

O-0210
IDENTIFY TOPOGRAPHIC SYMBOLS ON A MAP

CONDITIONS

Given a objective topographical map

OBJECTIVE

Correctly identify the topographical symbols, colors, and marginal information on a map.

TRAINING AND EVALUATION

Training Outline

1. In order to navigate using a map, the ground team member must know how terrain features are depicted on a map.
2. Ideally, every feature on the Earth's surface can be shown on a map in its true shape and size. Unfortunately this is impossible due to the limitations on detail that can be legibly transferred to paper. The amount of detail that can be shown on a map varies as the scale of a map. Small scale map such as 1:24,000 USGS quadrangles will show considerably more detail then 1:500,000 aeronautical sectionals.
3. Symbols are used on topographical maps to show features and details. On most topographic map the following colors are used to classify these symbols.
 - a. Black -- manmade or cultural features such as buildings, roads, railroads, names and boundaries.
 - b. Blue is used for water or hydrographic features such as lakes, rivers, canals and swamps.
 - c. Brown -- used for relief or contour and to show relief features such as cuts, fills, sand dunes, and glaciers.
 - d. Green -- is used for woodland cover and vegetation such as scrub, vineyards, forests, etc.
 - e. Red -- emphasizes important roads and highways.
 - f. Purple -- used to show revisions from previous map editions.
4. The shape and size of an object on the map will indicate it's actual shape and size on the ground. A black solid square is a building and an irregular blue item is a lake or pond. Interpreting symbols is a matter of knowing what color it is and how that relates to the above list, and matching the symbol to the map's legend. The map's legend is table of symbols and what they represent. It is usually located on the bottom of the map sheet in the marginal information or it is published separately for the objective types of topographic maps in use.
5. The marginal information on a map shows the mapsheets relationship to the rest of the Earth. Marginal information includes:
 - a. The geographic location of the map.

- b. The name of the mapsheet and adjoining mapsheets.
- c. Agency preparing the map and date of printing.
- d. Scale of the map and bar scales for meters, yards, and miles.
- e. Contour interval of contour lines.
- f. Grid to magnetic north declination diagram, or simply the magnetic variation angle.

Additional Information

More detailed information on this topic is available in Chapter 5 of the Ground Team Member and Leader Reference Text.

Evaluation Preparation

Setup: On an appropriate topographical map, circle an example of each item of marginal information and an item shown on the map by color.

Brief Student: Tell the student to identify the circled items.

Evaluation

<u>Performance measures</u>	<u>Results</u>	
1. Identifies the sheet name	P	F
2. Identifies the contour interval and lines	P	F
3. Identifies the G-M angle declination diagram	P	F
4. Identifies the legend	P	F
5. Identifies the bar scales	P	F
6. Identifies the adjoining sheets reference	P	F
7. Identifies man-made features	P	F
8. Identifies hydrographic (water) features	P	F
9. Identifies vegetation features	P	F

Student must receive a pass on all performance measures to qualify in this task. If the individual fails any measure, show what was done wrong and how to do it correctly.