

RULES

FOR THE CLASSIFICATION AND CONSTRUCTION OF HIGH-SPEED CRAFT

PART XVII RADIO EQUIPMENT

ND No. 2-020101-158-E



**St. Petersburg
2023**

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF HIGH-SPEED CRAFT

Rules for the Classification and Construction of High-Speed Craft of Russian Maritime Register of Shipping (RS, the Register) have been approved in accordance with the established approval procedure and come into force on 1 March 2023.

The present edition of the Rules is based on the 2018 edition taking into account the amendments developed immediately before publication.

The procedural requirements, unified requirements, unified interpretations and recommendations of the International Association of Classification Societies (IACS) and the relevant resolutions of the International Maritime Organization (IMO) have been taken into consideration.

The Rules are published in the following parts:

Part I "Classification";

Part II "Hull Structure and Strength";

Part III "Equipment, Arrangements and Outfit";

Part IV "Stability";

Part V "Reserve of Buoyancy and Subdivision";

Part VI "Fire Protection";

Part VII "Machinery Installations";

Part VIII "Systems and Piping";

Part IX "Machinery";

Part X "Boilers, Heat Exchangers and Pressure Vessels";

Part XI "Electrical Equipment";

Part XII "Refrigerating Plants";

Part XIII "Materials";

Part XIV "Welding";

Part XV "Automation";

Part XVI "Live-Saving Appliances";

Part XVII "Radio Equipment";

Part XVIII "Navigational Equipment";

Part XIX "Signal Means";

Part XX "Equipment for Pollution Prevention";

Part XXI "Craft for Personnel Transportation".

REVISION HISTORY

(purely editorial amendments are not included in the Revision History)

For this version, there are no amendments to be included in the Revision History.

1 SCOPE OF APPLICATION

1.1 This Part of the Rules for the Classification and Construction of High-Speed Craft¹ applies to high-speed craft² engaged in international voyages referred to in 1.1.1 and 1.1.2 of Part I "Classification", to HSC not engaged in international voyages, unless decided otherwise by the Administration of the State whose flag the craft is flying, and to radio equipment intended for installation on board such craft.

1.2 This Part sets forth technical requirements to be met by the radio equipment and specifies its composition and arrangement.

1.3 Radio equipment not dealt with in this Part or dealt with only partially is covered by the requirements of Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships, unless they are contradictory to the requirements of this Part.

¹ Hereinafter referred to as "these Rules".

² Hereinafter referred to as "HSC".

2 DEFINITIONS AND EXPLANATIONS

2.1 Definitions relating to general terminology are given in 1.1 of Part I "Classification" of these Rules and in Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships.

3 SCOPE OF TECHNICAL SUPERVISION

3.1 All types of radiocommunication equipment required by this Part, all associated arrangements, independent sources of electrical power, switching devices and cable lines as well as spaces and areas where the equipment is arranged are subject to technical supervision by the Register during the craft construction and service.

3.2 Design and production of all radio equipment intended for installation on HSC are subject to technical supervision by the Register at the manufacturer.

3.3 The procedure of the technical supervision is given in the General Regulations for the Classification and Other Activity and in Part I "General" of the Rules for the Equipment of Sea-Going Ships.

4 TECHNICAL DOCUMENTATION

4.1 The requirements for technical documentation on the radio equipment of HSC to be submitted for consideration together with plan approval documentation are set forth in 2.2.4, 2.2.5 of Part I "General" of the Rules for the Equipment of Sea-Going Ships.

4.2 The requirements for technical documentation on the radio equipment of HSC to be submitted for consideration together with ship's technical design are set forth in 2.3.3, 2.3.4 of Part I "General" of the Rules for the Equipment of Sea-Going Ships.

4.3 In addition to the documentation required by [4.1](#) and [4.2](#), documentation on marine areas of ship's navigation and on methods of maintenance of radio equipment under the requirements of Global Maritime Distress and Safety System (GMDSS) shall be submitted.

5 RADIO INSTALLATIONS OF HIGH-SPEED CRAFT

5.1 General.

Radio installations of HSC in terms of their itematization, technical characteristics, mounting, operation and maintenance requirements shall be capable of:

- transmitting ship-to-shore distress alerts by at least two separate and independent means;
- receiving shore-to-ship distress alerts;
- transmitting and receiving ship-to-ship distress alerts;
- transmitting and receiving search and rescue coordinating communications;
- transmitting and receiving on-scene communications;
- transmitting, using radar transponders in accordance with 2.1.2, Part XVI "Life-Saving Appliances", and receiving, using radar in accordance with item 6 of Table 5.1, Part XVIII "Navigational Equipment", signals for locating objects in distress;
- transmitting and receiving marine safety information;
- transmitting and receiving general radiocommunications;
- transmitting and receiving bridge-to-bridge communications.

