

CHAPTER 4

Countermine Tasks

HISTORY OF MINES

CLASSIFICATION

Obstacles are divided into two major classifications, existing and reinforcing. Within the category of reinforcing obstacles, there is a distinction between obstacles and mines. Mines are explosive devices designed to damage soldiers or vehicles. When actuated, as a result of other than a self-destruct feature, mines kill, damage, or destroy, thereby delaying or disrupting planned movement. This lethal capability separates mines from other obstacles that restrict movement by their existence or by being militarily reinforced.

Although the fundamentals of the mobility scheme are similar for countermine and counterobstacle tasks, the techniques for overcoming mines and minefield take into account their unique destructiveness.

EARLY USES

The use of mines to disrupt and delay highly mobile and mechanized military maneuvers began in World War II. Beginning with the campaigns of North Africa and spreading to all theaters of operation, enemy mines

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stopped well-planned armored and mechanized attacks by friendly forces. At the battle of Kursk in July 1943, the Soviet Army successfully used strongpoints reinforced by minefield to slow the attacking German Army and channelize it into kill zones. Expedient mines, fuzing devices, and other mine warfare techniques were used against US forces in Korea and Vietnam to harass and create confusion. They also took a heavy toll in equipment and unprepared soldiers. As a result, US forces became extremely mine-conscious.

LESSONS FROM HISTORY

The more significant lessons from military history apply to the AirLand battlefield today and include the following:

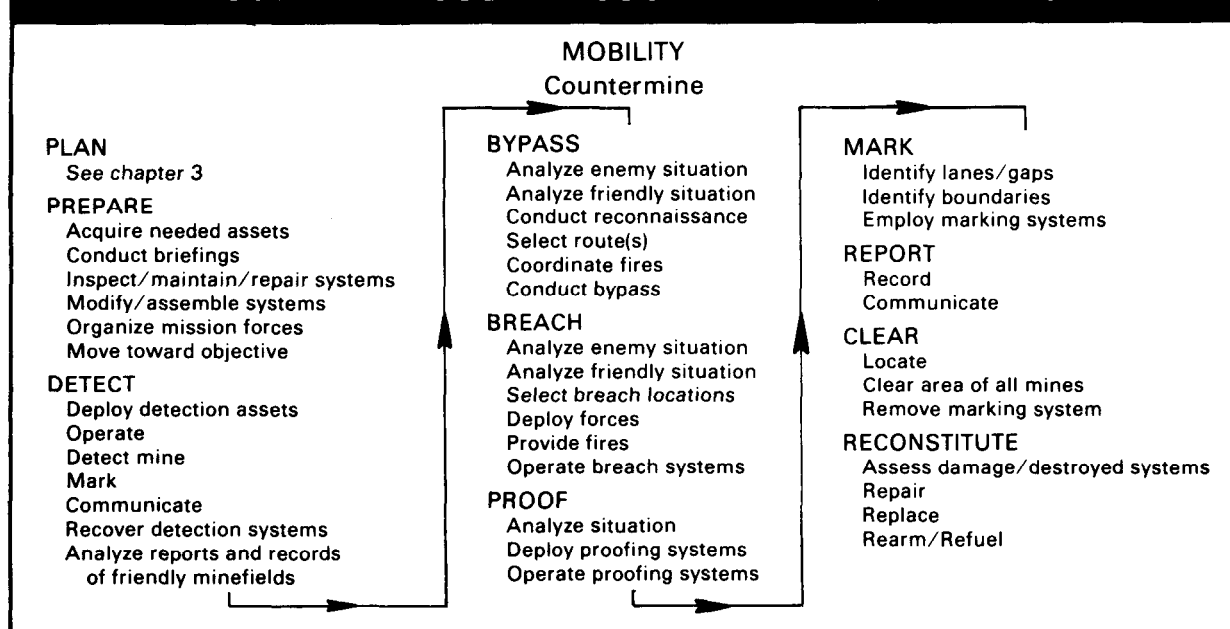
- Mines can decisively influence the outcome of battles.
- Most enemy minefield are covered by direct and indirect fire.
- Minefields are usually placed in conjunction with other obstacles and barriers.
- Friendly mines, as well as enemy mines, are a threat to force mobility. Current mines do not distinguish between friend and foe.

From these principles, it can be seen that mines are a significant combat power multiplier. Their use by Threat force on the battlefield requires immediate counteractions to restore freedom of movement for all US forces.

COUNTERMINE ACTIVITIES

Figure 4-1 shows the major subtasks involved in the conduct of countermining activities. During the conduct of a given countermining mission, however, not all of the functional subtasks may be required. For example, in the bypass analysis, if the bypass is tactically sound, all further tasks may be unnecessary. Similarly, the steps under "PLAN" can be adopted from tasks initiated for counter-obstacle and gap-crossing activities. The fundamentals of these are described in chapter 3. The following sections provide specific guidance and techniques applicable to countermining activities.

