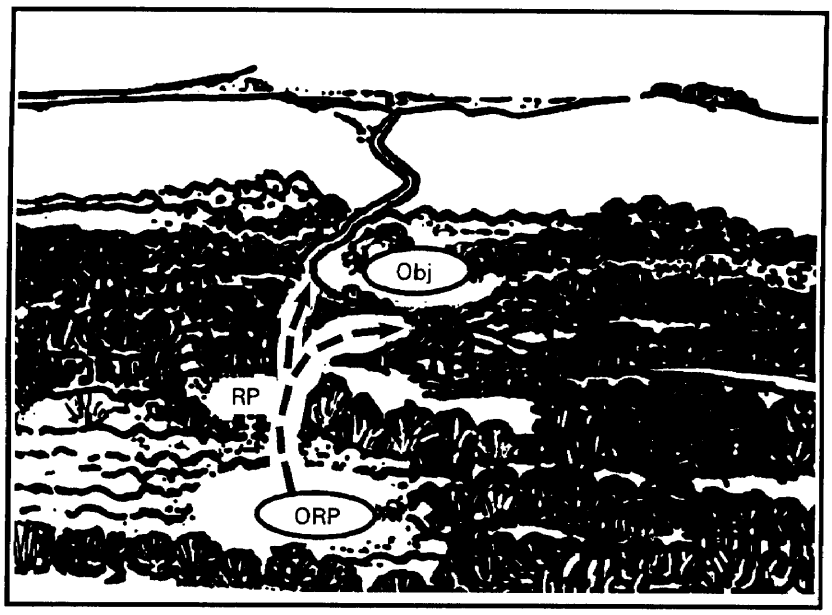


Figure B-13. Patrol using an RP.

Actions at Danger Areas

A danger area is a site where friendly forces face increased chance of detection or engagement by the enemy. Typical danger areas include the following:

- Known enemy positions.
- Roads and trails.
- Streams.
- Open areas.

In general, the patrol tries to avoid danger areas while it is moving. If it cannot avoid them, however, it must make specific plans before crossing. These plans are very similar to actions taken during mounted operations; however, they require more practice because a dismounted patrol may not have the mobility, protection, and firepower to extract itself should it encounter an enemy. Patrols also make general plans for crossing unexpected danger areas; these can be modified quickly to fit the situation.

Before crossing a danger area, the patrol must accomplish the following:

- Designate near-side and far-side rally points.
- Secure the near side.
- Secure the far side.

Securing the near side may involve nothing more than observing it. At other times, it may involve posting security teams far enough out on both flanks and to the rear of the crossing point to give warning of approaching enemy forces and to overwatch the rest of the patrol as it crosses (see Figure B-14).

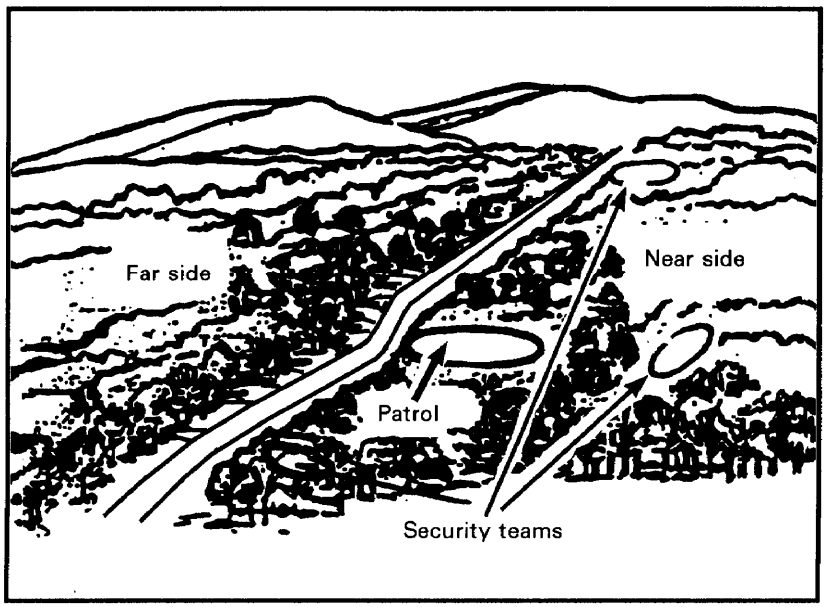


Figure B-14. Securing the near side of a danger area.

Once flank and rear security teams are positioned, another team quickly crosses the danger area and reconnoiters and secures the far side (see Figure B-15). The area secured on the far side must be large enough for the entire patrol to deploy. When the team leader is sure the far side is safe, he signals the rest of the patrol to cross.

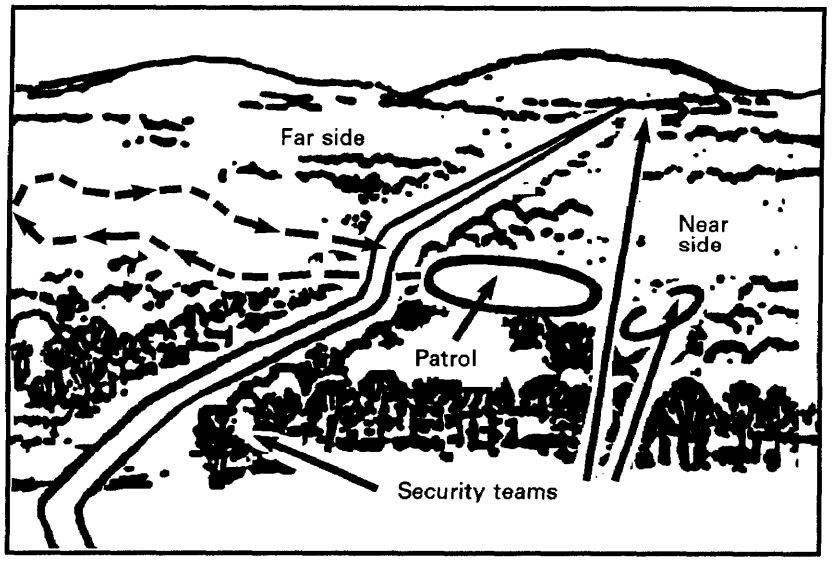


Figure B-15. Securing the far side of a danger area.

The patrol uses bounding overwatch or variations of it to cross the danger area (see Figure B-16, page B-34). The leader decides how the patrol will cross 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 he can post. A small patrol may cross all at once, in pairs, or one man 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 fro-side rally point until told to continue movement, When all other patrol elements have crossed the danger area, the security teams cross and rejoin the patrol.

Actions on Enemy Contact

A patrol must strive to avoid enemy contact unless required by the mission. If unexpected contact occurs, the patrol must quickly break contact so it can continue its mission.

Immediate action drills are well-rehearsed plans intended to allow quick reaction to unexpected enemy contact. Leaders should prepare simple, easily executed immediate action drills for the most common situations. Every member of the patrol must understand these drills and be able to execute his part of them.

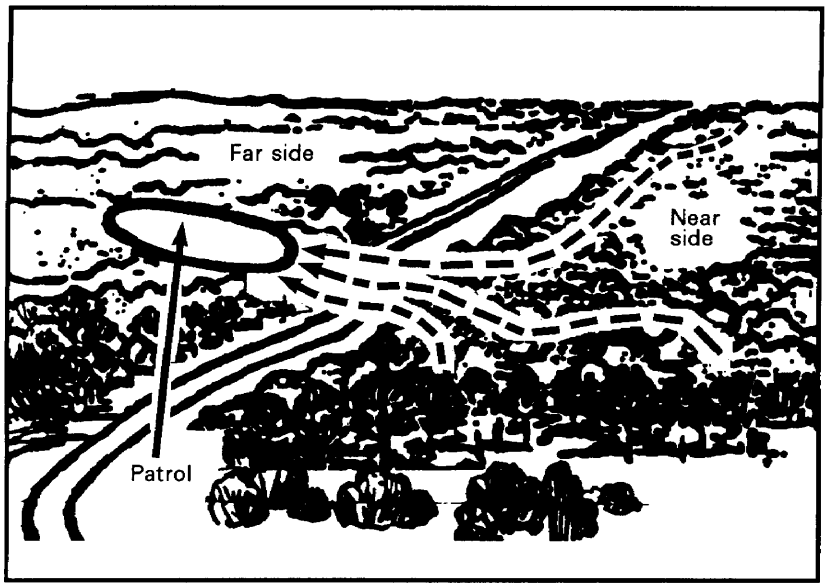


Figure B-16. Crossing a danger area.

As soon as any member recognizes a situation requiring an immediate action, he initiates the appropriate drill.

Air attack. The first man to see an aircraft shouts, "AIRCRAFT—FRONT (RIGHT, LEFT, or REAR)." If the patrol leader sees that the aircraft is making a firing run on the patrol, he hits the ground at once and shoots at the aircraft. All patrol members follow his example.

Freeze. This immediate action drill is used when a patrol, not yet seen by the enemy, observes the enemy but does not have time to take any other action. All patrol members remain still until signaled to continue or take another action as directed.

Hasty ambush. This immediate action drill is used when a patrol, not yet seen by the enemy, sees the enemy approaching and has time to take some action other than to "FREEZE." When the signal is given to initiate the drill, all members move on line and take concealed firing positions. The patrol leader lets the enemy pass if the patrol is not detected. If it is detected, the ambush is initiated.

Immediate assault. This immediate action drill is used when a patrol and an enemy element of the same size or smaller see each other at the same time and are at such a close range that fire and maneuver are not feasible. The men nearest the enemy open fire and shout, "FRONT (RIGHT, LEFT, or REAR)." The patrol moves swiftly into the assault. It stops the assault if the enemy withdraws and breaks contact. If the enemy fights, the assault continues until the enemy is destroyed or contact is broken.

Clock system. This immediate action drill is used when a patrol and a larger enemy element see each other at the same time and the patrol must break contact to avoid possible destruction. When contact is made, the patrol leader shouts a direction and a distance to move. The direction in which the patrol is moving is always 12 o'clock. For example, "EIGHT O'CLOCK—TWO HUNDRED" tells the patrol to move 200 meters in the direction of 8 o'clock. Each man must be sure to move in relation to the patrol's direction of march, not in relation to the direction of the enemy or the direction he is facing at that moment. The patrol rallies at the designated distance and continues its mission.

Ambush. If a patrol finds itself in an enemy ambush, it must get out of the kill zone or face destruction (see Figure B-17, page B-36). It must take the following immediate actions:

- Patrol members in the kill zone, without order or signal, immediately return fire and quickly move out of the kill zone by the safest route. There is no set way to do this; each man must decide the best way based on his situation. Smoke can help conceal the men in the kill zone.
- Elements not in the kill zone fire to support the withdrawal of those in the kill zone.
- The patrol breaks contact and reorganizes at the last designated rally point.

Indirect fire. If a patrol comes under indirect fire, the patrol leader immediately moves it out of the impact area. Patrol members do not seek cover. By continuing to move, the patrol is more difficult to hit, and it reduces the chances of being pinned down.

Sniper fire. If a patrol comes under sniper fire, it immediately returns fire in the direction of the sniper. The patrol then executes fire and maneuver to break contact with the sniper.



Figure B-17. Reacting to an ambush.

Handling Prisoners and Wounded and Dead Personnel

EPWs and wounded and dead soldiers create difficult situations for a patrol. Definite procedures for handling each situation must be established prior to the patrol's departure. All patrol members must know what to do in each case.

Procedures for handling WIA soldiers must not jeopardize the mission. Those wounded during an engagement are moved from the immediate area of the fight before being given first aid. Administering first aid during a firefight increases the risk of additional casualties.

There are several options for handling the walking wounded:

- They can be evacuated by air.
- They can accompany the patrol.
- They can conceal themselves for later pickup.
- The can return on their own to friendly areas.

These options are available for seriously wounded soldiers:

- They can be evacuated by air (this is generally practical only when the patrol is returning to friendly areas).
- They can be concealed for later pickup (another soldier should be left with the wounded man).

KIA personnel may be handled the same way as the seriously wounded, except that no one is left with the body when it is concealed for later pickup.

EPWs are bound and gagged; they may also be blindfolded. They may then be taken under guard to a friendly area. They can also be evacuated by air, taken with the patrol, or concealed for later pickup.

Reentry into Friendly Lines

The reentry of a patrol through another unit's lines can be confusing and dangerous if it is not thoroughly coordinated. The patrol leader should coordinate reentry with the friendly unit prior to the patrol's departure.

When the patrol returns to friendly lines, it stops at the reentry rally point just short of the friendly unit, out of sight and sound of friendly OPs. The leader transmits a prearranged codeword by radio to tell the friendly unit that the patrol is ready to reenter. To ensure that the friendly unit does not shoot at the returning patrol, the message must be acknowledged before the patrol moves in. Once communications are established and the friendly unit is prepared to guide the patrol through the lines, the patrol moves forward to the reentry point. The guide and patrol leader exchange signals to identify the patrol. Once identified, the patrol moves forward and is led through the lines by the guide. The assistant patrol leader should stay at the reentry point and count the men going through the lines. This ensures that no one besides patrol members reenters friendly lines.

If radio communications are not possible, a patrol member should contact an OP using the challenge and password (see Figure B-18). Once contact is made, the OP can then relay a message to friendly headquarters. The friendly unit then sends a guide to lead the patrol through its position.

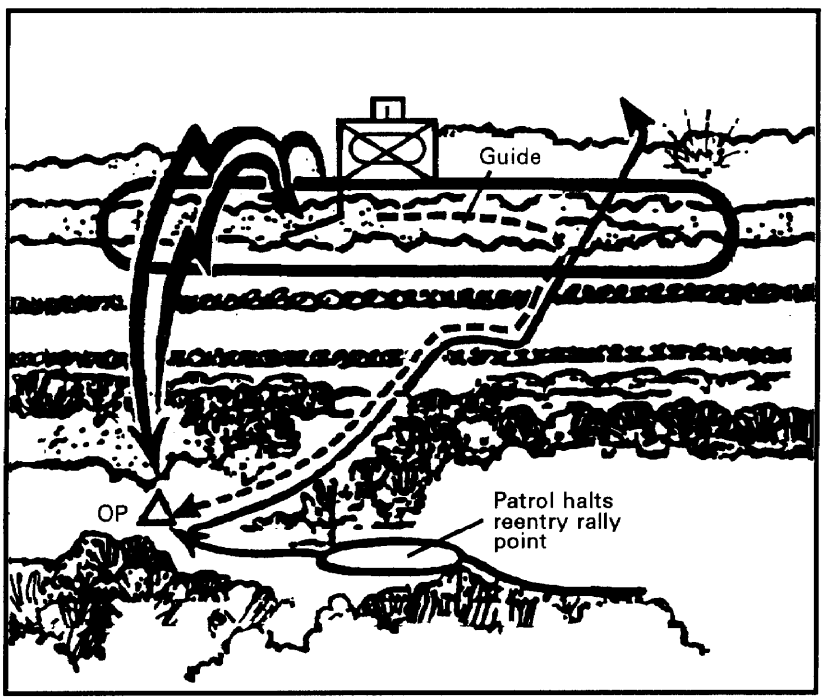


Figure B-18. Patrol makes contact to reenter friendly lines.

If communications cannot be established or if OPs cannot be found, the patrol can still conduct the reentry if a reentry point was coordinated prior to departure. The patrol leader takes a small security team with him to reconnoiter to the reentry point. He leaves the rest of the patrol outside small arms range of friendly lines. He avoids probing around wire obstacles. To help the patrol find the reentry point when visibility is poor, the guide can turn on an infrared light or a flashlight shielded with a red lens; this signal must be coordinated before the patrol departs friendly lines. The patrol leader makes contact with the guide (see Figure B-19) and sends two men to bring the patrol forward. The guide then leads the patrol through the lines. The assistant patrol leader should stay at the reentry point and count the men as they pass through the lines.

In all cases, the patrol leader should provide the stationary unit commander with any information of tactical value that the patrol gained.

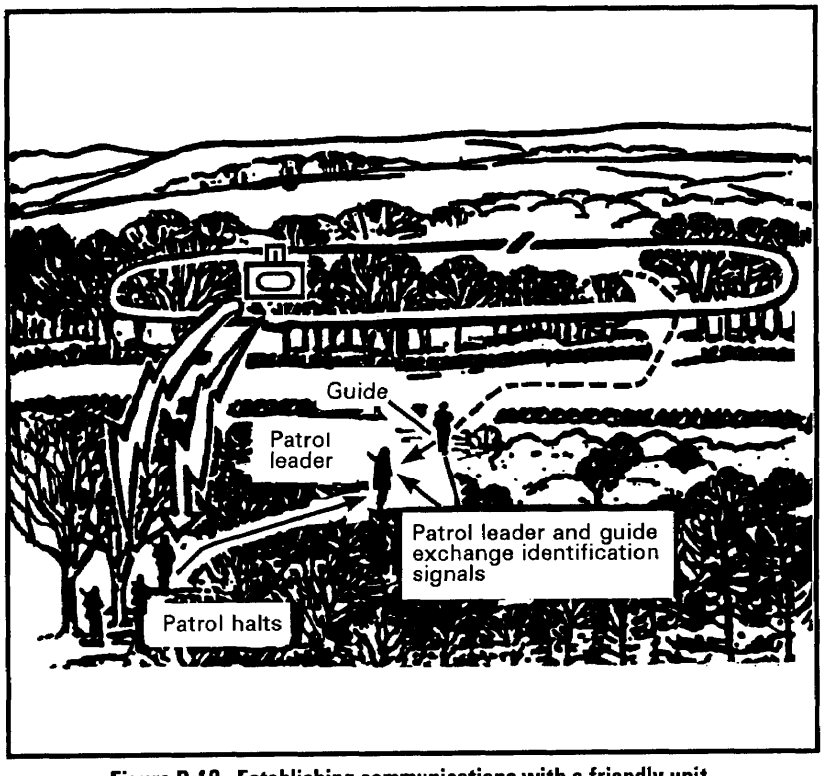


Figure B-19. Establishing communications with a friendly unit.

RECONNAISSANCE PATROLS

Reconnaissance patrols provide timely and accurate information about the enemy and terrain. The patrol leader must have specific intelligence collection requirements for each mission.

An area reconnaissance patrol is conducted to obtain information about a specific location (such as a road junction, hill, bridge, or enemy position) and the area immediately around it. The location of the objective is designated either by grid coordinates or by a map overlay with a boundary line encircling the area.

A zone reconnaissance patrol is conducted to obtain information on all enemy forces, terrain, and routes within a specific zone. The zone is defined by boundaries.

Reconnaissance patrols are also a critical part of platoon security missions. Area and zone reconnaissance patrols are executed to ensure the security of individual OP sites and to cover dead space and dismounted avenues of approach throughout the platoon's area of operations. When executed as part of a screen or other security mission, reconnaissance patrols are sometimes referred to as security patrols.

Conduct of an Area Reconnaissance

To conduct an area reconnaissance, the patrol uses a series of surveillance and vantage points around the objective to observe it and the surrounding area. A scout platoon normally sends a squad on an area patrol. In rare cases, a team or the entire platoon maybe required to conduct reconnaissance of a large area.

Once the patrol arrives in the objective area, it baits in the ORP and establishes security. The patrol leader and element leaders conduct a leaders' reconnaissance of the objective to confirm the plan and then return to the ORP. The security element departs the ORP before the reconnaissance element. The security element leader positions security teams at the ORP and on likely enemy avenues of approach leading into the objective area.

Once the security teams are in position, the reconnaissance element departs the ORP, moving to several surveillance/vantage points around the objective (see Figure B-20, page B-42). The reconnaissance element leader may decide to have a small reconnaissance team move to each surveillance/vantage point instead of having the entire element move as a unit from point to point. Once

the objective has been reconnoitered, the elements return to the ORP and report the information. The patrol then returns to friendly lines.

The terrain may not allow the patrol to secure the objective area. In this case, the patrol leader leaves a security team in the ORP and combines the reconnaissance and security elements into several teams to reconnoiter the objective (see Figure B-21, page B-42). These teams move to different surveillance/vantage points, from which they reconnoiter the objective. Once the objective has been reconnoitered, the teams return to the ORP and report the information. The patrol then returns to friendly lines.

The area patrol can execute either long-range or short-range observation or surveillance of the objective. The following considerations apply depending on the situation:

- Whenever METT-T permits the required information to be gathered from a distance, the patrol executes long-range observation or surveillance of the objective from an OP (see Figure B-22, page B-43). The OP must be far enough from the objective to be outside enemy small arms range and local security measures. Since the patrol does not move in close enough to be detected, long-range observation is the more desirable method for executing area reconnaissance. In addition, if the patrol is discovered by the enemy forces, direct and indirect fires can be employed on the objective without endangering the patrol. When information cannot be gathered from only one OP, successive OPs may be used. This is accomplished by squad-size reconnaissance patrols. The OPs must use available cover and concealment and have an unrestricted view of the objective.

- When required information cannot be obtained by observing from a distance, the patrol moves closer to the objective. Short-range observation or surveillance is the technique of watching an objective from a position that is within the range of enemy local security measures and small arms fire (see Figure B-23, page B-43). This method can be executed by the platoon as a whole or by an individual squad. When the entire platoon is taking part in a short-range observation operation, the routes and area to be reconnoitered must be clearly defined.

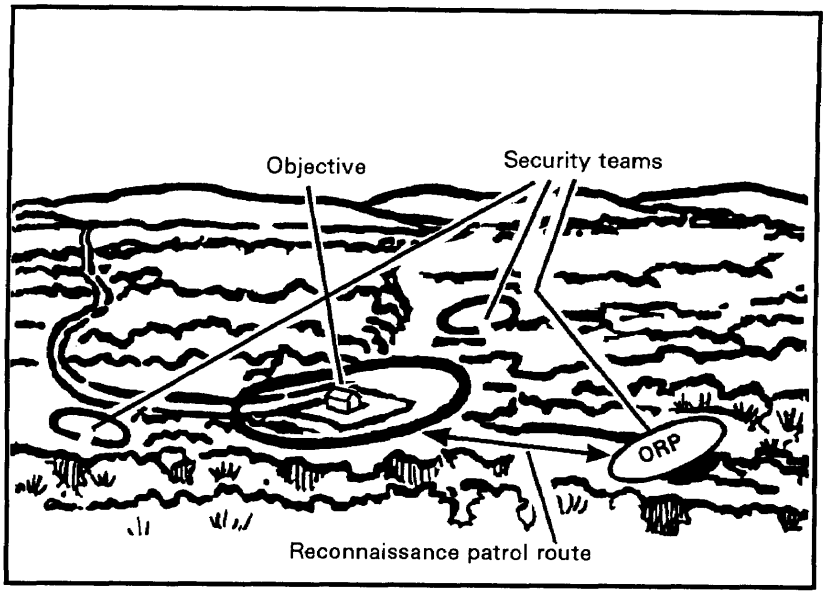


Figure B-20. Area reconnaissance using separate reconnaissance and security elements.

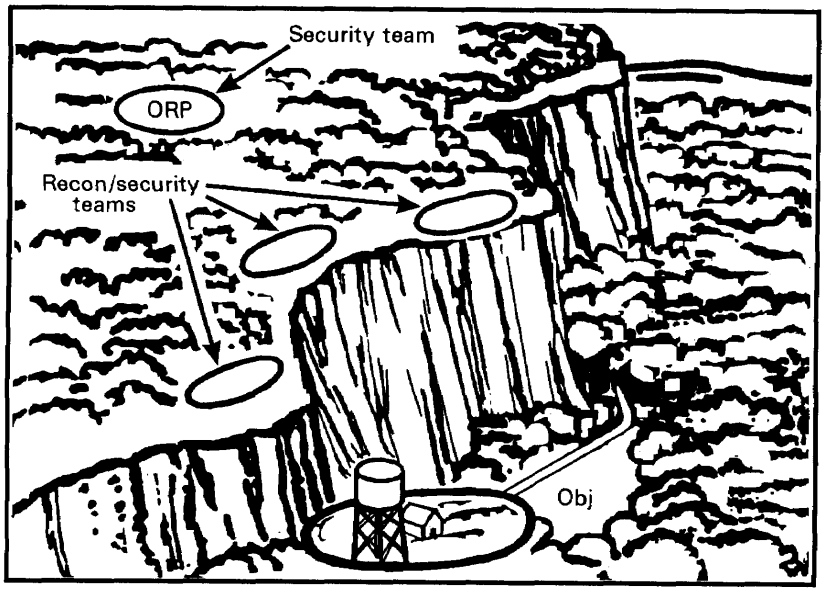


Figure B-21. Combined teams reconnoiter the objective.

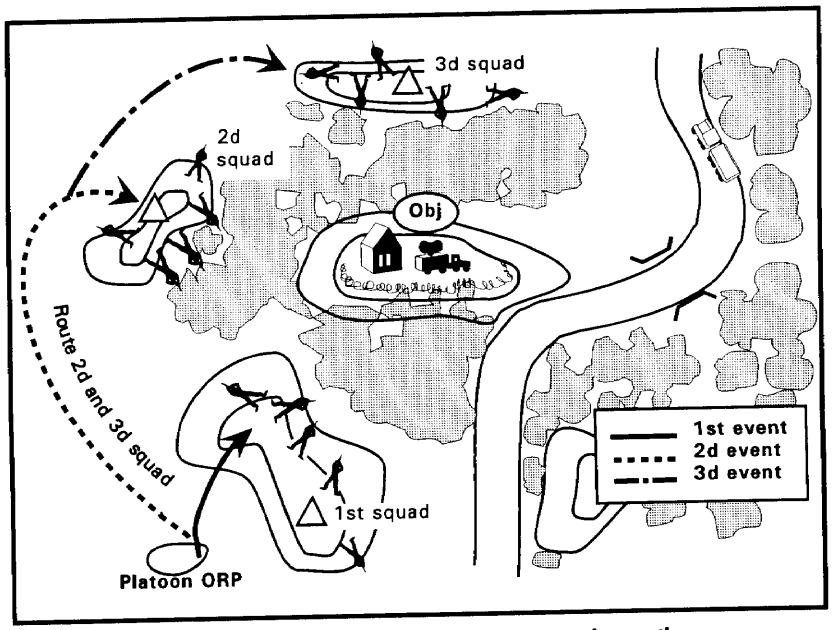


Figure B-22. Area reconnaissance long-range observation.

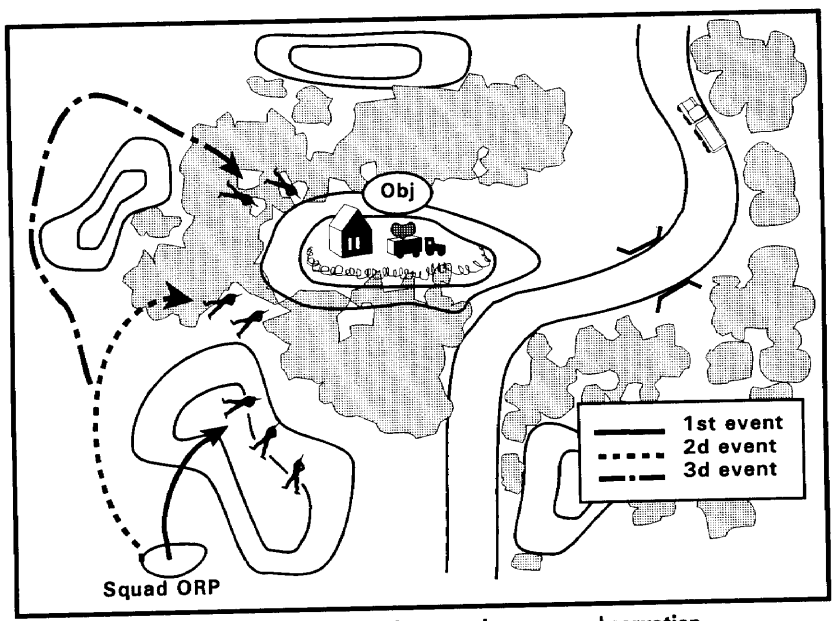


Figure B-23. Area reconnaissance close-range observation.

Conduct of a Zone Reconnaissance

There are three basic methods of conducting a zone reconnaissance: the fan method, the converging routes method, and the successive sector method. A dismounted scout squad can conduct a zone reconnaissance patrol of a narrow zone (less than 1 kilometer wide). A dismounted scout team or platoon can reconnoiter a zone up to 3 kilometers wide.

Fan method. The patrol leader first selects a series of ORPs throughout the zone from which to operate. When the patrol arrives at the first ORP, it halts and establishes security. The patrol leader then selects reconnaissance routes out from and back to the ORP, forming a fanshaped pattern around the ORP. The routes must overlap to ensure that the entire area is reconnoitered. The patrol leader then sends out reconnaissance elements along the routes. He does not send out all of his elements at once, keeping a small reserve in the ORP. (For example, if the patrol has three reconnaissance elements, only two are sent out. The other is kept as a reserve.) The patrol leader sends the elements out on adjacent routes. This keeps the patrol from making contact in two different directions.

After the entire area (fan) has been reconnoitered, the patrol leader reports the information. The patrol then moves to the next ORP, and the fan process is repeated (see Figure B-24).



