

I. — BOOKS OF REFERENCE
OUVRAGES DE REFERENCE

HYDROGRAPHY. — HYDROGRAPHIE.

4004. — **Hydrographic and Geodetic Surveying Manual.**
By JOHN G. KELLAR. — 20×27 cm. — 252 pp., 106 figs.— H. O. N° 215, U. S. Government Printing Office, Washington, 1937, Price \$ 3.00.

AERIAL PHOTOGRAPHY. — PHOTOGRAPHIE AÉRIENNE.

4005. — **La Fotogrammetria nella costruzione delle Carte Nautiche.** (Photogrammetry in the Compilation of Nautical Charts. — La Photogrammétrie dans la construction des Cartes nautiques).
By G. ROMAGNA MANOIA. — 18×24 cm. — 16 pp. — Publication N° 27 of the Istituto di Topografia e Geodesia, R. Politecnico, Milano, 1937.
4006. — **La Fotogrammetria e le necessità topografiche attuali.** (Photogrammetry and the present topographic Necessities. — La photogrammétrie et les Nécessités topographiques actuelles).
By L. SOLAINI. — 20×28 cm. — 11 pp., 12 figs. — Publication N° 26 of the Istituto di Topografia e Geodesia, R. Politecnico, Milano, 1937.

CARTOGRAPHY. — CARTOGRAPHIE.

4007. — **Dawne Mapy Morskie Wybrzeza Polskiego.** (Ancient Nautical Charts of the Polish Coast. — Anciennes Cartes marines de la Côte de Pologne).
By Komandor Ppor. ARTUR REYMAN. — 17×23 cm. — 17 pp., 4 figs., 2 charts. — Warszawa, 1937.
4008. — **Den Fotografiska Kartläggningens Ställning I Utlandet. Översikt och Historik.** (Outline and historical Notice on the Situation of photographic Cartography abroad. — Aperçu et Historique sur la Situation de la Cartographie photographique à l'Étranger).
By FRITZ DANIELSSON & PER COLLINDER. — 17×23 cm. — 28 pp. — Publication N° 113 of the Meddelanden från Lunds Universitets Geografiska Institution, Lund, 1935.
4009. — **Cartography.** (Cartographie).
By CHARLES H. DEETZ. — 15×23 cm. — 83 pp., 29 figs, 1 plate. — Special Publication N° 205, U. S. Department of Commerce, U. S. Coast and Geodetic Survey, Washington, D. C. 1936.

NAVIGATION. — NAVIGATION.

4010. — **Il Problema della Retta d'Altezza.** (The Line of Position Problem. — Le Problème de la Droite de Hauteur).
By Ten. Col. G.A.R.I. NICOLÒ GALANTE. — 17×23 cm. — 9 pp., 3 figs. — Reprint from the Rivista Aeronautica, Rome, Feb. 1938.
4011. — **O Loksodromie i Budowie Siatki Kartograficznej dla Map Morskich.** (Rhumb Line and Construction of the cartographic Network for Nautical Charts. — Loxodromie et Construction du Canevas des Cartes marines).
By INŻ. JÓZEF WOZNICKI. — 17×23 cm. — 30 pp., 14 figs. — Warszawa, 1937.
4012. — **Norme per la conservazione e l'impiego delle dotazione nautiche.** (Norms for the Preservation and the Employ of nautical Supplies. — Normes pour la Conservation et l'Emploi des Dotations nautiques).
17×23 cm. — 79 pp. — Publication I. I. 3024 of the Istituto Idrografico della R. Marina, Genoa, 1938.

4013. — **Complementi di Navigazione Aerea.** (Complements of aerial Navigation. — Compléments de Navigation aérienne).
By Ten. Col. NICOLÒ GALANTE. — 22×30 cm. — 193 pp., 119 figs. — Scuola di Guerra aerea, *Corsi normali Ministero dell'Aeronautica, Laboratorio fotomeccanico, 1938.*

METEOROLOGY. — MÉTÉOROLOGIE.

4014. — **Sopra uno speciale Termometro ad Aspirazione per la Misura della Temperatura dell'aria in Mare.** (On a special aspirating Thermometer for the Measurement of the Temperature of the Air at Sea. — Sur un Thermomètre spécial à Aspiration pour la Mesure de la Température de l'Air en Mer).
By ALBERTO SOMMA. — 17×24 cm. — 10 pp., 2 figs. — Reprint from *Annali del R. Istituto Superiore Navale, Naples, 1937, Vol. VI, Part. I-II.*

OCEANOGRAPHY. — OCÉANOGRAPHIE.