FIGURE 4-1. POSSIBLE COUNTERMINE SUBTASKS



PLANS AND PREPARATIONS

IMPORTANCE OF PLANNING

Countermine operations are an important part of combined arms planning. Advance planning will enable the force to detect and neutralize the effects of mined areas. The commander's effective preparation and use of countermine resources may determine force mobility and, ultimately, success or failure. This section supplements the discussion of mobility planning in chapter 3.

All mines affect maneuver. The intelligence officer and engineer must include both friendly and enemy mined areas in their analysis. In coordination with the operations officer, the engineer develops plans for bypassing or breaching mined areas as an integrated part of the maneuver plan. Where mines are suspected, countermine assets should be placed well forward in advancing columns. Maneuvering forces must have the capability to rapidly breach mined areas under fire. Careful planning should provide for maximum use of all countermine assets.

BREACHING PREPARATIONS

Several prerequisites for the planning of successful breaching tasks are—

- Adequate and timely reconnaissance.
- Sufficient intelligence, particularly engineer and tactical intelligence.
- Necessary breaching equipment.
- Deception and surprise.
- Security.

- Good communications and flexible command and control.

Lanes. The number and types of lanes planned for minefield breaching depend on the size of the breaching force and the equipment available. As the far side of the minefield is secured, initial foot lanes, if established, are widened to accommodate one-way vehicle traffic. Each maneuver company requires a minimum of one vehicular lane for passage. Approaches, lanes, and exits must be marked, and provisions made for minefield traffic control.

Concealment. Planning for breaching operations should include steps for concealing the breaching effort. Minefield breaches should be conducted at night whenever possible. Night vision equipment and night operation capability should be exploited.

Fire support. Fire support protects the breaching force in three possible ways. These fires neutralize enemy weapons systems which cover the minefield (both direct and indirect), provide smoke to prevent enemy observation of the breach, and can support the force as it moves through the minefield. Fire support must be capable of rapid adjustment and massing. It is used to exploit the developing success of a breach. The commander must identify the indirect fire assets available and set priorities for suppression, smoke, and counterbattery fire. In addition to supporting mortars and field artillery, the commander plans the employment of aviation assets to support the scheme of maneuver.

DETECTION

METHODS

Mine detection is performed by all soldiers in all phases of combat. Methods include detection by intelligence sources, anticipation of likely mined areas by the mobility planner,

and mine searching. Searching is a deliberate set of actions taken by single soldiers, teams, or units to locate mines or minefield. The types and characteristics of mine detection methods follow.

Intelligence reports. This method of detection relies on available sources such as staff-produced intelligence, reconnaissance reports, remote sensors, aerial photography analysis, side-looking airborne radar (SLAR), and the questioning of prisoners of war (POWs) and local noncombatants. It provides both general and specific indications of minefield locations.

Mobility plan. The mobility plan provides a detailed analysis of the terrain and weather. It also identifies likely areas for enemy minefields as well as trafficable routes and transportation networks that could be easily constricted or denied through the use of mines. All of this information is included in the planner's estimates, plans, and orders.

Visual detection. This method requires visual inspection of the terrain for physical signs of mine emplacement. These signs include disturbed earth, unusual or out-of-place features, surface-laid mines, and trip wires. This method does not detect well-concealed or camouflaged mines.

Physical detection. There are two categories of physical detection, detonation and probing. Discovery by detonation occurs when a vehicle, soldier, or countermine system physically encounters a mine. Detection in this manner does not indicate the boundary of a mined area. After detonation, the commander may have rollers/plows attempt to locate the minefield boundaries. Probing is used to detect the exact location of buried mines. It is done by pushing a sharp object into the ground at an angle to detect solid objects. Probing is slow, careful work, and is very personnel-intensive. It may be used in clearing, but generally is too inefficient for hasty breaches as it exposes soldiers to enemy fire for long periods of time.

Electronic detection. Electronic detectors are effective when used with visual and probing techniques. Two types of electronic detection devices, metallic and nonmetallic, have been developed to locate buried or hidden mines. Both types will locate objects

other than mines (false returns) and neither works well in heavy rain or wet soil. Metallic detectors are used to locate buried metal mine casings or components. Nonmetallic detectors recognize changes in density.

Airborne detection systems. Aircraft detectors have a limited capability to detect mines directly or locate disturbed earth patterns. These detection systems are based on several types of technology, including radar, infrared imagery, thermal imagery, and high resolution photography.

