



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 312-11-1527c

dated 18.03.2021

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships considering the experience of technical supervision

Item(s) of supervision:

ships under construction

Entry-into-force date:

19.04.2021

Valid till: -

Validity period extended till: -

Cancels / amends / adds Circular Letter Nos. 314-20-1481c dated of 10.12.2020
314-20-1450c of 15.10.2020

Number of pages: 1 + 10

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part I "Classification" 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 shall be amended after re-publication in 2021 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. Amendments introduced by the Circular Letter shall be applied during review and approval of the technical documentation on ships contracted for construction or conversion on or after 15.04.2021, in the absence of a contract, the keels of which are laid or which are at a similar stage of construction on or after 19.04.2021, as well as during review and approval of the technical documentation on ships, the delivery of which is on or after 19.04.2021.
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List of the amended and/or introduced paras/chapters/sections:

Part I: paras 1.1.1, 2.2.3.3.3, 2.2.3.3.5, Table 2.5, paras 3.1.5, 3.2.1.3, 3.2.8.1.9, 3.2.10.1.19 — 3.2.10.1.26, 3.2.11.1 — 3.2.11.3, 3.2.14, 3.3.8.1.13 — 3.3.8.1.16, 3.3.11.1 — 3.3.11.3, 3.3.14 and 3.4.10.1 — 3.4.10.3;

Part XVII: paras 5.6.16, 5.6.17 and 7.7.1.1, Table 10.7.6.2.3, Appendix to Section 10, Chapter 19.3

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**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 I, para 1.1.1	Definitions "A historical ship (traditional craft)" and "A replica of a historical ship" have been introduced	312-11-1527c of 18.03.2021	19.04.2021
2	Part I, para 2.2.3.3.3	Requirements for ice class marks assigned to tags have been specified	312-11-1527c of 18.03.2021	19.04.2021
3	Part I, para 2.2.3.3.5	Requirements concerning differences in the ice class of a ship in case of bow- and stern-first operation have been introduced	312-11-1527c of 18.03.2021	19.04.2021
4	Part I, Table 2.5 (item 1.17)	Descriptive notation Replica has been introduced	312-11-1527c of 18.03.2021	19.04.2021
5	Part I, Table 2.5 (item 1.18)	Descriptive notations Replica and Light ship have been introduced	312-11-1527c of 18.03.2021	19.04.2021
6	Part I, para 3.1.5	Reference to 8.2-5 of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships has been introduced	312-11-1527c of 18.03.2021	19.04.2021
7	Part I, para 3.2.1.3	Application of the requirements concerning the plan showing the location of the IMO number marking has been specified	312-11-1527c of 18.03.2021	19.04.2021
8	Part I, para 3.2.8.1.9	Para has been deleted in connection with introduction of new para 3.2.14	312-11-1527c of 18.03.2021	19.04.2021
9	Part I, paras 3.2.10.1.19 — 3.2.10.1.26	Para 3.2.10.1.19 has been deleted. Existing paras 3.2.10.1.20 — 3.2.10.1.26 are renumbered 3.2.10.1.19 — 3.2.10.1.25 accordingly	312-11-1527c of 18.03.2021	19.04.2021
10	Part I, para 3.2.11.1	Requirements concerning submitted documentation on arrangements and equipment for the prevention of pollution from ships have been specified	312-11-1527c of 18.03.2021	19.04.2021

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
11	Part I, para 3.2.11.2	Requirements concerning submitted documentation on arrangements and equipment for the prevention of pollution from ships have been specified	312-11-1527c of 18.03.2021	19.04.2021
12	Part I, para 3.2.11.3	Requirements concerning submitted documentation on arrangements and equipment for the prevention of pollution from ships have been specified	312-11-1527c of 18.03.2021	19.04.2021
13	Part I, para 3.2.14	New para containing the list of documentation on cyber security has been introduced	312-11-1527c of 18.03.2021	19.04.2021
14	Part I, paras 3.3.8.1.13 —3.3.8.1.16	Para 3.3.8.1.13 has been deleted in connection with introduction of para 3.3.14. Existing paras 3.3.8.1.14 — 3.3.8.1.16 have been renumbered 3.3.8.1.13 — 3.3.8.1.15 accordingly	312-11-1527c of 18.03.2021	19.04.2021
15	Part I, para 3.3.11.1	Requirements concerning submitted documentation on arrangements and equipment for the prevention of pollution from ships have been specified	312-11-1527c of 18.03.2021	19.04.2021
16	Part I, para 3.3.11.2	Requirements concerning submitted documentation on arrangements and equipment for the prevention of pollution from ships have been specified	312-11-1527c of 18.03.2021	15.04.2021
17	Part I, para 3.3.11.3	Requirements concerning submitted documentation on arrangements and equipment for the prevention of pollution from ships have been specified	312-11-1527c of 18.03.2021	19.04.2021
18	Part I, para 3.3.14	New para containing the list of documentation on cyber security has been introduced	312-11-1527c of 18.03.2021	19.04.2021
19	Part I, para 3.4.10.1	Requirements concerning submitted documentation on arrangements and equipment for the prevention of pollution from ships have been specified	312-11-1527c of 18.03.2021	19.04.2021
20	Part I, para 3.4.10.2	Requirements concerning submitted documentation on arrangements and equipment for the prevention of pollution from ships have been specified	312-11-1527c of 18.03.2021	19.04.2021
21	Part I, para 3.4.10.3	Requirements concerning submitted documentation on arrangements and equipment for the prevention of pollution from ships have been specified	312-11-1527c of 18.03.2021	19.04.2021