Figure B-24. Fan method of zone reconnaissance.

Converging routes method. The patrol leader first selects an ORP, then reconnaissance routes through the zone. He also selects a rendezvous point at which patrol members link up after their reconnaissance. Once the patrol arrives at the ORP, it halts and establishes security. The patrol leader designates the following:

- The element that will handle each reconnaissance route.
- A linkup time at the rendezvous point.

Each reconnaissance element then reconnoiters its designated route, normally using the fan method. The patrol leader usually moves with the center element. The entire patrol links up at the rendezvous point at the designated time (see Figure B-25). The rendezvous point is secured in the same way as the ORP. The patrol reports its information at the rendezvous point, then returns to friendly lines.

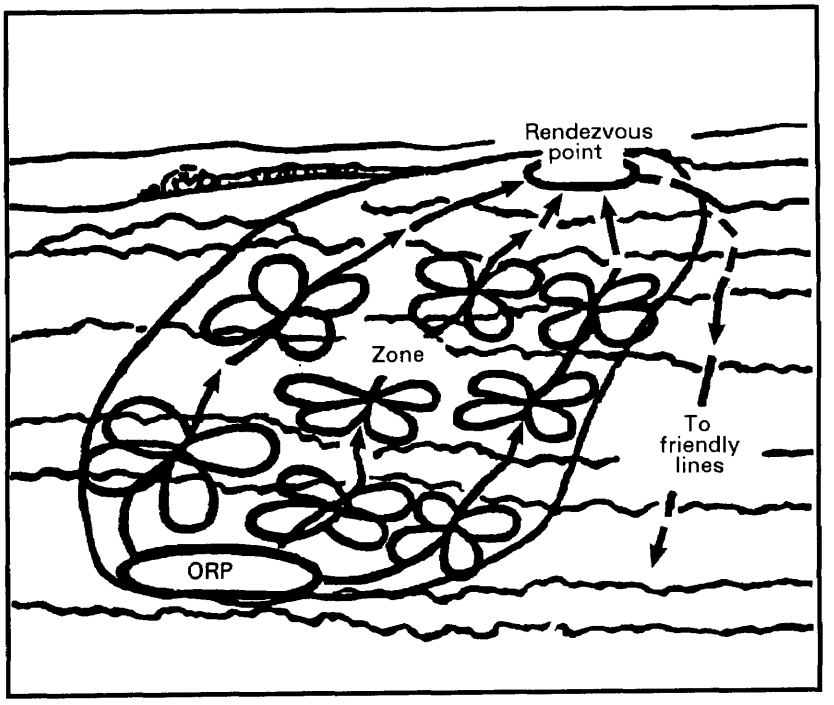


Figure B-25. Converging routes method.

Successive sector method. This method is basically a continuation of the converging routes method (see Figure B-26). The patrol leader selects an initial ORP and a series of reconnaissance routes and rendezvous points. The actions of the patrol from each ORP to each rendezvous point are the same as in the converging routes method. Each rendezvous point becomes the ORP for the next phase. When the patrol links up at a rendezvous point, the patrol leader confirms the designated reconnaissance routes and the next rendezvous point and designates a linkup time. This sequence continues until the entire zone has been reconnoitered. Once the reconnaissance is completed, the patrol returns to friendly lines.

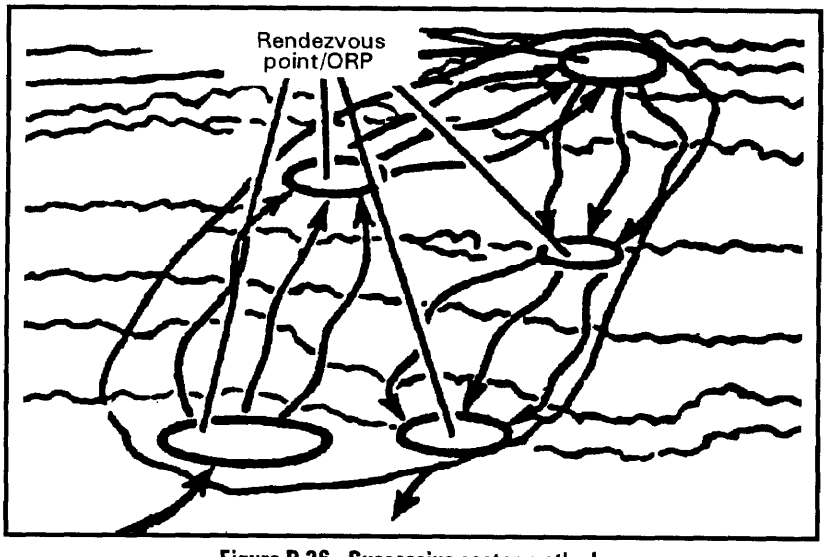


Figure B-26. Successive sector method.

TRACKING PATROLS

The scout platoon may be called upon to execute a specialized reconnaissance patrol called a tracking patrol. This mission requires a patrol to follow the trail of a specific enemy force; it occurs most frequently during operations other than war. Tracking patrols are usually used against dismounted enemy troops, but they can be used to locate a mounted enemy force if it is believed that the mounted element has not moved a great distance. It is sometimes possible for scouts to track enemy elements, particularly mounted ones, while remaining predominantly mounted themselves. Most tracking, however, is done dismounted.

Attention to detail, common sense, logic, and knowledge of the environment and enemy habits allow the tracker to obtain valuable information from signs in the area of operations. The tracker must have patience; he must be able to move slowly, quietly, and steadily while observing and interpreting every available indicator of enemy presence and movement. He must avoid using reckless speed that could cause him to overlook important signs, lose the trail completely, or blunder into the enemy force.

Organization

When the scout platoon receives the mission to conduct a tracking patrol, it assigns the task of tracking to only one team. The remaining teams provide security or act as a reserve if contact is made. Figure B-27 shows the organization of a typical tracking patrol; the following paragraphs outline the responsibilities of tracking team members.

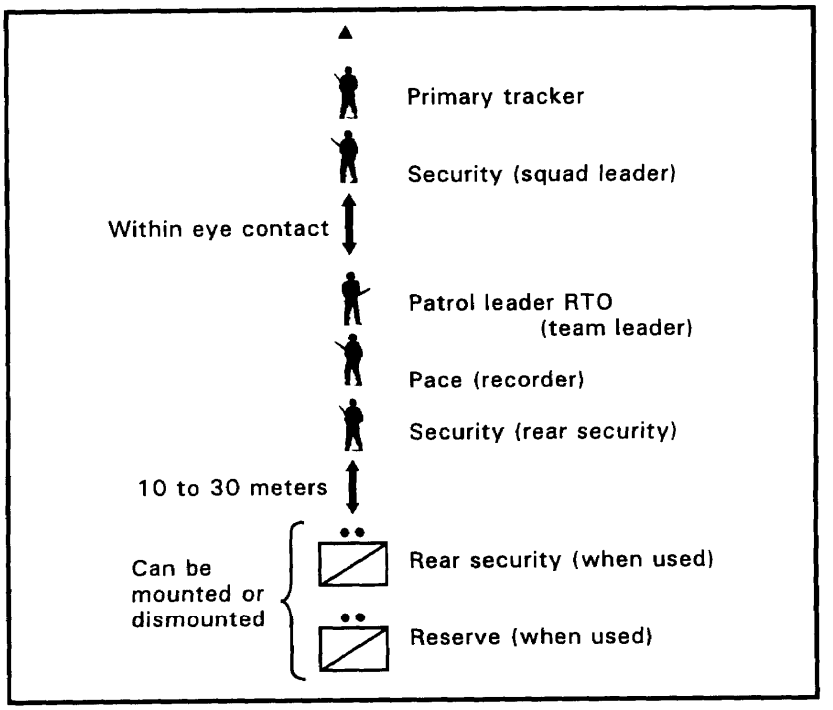


Figure B-27. Tracking patrol organization and movement formation.

Team leader. The team leader carries the radio and is the primary navigator. He has overall responsibility for organizing the force, setting each soldier's load, and accomplishing the mission.

Primary tracker. The primary tracker's job is to focus on following the main trail left by the tracked element; he has no other duties.

Security man. The security man, normally a squad leader, observes to the front and flanks of the trail and provides security for the primary tracker as he concentrates on the trail.

Rear security man. The rear security man looks back along the trail at irregular intervals to prevent the patrol from being ambushed from behind. If the patrol makes enemy contact to the front or flank, the rear security man is in the best position to support the scouts in contact. To assist in navigation, he also records the azimuths traveled by the patrol.

Training

Training is essential in developing and maintaining the skills necessary to execute a tracking patrol. Based on the commander's guidance, the scout platoon must make room for tracking concepts and techniques on its normal training agenda. Training must continue, however, once the platoon has deployed into an area of operations. All scouts, especially those who are most likely to be assigned the tracking patrol mission, must learn about local soil conditions, climate, vegetation, and animals; they must also be aware of the vehicles and footwear of enemy forces they are likely to encounter, as well as any other factors that could influence execution of the patrol. The primary tracker can prepare a tracking book illustrating specific signs of enemy presence and showing how these signs weather or change over time.

Intelligence

Specific intelligence about enemy habits, equipment, garments, footwear, diet, and tactics is important in a tracking patrol mission. For example, reports might show that the enemy wears sandals like the natives in the area. It however, there are signs that one soldier in the element being tracked is wearing boots with an unfamiliar tread, this could mean that the element has a trained cadre, a foreign advisor, or a prisoner. If possible, the patrol should interview someone who has seen the elements it is tracking.

Tracking is one of the best sources of immediate-use intelligence, information about the enemy that can be put to use immediately to gain surprise, to keep the enemy off balance, or to keep him from escaping the area entirely. The tracker may discover information that, when combined with information from other sources, indicates enemy plans and can help the commander plan a successful operation. The indicators may be so fresh that the tracker becomes a stalker, using this intelligence to search for an enemy that is obviously nearby.

As the tracker moves, he constantly asks himself questions. When he finds indicators that answer those questions, he begins to form a picture of the enemy in his mind. He must avoid, however, reporting his interpretations as facts. His report should be limited to a clear, accurate account of the indicators he has seen; the commander may have more information to help the tracker estimate the enemy he is facing.

Tracking Indicators

The first job of the tracking patrol is to detect the indicators of enemy presence. Some indicators will be obvious, such as footprints or the fresh ruts of a tracked vehicle in the mud. Others will be as subtle as an overturned rock or a bent tree branch. The tracker's ability to find this evidence is the key to success of the mission. Once he uncovers the indicators, he must be able to analyze them to determine what they tell him about enemy strength, composition, and movement. The following paragraphs examine indicators in these categories:

- Displacement.
- Stains.
- Weather.
- Litter.
- Camouflage.

Displacement. Displacement takes place when any person or object moves (or is moved) from its original position (see Figure B-28, page B-50). A well-defined footprint in soft, moist ground is a good example of displacement. The shoe or foot of the individual who left the print displaced the soil by compression, thus leaving an indention in the ground. By studying this indicator,

the tracker can determine several important facts; for example, a print left by worn footwear or by a barefooted person may indicate a lack of proper equipment.

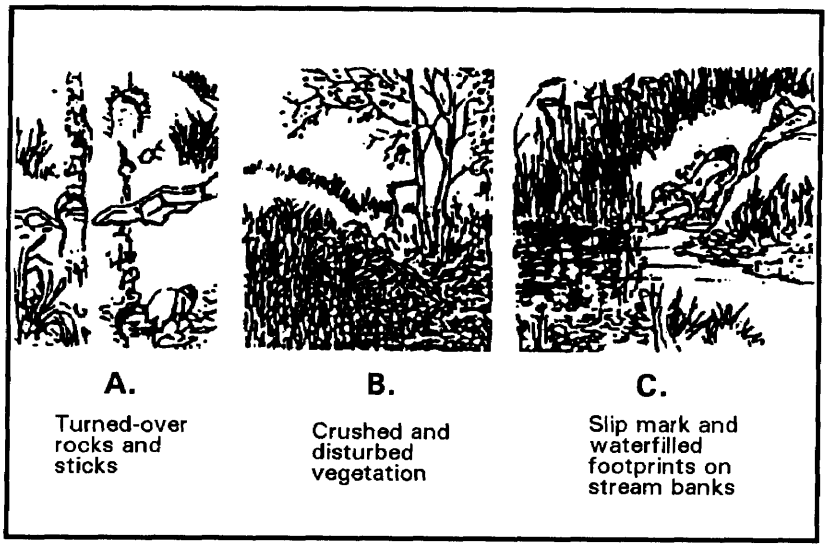


Figure B-28. Signs of displacement.

Footprints. Footprints may indicate the number of persons in the moving element, their direction and rate of movement, the weight of the loads they are carrying, and whether they realize that they are being followed. Figure B-29 illustrates the following conditions:

- Running. If footprints are deep and the pace is long, rapid movement is apparent. Extremely long strides and deep prints, with toes impressed deeper than heels, indicate running.
- Carrying a load. Prints that are deep, short, and widely spaced, with signs of scuffing or shuffling, indicate that the person who left the print is carrying a heavy load.
- Walking backwards. If members of the moving element realize they are being followed, they may try to hide their tracks. Persons walking backwards have a short, irregular stride; the prints have unnaturally deep toe impressions. Soil is displaced in the direction of movement.

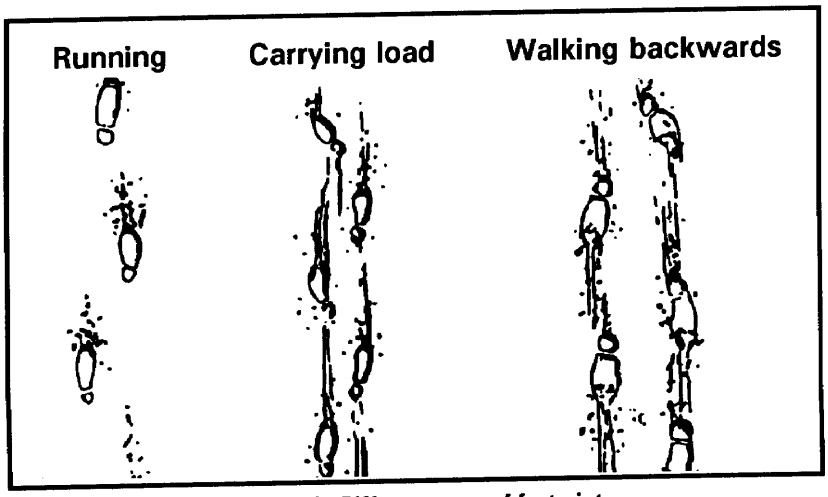


Figure B-29. Different types of footprints.

Key prints. Since the last man in a file or column normally leaves the clearest footprints, his should be the key set of prints. The tracker should cut a stick to match the length of the key prints and notch it to indicate the width at the widest part of the sole. He should study the angle of the key prints to the direction of march. The tracker should also look for an identifying mark or feature on the prints, such as a worn sole or distinctive tread, to help him identify the key prints. If the trail becomes vague, is erased, or merges with another, the tracker can use his stick and knowledge of the unique impression to identify the key prints and stay on the right trail.

Box method. The tracker can use the box method to count the total number of individuals being tracked. There are two ways to employ the box method.

The first and most accurate method is to use the stride as a unit of measure when key prints can be determined. The tracker uses the set of key prints and the edges of the road or trail to box in an area for analysis (see Figure B-30A, page B-52). This method, accurate under the right conditions for counting up to 18 persons, entails the following steps:

- Determine the key print. In this case, the key print is the print left by the lug sole boot. This boot made the last print on the trail, and it is the easiest print to recognize.
- Draw a line across the heel of one of the key prints.

- Move forward to the opposite key print and draw a line across the instep. Add half the length of one print to compensate for individuals with an abnormally long stride.
- Use the edges of the road or trail as the sides of the box and the drawn lines as the front and back. Any person walking normally would have stepped in the box at least one time. Count each print or partial print in the box.
- Remember to count the key print only once.

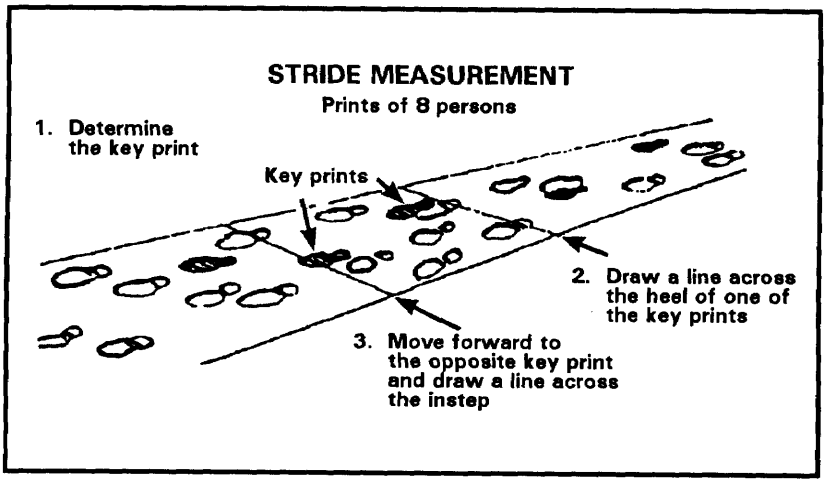


Figure B-30A. Stride measurement box method.

The second version of the box method is the 36-inch box (see Figure B-30B). Used where no key prints are distinguishable, it is not as accurate as the stride measurement method. Follow these steps:

- When no key print can be detected, use the edges of the road or trail as the sides of the box.
- Measure a section of the area 36 inches in length. The M16 rifle, which is 39 inches long, can be used as a measuring device.
- Count each footprint indentation in the box and divide by two.

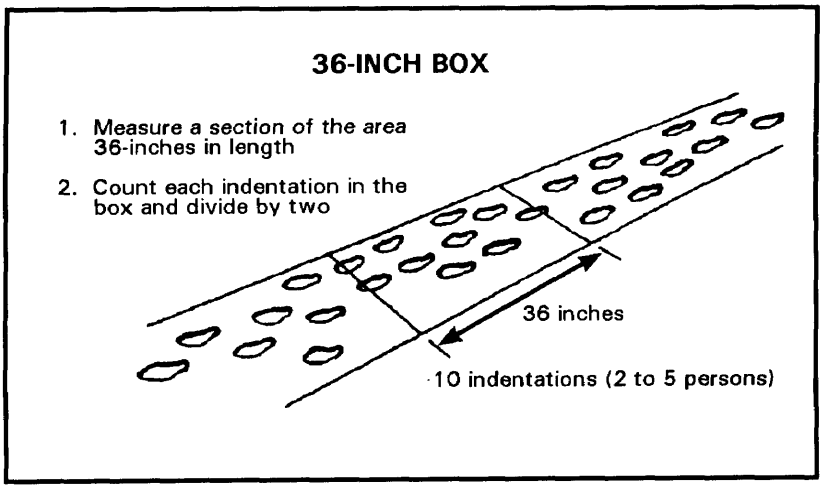


Figure B-30B. 36-inch box method.

Tire or track prints. Knowledge of enemy vehicles and equipment is essential when the patrol is tracking a mounted unit. Tire and track prints will reveal the number and types of vehicles and their direction of travel. Locating a site where dismounting has occurred will give an indication of how many enemy soldiers the patrol and its parent unit may encounter in the area of operations.

Other signs of displacement. Any object that has been moved from its original position by a moving person or vehicle is a sign of displacement. The following are examples of other types of indicators that scouts should be alert for during tracking patrols:

- Foliage, moss, vines, sticks, or rocks that are scuffed or moved from their original location are good indicators. Vines may be dragged, dew droplets displaced from leaves or stones, and sticks turned over to reveal a different color underneath. Grass or other vegetation may be bent or broken in the direction of movement.
- Bits of clothing, uniform threads, or dirt from the boots of the person being tracked can be tom or dislodged and left on thorns, on snags, or on the ground. The tracker should inspect all areas along the patrol route for these indicators.
- A person entering or exiting a stream creates slide marks, foot-prints, or scuff marks where bark is tom off roots or sticks.

Stains. A stain occurs when any substance from one organism or object is smeared or deposited on something else. The best example of a stain is blood from a profusely bleeding wound, either in the form of spatters or drops or as smears on the leaves or twigs of trees and bushes. Staining can also occur when muddy footgear is dragged over grass, stones, and shrubs; roots, stones, and vines may be stained where leaves or berries are crushed by moving feet.

Together with displacement indicators, stains can provide evidence of enemy presence and direction of movement. For example, crushed leaves may stain rocky ground that is too hard for footprints.

NOTE: In some instances, it may be difficult to determine the difference between staining and displacement since both terms can be applied to some of the same types of indicators. As an example, water that has been muddied may indicate recent movement; mud that has been displaced also stains the water.

The tracker can also use stain indicators to determine the time of movement. Water that collects in footprints in swampy ground is muddy if the tracks are recent. With time, the mud settles and the water clears. Normally, this clearing takes about one hour; however, the tracker must know local soil conditions to make an accurate determination.

Weather. Weather can either aid or hinder the tracker. A person or vehicle will leave distinctive indicators depending on the weather, and resulting soil conditions, at the time of movement. The tracker can use his knowledge of local weather to determine the nature of the moving element as well as the time it, moved through the area. On the other hand, wind, snow, rain, or sunlight may completely erase an indicator.

The tracker should study the effects of weather to become adept at determining the age of a particular indicator. For example, when bloodstains are fresh, they are bright red. Air and sunlight change their color, first to a deep ruby red, then to a dark brown crust as moisture evaporates. Scuff marks on trees or bushes darken with time; sap oozes and then hardens after making contact with the air.

Footprints and tire and track prints are especially susceptible to the effects of weather (see Figure B-31). A knowledgeable tracker can analyze the condition of a print to determine its approximate age. If particles are just beginning to fall into the print, the tracker should become a stalker. If the edges of the print

are dried and crusty, the prints are probably at least an hour old. As with stains, the tracker must have a knowledge of local soil conditions to accurately gauge the age of the indicator.

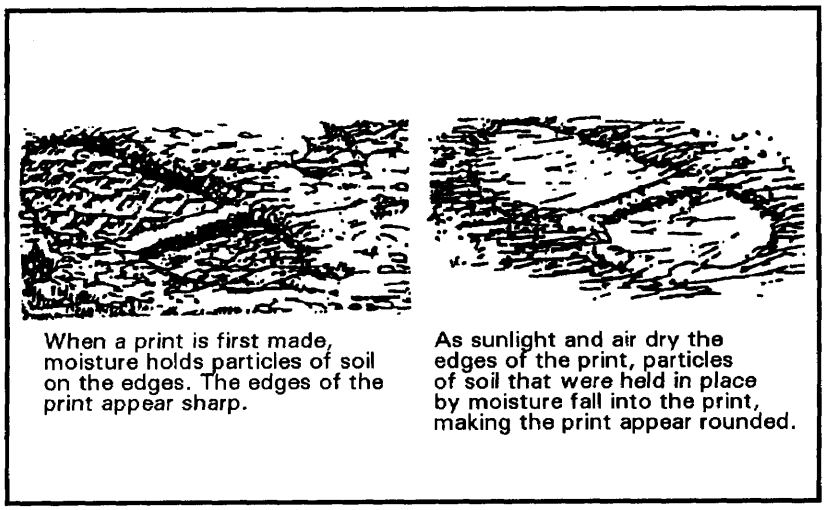


Figure B-31. Weather effects on footprints.

Litter. A poorly trained or poorly disciplined force is likely to leave a clear trail of litter as it moves over a piece of terrain. Gum or candy wrappers, ration cans, cigarette butts, remains of fires, or even piles of human feces are signs of recent movement.

As with other indicators, the tracker calls on his experience and knowledge of local conditions, especially weather, to accurately determine the age of litter. He can use the last rain or strong wind as a milestone for his analysis. Rain flattens or washes away litter and turns paper into pulp. A ration can exposed to weather rusts first at the edge where it is opened; the rust then moves toward the center of the metal surface.

Camouflage. An enemy force is likely to use camouflage techniques to confuse the tracker or slow him down. These measures include walking backwards, brushing out trails, and moving over rocky ground or through streams. By studying the existing signs, however, a careful, observant tracker can determine if an attempt is being made to confuse him. A person who is walking backwards will leave footprints that are abnormally deep at the toe; the soil

around the prints will be scuffed or dragged in the direction of movement. By carefully following these footprints, the tracker can usually find the point where the person turned around and resumed walking normally.

Tracking Techniques

Men, machines, and animals leave signs of their presence as they move through an area. These can be as noticeable as a well-worn path or tracks in the sand or snow or as subtle as an out-of-place odor or sound. All soldiers can read the obvious signs. The challenge for the scout platoon leader is to teach his men to uncover valuable tactical information from signs that are hidden or virtually invisible to the casual observer.

As with almost every other military skill, training and constant practice are the keys to successful tracking. Leaders should focus on the traits that will allow patrol members to track down their quarry using signs they find in the battle area attention to detail, common sense, alertness, logic, and precise knowledge of the environment and enemy habits.

In addition to these intangibles, scouts must learn some specific techniques that will help them execute effective patrols. The following discussion examines these tricks of the tracking trade.

Finding the trail. This is the first task of the tracking team. The team reconnoiters around a known location of enemy activity when the trail cannot be found in the immediate area. There are two ways to hunt for the trail:

- From a known location. If the enemy has been seen in a specific area or location, the tracking team can use this site as a starting point as it moves to locate and follow the enemy's trail.
- Cutting a trail. This occurs when the route of a friendly unit crosses a trail left by another group (see Figure B-32). It can happen by chance, or the tracking team can deliberately choose a route that cuts across one or more probable enemy routes.

If the tracker loses a trail, he stops. The tracking team then retraces its path to the last enemy sign and marks this point. The team studies the sign and the area around it for any clue as to where the enemy went. It looks for signs of the enemy scattering, backtracking, doglegging, or using any other countertracking method. If it still cannot regain the trail, the team establishes security in a spot

that avoids destruction of any sign. The tracker and his assistant look for the trail by "boxing" the area around the last clear sign (see Figure B-33). The tracking team always returns to the same path, away from the last sign, to avoid creating more trails than needed.

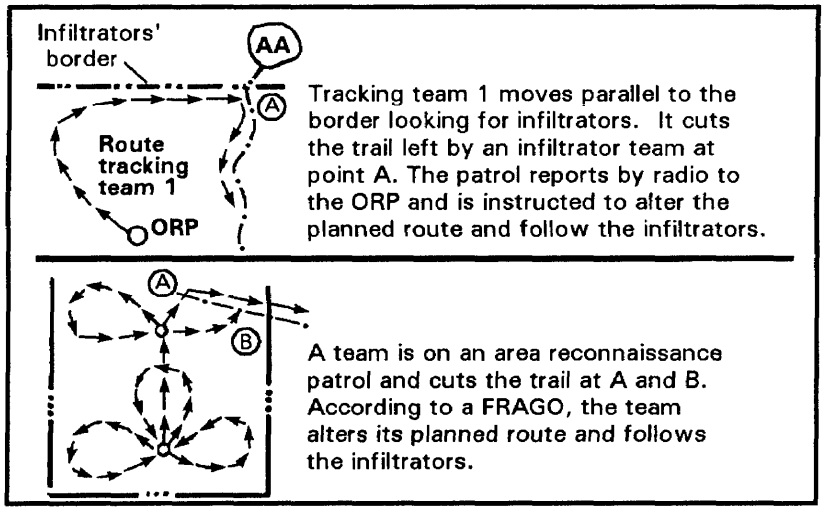


Figure B-32. Cutting enemy trails.

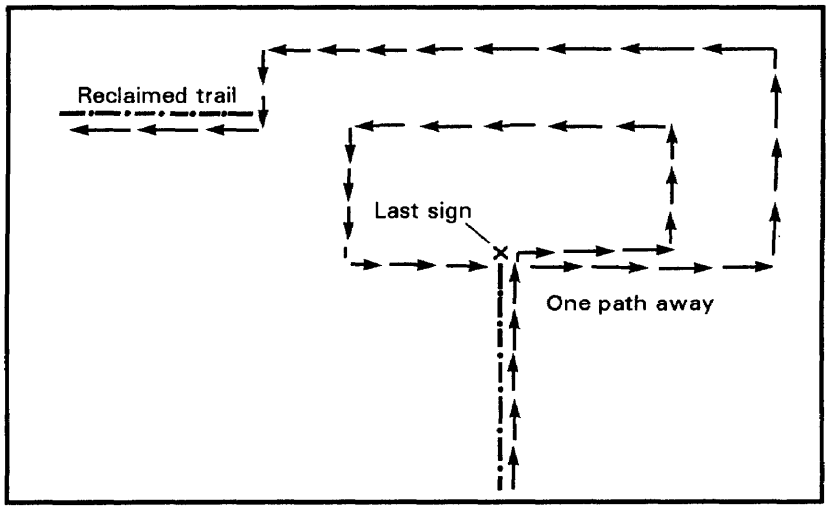


Figure B-33. Boxing technique.