Thermal sight system. Combat vehicles equipped with thermal sights may detect surface-laid metallic mines even in periods of limited visibility. These sights provide images for items that have different heat retention characteristics than their surrounding environments,

RULES

The following rules apply when visually and physically detecting mines and booby traps:

- Do not wear sunglasses. With sunglasses, you are less able to detect trip wires and camouflage.
- Be alert for trip wires.
- Look for signs of road repair. Look for new fill or paving, road patches, ditching, or culvert work (figure 4-2).
- Be alert for any signs placed on trees, posts, or stakes. Most of these signs are small and not easy to spot. They may indicate the presence of mines in the area.
- Watch for wires leading away from the side of a road. They may be command firing wires. They may be partly buried, or not buried at all.
- Watch for odd features in the ground or patterns not present in nature (figure 4-3 on page 4-6). Plant growth will wilt or change color. Rain may wash away some of the cover. The cover may sink or crack

- Watch the civilians. They may know where mines or booby traps are located in and around where they live. When the civilians stay away from certain places or keep out of certain buildings, it may be because of mines or booby traps. Question them to find the exact places.
- Watch for pieces of wood and other debris on a road. They may show the place where the enemy has put pressure or pressure release firing devices. These devices may be on the surface or partly buried.
- Keep in mind that the enemy can use mines fired by command. Search road shoulders and areas close to them. Watch

- Visually inspect all antitank and anti-vehicular mines for antihandling devices.
- Probe on hands and knees or prone. The prober first feels upward and forward to find trip wires and pressure prongs. To enhance the sense of touch, the prober should roll up sleeves and remove rings and watches. After looking and feeling, the prober pushes the probe gently into the ground at an angle less than 45 degrees from the horizontal, putting just enough pressure on the probe to sink it slowly into the ground. If pushed straight down, the tip of the probe may detonate a pressure mine. When a solid object is touched, probing is stopped and the surrounding earth removed. When probing, special attention should be given to the texture

WIRE TO ENEMY

MINE AT BASE OF TREE

HOLES FILLED WITH ASPHALT

MUD SMEARED ON ROAD COVERING MINES

MINE IN TUNNEL UNDER ROAD

WIRE TO ENEMY

MINES ALONG SHOULDER

The illustration shows a road winding through a grassy field with trees in the background. A wire runs along the ground, labeled 'WIRE TO ENEMY'. A mine is placed at the base of a tree, labeled 'MINE AT BASE OF TREE'. Two holes in the road surface are labeled 'HOLES FILLED WITH ASPHALT'. A patch of mud on the road is labeled 'MUD SMEARED ON ROAD COVERING MINES'. A mine is shown in a tunnel under the road, labeled 'MINE IN TUNNEL UNDER ROAD', with a wire leading to it labeled 'WIRE TO ENEMY'. Along the grassy shoulder of the road, several mines are laid out, labeled 'MINES ALONG SHOULDER'.

and hardness of the soil. A patch of unusually soft or loose soil indicates that it may have been disturbed recently. If a mine is found, enough earth is removed to show its type. It is then marked and reported. Special caution is taken not to disturb mines physically as they can be equipped with explosive antihandling devices.

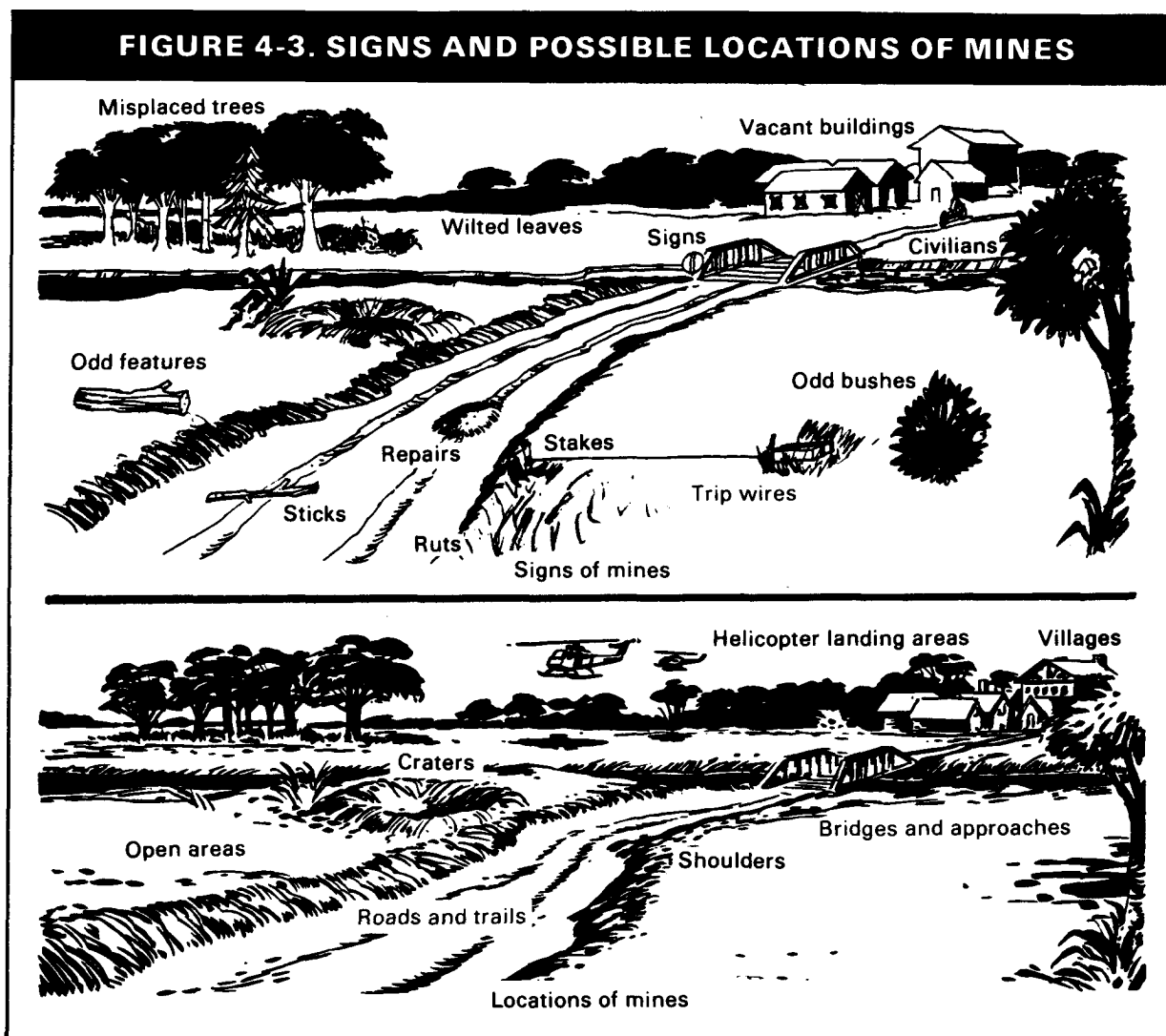
- Use electronic detectors to signal possible mine locations by changes in tones heard in the operator's headset. Probing is often used with electronic mine detectors to determine the exact location of mines.

