TABLICE NAWIGACYJNE

(NAUTICAL TABLES).

Published by the Editorial Institute of the Nautical School of the Ministry of Commerce
and Industry, Gdynia, 1933.   8vo. XXIX + 187 pp.

As the Polish Navy progressively grew, so the necessity for nautical tables became
more pressing.

The idea of studying and elaborating such tables with a view to publication dates
from 1929.   However, owing to various circumstances, and various difficulties experienced,
the execution of this plan had to be postponed.   Finally, having overcome every obs-
tacle, it was only in 1931 that the preparatory investigations were undertaken.

On 29th November, 1932, a Committee, composed of representatives of the various
organisations interested, assembled to discuss the subject of these Tables.   The Commit-
tee appointed an Editorial Committee which set to work immediately, and the Tables
were drawn up as follows :-

The book comprises an Introduction and a Preface, followed by special notes for
each table.

The tables proper are divided into five parts :

I. *GENERAL :*

Logarithmic and trigonometrical tables (Tables 1, 2, 3 and 4).

II. *ASTRONOMICAL :*

Correction for altitude of sun, stars and moon. (Tables 5, 6 and 7).
Correction for altitude taken above a shore horizon. (Table 8).
Mean dip of the apparent horizon and corrections for difference of temperature.
 (Tables 9 and 9 a).
Mean astronomical refraction and corrections for atmospheric pressure and for tem-
 perature. (Tables 10 and 10 a).
Ex-meridian altitude tables for heavenly bodies.
Ex-meridian azimuth tables. (Tables 11 and 11 a).
Change of altitude in one minute of time. (Table 12) ; A B C Azimuth Tables.
 (Table 13).
Semi-diurnal arcs and amplitudes of rising and setting. (Table 14).
Hour angles and altitudes on the prime vertical, *i. e.* at the greatest digression.
 (Table 15).
Corrections of the hour angle and amplitude, for apparent sunrise and sunset.
 (Tables 16 and 16 a).
Mean co-ordinates of several stars for the year 1933, with annual variations. (Table 17).
Ephemeris of the sun for 1933, with hourly variations. (Table 18).

III. *NAVIGATION :*

Traverse table. (Table 19).
Conversion of departure into difference of longitude. (Table 20).
Distance of the parallels from the equator on the nautical chart. (Table 21).
Range of visibility of a light. (Table 22).
Distance of an object of known height. (Table 23).
Distance of an object of known height whose foot is beyond the horizon. (Table 24).
Distance as a function of two bearings and the distance run between them. (Table 25).
Corrections for the gyro-compass. (Table 26).
Corrections for radiogoniometric bearings. (Table 27).
Speed table. (Table 28).
Product of arcs (deviation) and the sine or cosine of their rhumbs. (Table 29).
Value of the D coefficient of quadrantal deviation, as a function of the diameter
 of the spheres and of their distance from the centre of the compass. (Table 30).
Products of the deviation coefficient and the sine and cosine of the angles. (Table 31).

IV. *MISCELLANEOUS* :

Humidity of the air.
Vapour pressure of the water.
Conversion of degrees Centigrade and Réaumur into degrees Fahrenheit and *vice versa*.
Temperature corrections to barometer readings.
Conversion of English inches into millimetres.
Correction of atmospheric pressure.
Conversion of millimetres into millibars.
Comparative table of the Beaufort Scale.
True force and direction of the wind calculated from the apparent force and direction relative to the ship under way.
Weight of a metre of cable, breaking strain and working load.
Breaking strain and maximum load of a joining shackle with bolt.
Maximum load of studless chain cable in kilograms.
Comparative table of the different units of length.
Conversion of English into Metric measures and *vice versa*.
Weights and measures.
Comparative table of Metric and English measures.
Measures of timber.
Weights and volumes of the principal stores.
Weights and volumes of grain.
Table of certain common numbers and units.

(Tables 32 to 58).

V. *SUPPLEMENT* :

Tables by J. Y. DREISONSTOK (Navigation Tables for Mariners and Aviators). (Tables I and II).
These tables have been included by agreement with the author.

NOMOGRAMS FOR USE IN NAVIGATION

(Publication N⁰ 227 of the Hydrographic Department, Tokyo, 1933).

This publication of the Hydrographic Department of the IMPERIAL JAPANESE NAVY contains sixteen tabulations, each giving a nomographic abacus by aligned positions from which may be rapidly obtained the various elements most frequently used in navigation such as, for instance, distance run at various speeds during a certain number of hours and minutes, all the problems of position by dead reckoning, distance from an object by measurement of a subtended arc, correction of W/T bearings, problems relating to azimuth, altitude and amplitude, hours of rising and setting, etc.

COMPLETE 60° STAR LISTS FOR POSITION FIXING BY THE EQUAL ALTITUDE METHOD

by

WELD ARNOLD.

Publication No. 4 of the American Geographical Society School of Surveying.

(In 4to - 430 pages - New York - 1930)

The object of this book is to render unnecessary the computation of an observation programme before beginning work with the prismatic astrolabe or REEVES' prism attachment for theodolites. The range of latitude is from 60° North to 60° South. The stars used are all those in the American, British and French Ephemerides for which ten-day places are given in the edition of 1930.