Thus, as will be gathered from the second paragraph of this foreword, this first volume is intended primarily to be a general text-book on Hydrography for the use of Uruguayan Surveyors.

The book is divided into five parts and the first part contains a brief history of the Naval Hydrographic Service since its creation, a list of charts prepared up to 1932 and the Regulations governing the Service (see page 12). It continues with a general outline of the surveys which are to be made, including the methods to be employed and guiding rules for the operators, the construction of marks, triangulation and bases, both primary and secondary, traverses, topography, levelling, tide gauges, sounding, drawing up of plans, charts and sailing directions.

Part II gives detailed reports on certain hydrographic surveys carried out from 1925 to the end of 1932.

Part III is entitled "Methods of Observation, Measurement and Calculation" and is divided into two sections the first of which deals with the measurement of a base and the second with the triangulation. This part closes with a chapter on MERCATOR'S projection and the preparation and graduation of the sheets.

Part IV — "Geodetic Astronomy" — deals with the observations for and calculation of Latitude, Longitude and Azimuth. The last chapter contains a description of the KERN-AARAU Universal Theodolite.

The last part is devoted to oceanographic information relative to Maldonado Bay such as the physical and chemical conditions of the water and certain marine biological studies.

G. S. S.

RUSSIAN HYDROGRAPHIC EXPEDITION IN SIBERIA, 1933

In the *Bioulletin arktitcheskovo Instituta SSSR* (Bulletin of the Arctic Institute U.S.S.R.), No. 1, Leningrad, 1934, is a summary account of the expedition of the Russian Hydrographic Administration to the northern coasts of the Union, under the general direction of V. I. VOROBIEV, hydrographer.

The whole expedition had at its disposal the following ships: *Circule* (465 tons), *Farvater* (271 tons), *Chronometer* (411 tons), *Stativ* (110 tons), *Shiroka* (195 tons) and *Shturman* (195 tons), besides the *Pioneer* (50 tons).

The *Circule* and the *Farvater* operated in the Kara Sea sector; ice conditions prevented work being begun until the month of August, when Dickson Island could be approached. The ships then visited Stone I., Sverdrup I., Vilkitzky I., White I., Neupokoyev I., Wardroper I., Minin Skerries, Zveroboy I. and the Plavnikovy and Scott-Hansen Islands, as well as Two Bears Cape, Rastorguyev I. and Piassina Bay. The *Circule* and the *Farvater* completed their programme of work on 4th October.

The Yenissey detachment took systematic soundings of the Yenissey River northward of Igarka; 110 cross tacks were made and also a survey of the shores of the Yenissey from Igarka to Nikolsk, accompanied by buoyage work and pilotage duties.

The Ob detachment was engaged in buoyage work and the erection of marks. During the work in the Malyguin Strait the *Chronometer* ran aground and was seriously damaged. She was hauled off by S.S. *Circule* and towed to Novy Port. The *Stativ* worked in the region of Tazov Bay and made a survey of the shores of the Nadym Ob.

The chief results obtained by the work of the expedition are as follows: —

15 astronomical points have been determined (Sverdrup I., West Kamenny I., Rastorguyev I., Zveroboy I., Baranov I., Wardroper I., Scott-Hansen I., Minin Skerries, Cape Zveroboy, Ust-Piassinsk, the Novo-Morjovo winter camp, Two Bears Cape, Vilkitzky I., Neupokoyev I., Cape Kusnetzovsky (in the Yenissey Gulf). 1642 kilometres of shore have been surveyed, of which 618 km. are in the N.E. part of the Kara Sea and Piassina Bay, 135 km. in the Guidayama District, 74 km. in the Yenissey Gulf, 661 km. in the Yenissey River and 154 km. in the Ob River. Ship soundings have been obtained; total length of courses run, 2393 miles. 21 navigation marks have been erected, of which 12 are of the tower type. The bar of the Piassina River has been investigated, also the approaches to Cape Ragozin where a wireless station was established in 1933.

In the Lena-Khatanga sector, the surveys were carried out by the small schooner *Pioneer*. A tide-gauge station was established at the junction of the Bulun and the Lena, another near Otstoy Barges I., while two other tide-gauges were established one on Mostyr and one on Pioneer Islands. The surveys carried out correspond to blanks in the charts; a sea survey was carried out embracing the East and West Nordwick Straits, the Urung-Tumus Peninsula and the south-west coasts of Beguichev and Nicholas Islands. An 18-hour series of current observations by means of floats was carried out at the south-east cape of Beguichev I. The range of tide in Nordwick Bay reaches 2 ½ metres, the velocity of the currents attaining 3 knots at the outlet of Khatanga Bay, abreast Preobrajenya I.

Work was completed at the beginning of December. The programme included also meteorological observations, water surface temperature observations, the collection of information to be used in Sailing Directions, and the taking of photographs.

ON THE RESULTS OF SOUNDINGS IN THE VICINITY OF THE YAMATO BANK

by the

JAPANESE HYDROGRAPHIC DEPARTMENT.

(In Japanese. *Suiro Yôhô* (Hydrographic Bulletin) 12 (1933), pp. 427-8, 1 pl.)
Extract from the *Japanese Journal of Astronomy and Geophysics*, Vol. XI, No. 3
National Research Council of Japan, Tokyo, 1934, pp. (42)-(43).

A shallow depth of 465 metres was reported in 1930 in latitude 39°46' N., longitude 133°39' E., in the central part of the Sea of Japan. Accordingly, the surveying ship *Yamato* of the Imperial Japanese Navy made soundings in the vicinity of the reported shoal in 1931 and 1932. The results of the soundings are shown on a chart of scale 1: 600 000. The number of soundings made is over 200, covering an area of about 20×40 sea miles, and the form of the bank is now well established. The minimum depth recorded is 418 metres. Two banks not deeper than 600 metres were found to extend in N.E. and S.W. directions, one having a length of about 20 miles and a breadth of a few miles, and the other of 9 and 4 miles respectively. To the north-west the bottom of the sea falls very steeply to a basin deeper than 2000 metres. To the south-east of the bank, at a distance of about 60 miles, another bank known as the "Yamato Bank", the minimum depth of which is 285 metres, extends in a direction nearly parallel to that of the former from which it is separated by a furrow deeper than 2000 metres.

A NEW VOLCANO OFF THE EAST COAST OF ALAID ISLAND

by

AKITUNE IMAMURA and ZIRÔ KAWASE.

(Extract from the *Japanese Journal of Astronomy and Geophysics*, Vol. XI, No. 3
National Research Council of Japan, Tokyo, 1934, p. 113).

Linking Hokkaido with Kamchatka is a festoon-like chain of volcanic islands, the Kurile Islands (Tisima), of which the nearest to Kamchatka is Shumshir (Simusyu), the next being Paramshir (Paramusiru). About 45 kms. W.N.W. from Shumshir, or 28 kms. N.W. from the northern coast of Paramshir, is Alaid Island (Araido), the northernmost island of the Kuriles.

Alaid is circular and 15 kms. in diameter. Near the centre lies the beautiful cone of Mt. Oyakoba, 2334 metres high. According to Mr. A. UEMATU, who spent more than