MINEFIELD RECONNAISSANCE

Once an enemy minefield is detected, its limits are defined. There are two ways in which this is done, either by stand-off means or ground reconnaissance. In most cases, ground reconnaissance is the most dependable method.

Stand-off means. Studying remote imagery by trained interpreters is the most effective stand-off means of defining these limits. This option is restricted by terrain, weather conditions, and type of mine employed. Use of captured documents and prisoners to pinpoint mined areas is a less reliable method. Artillery, mortar, rockets, and aircraft munitions

FIGURE 4-3. SIGNS AND POSSIBLE LOCATIONS OF MINES



can be used to reconnoiter mine locations by fire. However, this often makes minefield breaching more difficult. The reconnaissance fire can disrupt mine patterns, spread shell fragments which will be picked up by electronic detectors, damage mines, or sensitize firing devices and detonators.

Ground reconnaissance. In most cases, ground reconnaissance is conducted by dismounted patrols. A minefield reconnaissance patrol consists of experienced and trained soldiers, organized into a security element and a search element. Equipment carried on

the patrol depends on the mission of the patrol and type of mines it might encounter. Where chemical mines are suspected, protective clothing, chemical agent first aid supplies, and detection equipment are carried.

When the minefield reconnaissance precedes a bypass or breach, time is critical. To save time, several patrols are used. Each patrol is assigned a single route, with instructions to report when they first contact mines. Mine contacts or lack thereof can be translated into an outline of the field as the reports are charted.

BYPASSING AND BREACHING

BYPASSING MINED AREAS

Mined areas which impede friendly maneuver must be overcome quickly and effectively. Units encountering minefield will either bypass or breach. Early detection and minefield reconnaissance allow the force commander to analyze possible options. Whenever possible, mined areas should be bypassed to maintain momentum and conserve scarce breaching assets. Bypassing is done by maneuvering around or, when helicopter support is available, over minefield. In many cases, however, mined areas cannot be avoided. The terrain, mission, or possibility of being channelized into an enemy kill zone may make bypass impractical. In this case, the minefield must be breached.

MINEFIELD BREACHING

The objective of a minefield breach is to clear a path or lane through a mined area for friendly forces to continue their mission. The selection of lane locations should take advantage of cover and concealment, overmatching fires, and the commander's scheme of maneuver. Breaching a minefield where it is first encountered before considering other possible sites is not recommended.

LANE CHARACTERISTICS

A lane is a clear route through a minefield. Lane types or their function, usually indicated or designated by width, follows.