6 LIST OF RADIO EQUIPMENT

6.1 Each HSC shall be provided with radio equipment in compliance with requirements 2.2.1 and 2.6, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships, as appropriate for sea areas and maintenance procedures which are used to ensure operation of the radio equipment.

7 ARRANGEMENT OF RADIO EQUIPMENT

7.1 All the required radio equipment shall be installed in the space from which the craft is navigated. An operating position to maintain a radio watch shall be provided in the space in accordance with the requirements of Section 3, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships.

7.2 The control position for maintaining a radio watch shall be provided with a table (a hinged table may be used) of a sufficient size to keep records and with a seat for the radio operator. Where radio equipment is installed so that it can be operated directly from the operating position of the navigator on watch, the table and seat required by Section 11, Part XVIII "Navigational Equipment", may be used for these purposes.

7.3 All controls, switches and indicators shall be positioned at the place from where radio watch is maintained so that they can be accessible for the radio operator without leaving his seat and without interference with steering the craft.

7.4 Radio equipment shall be installed so that it is readily accessible for maintenance purposes both in port and at sea.

7.5 Radio equipment may be arranged in a space other than that required in [7.1](#) provided the requirements of 3.2, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships are met. In this case, distress alerts and safety announcements may be made from the radio room and transmission of distress alerts shall be initiated from the position from which the craft is normally navigated.

7.6 The switchboard for power supply to the radio equipment referred to in [8.3](#) shall be positioned close to the radio operator's position. In case the position from where radio watch is maintained is arranged in the compartment from which the craft is normally navigated, the switchgear for power supply circuits of radio transmitters and command broadcast facilities shall be designed so that they can be locked in the "off" position.

The fulfilment of the requirements of this Chapter is mandatory where the compartment from which the craft is normally navigated cannot be locked.

7.7 The emergency accumulator battery for radio equipment required by [8.1](#) shall be arranged in compliance with the requirements of 3.3, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships.

8 SOURCES OF POWER

8.1 Supply of electrical power from the main, reserve and emergency sources of electrical power in accordance with the requirements of 2.3.4, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships, sufficient to operate radio installations and to charge a reserve source of energy shall be available at all times, while the craft is at sea.

8.2 The reserve source of energy required by [8.1](#) shall be capable of simultaneously operating the radio equipment installed on board the craft in accordance with [6.1](#) for a period of at least 1 h. The requirements for the reserve source of electrical power are set forth in 2.3, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships, except for 2.3.5 of the same Part of the Rules for the Classification and Construction of Sea-Going Ships.

8.3 Power to radio equipment and command broadcast facilities shall be supplied by separate feeders provided with appropriate switching and protection devices from the switchboard intended solely for the particular purpose. Power supply to switchboard busbars shall be provided from the main switchboard and from the emergency switchboard by separate feeders.

9 AERIALS

9.1 Every craft shall be provided with aerials necessary for operation of radio equipment in accordance with 2.4, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships.

9.2 Leads and feeders of aerials inside the spaces shall be fitted in compliance with 4.1 to 4.6, Part IV "Radio Equipment", and 4.2, Part V "Navigational Equipment" of the Rules for the Equipment of Sea-Going Ships.

9.3 The aerial of the VHF installation shall be fitted at the maximum possible height above the craft hull. The VHF installation and radar aerials shall not be shadowed from all the directions by metal structures (such as superstructures, pylons, etc.). Besides, the radar aerial shall be positioned so that there is no inadmissible level of emissive power on open decks and spaces not enclosed by metal structures where people can be present.

10 CONSTRUCTIONAL AND OPERATIONAL REQUIREMENTS FOR RADIO EQUIPMENT

10.1 All radio equipment required by this Part shall comply with constructional and performance requirements contained in Sections 5 to 14, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships.

11 MAINTENANCE

11.1 Serviceability of radio equipment of HSC shall be provided in accordance with 2.6, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships.

11.2 For craft operating only between ports where adequate facilities for shore-based maintenance and repair of radio installations are available and provided no journey between two such ports exceeds 6 h at least one maintenance method may be used.

12 SPARE PARTS

12.1 Where serviceability of radio equipment is ensured by proper at-sea maintenance and repair, the craft shall be provided with spare parts in accordance with 2.5, Part IV "Radio Equipment" of the Rules for the Equipment of Sea-Going Ships.

13 RADIO PERSONNEL

13.1 Every craft shall carry radio operators to the satisfaction of the Administration of the State whose flag the craft is flying, any one of whom shall be designated for distress and safety radio communication purpose. In passenger craft at least one qualified operator shall be designated to have primary responsibility for radio communications during distress incidents.

Russian Maritime Register of Shipping

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Part XVII
Radio Equipment**

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