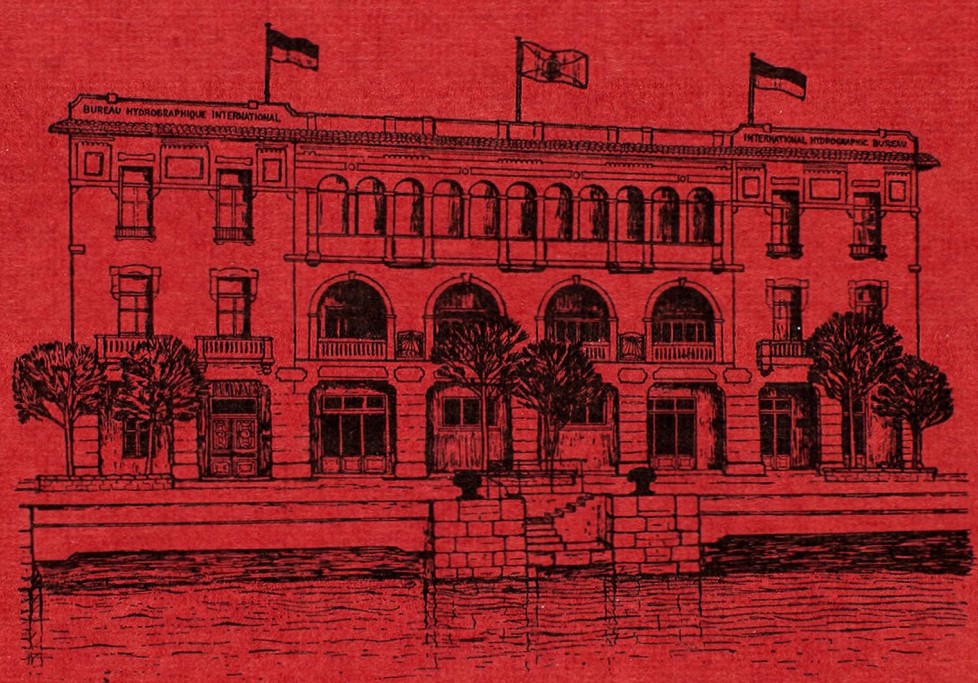


R.M. EATON

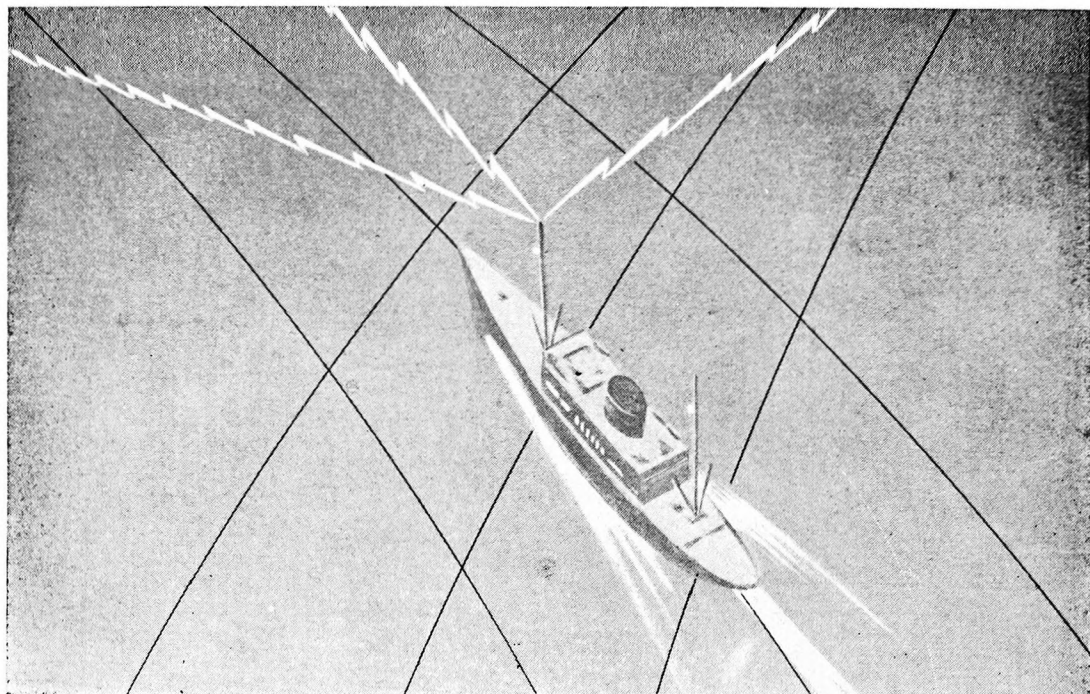
THE INTERNATIONAL HYDROGRAPHIC REVIEW



**INTERNATIONAL HYDROGRAPHIC BUREAU
MONACO**

Vol. XLIII, No 2
No 79 OF THE SERIES

JULY 1966



INTERNATIONAL HYDROGRAPHIC BUREAU SPECIAL PUBLICATION 39

2nd edition, 1965

RADIO AIDS

TO MARITIME NAVIGATION AND HYDROGRAPHY

Special Publication No. 39 of the International Hydrographic Bureau entitled **Radio Aids to Maritime Navigation and Hydrography** deals with the principles and gives a general description of radioelectric systems and instruments used in navigation and hydrographic surveying. The 2nd edition, 1965, of this work is a complete revision and recast of the 1st edition issued in 1956, with new additions. It includes the total number of Supplementary Papers which have already been published, and contains the following chapters and sections :

INTRODUCTION.

CHAPTER I. — Spectrum and Propagation of Electromagnetic Waves :

1. Frequency Spectrum of Electromagnetic Waves;
2. Propagation of Electromagnetic Waves.

CHAPTER II. — Radio Systems used in Maritime Navigation :

1. Radio Direction-finding; 2. Loran; 3. Decca; 4. Consol; 5. Radar.

CHAPTER III. — Radio Systems used in Hydrographic Surveying :

1. Decca; 2. Shoran; 3. Electronic Position Indicator (E.P.I.); 4. Shoran and E.P.I. in Offshore Hydrographic Surveying; 5. Raydist; 6. Lorac; 7. Rana; 8. Hi-Fix; 9. Hydrodist; 10. Microwave Position-Fixing System (M.P.F.S.); 11. Derveaux; 12. Toran.

CHAPTER IV. — Computation and Plotting of Hyperbolic Lattices :