- A foot assault lane, 1 meter (3.3 feet) in width, may be breached to pass dismounted troops so they may continue the attack. It may also be necessary to breach a foot lane to allow the force to cross and secure the far side of the minefield while lanes are breached for vehicles.
- A 4-meter-wide (13-foot) initial lane will be breached initially to pass vehicles and equipment conducting the attack. Due to the narrowness of the lane (little more than the outside edge to outside edge of a main battle tank's tracks) this lane must be widened as soon as the tactical situation permits.
- A single lane of 8 meters (25 feet) is the desired width. This lane permits one-way traffic to pass through it with relatively little impact on vehicle speed and safety. Normally, this lane will be developed from the 4-meter-wide (13-foot) initial lane.
- A double lane of 15 meters (approximately 49 feet) allows two-way traffic. Single lanes should be developed into double lanes as soon as the tactical situation permits. Lanes require little if any work or upgrading for tracked vehicle traffic. Lanes which will be used by wheeled vehicles may require engineer effort to fill or level the lane's traveled way. Lanes which pass

wheeled traffic require that mines, which may have been missed by detection or proofing hardware, be removed from the area covered by the wheelbase of these vehicles.

THE HASTY BREACH

The hasty breach is used to maintain the momentum of the attack by attempting to breach in stride as the minefield or obstacle is encountered. The hasty breach can be conducted under both conditions of awareness; the force is aware of the mined area through early detection or encounters it unintentionally. A hasty breach is conducted independently by a force with its available assets and sometimes without combat engineer participation. Breaching elements are located with the lead elements of maneuver units. Effective hasty breaches are the result of well-rehearsed mobility drills. Team members must know and take appropriate actions to suppress enemy fires, obscure the breach sites, create breaches, mark, report, and continue attacks through the minefield or mined area with as little pause as possible. Speed is extremely important because there is no time for the coordination and collection of resources from other units.

THE DELIBERATE BREACH

When it is not possible or necessary to take the minefield in stride or after a hasty breach has failed, a deliberate breach is conducted. This requires additional combat assets, support, or mobility equipment from other units. Combat engineer support is essential. More time is required for reconnaissance, planning, and buildup of necessary resources than is possible for a hasty breach. However, this time allows the enemy a chance to strengthen its defense. Generally, a deliberate breach requires that combat power be projected across the minefield to deny the enemy direct covering fire.

METHODS OF BREACHING

There are three methods of breaching conventional mined areas. These methods involve either mechanical means, explosive

means, or manual neutralization of mines. Expedient means should be used when no other methods are available.

Mechanical breaching. Mechanical devices, attached to the front of an armored vehicle, remove the mines from the area in front of the vehicle or explode them. These devices include rollers, full-width plows, and track-width plows. Mechanical devices permit units to quickly clear vehicle lanes in minefield. However, the devices can impair the vehicle's mobility and make it an inviting target for enemy fires covering the minefield. Mechanical devices should be employed in combination to defeat the variety of fuzes which may be encountered.

Explosive breaching. Explosive devices are placed in the minefield and detonated, setting off nearby mines by sympathetic detonation or Mowing them away from the breach lane. A lane may thus be cleared for traffic through the minefield. Several techniques are used in explosive neutralization:

- Charges placed by hand. A one-pound explosive charge is placed six inches to the side of detected mines and detonated. This method exposes soldiers to enemy fire.
- Linear charges, Linear demolition charges are pushed or projected by rocket into the minefield. The charges must be brought forward by personnel or armored vehicles which may be vulnerable to enemy fires covering the minefield. The charges are exploded and a lane is formed.

Manual breaching. In this method, personnel move into the minefield to detect and mark mines. The mines are then removed by using a grappling hook in order to clear a lane. They may then be destroyed or removed. Since personnel are exposed and vulnerable to enemy fire, this method should be reserved for clearing activities.

Expedient means of breaching. When other breaching methods are not available, expedient means, such as pushing disabled

vehicles through a minefield or using earth-moving blades to clear mines, should be used. The unit must apply the countermine resources available to continue its mission.

BREACHING OF SCATTERABLE MINES

Scatterable mines can be detected by visual observation, accidental encounter, close range detection or counterbattery and counter mortar radar. Take the following steps when breaching scatterable mines emplaced on a unit's position or formation:

- Take the enemy delivery system under fire.
- Use obscurants to counter enemy target acquisition, if required.
- Use reports from unit personnel to determine minefield boundaries and density and best paths to exit the minefield. Actual techniques for breaching the minefield depend on vegetation, type of unit, types of mines, and the nature of covering fire. When mines and trip wires can be seen, personnel and equipment operators visually determine mine locations and negotiate a path to the edge of the minefield. When visual detection is difficult, moving mechanized formations immediately deploy personnel and equipment to clear paths from each vehicle to the edge of the

minefield. These paths may be cleared by blades, rollers, plows, or dismounted individuals. Also, moving dismounted and wheel-mounted formations use manual neutralization methods to clear paths from individuals and vehicles to the edge of the minefield. Explosive breaching methods and other mine detonation measures are used only after safe operating distances have been reached.

- United States forces exploiting a breached lane are organized to react to remotely delivered mines emplaced in these lanes.
- Minefield breaching procedures used to breach into a unit position are designed to reduce the danger to either the breaching force or the entrapped unit.