4015. — **Die Salzgehaltsschwankungen im Oberflächenwasser des Nordatlantischen Ozeans während der Jahre 1920-1931.** (Salinity Variations in the Surface Water of the North Atlantic Ocean during the Years 1920-1931. — Variations de Salinité des Eaux de Surface de l'Océan Atlantique Nord au cours des Années 1920-1931).
By DR. GEORG KERNER. — 22×30 cm. — 19 pp., 5 pl. — Aus dem Archiv der Deutschen Seewarte, *Hamburg, 1937.*
4016. — **Tables for calculating the specific volume of seawater under pressure.** (Tables pour calculer le Volume spécifique de l'Eau de Mer sous pression).
By DONALD J. MATTHEWS. — 17×25 cm. — v. + 67 pp. — Conseil Perm. International pour l'Exploration de la Mer, *Copenhagen, March 1938, Price: Kr. 5.00.*
4017. — **Il colore del Mare.** (The Colour of the Sea. — La Couleur de la Mer).
By ALBERTO SOMMA. — 17×24 cm. — 23 pp. — Reprint from *Annali del R. Istituto Superiore Navale Naples, 1937. — Vol. VI, Part. I-II.*
4018. — **Osservazioni sul colore e sulla temperatura delle acque marine del Golfo di Napoli.** (Observations on the Colour and Temperature of the Sea Water in the Bay of Naples. — Observations sur la Couleur et la Température de l'Eau de Mer du Golfe de Naples).
By ALBERTO SOMMA. — 17×24 cm. — 5 pp., 2 figs, 1 map. — Reprint from *Annali del R. Istituto Superiore Navale, Naples, 1937, Vol. VI, Part. I-II.*
4019. — **La circulation générale des Eaux de la Mer Noire.** (The General Circulation of the Waters of the Black Sea).
By RADU CIOCARDEL. — 16×23 cm. — 16 pp., 10 figs, 1 diagram, 16 chartlets. — Ateliers Graphiques SOCEC & Co., S. A. *Bucarest, 1938.*
4020. — **Currents in St. Johns River, Savannah River, and intervening Waterways.** (Les Courants dans le Fleuve St. Johns, le Fleuve Savannah et les Chenaux intermédiaires).
By F. J. HAIGHT. — 15×22 cm. — 59 pp., 61 figs & charts. — Special Publication N° 211, *Coast and Geodetic Survey, U. S. Department of Commerce, Washington, 1938. Price: 60 cents.*
4021. — **A Bathythermograph.** (Un Bathythermographe).
By A. F. SPILHAUS. — 15×22 cm. — 5 pp., 4 figs. — Reprint from : *Sears Foundation : Journal of Marine Research, Vol. I, N° 2, April, 1938, pp. 95-100, figs. 30-33.*

GEODESY - TRIANGULATION. — GÉODÉSIE - TRIANGULATION.

4022. — **Messung der Basis Balaschov in Russland im Jahre 1935.** (Measurement of the Balaschov Basis in Russia in 1935. — Mesure de la Base Balaschov en Russie en 1935).
By U. PESONEN. — 16×24 cm. — 18 pp. — Special Publication N° 7 of the *Baltische Geodätische Kommission Helsinki, 1938.*

4023. — **Formulas and Tables for the computation of Geodetic Positions on the International Ellipsoid.** (Formules et Tables pour le Calcul des Positions géodésiques sur l'Ellipsoïde international).
By WALTER D. LAMBERT & CLARENCE H. SWICK. — 15×23 cm. — 120 pp., 1 fig. — Special Publication N° 200, U. S. Department of Commerce, U. S. Coast and Geodetic Survey, Washington, D. C., 1935.
4024. — **Über die nivellitische Refraktion.** (Concerning the Refraction encountered in Levelling. — Sur la Réfraction rencontrée dans les Nivellements).
By T. KUKKAMAKI. — 17×24 cm. — 49 pp., 8 figs. — Suomen Geodeettisen Laitoksen Julkaisuja N° 25 Helsinki, 1938.

VOYAGES - RESEARCHES. — VOYAGES - RECHERCHES

4025. — **Bericht über die erste Teilfahrt der Deutschen Nordatlantischen Expedition des Forschungs- und Vermessungsschiffes "Meteor", Februar bis Mai 1937.** (Report on the first Part-Cruise of the German North-Atlantic Expedition of the Research and Surveying Vessel *Meteor*, February to May 1937. — Rapport sur la première Croisière partielle du Navire Explorateur et Hydrographe *Meteor*, de l'Expédition Nord-Atlantique Allemande, Février à Mai 1937). 18×27 cm. — 29 pp., 13 figs. & diagr. — Supplement to the September 1937 issue of the *Annalen der Hydrographie u. Marit. Met.*, Berlin, 1937.
4026. — **Skifter om Svalbard og Ishavet.** (Report on the Activities of Norges Svalbard- og Ishavs-Undersøkelser 1927-1936. — Rapport sur les Activités des Norges-Svalbard- og Ishavs-Undersøkelser 1927-1936).
By ADOLF HOEL. — 18×26 cm. — 125 pp., 25 figs., 2 pl., 1 map. — Publication N° 73 of Det Kong. Department for Handel, Sjøfart, Industrie, Handverk og Fiskeri, Oslo, 1937.

LIGHTS AND BEACONS. — FEUX ET BALISES.

4027. — **International Agreement for a Uniform System of Maritime Buoyage and Rules annexed thereto.** (Accord international pour un Système uniforme de Balisage maritime et Règles y annexées).
Presented by the Secretary of State for Foreign Affairs to Parliament. — 15×25 cm. — 35 pp., 6 pl. — H. M. Stationery Office, London, 1937. Price: 1 s. 3 d. net.

TERRESTRIAL MAGNETISM. — MAGNÉTISME TERRESTRE

4028. — **Uses of Magnetic Stations.** (Emploi des Stations magnétiques).
15×23 cm. — 6 pp. — Special Publication N° 213, U. S. Department of Commerce, U. S. Coast and Geodetic Survey, Washington, D. C.

REPORTS. — RAPPORTS.

4029. — **Discovery Reports, Vol. XV: The Hydrology of the Southern Ocean.** (L'Hydrologie de l'Océan Austral).
By G. E. R. DEACON, B. Sc. — 24×31 cm. — pp. 1-124, plates I-XLIV, 22 figs, Cambridge University Press, 1937. Price: 30/- net.
4030. — **Discovery Reports, Vol. XV: Note on the Dynamics of the Southern Ocean.** (Note sur la Dynamique de l'Océan Austral).
By G. E. R. DEACON, B. Sc. — 24×31 cm. — pp. 125-152, 4 figs., tables. — Cambridge University Press, 1937. Price: 4/- net.