1. General; 2. Methods of the Danish Hydrographic Office; 3. Methods of the French Hydrographic Office; 4. Method of the U.S. Naval Oceanographic Office; 5. Method of the Swedish Hydrographic Department; 6. Methods of the Netherlands Hydrographic Office; 7. Methods of the British Naval Hydrographic Office.

CHAPTER V. — Electromagnetic Systems in Geodetic Surveying :

1. General Aspects and Use of Radio Positioning Systems; 2. Aga Geodimeter; 3. Tellurometer; 4. Micro-Dist (Electrotape).

This work, in loose-leaf form, thus permitting subsequent additions, is on sale at \$ 15.00. It includes about 550 pages and 270 figures.

It will continue to be brought up to date in the future by the publication of Supplementary Papers, whose issue will be announced in both the **International Hydrographic Review** and the **International Hydrographic Bulletin**.

SUPPLEMENTARY PAPERS TO SP 39

The 10 Supplementary Papers already published are the following :

PAPER 1 : Tellurometer and Micro-Dist (44 pages), price \$ 1.00.

PAPER 2 : Raydist, Hydrodist, M.P.F.S. (Microwave Position-fixing System) and Derveaux (72 pages), price \$ 2.00.

PAPER 3 : Decca in Hydrographic Surveys. Lorac, Rana and Hi-Fix (88 pages), price \$ 2.50.

PAPER 4 : Decca in Navigation (32 pages), price \$ 1.00.

PAPER 5 : Loran (56 pages), price \$ 2.00.

PAPER 6 : AGA Geodimeter (23 pages), price \$ 0.70.

PAPER 7 : Shoran and EPI (46 pages), price \$ 1.20.

PAPER 8 : Radio Direction - Finding, Consol, Radar (46 pages), price \$ 1.20.

PAPER 9 : Introduction, Wave Propagation, Geodetic Use of Radio Positioning Systems (35 pages), price \$ 1.00.

PAPER 10 : Toran, Computation and Plotting of Hyperbolic Lattices (88 pages), price \$ 2.50.

