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

GB/T 14555-2015

Replacing GB/T 14556-1993

Requirements for interface and installation of marine radar

船用导航雷达接口及安装要求

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 14555-1993 "marine navigation radar electrical and mechanical installation requirements" and GB/T 14556-1993 "Marine Navigation radar interface requirements. " The standard content of the original two standards merged into a standard, in addition to major technological changes outside editorial changes as follows:

- Increasing the term "GPS receiver", "GPS Interface", "Automatic Identification System", "AIS Interface", "voyage data recorders" "VDR Interface" (see 3.1);
- Increased abbreviations (see 3.2);
- "Interface requirements" to add a chapter of the basic interface, a transmitter, a receiver, impedance, grounding and shielding, fault isolation, interface commitment, the number of According to the format requirements (see 4.1.1 - 4.1.8);
- Compass interface requirements increase in digital signal interface requirements (see 4.2.2.2);
- Increased the meter instrument interface requirements (see 4.2.3);
- Increasing the GPS (Global Positioning System) interface requirements (see 4.2.4);
- Increased AIS (Automatic Identification System) interface requirements (see 4.2.6);
- Increased VDR (voyage data recorder) interface requirements (see 4.2.7);
- Antenna installation requirements added to the surrounding environment of the antenna installation requirements (see 5.2.1.3);

- Antenna installation requirements adds multiple radar installation requirements (see 5.2.6);
- Increasing the reference (see "References");
- Modify the scope of representation (see Chapter 1);
- Modify the normative references (see Chapter 2);

1 Scope

GB/T 14555-2015 is the Chinese national standard on requirements for interface and installation of marine radar, in the field of shipbuilding and marine structures. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 11 September 2015 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2016. Classification: ICS 47.020.70, CCS M53. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the marine navigation radar (hereinafter referred to as radar) interfaces and installation requirements. This standard applies to radar design, manufacturing guidelines and interface coordination, but also for radar electrical, mechanical installation in the ship, but also Automatic radar plotting aids (ARPA) in the ship's electrical and mechanical installation.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 12267-1990 Marine navigational equipment - General requirements and test methods

IEC 61162-1:2007 Maritime navigation and radio communication equipment and systems - Digital interfaces - Part 1. signal transmitter and multiplexer Receiver
(Maritimenavigationandradiocommunicationequipmentandsystems-Digitalinterfaces- Part 1. Singletalkerandmultiplelisteners)

IEC 61996-2:2006 Maritime navigation and radiocommunication equipment and systems for marine voyage data recorder (VDR) - Part 2. Simple test results voyage data recorder (S-VDR) - Performance requirements, test methods and requirements
(Maritimenavigationand

radiocommunication equipment and systems—Shipborne voyage data recorder (VDR) —Part 2. Simplified voyage data recorder (S-VDR) —Performance requirements, methods of testing and required test results) ITU-TX.27/V.11 data signal transfer rate of 10Mbit/s of switching circuit Electrical characteristics for balanced double (Electrical characteristics for balanced double-current interchange circuits operating at data signaling rates up to 10Mbit/s)

3 Terms, definitions and abbreviations

3.1 Terms and Definitions The following terms and definitions apply to this document.

3.1.1 Marine navigation radar marine radar Used for ship navigation and avoidance radar. It can display surface vessels, buoys, coastline, navigation markers and water barrier around the ship Etc. relative position of the ship's plane.

3.1.2 Compass Interface gyrocompass interface Compass and radar information output of compass information receiving boundary between the ends. As electronic circuits inside the compass radar load is Part of the interface.

3.1.3 Compass information receiving unit gyrocompass information receiving unit Luo Jingxin one kind of the number is converted into the radar can receive angular displacement proportional thereto or electrical signals of the electronic module.