



# RUSSIAN MARITIME REGISTER OF SHIPPING

**CIRCULAR LETTER**

**No. 313-67-1486c**

dated 21.12.2020

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships considering experience in application of the Rules

Item(s) of supervision:

propulsion plants of icebreakers and ice class ships, ships with the distinguishing marks **ECO-S** and **WINTERIZATION(DAT)**

Entry-into-force date:

**01.03.2021**

~~Valid till:~~

~~Validity period extended till:~~

~~Cancels / amends / adds Circular Letter No.~~

~~dated~~

Number of pages:

1 + 3

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part VII "Machinery Installations" and Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that the Rules for the Classification and Construction of Sea-Going Ships, after their re-publication in 2021, shall be amended as specified in the Appendices to the Circular Letter.

It is necessary to do the following:

1. Bring the content of the Circular Letter to the notice of the RS surveyors, interested organizations and persons in the area of the RS Branch Offices' activity.
2. Apply the amendments introduced by the Circular Letter during review and approval of the technical documentation on propulsion plants of icebreakers and ice class ships, ships with the distinguishing marks **ECO-S** and **WINTERIZATION(DAT)**, intended for ships contracted for construction or conversion on or after 01.03.2021, in the absence of a contract, the keels of which are laid or which are at a similar stage of construction on or after 01.03.2021.

List of the amended and/or introduced paras/chapters/sections:

Part VII: Chapter 2.1, paras 2.1.1.3, 2.1.1.4, Table 2.1.1.4-2, paras 2.1.15 — 2.1.17

Part XVII: para 3.6.3.8, Chapter 7.6

Person in charge: Sergey V. Lavrov

313

+7 812 3123985

"Thesis" System No. 20-236442

**Information on amendments introduced by the Circular Letter  
(for inclusion in the Revision History to the RS Publication)**

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
1	Part VII, Chapter 2.1	Chapter has been renamed	313-67-1486c of 01.03.2020	01.03.2021
2	Part VII, para 2.1.1.3	Requirements for the minimum power of ships of ice classes <b>Ice2</b> and <b>Ice3</b> have been specified	313-67-1486c of 01.03.2020	01.03.2021
3	Part VII, para 2.1.1.4	Requirements have been specified	313-67-1486c of 01.03.2020	01.03.2021
4	Part VII, Table 2.1.1.4-2	Table has been deleted	313-67-1486c of 01.03.2020	01.03.2021
5	Part VII, Formula (2.1.1.4-2)	Application has been specified	313-67-1486c of 01.03.2020	01.03.2021
6	Part VII, para 2.1.15	Requirements for replacing the blades of propeller afloat have been specified	313-67-1486c of 01.03.2020	01.03.2021
7	Part VII, para 2.1.16	Requirements for complete shaft line turning of the shafting during the ship stay in close floating ice have been introduced	313-67-1486c of 01.03.2020	01.03.2021
8	Part VII, para 2.1.17	Requirements for the power at propulsion plant of icebreakers and ships of ice-classes <b>Arc7 – Arc9</b> have been specified	313-67-1486c of 01.03.2020	01.03.2021
9	Part XVII, para 3.6.3.8	Requirements for prevention of lubricating oil and hydraulic oil leakages into seawater have been specified	313-67-1486c of 01.03.2020	01.03.2021
10	Part XVII, Chapter 7.6	Chapter has been amended considering experience in application of the Rules	313-67-1486c of 01.03.2020	01.03.2021

**RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS,2020,**  
**ND No. 2-020101-124-E**

**PART VII. MACHINERY INSTALLATIONS**

**2 GENERAL REQUIREMENTS**

1 **Chapter 2.1.** The Chapter is renamed as follows:

**"2.1 POWER OF MAIN MACHINERY AND GENERAL TECHNICAL REQUIREMENTS".**

2 **Para 2.1.1.3.** The last paragraph is replaced by the following text:

"Irrespective of the results obtained in calculating the power as per Formula (2.1.1.3), the minimum power, in kW, shall not be less than:

10000 kW for **Arc9** ice class ships;

7200 kW for **Arc8** ice class ships;

5000 kW for **Arc7** ice class ships;

3500 kW for **Arc6** ice class ships;

2600 kW for **Arc5** ice class ships;

1000 kW for **Ice2** and **Ice3** and **Arc4** ice class ships."