DISCOVERY EXPEDITIONS. — VOYAGES DE DÉCOUVERTE

4031. — **Le dernier rapport de campagne du „Pourquoi-Pas ?”** (The last Report on the voyage of the "Pourquoi-Pas ?").
By J. B. CHARCOT. — 15×22 cm. — 24 pp., 1 charilet. — Imprimerie Nationale, Paris, 1937. Price: 4 francs.

MISCELLANEOUS. — DIVERS.

4032. — **Effect of discharge of crude sewage into the estuary of the River Mersey on the amount and hardness of the deposit in the estuary.** (Effet du Déversement des Eaux d'égouts brutes dans l'estuaire de la Mersey sur la Quantité et la Dureté du Dépôt formé dans l'Estuaire).
21×32 cm. — 337 pp., 140 figs, 1 coloured map, 121 tables. Water Pollution Research Technical Paper No 7, Dept. of Scientific and Industrial Research. — H. M. Stationery Office, London, 1938. Price £ 1 : 10 s. 0 d. net.

**II. — DOCUMENTARY BIBLIOGRAPHY
BIBLIOGRAPHIE DOCUMENTAIRE****AERIAL PHOTOGRAPHY. — PHOTOGRAPHIE AÉRIENNE**

4033. — **The seven-lens Air-Survey Camera.** (L'Appareil photographique à sept Objectifs pour Levés aériens).
Cf. Empire Survey Review, London, Oct., 1937, pp. 216-221 ; Jan. 1938, pp. 263-267.

ECHO SOUNDING. — SONDAGE PAR LE SON.

4034. — **Les Sondages profonds en Mer. La Géologie du fond des Océans.** (Deep-sea Soundings. The Geology of the Ocean Floor).
By H. VIGNERON. — Cf. La Nature, Paris, 15 Mars 1938, pp. 175-177).
4035. — **Etude de la propagation des ultrasons dans les liquides sous pression.** (A Study of the Propagation of Ultra-Sounds in Liquids under Pressure).
By M. PIERRE BIQUARD. — Cf. C. R. Ac. Sciences, Paris, 21 Mars 1938, pp. 897-899.

PROJECTIONS.

4036. — **Winkeltreue Kartennetze.** (Conformal Map Skeletons. — Réseaux de Cartes conformes).
By A. WEDEMEYER. — Cf. Annalen der Hydr. u. Mar. Met., Berlin, Heft II, 15 Feb. 1938, pp. 75-78.
4037. — **International Standard Projections for Meteorological Charts.** (Projections d'un Modèle International, pour les Cartes météorologiques).
By W. R. GREGG & I. R. TANNEHILL. — Cf. Monthly Weather Review, Washington, D. C., Dec., 1937, pp. 411-415.

TIDES. — MARÉES.

4038. — **L'Analyse des Séries Marégraphiques de la Norvège.** (The Analysis of the Norwegian Tidal Series).
By V. FROLOW. — Cf. C. R. Ac. Sciences, Paris, 14 Mars 1938, pp. 824-826.
4039. — **Exposé critique de la Théorie des Marées.** (A critical Exposition of the Theory of Tides).
By E. FICHOT. — Cf. Annales du Bureau des Longitudes, Paris, 1938, Tome XI^e, Chap. I, II, III, pp. C. 3-C. 206.

CURRENTS. — COURANTS.

4040. — **The survey of the Currents of the Oceans.** (L'Observation des Courants des Océans).
By MARINE SUPERINTENDENT. — Cf. *The Marine Observer, London, April, 1938, p. 44.*

CARTOGRAPHY. — CARTOGRAPHIE.

4041. — **Una nuova copia dell'orbis Imago di Gerardo Mercatore (1538).** (A new copy of Gerardus Mercator's Orbis Imago - 1538. — Un nouvel Exemple de l'Orbis Imago de Gerhard Mercator - 1538).
By M. E. — Cf. *Bollettino della R. Società Geografica Italiana, Rome, Jan. 1938, pp. 61-62.*

NAVIGATION.

4042. — **Il Centenario della Navigazione transatlantica a vapore.** (The Centenary of Steam transatlantic Navigation. — Le Centenaire de la Navigation transatlantique à Vapeur).
By ALBERTO TAJANI. — Cf. *Rivista di Cultura Marinara, Rome, March-April, 1938, pp. 412-419.*
4043. — **History of the International Ice Patrol.** (Histoire de la Patrouille de Surveillance des Glaces).
By H. V. HOPKINS, *U. S. Coast Guard.* — Cf. *The Nautical Magazine, Glasgow, May, 1938, pp. 407-409.*
4044. — **The effect of shallow Water upon the resistance of Ships.** (L'effet de l'Eau peu profonde sur la Résistance des Navires).
By Lieut. HAROLD M. HEISER (C. C.), *U. S. Navy.* — Cf. *U. S. Naval Institute Proceedings, Annapolis, May, 1938, pp. 709-713.*

METEOROLOGY. — MÉTÉOROLOGIE.

4045. — **Accuracy of Radio Meteorograph Observations.** (Précision des Observations au Radio Météorographe).
Cf. *Journal of the Franklin Institute, Philadelphia, May, 1938, pp. 296-297.*

OCEANOGRAPHY. — OCÉANOGRAPHIE.

