

Interpretation of topographical maps using conventional symbols.

In the previous session, we discussed uses of key elements on a map. In this session you will be learning how to interpret information on topographical Maps using conventional symbols.

What are Conventional symbols?

Conventional symbols are letters, pictures or drawings which are used by cartographers and are accepted conventionally to represent natural and human made features in a map. Symbols in a map help in describing and interpreting various aspects on a map. The symbols are usually given in the key.

SYMBOL	FEATURE NAME	SYMBOL	FEATURE NAME
	Road – hard surface, all season		Sand in Water or Foreshore Flats
	Road – hard surface, all season		Rocky ledge, reef
	Road – loose or stabilized surface, all season		Flooded area
	Road – loose surface, dry weather		Marsh, muskeg
	Road – Rapid Transit Route		Swamp
	Road under construction		Well, water or brine; Spring
	Vehicle track or winter road		Rocks in water or small islands
	Trail or portage		Water Elevation
	Traffic circle		Horizontal control point; Bench mark with elevation
	Highway route number		Precise elevation
	Railway – multiple track		Contours; index, intermediate
	Railway – single track		Depression contours
	Railway sidings		Cliff or escarpment
	Railway – rapid transit		Sand
	Railway – under construction		Quarry
	Railway – abandoned		Cave
	Railway on road		Wooded area
	Railway station		Orchard
	Airfield; Heliport		Vineyard
	Airfield, position approximate		Sports track
	Airfield runways; paved, unpaved		Swimming pool
	Tunnel; railway, road		Stadium
	Bridge		Golf course
	Bridge: swing, draw, lift		Golf driving range
	Footbridge		Campground; Picnic site
	Causeway		Rifle range with butts
	Ford		Historic site or point of interest; Navigation light
	Cut		Greenhouse
	Embankment		Wind-operated device; Mine
	Barrier or gate		Landmark object (with height); tower, chimney
	Lock		Oil or natural gas facility
	Dam; large, small		Pipeline, multiple pipelines, control valve
	Dam carrying road		Pipeline, underground multiple pipelines, underground
	Footbridge		Electric facility
	Ferry Route		Power transmission line multiple lines
	Pier; Wharf; Seawall		Telephone line
	Breakwater		Fence
	Slip; Boat ramp; Drydock		Crane, vertical and horizontal
	Canal; navigable or Irrigation		Dyke or levee
	Canal, abandoned		Firebreak
	Shipswreck, exposed		Cut line
	Crib or abandoned bridge pier		School; Fire station; Police station
	Submarine cable		Church; Non-Christian place of worship; Shrine
	Seaplane anchorage; Seaplane base		Building
	Falls		Service center
	Rapids		Coast Guard station
	Direction of flow arrow		Cemetery
	Dry river bed		Ruins
	Stream – intermittent		Fort

How are conventional symbols used to interpret the map:

1. **Simplification of Features:** Conventional symbols allow complex features (like cities, roads, or mountains) to be represented in a simplified, standardized form. This makes it easier for map users to quickly identify these features without needing to read lengthy descriptions.
2. **Representation of Real-World Objects:** Maps use conventional symbols to represent real-world objects or features, such as rivers, buildings, parks, airports, railways, and more. By using these symbols, a map can provide a comprehensive overview of an area in a compact, easy-to-read format.
3. **Standardization:** Symbols are standardized so that people can interpret them consistently. For example, a blue line always represents water bodies, a red dot may represent a capital city, and a black line represents roads. This standardization is key in ensuring universal comprehension of maps.
4. **Simplification for Universal Understanding:** By using a fixed set of symbols, maps avoid the need for lengthy explanations or labels, allowing for a clearer presentation of information. This is particularly important for maps used in various fields such as transportation, tourism, or navigation, where quick interpretation is needed.

Importance of Conventional Symbols:

- **Clarity and Efficiency:** They provide a clear, quick way to represent various geographic features and allow the map to be understood without extensive text descriptions.
- **Standardization:** The use of standardized symbols ensures that maps are universally understood, whether used for navigation, education, or research.
- **Space Saving:** By using symbols rather than words, maps save space and remain uncluttered, making it easier to visualize large amounts of information on a single page.

Assessment

Identify conventional symbols used in interpretation of topographical maps.