ANNAES HYDROGRAPHICOS

TOMO III.

Published by the Brazilian Hydrographic Service, Rio de Janeiro, 1935.

The third volume of the *Annaes Hydrographicos* under review contains an analytical account of the hydrographic work carried out in Brazil during 1935 and the programme drawn up for the year 1936. It gives the results of tidal observations for 1935 in the Sâo Sebastião Canal, at Paraty and at Itacurussa.

There follows a report by Captain Alberto J. CARVALHAL on the determination of the geographical coordinates and magnetic data for the Brazilian Coast between Santo Agostinho and Aracajù. An appended chart shows the divergence between the new tracing and the former contour line on now disused charts.

The *Annaes Hydrographicos* further contain a report by Captain F. FROTA on the use of a 45° astrolabe by the Brazilian Surveying Party to determine the position of the Abrolhos Lighthouse. The result is as follows:

$$\varphi = 17^{\circ}\ 57'\ 47'',22\ \text{S.} \pm 0.11''$$
$$\lambda = 38^{\circ}\ 41'\ 46'',08\ \text{W.} \pm 0.37''$$

Captain FROTA's report is followed by an article describing the stereograph used by the Army Geographical Division for the examination of aerial photographs, with a theory concerning the method of using it in tracing depth contours.

An article by Lieut.-Commander G. B. PEREIRA DAS NEVES on the compensation of ships' direction finders and radio-compasses appears on page 75.

Lieutenant Ary RONGEL contributes a series of interesting notes on the datum of reduction of soundings to be selected for Brazilian coastal charts. At the end of this volume of the *Annaes Hydrographicos* some information is given concerning new Brazilian charts published since 1932 based on recent surveys by the Hydrographic Service.

With reference to the classification of charts and documents, the Brazilian coasts are divided into three parts:– from Orange Cape to Cape Calcanhar (North coast); from Cape Calcanhar to Cape Frio (East Coast); from Cape Frio to Chuy Deep (South Coast). The same geographical order will be used hereafter by the Hydrographic Service for Sailing Directions, Light Lists and Notices to Mariners.

A chart index shows the new plan for numbering charts according to scale. These scales have been standardised. Charts are constructed to rounded-off natural scale; for those of the North Coast the basic parallel of $\varphi = 0^{\circ}$ has been selected; for those of the East Coast $\varphi = 17^{\circ}\ 56'$; for those of the South Coast $\varphi = 31^{\circ}\ 43'$.

A Portuguese-English vocabulary is annexed so as to facilitate the use of English and American charts by Portuguese-speaking seamen.

H. B.

WORLD LONGITUDE 1933.

by

J. P. LUSHENE

(Reproduced from *Geodetic Letter* N° 6, June 21, 1934, published by U. S. Coast and Geodetic Survey).

One who examines a map showing the opposite coasts of the South Atlantic Ocean will notice the striking similarity of the shape of the coast lines. Each major indentation on the east coast of South America has a somewhat corresponding protuberance on the