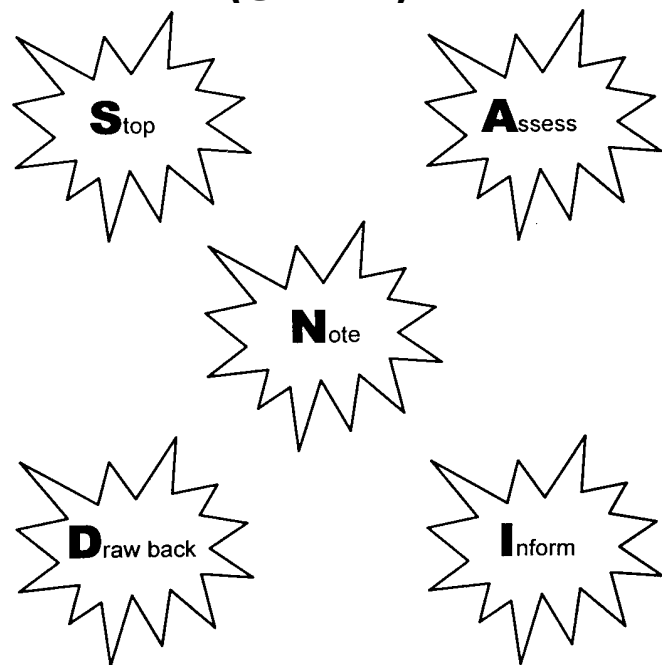


**MINE AWARENESS
(SANDI)**



Headquarters, Department of the Army

May 1999

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Stop

- Do not move your feet if you are on foot.
- Do not dismount if you are in a vehicle.

Assess

- Determine the shortest route to safety.
- Determine if you are in the middle of a mined area.
- Determine if there is a paved road close by.

Note

- Take notes on what you see.
- Describe characteristics.
 - Shape.
 - Color.
 - Size.
 - Material.
- Draw pictures if necessary.
- Indicate the number of mines.
- Annotate terrain considerations.
- Indicate the location.
- Include anything else that might be helpful to engineers.

Draw back

- Stay where you are, if possible, until help arrives.
- Follow your exact footprints.
- Follow your tire tracks.
- Probe if you have doubts that you can follow your tracks.

Inform

- Pass on the noted information to higher authority.

Expected Mined Areas

Although all areas are treated with caution, the most commonly mined areas are--

- Routes and roadways, especially intersections, that are frequently used.
- Brush and other traffic obstructions placed on roadways.
- Bridge bypasses and fording sites.
- Obvious turnarounds, bypasses, culverts, ditches, and shoulders.
- Key logistic points (water, fuel, food).
- Debris along a route.
- Confrontation lines.
- Abandoned buildings.
- Military establishments.
- Roadblocks and checkpoints.

Mine/UXO Indicators

- Signs of road repair (new fill, pavement, patches, ditches, culverts).
- Signs placed on trees, posts, or stakes.
- Dead animals.
- Damaged vehicles.
- Disturbances in previous tire tracks or tracks that stop unexplainably.
- Odd features in the ground or patterns that are not present in nature.
- Craters.
- Casualties.
- Pieces of wood or other debris on a road.
- Patterns of objects that could be used as a sighting line.
- Mine packaging.
- Trip wires or cables.
- Disturbed ground.
- Unattended fields.
- Unused paths, routes, or trails.
- Areas avoided by local civilians.

Minefield Marking

Various methods, materials, and colors are used to mark mines/minefields. Samples are shown in Figures 1 and 2.



Figure 1. Samples of mine signs

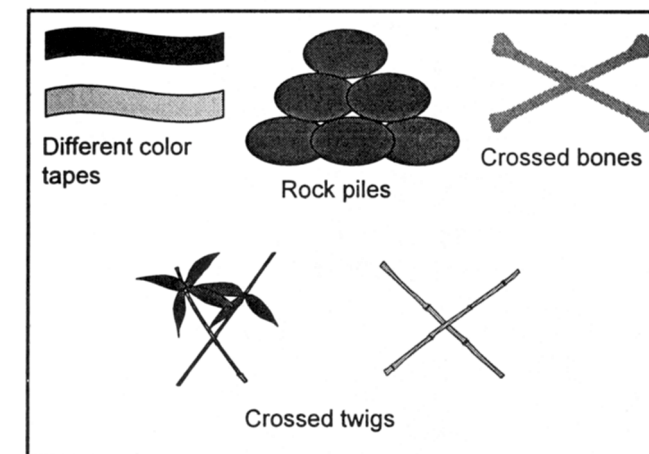


Figure 2. Samples of mine markings

Minefield Avoidance

- Stay on paved surfaces.
- Travel on approved routes.
- Do not drive on road shoulders.
- Do not give in to curiosity.
- Observe local behavior.
- Attend mine/unexploded ordnance (LTXO) awareness training.
- Obtain mine/UXO information.

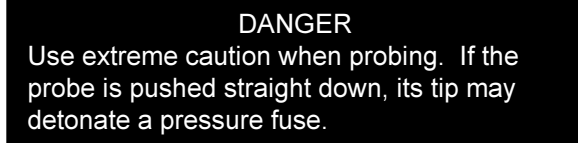
Self-Extraction

Step 1. Freeze, stand still, and alert others.

