

071-COM-1001
Identify Terrain Features on a Map
Status: Approved

Security Classification: U - Unclassified

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the G2, Ft Benning, GA 31905 foreign disclosure officer. This training product can be used to instruct international military students from all approved countries without restrictions.

Conditions: You are a member of a squad or team in a field environment and have been directed to identify the terrain features on a map. You have been given a 1:50,000 scale military map.

Standards: Identify the five major, three minor, and two supplementary terrain features on a military map.

Special Conditions: None

Safety Risk: Low

MOPP 4:

Task Statements

Cue: None

DANGER
None

WARNING
None

CAUTION
None

Remarks: None

Notes: All terrain features are derived from a complex landmass known as a mountain or ridgeline (Figure 1). The term ridgeline is not interchangeable with the term ridge. A ridgeline is a line of high ground, usually with changes in elevation along its top and low ground on all sides from which a total of 10 natural or man-made terrain features are classified.

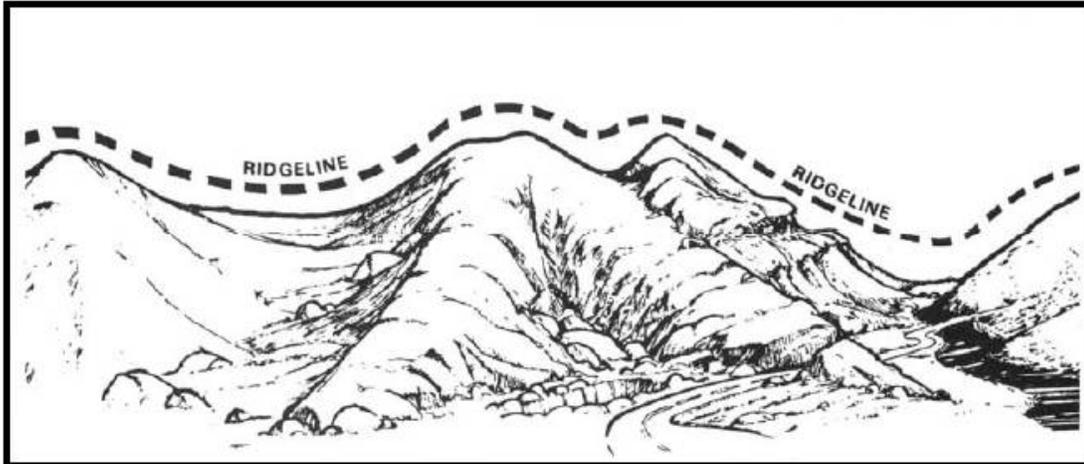


Figure 1. Ridgeline.

Performance Steps

1. Identify five major terrain features.

a. Identify a hill (Figure 2).

Note: A hill is an area of high ground. From a hilltop, the ground slopes down in all directions. A hill is shown on a map by contour lines forming concentric circles. The inside of the smallest closed circle is the hilltop.