4046. — **In fondo al Mare.** (At the Bottom of the Sea. — Au fond de la Mer).
By CIAI-KA. — Cf. *Rivista di Cultura Marinara, Rome, Mar.-Apr., 1938, pp. 265-275.*
4047. — **Bibliographia Oceanographica.**
JOHANNES MAGRINI, Fundator. — *Vol. X, Fasc. IV-V-VI, pp. 49-96 ; Fasc. VII-VIII-IX, pp. 97-144.*
Regia Academia Italica Praemio Ornavit, Romae, 1938-XVI.

GEOGRAPHY. — GÉOGRAPHIE.

4048. — **Recent Decisions of the P.C.G.N.** (Récentes décisions du C.P.N.G.).
By M. A. — Cf. *The Geographical Journal, London, Feb., 1938, pp. 158-159.*
4049. — **Het Beeld Van Antarctica Volgens de Uitkomsten Van Het Jongste Onderzoekings-tijdperk.** (The Image of the Antarctica according to the Results of the latest Period of Investigation. — L'Image de l'Antarctique d'après les Résultats de la récente Période de Recherches).
By Dr. C. H. POLLOG. — Cf. *Tijdschrift van het Kon. Aardrijkskundig Genootschap, Leiden, May, 1938, pp. 462-486.*

NAUTICAL ASTRONOMY. — ASTRONOMIE NAUTIQUE.

4050. — **Sulle Linee piane più semplici rappresentative della curva d'Azimut.** (On the simplest Plane Lines representative of the Azimuth Curve. — Les Lignes planes les plus simples pour représenter les Courbes d'Azimut).
By GIUSEPPE SIMEON. — Cf. *Annali del R. Istituto Superiore Navale, Naples, Vol. VI, 1937, pp. 119-130*
4051. — **L'impiego delle curve di altezza in Astronomia Nautica.** (The Use of the Altitude Curves in Nautical Astronomy. — L'Emploi des Courbes de Hauteur en Astronomie nautique).
By PASQUALE SCONZO. — Cf. *Annali del R. Istituto Superiore Navale, Naples, Vol. VI, 1937, pp. 131-138.*

**EPIHEMERIDES & NAUTICAL TABLES.
ÉPHÉMÉRIDES ET TABLES NAUTIQUES.**

4052. — **Un nuovo Almanacco Aereo per un Metodo più preciso di Navigazione Aerea.** (A new Air Almanac for a more precise Method of aerial Navigation. — Nouvel Almanach aéronautique pour une Méthode plus précise de Navigation aérienne).
By L. A. — Cf. *L'Universo, Firenze, Mar. 1938, pp. 280-281.*

LIGHTS AND BEACONS. — FEUX ET BALISES.

4053. — **Le nouveau Phare d'Ouessant.** (The New Ushant Lighthouse).
By H. VIGNERON. — Cf. *La Nature, Paris, 15 Déc. 1937, pp. 562-567.*
4054. — **Sur quelques illusions d'optique provoquées par un phare tournant.** (On some optical illusions brought about by a revolving Light).
By LOUIS DUNOYER. — Cf. *La Nature, Paris, 15 Déc. 1937, p. 567.*
4055. — **Lyskasteres Rekkevidde og dens Beregning.** (Range of a Searchlight Projector and its Calculation. — Portée lumineuse d'un Projecteur et son Calcul).
By Kaptein i Kystartilleriet J. P. OGLAND. — Cf. *Norsk Tidskrift for Sjøvesen Horten, April 1938, pp. 153-174 ; May 1938, p. 207-222.*

TERRESTRIAL MAGNETISM. — MAGNÉTISME TERRESTRE

4056. — **Earth Magnetic Researches along the Coasts of Sweden.** (Recherches de Magnétisme terrestre le long des Côtes de Suède). Part II. - Dip, Horizontal Force and Vertical Force at the Epoch July 1, 1929. (Inclinaison, Force horizontale et Force verticale à l'époque 1^{er} Juillet 1929).
By GUSTAF S. LJUNGDAHL. — *Kungl. Sjökartverket, Jordmagnetiska Publikationer N° 11, Stockholm, 1937.*

RADIO ELECTRICITY. — RADIOÉLECTRICITÉ

4057. — **Antennes tournantes de T. S. F.** (Rotating Wireless Aerials).
By P. H. — Cf. *La Nature, Paris, 15 Mars 1938, p. 189.*

BIOGRAPHIES.

4058. — **Sir George Simpson, K. C. B., C. B. E., F. R. S.**
Cf. *Nature, London, 26th. Febr. 1938, p. 360.*

FIRST PART

CLASSIFICATION OF ARTICLES ACCORDING TO THE SUBJECTS
DEALT WITH.

Year 1938 — (*Hydrographic Review*, Vol. XV, Nos 1 & 2).

