



## WORK OF THE BUREAU

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WORK CARRIED OUT, WORK WHICH IS IN PREPARATION,  
AND WORK WHICH IT IS PROPOSED TO UNDERTAKE.

(1st. OCTOBER 1924 to 20th. SEPTEMBER 1925)  
(Article 46 (a) iii, iv & v of the Statutes, 1923)

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*Report prepared by the Secretary-General and approved by the Directing  
Committee.*

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### **I. — Resolutions of the International Hydrographic Conference London 1919.**

*(See Report of Proceedings).*

Some of these Resolutions, which call for action on the part of the Bureau, have still to be dealt with and the reasons for the delay in making the necessary decisions and the steps taken with reference to each subject are given below.

#### **(a) Section I, Resolution E (Page 24 of Report).**

##### *Delineation of Contours of Depths.*

" It is agreed that it is desirable to adopt common symbols to indicate the contours of depths in charts produced by those nations using the metric system ; it was found impossible to arrive at an agreement as to the symbols to be used, and it was decided to refer the matter for discussion to the International Hydrographic Bureau when formed."

##### *Circular-Letters.*

N° 32 of 23.9.22.

N° 36-H of 9.10.24.

Only three replies having been received to Circular-Letter N° 36-H, which contained the Committee's suggestion that this subject be discussed at the next Hydrographic Conference and, these replies containing no reference to this suggestion, it is assumed that it is accepted and the subject will be entered on the Agenda of the Conference.

**(b) Section I, Resolution P. I, II & III. (Pages 28 & 29 of Report).**

*Transcription of names, and authorities to be consulted thereon.*

" I. — It is agreed that generally the literal transcription, and not the phonetic, is to be adopted.

" II. — It is agreed that for countries and islands that have not an official method of transcription, the transcription as adopted by the controlling Power should be used.

" III. — It is agreed that, in the case of those countries using characters other than Roman, the International Hydrographic Bureau, when formed, should as soon as possible prepare an international system of transliteration and transcription of names."

*Circular-Letter N° 36 of 28.9.22.*

A summary of the replies to Circular-Letter N° 36 of 1922 which had been received up to September 1924 was published in the "*Hydrographic Review*", Vol. II, N° 1 (November 1924) on pages 33 to 37 and the Committee suggested on pages 14 and 37 that this matter also be brought before the next Hydrographic Conference. No objection to this procedure having been received it will be carried out. No further information on this subject has reached the Bureau. (September 1925).

**(c) Section III. Resolution B. II. (Page 33 of Report).**

*A tabular method of compilation (of lists of lights).*

" That uniformity in arrangement is desirable. It is recognised that nations now publishing Light Lists have each adopted a form suitable to their respective requirements. It is recommended that until a uniform arrangement has been advised by the International Bureau, nations which publish Light Lists irregularly or not at all should adopt one of the forms followed by one of the nations now publishing Light Lists of the World."

*Circular-Letters.*

N° 40 of 16.10.22.

N° 35-H of 29.9.24.

Though, as stated on page 15 of the "*Hydrographic Review*", Vol. II N° 1 (November 1924), it is not possible, at present, to take any further action in this connection, the subject will be brought before the next Hydrographic Conference with the object of making another attempt to obtain the uniformity stated, by the Resolution, to be desirable or else of disposing of the charge laid on the Bureau by the second sentence of the Resolution.

**(d) Section III. Resolution D. (Page 34 of Report).**

*Method of describing visibility as limited by the intensity of light, and the adoption of a formula for its determination.*

" As at present no formula is known which is sufficiently elastic to satisfy the varying conditions of the atmosphere between the source of light and the point of observation, the observation method adopted by many nations appears to hold the field; in order to arrive at a unanimous solution this matter should be referred to the International Hydrographic Bureau. In the meantime each nation may retain its own method, and it is considered desirable that observations should be made by each nation with a view to accumulating data for determining constants and developing relations to serve as a basis for an acceptable formula, and these observations should be sent to the International Hydrographic Bureau."

*Circular-Letters.*

I. H. B. 149-21 of 10.10.21.

N° 39 of 12.10.22.

The Bureau continues to receive reports as suggested at the end of the Resolution and during the past twelve months has issued special Publication N° 7 which deals with some of the observations communicated to it. This Special Publication is reprinted on pages 141 to 180 of this number of the Hydrographic Review.

Most of the reports on observations so far received refer to lights on the northern coasts of Europe. The Bureau will be glad to receive similar reports from States lying in other parts of the world in order to determine whether there is any connection between the conditions of visibility in widely separated areas and, if not, to investigate such conditions off as many coasts as possible.

**(e) Section IV. Resolution B. (Page 36 of Report).**

*Advisability of arranging Notices geographically, to correspond with Sailing Directions and Light Lists.*

" It is agreed that it is desirable that the limits of enclosed seas should be laid down and that it might be stated to what sea or ocean a strait connecting two of them should be reckoned."

*Circular-Letter.*

N° 1-H of 15.2.23.

