

HYDROGRAPHIC REVIEW

The Directing Committee of the INTERNATIONAL HYDROGRAPHIC BUREAU will be pleased to consider articles for insertion in the *Hydrographic Review*. Such articles should be addressed to :

INTERNATIONAL HYDROGRAPHIC BUREAU

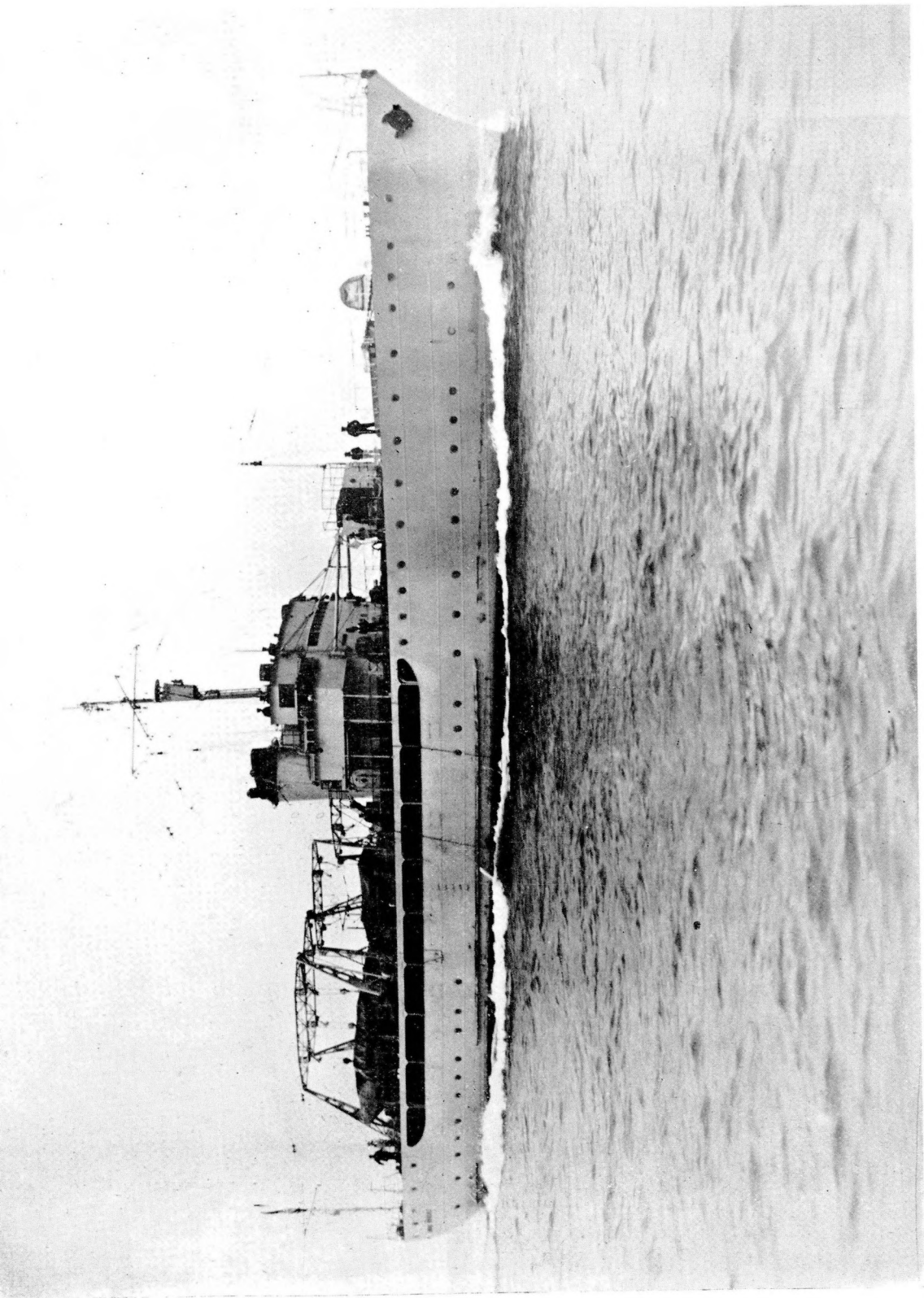
Quai de Plaisance

MONTE-CARLO

(Principality of Monaco).

and should reach the Bureau not later than 31st January for the *Hydrographic Review* of May and 31st July for the *Hydrographic Review* of November.

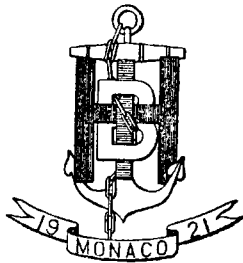
The Directing Committee is not responsible for statements made or opinions expressed in articles or papers published in this Review, which are written by Authors who are not members of the Directing Committee or of the Staff of the International Hydrographic Bureau.