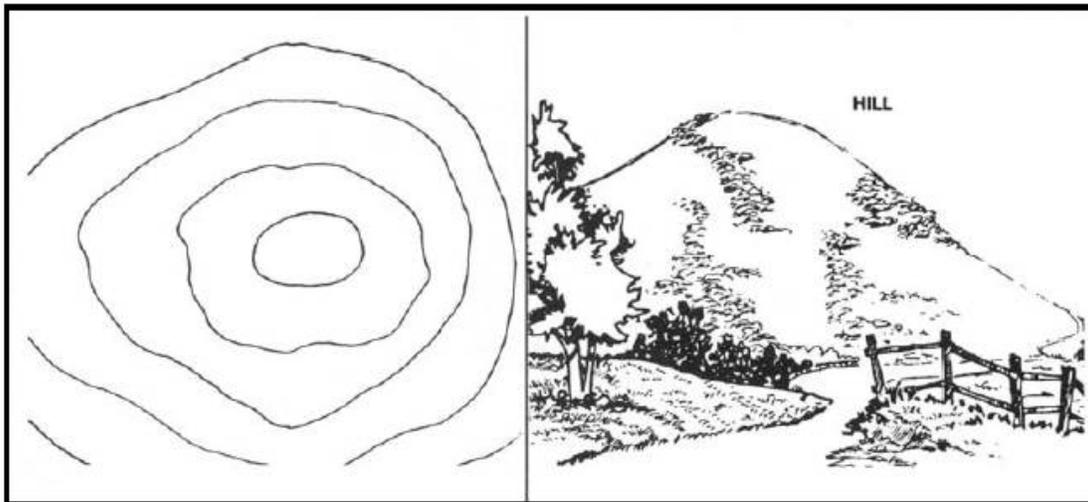


Figure 2. Hill.

b. Identify a saddle (Figure 3).

Note: A saddle is a dip or low point between two areas of higher ground. A saddle is not necessarily the lower ground between two hilltops; it may be simply a dip or break along a level ridge crest. If you are in a saddle, there is high ground in two opposite directions and lower ground in the other two directions. A saddle is normally represented as an hourglass.

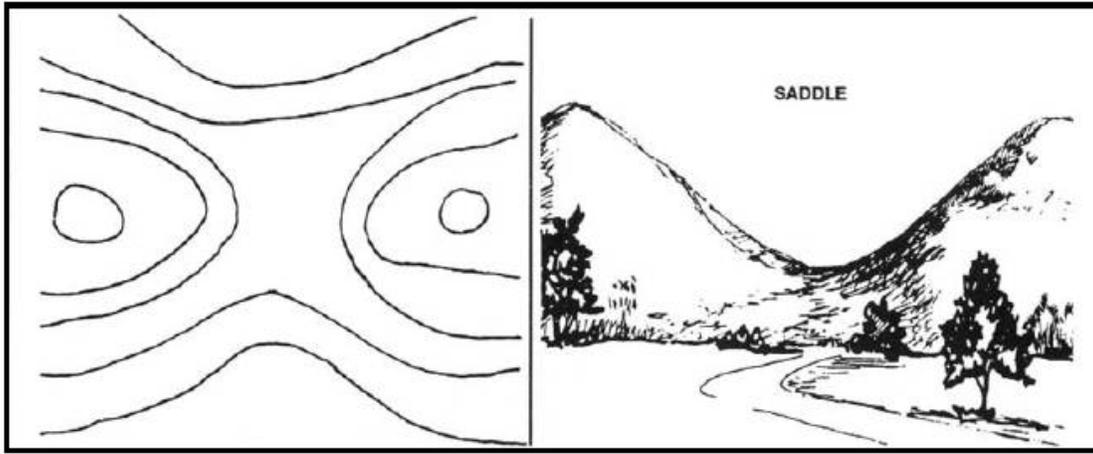


Figure 3. Saddle.

c. Identify a valley (Figure 4).

Note: A valley is a stretched-out groove in the land, usually formed by streams or rivers. A valley begins with high ground on three sides and usually has a course of running water through it. If standing in a valley, three directions offer high ground, while the fourth direction offers low ground. Depending on its size and where a person is standing, it may not be obvious that there is high ground in the third direction, but water flows from higher to lower ground. Contour lines forming a valley are either U-shaped or V-shaped. To determine the direction water is flowing, look at the contour lines. The closed end of the contour line (U or V) always points upstream or toward high ground.



Figure 4. Valley.

d. Identify a ridge (Figure 5).

Note: A ridge is a sloping line of high ground. If you are standing on the centerline of a ridge, you will normally have low ground in three directions and high ground in one direction with varying degrees of slope. If you cross a ridge at right angles, you will climb steeply to the crest and then descend steeply to the base. When you move along the path of the ridge, depending on the geographic location, there may be either an almost unnoticeable slope or a very obvious incline. Contour lines forming a ridge tend to be U-shaped or V-shaped. The closed end of the contour line points away from high ground.

