THE INTERNATIONAL HYDROGRAPHIC REVIEW

The Directing Committee of the International Hydro-GRAPHIC BUREAU will be pleased to consider articles for insertion in the *International Hydrographic Review*. Such articles should be addressed to

International Hydrographic Bureau Ouai des Etats-Unis

MONTE-CARLO (Principality of Monaco).

and should reach the Bureau not later than Ist February or Ist August for the May or November numbers respectively.

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

INTERNATIONAL HYDROGRAPHIC REVIEW

VOL. XXVII



Nº I

(Nº 47 OF THE SERIES)
PUBLISHED BY

THE

INTERNATIONAL HYDROGRAPHIC BUREAU

Quai des États-Unis, Monte-Carlo

MONACO

PRINCIPALITY



MAY 1950

IMPRIMERIE ROBAUDY

22. RUE HOCHE. CANNES

INTERNATIONAL HYDROGRAPHIC BUREAU

LIST OF STATES WHICH ARE MEMBERS OF THE BUREAU

ARGENTINA

BRAZIL

BRITISH EMPIRE

UNITED KINGDOM

Australia

NEW-ZEALAND

CHINA CUBA

DENMARK

EGYPT

FRANCE

GREECE

ITALY

JAPAN

MONACO

NETHERLANDS

NORWAY

POLAND

PORTUGAL

SPAIN

SWEDEN

THAILAND

TURKEY

UNITED STATES OF AMERICA

URUGUAY

DIRECTING COMMITTEE

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

Director: Rear-Admiral C. L. NICHOLS, U. S. N. (retired).

Secretary-General:

Capitaine de Vaisseau de réserve H. BENCKER, Marine Française.

TABLE OF CONTENTS.

	Pages
Erratum	6
H. S. H. Prince RAINIER III of Monaco	7
Organization of the Hydrographic Office of Sweden	9
The Calculation of Harmonic Constants from Non-harmonic Data (A. T. Doodson)	12
Is the Atlantic Coast Sinking? The Evidence from the Tide (H. A. MARMER)	25
Influence of Echo Sounding on Hydrography (A. J. Hughes)	29
Copper-plate Restoration for Charts of Spanish Hydrographic Institute (Manuel de la Hera Pacheco)	40
Use of Enamelled Plates in Map Drawing and Reproduction	47
Handling of Geographic Names on Nautical Charts and Documents.	49
Astronomy and Navigation (D. H. SADLER)	66
The Nautical Mile (A.B. MOODY)	77
Use of Equal Altitudes Instruments for Accurate Determination of Latitudes (A. GOUGENHEIM)	86
Special Chart for Direct Plotting of Radiogoniometrical Bearings taken from Vessels or Aircraft (Ch. PACE)	89
Methods of Plotting and Reduction (P. F. EVERITT)	97
Shoran Triangulation in Canada	100
Direct Measurement of Ocean Currents (M. V. Romanovsky)	102
Ocean Bottom Sampler for Ships under Way (J. L. WORZEL)	103
An Instrument for Recording continuously the Salinity, Temperature, and Depth of Sea Water (A. W. JACOBSON)	107
The Angleprism	123
Hints to Hydrographic Surveyors	125
Use of Bilby Towers in Triangulation of Southern Coast of Senegal	128
Razmara Method of Teaching Topographic Surveying and Geodetic Operations (Hossein Ali Razmara)	132
Unattended Fully Automatic Lighthouses (Crouse-Hinds Cy.)	133
The Earth's Magnetism (R. A. WATSON)	135
Radar, Collisions, and the Rules of the Road (J. K. TAUSSIG)	139
New Ocean-Charting Ships - Canada	146
Spanish Surveying Vessel "Juan de la Cosa"	148
Norwegian Surveying Vessel "Sjôvern"	151
International Hydrographic Bibliography	152