Trail and sign analysis. Once the first sign is discovered, it must not be disturbed or covered. The tracker analyzes it carefully to determine as much as possible about the enemy elements before following them. If the sign is found at the site of enemy activity, the enemy's exact actions can often be reconstructed. If a trail is the first sign found, the tracker can still determine such facts as the size and composition of groups being tracked, their direction, and their general condition. As the patrol continues, so does this process of discovery and analysis; the tracker's knowledge of the enemy grows.

Countertracking techniques. Once the enemy realizes he is being followed, he will try to evade or attack the tracking team. The team must be familiar with common countertracking techniques so it can develop procedures for countering enemy evasion efforts. In addition, the team may have to use countertracking itself to evade an attack. Figure B-34, pages B-59 and B-60, illustrates several countertracking measures.

Multiple patrols. Two or more tracking teams can be used to follow or search for the same enemy unit. The example in the following paragraphs is illustrated in Figure B-35, page B-61.

As Team A tracks the enemy, the team leader calls platoon headquarters (at the ORP) by radio and reports the estimated size, composition, rate of march, and direction of travel of the enemy. The platoon leader directs Team B to follow a route that he believes will cut the enemy's trail.

Team B marks the point at which it cuts the trail (Point A) and begins tracking. The mark is by prearranged signal; it can be a stake driven into the ground, several stacked rocks, or a twist of grass tied up and bent at an angle. Team A continues to follow the trail until it reaches the mark left by Team B. This ensures that the enemy unit is still together and that Team B has found the correct trail. The leader of Team A then requests further orders from the platoon leader.

When Team B confirms the enemy unit's direction, speed, and estimated location, it reports this information to the platoon leader. He directs Team C (which is patrolling in sector) to setup an ambush along the probable enemy avenue of approach.

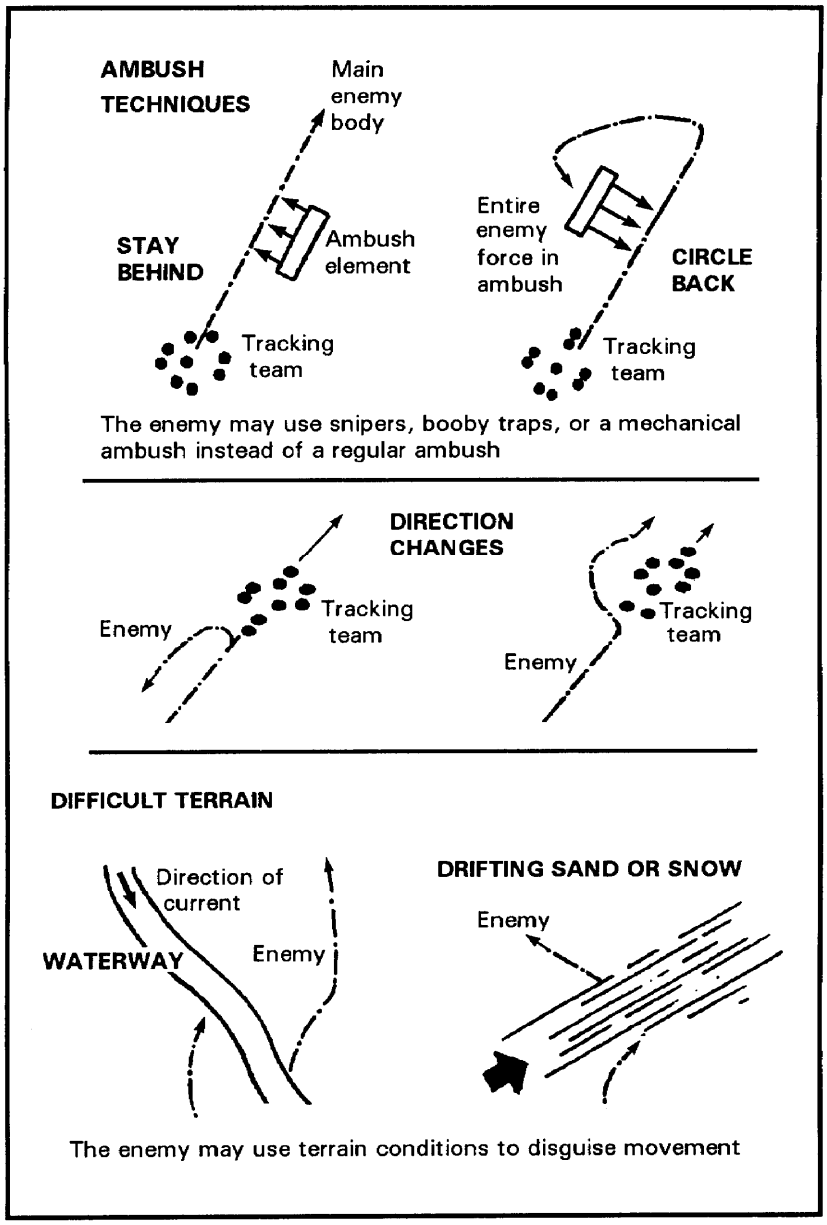
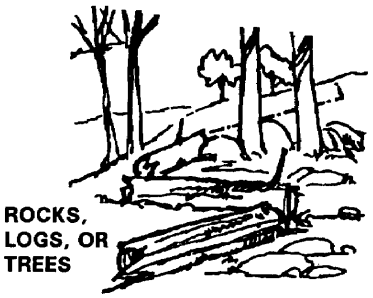
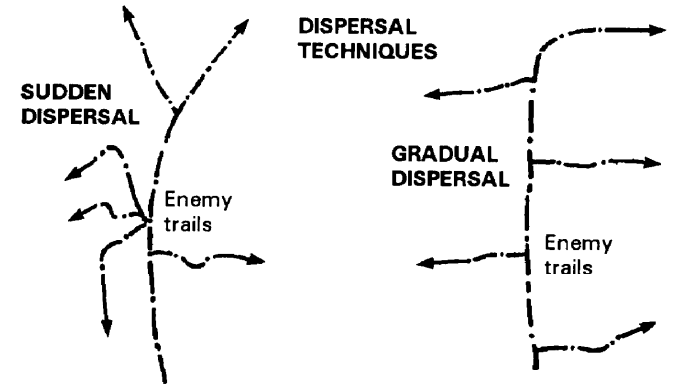


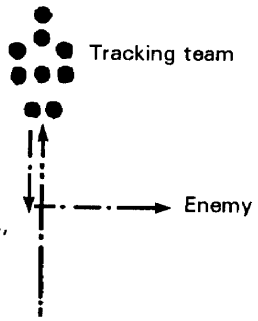
Figure B-34. Countertracking techniques.



ROCKS, LOGS, OR TREES

Countertracking techniques are even more likely to be used over wide areas where deadfall or rocks predominate, such as a rock ledge or a blown-down area in a large forest





BACKTRACKING

In many cases enemy troops will walk backwards, retracing their footsteps before leaving the trail

Figure B-34. Countertracking techniques (continued).

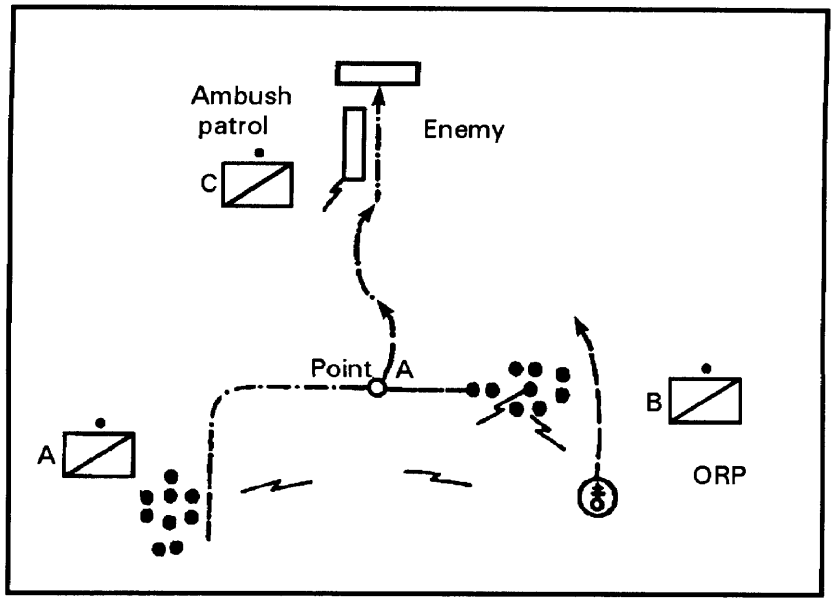


Figure B-35. Multiple tracking teams.

APPENDIX C

ORDERS

The scout platoon leader normally issues instructions to his platoon in the form of the five-paragraph OPORD as discussed in Chapter 2 of this manual. He derives much of the content of that order from the higher order he received during execution of the troop-leading procedures.

When the higher headquarters issues a complete five-paragraph OPORD, breaking down the higher order is fairly straightforward. Commanders, however, do not always have the time to issue a full OPORD; instead, they may have to issue a simplified matrix order. Additionally, in some units, scouts receive their missions from the R&S plan rather than from an OPORD.

Because of these factors, the scout platoon leader must be familiar with the format of matrix orders and R&S plans and be able to convert these into platoon OPORDs. He should always plan to issue a five-paragraph order when time permits. When time is short, he still issues an OPORD, but he does so in an abbreviated FRAGO format.

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SECTION I.	Matrix Orders	C-1
II.	Reconnaissance and Surveillance Plans	C-6
III.	Fragmentary Orders	C-6

Section I. MATRIX ORDERS

Matrix orders, used as an alternative to the standard five-paragraph OPORD, expand on the execution matrix found on many operations overlays. They reduce the time needed to produce the order, thus giving subordinates more time for reconnaissance, preparation, and rehearsal.

There is no standard format for matrix OPORDs. They are normally short, only one or two pages, and include a sketch of the operation. They also include all signal information for a particular day of operations. The entire order can be placed in the corner of a map case for easy reference.

Matrix orders are not stand-alone documents; they are usually issued with standard operations, intelligence, and fire support overlays. They also should be accompanied by an oral discussion of the commander's intent and the scheme of maneuver.

Every unit that uses matrixes, either as part of a five-paragraph OPORD or as a separate matrix order, will have a different format. It is the responsibility of the scout platoon leader to determine if his commander will use matrixes and what format he will use. The scout platoon leader then must convert the information contained in the matrix order into a five-paragraph platoon order. He should not issue matrix orders to the platoon.

Figures C-1 and C-2 illustrate two examples of matrix orders. Figure C-1 is a battalion order. This format is read vertically; the sixth column addresses the organization and requirements of the scout platoon. Figure C-2 is an example of a troop matrix order (see pages C-4 and C-5). It is read horizontally, with each line addressing the requirements of a scout or tank platoon.

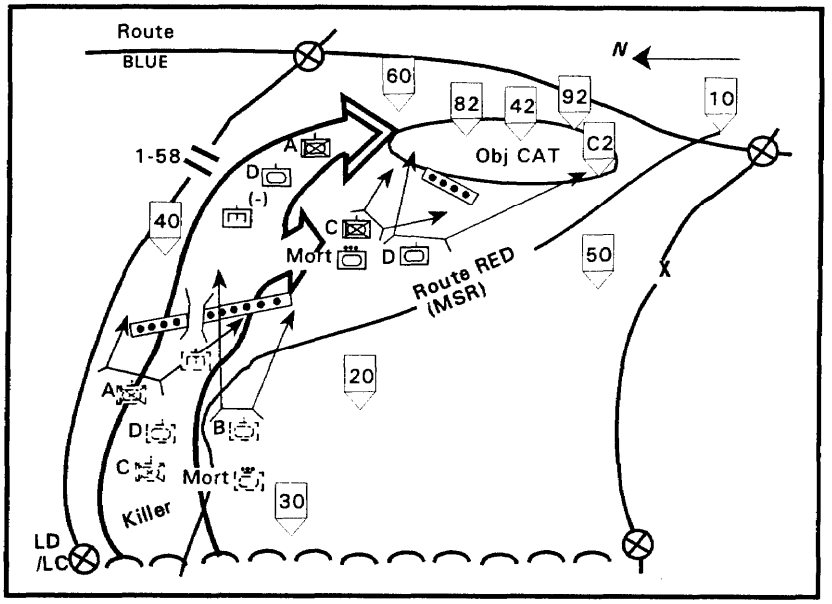
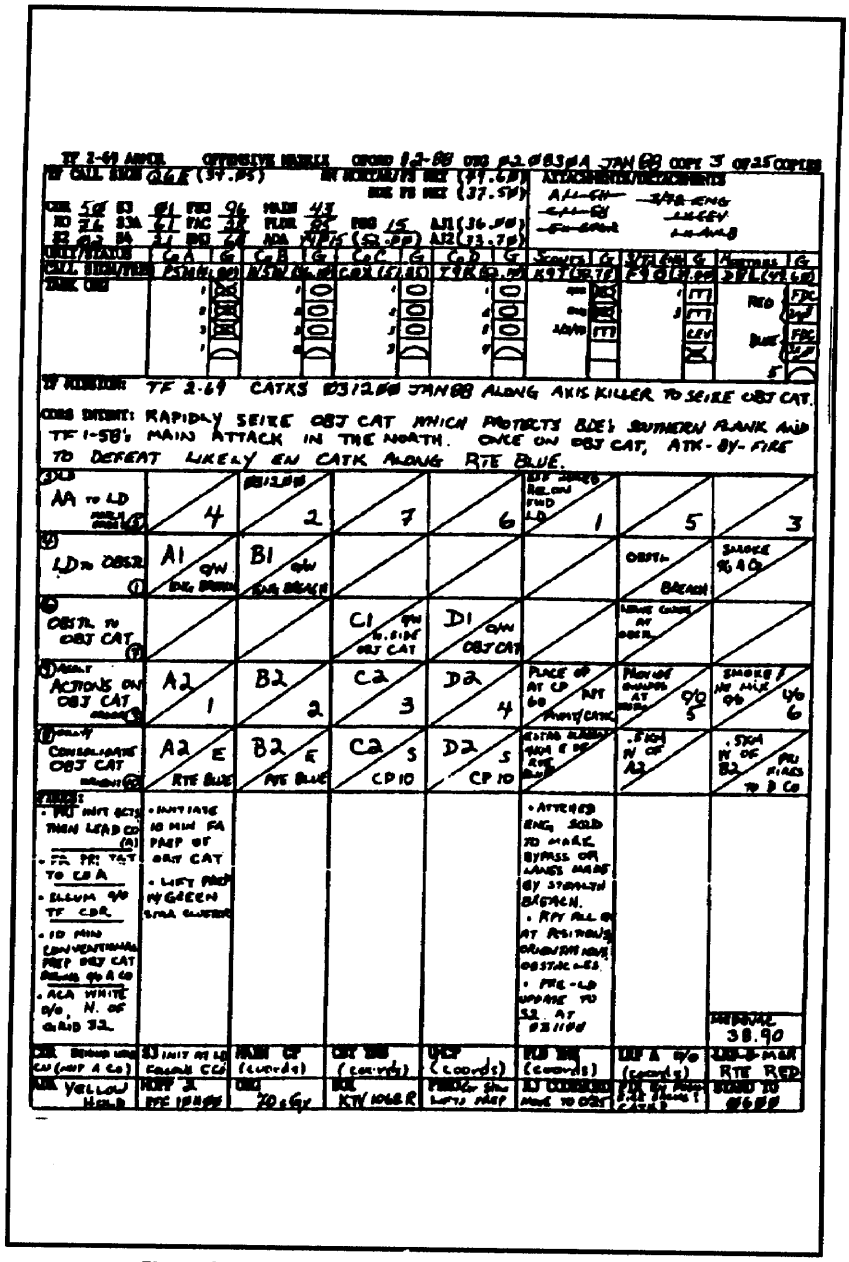


Figure C-1A. Example battalion matrix order.



TF 2-69 ARMOR OFFENSIVE MSN 1 GRID 82-88 DTG 82-0803A JAN 88 COPY 3 OF 25 COPIES

TF CALL SIGN OAK (37.85) BN SCHWARTZ NET (37.65) BDE TF NET (37.50)

ATTACHMENTS/DETACHMENTS: A/1-64 — 2/8 ENG — C/1-68 — LIKELY — E/2-69 — LEAVE B

CDR 5/E E3 6A 7 FSO 96 MAJOR 4/E
XO 7A S3A 67 FAC 32 FLOT 85 RHO 15 AA1 (36.50)
S2 6A S4 37 BDE 64 ADA NIKE (50.00) AA2 (33.75)

UNIT/ATCHMTS	C A	G	C B	G	C C	G	C D	G	Scouts	G	VEH CAV	G	Engineers	G
CALL SIGN/FREQ	PANIC (60)		MOTOR (46.80)		CROSS (51.60)		TRUCK (53.70)		KEY (38.70)		FOX (40.00)		2/8 (41.60)	
SIGNAL CMD	1 2 3 4		1 2 3 4		1 2 3 4		1 2 3 4		one two three		1 2 3		RED BLUE	FRC FRC MSN MSN E

TF MISSION: TF 2-69 CATKS 031200 JAN 88 ALONG AXIS KILLER TO SEIZE OBJ CAT.

CDR'S INTENT: RAPIDLY SEIZE OBJ CAT WHICH PROTECTS BDE'S SOUTHERN FLANK AND TF 1-58'S MAIN ATTACK IN THE NORTH. ONCE ON OBJ CAT, ATK-BY-FIRE TO DEFEAT LIKELY EN CATK ALONG RTE BLUE.

AA TO LD	4	2	7	6	1	5	3
LD TO OBSTACLE	A1 C/W ENG BREACH	B1 C/W ENG BREACH				OBSTACLE BREACH	SMOKE 90 & 60
OBSTACLE TO OBJ CAT			C1 C/W N. SIDE OBJ CAT	D1 C/W OBJ CAT			
ACTIONS ON OBJ CAT	A2 1	B2 2	C2 3	D2 4	PLACE GP AT CP 60	PLACE GP AT OBSTACLE 90	SMOKE 1 KM MILE 90 6
CONSOLIDATE OBJ CAT	A2 E RTE BLUE	B2 E RTE BLUE	C2 S CP 10	D2 S CP 10			

- PREP UNIT SOPS THAN LEAD CO (A)
- FA PREP TO LD A
- ILLUM 90 TF CDR
- 10 MIN CONVENTIONAL PREP OBJ CAT
- ACA WHITE 90, N. OF GRID 32

- INITIATE 10 MIN FA PREP OF OBJ CAT
- LIFT FIRE W/GREEN STAR CLUSTER

- ATTACHED ENG SQD TO MAKE BYPASS OR LANES MARK BY STEALTH BREACH.
- PREP ALL OBSTACLES.
- PRE-LD UPDATE TO S2 AT 031100

RELEASE 38.90

CDR (Report when CAT (NOT A CO))	INIT RP LD Change CCIR	MAIN CP (coords)	CAT CP (coords)	UCP (coords)	FOB (coords)	LDP A 90 (coords)	CDR-S MAIN RTE RED
ALT YELLOW Hold	MOVE TO RTE [illegible]	CHG 70 & 6X	BDE KW 1068 R	PHASE LINES MAP	LD CONTROL MSR TO OBJ	FSE TO [illegible]	BOUND TO 0600

Figure C-1B. Example battalion matrix order (continued).

OPORD 4-3A

CLASSIFICATION _____ DTG _____

TASK ORGANIZATION: [A] [A/T] [C] [MTR] [ ] [ ] [ ] [ ] [ ]

SITUATION:
ENEMY (STRENGTHS, WEAKNESSES, SIGNIFICANT ACTIVITY, EQUIPMENT)
ENEMY HAS WITHDRAWN TO DEFEND NC BRANDENBURG STATION (7502), ELEMENTS OF 4 MRD IN HASTY DEFENSE TRANS. TO DELIBERATE. 65% STRNGT. BMP2 / T72 EQUIP.

FRIENDLY (LEFT, RIGHT, FRONT, REAR): 2-14 CAV CONDUCTS RECON SADDLE TO BIT. A TROOP (LEFT) ZONE RECON, A/1-72 AR (RIGHT) MVMT TO CONTACT

TERRAIN AND WEATHER:

ILLUM: DUST: GUST:

MISSION: B TROOP CONDUCTS A ZONE RECON AT 2130 FROM PL SADDLE TO PL BIT TO SECURE A LD FOR 1 BDE 52 ID

COMMANDER'S INTENT: TO ENSURE TRAFFICABILITY OF AXIS IN SECTOR, AND IDENTIFY ANY ENEMY WHICH MIGHT HINDER 1 BDE MVMT TO PL BIT MUST BE SET OF BIT NLT 0500.

EVENT / UNIT	AA TO PL SADDLE	SADDLE TO SPUR	SPUR TO BRIDLE	BRIDLE TO BIT			
CO/TM/XO/FIST	MACCH SET LD	ZONE RECON	ZONE RECON	ZONE RECON % SCREEN BF	B/P CONT RECON N.		
1 PLATOON	1 SPD 180 SET SADDLE	ZONE RECON HASTY AT RECON BLUE	RECON ZONE TO RED CP F	RECON % SCREEN	B/P CONT. RECON N.		
2 PLATOON	2 SET SADDLE	ZONE RECON C PL	RECON ZONE CP J	RECON % SCREEN	"		
3 PLATOON	4 SET SWING	ZONE RECON HASTY AT RECON BLUE	ROAD RECON RT BLUE	RECON % SCREEN	"		
MTR	3 MVMT LOC 885907	OCC L	OCC J		DISPLACE UNDER FIST CONTROL		
XO / TOC	6 MVMT LOC 872910				DISPLACE UNDER XO CONTROL	B/P TO COORD FWD PMV. 1 BDE	
MEDIC CBT TMS / UNIT	5 MVMT LOC 880907	RECON 881925	AV SUB LOC 881925				

PRIORITY 1, 2, 3	PRIORITY TGT(S) CO, TRP, BMP, M1IL	FIRES: 2/72 FA DS-SOSM	TARGET	LOCATION	DESCRIPTION	TRIGGER	RESPONSIBILITY
			AB0001	TBA	PREPLANNED	*	1 PLT
			" 2				1 PLT
			" 3				2 PLT
			" 4				2 PLT
TGT NONE	CAS NEEDS		" 5				3 PLT
			" 6	"	"		3 PLT

TURN IN PLT TARGETS PRIOR TO 2000 TO FIST (2 ea)

Figure C-2A. Example troop matrix order.

CLASSIFICATION

OBSTACLES: 4/A	TYPE	LOCATION	RESPONSIBILITY
PRIORITY OF SUPPORT: MOB, C-MOB, SURV / PRIORITY OF EFFORT: ATACD, BLUE			

SPECIFIC INSTRUCTIONS: NONE

COORDINATING INSTRUCTIONS: (MARCH INST, REPORTS, FORMATIONS)
RENDEZVOUS CONTROL MEASURES
FA/TA: LOC OF ENEMY RECON

RES: NONE
ADA: MARK: RED STAT: HOLD
WDPP: TIME: 0

ACTIONS ON CONTACT: (PHYSICAL, VISUAL, INDIRECT, AERIAL, NBC)
DESTROY ALL RECON ELEMENTS SIZE 2 SMALLER
UTILIZE INDIRECT FIRE AS PR

DLC 1
50 c Gy

COMBAT SERVICE SUPPORT:

BN CBT TRAIN LOCATION: 88595	DECON LOCATIONS: TBA	RESUPPLY: TIME: / LOCATION: SOP / METHOD: / RATION CYCLE: C-A-C	BASIC LOAD REQUIREMENTS: CL III PACKAGE: / CL V (PRE-STOCK): SOP / CL IV:	REPAIR PRIORITY: C², MB, M1B6 / RESUPPLY PRIORITY: II, III, IV, I
CASEG LOCATION: 80275		MSR: RT AED	EMERGENCY RESUPPLY: N/A	

MEDICAL EVAC PLAN: (AXP, FAS, BAS, MODE OF TRANSPORT, WIA, KIA)

CPH PLAN: HOLD TO A BIT → ISG → CBT TNS (TRP) → SQDN TNS

COMMAND AND SIGNAL:

COA WITH:	XO WITH:	CHAIN OF CMD:	TF CDR:	TF TOC:	SOI

(CODE WORDS)
AJ: HIGHWIRE FREQ:
CHALLENGE:
PASSWORD:

FA CALL SIGN: BLK 1 / FREQ:	MORTAR CALL SIGN: BLK 2 / FREQ:	MEDEVAC CALL SIGN: 4 MIKE / FREQ: 7060	SIGNALS: EMERGENCY SIGNALS: Nov-Smk-FM/REINFAR

REVERSE PLANNING SCHEDULE:
TRP ORDER 1830
SP 2100
LD 2130

TIME NOW:

OPERATION SKETCH / NOTES

Figure C-2B. Example troop matrix order (continued).

Section II. RECONNAISSANCE AND SURVEILLANCE PLANS

In the battalion task force, reconnaissance or surveillance operations must often be accomplished before the battalion order is issued. The reconnaissance effort of the scout platoon becomes an integral part of the battalion orders process. As early as possible, the battalion S2 and S3 will issue the R&S tasks of the battalion in the form of an R&S plan. This plan then becomes the basis of the scout platoon leader's OPORD.

The R&S plan is not a complete document for the scout platoon leader's purposes, but it does contain the key elements necessary for him to begin his planning. The scout platoon leader should still get oral guidance from both the commander and the S3 as well as coordinate with other key staff officers as discussed in Chapter 2.

There are two components to the R&S plan: the R&S tasking order and the R&S overlay. The scout platoon leader usually receives the tasking order orally with a copy of a tasking matrix. At the same time, he receives his copy of the R&S overlay. The tasking matrix simply states the specific R&S requirements of the scout platoon and other R&S assets (see Figure C-3). The R&S overlay, the key to successful execution of the plan, has two components. The graphic display illustrates critical target areas and shows exactly where the R&S assets should be deployed. Included in the marginal data the second part of the overlay, are the legend, administrative data, specific unit instructions, and the distribution list (see Figure C-4, page C-8).

Section III. FRAGMENTARY ORDERS

The FRAGO is a brief oral or written order. It serves any of the following purposes:

- It implements timely changes to existing orders.
- It provides pertinent extracts from more detailed orders.
- It provides instructions as a detailed order is developed.
- It provides specific instructions to subordinates who do not require a complete order.

There is no specific format for a FRAGO, but it normally contains these elements:

- Changes to task organization.
- Situation.
- Concept.
- Fire support.
- Coordinating instructions.

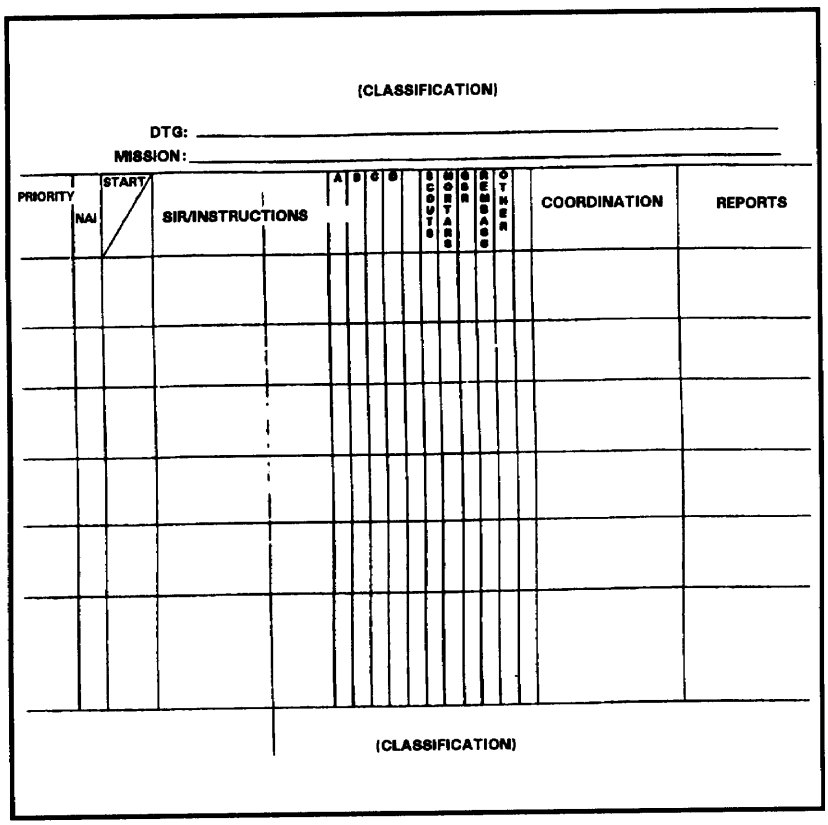


Figure C-3. R&S tasking matrix.