A Special Supplementary Paper containing the Preface, the Table of Contents and the General Index has been issued (23 pages), price : \$ 0.50.

Finally, a loose-leaf cover for filing the various Supplementary Papers making up the 2nd edition of the SP 39, is available at the price of \$ 1.50.

SUPPLEMENTS TO THE INTERNATIONAL HYDROGRAPHIC REVIEW

The purpose of these Supplements is to complete the basic work that SP 39 represents, by publishing articles, some of which give the practical points of view or the conclusions of the users of electromagnetic instruments and systems, and the others may be technical and scientific notes in connection with the theoretical subjects dealt with in SP 39. Other articles are either outlines of systems, whose development is contemplated or the improvement of those already existing.

A bibliography is also included in these Supplements.

The Supplements already published are :

- VOLUME 1, October 1960 (about 150 pages), price \$ 5.00.
- VOLUME 2, October 1961 (about 150 pages), price \$ 5.00.
- VOLUME 3, November 1962 (about 100 pages), price \$ 3.00.
- VOLUME 4, December 1963 (about 130 pages), price \$ 4.00.
- VOLUME 5, April 1964 (108 pages), price \$ 3.00.
- VOLUME 6, September 1965 (130 pages), price \$ 4.00.

Later Volumes will be announced in the **International Hydrographic Review** and the **International Hydrographic Bulletin**.

