

## APPENDIX B

### THREAT MINEFIELD RECONNAISSANCE

Successful combined arms reconnaissance requires extensive training. Engineers train alone to hone their individual and collective skills, and they also train with scouts. This training fosters habitual integration of engineers with maneuvers for reconnaissance missions. The information gained from minefield reconnaissance assists the commander in refining the scheme of maneuver, in planning, and in task-organizing for breaching operations. Engineers are trained to evaluate the technical aspects of a minefield, and they collect the information during combined arms reconnaissance. Engineers in support of heavy forces reconnoiter enemy tactical minefield, and light engineers infiltrate to reconnoiter protective minefield. Scouts concentrate on other intelligence requirements.

The staff engineer integrates engineers into the maneuver R&S plan. He coordinates the plan with other R&S plans, artillery fires, infiltration lanes, and follow-on missions.

Engineer company and platoon R&S plans include—

- Issuing a warning order to subordinates that contains tentative minefield locations and specific requirements for information, equipment, and coordination.
- Moving early to allow connection with scouts.
- Affording leaders maximum time to prepare for the mission.

Early connection of engineers, scouts, and maneuver personnel is critical for planning and preparation. Engineers participate in planning passage of lines, routes, R&S mission /objective, reports, consolidation, and and ex-filtration. At a minimum, rehearsals are conducted for actions on contact, at unexpected obstacles, and at the reconnaissance objective.

During movement, the R&S patrol uses concealed routes and limited visibility. It avoids enemy contact at all costs. The patrol establishes an objective rally point (ORP) short of the minefield. The R&S leader issues a contingency plan prior to R&S teams leaving the ORP. Engineer R&S teams then move to the R&S locations and establish security.

### SECURITY

R&S teams ensure abnormal patrolling activity does not compromise selected breaching locations. The amount of patrolling should be

similar at all possible points of attack. They do not leave behind evidence of their activities.

### TECHNICAL INFORMATION

R&S teams gather the following information from the reconnaissance:

- Minefield location. Plot the perimeter location on a large-scale map and refer to recognizable landmarks.

- Perimeter description. Describe how the perimeter is fenced. If it is unfenced, describe how it is marked. If it is unmarked, show how it was recognized.
- Nuisance mines. If you discover a nuisance mine forward of the minefield's outer edge, remember, there may be others. Assembly areas might also be mined.
- Types of mines. Indicate whether mines are AT, AP, or have unknown fuzes (self-neutralized or self-destruct). Recover specimens of unknown or new mines and note the details.
- Details of any other devices. Describe booby traps, trip wires, flares, and antisturbance devices.
- Laying method. Indicate whether mines are buried or surface-laid.
- Density and pattern. Include the mine spacing and the number of mine rows. Mine density is estimated using this information.
- Minefield depth. Provide the distance between strips/rows and describe markers.
- Safe lanes and gaps. Plot the location of suspected safe lanes and describe their marking.
- Ground conditions. Include information on general ground conditions.
- Other obstacles. Plot the location and construction of other obstacles.
- Enemy defenses. Describe the enemy's location and size. Include the location of enemy direct fire weapons.

**NOTE: Engineers engaged in reconnaissance for OBSTINTEL should rarely, if ever, be used to reduce obstacles during the reconnaissance (although they make ideal leaders for subsequent breaching operations).**

## RECONNAISSANCE REPORT

Each R&S team commander submits a detailed intelligence report to the next higher headquarters when the reconnaissance is complete.

A sample minefield report is shown in Figure B-1.

## RECONNAISSANCE TECHNIQUE

A minefield R&S team normally consists of a commander and two men. When reconnaissance of several collocated sites is required, several teams might be formed into a reconnaissance group. When possible, teams are drawn from one platoon. There is no established reconnaissance drill, but the following technique is recommended for convenience and to ensure the results of each team are consistent and accurate.

- The R&S team consists of a prober, detector operator (relief man), and commander. It removes all equipment except flak vests, kevlar helmets, and weapons. The team uses stealth and available cover/concealment

during movement to the reconnaissance site. (The reconnaissance is normally conducted at night.) Depending on the type of mines likely to be encountered, the prober or the detector operator enter the minefield first.

- The leading man (soldier 1) enters the mined area and dispenses a cord or tape. He feels for trip wires and feels/probes for mines and other devices in a path approximately 1 meter wide. He marks located mines and reports their location to the commander. The commander stays 1 to 5 meters behind soldier 1 and ensures soldier 1 stays on the correct azimuth.

Letter Designation	Explanation
A	Map sheet(s).
B	Date and time the information was collected.
C	Type of minefield (AT, AP, or mixed).
D	Grid references of minefield extremities, if known.
E	Depth of minefield.
F	Estimated time required to clear the minefield.
H	Estimated material and equipment required to clear the minefield.
I	Routes for bypassing the minefield, if any.
J-Y	Grid reference of lanes (entry and exit) and width of lanes, in meters.
Z	Additional information such as types of mines used, unknown mines, or types of booby traps.

*Figure B-1. Sample minefield report*

- Distances from the start point can be recorded in several ways. **EXAMPLE:** Once the mines are located, the commander uses a knot or loop code tied on the cord being dispensed by soldier 1. When necessary, the commander rotates soldier 1 and soldier 2. The relief man (soldier 2) stays approximately 5 meters behind the commander and uses a mine detector to search for deeply buried AT mines. The rate of travel (depending on terrain and soil conditions) is approximately 80 meters per hour. When all the information has been gathered, the R&S team returns along the cord/tape and removes evidence of its activities.
- The R&S team moves back to the ORP. The reconnaissance patrol conducts a debrief to eliminate redundant information. The patrol uses established procedures to report the information.
- During exfiltration back to friendly lines, the patrol again avoids enemy contact at all costs. It communicates with the friendly passage point unit, exchanges far and near recognition signals, and conducts a passage of lines.
- The engineer staff officer and the S2 debrief R&S units.