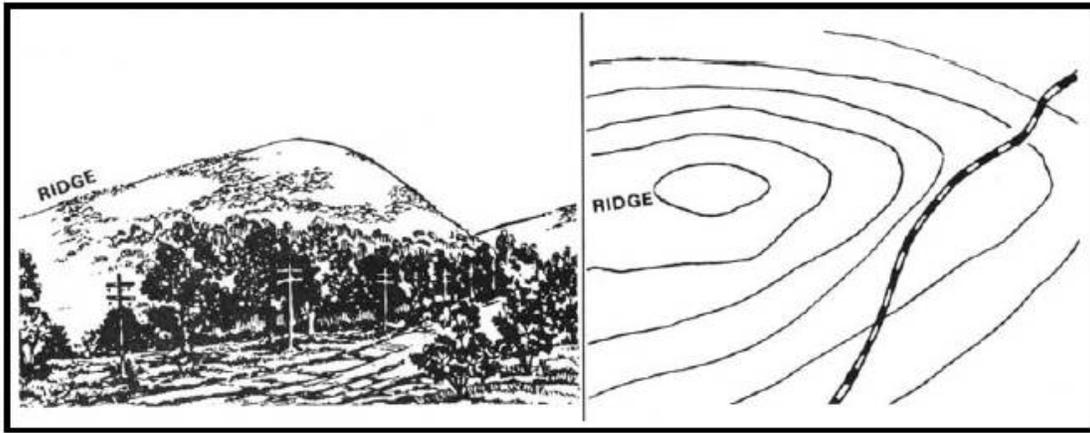


Figure 5. Ridge.

e. Identify a depression (Figure 6).

Note: A depression is a low point in the ground or a sinkhole. It could be described as an area of low ground surrounded by higher ground in all directions, or simply a hole in the ground. Usually, only depressions that are equal to or greater than the contour interval will be shown. On maps, depressions are represented by closed contour lines that have tick marks pointing toward low ground.

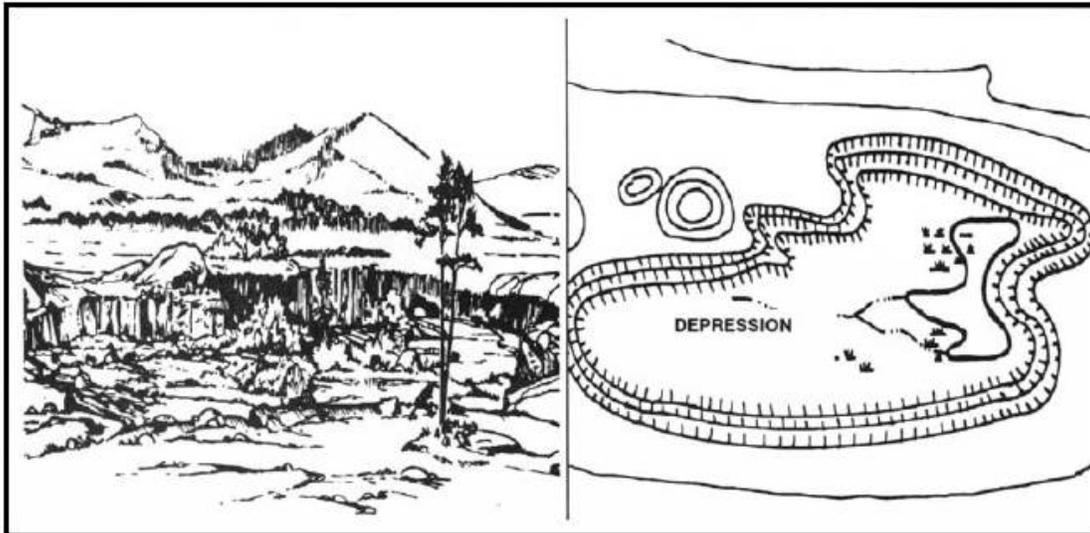


Figure 6. Depression.

2. Identify three minor terrain features.

a. Identify a draw (Figure 7).

Note: A draw is a stream course that is less developed than a valley. In a draw, there is essentially no level ground and, therefore, little or no maneuver room within its confines. If you are standing in a draw, the ground slopes upward in three directions and downward in the other direction. A draw could be considered as the initial formation of a valley. The contour lines depicting a draw are U-shaped or V-shaped, pointing toward high ground.