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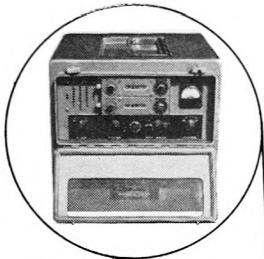
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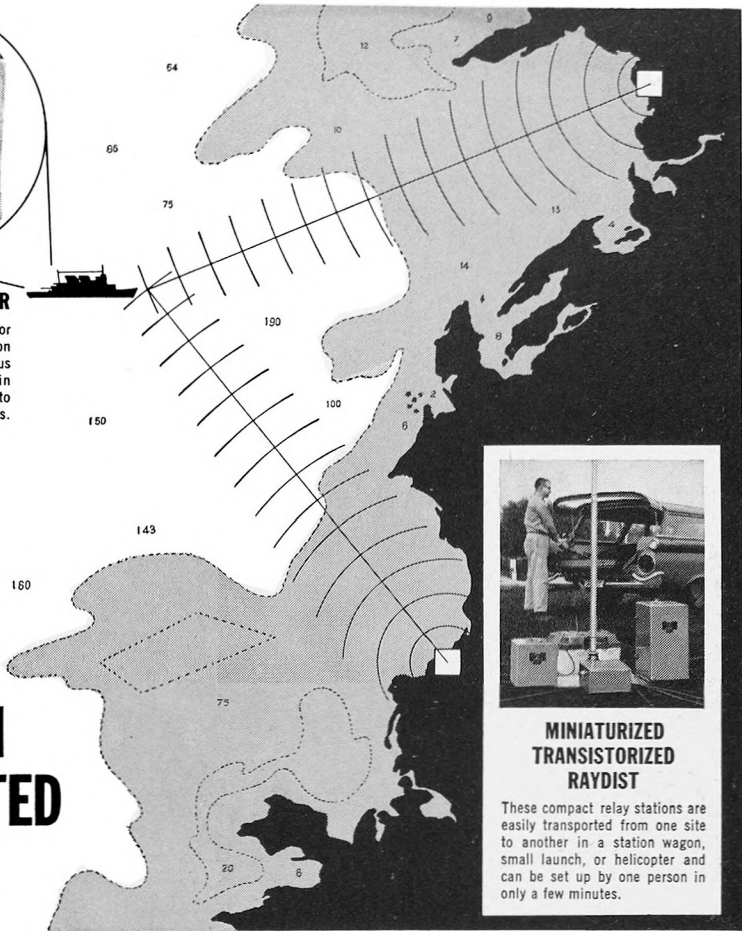
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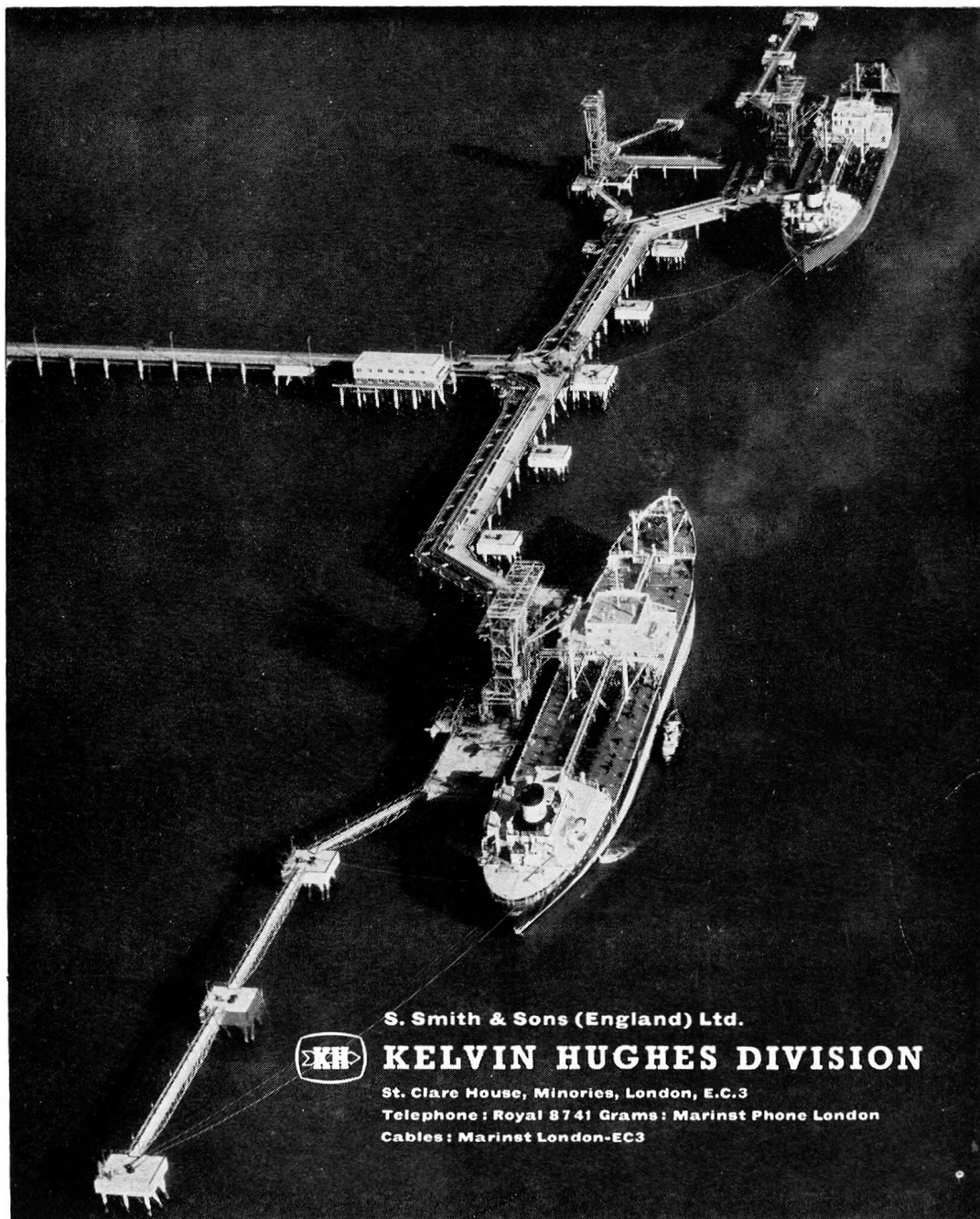


