## **RESULTS OF TIDAL OBSERVATIONS**

by

#### JONAS EKMAN FJELDSTAD.

(Published by the Geofysisk Institutt, Bergen,  $1936 - 23 \times 31$  cm., 88 pp. – 13 fig., Tables).

This publication contains the results of tidal observations made by the Norwegian North Polar Expedition with the *Maud* 1918-1925, being N° 4, Volume IV, of the Scientific Results of the Expedition.

Details of the tidal observations at various stations along the Siberian Coast from Cape Chelyuskin to Cape Serdze Kamen on the edge of the continental shelf are given. The tide-gauge used was fitted on board the vessel and was specially developed for the measurement of the height of sea level through the ice-bed.

An explanation is given of the method of reduction adopted for a short series of observations and of the treatment of a comparatively lengthy series of hourly soundings. Current measurements were also made, by means of an electric current meter.

This study collates all the known factors for the diurnal and semidiurnal tides along the shores of the Arctic Ocean and one finds in it a comprehensive investigation of Arctic Tides taken as a whole.

H. B.

## INTERNATIONAL GEODETIC BIBLIOGRAPHY

by

GEORGES PERRIER, MEMBER OF THE INSTITUT DE FRANCE, SECRETARY OF THE INTERNATIONAL ASSOCIATION OF GEODESY

and

PIERRE TARDI,

SECRETARY OF THE GEODETIC DIVISION OF THE NATIONAL FRENCH COMMITTEE ON GEODESY AND GEOPHYSICS.

Volume I (1928-29-30), Paris, Secretariat of the International Association of Geodesy, 19, rue Auber, 1935 (80 + 221 pp.  $-27 \times 22$  cm.) Price : 185 French francs.

The Secretariat of the Association of Geodesy of the International Union of Geodesy and Geophysics recently issued Volume I of the *International Geodetic Bibliography*, Paris, 1935.

This first volume covers the bibliography which appeared during 1928-1929-1930.

As early as 1922, the International Association of Geodesy had already under consideration the drawing up of bibliographical lists and at each of the three General Assemblies : Madrid (1924), Prague (1927) and Stockholm (1930), geodesists of the whole world displayed interest in a publication of this nature.

This bibliography supplies geodesists with a comprehensive list of all publications on the subject, methodically classified, and in the Introduction to Volume I recently issued by the Secretariat of the Association the general rules adopted for its compilation are given. The classification adopted rests within the general plan and in conformity with the rules of the decimal classification recommended by the Brussels *Institut International de Documentation*, according to a system worked out in the Secretariat of the Association of Geodesy. The tabulations in the Preface (pp. A.54 to A.59) give this classification and, in addition, show its analogy with the classification of the "International Catalogue of Scientific Literature" (Royal Society, London).

#### HYDROGRAPHIC REVIEW.

The volume includes a list of names of authors, arranged alphabetically.

For each country, one person (a specialist) is entrusted with the task of the preparation of the bibliographic cards and sending them to the Secretariat of the Association, which assembles them, finally classifies them and assures their publication, reducing to uniformity the information upon them. Articles which have appeared in periodicals are also mentioned, and for each country the Association has drawn up a list of the periodicals of geodetical interest. In order not to divide up the publication into too many parts, the Secretariat of the Association proposes to issue a fresh volume every three years. The present volume comprises 219 pages and gives a list of about 1430 articles.

Volume 2 (1931-1934) and Volume 3 (1935-1937) of this Bibliography are in hand. It is intended to publish one volume every three years to appear at the period of the triennial General Assembly of the International Association of Geodesy.

Geodesians and topographers will welcome the successive volumes of this Bibliography which will be for them a working instrument of great value.

### HYDROGRAFIA

# (THEORETICAL AND PRACTICAL MANUAL FOR HYDROGRAPHIC SURVEYS)

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GEORGE MAXIMOV, HYDROGRAPHIC AND GEODETIC ENGINEER. Published by the Hydrographic Section of the Department of Maritime Routes in the Northern Part of U.S.S.R.

16 × 26 cm. – 503 pp. 328 fig. – Leningrad 1935 – Price : R. 10.50.

The author of this important work had already collated in 1918 considerable material for a work entitled : *Lectures on Hydrography*. The plan of the present work, begun in 1921, was brought up to date in 1934 in so far as concerns new matter of interest to hydrography.

In the introduction the author discusses the different stages in the development of hydrography and gives some general information with regard to surveying ships.

The first part is devoted to the general theory of hydrographic operations and a description of the instruments :—

Chapter I. — Location of signals and buoy-marks in the waters to be surveyed, in particular by means of the automatic signal buoy invented by Hydrographic Engineer A.I. NEELOFF. This chapter also contains a theory on the degree of accuracy and the sensitiveness of the ranges.

Chapter II discusses the degree of accuracy to be obtained in hydrographic surveys and the disposition of the boats available for this work. In this chapter are given the plans of the Russian surveying boats, which are generally equipped with a steam motor with three radial cylinders. There is also a description of the Malminen indicating counter which allows the boat soundings to be regularly spaced.

Chapter III reviews the different types of sounding apparatus, hand sounding, mechanical and echo sounding.

Chapter IV describes the bottom samplers and the nature of the bottom.

In Chapter V are given descriptions of the methods of position finding for the surveying vessel. In this chapter are given also a theory of the LUGEOL micrometer and of the telemeter of BARR and STROUD, and a description of the various devices employed in fixing the position of the ship by means of sound ranging.

The second part is entitled Systematic Surveys, and includes :

Chapter VI, which treats of the measurement of bases and 3rd Order triangulation; compensation; and the laying out of the projections for the field sheets.

Chapter VII. — Different methods of hydrographic surveying including the particular case of surveying on ice.