HYDROGRAPHIC REVIEW.

MAREE E CORRENTI DI MAREA

(TIDES AND TIDAL CURRENTS).

by

PROFESSOR M. TENANI.

(Publication N° I. I. 3094 - 2nd edition - published by the *Istituto Idrografico della* R. Marina, Genoa, 1935 - 24×15 cm. - 215 pages - 22 ill. and tables).

This publication, which forms part of the series prepared for the Naval Academy at Leghorn, completes the collection of Text Books for instruction in the various questions relative to geophysics and its maritime applications. To this end the theoretical part is restricted to the necessary elements only but, on the other hand, practical applications in the nautical domain have been fully developed.

This second edition, like the first, was prepared by Professor Mario TENANI and based on the experience gained in the courses held during the last few years at the Leghorn Naval Academy. The first part of the manual includes essential notions on tides and tidal currents *viz.*: description of the phenomena, causes of tides, static theory of tides, non-harmonic predictions, harmonic analysis and approximate tide-predictions, datums of reduction for soundings, description of tidal streams and method of prediction of these streams.

The second part includes tide tables for the Mediterranean, the Red Sea and Italian Somaliland, together with a group of tables for tide prediction by the harmonic method, limited to nine principal constituents. Harmonic constants for the tidal streams in the Strait of Messina and the Strait of Bab el Mandeb are included also.

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MANUALE DI METEOROLOGIA NAUTICA

(MANUAL OF NAUTICAL METEOROLOGY.)

(2nd Edition - published by the Hydrographic Institute of the Royal Italian Navy-Publication I.I. 3093 - Genova 1935 - 16×24 cm. - 290 pp. 81 figs & tables).

The Hydrographic Institute of the Royal Italian Navy recently issued a Second Edition of this manual, the character of which is essentially practical in the meteorological sphere.

This work supplies practical rules for the application of meteorology to navigation, thus constituting an indispensable appendix to the *Manuale dell'Ufficiale di Rotta* (The Navigating Officers' Manual) by Admiral E. BURZAGLI. The second edition has been entirely rearranged and revised by Professor Mario TENANI; it thus becomes one of a group of volumes dealing with magnetism, tides, etc., forming the collection of manuals of a scientific nature published by the Institute of Genoa and drawn up with the intention of preparing the way to the study of geophysical problems. The contents of the First Edition have been completed and brought up to date, particularly in so far as the weather broadcasting service is concerned.

The manual is divided into two parts: Part I gives explanations necessary for the understanding of atmospheric phenomena which may be of interest to seamen :- Chapter I, Studies of the atmosphere; Chapter II, Periodical changes of weather; Chapter III, Non-periodical changes of weather.

Part II deals with meteorology in its relation to marine navigation:- Chapter I, Units and instruments; Chapter II, Sources of meteorological information for seamen; Chapter III, Application of meteorology on board ship; Chapter IV, Information regarding present-day methods of géneral weather-forecasting in central offices.

The work is accompanied by a certain number of numerical tables and includes an English-Italian vocabulary of meteorological terms necessary to Italian-speaking readers who may wish to consult nautical documents in English. A small meteorological atlas gives, among other things, an extract from the international cloud atlas.

H. B.