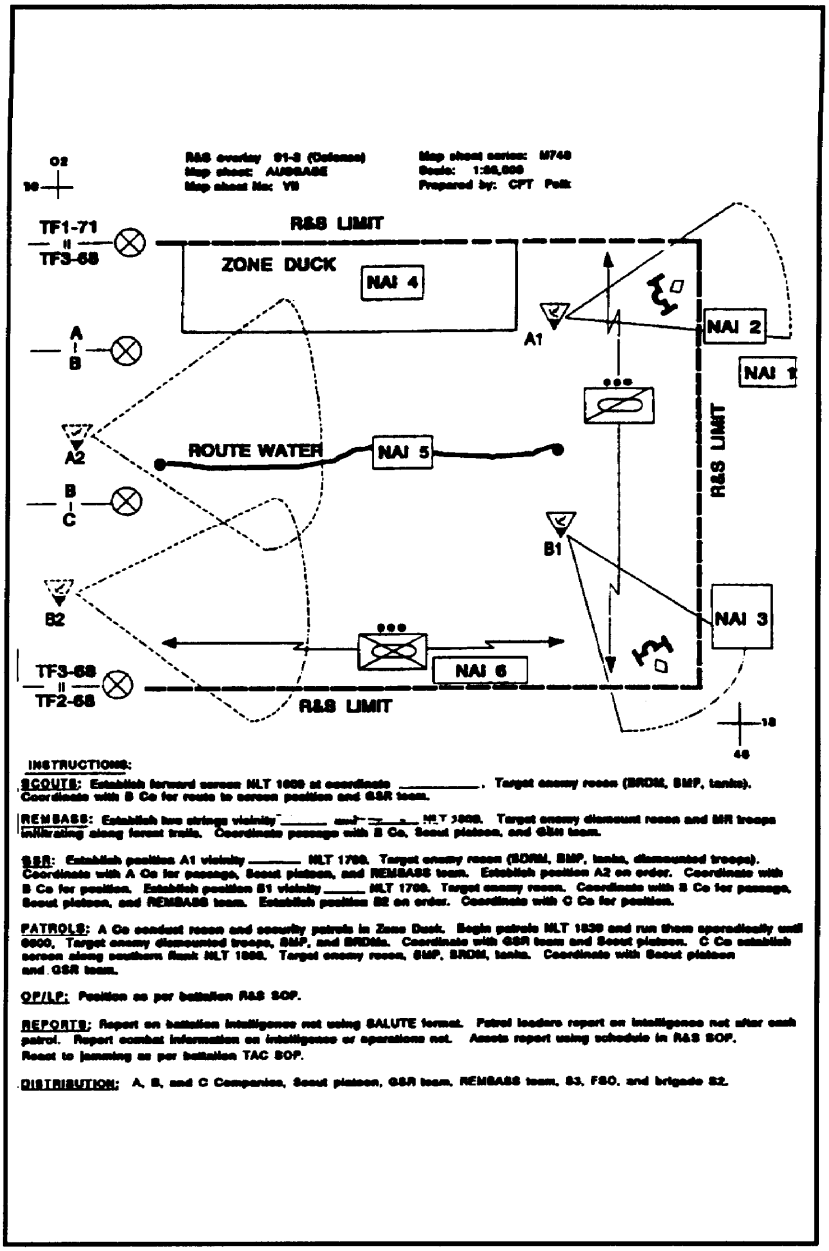


Figure C-4. R&S overlay with marginal data.

MISSION ORDERS

Mission orders are a type of FRAGO that a platoon leader uses when the situation requires a rapid change of mission and immediate maneuver. They contain a task and the purpose of the task. The task tells the subordinate what he is to do. The platoon leader tells his scouts the purpose of the task so they can use their initiative to take all necessary actions to ensure mission success.

The following is an example of a mission order sent over a secure platoon net:

> "TEAM A ESTABLISHES AN OP VICINITY OF CHECK-POINT 7A TO OBSERVE ALL ENEMY MOVEMENT ALONG AVENUE OF APPROACH TWO."

SADDLE ORDERS

Saddle orders are issued face-to-face by the commander or leader when visiting or accompanying subordinates. Ideally, they are issued from a position that overlooks the terrain on which the operation will take place. The saddle order is normally the preferred type of FRAGO because the platoon leader can see the area of operations.

The following is an example of a saddle-type FRAGO given by a platoon leader to a team leader:

> "I WANT YOU TO ORGANIZE A RECON PATROL—MOVE FORWARD ALONG THE LOW GROUND BY THE CREEK TO RECON THOSE TWO HILLTOPS AND THE DEAD SPACE BEYOND THEM-TROOP MORTARS ARE IN SUPPORT, AND YOU HAVE PRIORITY OF FIRE IF YOU MAKE CONTACT."

APPENDIX D

SCOUT PLATOON SOP

The following outline is based on the scout platoon SOP detailed in FKSM 17-98-3. Combined with the relevant higher headquarters SOP and specifics of the scout platoon's situation, it is a guide that each platoon leader can use to develop a thorough working SOP. FKSM 17-98-3 contains additional details.

I. GENERAL.

This section includes statements covering the pupose, scope, and distribution of the SOP.

II. COMMAND AND CONTROL.

a. Organization.

(1) The CFV scout platoon maybe organized into a 2-team, 3-team, or 6-vehicle organization based on the factors of METT-T.

(2) The HMMWV scout platoon maybe organized into a 2-team, 3-team, 4-team, or 8-squad organization based on METT-T factors.

b. Succession of Command.

(1) In the CFV scout platoon, the succession is as follows: platoon leader, PSG, A team leader, B team leader.

(2) In the HMMWV scout platoon, the succession is as follows: platoon leader, PSG, A team leader, B team leader, C team leader, D team leader.

c. Troop-Leading Procedures.

(1) Receive and analyze the mission.

(2) Issue the warning order.

(3) Make a tentative plan.

(4) Initiate movement.

(5) Conduct reconnaissance.

(6) Complete the plan.

(7) Issue the order.

(8) Supervise and refine.

d. Orders.

(1) The orders group consists of the following: PSG, team leaders, gunners from platoon leader's and PSG's vehicle, squad leaders, and all attached section leaders.

(2) Warning order.

(3) Operation order. The OPORD is issued in the five-paragraph format (see Figure D-l).

(4) Fragmentary order.

1. SITUATION.
   a. Enemy forces.
   b. Friendly forces.
   c. Attachments and detachments.
2. MISSION. This paragraph contains the elements of WHO, WHAT, WHEN, WHERE, and WHY.
3. EXECUTION.
   a. Concept of the operation.
      (1) Maneuver.
      (2) Fires.
      (3) Engineers.
      (4) Other operational functions.
   b. Tasks to teams.
      (1) Deliberate dismounted patrols.
      (2) Search and EPW teams.
      (3) NBC teams.
      (4) Obstacle reconnaissance and/or breaching teams.
      (5) Route evaluation teams.

Figure D-1. Five-paragraph OPORD format.

4. SERVICE SUPPORT.
    a. General. Organization, location, and movement of trains.
    b. Materials and services.
        (1) Supply. Classes I, II, III, IV, and V and LOGPAC instructions.
        (2) Transportation, including main supply route (MSR).
        (3) Services (if available).
        (4) Maintenance.
    c. MEDEVAC and hospitalization.
    d. Personnel, including EPWs.
    e. Miscellaneous.
5. COMMAND AND SIGNAL.
    a. Command.
    b. Signal.

Figure D-1. Five-paragraph OPORD format (continued).

e. Communications.

f. Terrain Index Reference System.

g. Security Readiness Conditions. REDCONs are the following:

(1) REDCON-1 (full alert).
(2) REDCON-2 (full alert/engines off).
(4) REDCON-3 (reduced security).
(5) REDCON-4 (preparation phase/minimum security).

h. Attachments and Detachments.

III. TACTICAL OPERATIONS.

a. Precombat Operations.

(1) To ensure combat readiness, conduct precombat inspections of soldiers and equipment in accordance with unit SOP.

(2) Back-brief key leaders and soldiers.

(3) Conduct rehearsals.

(4) Conduct necessary training on mission-critical tasks.

(5) Conduct LOGPAC operations.

(6) Refine the plan as required.

(7) Develop and rehearse contingencies.

(8) Conduct necessary coordination with adjacent, higher, attached, OPCON, and supporting units.

(9) Execute specified REDCON levels at specific times to maintain security.

(10) Report unit readiness to conduct the mission.

b. Quartering Parties.

(1) Personnel.

(2) Equipment.

(3) Duties.

(4) Nighttime occupation.

c. Assembly Areas.

d. Tactical Road Marches.

e. Reconnaissance Missions. Fundamentals of reconnaissance include **the following:**

(1) Maximum reconnaissance forward.

(2) Orient on the reconnaissance objective.

(3) Report all information rapidly and accurately.

(4) Retain freedom to maneuver.

(5) Gain and maintain enemy contact.

(6) Develop the situation rapidly.

f. Screen Missions. Fundamentals of the screen mission are the following:

(a) Orient on the main body.

(b) Perform continuous reconnaissance.

(c) Provide early and accurate warning.

(d) Provide reaction time and maneuver space.

(e) Maintain enemy contact,

g. Fire Support.

h. Air Defense.

(1) Report enemy air activity.

(2) warnings:

(a) White (attack not probable).

(b) Yellow (attack probable).

(c) Red (attack imminent or in progress).

(3) Weapon control status levels:

(a) Weapons free.

(b) Weapons tight.

(c) Weapons hold.

i. NBC Operations.

(1) Chemical detection teams are equipped with the following:

(a) MS or M8A1 alarm.

(b) M229 refill kit or M273 maintenance kit.

(c) A minimum of 400 feet of WD-1/TT.

(d) One BA-3517 battery and four BA-3030 batteries.

(e) M256/M256A1 chemical agent detector kit with minimum of six sampler detectors.

(f) M8/M9 detector paper.

(2) Radiological survey/monitoring teams are equipped with the following:

(a) IM-93 dosimeters.

(b) IM- 174 radiacmeter.

(c) Watch.

j. Passage of Lines.

(1) Unit commanders or their designated representatives meet at the coordination point to exchange and coordinate pertinent information.

(2) The platoon will use the traveling technique during the passage, normally in column.

k. Limited Visibility Operations.

(1) Leaders make sure adequate security is provided to the front and flanks.

(2) Night vision devices and thermal imagery are helpful during limited visibility.

ANNEX A
ALARMS

1. AIR ATTACK.
2. CHEMICAL.
3. NUCLEAR (RADIATION ONLY).
4. ALL CLEAR.
5. ENEMY CONTACT (GROUND).

ANNEX B
PRECOMBAT CHECKLIST

1. INDIVIDUAL PREPARATIONS.
   a. Uniforms and equipment.
   b. “A” alert bag.
   c. Tanker’s roll.
   d. “B” alert bag.
   e. “C” alert bag.
   f. Individual knowledge.
   g. Leader’s packet.

2. VEHICLE PREPARATIONS.
   a. General.
   b. Automotive.
   c. Armament.

3. COMMUNICATIONS EQUIPMENT.
   a. Radios.
   b. Other equipment.

4. NBC EQUIPMENT.
   a. Serviceable M11 decontamination apparatus.
   b. Hasty decontamination kit.
   c. M8A1 chemical agent alarm.
   d. M256 chemical detection kit.
   e. Contamination marking sets.
   f. IM-93 or IM-147 dosimeters.
   g. P-1578A or PP-1578/PD radiac chargers.
   h. IM-174 radiacmeter.

i. AN/PDR-27 or A/VDR-2 radiac set.

j. CAMS.

5. ANCILLARY EQUIPMENT.

6. CLASS V.

ANNEX C
REPORTS

1. BLUE REPORTS (OPERATIONS).

a. Blue 1- Spot Report (SPOTREP).

b. Blue 2- Situation Report (SITREP).

c. Blue 4- Report for Bridge, Overpass, Culvert, Underpass, or Tunnel (BRIDGEREP).

d. Blue 5- Report for Ford, Ferry, or Other Crossing Site (CROSSREP).

e. Blue 7- Route Reconnaissance Report (ROUTEREP).

f. Blue 9- Obstacle Report.

g. Blue 10- Bypass Report.

h. Blue 11- Stand-to Report (STANREP).

2. GREEN REPORTS (INTELLIGENCE).

a. Green 2- Sensitive Items Report (SENSEREP).

b. Green 3- Splash Report.

c. Green 4- Patrol Report.

d. Green 5- Meaconing, Intrusion, Jamming, and Interference (MIJI) Report.

e. Green 6- EPW/Captured Material Report.

3. YELLOW REPORTS (LOGISTICS).

a. Yellow 1- Equipment Status Report (ESTAT).

b. Yellow 1A - Battle Loss Spot Report.

c. Yellow 2- Ammunition Status Report.

d. Yellow 2A - Ammunition Request.

e. Yellow 3- POL Status Report.

f. Yellow 3A - POL Request.

4. RED REPORTS (PERSONNEL).

a. Red 2- Personnel Battle Loss Report.

b. Red 3- Medical Evacuation Request.

5. NBC REPORTS.

a. NBC-1 - Observer's Initial Report.

b. NBC-3 - Immediate Warning of Expected Contamination.

c. NBC-4 - Report of Radiation Dose-Rate Measurement.

d. NBC-5 - Report of Areas of Contamination.

ANNEX D
OPERATIONAL TERMS

This annex lists and defines operational terms that can be used to shorten the length of radio transmissions. It also covers the use of spares (preplanned words or symbols that can be used as "shorthand" to further reduce message traffic) and warning codes.

ANNEX E
CONTINGENCY PLANS

1. FIVE-POINT CONTINGENCY PLAN.
    a. Personnel whom the leader will take with him.
    b. How long the leader will be gone.
    c. What to do if the leader fails to return.
    d. What to do if the leader makes enemy contact.
    e. What to do if the second in command or another element makes enemy contact.
2. LOSS OF COMMUNICATIONS.
3. DESTRUCTION OF MATERIAL.
4. HANDLING OF DECEASED PERSONNEL.

ANNEX F
COORDINATION CHECKLISTS

1. CHECKLIST 1- COORDINATION WITH ADJACENT UNITS.
2. CHECKLIST 2- ENGINEER TARGET TURNOVER MST.
3. CHECKLIST 3- RELIEF IN PLACE.
4. CHECKLIST 4- ARMY AVIATION.

ANNEX G
PATROL DEBRIEFING

1. GENERAL.
2. TYPE OF UNIT.
3. SIZE.
4. ORGANIZATION.

5. MISSION.
6. TIME OF DEPARTURE.
7. TIME OF RETURN.
8. ROUTES (out and back).
9. TERRAIN.
10. ENEMY.
11. MAP CORRECTIONS.
12. MISCELLANEOUS INFORMATION.
13. RESULTS OF ENCOUNTERS WITH ENEMY (such as EPWs, KIAs, or captured documents and material).
14. PERSONNEL STATUS.
15. CONCLUSIONS/COMMENDATIONS.
16. INTERROGATOR REMARKS.
17. DISTRIBUTION.
18. CLASSIFICATION.
19. INSTRUCTIONS.
20. METHOD OF TRANSMISSION.

APPENDIX E

OPERATIONS OTHER THAN WAR

The scout platoon of a armor battalion or cavalry organization has unique capabilities that make it an important asset to Army units executing missions in support of operations other than war. The scout platoon may be called upon to perform a variety of missions in a wide range of political, military, and geographical environments and in both combat and noncombat situations (see Figure E-1, page E-2). These operations will be decentralized and can require the scout platoon leader to make immediate decisions that may have strategic or operational consequences. The distinction between these roles and situations will not always be clear, presenting unique challenges for the scout platoon.

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II.	The Scout Platoon in Operations Other Than War	E-9
III.	Light/Heavy Operations	E-30

SECTION I. GENERAL

Operations other than war entail political and military confrontations between contending states or groups, frequently involving protracted struggles of competing principles and ideologies. In the scope of military operations, operations other than war are those that occur in the peacetime and conflict environments. They range from subversion to the overt use of armed force, and they may be waged by a combination of political, economic, informational, and military elements. Operations other than war can occur at anytime and can have global and regional security implications for US national objectives.

STATES OF THE OPERATIONAL ENVIRONMENT	GOALS	MILITARY OPERATIONS	MISSIONS	RECENT OPERATIONS
WAR	Fight and win	WAR	• Large-scale combat operations • Attack • Defend	DESERT STORM
CONFLICT	Deter war and resolve conflict	OTHER THAN WAR	• Strikes and raids • Peace enforcement • Support to insurgency • Antiterrorism • Peacekeeping • NEO	RESTORE HOPE
PEACETIME	Promote peace	OTHER THAN WAR	• Counterdrug • Disaster relief • Civil support • Peace building • Nation-building assistance	HURRICANE ANDREW

Figure E-1. Range of military operations.

THE RANGE OF MILITARY OPERATIONS

Operations other than war will take place in the peacetime and conflict environments in the range of military operations.

Peacetime

In peacetime, a variety of measures are employed to achieve national objectives; these include political, economic, and informational measures, as well as military actions short of combat operations or active support of warring parties. Within this environment. US forces may conduct training exercises to demonstrate national resolve; conduct peacekeeping operations; participate in nation-building activities; conduct disaster relief and humanitarian assistance; provide security assistance to friends and allies; or execute shows of force. Confrontations and tensions may escalate during peacetime to reach a point of transition into a state of conflict.

Conflict

Conflict can encompass numerous types of situations including the following: clashes or crises over boundary disputes and land and water territorial claims; situations in which opposing political factions engage in military actions to gain control of political leadership within a nation; and armed clashes between nations or between organized parties within a nation to achieve limited political or military objectives.

While regular military forces are sometimes involved, the use of irregular forces frequently predominates in conflict actions. Conflict is often protracted, confined to a restricted geographic area, and limited in weaponry and level of violence. In this state, military response to a threat is exercised indirectly, usually in support of other elements of national power; limited objectives may be achieved by the short, focused, and direct application of military force. Conflict approaches the threshold of a state of war as the number of nations and/or troops, the frequency of battles, and the level of violence increase over an extended time.

Military operations involving scout platoons occur most often in the state of conflict. These may include standard security and reconnaissance missions in support of offensive and defensive operations. The scout platoon can also assist in a variety of operations other than war, such as populace and movement control (checkpoints and roadblocks), the handling of EPWs or refugees, or EPW exchanges.

MILITARY ROLES IN OPERATIONS OTHER THAN WAR

Military forces can be used in a variety of roles in support of operations other than war.

Insurgency/Counterinsurgency

These operations cover assistance the US may provide to a friendly nation or group combating or prosecuting an insurgency. Scout platoons will normally operate as part of their battalion or troop. Armored units are called on when a situation requires their armor-specific capabilities.

Combating Terrorism

Combating terrorism has two parts: counterterrorism and antiterrorism. In special situations, armored forces can be employed during offensive operations in a counterterrorism role. Scout platoons will operate as part of their battalion or troop, probably conducting a demonstration or diversion. Other high-frequency missions are convoy escort and area security. Antiterrorism operations include the defensive actions that every leader and soldier must practice to avoid falling victim to terrorist activities.

Peacekeeping Operations

These are military operations conducted with the consent of the belligerent parties to prevent, contain, moderate, or terminate hostilities between or within states; they entail peaceful third-party intervention organized and directed internationally, using multinational forces of soldiers, police, and civilians to maintain peace and facilitate diplomatic resolutions of conflicts. US forces may participate in peacekeeping operations unilaterally, as a member of an international organization, or in cooperation with involved countries.

Common missions in peacekeeping operations include cease-fire supervision, observation, and reporting; EPW exchanges; demilitarization; and demobilization. Peacekeeping as part of a cease-fire, demilitarization, or demobilization may require armor support. Area security operations are also common.

Although peacekeeping is intended to be a peaceful operation, peacekeeping operations often require military forces to deal with situations of extreme tension, possible acts of sabotage, or minor military conflicts involving known or unknown belligerents. Consequently, peacekeeping operations can quickly evolve into peace enforcement operations.

Peace Enforcement Operations

Some situations may require deployment of US military forces to maintain or restore international peace and security. These operations are often labeled peacekeeping, but are better described as peace enforcement. They differ significantly in execution from peacekeeping missions. While the ultimate objective may be to maintain peace, the initial phase in peace enforcement is to achieve or impose peace, sometimes through conventional military operations. Peace enforcement is often unilateral, conducted with or without consent from the belligerents.

Other Operations

In certain environments, military operations become necessary when diplomatic initiatives have been, or are expected to be, ineffective in achieving extremely time-sensitive, high-value objectives. Failure to influence a belligerent nation or activity through diplomatic means may require the use of military forces to protect US national interests or assets, to rescue US citizens, or to provide emergency relief. Such operations may include strike operations, rescue and recovery, demonstrations or shows of force, EPW exchange, noncombatant evacuation operations (NEO), and security for relief forces.

ACTIVITIES IN OPERATIONS OTHER THAN WAR

The Army's missions in operations other than war are divided into activities (see Figure E-2). Although these activities have distinct characteristics, they often overlap in execution. For example, peacekeeping forces must protect against terrorism; conversely, a terrorist incident may result in a peace enforcement operation.

Noncombatant Evacuation Operations	Combating Terrorism
Arms Control	Peacekeeping Operations
Support for Domestic Civil Authorities	Peace Enforcement
Humanitarian Assistance and Disaster Relief	Show of Force
Security Assistance	Support for Insurgencies and Counterinsurgencies
Nation-building Assistance	Attacks and Raids
Support for Counterdrug Operations	

Figure E-2. Potential military activities in operations other than war.

OPERATIONAL CONSIDERATIONS

Although operations other than war can take place in any part of the world, they are most likely to occur in third world countries, where social, political, economic, and psychological factors contribute to political instability. Each country or region is unique, with its own history, culture, goals, and problems. US forces deployed to these areas can be subject to rapid and dramatic changes in situations and missions. The scout platoon leader must understand this environment; he must plan for rapid changes in the situation or mission and constantly be prepared to adapt to them. In addition, scout platoons must be prepared to operate in any type of terrain and climate.

Intelligence

Intelligence is crucial during the execution of operations other than war. Likewise, all activities require continuous emphasis on intelligence. The threats faced by military forces in these operations are more ambiguous than those in other situations because combatants, guerrillas, and terrorists can easily blend with the civilian population. Before forces are committed, intelligence must be collected, processed, and focused to support all planning, training, and operational requirements. (See FM 100-20 for additional information.)

Rules of Engagement

Politically imposed restrictions on military operations are called rules of engagement (ROE). The ROE are directed by higher military authorities based on the political and tactical situations and the level of threat. For example, these restrictions may require that the forces involved limit their use of firepower to a certain geographical area or that they limit the duration of their operations. Figure E-3 is an example of ROE for one possible situation.

ROE must be considered during the planning and execution of all operations. **Tactics, techniques, and procedures will require adjustment based on each particular situation's ROE.** Understanding, adjusting for, and properly executing ROE are especially important to success in operations other than war. The restrictions change whenever the political and military situations change; this means ROE must be explained to friendly soldiers continuously. ROE provide the authority for the soldier's right to self-defense. **Each soldier must understand the ROE and be prepared to execute them properly in every possible confrontation.** In addition, because ROE violations can have operational, strategic, and political consequences that may affect national security, the enemy can be expected to exploit such violations.

All enemy military personnel and vehicles transporting enemy personnel or their equipment may be engaged subject to the following restrictions:

A. When possible, the enemy will be warned first and asked to surrender.

B. Armed force is the last resort.

C. Armed civilians will be engaged only in self-defense.

D. Civilian aircraft will not be engaged, except in self-defense, without approval from division level.

E. All civilians should be treated with respect and dignity. Civilians and their property should not be harmed unless necessary to save US lives. If possible, civilians should be evacuated before any US attack. Privately owned property may be used only if publicly owned property is unavailable or its use is inappropriate.

F. If civilians are in the area, artillery, mortars, AC-130s, attack helicopters, tube-launched or rocket-launched weapons, and main tank guns should not be used against known or suspected targets without the permission of a ground maneuver commander (LTC or higher).

G. If civilians are in the area, all air attacks must be controlled by an FAC or FO, and close air support, white phosphorus weapons, and incendiary weapons are prohibited without approval from division.

H. If civilians are in the area, infantry will shoot only at known enemy locations.

I. Public works such as power stations, water treatment plants, dams, and other public utilities may not be engaged without approval from division level.

J. Hospitals, churches, shrines, schools, museums, and other historical or cultural sites will be engaged only in self-defense against fire from these locations.

K. All indirect fire and air attacks must be observed.

L. Pilots must be briefed for each mission as to the location of civilians and friendly forces.

M. Booby traps are not authorized. Authority to emplace mines is reserved for the division commander. Riot control agents can be used only with approval from division level.

N. Prisoners should be treated humanely, with respect and dignity.

O. Annex R to the OPLAN provides more detail. In the event this card conflicts with the OPLAN, the OPLAN should be followed.

DISTRIBUTION: ONE FOR EACH SOLDIER DEPLOYED (ALL RANKS)

Figure E-3. Example rules of engagement.

Force Protection

Because of the influence of local politics and news media in operations other than war, minimizing casualties and collateral damage becomes a particularly important operational consideration during these operations. At the same time, however, force protection must be a constant priority. In attempting to limit the level and scope of violence used in operations other than war, leaders must avoid making tactically unsound decisions or exposing the force to unnecessary risks. On the contrary, an overpowering use of force, correctly employed and surgically applied, can reduce subsequent violence or prevent a response from the opposing force. This must be covered in the ROE and the OPORD from battalion or squadron. Armored forces are deployed for force protection.

Soldiers' Responsibilities

US soldiers may have extensive contact with host-nation civilians during operations other than war. As a result, their personal conduct has a significant impact on the opinions, and thus the support, of the local population. Soldiers must understand that misconduct by US forces (even those deployed for only a short time) can damage rapport that took years to develop. US soldiers must treat local civilians and military personnel as personal and professional equals, affording them the appropriate military customs and courtesies.

To enhance civilian cooperation and support, US commanders can issue a key word and phrase card to translate key English phrases into the language of the host nation (see Figure E-4). These phrases should apply specifically to the area of operations.

Every individual is an intelligence-collecting instrument. The collection of information is a continuous process, and all information must be reported. Intelligence is provided by many sources, including friendly forces, enemy elements, and the local populace. From the friendly standpoint, each soldier must be familiar with the local PIR and intelligence requirements. At the same time, enemy soldiers are continuously seeking intelligence on US actions, and they often blend easily into the civilian population. US soldiers must be aware of this and use OPSEC procedures at all times.

KEY WORDS

ENGLISH	SPANISH
bathroom	banos
boy	muchacho
bridge	puente
bus	bus
east	este
food	comida
friend	amigo
girl	muchacha
halt	alto
help	ayuda
I	yo
left	izquierda
man	hombre
map	mapa
north	norte
please	por favor
quickly	rapido
right	deredha
river	rio
soldier	soldado
south	sur
straight	recto
telephone	telefono
thanks	gracias
wait	espera
water	agua
weapon	arma
west	oeste
woman	mujer
you	usted

KEY PHRASES

ENGLISH	SPANISH
May I ?	Puedo ?
Do you have a ?	Tiene usted un ?
My name is	Mi nombre es
Speak slowly	Hable despacio
Do not talk	No hables
What is your name ?	Como se llama ?
Hands up	Manos arribai
What time is it	Que hora es ?
Drop your weapon	Baja tu arma
I will search you	Te voy a registrar
Where are you from ?	De donde eres ?
Where is ?	Donde esta ?
I don't know	No se
Do you speak English?	Hables ingles ?
Can you get an interpreter ?	Puedes consequir un interprete ?
Good morning	Buenos dias
I want	Yo quiero
Identify yourself	Identifiquese

Figure E-4. Example of a key word and phrase card.

Section II. THE SCOUT PLATOON IN OPERATIONS OTHER THAN WAR

Because military operations involving the scout platoon occur most often in the state of conflict, scout platoons are most likely to operate in support of peacekeeping and peace enforcement. In addition to executing standard platoon missions, scout platoons must be prepared to execute missions or tasks unique to operations other than war.

SPECIFIC SCOUT PLATOON TASKS

As part of a force involved in operations other than war, the scout platoon can expect to perform these tasks:

- Security operations:
  - Convoy security (refer to Chapter 5).
  - Checkpoints.
  - Roadblocks.
  - Searches of personnel and vehicles.
- Reconnaissance operations:
  - Route reconnaissance (refer to Section IV, Chapter 4).
  - Building searches (refer to Section III of this chapter, covering light/heavy operations).

Roadblocks, checkpoints, and searches are used to control the movement of vehicles, personnel, or material along a specific route. Roadblocks and checkpoints help to prevent trafficking in contraband and stop the movement of known or suspected belligerents. They are used to control access into restricted or contested areas by individuals or elements that could cause hostilities between warring parties. They also assist friendly forces in detecting and establishing the behavior patterns of the local populace, a critical part of the intelligence process.

Roadblocks and checkpoints are either deliberate or hasty and can be established on a permanent, temporary, or surprise basis. Individual roadblocks and checkpoints can be established and manned by scout platoons, teams, or squads, depending on the operational environment and the amount of traffic expected to move through the checkpoint.

ROADBLOCKS

A roadblock is used to stop the movement of vehicles along a route or to close access to certain areas or roads (see Figures E-5A through E-5C, pages E-11 and E-12). Roadblocks can be established separate from checkpoints or used to channel traffic into a checkpoint. Armored vehicles make excellent

roadblocks, but local dismounted security must be established to protect vehicles from dismounted attack. Likewise, HMMWVs make excellent hasty roadblocks due to their mobility and austere logistical requirements. Concertina wire should be used to prevent vehicles from running through the roadblock (see Figure E-5A).