Certain further suggestions with reference to the fixing of the limits of Oceans and Seas have been received but answers are still lacking from China and Greece. Once more it must be insisted upon that the suggested limits have no political significance whatever — the commonly accepted term "Indian Ocean" does not (or should not) convey the

impression that either British India or Dutch India has political rights over that ocean nor has Mexico any special rights over the Gulf which bears its name. The fixing of limits for these navigable waters does not, therefore, fix limits to political spheres, as seems to be the opinion of certain Hydrographic Offices.

Revision of the original proposed limits is proceeding, with a view to the production of an amended proposal embodying all the suggestions which have reached the Bureau. The result would be much more satisfactory, however, if those States which have not yet commented on the Bureau's proposal would do so.

**(f) Section V. Resolution B. (Page 39 of Report).**

*Publication by each country of distance tables for its own coast, and the adoption of common points, where possible, to measure from.*

" That countries which do not already publish Distance Tables for their own coasts should in future do so, including in such tables common points for the purpose of effecting connection with the coasts of adjoining countries."

" The selection and determination of the positions of such common points should be referred to the International Hydrographic Bureau."

This matter still awaits a decision as to the limits of oceans and seas.

## **II. — Researches.**

The Bureau continues to study various problems and to collate and publish information gathered on various subjects of interest.

The principal problems and subjects are enumerated below : —

**(a) Coasts fully and partially surveyed and those which are but superficially examined.**

*Circular-Letter* N° 43 of 1922.

Several States have still not sent the information required. The collation of the data received is being continued and will be submitted to the International Hydrographic Conference.

**(b) Tidal matters.***Circular-Letters.*

N° 30 of 5.9.22.

N° 20-H of 8.7.24.

With a view to studying the subject of "*International Low Water*" the Members were requested to supply to the Bureau a list of all harmonic tidal constants which had been calculated by them. Though not very many States sent such lists, the Bureau is indebted to a publication issued by the Coast and Geodetic Survey of the United States of America, entitled "*A Manual of Harmonic Analysis and Prediction of Tides*" 1924, for very complete information as to these constants. The results of the investigation, which was carried out by Director PHAFF, have been issued as Special Publication N° 5 (March 1925) and this is reprinted on pages 63 to 134 of the "*Hydrographic Review*", Vol. II, N° 2. (May, 1925).

**(c) Echo-sounding.**

The progress made in this interesting subject is being closely followed by the Bureau which has been promised a report on a sounding cruise carried out by the Royal Italian Surveying Ship "*Magnaghi*" in which the Langevin-Florisson apparatus was installed early this year (1925). A description of this apparatus has been received recently and will be published with the report.

The allied subject of "*Velocity of Sound through Sea Water*" is the object of an article which appears on pages 69 *et seq.* This is a summary of an investigation carried out by the U. S. Coast and Geodetic Surveying Vessel "*Guide*" in 1923 and 1924.

**(d) Engraving and repair of chart plates.***Circular-Letter.*

N° 49 of 20.12.22.

The hope, expressed in "*Hydrographic Review*", Vol. II, N° 1, that further reports on this subject would be received has been realized as the Swedish Hydrographer has sent to the Bureau a very full report of the galvanoplastic method developed by his Office. Unfortunately it has arrived too late for inclusion in this number of the "*Hydrographic Review*".

**(e) Buoyage.***Circular-Letters.*

- N° 3-H of 1.2.24.  
 34-H of 27.9.24.  
 4-H of 7.3.25.  
 6-H of 12.3.25.  
 20-H of 27.8.25.

This subject has been very closely investigated by Director Niblack and the first results of his work were issued as Special Publication N° 6 (August 1925) under cover of Circular-Letter N° 20-H of 1925, and it was accompanied by three sheets giving a tabulation of the systems of Buoyage in use throughout the world. The text of the Special Publication is repeated on pages 101 to 140 of this number of the "*Hydrographic Review*" but it has been found impossible to reproduce the sheet referred to above.

The Bureau continues to collate information on this subject with a view to supplying as many data as possible on which to base discussions at the Conference which is to be held at Monaco in November 1925 (see page 125) and some further data are being issued as Special Publication N° 6 A.

**(f) Port and Coastal signals.***Circular-Letter.*

- N° 20-H of 27.8.25.

This subject was included originally with that under (e) above but it has been found necessary to separate them. Charts, similar to those which accompanied Special Publication N° 6 and detailed information, for issue in another Special Publication, is being collated and the results will be available at any future Conference on these subjects.

**(g) Storm warning signals.***Circular-Letter.*

- N° 15-H of 15.5.25.

The Bureau is studying this subject with a view to putting data before the Members in the same form as those for Buoyage and Port and Coastal Signals.

Storm Warning Signals are made primarily for the use of seamen and the Directing Committee considers that it would be of very great advantage if they could be standardised.

It is of opinion, however, that the first step to be taken in this matter is to standardise the expressions used to convey to the seaman an idea of the force of the wind. This can only be done by the international acceptance of definite terms in the various languages to express definite velocities of the wind and it is for this reason that the Bureau issued Circular-Letter N° 15-H of 1925 suggesting a scale of velocities and a code of terms relating thereto for approval and for eventual submission to the International Meteorological Committee for consideration.