The French Surveying Ship "AMIRAL MOUCHEZ"
Le Navire Hydrographe Français "AMIRAL MOUCHEZ"

THE
HYDROGRAPHIC
REVIEW

VOL. XVI



N° 2

(N° 32 OF THE SERIES)

PUBLISHED BY
THE
INTERNATIONAL HYDROGRAPHIC BUREAU

Quai de Plaisance, Monte-Carlo

MONACO
(PRINCIPALITY)



NOVEMBER 1939

IMPRIMERIE G. MATHIEU
14, RUE CHAUVAIN, NICE

INTERNATIONAL HYDROGRAPHIC BUREAU

LIST OF STATES WHICH ARE MEMBERS OF THE BUREAU

ARGENTINA	FRANCE
BRAZIL	JAPAN
BRITISH EMPIRE	MONACO
UNITED KINGDOM	POLAND
AUSTRALIA	PORTUGAL
CHILE	SPAIN
CHINA	SWEDEN
DENMARK	THAILAND
ECUADOR	UNITED STATES OF AMERICA
EGYPT	URUGUAY

DIRECTING COMMITTEE

President : Vice-Admiral J. D. NARES, D. S. O. Royal British Navy (retired).

Directors : {
 Ingénieur Hydrographe Général en retraite
 P. DE VANSSAY DE BLAVOUS (Marine Française).
 Rear Admiral Lamar R. LEAHY, United States Navy (retired).

LIST OF CONTENTS.

	<i>Pages</i>
Erratum to Hydrographic Review, Vol. XVI-1, May 1939, p. 48.....	7
Ingénieur Hydrographe Général E. Fichot (Obituary) (P.V.).....	9
Rear Admiral Walter R. Gherardi (Obituary).....	13
Note on the French Surveying Vessel "Amiral Mouchez".....	13
Echo Soundings in the Southern Ocean (Douguet & L. Péliissier).....	17
Communication to be made to the General Assembly of the Association Inter- nationale d'Océanographie Physique (Washington, 1939) (J.D. Nares)..	20
The Epicentres of Earthquakes in relation to the Mid-Atlantic Ridge and the Carlsberg Ridge in the Indian Ocean (P. de Vanssay).....	23
Conformal Projections of the Ellipsoid (P. de Vanssay).....	25
The International Exhibition of Polar Exploration, Bergen, 1940 (J.D.N.)..	44
United States Geophysical Expedition to the Pacific Ocean (S. Chapman)....	45
The Oceanographic Work on the second partial voyage of the German North Atlantic Expedition, January to July 1938 (Extr.) (O.v. Schubert)	46
Some morphological results of the cruise of the <i>Meteor</i> , January to May 1938 (Extract) (G. Dietrich).....	52
Survey of the Morphological details of the Ocean bottom by means of echo sounding (Extract) (A. Defant).....	56
Morphologie des Atlantischen Ozeans (Th. Stocks) (P.V.).....	58
On Soundings (A new type of Nautical Chart, U.S. Coast and Geodetic Survey) (K.T. Adams).....	59
The present state of the technique of Maritime Lighthouses (R. Cippico)....	66
Geomagnetic elements of environment of Riga (L. Slaucitajs).....	86
The Equatorial Currents in the western part of the Pacific Ocean (Extract) (G. Schott)	87
The Counter-Current off the South and South-East African Coast (E. Römer)	88
Atlas of Tidal Current Charts in the St. Lawrence Estuary (J.D.N.).....	92
The drift of the <i>Sedov</i> (Extract) (N.N. Zubov).....	93
Taut-Wire, Sun azimuth Traverses (F.S. Borden).....	98
Measurements with a new type of levelling instrument with double image and inclinable line of sight for hilly country (W. Riemann).....	102
Horse Latitudes	109
Echo Sounding in Harbour Hydrography (D.H. Macmillan).....	110
Velocity of Sound in Sea-Water and calculation of the Velocity for use in Sonic Sounding (S. Kuwahara).....	123

HINTS TO HYDROGRAPHIC SURVEYORS :

Correcting Closure Error (G.C. Commons).....	141
Astro-Radio Points (K.M. Papworth).....	141
Whitewash Signals (L.W. Swanson).....	143
Calibration of Taut-Wire Apparatus (L.P. Raynor).....	146
Creating a Horizon (Extr.) (J.Y. Dreisonstok).....	147

INSTRUMENTS :

The Lowestoft crossbow float (J.N. Carruthers).....	149
Electromagnetic Hydrophones or "Magnetophones" (H.G. Dorsey).....	153
The Bastien Position Calculator (L. Daviot).....	157
Setting out deep sea Tide Gauges (Extr.) (H. Geissler).....	160
A solution to the problem of adjusting the counterbalance of a shipboard theodolite (Extract) (A.R. Stickley).....	162

EXTRACTS AND REVIEWS :

Admiralty Manual of Hydrographic Surveying (J.D.N.).....	164
Admiralty Weather Manual (J.D.N.).....	164
The divisions of the Circle (Extract).....	165

BIBLIOGRAPHY :

Hydrographic Bibliography	167
---------------------------------	-----