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
22	Part XVII, paras 5.6.16 and 5.6.17	Procedure of verification of ship's compliance with the provisions of Mooring Equipment Guidelines (MEG 4) has been specified	312-11-1527c of 18.03.2021	19.04.2021
23	Part XVII, para 7.7.1.1	The term "standard sized valves" has been replaced by the term "standard series of valves"	312-11-1527c of 18.03.2021	19.04.2021
24	Part XVII, Table 10.7.6.2.3-1	Values of coefficients have been specified in connection with the information on misprints received from the developer of the Finnish-Swedish Ice Class Rules	312-11-1527c of 18.03.2021	19.04.2021
25	Part XVII, Appendix to Section 10	Requirements for dimensions of letters have been specified in Note 4 in accordance with the Finnish-Swedish Ice Class Rules	312-11-1527c of 18.03.2021	19.04.2021
26	Part XVII, Chapter 19.3	New Chapter with the requirements for subdivision has been introduced	312-11-1527c of 18.03.2021	19.04.2021

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2020,

ND No. 2-020101-124-E

PART I. CLASSIFICATION

1 GENERAL

1 **Para 1.1.1.** Before the definition "A combination carrier" the definition "A historical ship" is introduced:

"A historical ship (traditional craft) is a ship which, based on its age, its technical nature or construction, its rarity, its meaning for the preservation of traditional principles of seamanship or techniques of inland navigation or its significance for a period from a historic viewpoint, is worthy of being preserved, and is operated for demonstration purposes in particular, or a replica thereof."

2 **Para 1.1.1.** Before the definition "A crane ship" the definition "A replica" is introduced:

"A replica of a historical ship is a ship which was largely built from original materials, using an appropriate construction method according to plans or templates as a historical ship."

2 CLASS OF A SHIP

3 **Para 2.2.3.3.3** is replaced by the following text:

"**2.2.3.3.3** For tugs, depending on their compliance with the requirements of these Rules for ice class, one of the following ice class marks is added to the character of classification: **Ice2, Ice3, Arc4, Arc5, Arc6** taking into account the provisions of 2.2.3.3.1.

Determination of possible periods and areas of navigation as well as regimes of navigation with icebreaker escort is within the shipowner's."

4 **Para 2.2.3.3.5** is replaced by the following text:

"**2.2.3.3.5** Double acting ships (DAS) are ice navigation ships fitted with podded propulsion units designed to operate stern first in ice.

If double acting ships comply at least with the requirements of Section 19, Part XVII "Distinguishing Marks and Descriptive Notations in the Class Notation Specifying Structural and Operational Particulars of Ships", the distinguishing mark **DAS** (**ice class mark**) may be added to the character of classification, where the RS ice class is indicated in brackets according to 2.2.3.3.1 or 2.2.3.3.4 in case of stern-first operation.

When the RS ice class in case of bow-first operation differs from that in case of stern-first operation, the appropriate limitation is introduced to the RS ice class assigned according to 2.2.3.3.1 or 2.2.3.3.4, for example: **Arc4 (hull at $d \leq 11$ m; ahead) DAS (Arc6 hull at $d \leq 11$ m) Arc6 (machinery)**."