AUTHOR	TITLE	Year	Vol.	Page
I. Hydrographic Offices and other Maritime and Scientific Organisations (Patrols, Life-saving, Observatories, Institutes of Optics)				
McEWEN (G. F.)	(E) The Story of Scripps Institution of Oceanography, La Jolla, California	1938	XV-1	55
J. D. N.	Methods of Recruiting and training Surveying assistants (Italy, Denmark, Great Britain & Australia, Portugal, Sweden, Canada, U. S. A. (Hydrographic Office), Uruguay, Brazil, Chile, France, Latvia, Argentina, Norway, Siam)	1938	XV-1	13
J. D. N.	Methods of Recruiting and training Surveying assistants (continued) (Yugoslavia)	1938	XV-2	25
CROSLY (W. S.)	Some facts about Hydrography in the United States Navy.....	1938	XV-1	30
II. Surveying Vessels & Boats				
	The R. R. S. <i>Research</i>	1938	XV-2	7
III. Hydrographic Work (Expeditions, Surveys, E. D. & P. D. Dangers, Progress, etc)				
ROOS (S. E.)	Some Geographical Results of the Second BYRD Antarctic Expedition, 1933-1935.....	1938	XV-1	76
	The Soviet Polar Enterprise. Some preliminary results.....	1938	XV-1	84
G. C. L. B.	Progress of the Discovery Committee's Investigations.....	1938	XV-1	85
RITTENBURG (I. E.)	(E) Wire Drag surveys, Pacific Coast, 1934-1937.....	1938	XV-2	107
P. V.	Soundings in the North Atlantic Ocean.....	1938	XV-1	59
P. V.	Soundings in the North Atlantic Ocean.....	1938	XV-2	66
SHEPARD (F. P.)	(R) New Bathymetric Map off California.....	1938	XV-1	60
SMITH (P.)	Submarine Valleys.....	1938	XV-1	61
	Submarine Canyons.....	1938	XV-1	66
SHEPARD (F. P.) & BEARD (C. N.)	Submarine Canyons: Distribution and longitudinal profiles...	1938	XV-2	120
P. V.	(E) Morphologie des Atlantischen Ozeans, Grundkarte der Ozeanischen Lotungen - 1:5 Millionen (von Th. Stocks), Berlin & Leipzig, 1937.....	1938	XV-1	74

AUTHOR	TITLE	Year	Vol.	Page
IV. Echo Sounding				
(Equipment, Velocity of Sound, Correction of Echo Soundings, etc.)				
SADAHIRO MATSUO	Investigation of a direct reading depth meter for "Pilotage" using a new ultrasonic sounding principle (Quasi "Modulated Frequency" principle).....	1938	XV-1	33
	Echo Sounding — XVIII. The new British Admiralty Recording Echo Sounders : Universal, M. S. XII, M. S. XV. — Some recent ultrasonic instruments: SCAM-TOULY, LANGEVIN-TOULY, MARCONI, LANGEVIN-FLOISSON. — The MARCONI Magneto-striction supersonic Echo Sounding Equipments. — The Atlas Echolot, High Frequency Type.....	1938	XV-2	26
V. Use of Aircraft and Aerial Photography for Surveying				
SOLAINI (L.)	(E) Photogrammetry and the Present-day Topographical Requirements.....	1938	XV-1	105
ROMAGNA MANOIA (G.).....	(E) Photogrammetry and the preparation of Marine Charts.....	1938	XV-1	102
FROTA (F.).....	The use of aerial photography at the Hydrographic Service...	1938	XV-2	103
P. V.	(R) Northernmost Labrador Mapped from the Air, (A. FORBES), New York, 1938.....	1938	XV-2	157
VI. Treatises on Hydrography				
H. B.	(R) Hydrographic and Geodetic Surveying Manual for the use of U. S. Naval Surveys (J. G. KELLAR), Washington, 1937...	1938	XV-2	160
H. B.	(R) Hydrografisch Opnemen (Hydrographic Surveys) 's-Gravenhage, 1938.....	1938	XV-2	163
VII. Astronomy and Navigation				
HELLWEG (J. F.).....	(E) Time Determination and Time Broadcast.....	1938	XV-1	136
SIEMS (F. B. T.)	Light Star Sights.....	1938	XV-2	18
H. B.	(R) Practical Air Navigation and the use of the Aeronautical Charts of the U. S. Coast and Geodetic Survey (T. C. Lyon), Washington, 1938.....	1938	XV-2	169
H. B.	(R) Complementi di Navigazione Aerea (Complements of Aerial Navigation) (N. GALANTE), Roma, 1938.....	1938	XV-2	170
WEEMS (P. V. H.).....	Aeronautical Charts.....	1938	XV-2	93
VIII. Radiotelegraphy and Phonotelemetry				
SENIOR (J.)	(E) Sono-radio buoy.....	1938	XV-2	141
DORSEY (Dr. H. G.).....	(E) Radio Acoustic Ranging circuits.....	1938	XV-2	140
P. H.	A novel use of short waves for navigation in foggy weather.....	1938	XV-2	139

CLASSIFICATION OF ARTICLES ACCORDING TO THE SUBJECTS DEALT WITH

AUTHOR	TITLE	Year	Vol.	Page
IX. Geographical Positions (Longitudes, Meridian of Origin, etc.)				
ANDERSON (G. L.).....	Taut wire and Sun Azimuth computation.....	1938	XV-2	109
X. Geodesy (Ellipsoid, Pendulum, Method of the Least Squares, etc.)				
HERRMANN (Dr. K.)	The New 400-Grade Division.....	1938	XV-1	108
I. A. G. U.	Study of a full compensation of the European Geodetic Net.....	1938	XV-2	138
XI. Tides and Currents (Tide-Gauges, etc.)				
LEYPOLDT (H.).....	Bay of Fundy Tides	1938	XV-2	112
ROON (van)	Interference of Tide Waves.....	1938	XV-1	89
H. B.	(R) Exposé Critique de la Théorie des Marées (Critical Exposition of the Theory of Tides) (E. FICHOT), Paris, 1938	1938	XV-1	100
VIGNAL (J.).....	(E) Tidal Observations.....	1938	XV-1	98
	RENQVIST-WITTING Tide Gauge (as installed at the Port of Gdynia).....	1938	XV-2	152
MARMER (H. A.).....	The Kuroshio or Japan Current	1938	XV-1	86
STETSON (H. C.)	Current Measurements in the Georges Bank Canyons.....	1938	XV-1	71
TENANI (M.)	On the recording of the set and drift of Ocean currents. Description of a Self-registering PROPELLER Current-meter... ..	1938	XV-2	77
BÖHNECKE (G.).....	(E) Report on current measurements at station N ^o 369 of the German Surveying Vessel <i>Meteor</i> , 19th April 1937	1938	XV-2	83
SCHUREMAN (P.)	Variations in yearly sea level	1938	XV-2	135
XII. Lights, Signals, Buoyage (Aids to Navigation)				
BENCKER (H.).....	Fog Signals by Rotating Nautophone (Pendulum Vibrator).. ..	1938	XV-1	41
XIII. Magnetism, Meteorology, Oceanography				
HECK (N. H.)	(E) The Magnetic Survey of the United States	1938	XV-1	111
	Magnetic Chart of Greece - 1937	1938	XV-1	115
RADU CIOCARDEL.....	(E) Influence of the Winds on the Changes in the Delta of the Danube	1938	XV-1	68