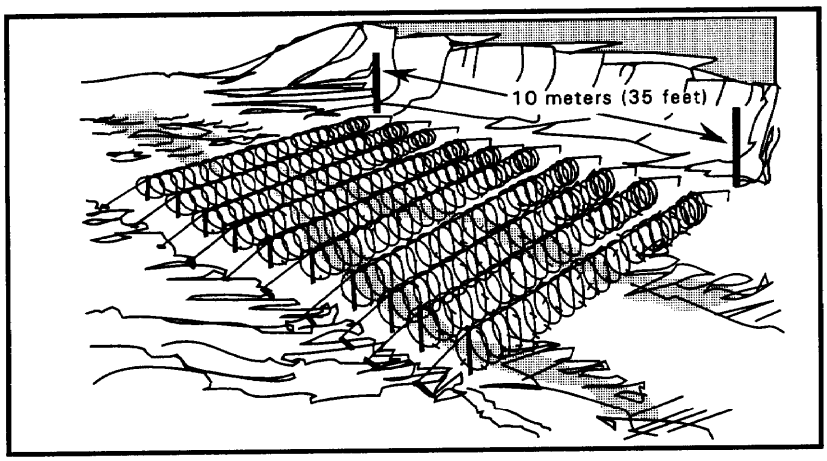


Figure E-5A. Concertina wire roadblock.

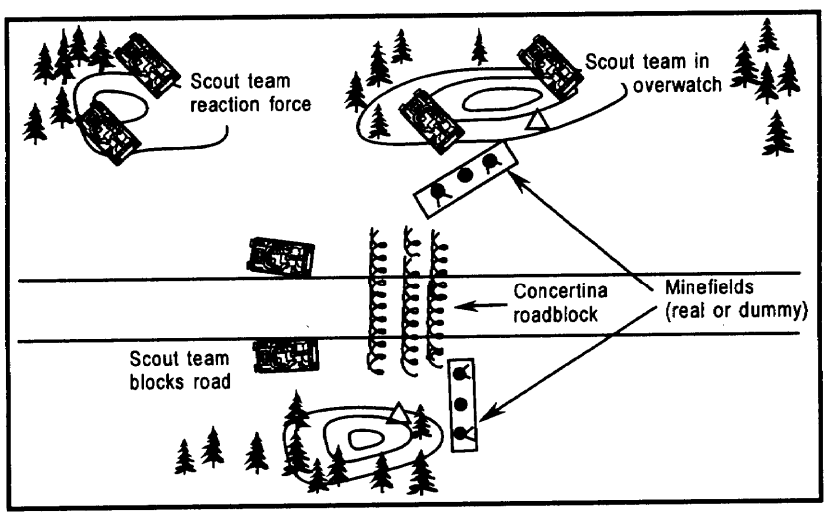


Figure E-5B. Scout platoon roadblock.

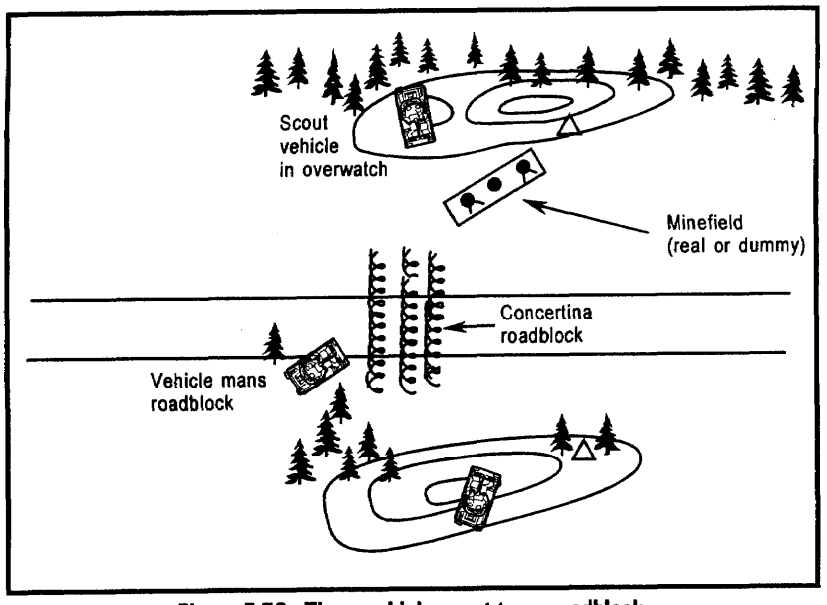


Figure E-5C. Three-vehicle scout team roadblock.

A roadblock is considered an obstacle and is set up or constructed like an obstacle. These factors apply in positioning a roadblock:

- It must be covered by observation and direct fire.
- It must be positioned so that it cannot be bypassed.
- If required, the positioning must channel traffic into a checkpoint.

CHECKPOINTS

Checkpoints are manned locations used to accomplish the following:

- Control movement along specific routes.
- Maintain continuous monitoring of road movement.
- Apprehend suspects.
- Prevent smuggling of controlled items.

- Prevent infiltration of unauthorized civilians or military forces into or through a controlled area.
- Check vehicles and personnel for weapons, ammunition, and explosives.
- Ensure proper use of routes by both civilian and military traffic.

Deliberate Checkpoints

The deliberate checkpoint is a relatively fixed position established in a town or in open country, often on a main road (see Figure E-6). Deliberate checkpoints are classified as heavy traffic or light traffic checkpoints depending on the amount of traffic expected to pass through them. While the scout platoon can operate both heavy and light traffic checkpoints, scout teams and squads can operate only light traffic checkpoints (see Figures E-7 and E-8, page E-14).

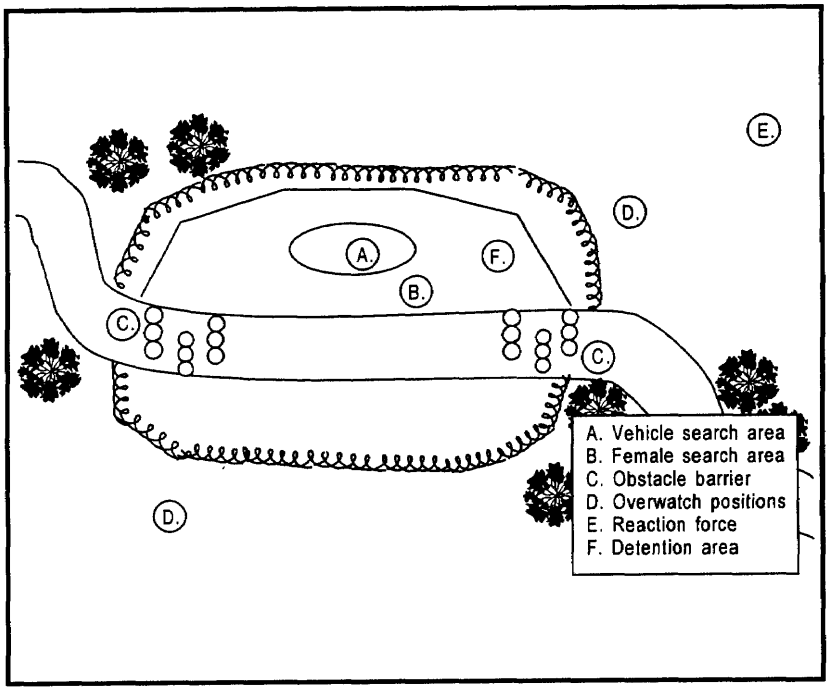


Figure E-6. Deliberate checkpoint organization.

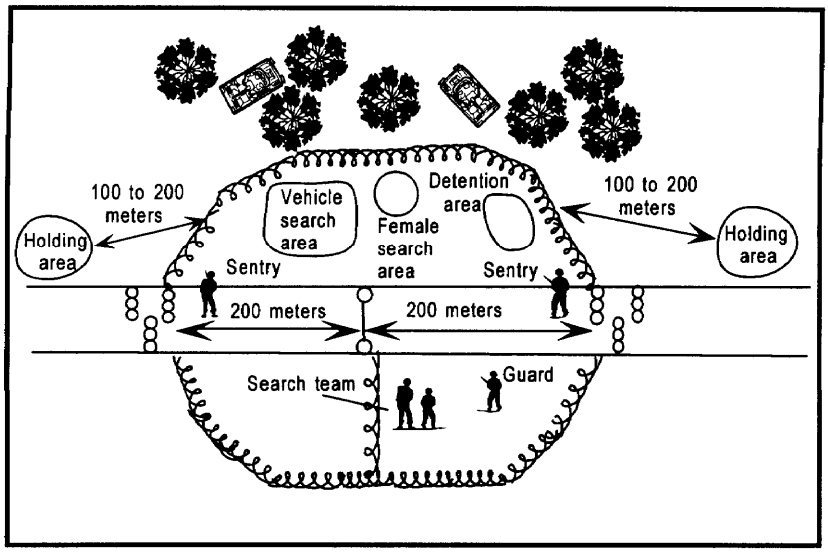


Figure E-7. Scout team manning a light traffic checkpoint.

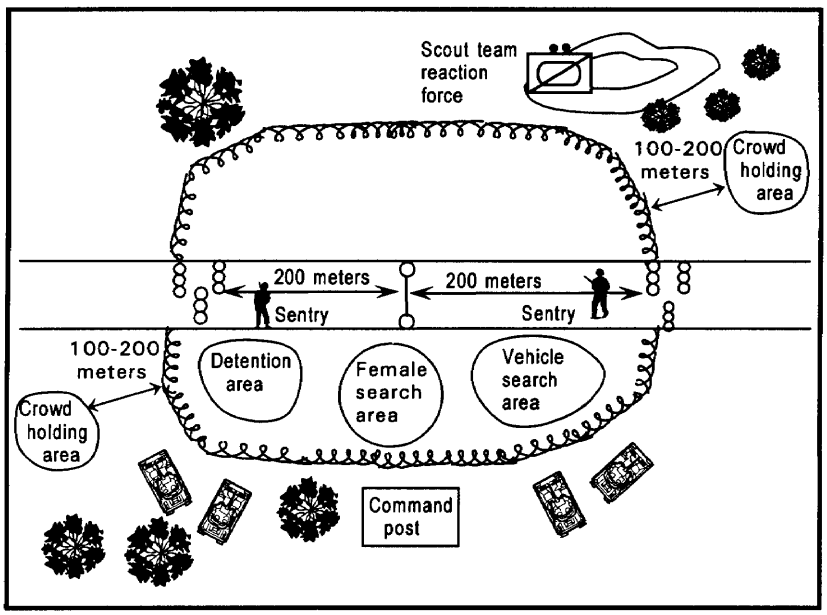


Figure E-8. Scout platoon manning a heavy traffic checkpoint.

Establishing a deliberate checkpoint. The physical layout and level of preparation of the checkpoint depend on the amount of traffic expected to pass through it and the duration of its operation. Regardless of the type, all checkpoints have common characteristics and organization. A checkpoint consists of the following parts:

- Obstacles (barriers).
- Search areas,
- Security overwatch and fighting positions.
- Holding area.

Obstacles. A checkpoint is established by placing two parallel obstacles (each with a gap) across the road. These obstacles should be large enough and deep enough to prevent vehicles from running over or through them. The gap must be negotiable by slow-moving vehicles only. The distance between obstacles depends on the amount of traffic that is held in the search area. A barrier pole is placed midway between obstacles to control movement from the search area to the exit obstacle.

Search areas. The amount of traffic held in the search area (refer to Figure E-6, page E-13, for an illustration of the area) is determined by the type of search. Separate search areas for the following should be setup as needed:

- Vehicles.
- Females.
- Suspects and other persons detained for further interrogation.

Fighting positions. Fighting positions for vehicles, automatic weapons, and individuals must be emplaced to overwatch, protect, and secure the checkpoint.

Holding area. A holding area is established several hundred meters forward of the checkpoint to control the flow of traffic so that the checkpoint is not overwhelmed.

Task organization. Personnel manning the checkpoint are organized into the following teams or elements to accomplish specific tasks:

- Headquarters element.
- Security force.
- Search teams.
- Sentry teams.

Headquarters element. The headquarters element consists of the platoon leader, PSG or team leader, RTO, and medical personnel.

Security force. The security force consists of a security element and a checkpoint reaction force.

The checkpoint security element mans overwatch positions and/or perimeter security positions. Security element personnel overwatch activities in the search area and provide security for personnel operating the checkpoint. Overwatch positions also provide security for sentry teams and the holding area.

The checkpoint reaction force is a concealed element whose purpose is to prevent traffic from avoiding or bypassing the checkpoint. This force can be part of the perimeter security and can react to surprise attacks against the checkpoint or to other emergency situations. It can be located at a position away from the checkpoint, but it must be able to quickly move to and support the checkpoint. The reaction force should be no smaller than a scout team.

Search teams. The search team, comprising two to three soldiers, searches vehicles and personnel. The team is organized into a guard security element and a search element. The guard element provides security during the searches; at least one member of the guard element guards or observes the individual being searched at all times while the searcher conducts the search.

Sentry teams. Sentry teams secure the entrance and exit of the checkpoint and the holding area. They control the flow of traffic through the checkpoint, including movement from the entrance into the search area and from the search area to the exit point.

Other personnel. Whenever possible, the following should be on hand to assist scout platoon personnel with checkpoint activities:

- A civil affairs officer, a liaison officer, or a member of the civilian police or other local authority.
- An interpreter.
- A trained female searcher.

Hasty Checkpoints

Hasty checkpoints are set up to achieve surprise. They are established in locations where they cannot be observed by approaching traffic until it is too late to withdraw and escape without being observed. Possible locations for hasty checkpoints include the following:

- Culverts.
- Bridges.
- Defiles.
- Positions beyond sharp curves.
- Highway intersections.
- Key terrain on highways.
- Reverse slopes of hills.
- Other locations that limit detection from long distances.

The hasty checkpoint has the same basic layout as a deliberate checkpoint; however, because hasty checkpoints are temporary and mobile, materials used to construct these checkpoints must be carried by the platoon.

The platoon or team uses its vehicles, reinforced with concertina wire, as the obstacle. The vehicles are positioned to partially block the road or route (see Figure E-9, page E-18). The search area is the space between the vehicles. Sentries are positioned at each end of the checkpoint and are covered by mounted or dismounted automatic weapon positions. A reaction force is designated and concealed nearby.

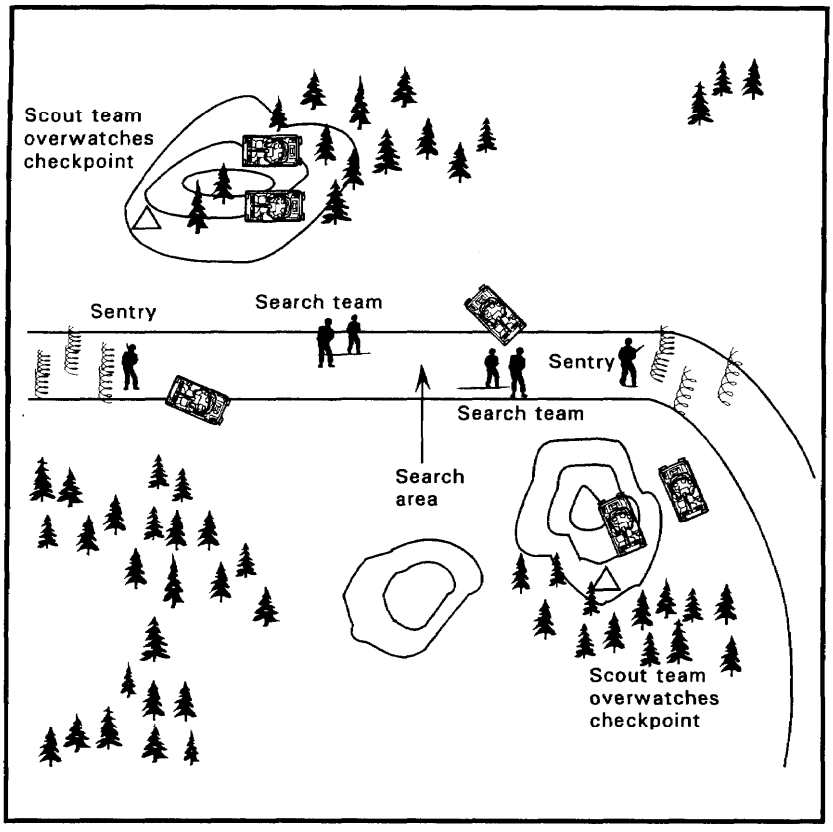


Figure E-9. Hasty (mobile) checkpoint.

Special Equipment and Personnel Requirements

Signs. Portable signs in the local language and in English are required. Signs should denote the speed limit of approach, vehicle search area, male and female search areas, and dismount point.

Communications. Communications must be established between the checkpoint or roadblock and higher headquarters. Radios and wire are used within the checkpoint and between overwatch positions, reaction forces, the checkpoint CP, and sentry posts. Checkpoint personnel also plan for additional means of communications, such as pyrotechnics, flags, hand-and-arm signals, or code words.

Lighting and night observation devices. Adequate lighting for the obstacle, search area, and perimeter area is necessary during night operations. Reaction forces and overwatch elements use night observation devices to observe outside the perimeter; however, these elements must consider how white light will affect operation of these devices.

Barriers. Obstacles should be positioned across the road and around the search area. These can include barrels filled with concreate or sand, barrier poles, clearly marked barbed wire, buses parked sideways in the road, felled trees, abandoned or disabled vehicles, or other readily available items strong and big enough to prevent motorists from driving through or around them. Hasty minefields, both dummy and actual, can be used to reinforce an obstacle.

Weapons. Soldiers must have adequate firepower to withstand an attack or to halt a vehicle attempting to flee or crash through the checkpoint. Crew-served weapons must be loaded and manned at all times.

Linguists. Soldiers familiar with the local language are valuable in all roadblock or checkpoint operations. If they are not available, soldiers must be familiar with basic phrases necessary for the operation. They should have a printed reference such as a key word and phrase card (an example is illustrated in Figure E-4, page E-9); this should be obtained from the civil affairs section, translation detachment, local authorities, or liaison officers as soon as the mission is received.

Other equipment. Other specialized equipment may be required to support the checkpoint mission. Figure E-10, page E-20, provides a list of equipment that may be helpful.

Other Planning Considerations

The scout platoon leader must take the following requirements into account when planning the checkpoint mission:

- Obtaining indirect fire support on key terrain around the checkpoint.
- Ensuring that checkpoints are designed so that the minimum number of soldiers are exposed at any given time.

- Positioning automatic weapons to provide overwatch when soldiers are exposed.
- Ensuring reinforcement and counterattack plans are developed and rehearsed.
- Ensuring ROE are clear and understood by all soldiers manning the checkpoint.
- Planning for 24-hour operation of the checkpoint.
- Obtaining logistical support.
- Coordinating for medical assistance and MEDEVAC assets.

GENERAL	ROADBLOCKS/ CHECKPOINTS	SEARCHES
Pyrotechnic pistols	Portable lamps/lights	Ladders
Riot guns	Marker lights	Flashlights
Tear gas launchers	Traffic cones	Picks/shovels
Hand-held flashlights	Traffic signs	Wrecking bars
Antiriot helmets	Visor sleeves	Hand tools, fluorescent (hammers, pliers, screwdrivers)
Shields, 3-ft 6-in	Tire puncture chains	
Shields, 6-ft	Directional arrows	Rope
Police batons	Lightweight barriers	Magnets
Handcuffs	Mirrors	Telescopic mirror
Body armor		Axe
Marshaling wands		Mine markers
Telescopes and tripods		Helmets
Binoculars		White tape
Infrared devices		Mine detectors
Loudspeakers		Eye shields
Fire extinguisher		Measuring tape
Cameras with flash attachments and tripods		Metal-cutting tools
		Chisels
Telescopic sights		Knives
Photographic filter		Saws
Polaroid cameras		Mine probes
Whistles		Safety harness
Hand-held radios (for use in urban areas)		

Figure E-10. Equipment list for roadblocks and checkpoints.

Preparing for Contingencies At Checkpoints

Scout platoon leaders must develop tactics and procedures to respond to various situations that can develop at a checkpoint. For example, a high volume of pedestrian and vehicle traffic can be expected to pass through a checkpoint; this congestion can be compounded by undisciplined driving habits of the local population and by the shortage of soldiers able to speak the local language. Belligerents can use the resulting confusion to smuggle weapons and explosives through the checkpoints. In addition, checkpoints face the constant threat of violence. Leaders must plan for these contingencies when preparing personnel to man checkpoints. The ROE must be clear and flexible enough to accommodate rapid changes in any situation that may develop. Figure E-11, page E-22, lists some examples of situations encountered at checkpoints, along with possible responses.

SEARCHES

Searches of people, material, and vehicles are commonly used at roadblocks and checkpoints to control unauthorized movement of individuals and prohibited items (contraband).

Planning Guidelines for Search Operations

Planning for a search operation should cover these points:

- Search authority.
- Conduct of the search.
- Search rates.
- Use of force.
- Courtesy.

Search authority. Checkpoint personnel perform searches to apprehend suspects or confiscate contraband only in areas within their military jurisdiction (or where otherwise lawful). Proper use of search procedures gains the respect and support of the local population, maintains credibility, and demonstrates impartiality. Conversely, misuse of search authority can undermine the credibility of forces conducting operations in the area; it can also affect future operations. Checkpoint personnel must ensure that search procedures are conducted in accordance with established guidelines and ROE.

SITUATION	RESPONSE
• Diversions covering the efforts to sneak or rush through the checkpoint, such as— - Sniper attack. - Ambulance arriving at checkpoint with sirens blaring. - Staged fights or riots near the checkpoints. - Staged vehicle accidents or fires.	• Close the checkpoint; rapidly emplace barricades to stop and contain both vehicular and pedestrian traffic in and around the checkpoint. • Use reaction force to handle situations outside checkpoint so that checkpoint personnel do not have to leave it. • Remain calm; report to higher headquarters.
• Sniper fire.	• Take cover. • Employ smoke. • Protect wounded. • Identify location of sniper. • Report. • Respond in accordance with ROE.
• Thrown projectiles.	• Maintain standoff. • Protect self and others. • Do not throw objects back. • Report. • Respond with force in accordance with ROE.
• Imminent harm.	• Protect self and others. • Use force in accordance with ROE. • Report.
• Civilian casualty.	• Provide first aid. • Report; request MEDEVAC.
• Drive-by shooting.	• Take cover. • Report. • Respond with force in accordance with ROE.

Figure E-11. Responses to situations at a checkpoint.

Conduct of the search. All checkpoint personnel must thoroughly understand the instructions issued for the conduct of searches. Instructions may cover, but are not limited to, the following points:

- Personnel and/or vehicles allowed to pass through the checkpoint.
- Personnel and/or vehicles not allowed to pass through the checkpoint.

- Items to be confiscated.
- Items not allowed to pass through the checkpoint.
- Procedures for handling confiscated items.
- Procedures for detaining vehicles or personnel.

Search rates. Search operations are conducted slowly enough to allow for a thorough search but rapidly enough to prevent the enemy from reacting to the threat of the search.

Use of force. In accordance with established ROE, minimum essential force is used to eliminate any active resistance encountered during the search.

Courtesy. Search personnel should remain polite and considerate at all times. Figure E-12, page E-24, lists guidelines for personal conduct during search operations.

Search Procedures

Search of individuals. To avoid making an enemy of a person passing through a checkpoint, searchers must be polite, considerate, patient, and tactful. Since the very presence of checkpoints can cause uneasiness or fear, it is during the initial handling of a person about to be searched that the greatest caution is required. At least one member of the search team must provide security at all times while others conduct the search. The following methods can be used to search an individual:

- Frisk search.
- Wall search.
- Strip search.
- Female search.

DO take these actions during a search operation:	DO NOT take these actions during a search operation:
• Maintain professional, courteous demeanor when approaching the vehicle and talking to the driver.	• Show disrespect or give any hint of dislike.
• Speak only to the driver; let him speak to the passengers.	• Speak to women regardless of their age.
• Ask the driver politely to do what you want him to do.	• Put your head or arm in through the side window or open the door without permission.
• Speak naturally and no louder than needed.	• Shout or show impatience.
• When searching an individual, be courteous. Use scanners whenever possible.	• Frisk women or tell them to put their hands up.
• Whatever happens at the checkpoint, stay calm and make a special effort to be polite, regardless of your feelings.	• Point your weapon directly at people unless essential for security reasons.
• Always maintain a high standard of dress and military bearing. If you look smart and professional, people are more likely to accept your authority and be willing to cooperate.	• Become involved in a heated argument.
• Contact your checkpoint commander whenever necessary.	• Use force unless force is used against you. Use the minimum force necessary.
• Maintain situational awareness at all times.	• Become careless or sloppy in appearance.
• Maintain strict security at all times.	• Establish a routine pattern of operations. This will allow the enemy to take advantage of the checkpoint operations.

Figure E-12. "Dos" and "don'ts" of search operations.

Frisk search. This a quick search of an individual for weapons, evidence, or contraband. It should be conducted in the presence of an assistant (guard) and a witness, when available. In conducting the frisk search, the searcher stands behind the individual being searched (see Figure E-13). The searcher's guard takes a position from which he can cover the individual with his weapon. The searcher must avoid moving between the guard and the individual being

searched. The searched individual is required to raise his arms above his head. The searcher slides his hands over the individual's entire body, crushing the clothing to locate concealed objects. If the individual being searched is carrying a bag or wearing a coat or hat, these are also searched, with special attention given to the linings.

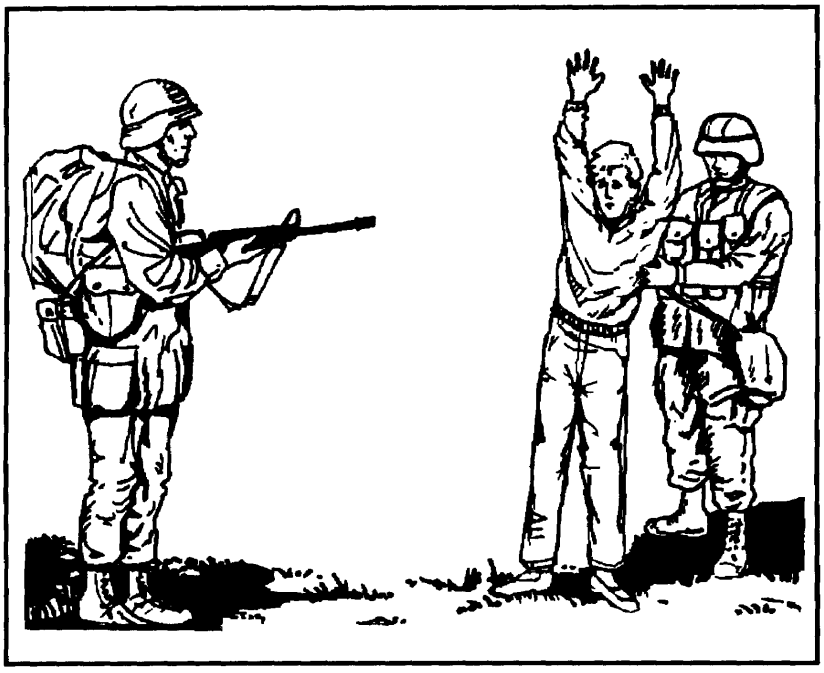


Figure E-13. Frisk search.

Wall search. The wall search affords the searcher some safety by placing the individual being searched in a strained, awkward position (see Figure E- 14, page E-26). This search method is useful when two searchers must search several individuals. The individuals to be searched can be positioned against any upright surface, such as a wall, vehicle, tree, or telephone pole. The following discussion covers factors that must be considered during the wail search.

Position of individual being searched. The individual must face the wall (or other object) and lean against it, supporting himself with his hands over his head, placed far apart with fingers spread. His feet are placed well apart as far

the wall as possible; they are turned outward so they are parallel to the wall. The individual must keep his head down as illustrated in Figure E-14.

Position of the searcher's guard. The searcher's guard stands to the rear of the individual being searched on the opposite side from the searcher (see Figure E-14). The guard covers the individual being searched with his weapon. When the searcher moves from his original position to the opposite side of the individual being searched, the guard also changes position. The searcher walks around the guard to avoid coming between the guard's weapon and the individual being searched.