5 **Table 2.5 (item 1.17).** Before the descriptive notation **Ro-ro passenger ship** the descriptive notation **Replica** is introduced reading as follows:

"

Replica replica of a historical ship (traditional craft)	Special technical requirements developed by the designer and approved by the Register for further design and construction of a ship
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"

6 **Table 2.5 (item 1.18).** Before the descriptive notation **Shipborne barge** the descriptive notation **Replica** is introduced reading as follows:

"

Replica replica of a historical ship (traditional craft)	
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"

7 **Table 2.5 (item 1.18).** Before the descriptive notation **Passenger-A** the descriptive notation **Light ship** is introduced reading as follows:

"

Light ship a high-speed craft not covered by the International Code of Safety for High-Speed Craft	
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"

3 TECHNICAL DOCUMENTATION

8 **Para 3.1.5** is replaced by the following text:

3.1.5 In the lists specified in 3.2 — 3.4, 4.3 documentation marked with (*) is the documentation, which review results are documented by stamping in accordance with 8.2-1, 8.2-5 or 8.2-7 (in case of dual classification) of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships.

Documentation marked with (**) is the documentation, which review results are documented by stamping in accordance with 8.2-3 or 8.2-9 (in case of dual classification), Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ship ".

9 **Para 3.2.1.3** is replaced by the following text:

.3 plan showing the location of the IMO ship identification number (IMO number) marking in compliance with the requirements of regulation XI-1/3 of SOLAS-74 as amended (ships not covered by this regulation shall comply with the provisions of IMO resolution A.1117(30) as amended) (*);".

10 **Paras 3.2.8.1.9** and **3.2.10.1.19** have been deleted.

11 **Existing paras 3.2.10.1.20 — 3.2.10.1.26** are renumbered 3.2.10.1.19 — 3.2.10.1.25 accordingly.

12 **Para 3.2.11.1** is replaced by the following text:

3.2.11.1 For ships of all types:

.1 arrangement plan of oil fuel tanks (*) and calculation confirming their protective location relative to shell plating (Regulation 12A of Annex I to MARPOL 73/78), if applicable (**);

- .2 calculation of required capacity of holding tanks, oily water and sewage tanks, garbage containers and their arrangement plans (**);
- .3 diagram of oily bilge water piping (*);
- .4 diagram of oil residue piping (*);
- .5 diagram of sewage piping (*);
- .6 calculation of the discharge rate of untreated sewage (*);
- .7 Energy Efficiency Design Index Technical File (EEDI Technical File) in accordance with the Guidelines on Survey and Certification of Energy Efficiency Design Index (EEDI) (IMO resolution MEPC.254(67) as amended), if applicable (**)."

13 **Para 3.2.11.2** is replaced by the following text:

"**3.2.11.2** For oil tankers, in addition to the documentation listed in 3.2.11.1:

- .1 calculation of slop tanks capacity (**);
- .2 calculation of accidental oil outflow (Regulation 23 of Annex I to MARPOL 73/78) (**);
- .3 arrangement plan of cargo and slop tanks (*) and calculation confirming their protective location relative to shell plating (Regulation 19 of Annex I to MARPOL 73/78) (**);
- .4 arrangement plan of pump room (*) and calculation confirming their protective location relative to shell plating (Regulation 22 of Annex I to MARPOL 73/78), if applicable (**);
- .5 diagram of emergency oil transfer system (if applicable) (*);
- .6 diagram of crude oil washing system and shade diagram (if applicable) (*);
- .7 arrangement plan of discharge outlets (*);
- .8 diagram of transfer of oil residues and tank washings from cargo tank areas into slop tanks (*);
- .9 diagram of ballast and washing water discharge monitoring and control system (if applicable) (*)."

14 **Para 3.2.11.3** is replaced by the following text:

"**3.2.11.3** For tankers carrying noxious liquid substances, in addition to the documentation listed in 3.2.11.1:

- .1 calculation of size of underwater discharge outlet (**);
- .2 diagram of cargo tank ventilation systems (if applicable for tank cleaning) (*);
- .3 arrangement plan of discharge outlets (*)."

15 **New para 3.2.14** is introduced reading as follows:

"**3.2.14 Documentation on cyber security:**

.1 concept of computer based system (for information). The document shall contain the following information:

purpose of computer based system with brief description of functions;

flowchart (plan) clearly identifying shipboard systems controlled/monitored by the computer based system. The flowchart (plan) shall also contain the following information: communications with external network for monitoring, control and performance of administrative functions; communications with other computer based systems;

.2 description of data transmission networks (for information). The document shall contain the following information:

physical location of the system and subsystem components (e.g., name of a space, deck of location, etc.);

category I system communications with category II or III systems;

network topology of systems and subsystems (star, ring, etc.);

applicable network technologies (e.g., Gigabit Ethernet , Fast Ethernet Ethernet);

applicable network cables (twisted pair, fibre optic, etc.);

communications from controllers and field devices (MODBUS, Fieldbus, etc.);

network diagrams indicating the devices, nodes, network cable details and general locations of the equipment;

list of IT and OT systems indicating their categories;

data flows and network devices or resources potentially limiting them;

details of external connections for remote access;

access points and interfaces, including machine-to-machine (M2M) interfaces;
logical diagrams of shipboard networks.