FIRST PART

AUTHOR	TITLE	Year	Vol.	Page
VIGNERON (H.).....	The Ocean Waves.....	1938	XV-2	128
	(E) Rate of formation of Marine Sediments.....	1938	XV-2	130
J. D. N.	(R) International Aspects of Oceanography, Oceanographic data and Provisions for Oceanographic Research. (Th. WAYLAND VAUGHAN), Washington, 1937.....	1938	XV-1	58
VALLAUX (C.)	Deep Circulation in the Oceans.....	1938	XV-2	9
ISELIN (C. O'D.).....	Problems in the Oceanography of the North Atlantic	1938	XV-2	73
HANNEMANN (M.).....	Danish Deep-sea Exploration.....	1938	XV-2	85
HANNEMANN (M.).....	International Research in the Gulf Stream.....	1938	XV-2	86
CIOCARDEL (R.).....	The general Circulation of Water in the Black Sea	1938	XV-2	87
MATTHEWS (D. J.)	Tables for calculating the specific volume of Sea-Water under pressure	1938	XV-2	159
XIV. Various Instruments (Sextants, Chronographs, Chronometers, etc.)				
HOTINE (M.)	(E) Triangulation Beacon Lamps - Type COOKE, TROUGHTON & SIMMS	1938	XV-2	150
WILSON (R. M.).....	A New Photoalidade	1938	XV-1	116
FREIESLEBEN (Dr. H. C.) ..	(E) Testing of Bubble and Pendulum Sextants.....	1938	XV-2	131
ENGLE (F. G.)	Automatic brake Sounding Machine	1938	XV-2	147
SNOWDEN PIGGOT (C.).....	Core samples of the Ocean bottom.....	1938	XV-2	67
SPILHAUS (A. F.).....	A Bathythermograph	1938	XV-2	153
SOMMA (A.)	(E) Special aspirating Thermometer for measuring the temperature of the Air at Sea.....	1938	XV-2	142
VAN CLEVE (R.).....	Fifteen-Gallon Water-Bottle	1938	XV-1	119
	MARCONI Direction Finder, Type 579/354 N.	1938	XV-1	121
XV. Cartography (Projections, Symbols, Use of Original Charts, Air Charts, etc.)				
J. D. N.	Insertion on Charts of Soundings taken from original Foreign Charts.....	1938	XV-1	54
H. B.	(R) Cartography (Ch. H. DEETZ), Washington, 1936	1938	XV-2	165
P. V.	International Standard Projections for Meteorological Charts.....	1938	XV-2	170
XVI. Nomenclature and Units (Terminology, Notations, etc.)				
None.				

CLASSIFICATION OF ARTICLES ACCORDING TO THE SUBJECTS DEALT WITH

AUTHOR	TITLE	Year	Vol.	Page
XVII. Engraving and Reproduction of Charts				
MEYER (Dr. Hans H. F.) & MANGELSDORFF (R.).	(E) Galvanic Engraving and Retouching.....	1938	XV-2	97
DEETZ (C. H.).....	(E) Reproduction (Extract from Cartography)	1938	XV-2	166
XVIII. Historical, Personal and Obituary Notices				
CRESSWELL (M.).....	(E) Captain James COOK (1728-1779).....	1938	XV-1	126
	Rear Admiral Raymond Stanton PATTON (1882-1937).....	1938	XV-1	10
M. E.	A new copy of G. MERCATOR's <i>Orbis Imago</i> (1538)	1938	XV-2	101
H. B.	The Centenary of the Position Line	1938	XV-1	141
XIX. International Hydrographic Bureau, Work, Conferences				
	The International Exhibition of Polar Exploration, Bergen 1940.	1938	XV-1	144
XX. Miscellaneous				
	Notice to Contributors to the <i>Hydrographic Review</i>	1938	XV-1	7
J. D. N.	(R) Water Pollution Research - Survey of the River Tees.....	1938	XV-2	157
	Estuary of the River Mersey. Effect of the discharge of sewage on the conservancy of the River	1938	XV-2	155
XXI. Practical Hints to Hydrographic Surveyors				
	None.			
XXII. Bibliography				
	Books of Reference and Documentary Bibliography :			
	Nº 3921 - 4003.....	1938	XV-1	145
	Nº 4004 - 4067.....	1938	XV-2	172
XXIII. Errata to the Hydrographic Review				
	None.			

SECOND PART

ALPHABETICAL INDEX OF THE NAMES OF AUTHORS OF ARTICLES WHICH HAVE BEEN PUBLISHED IN THE HYDROGRAPHIC REVIEW.