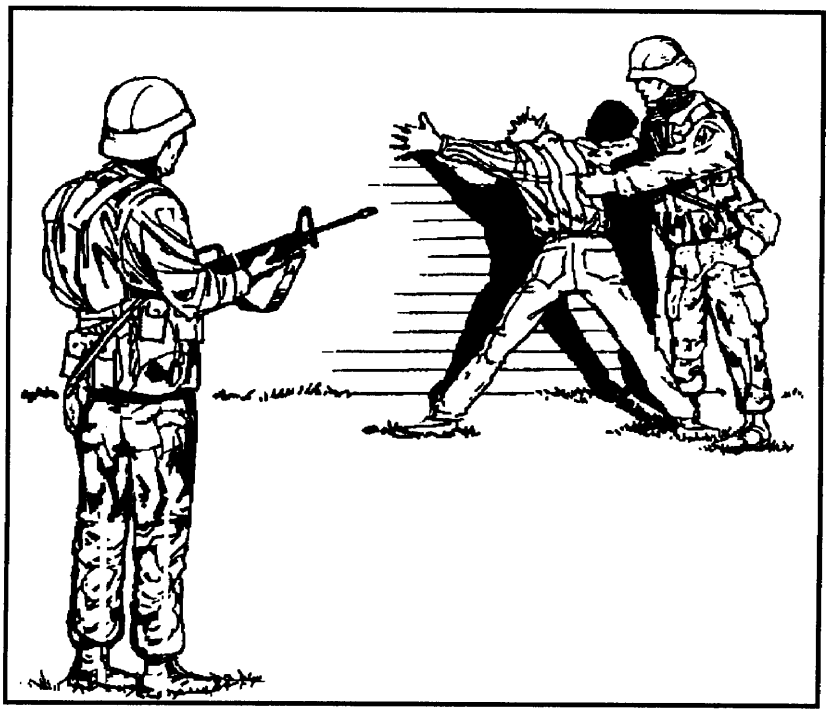


Figure E-14. Wall search.

Position of the searcher. The searcher approaches the individual being searched from the right side. The searcher must secure his weapon so that it cannot be grabbed by the individual being searched. When searching from the right side, the searcher places his right foot in front of the individual's right foot,

making and maintaining ankle-to-ankle contact. If the individual offers resistance, this position allows the searcher to push the individual's right foot back from under him and throw him to the ground. When searching from the left side, the searcher places his left foot in front of the individual's left foot and makes and maintains ankle-to-ankle contact (see Figure E-15).



Figure E-15. Ankle-to-ankle position for the wall search.

Search procedures. In taking his initial position, the searcher must remain alert to prevent the individual being searched from making a sudden move to disarm or injure him. The searcher first searches the individual's headgear. Then he checks, in sequence, the individual's hands and arms, the right side of his body, and his right leg. The searcher repeats the procedure on the left side of the individual. He crushes the person's clothing between his fingers rather than merely patting the surface of the clothing. The searcher pays close attention to the armpits, back, waist, legs, groin area, and tops of boots or shoes. Any item that is not considered a weapon or evidence is replaced in the individual's pocket. If the individual resists, attempts to escape, or must be thrown down before the search is completed, the search is restarted from the beginning.

Search of multiple individuals. When two or more individuals are to be searched, they must all assume a position against the same wall or object but far enough apart so that they cannot reach each other. The guard takes a position a few paces to the rear of the line with his weapon ready. The search starts with the person on the right end of the line. Upon completing the search of the first individual, the searcher moves that individual to the left end of the line; the individual assumes the proper position against the wall. The searcher resumes with the individual now on the right end of the line. The searcher must be careful to approach and search the remaining individuals without coming between them and the guard (see Figure E-16).

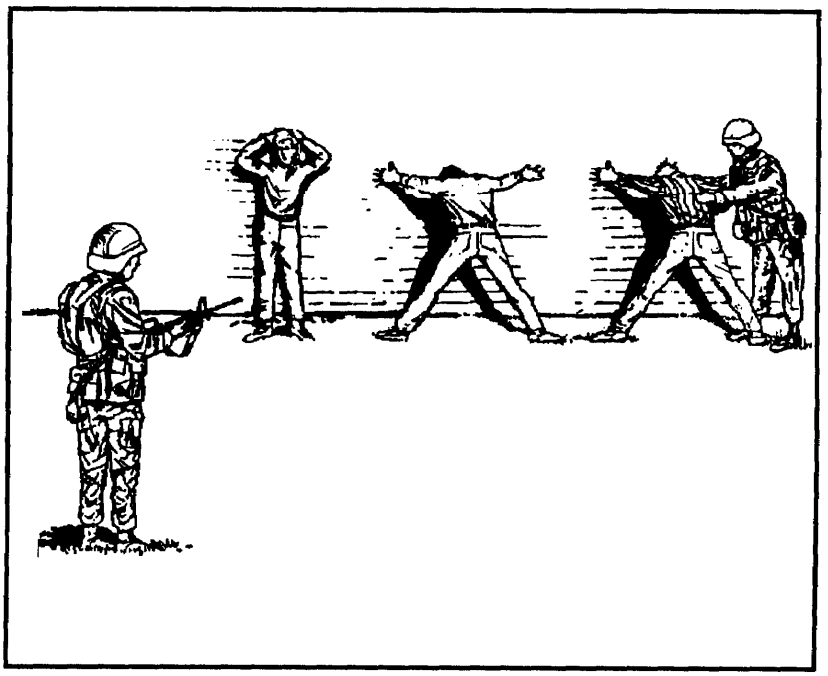


Figure E-16. Wall search of multiple subjects.

Strip search. This extreme search is used only when the individual is suspected of carrying documents or other contraband on his person. The search is conducted in an enclosed area such as a room or tent. Several search techniques are available. One method is to use two unarmed searchers while an armed guard provides security. The individual's clothing is removed and searched carefully.

A search is then made of his person, including his mouth, nose, ears, hair, armpits, groin area, and other possible concealment areas. A medic is a good choice to conduct this search. Care must be taken not to subject the individual to unnecessary embarrassment. Searchers must ensure that the person's privacy and dignity are maintained as much as possible.

Search of females. Women should be used to search other females whenever possible. If female searchers are not available, consider using doctors, medics, or designated males from the local population. If male soldiers must search females, all possible measures must be taken to prevent any action that could be interpreted as sexual molestation or assault.

Search of vehicles. Vehicles searches may require special equipment such as metal detection devices and mirrors. Because a thorough vehicle search is a time-consuming process, a separate search area should be established to prevent unnecessary delays. Figure E-17 shows an example of a search rate planning guide.

SEARCH PATTERN	RATE (veh/hr/lane)	TIME (per vehicle)
None	600-800	—
Vehicle Decal ID Check	400-600	10 sec
Driver ID Check	200-400	20 sec
Visual Observation of Passengers and Cargo Area	150-300	25 sec
Basic Physical and Visual Search of Passengers and Cargo Area	50-150	1.2 min
Comprehensive Vehicle Search	12-24	5 min

Figure E-17. Example search rate planning guide.

Searchers instruct all occupants to get out and stand clear of the vehicle. The driver should be made to watch the search of the vehicle. A guard watches the passengers and provides additional security at all times. If sufficient searchers are available, the passengers should be searched at the same time. Figure E-18, page E-30, lists some examples of vehicle search procedures.

SITUATION	RESPONSE
Weapons or explosives may be hidden in vehicle fuel tanks or inside components of vehicles.	Look for newly replaced vehicle components, scratches on vehicle components, new nuts and bolts, or other signs of recent work.
Weapons, explosives, and combatants may be concealed in hearses and ambulances with bodies or wounded civilians.	Treat these vehicles with respect, but search them and their contents thoroughly, including caskets. Do not disturb bodies. Have medics verify wounds.
Females may be used to smuggle weapons and explosives.	Male soldiers should not touch females; use female searchers or metal or mine detectors whenever possible. Use medical personnel if no female searchers are available.

Figure E-18. Example vehicle search procedures.

Section III. LIGHT/HEAVY OPERATIONS

During operations other than war, numerous situations exist in which armored and light forces will operate together. The use of a mixed force capitalizes on the strengths of both forces while offsetting their respective weaknesses. Light/heavy operations take advantage of the light unit's ability to operate in restrictive terrain (such as urban areas, forests, and mountains), while increasing the light unit's survivability. Conversely, the armored unit's mobility, protection, and firepower complement the light infantry unit's capabilities.

The scout platoon will operate with light infantry forces in various task organizations. Examples of these organizations include the following:

- The cavalry squadron or troop is attached or OPCON to a light infantry brigade.
- A light infantry company is attached to an armor or mechanized battalion or cavalry squadron.
- The scout platoon is attached to a light infantry brigade as part of an armor company or team.

Regardless of the task organization, **the key challenge in light/heavy operations is to understand the capabilities and limitations of light and armored forces, to develop plans that take full advantage of their capabilities, and to correctly employ the two types of forces for maximum effectiveness.** The goal of this section is to assist the scout platoon leader in understanding the platoon's role in the light/heavy force and in planning and executing the platoon's missions during these operations.

ROLE OF THE SCOUT PLATOON

The scout platoon normally does not conduct close support of infantry operations. In operations other than war, however, the scout platoon can use its unique capabilities to conduct combat operations in support of or in conjunction with light infantry. Along with conventional reconnaissance and security missions, the platoon can support infantry in military operations in urban terrain (MOUT) and in cordon and search operations. It can also provide protection against enemy armored forces.

THE THREAT

Light infantry fights a variety of enemy forces. These may range from crudely equipped insurgents to technologically advanced conventional forces. Potential threat targets include the following:

- Nonarmored targets:
  - Bunkers.
  - Automatic weapon positions.
  - Buildings and walls.
  - Roadblocks and obstacles.
- Command posts.
- Logistical positions.
- Light-skinned vehicles.
- Armored vehicles.

CAPABILITIES AND LIMITATIONS OF THE SCOUT PLATOON

Capabilities

Capabilities of the scout platoon in support of light/heavy operations include the following:

- Ability to suppress or destroy enemy positions with direct fires from the caliber .50 heavy machine gun, 40-mm grenade launcher, or 25-mm chain gun.
- Ability to breach walls and reduce obstacles with direct free.
- Increased communications assets.
- Thermal sights and night observation devices.
- Capability for rapid movement and limited penetrations.
- Use of CFVs to provide protection against light AT fires, small arms, and fragments.

Limitations

Limitations of the scout platoon in light/heavy operations include the following:

- Restricted mobility and fields of fire in close or urban terrain.
- Vulnerability to antiarmor weapons in built-up areas.
- CFVs' consumption of large quantities of Classes III, V, and IX, requiring daily resupply.
- Need for augmentation of transportation assets to support CSS requirements.
- Possibility that bridges and roads may not support CFVs.
- Inability to move over soft or heavily wooded terrain traversable by light infantry.

ORGANIZATION OF LIGHT INFANTRY UNITS

In the past, the use of a light infantry company with a heavy battalion was rare; however, the tank battalion traditionally was task organized with mechanized infantry for support. Since a light infantry battalion can deploy twice as many dismounted infantry as a mechanized infantry battalion, future force mixtures in operations other than war will include the attachment of light infantry to armor forces.

Light Infantry Company

Light infantry companies can conduct independent operations and are organized around the nucleus of the company headquarters (see Figure E-19). The headquarters contains both the antiarmor section (six Dragons) and the mortar section (six 60-mm mortars). The rifle platoons centralize their six SAW automatic rifles under the platoon headquarters. The rifle squad consists of two fire teams, armed with Ml6s and M203s only. The primary means of communication for the company is the AN/PRC-77 radio. There are no radios in a light infantry squad.

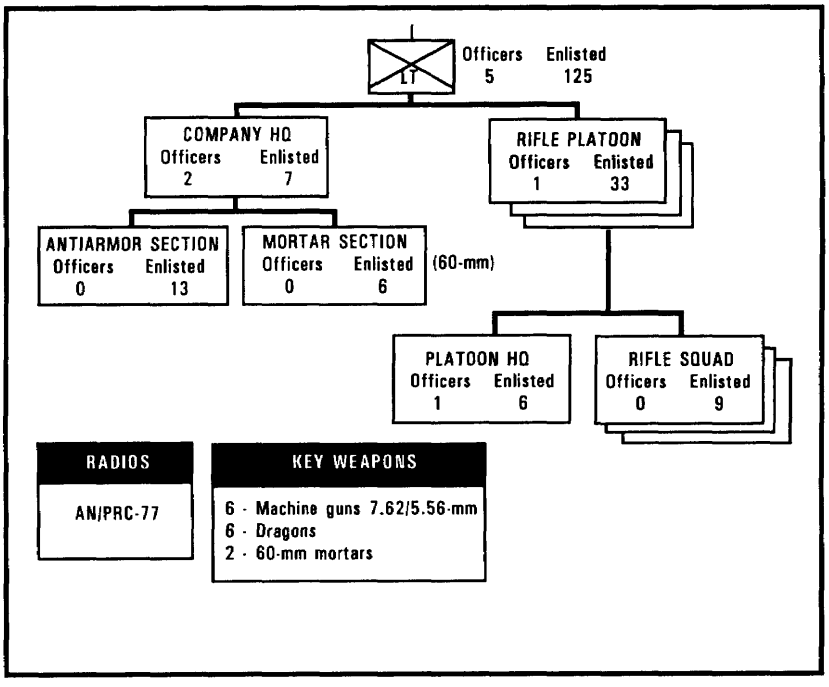


Figure E-19. Light infantry company.

Air Assault Infantry Company

When employed in an air assault role, the air assault infantry company is capable of more independent platoon action than is the light infantry company. When not assigned an air assault mission, however, the air assault company operates in a manner similar to that of the light infantry company (see Figure E-20). Each of the three rifle platoons has its own weapons squad and three rifle squads. The weapons squads have both machine gun crews and antiarmor missile crews. The company headquarters retains only the 60-mm mortar section. There are no radios in an air assault rifle squad.

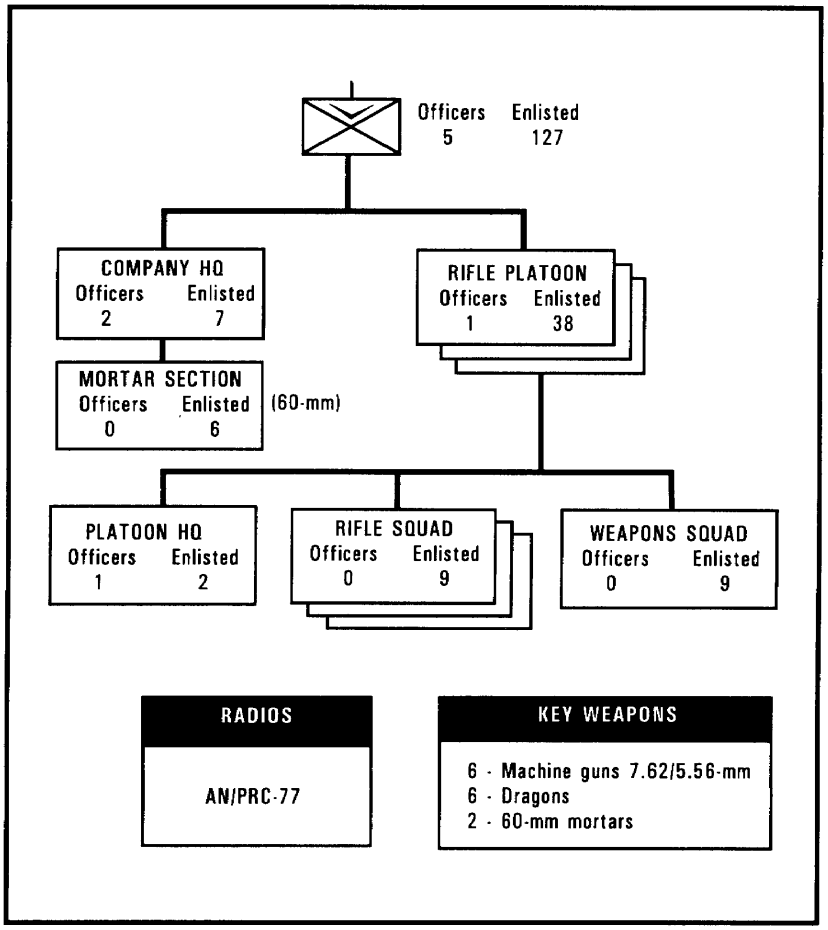


Figure E-20. Air assault infantry company.

Airborne Infantry Company

The airborne infantry company's rifle squads are capable of independent action (see Figure E-21). Organization and weapons of the airborne infantry company headquarters and rifle squad are almost identical to their counterparts in the air assault infantry company. Each rifle squad has two AN/PRC-68 radios or two AN/PRC-126 radios.

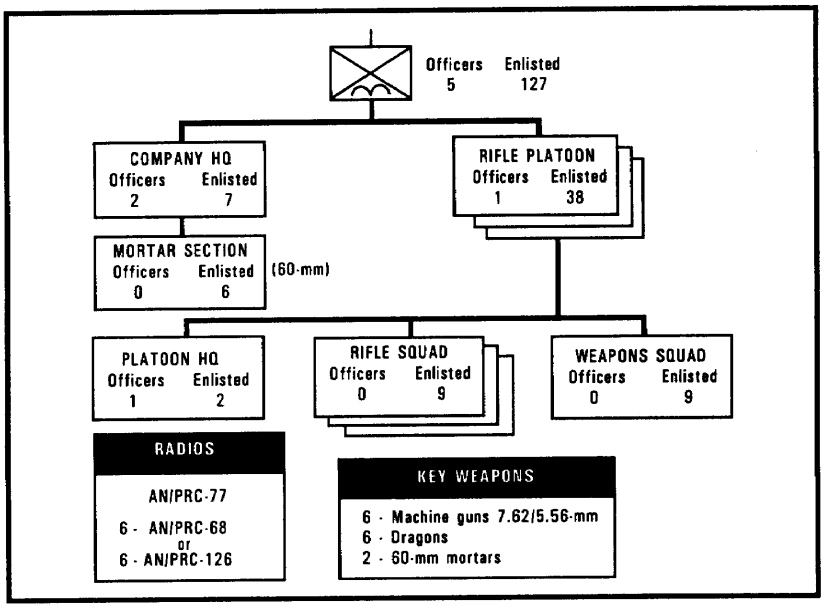


Figure E-21. Airborne infantry company.

CORDON AND SEARCH OPERATIONS

When intelligence identifies and locates members of an insurgent infrastructure, cordon and search operations are mounted to neutralize them. This section discusses procedures for the scout platoon in support of the light infantry company or battalion conducting these operations.

Task Organization

Task organization for cordon and search operations includes a security force (cordon force), a search force, and a reserve force. The scout platoon will normally operate as part of the security force or the reserve force; if required,

however, it can operate either by itself as the search force or as part of a larger search force.

Conduct of the Operation

Search zones are designated, and a search party is assigned to each zone. Each search party has its own search force, security force, and reserve force.

Security Force

An effective cordon is critical to the success of the search effort. Cordons isolate the search area, prevent the escape of individuals, and protect the forces conducting the operation. Deployment to the search area is rapid and is synchronized so it does not provide early warning to the local population; the security force surrounds the area while the search force moves in (see Figure E-22).

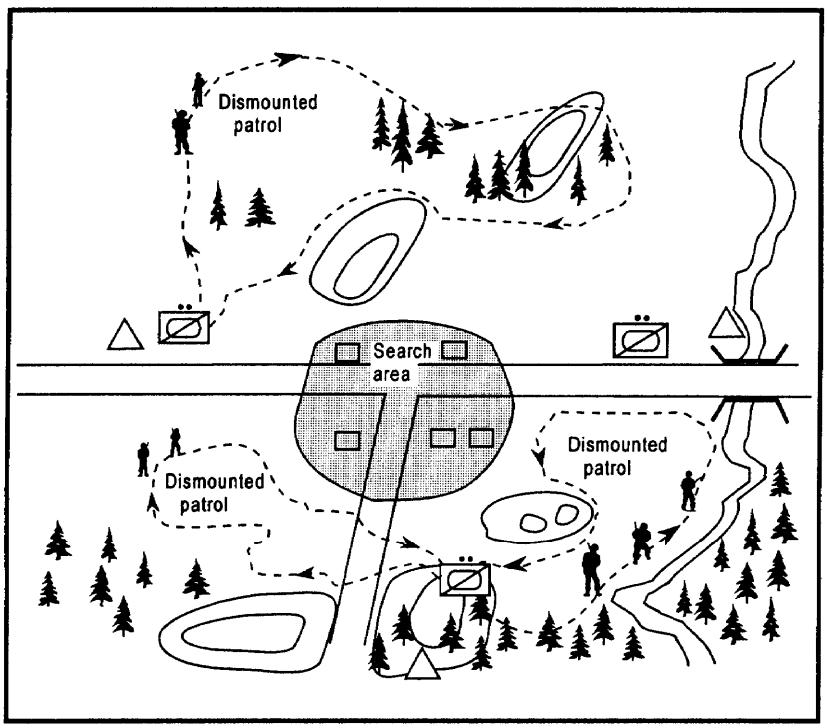


Figure E-22. Scout platoon establishes 360-degree security of search area.

Checkpoints and roadblocks are established along roads entering and exiting the area (see Figure E-23). OPs are established, and security patrols are executed in the surrounding area. Members of the security force orient mainly on people or vehicles attempting to escape or evade the search in the populated area; however, the security force can also cut off elements or individuals trying to reinforce enemy forces in the search area.

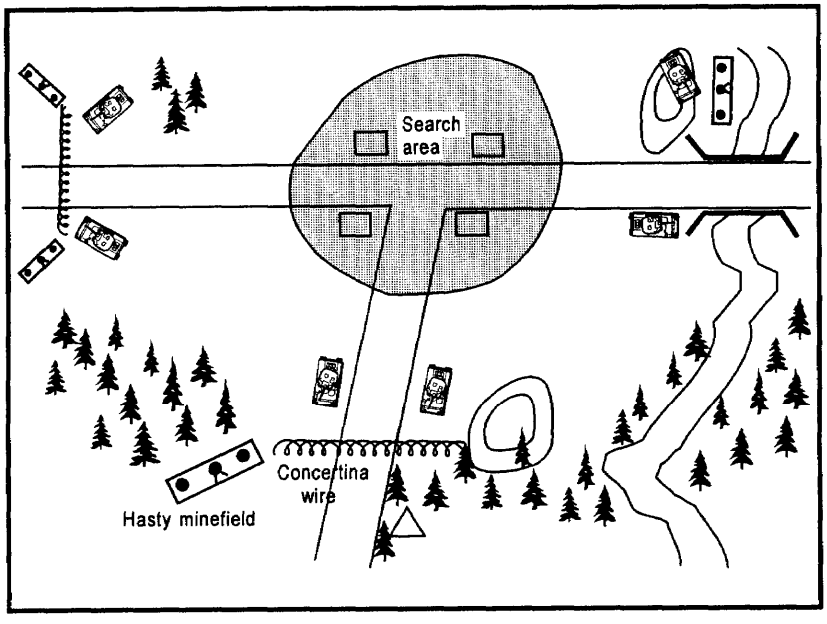


Figure E-23. Scout teams establish hasty roadblocks at search area.

Reserve Force

A mobile reserve force is located near the search zone. Its specific mission is to reinforce OPs, patrols, or the search force and to assist the other elements as required by the mission (see Figure E-24, page E-38).

LIGHT/HEAVY MOUT OPERATIONS

MOUT battlefields are complex and three-dimensional; they are characterized by the close, restrictive terrain typical of built-up areas, resulting in severely limited fields of fire and maneuver space. Mounted avenues of approach, restricted mostly to streets and alleys, are narrow, canalized, and

easily obstructed. On the other hand, cover and concealment are plentiful for dismounted forces. Dismounted avenues of approach are literally everywhere; they can be underground, through buildings, along edges of streets, and over rooftops.

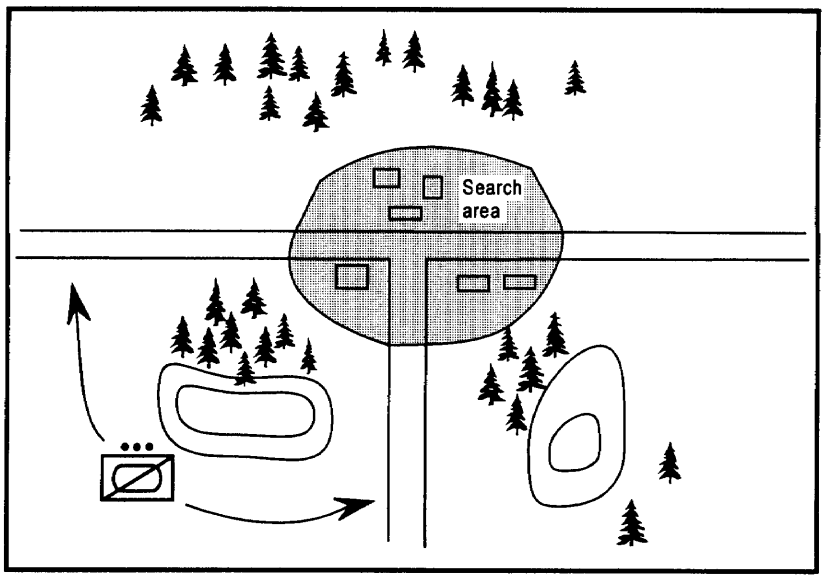


Figure E-24. Scout platoon as reserve force in search operation.

While MOUT are predominantly an infantry fight, the scout platoon can support light infantry units by providing security, protection, mobility, and firepower. The scout platoon can perform the following tasks to increase the combat power of the light infantry force:

- Isolate objectives with direct fires to prevent enemy withdrawal, reinforcement, or counterattack.
- Suppress or destroy enemy positions.
- Breach walls and blocked doorways.
- Reduce barricades and obstacles with direct fires.
- Reduce enemy strongpoints.

- Establish roadblocks.
- Protect against enemy armored attacks or counterattacks.
- Suppress sniper fires.
- Use CFVs to provide protection from small arms and fragmentation rounds.
- Overwatch likely armor avenues of approach.

Vehicle Capabilities And Limitations in MOUT

Scout platoons equipped with the CFV can be employed in built-up areas to assist dismounted forces in seizing and clearing streets and buildings. Scout platoons equipped with the HMMWV do not normally operate inside the built-up area because of their lack of armor protection; they are used to secure the avenues of approach around the perimeter of the area. Both the CFV and the HMMWV can provide suppressive fires for the initial assault on the built-up area.

CFV capabilities. The CFV has these capabilities related to MOUT:

- It is armed with the 25-mm cannon and 7.62-mm coax machine gun.
- It is capable of 60-degree elevation, allowing it to engage targets on the upper floors of tall buildings.
- Its 25-mm TP-T or HEI-T ammunition will penetrate buildings.
- It provides armor protection for crew and passengers.
- It is equipped with multiple FM radios.
- It can assist in MEDEVAC operations.
- It can assist in resupply operations.

CFV ***vulnerabilities.*** The CFV has these vulnerabilities related to MOUT:

- It is restricted primarily to streets and lacks maneuverability inside built-up areas.
- There is dead space around the CFV into which the vehicle cannot fire its weapons.

- It is vulnerable to enemy infantry firing antiarmor weapons from cellars and drains.
- It is dependent on infantry for all-around protection.

HMMWV capabilities. The HMMWV has these capabilities related to MOUT:

- It is armed with the caliber .50 heavy machine gun and/or the MK-19 40-mm automatic grenade machine gun.
- It can suppress and destroy light armor vehicles.
- It is highly mobile and has a small thermal signature.
- It is equipped with multiple FM radios.
- It presents fewer logistical problems than the CFV.
- It can operate in narrow streets.

HMMWVvulnerabilities. The HMMWV has these vulnerabilities related to MOUT:

- It provides armor protection only against small arms.
- It lacks the ability to transport infantry soldiers.
- It has no antiarmor capability.

The Scout Platoon In MOUT

Planning for light/heavy operations in a MOUT environment is the same as in any other terrain. CFVs are most effective when employed in terrain that allows for offensive maneuver. In some situations, it may be possible to keep armored forces around the perimeter of the town rather than to expose them to the inherent dangers in the built-up area. Armored vehicles can then operate outside the town while still providing adequate fire support to the infantry.

Light infantry forces conduct the attack of a built-up area in three phases: isolating the area, seizing a foothold, and clearing the objective. The scout platoon can support all phases of the operation. Normally, it will operate as part of the fire support element or the security force.

Isolating the objective. The isolated area may be a building, village, small town, or large built-up area. The scout platoon is effective in this phase of the operation; operating outside the town allows the armored force to use long-range fires, speed, and mobility. The defender often positions forces outside the town to disrupt an attack and to limit friendly reconnaissance and mobility; CFVs may be able to prevent these enemy forces from accomplishing their goals and from withdrawing into the town. The scout platoon surrounds the objective by seizing key terrain and covering enemy avenues of approach (see Figure E-25). In addition to security, scout platoon tasks may include the following:

- Preventing enemy forces from escaping.
- Preventing reinforcement of the built-up area.
- Protecting the assault force from counterattack.
- Calling for and adjusting indirect fires.