Note. Documentation listed in 3.2.14 shall be submitted to RHO for review for all ships contracted for construction on or after 01.01.2021 in accordance with the Guidelines on Cyber Safety."

16 **Para 3.3.8.1.13** is deleted.

17 **Existing paras 3.3.8.1.14 — 3.3.8.1.16** are renumbered 3.3.8.1.13 — 3.3.8.1.15 accordingly.

18 **Para 3.3.11.1** is replaced by the following text:

"3.3.11.1 For ships of all types:

- .1 arrangement plan of oil fuel tanks (*) and calculation confirming their protective location relative to shell plating (Regulation 12A of Annex I to MARPOL 73/78), if applicable (**);
- .2 calculation of required capacity of holding tanks, oily water and sewage tanks, garbage containers and their arrangement plans (**);
- .3 diagram of oily bilge water piping (*);
- .4 diagram of oil residue piping (*);
- .5 diagram of sewage piping (*);
- .6 calculation of the discharge rate of untreated sewage (*);
- .7 Energy Efficiency Design Index Technical File (EEDI Technical File) in accordance with the Guidelines on Survey and Certification of Energy Efficiency Design Index (EEDI) (IMO resolution MEPC.254(67) as amended), if applicable (**)."

19 **Para 3.3.11.2** is replaced by the following text:

"3.3.11.2 For oil tankers, in addition to the documentation listed in 3.3.11.1:

- .1 calculation of slop tanks capacity (**);
- .2 calculation of accidental oil outflow (Regulation 23 of Annex I to MARPOL 73/78) (**);
- .3 arrangement plan of cargo and slop tanks (*) and calculation confirming their protective location relative to shell plating (Regulation 19 of Annex I to MARPOL 73/78) (**);
- .4 arrangement plan of pump room (*) and calculation confirming their protective location relative to shell plating (Regulation 22 of Annex I to MARPOL 73/78), if applicable (**);
- .5 diagram of emergency oil transfer system (if applicable) (*);
- .6 diagram of crude oil washing system and shade diagram (if applicable) (*);
- .7 arrangement plan of discharge outlets (*);
- .8 diagram of transfer of oil residues and tank washings from cargo tank areas into slop tanks (*);
- .9 diagram of ballast and washing water discharge monitoring and control system (if applicable) (*)."

20 **Para 3.3.11.3** is replaced by the following text:

"3.3.11.3 For tankers carrying noxious liquid substances, in addition to the documentation listed in 3.3.11.1:

- .1 calculation of size of underwater discharge outlet (**);
- .2 diagram of cargo tank ventilation systems (if applicable for tank cleaning) (*);
- .3 arrangement plan of discharge outlets (*)."

21 **New para 3.3.14** is introduced reading as follows:

"3.3.14 Documentation on cyber security:

- .1 concept of computer based system (for information). The document shall contain the following information:
 - purpose of computer based system with brief description of functions;
 - flowchart (plan) clearly identifying shipboard systems controlled/monitored by the computer based system. The flowchart (plan) shall also contain the following information: communications

with external network for monitoring, control and performance of administrative functions; communications with other computer based systems;

.2 description of data transmission networks (for information). The document shall contain the following information:

physical location of the system and subsystem components (e.g., name of a space, deck of location, etc.);

category I system communications with category II or III systems;

network topology of systems and subsystems (star, ring, etc.);

applicable network technologies (e.g., Gigabit Ethernet, Fast Ethernet Ethernet);

applicable network cables (twisted pair, fibre optic, etc.);

communications from controllers and field devices (MODBUS, Fieldbus, etc.);

network diagrams indicating the devices, nodes, network cable details and general locations of the equipment;

list of IT and OT systems indicating their categories;

data flows and network devices or resources potentially limiting them;

details of external connections for remote access;

access points and interfaces, including machine-to-machine (M2M) interfaces;

logical diagrams of shipboard networks.

Note. Documentation listed in 3.2.14 shall be submitted to RHO for review for all ships contracted for construction on or after 01.01.2021 in accordance with the Guidelines on Cyber Safety."