AUTHOR	TITLE	Year	Vol.	Page
A				
ANDERSON (G. L.).....	Taut wire and Sun Azimuth computation.....	1938	XV-2	109
B				
BEARD (C. N.) & SHEPARD (F. P.).....	Submarine Canyons : Distribution and longitudinal profiles.....	1938	XV-2	120
BENCKER (H.)	Fog Signals by Rotating Nautophone (Pendulum Vibrator)...	1938	XV-1	41
H. B.	(R) Hydrografisch Opnemen (Hydrographic Surveys) 's-Gravenhage, 1938.....	1938	XV-2	163
- d° -	(R) Hydrographic and Geodetic Surveying Manual for the use of U. S. Naval Surveys (J. G. KELLAR), Washington, 1937...	1938	XV-2	160
- d° -	(R) Cartography (Ch. H. DEETZ), Washington, 1936.....	1938	XV-2	165
- d° -	(R) Exposé Critique de la Théorie des Marées (Critical Exposition of the Theory of Tides) (E. FICHOE), Paris, 1938.....	1938	XV-1	100
- d° -	(R) Complementi di Navigazione Aerea (Complements of Aerial Navigation) (N. GALANTE), Roma, 1938.....	1938	XV-2	170
- d° -	(R) Practical Air Navigation and the use of the Aeronautical Charts of the U. S. Coast and Geodetic Survey (T. C. LYON), Washington, 1938.....	1938	XV-2	169
- d° -	The Centenary of the Position Line	1938	XV-1	141
BÖHNECKE (G.).....	(E) Report on current measurements at Station N° 369 of the German Surveying Vessel <i>Meteor</i> , 19th April 1937.....	1938	XV-2	83
C				
CIOCARDEL (R.)	(E) Influence of the Winds on the Changes in the Delta of the Danube	1938	XV-1	68
- d° -	The general Circulation of Water in the Black Sea.....	1938	XV-2	87
CRESSWELL (M.).....	(E) Captain James COOK (1728-1779).....	1938	XV-1	126
CROSLY (W. S.).....	Some facts about Hydrography in the United States Navy.....	1938	XV-1	30

SECOND PART

AUTHOR	TITLE	Year	Vol.	Page
D				
DEETZ (C. H.).....	(E) Reproduction (Extract from Cartography)	1938	XV-2	166
DORSEY (Dr. H. G.).....	(E) Radio Acoustic Ranging circuits.....	1938	XV-2	140
E				
ENGLE (F. G.)	Automatic brake Sounding Machine.....	1938	XV-2	147
F				
FRIESLEBEN (Dr. H. C.)..	(E) Testing of Bubble and Pendulum Sextants.....	1938	XV-2	131
FROTA (F.).....	The use of aerial Photography at the Hydrographic Service...	1938	XV-2	103
G				
(None).				
H				
HANNEMANN (M.)	International Research in the Gulf Stream.....	1938	XV-2	86
- d° -	Danish Deep-sea Exploration.....	1938	XV-2	85
HECK (N. H.)	(E) The Magnetic Survey of the United States	1938	XV-1	111
HELLWEG (J. F.).....	(E) Time Determination and Time Broadcast.....	1938	XV-1	136
HERRMANN (Dr. K.)	The New 400-Grade Division.....	1938	XV-1	108
HOTINE (M.)	(E) Triangulation Beacon Lamps - Type COOKE, TROUGHTON & SIMMS.....	1938	XV-2	150
I				
ISELIN (C. O'D.)	Problems in the Oceanography of the North Atlantic.....	1938	XV-2	73
J - K				
(None).				

ALPHABETICAL INDEX OF THE NAMES OF AUTHORS OF ARTICLES

<i>AUTHOR</i>	<i>TITLE</i>	<i>Year</i>	<i>Vol.</i>	<i>Page</i>
L				
LEYPOLDT (H.).....	Bay of Fundy Tides.....	1938	XV-2	112
M				
McEWEN (G. F.)	(E) The Story of Scripps Institution of Oceanography, La Jolla, California.....	1938	XV-1	55
MANGELSDORFF (R.) & MEYER (Dr. Hans H. F.).....	(E) Galvanic Engraving and Retouching.....	1938	XV-2	97
MARMER (H. A.).....	The Kuroshio or Japan Current	1938	XV-1	86
MATTHEWS (D. J.)	Tables for calculating the specific volume of Sea-Water under pressure	1938	XV-2	159
MEYER (Dr. Hans H. F.) & MANGELSDORFF (R.).....	(E) Galvanic Engraving and Retouching.....	1938	XV-2	97
N				
J. D. N.	Methods of Recruiting and training Surveying assistants (Italy, Denmark, Great Britain & Australia, Portugal, Sweden, Canada, U. S. A. (Hydrographic Office), Uruguay, Brazil, Chile, France, Latvia, Argentina, Norway, Siam).....	1938	XV-1	13
- d° -	Methods of Recruiting and training Surveying assistants (continued) (Yugoslavia).....	1938	XV-2	25
- d° -	Insertion on Charts of Soundings taken from original Foreign Charts	1938	XV-1	54
- d° -	(R) International Aspects of Oceanography, Oceanographic data and Provisions for Oceanographic Research, (Th. WAYLAND VAUGHAN), Washington, 1937.....	1938	XV-1	58
- d° -	(R) Water Pollution Research - Survey of the River Tees.....	1938	XV-2	157
O - P - Q				
(None).				
R				
RITTENBURG (I. E.)	(E) Wire Drag surveys, Pacific Coast, 1934-1937.....	1938	XV-2	107
ROMAGNA MANOIA (G.).....	(E) Photogrammetry and the preparation of Marine Charts.....	1938	XV-1	102
ROON (van)	Interference of Tide Waves.....	1938	XV-1	89
ROOS (S. E.)	Some Geographical Results of the Second BYRD Antarctic Expedition, 1933-1935.....	1938	XV-1	76

