

## THE SPANISH HYDROGRAPHIC SERVICE

BY THE PRESIDENT OF THE DIRECTING COMMITTEE.

During the holding of the Assembly of the International Union of Geodesy & Geophysics in Madrid, in October, 1924, at which the President of the Directing Committee was present, the opportunity presented itself of visiting the Spanish Hydrographic Office and the following brief résumé of this Service is now given.



HE Director General of Navigation, a Rear-Admiral, has the general supervision of the Hydrographic Service, the offices of which are situated in the Navigation Department in Madrid; the Officer in charge of the Hydrographic Service is a Captain in the Royal Navy, a surveying officer of the highest class.

The office personnel consists of four retired Naval officers, who are employed in the preparation of charts and Notices to Mariners, the writing of Sailing Directions and the compilation of other hydrographic publications; four cartographers are employed on the construction of charts, while there are six engravers on the staff with two apprentices undergoing training; one master printer and two assistants are employed in carrying out ail chart printing; five attendants, chart packers and messengers are also employed in the Department.

Special instruction for Surveying Officers is given at the Academy of Hydrography in the Marine Observatory at San Fernando, Cadiz, there is no permanent staff of surveying officers, but the services of the specially trained officers are utilised when required.

The Surveying vessel "Giralda" is of 2,450 tons displacement, which appears somewhat large for surveying work, but she has two small steam vessels of 100 tons each attached to her to assist in the sounding of shoal waters.

All charts are printed from copper plates, and the excellence of the engraving work is most noticeable; the charts are actually printed in the building beforementioned, the resultant charts being most creditable.

The issue of all hydrographic charts and publications, both to the

ships of the Royal Navy and to the vessels of the Mercantile Marine, is carried out directly from the Hydrographic Office, but the chronometers, compasses and other navigational instruments for the use of the Fleet are stored at the Marine Observatory at San Fernando, and issued therefrom.

Special mention must to be made of the Library of the Hydrographic Office, with its wealth of old material, both in book, map and chart form, as its contents probably include unique specimens of charts and hydrographic works of the Middle ages to the end of the eighteenth century. The care bestowed on the preservation of the old maps, etc., is most evident, and it need not be said that the inspection of such a collection was a privilege which was immensely appreciated; the Librarian is a retired naval officer, Commander J. DE ARIZA, and his work is most clearly a labour of love.

I am much indebted to the Director of Navigation and the staff of the Hydrographic Service for the cordiality with which I was received as the representative of the International Hydrographic Bureau, and my thanks are specially due to the Librarian for his great courtesy in showing me so many of the interesting and beautiful treasures in his charge.

