

IXth GENERAL ASSEMBLY OF THE INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS 1951

The IXth General Assembly of U. G. G. I. was held at Brussels from Tuesday 21st August to Saturday 1st September 1951. The opening ceremony was graced by the presence of Her Majesty Queen Elisabeth of the Belgians, who also received the Council of the Union, Heads of Delegations and their Wives at Her Palace on the afternoon of Tuesday 28 th August.

The Heads of the Hydrographic Offices of the following Countries attended the General Assembly : Belgium, Germany, Great Britain, Greece, Italy, Norway and Spain ; and the International Hydrographic Bureau was represented by the President of the Directing Committee, Vice-Admiral J.-D. Nares.

During the course of the General Assembly, the meetings of which were held at the spacious University buildings, much hospitality was offered to the Delegates and their Wives by the Comité National Belge, at the Hôtel de Ville de Bruxelles, an excursion to Antwerp including a luncheon and trip by steamer down the River Scheldt and through the Antwerp Docks offered by the Town of Antwerp and the Comité Belge, and a closing dinner offered to all the Members of the various Delegations by the Comité Belge at the Palais des Beaux-Arts, Brussels.

Visits were paid by the various Associations to the Royal Observatory at Uccle, to the Laboratories of Hydraulic Research and Works of Art, to the Centre Géophysique de Dourbes, etc...

Visits were also paid to the U.S.A. Oceanographic Research Vessels « Rehoboth » and « San Pablo » and to H.M. Surveying Ship « Scott » which were at Antwerp during the Conference. Rear-Admiral A. Day, Hydrographer of the British Navy, held a reception on board the « Scott » at which, amongst others, six Hydrographers and the President of the I.H.B. were present.

During the course of the meetings of the Triangulation Section of the International Association of Geodesy lengthy discussions took place on the subject of the Co-ordination of the Geodetic Grids of the World. Captain Viglieri, Director of the Hydrographic Institute of the Italian Navy, presented a paper entitled « Co-ordination of World Networks » in which he pointed out « that at the 8th General Assembly of U.G.G.I. held at Oslo in 1948 the President of the Directing Committee of the International Hydrographic Bureau, following the decision taken at the Vth I.H. Conference,

1947, had presented a paper specifying the needs of Hydrographic Offices regarding such co-ordination, but that so far as he (Captain Viglieri) is aware no information as regards the work done in this field up to the present had been received by the I.H.B. ». A statement regarding this was made to the Delegates and it is hoped that M. Tardi, Secretary of the International Association of Geodesy will present a Report on this subject at the VIth International Hydrographic Conference to be held in Monaco in 1952.

Several meetings of the International Association of Physical Oceanography were held during the course of the Assembly and Admiral Nares, in his capacity as Chairman of the Committee on Mean Sea Level and its Variations, presented a report on the work carried out since the Oslo Conference in 1948.

Also, as President of the Directing Committee of the I.H. Bureau, Admiral Nares read a Report on the Work carried out by the Bureau of special interest to Oceanographers since the last meeting held in Oslo in 1948. This included the following items :

a) Preparation and publication of sheets of the 3rd Edition of the General Bathymetric Chart of the Oceans.

b) Work in connection with the International Committee on the Nomenclature of Ocean Bottom Features.

c) Preparation of a Provisional 3rd Edition of I.H.B. Special Publication No. 23 « Limits of Oceans and Seas ».

d) Work in connection with the Committee on Mean Sea Level and its Variations (mentioned above).

e) Production of additional sheets of I.H.B. Special Publication No. 26 « Tidal Harmonic Constants ».

f) Extension of World network of Tidal and Tidal Stream Stations.

g) Compilation of a Second Edition of I.H.B. Special Publication No. 32 « Hydrographic Dictionary ».

h) Compilation of a new up-to-date edition of I.H.B. Special Publication No. 22 « Manual of Symbols and Glossary of Nautical Terms and Abbreviations used on the latest navigational charts of the various countries », the last edition of which was dated March 1936.

Considerable discussions took place during the meetings of the International Committee on the Nomenclature of Ocean Bottom Features regarding (a) the Bathymetric Chart of the Oceans, and in their Interim Report they recommended :

First. That the importance of Oceanic depths to geodesists and geophysicists has so increased as to warrant the establishment of a Permanent Bureau with appropriate financial arrangements for the maintenance of world-wide bathymetric charts, consequently it is most strongly recommended that the Association d'Océanographie Physique should submit a resolution to this effect at the closing General Assembly.

Second. That the International Hydrographic Bureau (I.H.B.), should be urged to continue to maintain its bathymetric charts.

Third. That all countries should be urged to provide the International Hydrographic Bureau with as much information as possible on deep-sea soundings.

Fourth. That for general scientific use a scale of 1 : 10 000 000 at the equator is satisfactory and for detailed charts a scale of 1 : 1 000 000. So far as the Inter-

national Hydrographic Bureau is concerned the International Committee see no alternative to the Mercator projection for the extensive equatorial and temperate belts.

Fifth. The International Hydrographic Bureau should be asked to continue its existing practice of correcting soundings wherever possible for the speed of sound in sea-water.

Sixth. Bathymetric charts should be fully contoured with the major contours interpreted by colour layers. Pecked contours should be used when supporting soundings are insufficient. Soundings should be inserted to show maximum and minimum depths. When soundings are sparse a suitable symbol should be inserted to mark their position. The International Committee suggest that the International Hydrographic Bureau should be asked to consider the initiation of this procedure, as they consider that not only would there be a great improvement in the scientific value of their bathymetric charts, but also a considerable saving in printing and other costs. It is also desirable, in the opinion of the International Committee, that copies of the I.H.B.'s plotting sheets with complete soundings should be available for expert use, and that details of surveys of interesting topographic features should be included in the pamphlets issued with the bathymetric charts.

Seventh. The contourer, who should be fully skilled in his art, should not be influenced by any preconceived idea that deep-sea topography is similar to that found on land.

Eighth. Internationally agreed names for the major topographical features should be inserted on all bathymetric charts, as they greatly facilitate scientific discussion. Features which are too small for representation by contours could in some cases be represented with advantage by a symbol, provided international agreement had been reached.

The question of the possibility of making the Bureau's plotting sheets (scale 1 : 1 000 000) available for reproduction as required was discussed, and Admiral Nares pointed out that it was impossible for the Bureau to do this without the employment of additional staff, and consequent additional expense. It is understood that this matter is receiving further consideration by the Committee.

In connection with the 3rd Edition of S.P. No. 23 « Limits of Oceans and Seas », Admiral Nares stressed the fact that this was provisional only until it had been discussed at, and it is hoped adopted by, the VIth International Hydrographic Conference, 1952.

In connection with (e) Admiral Nares presented a world map compiled in the I.H.B. showing, in black, the general areas for which Tidal Harmonic Constants had been published by the Bureau (S.P. No. 26) up to the year 1948, and, by shaded lines, those issued since that year ; a detailed list of the various countries and areas concerned, with the number of new sheets or complementary data affecting each country or area which have already been published since 1948 or are in preparation, was also presented, and it was pointed out that these also give an indication of the degree of extension of the world network of tidal stations mentioned under (f).

At the suggestion of a Delegate particularly concerned with these two subjects, the above mentioned world map and accompanying list will be published in the present volume of the International Hydrographic Review.

With reference to items (g) and (h) new Editions of I.H.B. Special Publications Nos. 32 and 22 were issued in november and december 1951 respectively.

J.D.N.