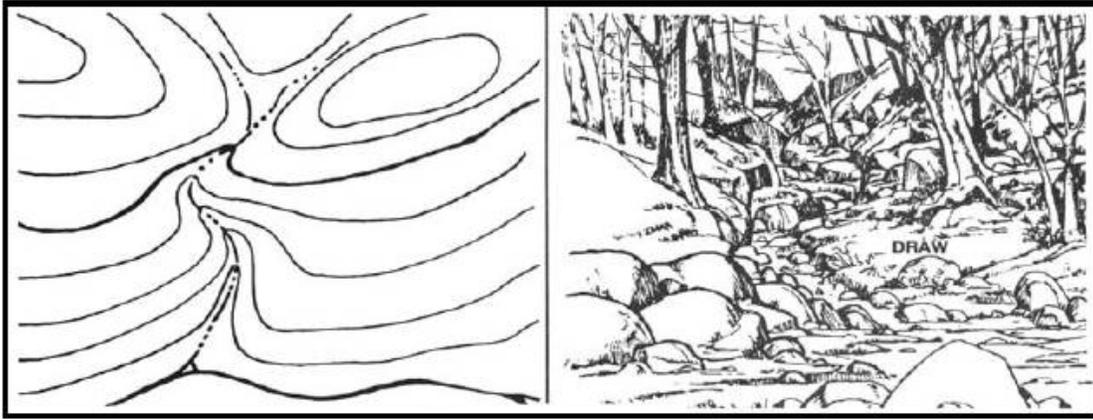


Figure 7. Draw.

b. Identify a spur (Figure 8).

Note: A spur is a short, continuous sloping line of higher ground, normally jutting out from the side of a ridge. A spur is often formed by two roughly parallel streams cutting draws down the side of a ridge. The ground will slope down in three directions and up in one. Contour lines on a map depict a spur with the U or V pointing away from high ground.

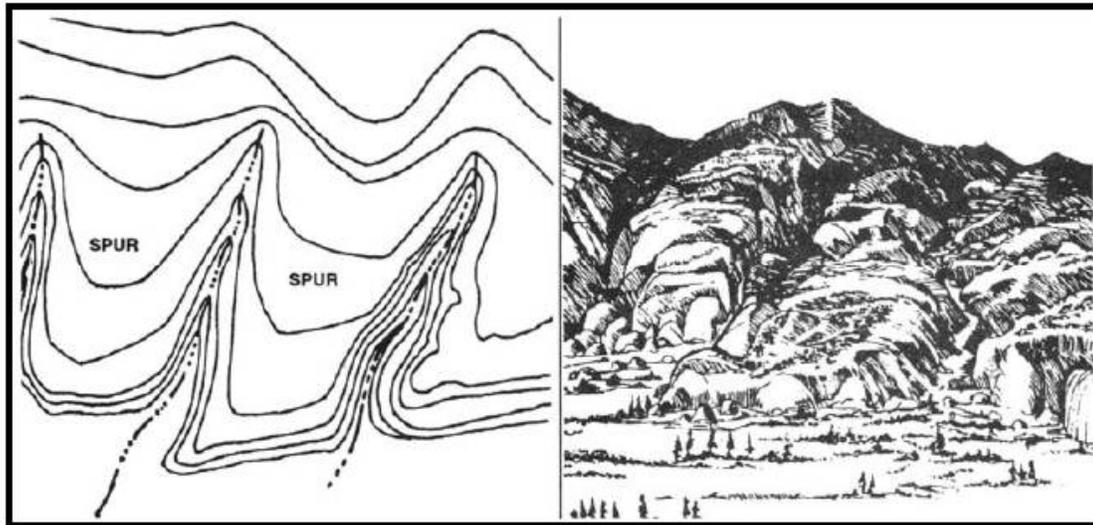


Figure 8. Spur.

c. Identify a cliff (Figure 9).