MINEFIELD PROOFING

Proofing a vehicle breach lane involves a test of the lane to insure that all mines were removed. The safest and quickest way to proof a vehicle-width lane is to use mechanical means, if available. Counter mine equipment will detect mines that were not initially located or detonated, including those fitted with multiple-impulse type fuzes. Proofing may have to occur once the forces necessary to eliminate enemy direct fire on the lane have been passed through. It should be initiated and completed prior to moving through the remainder of the force.

MARKING, REPORTING, AND RECORDING

MARKING MINEFIELDS

Marking is necessary to define the limits of the breached path, lane, or gap, as well as the boundaries of the mined area. This activity is critical to the safe and swift movement of the remainder of the leading and follow-on forces. The limits of the minefield must be clearly identified to avoid detonating a mine. Since standard marking kits are not always available, a unit encountering an enemy minefield will mark it with available resources. These resources and techniques will be made known to follow-on forces via standing operating procedures (SOP) or op-

erations/fragmentary order. Temporary marking is replaced by standard marking materials as soon as the tactical situation permits.

MARKING LANES

Distinctive markers must show where the lane begins and ends. There is a tendency for most drivers to start maneuvering before they are out of the minefield. The side limits of the breach are marked to prevent vehicles or personnel from traveling in areas that are not cleared and proofed. Side-marking systems, standard marking kits, or expedient

devices are placed at least one foot inside the width of the mine-free lane to provide a safety margin. The width of the lane will be determined by the breaching method. Figure 4-4 shows a standard method of marking the

limits of the lane, Figure 4-5 shows the individual markers that are hung on fences surrounding mined areas. All minefield are to be marked. Engineers supporting follow-on forces improve breach lanes and fence in