**(h) Signal & Life saving stations & publication of information thereon.**

*Circular-Letters.*

N° 44-H of 20.12.24.

8-H of 24. 3.25.

14-H of 7. 5.25.

The Resolutions made at the International Hydrographic Conference, London 1919, having made no provision for the publication of information relative to certain signal and other stations unless situated at or in close proximity to a lighthouse, except perhaps in a very inconvenient form, *i. e.* scattered through the Lists of Lights, Sailing Directions, *etc...* the Directing Committee is examining the practice of the Members in this connection and is collecting information as to all such stations with the object of bringing this subject before the next International Hydrographic Conference.

**(i) Scale & code for reporting disturbance of the surface of the sea.**

*Circular-Letter.*

N° 16-H of 20.6.24.

The greater number of the States Members having expressed their opinions on the suggestion made by Captain DOUGLAS, these were communicated to the Director of the British Meteorological Office. It is understood that the matter is to be brought before the International Meteorological Committee.

**(j) Surveying vessels.**

*Circular-Letter.*

N° 27-H of 27.8.24.

Several Hydrographic Offices have sent photographs and details of

their vessels and the French report was included in "*Hydrographic Review*", Vol. II, N° 2. The series is continued in the present number by the publication of a summary of the British report (see page 66).

**(k) Hydrographic Offices.**

Reports on the Hydrographic Offices of Chile and Italy were published in "*Hydrographic Review*", Vol. II, N° 2 and this series is continued by reports of visits made to the Portuguese and Spanish Hydrographic Offices by the President of the Directing Committee.

**(l) Work carried out & projected by Hydrographic Services.**

<i>Circulars-Letters.</i>	<i>Dealing with a report received from.</i>
N° 40-H of 24.11.24.....	Argentine.
3-H of 14. 2.25.....	Sweden.
5-H of 11. 3.25.....	Chile.
11-H of 27. 4.25.....	Greece.
13-H of 30. 4.25.....	Netherlands.
16-H of 4. 7.25.....	Siam.
18-H of 28. 7.25.....	Japan.

The publication of these valuable reports, as soon as they are received, has been continued.

**(m) Distinguishing signal for Surveying Vessels.**

*Circular-Letter.*

N° 38-H of 12.11.24.

The Greek Hydrographer having suggested that an international agreement should be made as to a special signal to be used by surveying vessels when at work, the Directing Committee issued the Circular-Letter quoted enquiring as to the practice of the various States in this matter and suggesting that a "distant signal" would be better than a flag signal.

Thirteen States have replied to these questions and of these only one negatives the Greek Hydrographer's suggestion. Most of the answers favour the proposal that a "distant signal" be adopted but several add that the signal for Cable-ships appears to be suitable. Nearly all suggest that any signal adopted should not be used indiscriminately. It is hoped



that those Members who have not yet informed the Bureau of their opinions on these proposals will do so shortly in order that the matter may be brought before the International Hydrographic Conference.

**(n) Terminology for Submarine Relief.**

The Bureau has been in constant communication with the Hydrographers of the British and U. S. Navies in connection with the terms to be employed in the English language and practical agreement has now been reached.

**(o) Record of documents of Hydrographic interest & Bibliography.**

*Circular-Letters.*

N° 19-H of 22.6.23.

25-H of 19.7.24.

39-H of 17.11.24.

No further reports on this subject have reached the Bureau but it is known that the British Hydrographic Office is preparing a valuable catalogue of such documents for publication. It will be remembered that on pages 193 to 197 of Vol. II, N° 2 of the "*Hydrographic Review*" the Bureau published a list of subjects which are of interest to Hydrography in the form of a "Classification" intended primarily for use in its Library and for Bibliographical purposes. This can very well serve as a guide as to the type of document which should be included in reports.

**(p) Original Charts.**

*Circular-Letter.*

N° 2-H of 29.1.24.

Many replies have been received in answer to the request of the Directing Committee that catalogues of charts, in which those which are "original" are marked, be sent to the Bureau. As soon as full data have been received they will be published.

The Hydrographer of the Netherlands who is the author of the article entitled "The use and distribution of Original Charts" which appeared on pages 121 *et seq.* of Vol. I, N° 2 of the "*Hydrographic Review*", has prepared a catalogue and index chart of the original charts of the Baltic and caused it to be printed and published. This forms a very interesting practical example of the value of such a publication.

**(q) International Organisations dealing with Subjects allied to Hydrography.**

The connection of the Bureau with these Organisations has been dealt with on page 10.

**(r) International Hydrographic Conference, 1926.***Circular-Letters.*

N° 1-R, 7-H of 13.3.25.

7-R, 22-H of 17.9.25.

The Members have been invited to forward to the Bureau lists of subjects and questions to be discussed at the quinquennial conference which it is proposed to convene during the Autumn of 1926. The Directing Committee has proposed that the date of opening of the conference be about the end of October and awaits the remarks of the Members as to the suitability of this date.