3 **Para 2.1.1.4.** The last paragraph is deleted.

4 **Table 2.1.1.4-2** is deleted.

5 **Formula (2.1.1.4-2).** The last line in the explication is replaced by the following text:

"If the value  $(LT/B^2)^3$  is less than 5, than the value is assumed equal to 5. If the value  $(LT/B^2)^3$  is more than 20, than the value is assumed equal to 20."

6 **New paras 2.1.15 – 2.1.17** are introduced reading as follows:

**2.1.15** On icebreakers of ice class mark **Icebreaker7 – Icebreaker9** and ships of unrestricted service of ice classes **Arc7 – Arc9**, detachable (as a rule, four-bladed) propellers shall be used. In this case, the ships shall be provided with technical means for replacing defective blades, the list of which is agreed by the Register (for example, means of launching / lifting, fastening and orientation of the blade), to replace defective blades afloat.

**2.1.16** On icebreakers and ships of ice classes **Arc7 – Arc9**, technical means shall be provided for complete shaft line turning of the shafting during the ship stay in close floating ice.

**2.1.17** Propulsion plant of icebreakers and ship of ice-classes **Arc7 – Arc9** shall be capable of maintaining the rated power and required rated torque at propeller shafts in a range of rotation speed corresponding to the appropriate operating conditions in accordance with the assigned ice class."

## PART XVII. DISTINGUISHING MARKS AND DESCRIPTIVE NOTATIONS IN THE CLASS NOTATION SPECIFYING STRUCTURAL AND OPERATIONAL PARTICULARS OF SHIPS

### 3 REQUIREMENTS FOR THE EQUIPMENT OF SHIPS IN COMPLIANCE WITH THE DISTINGUISHING MARKS ECO AND ECO-S IN THE CLASS NOTATION

7 **Para 3.6.3.8** is replaced by the following text:

**"3.6.3.8** Prevention of lubricating oil and hydraulic oil leakages into seawater.

The requirements specified in 3.5.3.8 shall be met.

When environmentally hazardous refrigerants are used, the sterntube seals shall be so designed as to prevent leakage out of the seal housing when operated within the specified modes. Permissible leakage of non-toxic and biologically neutral refrigerants are not considered as pollution from ships."

### 7 REQUIREMENTS FOR SHIP EQUIPMENT TO ENSURE LONG-TERM OPERATION AT LOW TEMPERATURE

8 **Chapter 7.6** is replaced by the following text:

#### **"7.6 MACHINERY INSTALLATIONS**

**7.6.1** Means shall be provided to ensure that machinery may be brought into operation from the dead ship condition without external aid (refer also to 2.1.6, Part VII "Machinery Installations"), as well as storage and supply of fuel to the emergency diesel-generator with pour point temperature being 5 °C lower than design ambient temperature indicated in brackets of the distinguishing mark **WINTERIZATION(DAT)**. As an alternative, self-contained portable arrangements may be provided on board to ensure that machinery may be brought into operation from the dead ship condition.

**7.6.2** Based on their design, the machinery, shafting, boilers and other pressure vessels, as well as pipelines of systems and fittings, shall remain operative during the ship stay at design ambient temperature.

**7.6.3** Air supply to main engines shall not lead to overcooling of machinery space. Technical means shall be provided to exclude increase of mechanical load on cylinders and pistons and bearings of main engines due to the harmful effect of reduced temperatures of scavenging air.

**7.6.4** In general, at least two auxiliary boilers shall be provided onboard the ships with distinguishing marks **WINTERIZATION(-40)** and **WINTERIZATION(-50)**."