FIGURE 4-4. STANDARD LANE MARKINGS

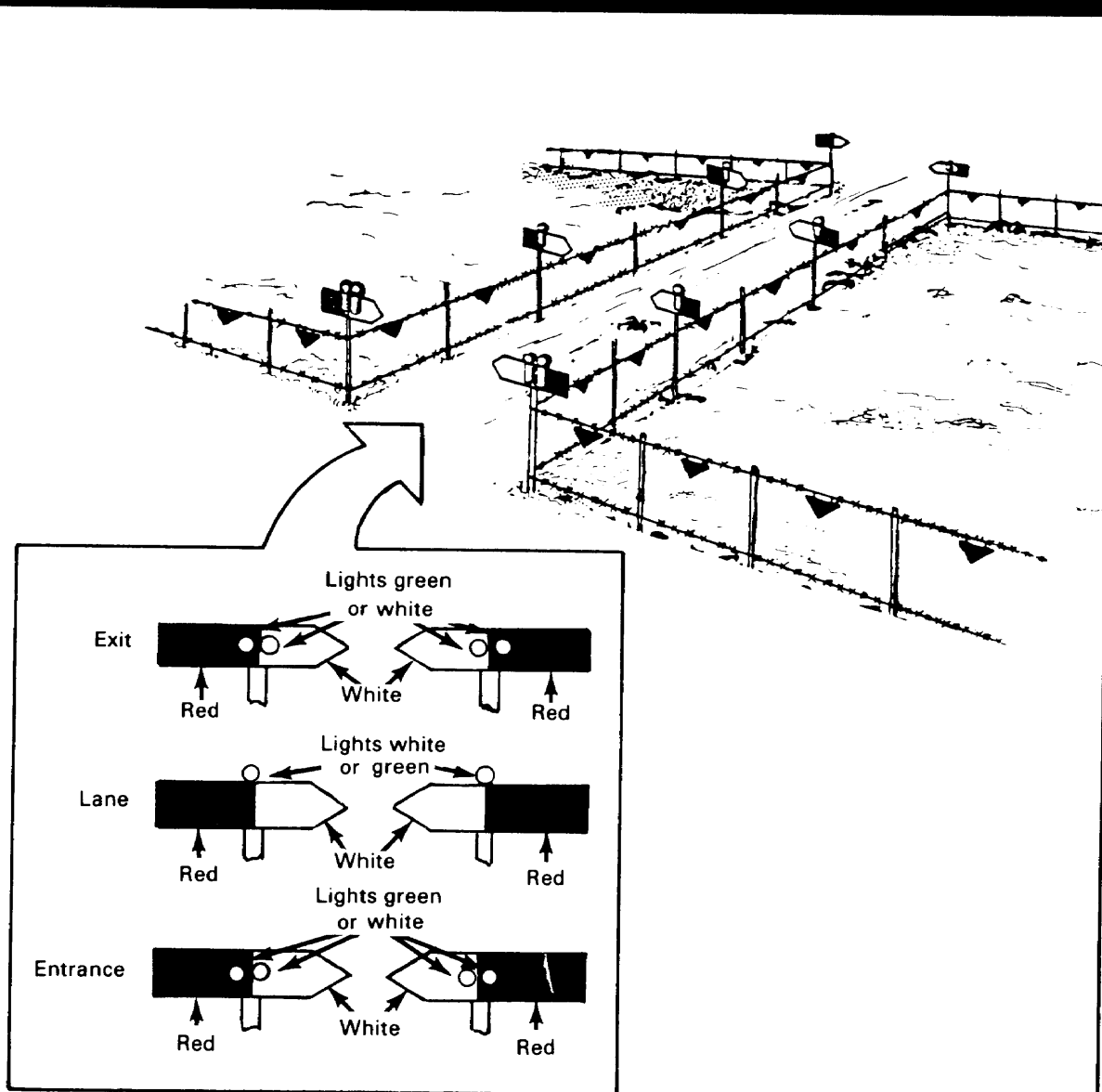
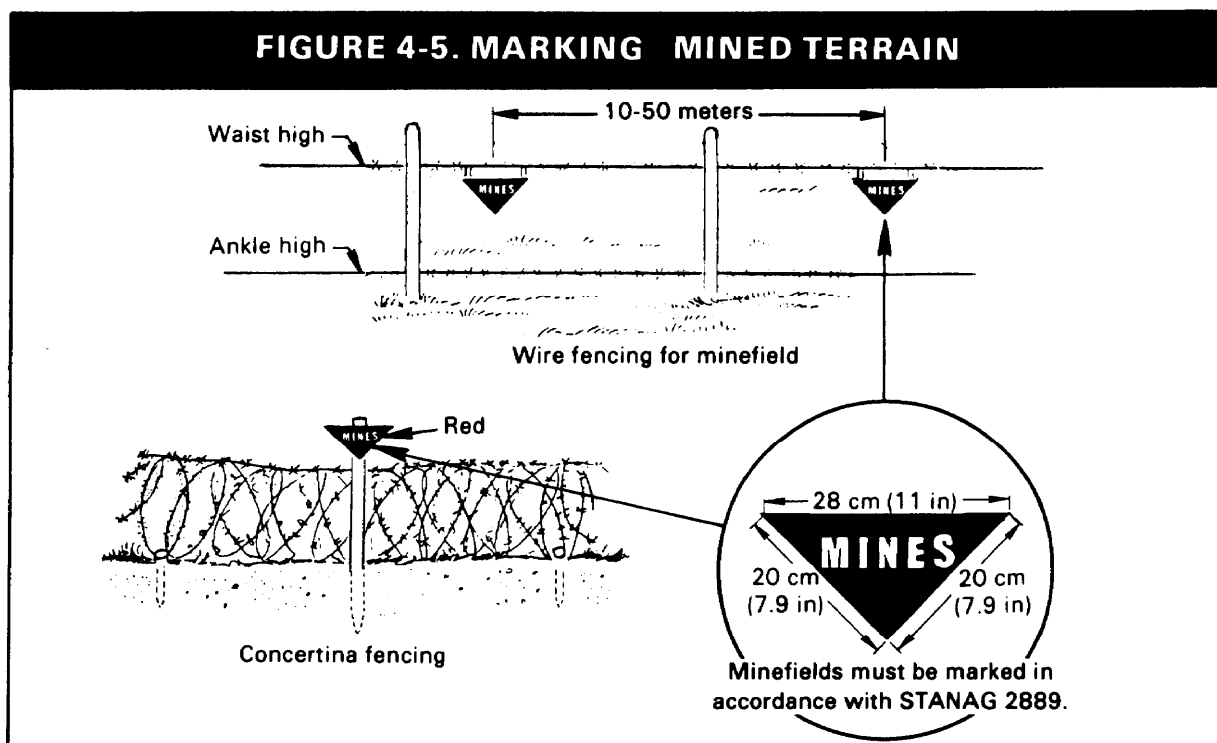


FIGURE 4-5. MARKING MINED TERRAIN

the remainder of the mined areas, placing warning signs on the fences. Fences and warning signs will normally be removed, if possible, if the minefield must be given up to the enemy in future operations.

REPORTING AND RECORDING MINEFIELDS

Any knowledge, detection, or encounter of enemy minefield is reported to the next higher commander by the fastest reliable means. Reports are normally transmitted through operational channels and must be as complete as possible. These reports (figure 4-6) are then integrated into intelligence data at the lowest possible level and are disseminated to higher, lower, and adjacent headquarters. The record is then forwarded to the senior Army engineer in the theater responsible for minefield reports. The report includes all known information concerning the minefield. The specific types of information and format required for enemy minefield reports (in accordance with STANAG 2096) are found in figure 4-6.

FIGURE 4-6. MINEFIELD REPORT

ALFA	Map sheet designation.
BRAVO	Date and time of collection of information.
CHARLIE	Type of minefield
DELTA	Coordinates of minefield extremities.
ECHO	Depth of minefield.
FOXTROT	Enemy weapons or surveillance.
GOLF	Estimated time to breach minefield.
HOTEL	Estimated material and equipment needed to breach minefield.
INDIA	Routes for bypassing minefield
JULIETT	Coordinates of lane entry
KILO	Coordinates of lane exit
LIMA	Width of lanes, in meters
ZULU	Other: Types of mines, new mines, booby traps.