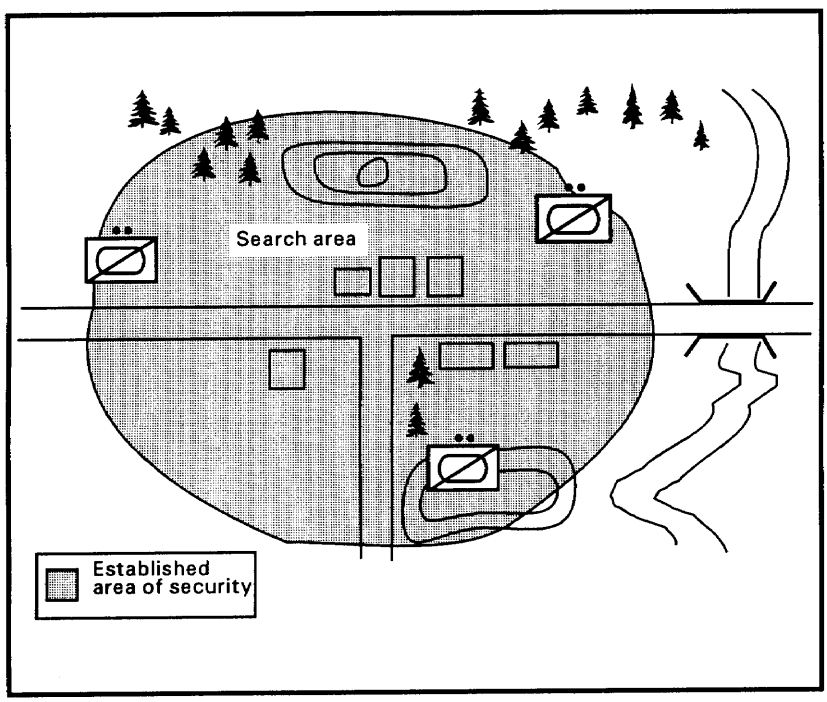


Figure E-25. Isolation of the objective in MOUT.

Gaining a foothold. The scout platoon can use its sights, including thermals, to conduct long-range reconnaissance and to locate enemy positions and/or vehicles during periods of limited visibility. The platoon can also provide fire support for infantry assaulting the objective. During the assault, the attacking force penetrates the area on a narrow front, concentrating all available supporting fires on the entry point. In support of the assault, scout platoon tasks include the following:

- Attack by fire.
- Support the attack with direct fires.
- Attack with the infantry.
- Coordinate and control indirect fires.

Attack by fire. The CFVs attack by fire while the infantry assaults the objective. Once the assault force establishes a foothold, CFVs move forward to provide close-in support. This method is used when enemy antiarmor fires or obstacles block the only possible armor avenue of approach.

Support by fire. CFVs support by fire or cover critical areas on the assault force's flanks. Once the assault force establishes a foothold, CFVs move forward to provide close-in support (see Figure E-26).

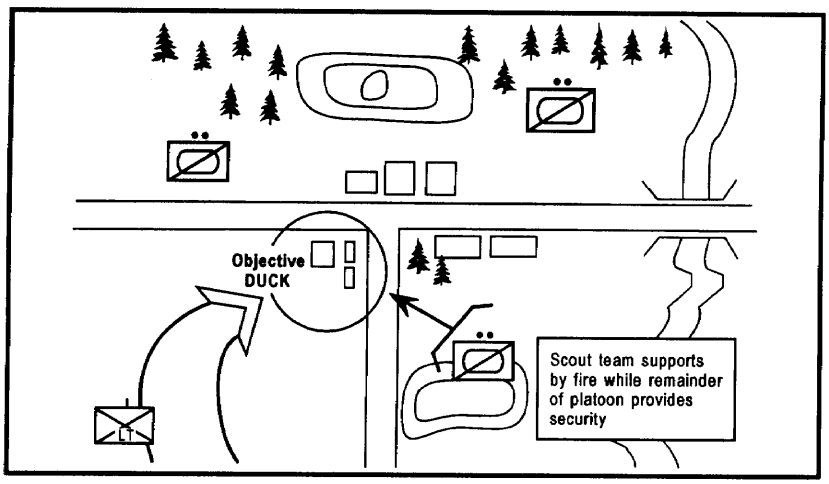


Figure E-26. Gaining a foothold in MOUT (scout platoon supports by fire).

Attack with the infantry. CFVs and the infantry advance together, with the infantry moving behind the CFVs for protection from small arms free. Infantry squads or fire teams protect the CFVs from hand-held antiarmor weapons (see Figure E-27). Attacking with infantry is difficult to coordinate and execute due to differences in speed between the mounted and dismounted forces.

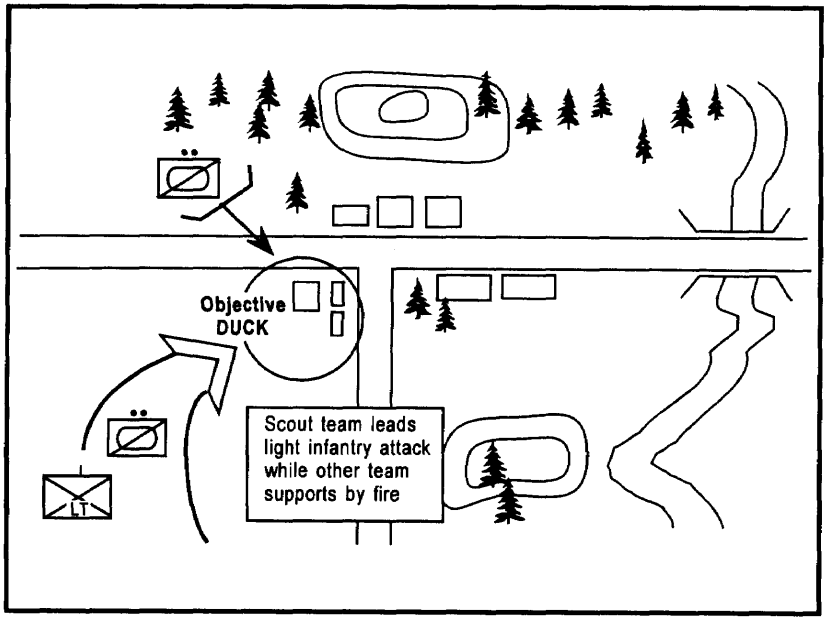


Figure E-27. Gaining a foothold in MOUT (scout platoon attacks with infantry).

Seizure and clearance. Once the infantry seizes its initial foothold, the scout platoon provides supporting fires while the infantry clears each building. Due to the danger of ambush, scout vehicles should support by fire from cleared positions rather than moving ahead of the infantry. They can sometimes provide fire support without entering the built-up area.

Because target identification and fire control measures change rapidly as clearing progresses, CFVs in the built-up area must be closely controlled by the infantry leader in charge (see Figure E-28, page E-44). Scout vehicles provide suppressive fires to allow the infantry to establish a foothold in each building. To isolate buildings, vehicles engage known or suspected enemy locations. Once the infantry is inside the building, the scout vehicles continue to suppress enemy

positions on other floors or in adjacent buildings. Specific actions of the scout platoon include the following:

- Firing into the upper stories of the buildings to drive the enemy forces to the basement, where the infantry traps and destroys them.
- Suppressing and destroying enemy weapons and personnel.
- Providing antitank protection.
- Using direct fires to open holes in walls and to reduce barricades.

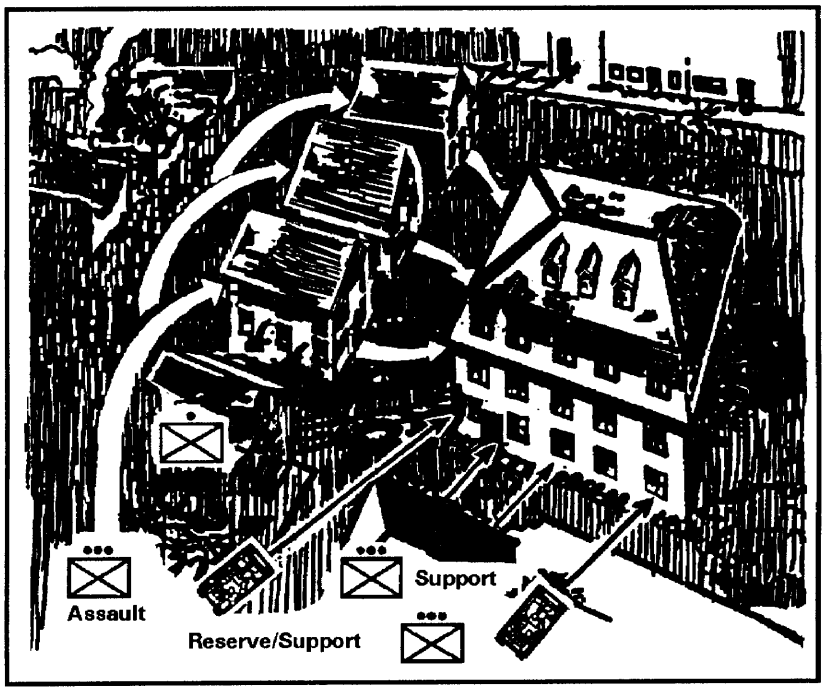


Figure E-28. Scout team supports isolation and seizure of a building.

Seizure and clearance operations can range between two extremes: a systematic, block-by-block, house-by-house reduction of the built-up area or a rapid advance with friendly forces concentrating on seizing and clearing critical

areas and buildings. (Figure E-29, page E-46, shows a CFV supporting an infantry squad in seizing and clearing an urban area.) The scout platoon's role is roughly the same in either type of operation. These procedures apply:

- Clearing streets:
  - CFVs lead, closely followed and supported by infantry.
  - CFVs work in pairs.
  - CFVs concentrate fires on windows and rooftops of buildings.
  - Infantry protects CFVs from close-in fires.
  - Infantry moves alongside or directly behind CFVs and scans for potential antiarmor positions.
- Seizing and clearing buildings:
  - CFVs provide suppressive fires, concentrating on windows, doorways, and rooftops.
  - CFVs create holes in building walls to allow the infantry to enter through unexpected entrances.

Command, Control, and Communications

Combat power is difficult to mass during MOUT because fighting is isolated. Command and control are further aggravated because units can become separated easily. Such conditions make it necessary to decentralize the fight down to the smallest unit. These small units, scout teams and infantry squads, must communicate continuously and effectively if they are to survive and win on the urban battlefield.

Visual signals. Visual signals are the most effective and reliable means of communication between the infantry force and the scout vehicles. Targets are identified with tracer fire, grenade launcher rounds, smoke grenades, VS-17 panels, or hand-and-arm signals. Visual signals are used to trigger specific actions such as initiating fires, lifting or shifting fires, moving forward to the next position, and providing smoke obscuration.

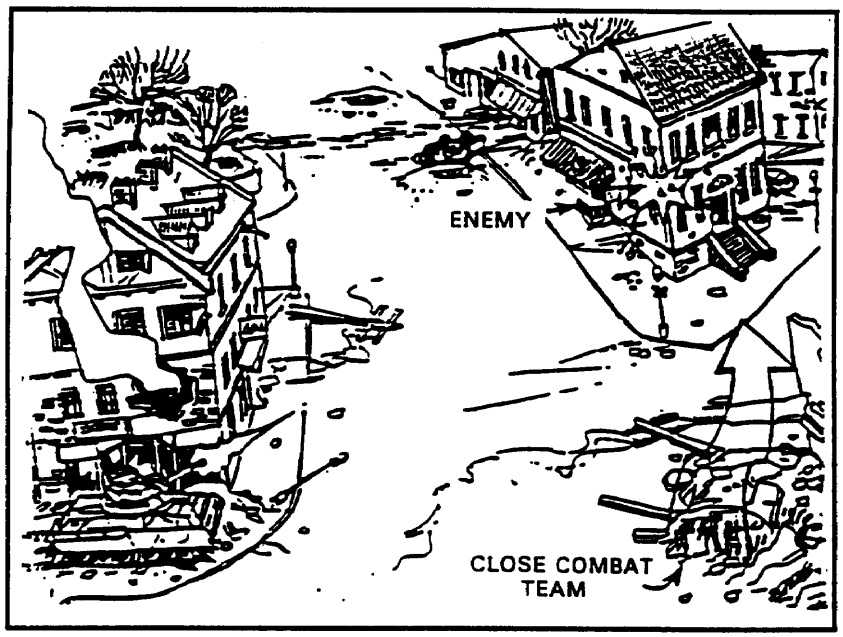


Figure E-29. CFV supports as infantry squad seizes and clears a building.

Radios and wire. The infantry leader and scout vehicles can use FM radios or land lines to communicate. Radio communications may be affected by the terrain; land lines can be used when FM communications are disrupted. To use land lines, run wire through the hatch to the inside of the CFV or connect it to the sponson box on the rear of the vehicle. A TA-1 is used to relay fire control instructions to the vehicle.

Fire Support

Indirect fires are most effective when used against open spaces of built-up areas; high-trajectory indirect fires are more effective than lower-trajectory fires. Because of these factors, mortars are normally more desirable than artillery for indirect fire support in MOUT. Scouts can play a valuable role as the link between infantry squads and platoons and the mortars of the cavalry troop or armored battalion. Three 107-mm heavy mortars are organic to cavalry troops, while heavy battalions have a mortar platoon with six 107-mm heavy mortars. Scout teams or squads are trained to call for and adjust indirect fires from these assets in support of the infantry's attack.

APPENDIX F

FUTURE TECHNOLOGIES

Just as social and political changes are reshaping the nations of the world and their interaction with each other, so too are technological developments altering the nature of the battlefield. The current threat array and the types of weapons that may emerge in the near future present the Army with greater strategic, tactical, and training challenges than it has ever faced before.

Effective reconnaissance and security operations are, and will remain, particularly critical components in the complex, high-tempo battlefield environment. The Army is currently developing key technologies that, as they are fielded, will directly and fundarnentally affect how the scout platoon fights. This appendix identifies some of these developments and examines their potential impact on the scout platoon.

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Section I. DIRECTED-ENERGY WEAPONS

This section discusses directed-energy weapons (DEW) and gives an overview of how to defend against them. This new category of weaponry is different in operation and effect from any other weapon. There is evidence that DEWs

are in use in areas of conflict around the world. **(NOTE:** For information on technical characteristics, refer to the US Army capstone manual on DEWs and to TB MED 524.)

CHARACTERISTICS

DEWs include lasers, microwave radiation emitters, and particle beam generators. These weapons produce casualties and damage equipment by depositing energy on the target. While conventional weapons rely on the kinetic or chemical energy delivered by a sizable projectile, DEWs produce subatomic particles or electromagnetic waves that strike the target at or near the speed of light.

Measures to prevent injury, damage, or destruction from DEW engagement to soldiers and currently fielded equipment are limited. Current equipment and soldier apparel lack built-in passive defense mechanisms to counter the effects of DEWs. Future versions of these items will be manufactured with built-in defenses as they are developed; older equipment maybe refitted with protective devices.

At present, however, DEWs are able to damage only "soft" targets, including people or soft components of hard targets. Scouts can employ the measures discussed in this section to protect themselves from attack by these weapons.

LASERS

Lasers are the type of DEWs most likely to be used against US forces. All modern armies have increasing quantities of laser devices in their inventories. Any laser-emitting device, such as a target designator or a range finder, can be employed as a weapon if it is aimed at a type of target it can damage.

The most probable targets of laser weapons are optical and electro-optical systems, most notably fire control devices such as sights. The soldiers behind the sights are vulnerable as well.

A laser beam entering a direct-view optical system, such as a telescope, has its power increased by the magnification of that system. Anyone who happens to be looking through the system will suffer burns to the eye. The severity of the burns, the permanence of the damage, and the time required for the eye to heal itself depend on weather conditions, the intensity of the laser, the magnification

of the optical device, and the duration of the eye's exposure to the laser. Eye injuries range from temporary flash blinding and mild bums to total, permanent blindness. A soldier suffering this type of injury can be incapacitated; he may be unable to aim a direct-fire weapon or track a command-guided weapon. A laser weapon usually will fire at a target for only a split second, at most, before laying on another target.

A laser beam entering a nonsee-through electro-optical device, such as a night vision sight or thermal imagery device, deposits its energy in the form of heat on the sensor screens inside. If the heat is intense enough, it can bum out the screen, rendering the device useless. Some of the electrical circuits inside may also burn out from the heat and from the sudden surge of electricity caused by the laser's energy. Any device so affected will require extensive repairs.

Laser weapons can also be directed against people, although that is an inefficient way to employ them. They can burn human organs and tissue, with the eyes being the most susceptible to injury. For the person to suffer eye injury, however, he must be looking directly at the laser source. Since the eye is more sensitive to light at night, laser energy entering the eye during darkness can cause more severe damage than it would during daylight. Some types of lasers are hazardous to the eye even though the laser cannot be seen.

Any uncovered glass surface (such as eyeglasses, vision blocks, or binoculars) has the potential to attractor alert an antielectro-optical weapon's target acquisition system. This increases the probability of a laser attack as well as the chance of injury or equipment damage.

DEFENSIVE AND PROTECTIVE MEASURES

Apply the following techniques to avoid detection by antielectro-optical weapon systems:

- Use artillery, mortars, or direct-fire weapons to suppress known or suspected antielectro-optical weapons locations. Smoke rounds are good for temporarily defeating laser devices.
- When operating from fixed or semifixed positions in the line of sight of known or suspected enemy locations, reduce exposure of glass surfaces in the direction of the enemy by positioning vehicles and weapons in covered or concealed positions.

- When the mission requires maneuver and, as a result, the possible exposure of multiple glass surfaces, block the line of sight between friendly forces and known or suspected enemy locations with smoke, or plan routes to lessen exposure time.

- Use sound tactics to prevent friendly weapons locations from being pinpointed and targeted for attack by laser devices.

- Devices with external glass surfaces should be shielded until they are used. Even vision blocks and headlights can alert the target acquisition systems of antieletro-optical weapons; cover them whenever possible. Tape, canvas, sandbags, or other materials can be used as covers.

- When using optical or electro-optical devices to search for the enemy, use the minimum number possible to do the job and reduce exposure time. Shield the rest until they are required for fining or other purposes.

- Gunners can use the AN/TAS-4 to scan for enemy laser devices. A blooming of the image indicates the presence of a laser. The gunner should be instructed to find the enemy laser device. The unit can then avoid the laser or use indirect fire to neutralize it.

- Tubular extensions over objective lenses reduce the chance of detection except from almost head-on. They can be made from tubular ammunition packaging or other scrap materials.

- Low-energy antielectro-optical weapons work only if they have a line of sight to their target, although they are just as effective at night as during the day. Take advantage of smoke, fog, snow, and dust to degrade their effectiveness. Another good countermeasure against some laser devices is to cover one-half of the optical lens with tape or some other type of cover. This may result in some degradation of viewing capability; however, the benefits of reducing vulnerability to laser attack could justify the loss.

Soldiers should be aware of the potential hazards from laser devices in the US Army inventory. Laser range finders are the devices most likely to be found near friendly soldiers; they are used on the M551A1, M60A3, and M1-series

tanks. They are also used in artillery units and by FISTs in cavalry troops and squadrons. Other lasing devices used by FISTs include the following:

- The ground-locating laser designator and lightweight target designator.
- The GVS-5 binocular-type laser range finder (used by artillery FISTs and reconnaissance patrols).
- The laser designator used by attack helicopters to direct the Hellfire and Copperhead weapon systems.
- Laser devices used by artillery survey parties for surveying in gun positions.

Air Force and Navy aircraft can also carry laser target designators for aiming precision-guided munitions. The F-4, F-7, F-111, F-105, F-16, and A-6 aircraft can be equipped with these designators.

Operators of laser firing devices receive extensive training in using them safely. The devices themselves cannot be activated without conscious, deliberate action on the part of the operator. While accidents are rare, however, they can happen. A victim might suddenly and unexpectedly move directly into the path of the laser beam and look directly at it, or a laser beam might reflect off a shiny surface and strike a victim in the eyes.

To prevent such accidents, operators of laser firing devices must constantly be kept aware of friendly soldier locations, and they must positively identify targets before lasing them. Lasers should not be fired at reflective surfaces, and the warning "LASING" should be given before activating the laser.

Conversely, commanders of soldiers operating in areas near friendly lasers must ensure that the commanders of laser-operating forces are always aware of the locations of friendly soldiers. Soldiers should be told whenever there are friendly lasers in their area, including the exact locations, if possible. They should be warned not to look in the direction of the laser-emitting devices unless specifically told it is safe to do so. Whenever possible, soldiers should wear laser-protective goggles matched to the wavelength of the friendly lasers. These goggles are available through normal supply channels.

DIRECTED ELECTROMAGNETIC PULSE

Electromagnetic pulse (EMP) is electromagnetic radiation that has a frequency ranging from 10 MHz to 4 GHz. EMP can come from nuclear

detonations (nondirected EMP), from detonation of conventional explosives coupled with focusing electromechanical devices, or from electrically powered EMP generators on or above the ground.

EMP can damage or destroy sensitive electronic components, such as microchips, coils, and fuses by overloading them with electrical current. All equipment containing electronic components, including FM radios, is subject to damage or destruction from EMP attack. The extent of damage depends on the distance from the equipment to the source of the pulse.

EMP can be projected into target areas from long ranges. It can enter a targeted device through any opening and attack sensitive components inside even if the device is disconnected or turned off. For example, it can enter a radio set through the louvers over the cooling fans and destroy circuitry inside, leaving the radio useless. It can also enter through unshielded cables for antennas, power lines, and so on.

Protecting equipment from EMP is difficult because the attack lasts for only a split second and affects a large area. It is possible, however, to make operational equipment less susceptible to destruction during an attack and to ensure that other equipment is available for use after the attack.

The only truly reliable method of protection is to encase vulnerable equipment in some type of heavy-gauge metal shielding or to surround it with special metal screening. Burying or covering equipment with sandbags or other nonmetallic materials does not provide enough protection. Terrain masking is ineffective because EMP follows the curve of the earth.

When operated from combat vehicles, sensitive equipment should be disconnected when not needed and moved to the center of the vehicle. Smaller pieces of equipment should be placed in empty ammunition cans. Hatch covers should stay closed except when someone enters or exits the vehicle. Known or suspected locations of enemy ground-based EMP-generating weapons should be attacked by direct or indirect fire weapons within range.

TRAINING

Commanders at all levels must mentally condition their subordinates to face the threat of DEWs. These weapons appear at first glance to have devastating effects on men and equipment; effective defense against them seems nearly impossible. A basic understanding of what they are and how they work, however, reveals them to be far less fearsome.

Laser, microwave, and EMP weapons damage their materiel targets by attacking soft electronic components. Their terminal effects are less violent and destructive than those of conventional kinetic-energy or chemical-energy munitions. Even though they may render their targets just as combat-ineffective, they do not have the blast, fire, and fragmentation effects of conventional munitions.

For those same reasons, people face less danger from laser, microwave, or EMP attacks than from conventional attacks. While the thought of laser-induced eye injuries may be tightening to the soldier, the potential extent of such injuries, as well as the possibility of their occurrence, is much smaller than that for gunshot wounds. The expected recovery time is shorter as well. Permanent blindness in the affected eye occurs in only a small percentage of incidents.

The advantages of particle beam weapons (to the extent they are used) are their flat trajectory, long range, and large magazine capacity. Otherwise, these weapons are similar to conventional tank cannons in employment and effect. Whether a vehicle is struck by a HEAT round, an APDS round, or a particle beam hardly matters; the effect on the vehicle and its occupants is about the same in all cases. There are no countermeasures against a particle beam weapon system.

Until equipment is factory-hardened against DEWs, the defensive techniques discussed in this appendix are the key to surviving directed-energy attack. DEWs that can injure people are line-of-sight systems; the standard techniques employed against any direct fire weapon provide protection against personal injury from DEWs. Because DEWs have no bursting radius, these techniques may actually be more effective against directed energy than against conventional weapons.

LASER COUNTERMEASURE SYSTEM

Each squad is issued one laser countermeasure system (LCMS). The LCMS has the following capabilities in disrupting enemy optical and electro-optical sighting devices:

- Detection of all types of optics from extended ranges.
- Location of optical and electro-optical devices, allowing the gunner to track and suppress the enemy.

- Illumination of a 30-meter target at a range of up to 1,000 meters.
- Suppression of enemy personnel and equipment. The LCMS can temporarily flash-blind personnel who are using direct-view optics as well as those who happen to look directly at the laser without eye protection. The system can also cause temporary "blooms" in image intensifiers.
- Designation of a precise target area that can be used to cue and direct fires from other weapons.

The scout platoon leader uses the LCMS to assist in identifying targets during reconnaissance and security operations. Once targets are identified, the LCMS enhances the combat power of the maneuver force by pinpointing targets for direct and indirect fires. Target handoff criteria must be coordinated and specified in the OPORD to ensure the LCMS is not used before handoff assets become available. For example, if mortars are tasked to destroy identified targets, the squad will not activate the LCMS until the mortars are ready to fire. If the system is activated too early, the enemy can take measures to counter the effects of the mortars.

The LCMS can be used in either active or passive mode. In the passive mode, targets can be identified without the enemy's knowledge. In the active mode, the enemy may discover that he is being targeted. For safety, the LCMS should never be used to identify friendly forces.

The LCMS gives the platoon the ability to detect targets at long ranges; it is most valuable, however, when used in conjunction with other detection devices. The mission of the platoon does not change with the addition of the LCMS. The system provides high-quality operational information, but the platoon must rely on its tactical skills to move into a position to most effectively use it.

SECTION II. THE STINGRAY SYSTEM

The Stingray, which can be employed on the battlefield as an adjunct direct-fire system on the CFV and BFV, is a combat protection system that enhances survivability against enemy optical devices. The Stingray can counter multiple ground and aerial weapons under almost all battlefield conditions by detecting and jamming enemy optical sighting systems before the weapons can be fired. Current fielding plans will assign three Stingrays to each scout platoon

equipped with the CFV. There is no current fielding plan for HMMWV-equipped scout platoons.

CAPABILITIES AND OPERATION

The Stingray can operate in automatic, semiautomatic, or manual modes. The mode of operation depends on the control measures required to protect friendly forces and to obtain the maximum effect on enemy systems. The following conditions apply:

- The automatic mode is used when there is no danger to friendly forces and when there is a large number of enemy systems.
- The semiautomatic mode is used when more restrictive control measures are required. It restricts the Stingray system to its scanning function until the operator gives the command to fire.
- The manual mode is used for security reasons when tight control of the system is required because of command restrictions or restrictions on laser operations. Manual control also permits rapid reorientation to anew sector when a higher-priority threat appears or when one mission is completed and a change of sector is required.

In combat, the Stingray is an integral part of the platoon; the system allows the platoon to observe, detect, and jam enemy ground and aerial targets beyond the direct-fire engagement range of other organic weapon systems. Stingray-equipped CFVs not only can jam known enemy locations, but also can locate enemy positions that might otherwise go undetected.

On the battlefield, the Stingray is controlled in the same manner as other direct-fire weapons. It is assigned a sector of fire within the platoon. Stingray sectors are included on the CFV range card, and restrictions on the Stingray mode of operation are noted in the range card remarks section. The platoon leader employs the system in accordance with the commander's intent and plan. The Stingray normally operates in the automatic or semiautomatic mode, but some situations will require use of the manual mode. This information is included in the commander's OPORD to the platoon leader.

RECONNAISSANCE

During reconnaissance operations, Stingray vehicles should be employed on the flanks and forward of the platoon to provide maximum protection. They can be linked with each other to provide overlapping sectors of coverage. During

movement, the Stingrays are employed with the overwatch element. Prior to the movement of the bounding element, they sweep the area in the semiautomatic mode to detect the presence of enemy forces without jamming their systems. On engagement by the enemy, the Stingray can switch to the automatic mode to jam threat systems. If necessary, Stingrays can be employed with the bounding element, although this is not the most effective use of the system. In the bounding element, the Stingray operates in the semiautomatic mode. Upon contact, it is placed in the automatic mode to detect and jam threat systems.

SECURITY

Because of their ability to detect enemy optics. Stingray-equipped platoons can routinely perform screen missions. One Stingray-equipped CFV should be employed with each OP. The CFV moves to a hull-down position and sweeps the area under observation in the automatic mode. Once the area is cleared, the CFV returns to a hide position. At irregular intervals, the Stingray vehicle returns to a hull-down position and checks the area to ensure that OPs are not under enemy observation. The Stingray can also be employed as a redundant system (similar to GSR) to provide maximum area coverage along the screen line to detect any enemy approach. Stingrays operate in the semiautomatic mode during these missions; however, they can most effectively avoid detection when operated in the manual mode.

Section III. DIGITIZATION AND THE lNTRAVEHICULAR INFORMATION SYSTEM

The intravehicular information system (IVIS) can digitally transmit, receive, and display accurate friendly vehicle positions, laser-designated enemy vehicle locations, and a menu of operational reports and graphics. IVIS significantly increases the ability of the platoon to operate dispersed at a rapid tempo and then to rapidly concentrate at critical points when required.

The system's most important feature is the accurate eight-digit map grid that visually displays friendly and enemy vehicle locations. This permits virtually perfect spot reports and calls for fire. It also vastly improves the platoon leader's situational awareness. IVIS permits the digital transmission of operational graphics. This allows the commander to get his scouts moving as early as

possible in the mission; it also permits the scout platoon leader to receive and issue graphics for FRAGOs more rapidly and with greater accuracy. When integrated with either a global positioning system (GPS) or a positive navigation system (POSNAV), IVIS makes navigation easier and more accurate, particularly in the extremes of open or closed terrain.