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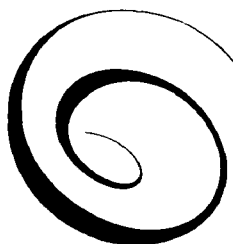
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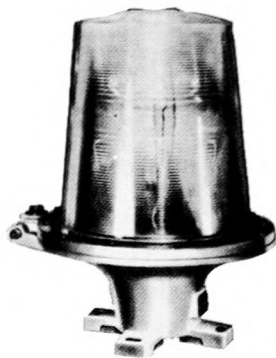
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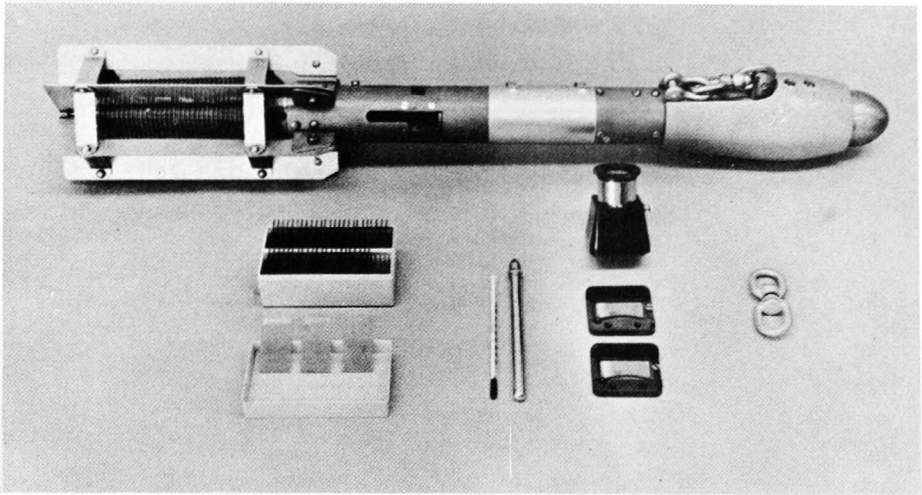
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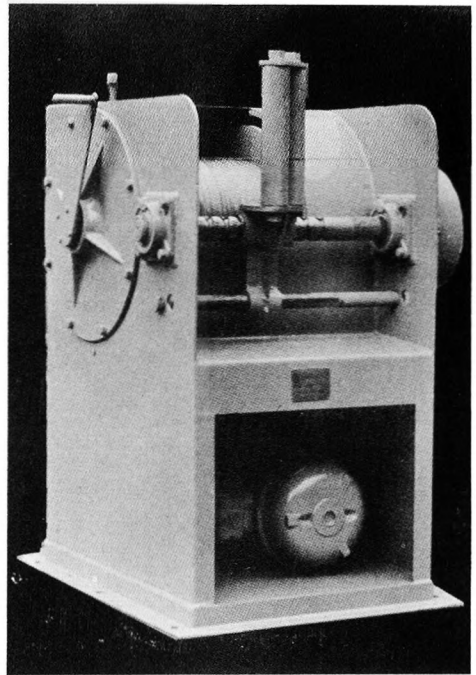
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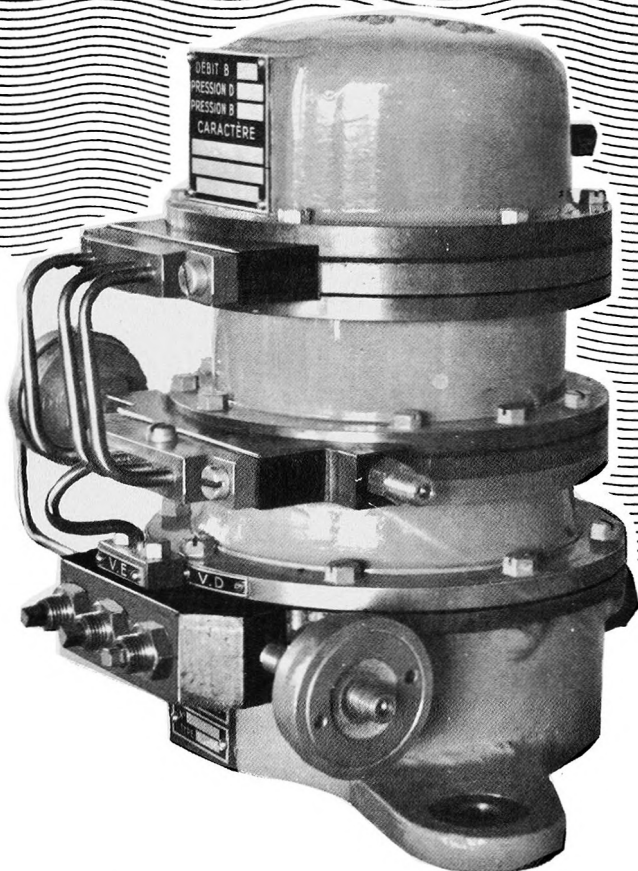
