FRENCH GRAVITY MEASURING CRUISE IN THE WESTERN PART OF THE MEDITERRANEAN

(Lecture delivered by Ingénieur Hydrographe Général COT, Director of the Service Hydrographique of the French Navy, before the IVth International Hydrographic Conference, 20th April, 1937).

The example set by the Dutch Navy, the United States Navy and the Italian Navy has been followed by the French Navy in carrying out two gravimetric surveys on the submarines *Fresnel* and *L'Espoir* successively in 1935 and 1936 in the western basin of the Mediterranean.

The instrument used was the Vening-Meinesz pendulum apparatus, kindly loaned by the Netherlands Geodetic Commission. M. Marti, French Hydrographic Engineer, was personally instructed in the use of the apparatus by M. Vening-Meinesz himself.

In all, 76 stations were occupied at sea between the Straits of Gibraltar and the meridian of Corsica.

On the first voyage three chronometers were used simultaneously and on the second voyage four, in order to determine the rate of the principal chronometer with the requisite accuracy.

The depths, which did not exceed 2,600 metres, were determined by means of sonic soundings.

The results will be published. An article on this subject will appear in the next issue of the Annales Hydrographiques françaises.