IVIS is an integral part of the soon-to-be-fielded M1A2 tank. In addition, IVIS, or a similar system, will be incorporated into the M3A3 fighting vehicle and used in all CPs at battalion/squadron and higher level. Although the format is not yet determined, an IVIS-type system will eventually become available to HMMWV-equipped scout platoons. The impact of these digitized information systems will be an ever-faster tempo of operations, creating correspondingly more challenging command and control problems. Offsetting these negative elements will be the platoon's capability for instant transmission of highly accurate orders.

Section IV. REMOTELY PILOTED VEHICLES

Remotely piloted vehicles (RPV) are currently in active use by many nations. The US Army is rapidly developing this technology and has several versions of RPVs ready for fielding in the near future. It is likely that the RPVs will be available for employment by battalion and cavalry scout platoons, either as an assigned part of the platoon or as an attached element. Typical RPV capabilities and attributes include the following:

- Hand-launched.
- Transportable on the HMMWV or CFV.
- Battery-powered.
- One-hour flight duration.
- Both color and black-and-white video.
- Operating radius of 5 to 7 kilometers.
- Low noise and visual signatures.

- Operator-maintainable.
- Imagery resolution sufficient to recognize troops and vehicles.
- Video down-link that can provide a HMMWV or CFV base station with real-time images.

The major limitation of RPVs is their inability to conduct detailed reconnaissance and to locate small reconnaissance objectives such as dismounted enemy elements. Effective camouflage, limited visibility conditions, bad weather, and the use of dummy positions by the enemy also degrade the reliability of information received from RPVs.

RECONNAISSANCE

Despite their limitations, RPVs can significantly enhance the scout platoon's ability to conduct reconnaissance missions. RPV employment is in many ways similar to that of air cavalry elements. During reconnaissance, an RPV can assist in mission preparation, augment the ground reconnaissance effort, and execute independent reconnaissance tasks.

During mission preparation, RPVs can conduct rapid reconnaissance of such objectives as designated routes or the overall terrain in the area of operations. The platoon leader can then use this information to develop or refine his plan. If video playback is available, the results of the reconnaissance can become part of the platoon leader's OPORD.

RPVs can augment ground reconnaissance elements by searching for terrain, obstacles, and enemy forces forward of the scout teams. This enhances the scout teams' security and therefore can speed the tempo of the reconnaissance mission. When RPVs locate something significant, they transmit the information to the nearest scout team, which can then report the data and coordinate for handover of targets.

The scout platoon leader can use RPVs to execute independent reconnaissance tasks under a variety of circumstances. They can reconnoiter objectives that are difficult or impossible to reach on the ground. They are also useful in rapid reconnaissance of low-priority objectives; this can free ground scout teams to perform other tasks. RPVs can also perform rapid and effective

reconnaissance of high-priority objectives when conditions favor their use (open terrain and good weather are ideal) or when a detailed reconnaissance is not required.

SECURITY

During security operations, RPVs can perform independent security missions or augment screen line operations. Independent RPV missions are difficult to execute because of the requirement for continuous coverage, but such coverage can be maintained for short periods through careful management of aerial patrols. When used to augment the screen line, aerial patrols reconnoiter forward of the OP positions to provide early warning of enemy approach. They can also reconnoiter dead space throughout the depth of the screen line to provide security for the OPs and to prevent infiltration.

Section V. LONG-RANGE ADVANCED SCOUT SURVEILLANCE SYSTEM

This system, known as LRAS3, is designed for all-weather observation and target acquisition. It can be employed either mounted or man-portable, day or night, and under a variety of adverse conditions. It allows scouts to acquire and identify enemy equipment and positions while remaining outside the range of enemy small- and large-caliber direct fire acquisition and engagement systems.

The LRAS3 includes a laser range finder, thermal imaging system, daylight TV, and chemical detection capability. It may also have an integrated GPS and a digital link to IVIS or a similar command and control system.

The LRAS3's biggest asset is its enhanced ability to acquire targets without the enemy's knowledge; the scout platoon's target acquisition capability will be 50 to 70 percent better than with current systems. Scouts will also be able to make reports and call for indirect fire support more quickly and accurately. Dismounted OPs will have the same acquisition capability as vehicles without sacrificing stealth. The LRAS3 will increase the tempo of reconnaissance missions as scouts gain the ability to move and observe with more security and greater accuracy. It will permit scouts to make more efficient use of available time for planning and execution; their ability to keep pace with mobile operations and rapidly changing situations will improve as a result.

Section VI. BATTLEFIELD COMBAT IDENTIFICATION SYSTEM

As discussed throughout this manual, fratricide is a major battlefield hazard. Recent combat experience has spurred the Army to approach fratricide reduction from two directions. One approach focuses on training in situational awareness and risk assessment for all leaders and soldiers. At the same time, the battlefield combat identification system (BCIS) has been developed as a technological solution to fratricide. This system will permit electronic interrogation of an unknown vehicle by Army vehicles and aircraft. Friendly vehicles of all types will carry a transponder that will respond positively to the interrogation, greatly reducing the likelihood of fratricide.

The BCIS will be fielded on all direct fire weapons platforms (CFVs and tanks), as well as on direct acquisition systems (scouts and field artillery observers). On the CFV, BCIS is expected to be integrated into the vehicle fire control system. On the HMMWV, the BCIS will be part of an integrated sight unit such as the LRAS3. The system will also be integrated into the appropriate vehicle-mounted information system (such as IVIS). It is anticipated that dismounted troops will also be able to interface with BCIS.

The impact of BCIS on scout tactics, techniques, and procedures will be minimal. BCIS interrogation w ill be a routine step in the acquisition process; in addition, interrogation results will be included in all spot reports. The ultimate impact of BCIS will not be in changing how scouts operate, but rather in making it safer for them to operate forward of other friendly elements.

Section VII. JAVELIN

The Army is attempting to field the man-portable, “free-and-forget” Javelin antitank weapon system for all HMMWV-mounted scouts. The system can be loaded quickly and has the capability of attacking armored vehicles “top-down.” Weighing approximately 50 pounds, it will include a separate command launch unit that can operate as a thermal-capable night observation device even if there is no armor threat. The range of the system will be greater than 2,000 meters.

The Javelin's impact on scout capabilities will be significant. It will allow dismounted scouts to execute reconnaissance and combat patrols with a relatively lightweight thermal sight. It will also give dismounted patrols the capability of dealing with unexpected armored vehicle threats. (Scouts, however, will not use the Javelin to seek out and destroy enemy armor in offensive operations.)

During security operations, the Javelin will give HMMWV scouts who are manning OPs the ability to employ an effective antiarmor weapon in self-defense situations. It will also provide them with an effective, lightweight thermal sight system that can be employed instead of, or in addition to, other available dismounted thermal optics. (During screening operations, however, the Javelin will not be used as a substitute for an armor-killing counterreconnaissance force in augmenting scouts elements.)

APPENDIX G

FRATRICIDE REDUCTION

Fratricide is as old as warfare itself, a complex problem that defies simple solutions. It is defined as "the employment of friendly weapons and munitions, with the intent to kill the enemy or destroy his equipment or facilities, that results in unforeseen and unintentional death or injury to friendly personnel." This appendix focuses on actions leaders can take with current resources to reduce the risk of fratricide.

MAGNITUDE OF THE PROBLEM

The modern battlefield is more lethal than any in history. The pace of operations is rapid, and the nonlinear nature of the battlefield creates command and control challenges for all unit leaders.

Our ability to acquire targets using thermal imagery exceeds our ability to accurately identify targets as friend or foe. The accuracy and lethality of modem weapons make it possible to engage and destroy targets at these extended acquisition ranges.

Added to this is the problem of battlefield obscuration. Rain, dust, fog, smoke, and snow degrade the ability to identify targets by reducing the intensity and clarity of thermal images. The effects of battlefield obscuration must be considered when thermal identification is relied upon.

On the battlefield, positive visual identification cannot be the sole engagement criteria at ranges beyond 1,000 meters. Situational awareness is key and must be maintained throughout an operation.

STOPPING A FRIENDLY FIRE INCIDENT

The following are recommended actions to take at crew and leader level in the event the crew falls victim to friendly fires:

- React to contact until you recognize friendly fire.
- Cease fire.

- Report the following on the next higher unit net:
  - Announce that you are receiving friendly fire.
  - Give the location and direction of the firing vehicle.
  - Provide a visual recognition signal to cease fire.
  - Protect troops and request medical assistance as needed.
  - Warn the higher unit not to return fire if you identify the firing unit as friendly.

The following are recommended actions to take at crew and leader level when the crew has engaged friendly forces:

- Cease fire.
- Report the following on the next higher net:
  - Identification of the engaged friendly force (if unknown, report number and type of vehicles).
  - The location.
  - The direction and distance to victims.
  - The type of fire.
  - The target effects.

The following are recommended actions to take at crew and leader level in the event the crew observes a friendly fire incident:

- Seek cover and protect yourself.
- Report the following on the next higher net:
  - The engaged friendly force.
  - The location of the incident.

- The direction and distance to the victim and the firing unit.
- The type of fire.
- The target effects.

- Provide a visual friendly recognition signal.
- Provide assistance (when safe to do so) as needed.

In all situations involving the risk of fratricide and friendly fire, leaders must be prepared to take immediate actions to prevent casualties and equipment damage or destruction. Recommended actions include the following:

- Identify the incident and order the parties involved to cease fire.
- Conduct an in-stride risk assessment.
- Identify and implement controls to prevent the incident from recurring.

PREVENTATIVE MEASURES

Reduction of fratricide risk begins with the planning phase of an operation and continues through the execution of the operation. The following are considerations for identify fratricide risks in the planning, preparation, and execution phases of a given operation:

- Planning phase. A plan that is thoroughly developed and understood helps to minimize fratricide risk. The following considerations help indicate the potential for fratricide in a given operation:
  - The clarity of the enemy situation.
  - The clarity of the friendly situation.
  - The clarity of the commander's intent.

- The complexity of the operation.
- The planning time available at each level.

- Preparation phase. The following factors may cause fratricide risks to become evident during rehearsals:
  - Number and type of rehearsals.
  - Training and proficiency levels of units and individuals.
  - The habitual relationships between units conducting the operation.
  - The endurance of the troops conducting the operation.
- Execution phase. During execution, in-stride risk assessment and reaction are necessary to overcome unforeseen fratricide risk situations. The following are factors to consider when assessing fratricide risks:
  - Intervisibility between adjacent units.
  - Amount of battlefield obscuration.
  - Ability or inability to positively identify targets.
  - Similarities and differences in equipment, vehicles, and uniforms among friendly and enemy forces.
  - Vehicle density on the battlefield.
  - The tempo of the battle.

Graphics are a basic tool that commanders at all levels use to clarify their intent, add precision to their concept, and communicate their plan to subordinates. As such, graphics can be a very useful tool in reducing the risk of fratricide. Commanders at all levels must understand the definitions and purpose of operational graphics and the techniques of their employment. See FM 101-5-1 for the definitions of each type of graphic control measure.

Briefbacks and rehearsals are primary tools in identifying and reducing fratricide risk. The following are some considerations in reducing fratricide:

- Briefbacks ensure subordinates understand the commander's intent. They often highlight areas of confusion, complexity, or planning errors.
- The type of rehearsal conducted determines what types of risks are identified.
- Rehearsals should extend to all levels of command and involve all key players.
- Use briefbacks or rehearsals to ensure subordinates know where fratricide risks exist and what to do to reduce or eliminate the risk.

Maintaining situational awareness at all levels is another key to fratricide reduction. Units must develop techniques and SOPs to gain and maintain situational awareness. Techniques could include—

- Eavesdropping on the next higher net.
- Radio cross-talk between units.
- Accurate position reporting and navigation.
- Training and use/exchange of LOs.

Risk assessment must be conducted at all levels during the planning, preparation, and execution phases of all operations. Identification of fratricide risk factors is conducted at every level, and the results should be clearly communicated up and down the chain of command.

Figure G-1, page G-6, provides a worksheet for considering fratricide risk in the context of mission requirements. The worksheet lists six mission-accomplishment factors that affect the risk of fratricide. Assess the potential risk in each area as low, medium, or high, and assign a point value to each (one point for low risk, two for medium risk, three for high risk). Add the point values for the overall fratricide assessment score. Use the resulting score only as a guide, however. Your final assessment must be based both on observable risk factors like those on the worksheet and on your "feel" for the intangible factors affecting the operation. Note that descriptive terms are listed only in the low- and high-risk columns of the worksheet. Your assessment of each factor will determine whether the risk matches one of these extremes or lies somewhere between them as a medium risk.

FACTORS	LOW (1)	MEDIUM (2)	HIGH (3)
1. UNDERSTAND PLAN			
- Commander's Intent	Clear	← - - →	Foggy
- Complexity	Simple	← - - →	Complex
- Enemy Situation	Known	← - - →	Unknown
- Friendly Situation	Clear	← - - →	Unclear
- ROE	Clear	← - - →	Unclear
2. ENVIRONMENT			
- Intervisibility	Favorable	← - - →	Unfavorable
- Obscuration	Clear	← - - →	Obscured
- Battle tempo	Slow	← - - →	Fast
- Positive target ID	100%	← - - →	0%
3. CONTROL MEASURES			
- Command relationships	Organic	← - - →	Joint/Combined
- Audio	Loud/Clear	← - - →	Jammed
- Visual	Well Seen	← - - →	Obscured
- Graphics	Standard	← - - →	Not understood
- SOPs	Standard	← - - →	Not used
- LOs	Proficient	← - - →	Untrained
- Location/Navigation	Sure	← - - →	Unsure
4. EQUIPMENT (Compared to US)			
- Friendly	Similar	← - - →	Different
- Enemy	Different	← - - →	Similar
5. TRAINING			
- Individual proficiency	MOS Qual	← - - →	Untrained
- Unit proficiency	Trained	← - - →	Untrained
- Rehearsals	Multiple	← - - →	None
- Habitual relationship	Yes	← - - →	No
- Endurance	Alert	← - - →	Fatigued
6. PLANNING TIME (1/3 -2/3 Rule)			
- Higher HQ	Adequate	← - - →	Inadequate
- Own HQ	Adequate	← - - →	Inadequate
- Lower HQ	Adequate	← - - →	Inadequate
OVERALL FRATRICIDE ASSESSMENT SCORE	LOW 26–46*	MEDIUM 42–62*	HIGH 58–78*

* Commander may use numbers as the situation dictates.

* Numbers alone may not give accurate fratricide risk.

Figure G-1. Fratricide risk assessment worksheet.

FRATRICIDE REDUCTION GUIDELINES

The following measures are provided as a guide to prudent and appropriate actions that can reduce fratricide risk. They are not directive in nature, nor are they intended to restrict initiative. Apply them as appropriate based on the specific situation and METT-T factors.

- Identify and assess potential fratricide risk in the estimate of the situation. Express this risk in the OPORD or FRAGO.
- Maintain situational awareness-current intelligence; unit locations/dispositions; denial areas (minefields/FASCAM); contaminated areas, such as ICM and NBC; SITREPs; and METT-T.
- Ensure positive target identification. Review vehicle/weapons identification (ID) cards. Know at what ranges and under what conditions positive ID of friendly vehicles/weapons is possible.
- Establish a command climate that stresses fratricide prevention. Enforce fratricide prevention measures; use doctrinally sound tactics, techniques, and procedures to ensure constant supervision of execution of orders and performance to standards.
- Recognize the signs of battlefield stress. Take quick, effective action to deal with it to maintain unit cohesion.
- Conduct individual and collective (unit) fratricide awareness training; target identification/recognition training; fire discipline; and leader training.
- Develop a simple, decisive plan.
- Give complete and concise mission orders.
- Use SOPs that are consistent with doctrine to simplify mission orders. Periodically review and change SOPs as needed.
- Strive for maximum planning time for you and your subordinates.
- Use common language/vocabulary and doctrinally correct standard terminology and control measures, such as FSCL, zone of engagement, RFL, and others.

- Ensure thorough coordination is performed.
- Plan for and establish effective communications.
- Plan for collocation of CPs as appropriate to the mission, such as during a passage of lines.
- Designate and employ LOs as appropriate.
- Make sure ROE are clear.
- Consider the effect of fratricide on key elements of terrain analysis **(OCOKA).**
- Conduct rehearsals whenever the situation allows time to do so.
- Be in the right place at the right time. Use position location/ navigation (GPS) devices; know your location and the locations of adjacent units (left, right, leading, and follow-on); and synchronize tactical movement.
- Include fratricide incidents in after-action reviews (AAR).

FRATRICIDE RISK CONSIDERATIONS (OPORD FORMAT)

This section, which parallels the five-paragraph OPORD, contains key factors and considerations in fratricide reduction. This is not a change to the OPORD format; rather, it should be used during OPORD development to ensure fratricide reduction measures are included in the order. It is not a strict guide. The factors and considerations are listed where they would likely appear in the OPORD, but they may warrant evaluation during preparation of other paragraphs.

1. Situation.

a. Enemy forces.

(1) Are there similarities among enemy and friendly equipment and uniforms that could lead to fratricide?

(2) What languages do enemy forces speak? Could these contribute to fratricide risk?

(3) What are the enemy's deception capabilities and its past record of deception activities?

(4) Do you know the locations of enemy forces?

b. Friendly forces.

(1) Among the allied forces, are there differences (or similarities with enemy forces) in language, uniform, and equipment that could increase fratricide risk during combined operations?

(2) Could differences in equipment and uniforms among US armed forces increase fratricide risk during joint operations?

(3) What differences in equipment and uniforms can be stressed to help prevent fratricide?

(4) What is the friendly deception plan?

(5) What are the locations of your unit and adjacent units (left, right, leading, follow-on)?

(6) What are the locations of neutrals and noncombatants?

c. Own forces.

(1) What is the status of training activities? What are the levels of individual, crew, and unit proficiency?

(2) Will fatigue be a factor for friendly forces during the operation? Has an effective sleep plan been developed?

(3) Are friendly forces acclimatized to the area of operations?

(4) What is the age (new, old, or mix) and condition of equipment in friendly units? What is the status of new equipment training (NET)?

(5) What are the expected MOPP requirements for the operation?

d. Attachments and detachments.

(1) Do attached elements know the above information regarding enemy and friendly forces?

(2) Are detached elements supplied the above information by their gaining units?

e. Weather.

(1) What are the expected visibility conditions (light data and precipitation) for the operation?

(2) What effect will heat and cold have on soldiers, weapons, and equipment?

f. Terrain.

(1) Do you know the topography and vegetation (such as urban, mountains, hilly, rolling, flat, desert, swamp/marsh, prairie/steppe, jungle, dense forest, open woods) of the expected area of operations?

(2) Have you evaluated the terrain using the factors of OCOKA?

2. Mission. Is the mission, as well as all associated tasks and purposes, clearly understood?

3. Execution.

a. Task organization.

(1) Has the unit worked under this task organization before?

(2) Are SOPs compatible with the task organization (especially with attached units)?

(3) Are special markings or signals (for example, cats' eyes, chemlites, or panels) needed for positive identification of uniforms and equipment?

(4) What special weapons and/or equipment are to be used? Do they look or sound like enemy weapons and/or equipment?

b. Concept of the operation.

(l) Maneuver. Are main and suppotiing effort is identified to ensure awareness of fratricide risks and prevention?

(2) Fires (direct and indirect).

(a) Are priorities of fires identified?

(b) Have target lists been developed?

(c) Has the fire execution matrix/overlay been developed?

(d) Have locations of denial areas (minefield, FASCAM) and contaminated areas (ICM, NBC) been identified?

(e) Are the locations of all supporting fire targets identified in the OPORD/OPLAN overlays?

(f) Are aviation and CAS targets clearly identified?

(g) Has the direct-fire plan been developed?

(h) Have FPF been designated?

(i) Have you identified and verified sector limits?

(3) Engineer tasks.

(a) Are friendly minefield, including FASCAM and ICM dud-contaminated areas, known?

(b) Are obstacles identified, along with the approximate time needed for reduction/breaching of each?

(4) Tasks to each subordinate unit. Are friendly forces identified, as appropriate, for each subordinate maneuver element?

(5) Tasks to CS/CSS units. Have locations of friendly forces been reported to CS/CSS units?

(6) Coordinating instructions.

(a) Will a rehearsal be conducted? Is it necessary? Are direct and indirect fires included?

(b) Is a briefback necessary?

(c) Are appropriate control measures clearly explained and illustrated in the OPORD and overlays? Have they been disseminated to everyone who has a need to know? What is the plan for using these control measures to synchronize the battle and prevent fratricide?

(d) Have target/vehicie identification drills been practiced?

(e) Do subordinate units know the immediate action, drill, or signal for "cease fire" or "I am friendly" if they come under unknown or friendly fire? Is there a backup action?

(f) Is guidance in handling dud munitions, such as ICMs and CBUs, included?

4. Service Support.

a. Are train locations and identification markings known by everyone?

b. Do medical and maintenance personnel know the routes between train units?

5. Command and Signal.

a. Command.

(1) What is the location of the commander and key staff?

(2) What is the chain of command?

b. Signal.

(1) Do instructions include signals for special and emergency events?

(2) Do instructions include how to identify friendly forces to aircraft?

(3) Do instructions include backup codewords and visual signals for all special and emergency events?

(4) Are SOI distributed to all units with a need to know, such as higher, lower, adjacent, leading, and follow-on?

GLOSSARY

A

AA	avenue of approach; assembly area (illustration text only)
AAR	after-action review
ACE	armored combat earthmover
ACR	armored cavalry regiment
ADA	air defense artillery
A/L	administrative/logistics
ALOC	administrative/logistics operations center
AP	antipersonnel
APC	armored personnel carrier
APDS	armor-piercing, discarding-sabot (ammunition)
ARTEP	Army Training and Evaluation Program
ASL	assistant section leader (illustration text)
AT	antitank
ATAS	air-to-air Stinger (missile)
ATGM	antitank guided missile
AVLB	armored vehicle launched bridge

B

BCIS	battlefield combat identification system
bde	brigade
BFV	Bradley (infantry) fighting vehicle
BHL	battle handover line
bn	battalion
BP	battle position
BSFV	Bradley Stinger (missile) fighting vehicle

C

cal	caliber
CAM	chemical agent monitor
CAS	close air support
cbt	combat
CBU	cluster bomb unit
CEV	combat engineer vehicle
CFV	cavalry fighting vehicle

cGy/hr	centigray(s) per hour
cm	centimeter(s)
cmd	command
CMH	US Army Center for Military History
co	company
co tm; co/tm	company team
coax	coaxially mounted (machine gun)
COLT	combat observation lasing team
CP	command post
CRP	combat reconnaissance patrol
CS	combat support
CSS	combat service support
CTCP	combat trains command post

D E

DA	Department of the Army
DAP	decontamination apparatus (illustration text)
DD	Department of Defense
DEW	directed-energy weapon
dir	directional (illustration text)
DP	decision point
DPICM	dual-purpose improved conventional munitions
DS	direct support
DTG	date-time group
dvr	driver
EA	engagement area
EMP	electromagnetic pulse
en	enemy
EPW	enemy prisoner of war

F

1SG	first sergeant
FA	field artillery
FAAD	forward area air defense
FAC	forward air controller
FASCAM	family of scatterable mines
FDC	fire direction center
FEBA	forward edge of the battle area
FIST	fire support team

FLOT	forward line of own troops
FM	frequency modulation (radio); field manual
FMFM	Fleet Marine Field Manual
FO	forward observer
FPF	final protective fires
FRAGO	fragmentary order
FS	fire support
FSCL	fire support coordination line
FSE	fire support element
FSO	fire support officer
ft	foot; feet

G H

GELD	ground-emplaced laser designator
GHz	gigahertz
GPS	global positioning system
GSR	ground surveillance radar
H	hour (used for timeline designation)
HE	high explosive
HEAT-T	high explosive antitank-tracer (ammunition)
HEI-T	high explosive incendiary-tracer (ammunition)
HHC	headquarters and headquarters company
HMMWV	high-mobility multipurpose wheeled vehicle
HQ	headquarters
hr	hour(s)

I J K

IAW	in accordance with
ICM	improved conventional munitions
ID	identification
IFF	identification, friend or foe
in	inch(es)
inf	infantry
info	information
IPB	intelligence preparation of the battlefield
IR	infrared; intelligence requirements
JAAT	joint air attack team
KIA	killed in action
km	kilometer(s)

L

lb	pound(s)
LBE	load-bearing equipment
LCMS	laser countermeasure system
LD	line of departure
LD/LC	line of departure is line of contact
ldr	leader
LO	liaison officer
LOA	limit of advance
LOGPAC	logistics package
LP	listening post
LRAS3	long-range advanced scout surveillance system
LT	lieutenant
LTC	lieutenant colonel
LZ	landing zone

M

m	meter(s)
MANPADS	man-portable air defense system
MBA	main battle area
MC	mobility corridor
mech	mechanized
MEDEVAC	medical evacuation
METL	mission-essential task list
METT-T	mission, enemy, terrain (and weather), troops, and time available
MHz	megahertz
min	minute(s)
mm	millimeter(s)
MMS	mast mounted sight
MOPP	mission-oriented protective posture
mort	mortar(s)
MOS	military occupational specialty
MOUT	military operations in urban terrain
mph	mile(s) per hour
MRE	meals, ready to eat
MSR	main supply route

N

NAAK	nerve agent autoinjector kit
NAI	named area(s) of interest
NBC	nuclear, biological, chemical
NBCRS	NBC reconnaissance system
NBCWRS	NBC warning and reporting system
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
NCS	net control station
neg	negative
NEO	noncombatant evacuation operations
NET	new equipment training
NLT	not later than
no	number
NOD	night observation device

O

obj	objective
OBSINTEL	obstacle intelligence
OCOKA	observation and fields of fire; cover and concealment; obstacles; key terrain; and avenues of approach (considerations in evaluating terrain as part of METT-T analysis)
OEG	operational exposure guidance
OI	operations and intelligence
OIC	officer in charge
OOTW	operations other than war
OP	observation post
OPCON	operational control
OPLAN	operation plan
OPORD	operation order
OPSEC	operations security
ORP	objective rally point
OT	observer-target

P

PEWS	platoon early warning system
PFC	private first class

PIR	priority intelligence requirements
PL	phase line; platoon leader (illustration text only)
PLL	prescribed load list
plt	platoon
plt ldr	platoon leader
PMCS	preventive maintenance checks and services
POL	petroleum, oils, and lubricants
pos	position; positive
POSNAV	position navigation (system)
PP	passage point
PSG	platoon sergeant
PW	prisoner of war

R

R&S	reconnaissance and surveillance
RAA	reconnaissance avenue of approach
rad	radiation absorbed dose
recon	reconnaissance
REMBASS	remotely monitored battlefield sensor system
retrans	retransmission
ROE	rules of engagement
RP	release point
RPG	rocket-propelled grenade
RPV	remotely piloted vehicle
rte	route
RTO	radiotelephone operator
RTP	radiotelephone procedure(s)

S

S1	adjutant (US Army)
S2	intelligence officer (US Army)
S3	operations and training officer (US Army)
S4	supply officer (US Army)
SALUTE	size, activity, location, unit identification, time, and equipment (format for report of enemy information)
SAW	squad automatic weapon
sct	scout
sec	section; second(s) (illustration text)

SFC	sergeant first class
SGT	sergeant
SHORAD	short-range air defense
SIR	specific information requirements
SOI	signal operation instructions
SOP	standing operating procedure
SOR	specified orders and requests
SOSR	suppression, obscuration, security, and reduction
SP	start point
SPC	specialist
sqd	squad
SSG	staff sergeant
STANAG	standardization agreement (international)

T

TAC CP	tactical command post
TACFIRE	tactical fire direction system
TAI	target area(s) of interest
TC	tank commander
TCP	traffic control point
TF	task force
TIRS	terrain index reference system
tm	team
TOC	tactical operations center
TOE	table(s) of organization and equipment
TOW	tube-launched, optically tracked, wire-guided (missile)
TP-T	target practice-tracer (ammunition)
TRADOC	US Army Training and Doctrine Command
TRP	target reference point
trp	troop
TTP	tactics, techniques, and procedures

U V W X

UMCP	unit maintenance collection point
USAARMS	US Army Armor School
veh	vehicle (illustration text)
WIA	wounded in action
XO	executive officer

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FM 17-95-10	The Armored Cavalry Regiment and Squadron. 22 September 1993.
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FM 100-5	Operations. 14 June 1993.
FM 101-5-1	Operational Terms and Symbols. 21 October 1985.

Command Publications

The following command publication, published by the US Army Armor Center and School as Fort Knox Supplementary Material (FKSM), cannot be obtained through Armywide resupply channels. Determine availability by contacting the installation at the following address:

Commander, USAARMC
ATTN: ATZK-IMO-RS
Fort Knox, KY 40121-5000

FKSM 17-98-3 Scout Platoon SOP. (An updated edition is projected for publication by the start of FY 1995.)

DOCUMENTS NEEDED

These documents must be available to the intended users of this publication.

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FM 7-90	Tactical Employment of Mortars. 11 June 1985.
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FM 8-55	Planning for Health Service Support. 15 February 1985.
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