SECOND PART

AUTHOR	TITLE	Year	Vol.	Page
S				
SADAHIRO MATSUO	Investigation of a direct reading depth meter for "Pilotage" using a new ultrasonic sounding principle (Quasi "Modulated Frequency" principle)	1938	XV-1	33
SCHUREMAN (P.)	Variations in yearly sea level	1938	XV-2	135
SENIOR (J.)	(E) Sono-radio buoy.....	1938	XV-2	141
SHEPARD (F. P.)	(R) New Bathymetric Map off California.....	1938	XV-1	60
SHEPARD (F. P.) & BEARD (C. N.)	Submarine Canyons : Distribution and longitudinal profiles...	1938	XV-2	120
SIEMS (F. B. T.)	Light Star Sights.....	1938	XV-2	18
SMITH (P.).....	Submarine Valleys.....	1938	XV-1	61
SNOWDEN PIGGOT (C.)	Core samples of the Ocean bottom.....	1938	XV-2	67
SOLAINI (L.)	(E) Photogrammetry and the Present-day Topographical Requirements.....	1938	XV-1	105
SOMMA (A.)	(E) Special aspirating Thermometer for measuring the temperature of the Air at Sea.....	1938	XV-2	142
SPILHAUS (A. F.).....	A Bathythermograph.....	1938	XV-2	153
STETSON (H. C.)	Current Measurements in the Georges Bank Canyons.....	1938	XV-1	71
T				
TENANI (M.)	On the recording of the set and drift of Ocean currents. Description of a Self-registering Propeller Current-meter.....	1938	XV-2	77
U				
(None).				
V				
VALLAUX (C.)	Deep Circulation in the Oceans.....	1938	XV-2	9
VAN CLEVE (R.).....	Fifteen-Gallon Water-Bottle.....	1938	XV-1	119
P. V.	Soundings in the North Atlantic Ocean.....	1938	XV-1	59
- d° -	Soundings in the North Atlantic Ocean.....	1938	XV-2	66

ALPHABETICAL INDEX OF THE NAMES OF AUTHORS OF ARTICLES

AUTHOR	TITLE	Year	Vol.	Page
- do -	(B) Morphologie des Atlantischen Ozeans Grundkarte der Ozeanischen Lotungen - 1:5 Millionen (von Th. Stocks), Berlin & Leipzig, 1937.....	1938	XV-1	74
- do -	(B) Northernmost Labrador Mapped from the Air, (A. FORBES), New York, 1938.....	1938	XV-2	157
- do -	International Standard Projections for Meteorological Charts.	1938	XV-2	170
VIGNAL (J.).....	(E) Tidal Observations.....	1938	XV-1	98
VIGNERON (H.).....	The Ocean Waves.....	1938	XV-2	128
W				
WEEMS (P. V. H.).....	Aeronautical Charts.....	1938	XV-2	93
WILSON (R. M.).....	A New Photoalidade.....	1938	XV-1	116
X - Y - Z				
(None).				



4059. — **Nathaniel Bowditch (1773-1838).**
Cf. Nature, London, 12th March 1938, p. 484.
4060. — **Captain Thomas Hubbard Sumner of Sumner Line Fame.** (Le Capitaine de Vaisseau Thomas Hubbard Sumner célèbre par la Droite de Sumner).
 By Lieut. Cdr. P. V. H. WEEMS, U. S. N. (Ret.). — *Cf. U. S. Naval Institute Proceedings, Annapolis, Jan. 1938, pp. 61-65 ; May, 1938, pp. 735-736.*
-

DISCOVERY EXPEDITIONS. — VOYAGES DE DÉCOUVERTE.

4061. — **Nuova traversata del Passagio di Nord-Ovest.** (A New Making of the North-West Passage. — Nouvelle Traversée du Passage du Nord-Ouest).
Cf. Bollettino della R. Società Geografica Italiana, Rome, Jan. 1938, p. 86.
4062. — **The Soviet Polar Enterprise. Some preliminary Results.** (L'Entreprise polaire soviétique. Quelques Résultats préliminaires).
 By R. N. R. B. — *Cf. Nature, London, 12th Mar., 1938, p. 480.*
-

MISCELLANEOUS. — DIVERS.

4063. — **Earthquakes and the Navy.** (Les Tremblements de Terre et la Marine).
 By Captain NICHOLAS H. HECK. — *Cf. U. S. Naval Institute Proceedings, Annapolis, Feb. 1938, pp. 205-210.*
4064. — **L'Arte dell'Ammiraglio.** (The Art of the Admiral. — L'Art de l'Amiral).
 By FAUSTO LEVA. — *Cf. Rivista Marittima, Roma, Mar. 1938, pp. 386-392.*
4065. — **The old English Mile and the Gallic League.** (L'ancien Mille anglais et la Lieue gauloise).
 By G. B. GRUNDY. — *Cf. The Geographical Journal, London, Mar. 1938, pp. 251-259.*
4066. — **The Origin of the Name Antillia.** (L'Origine du Nom Antillia).
 By G. R. CRONE. — *Cf. The Geographical Journal, London, Mar. 1938, pp. 260-262.*
4067. — **The Velocity of Sound in Air.** (La Vitesse du Son dans l'Air).
 By R. C. COLWELL, A. W. FRIEND & D. A. MCGRAW. — *Cf. Journal of the Franklin Institute, Philadelphia, May, 1938, pp. 579-583.*
-