Note: A cliff is a vertical or near vertical feature; it is an abrupt change of the land. When a slope is so steep that the contour lines converge into one "carrying" contour of contours, this last contour line has tick marks pointing toward low ground. Cliffs are also shown by contour lines very close together and, in some instances, touching each other.

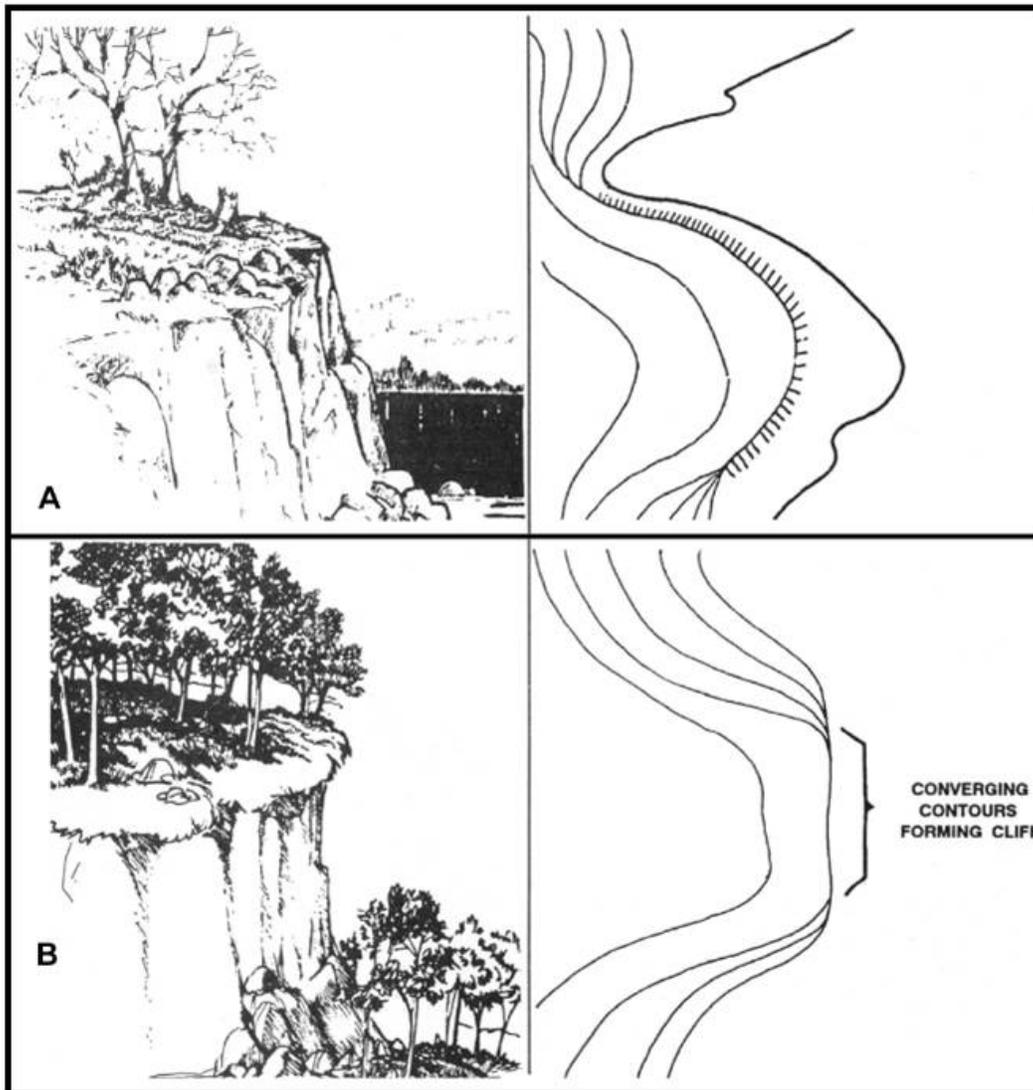


Figure 9. Cliff.

3. Identify two supplementary terrain features.

a. Identify a cut (Figure 10).