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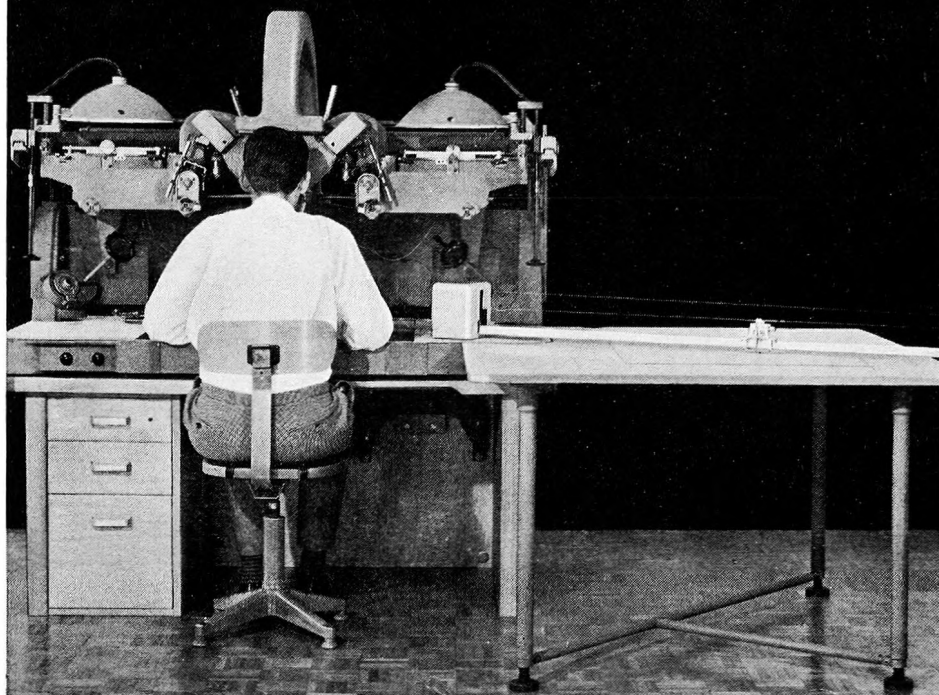
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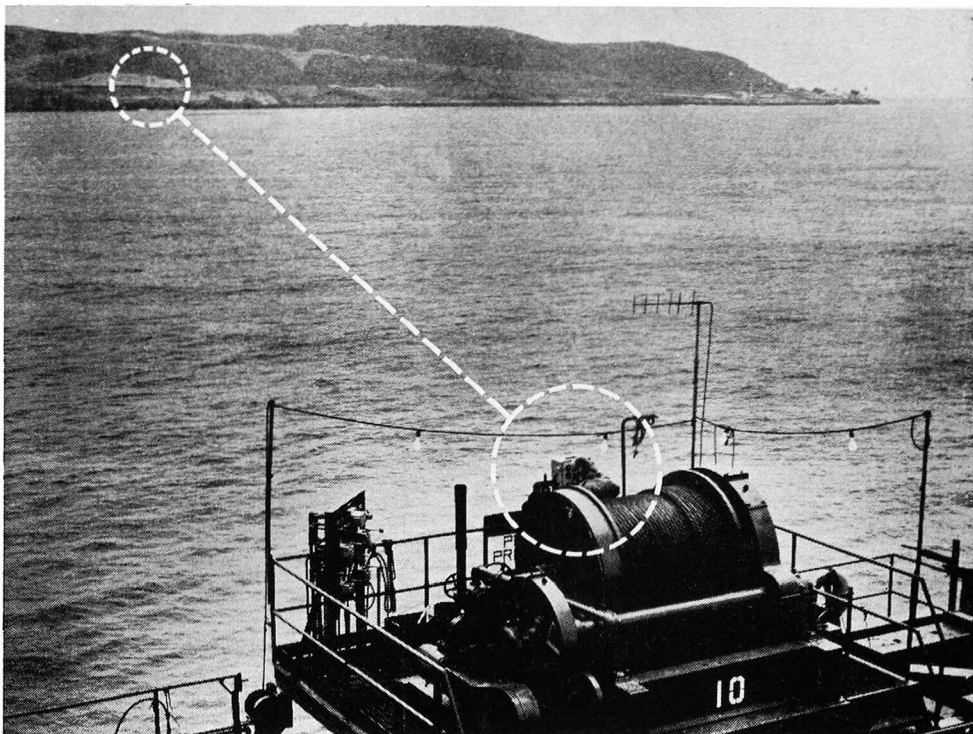
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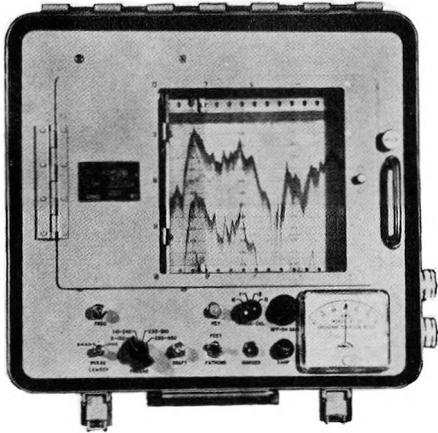
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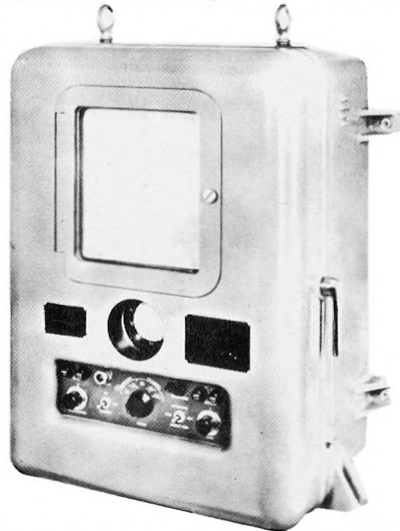


