

## ARTICLES IN REVIEW

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### **A RE-APPRAISAL OF THE INTERNATIONAL MAP OF THE WORLD (IMW) ON THE MILLIONTH SCALE**

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In this article, the author reviews the origin and the background of this map, then he shows the need for re-appraisal in accordance with new information now available.

A Central Bureau was established at the Ordnance Survey Office in England to provide liaison between the Governments concerned but with no executive or technical functions. The Central Bureau functions were transferred to the Cartographic Office of the United Nations on 30 September 1953. Since 1913, when the second International Conference in Paris established the specifications of this map, the situation has changed considerably and only in a few areas of the globe is it still possible to include on the chart all available topographic information. Indeed, for most areas, the problems of compilation have almost entirely become matters of what information to omit.

For example, it is impracticable, on the score of legibility alone, to depict airline routes on IMW sheets, but major airfields have become essential items and in the sparsely inhabited areas even airfields with no facilities need to be shown. The ever-increasing telephone network has rendered the inclusion of all post and telegraph offices valueless except in sparsely inhabited areas. Vast international development projects have considerably altered many of the features depicted on existing sheets of the IMW. The practical need for a comprehensive air chart series has been so pressing that most nations have given its production and maintenance priority over the International Map. During the 1914-18 World War, the British War Office published a large number of sheets to the same general specifications as the International Map.

Concerning the relationship between ICAO world aeronautical charts and the International Map, the conclusion reached in 1949 was that a need existed for both series. The International Map (\*) is a map aimed at providing as much planimetric, orographic, hydrographic, political and similar information as the scale will permit. A close study reveals some common features between the two maps (ICAO and International Map). If some changes to both specifications are made, a common basic topographical map can be devised from which two separate publications can be produced. The saving in effort which would result would be very large indeed and would be especially valuable to the smaller cartographic agencies.

(\*) See Hydrographic Review Vol. VI, No. 2, November 1929, for a comprehensive account of the International Map of the World on the Millionth Scale.

The author then makes a number of suggestions concerning the technical details of the International Map : for the scale, no change; a system of sheet referencing has proved extremely convenient in practice and should be retained; the north-south sheet limits of the ICAO charts are formed by the same latitude zones as are the International Map, but the east-west limits are varied in successive zones so that the actual size of each sheet remains approximately constant. The needs of the IMW call for an orthomorphic projection. ICAO charts are based on slightly different projections : Lambert conical orthomorphic projection. As there are advantages in the use of a common projection for the two maps, it was proposed to use the Lambert projection.

For the indication of the relief, the same system of depth contours in sea and lake areas is proposed.

In hydrography, the inclusion of reefs and shoals should be considered.

The author then reviews the following items : roads, railways, canals and navigable channels, communications, cities and towns, international and national boundaries, contours, trigonometrical and astronomical points, conventional signs (the article includes a plate showing the new symbols which are proposed), and lettering.

This article is based on a paper read by the author at the XIXth International Geographical Congress in 1960. The United Nations have proposed that a conference be held on this subject in 1962.