
APPENDIX I

FOREIGN MAPS

The use of foreign maps poses several problems to the land navigator. These products are often inferior in both content reliability and topographic accuracy to those produced by the DMA. Clues to these weaknesses are the apparent crudeness of the maps, unusually old compilation dates, or differences in mapped and actual terrain. The following characteristics should be examined closely.

I-1. HYDROGRAPHY

Of all the symbols on foreign maps, those for hydrography conform most closely to DMA usage. The use of blue lines and areas to depict streams, rivers, lakes, and seas seems to be universally accepted. The one caution to be observed is that foreign cartographers use different sets of rules to govern what is and what is not included on the map. Distinction between perennial and intermittent streams is usually not made.

I-2. VEGETATION

The classification and symbols for vegetation on most foreign maps are different to those used on DMA maps. The vegetation included on many foreign maps is often extensive, identifying not only vegetated areas--but also the specific types of vegetation present. Green is the predominant color used to represent vegetation; but, blue and black are sometimes used. The symbols that depict the various types of vegetation differ greatly from one foreign map to another.

I-3. CULTURAL AND LINEAR FEATURES

Perhaps the most striking difference between DMA and foreign maps is the set of symbols used to portray cultural features. Some symbols found on foreign maps are very unusual. Symbols for linear features on foreign maps are also likely to confuse the user who is accustomed to DMA symbols. DMA uses 10 basic road symbols to portray different classes of roads and trails; foreign mappers use many more.

I-4. TERRAIN RELIEF

Foreign maps generally use contour lines to portray terrain relief, but substantial variability exists in the contour intervals employed. They may range from 5 to 100 meters.

I-5. SCALE

Scales found on foreign maps include 1:25,000, 1:63,360, 1:63,600, 1:75,000, and 1:100,000. Most foreign large-scale topographic maps have been overprinted with 1,000-meter grid squares; so, it is unlikely that the variable scales will have much effect on your ability to use them. However, you must learn to estimate grid coordinates because your 1:25,000 and 1:50,000 grid coordinate scales may not work.

I-6. STEPS TO INTERPRETING FOREIGN MAPS

After discussing the many difficulties and limited advantages encountered when using foreign maps, it is only appropriate that some strategy be offered to help you with the task.

a. In the August 1942 issue of *The Military Engineer*, Robert B. Rigg, Lieutenant, Cavalry, suggested a five-step process for reading and interpreting foreign maps. It is as appropriate today as it was when he first proposed it.

Step 1. Look for the date of the map first. There are generally four dates: survey and compilation, publication, printing and reprinting, and revision. The date of the survey and compilation is most important. A conspicuous date of revision generally means that the entire map was not redrawn—only spot revisions were made.

Step 2. Note whether the publisher is military, government, or civilian. Maps published by the government or the military are generally most accurate.

Step 3. Look at the composition. To a great extent, this will reveal the map's accuracy. Was care taken in the cartography? Are symbols and labels properly placed? Is the draftsmanship precise? Is the coastline or river bank detailed?

Step 4. Observe the map's color. Does it enhance your understanding or does it obscure and confuse? The importance of one subject (coloring) must warrant canceling others. If it confuses, the map is probably not very accurate.

Step 5. Begin to decode the various map colors, symbols, and terms. Study these items by examining one feature classification at a time (culture, hydrography, topography, and vegetation). As an accomplished navigator, you should already have a good understanding of your area of operations, so translation of the map's symbols should not present an impossible task. Use your notebook to develop an English version of the legend or create a new legend of your own.

b. In dealing with the challenge of using a foreign map, be certain to use these five steps. In doing so, you are also encouraged to bring to bear all that you know about the geographic area and your skills in terrain analysis, map reading, map interpretation, and problem solving. After careful and confident analysis, you will find that what you do know about the foreign map is more than what you do not know about it. The secret often lies in the fact that the world portrayed on a map represents a kind of international language of its own, which allows you to easily determine the map's accuracy and to decode its colors, symbols, and labels.