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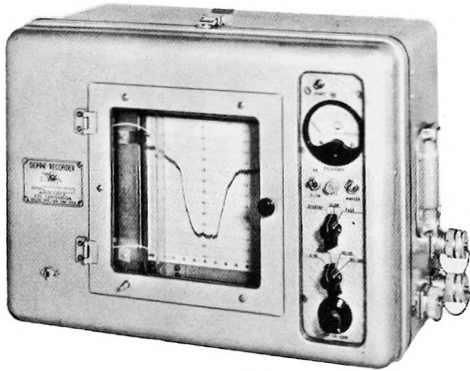
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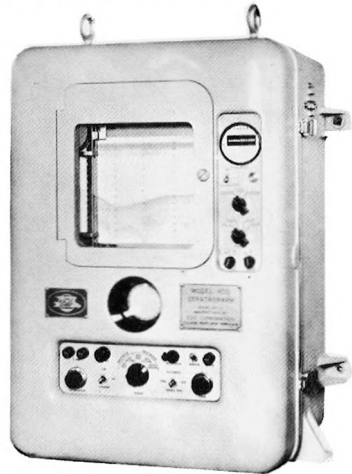


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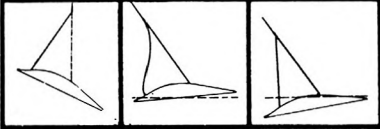
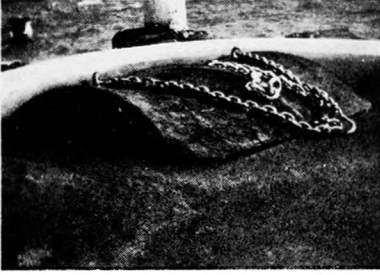
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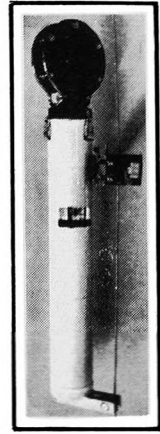
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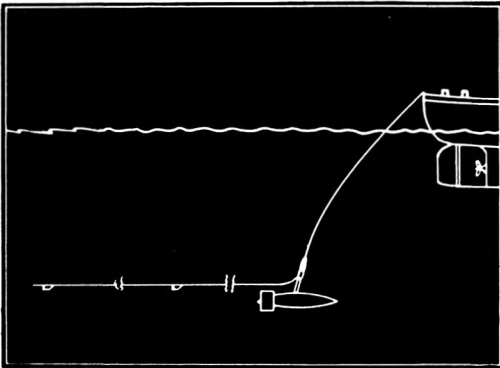
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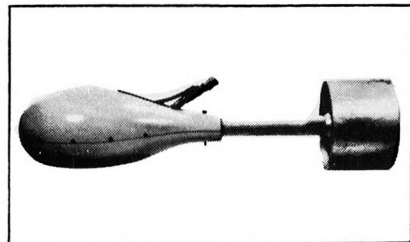
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ERRATA
INTERNATIONAL HYDROGRAPHIC REVIEW

