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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 12320-2022

Compilation specifications for Chinese nautical charts

中国航海图编绘规范

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Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and Definitions

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part

1. Structure and Drafting Rules of Standardization Documents" drafted. This document replaces GB 12320-1998 "Code for Compilation and Drawing of Chinese Nautical Charts". Compared with GB 12320-1998, except for structural adjustment and editing In addition to the modification, the main technical changes are as follows:

- Delete the content and indicators that are incompatible with the current nautical chart production technology, such as exhibition points, editing methods, etc. (see 4.2);
- Modify the coordinate system to 2000 National Geodetic Coordinate System (see 6.1.1);
- Adjusted the water depth density index and basic iso-altitude requirements (see 11.5.2.2, 11.14.1, 9.13.1 of the 1998 edition);
- Added the representation requirements of some new elements, such as logarithmic scale, linear scale, VTS report line, etc. (see 9.4.7, 11.22.5.3);
- Modify the projection requirements, delete the Gaussian projection, and add the polar spherical projection (see 6.3, 6.1.3.2, 6.1.3.3 of the 1998 edition);
- Added the requirements for navigating charts in foreign regions (including polar regions) (see 9.3.3.3, 9.4.3, 9.4.6.4);
- Modified the requirements for the layout of the drawing, reducing the cover of the navigation elements on the drawing by elements such as drawing names and charts (see 9.4.2.2, 1998 edition) 7.4.1.2);
- Delete the old operation methods and related requirements, and add the editing operation methods and technical requirements based on digital drawing technology (see 8.2.2, 8.3.2,

8.1 of the 1998 edition);

--- Increase the requirements for the adoption, analysis and use of digital data (see 10.2.2, 10.3.2, 8.3.1, 8.3.2, 8.3.3, 1998 edition 8.3.4, 8.4);

1 Scope

China's mandatory compilation specifications for Chinese nautical charts. A nautical chart is a legal document as much as a drawing: a ship's officer navigates by it, and an error in a sounding or a light characteristic can put a vessel on the ground. The specifications govern how a chart is built from survey data - the projection and datum, which must be stated because a position plotted on the wrong datum can be hundreds of metres out, the selection and generalisation of soundings, where the rule is always to show the shoalest depth rather than the average, the depiction of the coastline, dangers, aids to navigation and traffic separation schemes, and the scale-dependent decisions about what to keep and what to omit. China's charts cover some of the busiest and most crowded waters in the world, and they are produced to be interoperable with the international chart series that foreign vessels carry.

This document specifies the general requirements for nautical charts, mathematical basis, framing, numbering, editing design, editing and drawing operation methods, editing and drawing of various elements, annotations Records, corrections in editing, quality control, color printing and prepress processing and updating, etc. This document applies to the preparation of nautical charts of various scales.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB 5863 Inland River Navigation Signs

GB 12319 Chinese nautical charts

GB/T 14477 Specification for printing charts

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 cartographic document Various charts, documents and data that can be used to compile nautical charts or have research, enrichment, correction and reference value for the preparation of nautical charts material.

3.2 banner chart reversesheetchart A frame whose horizontal profile length is greater than its vertical profile length.

3.3 Straight chart normalsheetchart A frame whose horizontal profile length is less than the vertical profile length.

3.4 Overlapchart The overlap between adjacent graphs of the same scale or similar scales.

3.5 Sheet size sheetdimension Horizontal and vertical dimensions of outlines in nautical charts.

3.6 Mosaic contiguouscharts A picture made up of two or more adjacent drawing areas.