COMMAND AND CONTROL

COUNTERMINE MEASURES

The maneuver force staff, including the supporting engineer representative, continues to revise countermine plans during the execution of countermine tasks. They must anticipate changes in the locations of mined areas. Patrols reconnoiter planned areas of operations to determine exact minefield locations. Aerial surveillance can detect some minefield and minelaying operations. As it is collected, enemy mine data is consolidated with friendly minefield records and provided to tactical commanders and staffs for operational planning.

TASK ORGANIZATION

In developing their task organizations, commanders should include countermine measures. The task organization should include special purpose equipment and units, such as combat engineers, located well forward. Bypass construction and breaching activities, if needed, can be started immediately. Whenever possible, task-organized forces should rehearse measures to be taken when encountering mines. The maneuver commander controls all breaching operations, coordinating artillery, Air Force and Army aviation support, smoke units, and engineer assets to insure the success of the operation. The commander organizes breaching assets into three elements, as described in chapter 2.

BREACHING AUTHORITY

The entire breaching operation must be under the control of a single responsible commander. Every element establishes direct communication with the commander who constantly reassesses the situation and controls the employment of maneuver and support forces. The commander must assume responsibility for traffic control for the countermine task. This includes establishment of movement orders, consolidation areas, and staging areas. If necessary, guides should be assigned to lead units through the lanes and remain to guard the lanes until relieved by follow-on forces. After the breach has been completed and the breaching unit has passed

through the minefield, control of the area is passed to follow-on forces.

DEFENSIVE COUNTERMEASURES

Unit commanders must consider any combat area in which the enemy is operating or has operated as possibly containing mines or booby traps. Defensive countermeasures and countermine activities can be found in FM 20-32, TM 5-280, FM 71-2, and STANAG 2889. This information, summarized below, must be common knowledge to all soldiers. Also, command and control of forces should include use of the following measures to prevent contact with minefield, mines, or booby traps and resultant casualties.

Troop interval and dispersion. Troops should maintain safe intervals between units to prevent excessive casualties from a single device.

Operation of vehicles. Old vehicle tracks should be avoided, when possible, because they are often deliberately mined. However, within a breach lane, vehicle operators should follow in the tracks of the vehicle ahead to reduce the possibility of detonating mines missed by the first vehicle. The speed and spacing of individual vehicles can be varied to make the timing of command-detonated mines more difficult. Key personnel are prime targets for command-detonated mines and must not congregate in one vehicle. Whenever possible, vehicles should avoid traveling alone. Single vehicles may be prime targets for mines command-detonated by enemy patrols seeking weapons or intelligence information.

Point men. Alert and well-trained point men are the best mine and booby trap detectors. They must be rotated frequently or they may become ineffective under the job stress. This also applies to lead vehicles in columns.

Behavior patterns. Units and soldiers

should avoid establishing predictable patterns of tactical behavior. Patrols should follow different routes out and back from their base. Patrol times or other movements should be random.

Reaction to mine casualties. Soldiers are understandably eager to assist fellow soldiers who have become mine casualties. They

should be warned to do so with extreme caution, as secondary mines often inflict casualties on personnel grouped around the wounded. The soldier nearest each casualty should carefully clear a way to the individual and give first aid. Under no circumstances should soldiers crowd around the wounded and present a larger target for enemy covering fire.

MINEFIELD CLEARING OPERATIONS

CONSIDERATIONS

Minefield clearing is the elimination of all mines in a minefield or mined area. It is conducted after enemy fires have been eliminated from the mined area. Thoroughness and safety, not speed, are the most important considerations. Clearance is conducted by engineer units which generally use manual mine detection methods and hand-emplaced explosives to detonate all mines in place. The procedures necessary to clear minefield are described in FM 20-32.

PREPARATION

AND PRECAUTIONS

Successful mine clearance is directly dependent upon the discipline and skill of personnel in the clearing unit. Leaders must exercise complete and positive control over all soldiers engaged in the clearing operation. They must guard against overconfidence and rotate personnel involved in the more critical tasks such as operating mine detectors. When clearing mines from an area contaminated by chemical agents, commanders insure that adequate protective clothing and equipment

(TM 5-220) is provided and used. Detonation of chemical mines within areas already controlled by US forces should be avoided. Minefields suspected of containing chemical mines are bypassed and referred through channels to specially trained personnel. Before entering an area to conduct deliberate clearance, take the following precautions:

- Check division, corps, and theater minefield records files for all records of minefield (friendly or captured enemy) installed in the area.
- Check aerial photographs of the area.
- Cross-check POW interrogation reports and the All-Source Intelligence Center for indications or reports of enemy mining or booby traps.
- Perform ground minefield reconnaissance in the suspected area.
- Establish and mark minefield boundaries if the field is not already fenced.