Vol. XLII, No. 1, January 1965

Page 106 :

“ The Sphere ” — Delete 2nd and 3rd lines, and substitute :
“ If we imagine a large fluid mass, with the same mean density (about 5.6) and volume as the Earth being ... ”.

Page 113 :

13th line : Amend $1' = 1852.925$ m to read $1' = 1842.925$ m.

Page 114 :

8th line of text : Amend “smaller potential” to read “greater potential”.
10th line of text : Amend “greater potential” to read “smaller potential”.
5th line from bottom of page : Amend last coefficient in formula “ a^2 ” to read “ a_2 ”.

Page 117 :

11th line from bottom of page : Amend “greatest potential” to read “smallest potential”.

Page 118 :

24th line : Amend “geodesists” to read “geodesist”.

ERRATUM
TO THE INTERNATIONAL HYDROGRAPHIC REVIEW

Vol. XLII, No. 2, July 1965

Add the following to page 11 :

Comments by Brazil (letter of 13 April 1965)

“ With reference to the question that has been raised concerning the “ Repertory of Technical Resolutions ”, I hereby communicate our point of view, which is based on the following considerations :

“ a) The general arrangement of the Repertory of T.R. must not be basically altered.

“ b) Bearing in mind the arguments put forward by Captains LANGERAAR and ALBINI, Brazil agrees with the suggestion that a new first part might be added, grouping only the Fundamental Technical Resolutions, with cross-references to Derived or Related Resolutions in the other parts.

“ Such an arrangement would ensure constant protection against the possibility of amending Fundamental Technical Resolutions without making the relevant amendments to Derived or Related Resolutions.

“ c) All proposals concerning the adoption or amendment of Fundamental Technical Resolutions should be approved by a 2/3 majority and should at the same time specify the consequent amendments proposed to derived or Related Resolutions. ”

Signed :

For the Director General of Hydrography and Navigation :

Rubem José RODRIGUES DE MATTOS

Comments by Great Britain (letter of 13 April 1965)

“ I have the honour to refer to the article concerning uniformity by Captain LANGERAAR which appeared in the July 1963 Review and on which the Directing Committee asked for the views of hydrographic officers.

“ It seems that both Captain LANGERAAR and Captain ALBINI are in agreement about the need to classify certain Resolutions as Fundamental or Guiding Resolutions which would require greater unanimity to amend than at present. I think that both proposals are good in principle.

“ It is evident that Captain ALBINI has devoted a very great deal of time and thought to the compilation of the Repertories published in 1953 and 1960, which in my opinion have resulted in most satisfactory volumes, which facilitate the finding of specific resolutions and the application of them to charting.

“ Captain LANGERAAR’s suggestion for a second volume listing Fundamental Technical Resolutions in addition to the present volume, and Captain ALBINI’s suggestion for drawing attention to the Fundamental Resolutions within the existing format but with an expanded index, seem equally effective. In these circumstances, I believe that the choice should be decided by considering their respective costs, particularly at a time when prices are rising so rapidly. ”

Signed :

E. G. IRVING, Hydrographer of the Navy

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Dépôt légal n° 28 - 1966

**THE
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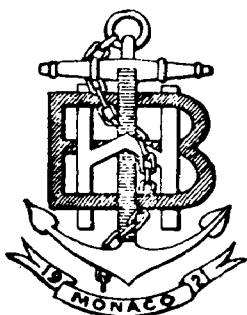
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THE INTERNATIONAL HYDROGRAPHIC REVIEW

Vol. XLIII

N^o 2



(N^o. 79 OF THE SERIES)

PUBLISHED BY

THE

INTERNATIONAL HYDROGRAPHIC BUREAU

Avenue Président J. F. Kennedy, Monte-Carlo

MONACO

PRINCIPALITY



JULY 1966

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