Step 2. Turn around carefully within your footprints and retrace them back to a safe area. If your footprints are not visible--

- Roll up your sleeves and remove your jewelry to increase sensitivity. Ensure that the chin strap on your Kevlar helmet is buckled.
- Stay close to the ground and move in a prone position to reduce the effects of an accidental blast as follows:
 - Squat down without touching your knees to the ground.
 - Scan forward up to 2 meters and to the sides up to 3 meters for mine indicators.
 - Probe the area around your feet and as far forward as possible.
 - Kneel on the ground after the area is found to be clear and continue probing forward until you are in a prone position.
- Use sight and touch to detect trip wires, fuses, and pressure prongs.
- Use a slender, **nonmetallic** object as a probe. Only as a **last** resort, the following items can be used as probes: bayonet, screwdriver, cleaning rod, pen, antenna, or any sharp, pointed object.
- Probe every 5 centimeters across a 1-meter front.

- Push the probe into the ground gently at an angle that is less than 30 degrees (Figure 3).



- Apply just enough pressure on the probe to sink it slowly into the ground.
- Pick the soil away carefully with the tip of the probe if it encounters resistance and does not go into the ground freely. Remove the loose dirt by hand.
- Stop probing and use two fingers from each hand to carefully remove the surrounding soil when a solid object is touched. Identify the object.
- Remove enough soil to show the mine type. Mark its location. Do not attempt to remove or disarm the mine.

Step 4. Mark your footprints for others if you are in a group. The group moves one at a time and maintains a 30-meter spacing between persons.

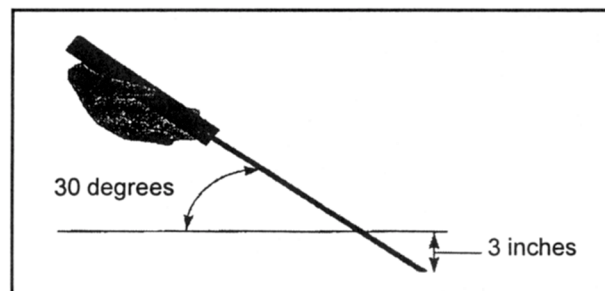


Figure 3. Probing for mines

Casualty Extraction

- Reassure the casualty.
- Do not panic and create another casualty.
- Call higher headquarters at the earliest opportunity, and request a specialist engineer and medical help as soon as possible.
- Extract yourself and mark your path as you go (see self-extraction).
- Reenter along the marked path.
- Clear a path to the casualty.
- Clear the area around the casualty.
- Administer first aid.
- Recover the casualty.
- Mark the area after it is clear, record it on the map, and report to higher headquarters.

Mine Colors

- Light green.
- Dark green.
- Brown.
- Black.
- Sand.
- Camouflage.
- Grey.
- Metallic.
- Natural wood.
- Olive.
- Blue.
- White.

Mine Materials

- Plastic.
- Plastic casing.
- Wood.
- Sheet metal.
- Cast iron.
- Metal alloys.
- Concrete.
- Bakelite™.
- Cast explosive.

Mine Shapes

Samples of mine shapes are shown in Figure 4.

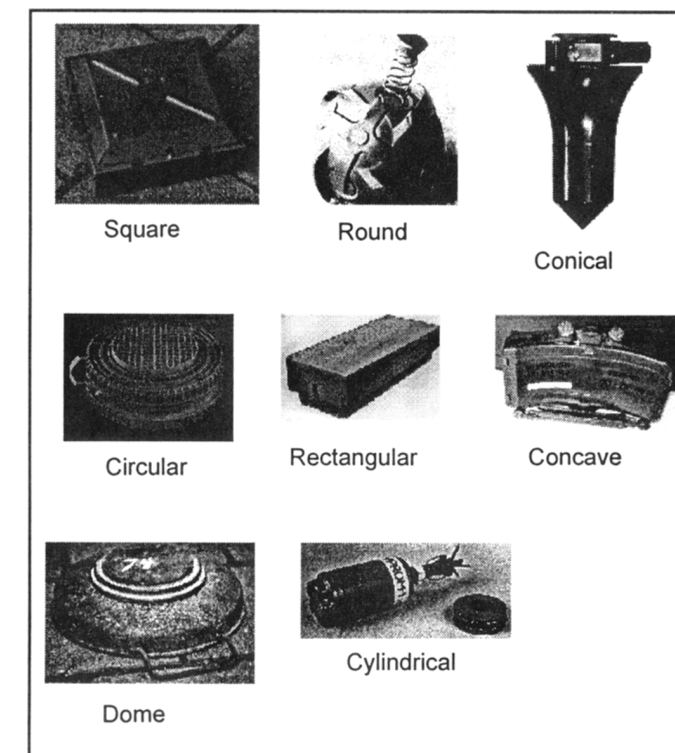


Figure 4. Samples of mine shapes

NOTE: For additional information on mine detection and extraction, see Field Manual 20-32, *Mine/Countermine Operations*.