

Chapter VIII. — Examination of banks; search for inshore and offshore shoals.

Chapter IX is devoted to dragging; the utilisation of various drags — in particular the *Kotelnikoff* drag (1906) and the *Routchkine* drag (1930).

Chapter X: Reduction of Soundings. Locating of the tide pole. Determination of the level for the reduction of soundings. Determination of mean level. Method of Interpolation of soundings by Professor N. MATOUSEVITCH. Convention adopted for drawing up the field sheet for soundings. Data concerning the tides to be inserted on charts. Arrangement of system for running sounding lines.

The Third part is devoted to running surveys.

Chapter XI. — The measurement of a base line. Determination of the azimuth. Surveys underway by various methods. Construction of the survey on the Mercator projection. The Givry correction. Conversion of astronomic azimuths into loxodromic azimuths for high latitudes, according to the VILKITSKII method. Determination of distances by angular altitudes.

Chapter XII. — Special requirements for hydrographic reconnaissance in the polar regions. Methods of observing tides through the ice. Study of the changes in level of the ice.

The work ends with a comprehensive list of Russian and foreign treatises having to do with hydrography.

H. B.

HANLEDNING I SJÖMÄTNING

(MANUAL FOR HYDROGRAPHIC SURVEYS).

Published by the Kungl. Sjökarteverket, Stockholm, 1936.

This volume replaces the previous edition of the same work dated 1923. The arrangement of the chapters has been revised with respect to the previous edition. The first chapter gives a description of the instruments and apparatus; there is given especially a description of the pentagonal prismatic sextant and the apparatus for verification of the station pointers; soundings with the fish-lead and the different methods of dragging used in Swedish waters.

Chapters II deals with triangulation — Methods followed in the Swedish Hydrographic Service and the methods of performing the calculations.

Chapter III deals with the levelling operations.

Chapter IV deals with the manner of establishing the projection sheets.

Chapter V, entirely revised, concerns the study of the sea-level, gives a description of the Swedish tide-gauges and a synoptic chart showing the location of the various tidal stations in Swedish waters.

Chapter VI is concerned with the preliminary work for hydrographic surveys.

Chapter VII deals with coastal surveys: the erection of signals; methods of fixing the position of the controls; determination of boat soundings; plane-table methods of surveying; coastal topography; the taking of the soundings; fixing the position of the boat; the examination of shoals; dragging; echo-soundings from boats with or without recording apparatus.

Chapter VIII. — Soundings at sea. Echo Sounding. Search for shoals with the aid of echo sounding.

Chapter IX. — Fixing the sectors for lights.

Chapter X. — Study of magnetic anomalies.

Chapter XI. — Completion of the sheets on the surveying ship.

Chapter XII. — Views of the coast.

In the appendix there is given an example of the field sheet, the list of equipment for the surveying boats, tables of conversion for Swedish measures into metres and fathoms, and a table of distances for the visible horizon.

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