Note: A cut is a man-made feature resulting from cutting through raised ground, usually to form a level bed for a road or railroad track. Cuts are shown on a map when they are at least 10 feet high, and they are drawn with a contour line along the cut line. This contour line extends the length of the cut and has tick marks that extend from the cut line to the roadbed, if the map scale permits this level of detail.

b. Identify a fill (Figure 10).

Note: A fill is a man-made feature resulting from filling a low area, usually to form a level bed for a road or railroad track. Fills are shown on a map when they are at least 10 feet high, and they are drawn with a contour line along the fill line. This contour line extends the length of the filled area and has tick marks that point toward lower ground. If the map scale permits, the length of the fill tick marks are drawn to scale and extend from the base line of the fill symbol.

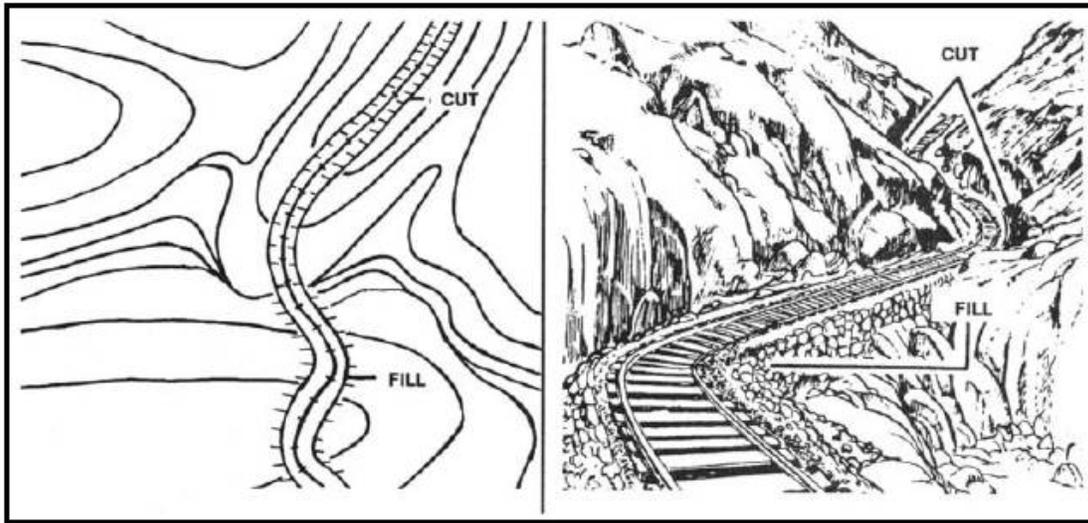


Figure 10. Cut and Fill.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier scores a NO-GO, show the Soldier what was done wrong and how to do it correctly.

Evaluation Preparation: Setup: Provide the Soldier with the equipment and materials described in the conditions statement. Brief the Soldier: Tell the Soldier what is required to successfully complete the task by reviewing the conditions and standards. Stress the importance of observing cautions, warnings, and dangers, as applicable.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Identified the five major terrain features.			
2. Identified the three minor terrain features.			
3. Identified the two supplementary terrain features.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary	Source Information
	TC 3-25.26	MAP READING AND LAND NAVIGATION (https://armypubs.us.army.mil/doctrine/DR_pubs/dr_c/pdf/tc3_25x26.pdf)	Yes	No	

TADSS : None

Equipment Items (LIN): None

Materiel Items (NSN) :

Step ID	NSN	LIN	Title	Qty
	7643-01-404-4393		Topo, MC&G Products	1

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card.

Safety: In a training environment, leaders must perform a risk assessment in accordance with current Risk Management Doctrine. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each

task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC).
Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW current CBRN doctrine.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks : None

Knowledges :

Knowledge ID	Knowledge Name
071-NAV-0028	Contour Lines
071-NAV-0027	Military Grid Reference System
071-OPN-0023	Terrain
071-NAV-0026	Terrain Features
071-NAV-0031	Topographic Symbols

Skills :

Skill ID	Skill Name
071-NAV-0011	Identify Terrain Features on a Map
071-NAV-0003	Ability to Read a Map

ICTL Data : None