22 **Para 3.4.10.1** is replaced by the following text:

"3.4.10.1 For ships of all types:

.1 arrangement plan of oil fuel tanks (*) and calculation confirming their protective location relative to shell plating (Regulation 12A of Annex I to MARPOL 73/78), if applicable (**);

.2 diagram of oily bilge water piping (*);

.3 diagram of oil residue piping (*);

.4 diagram of sewage piping (*)."

23 **Para 3.4.10.2** is replaced by the following text:

"3.4.10.2 For oil tankers, in addition to the documentation listed in 3.4.10.1:

.1 arrangement plan of cargo and slop tanks (*) and calculation confirming their protective location relative to shell plating (Regulation 19 of Annex I to MARPOL 73/78) (**);

.2 arrangement plan of pump room (*) and calculation confirming their protective location relative to shell plating (Regulation 22 of Annex I to MARPOL 73/78), if applicable (**);

.3 diagram of emergency oil transfer system (if applicable) (*);

.4 diagram of crude oil washing system and shade diagram (if applicable) (*);

.5 arrangement plan of discharge outlets (*);

.6 diagram of transfer of oil residues and tank washings from cargo tank areas into slop tanks (*);

.7 diagram of ballast and washing water discharge monitoring and control system (if applicable) (*)."

24 **Para 3.4.10.3** is replaced by the following text:

"3.4.10.3 For tankers carrying noxious liquid substances, in addition to the documentation listed in 3.4.10.1:

.1 calculation of size of underwater discharge outlet (**);

.2 diagram of cargo tank ventilation systems (if applicable for tank cleaning) (*);

.3 arrangement plan of discharge outlets (*)."

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

5 REQUIREMENTS FOR THE EQUIPMENT OF OIL TANKERS FOR CARGO OPERATIONS WITH OFFSHORE TERMINALS

25 **Paras 5.6.16 and 5.6.17** are replaced by the following text:

"5.6.16 Verification of ship's compliance with the provisions specified in 4.3 of Mooring Equipment Guidelines (MEG 4).

5.6.16.1 Upon request from the shipowner, the Register may carry out an expertise of the technical documentation and survey of the ship in order to confirm that the ship is equipped in accordance with 4.3 of Mooring Equipment Guidelines (MEG 4), published by the Oil Companies International Marine Forum, 2018, as amended.

5.6.16.2 The chain bearing surface of the bow fairleads described in 4.3 of MEG 4 shall have a diameter at least seven times that of the associated chain.

5.6.16.3 In case of satisfactory results of the review of the technical documentation by the RS Head Office or RS Branch Office duly authorized by the RS Head Office as well as satisfactory survey of the equipment by the RS surveyor, the document of compliance is issued confirming the fulfilment of the provisions of this para and 4.3 of Mooring Equipment Guidelines (MEG 4). The possibility of issuing the document of compliance and the document content shall be agreed upon with the RS Head Office."

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

26 **Para 7.7.1.1** is replaced by the following text:

"7.7.1.1 Materials for manufacture of fittings, expansion joints and formed components of pipelines to be installed on the open decks, as well as in the open unheated spaces shall meet the requirements of 7.12.1 — 7.12.6.

For products and seals manufactured of rubber as well as materials of organic origin in fittings, cold endurance type tests may be replaced by checking the operability of assembled fittings in low temperatures. For this purpose, a sample of each standard series of valves shall be conditioned within 6 h at a temperature of 10 °C lower than design ambient temperature indicated in brackets of the distinguishing mark **WINTERIZATION(DAT)**. Immediately after removal from the refrigerating chamber, 10 cycles of closing and opening of the fittings shall be made, after which hydraulic tests are carried out with working pressure at normal temperature."

10 REQUIREMENTS FOR BALTIC ICE CLASS SHIPS

27 **Table 10.7.6.2.3-1** is replaced by the following one:

"Table 10.7.6.2.3-1

	Open propeller	Ducted propeller
<i>B</i> ₁	0,00328	0,00223
<i>B</i> ₂	1,0076	1,0071
<i>B</i> ₃	2,101	2,471

28 **Appendix to Section 10. Note 4** is replaced by the following text:

"4. The dimensions of all letters shall be the same as those used in the load line mark."

19 REQUIREMENTS FOR HULL ICE-STRENGTHENING STRUCTURES OF SHIPS INTENDED FOR STERN-FIRST OPERATION

29 **New Chapter 19.3** is introduced reading as follows:

"19.3 SUBDIVISION

19.3.1 For the purpose of damage trim and stability calculations of the ships of ice classes **Arc4 — Arc9** with the distinguishing mark **DAS** in the class notation, the longitudinal extent $0,045L_{ice}$ shall be assumed for ice damage in the forward and aft part of the hull, if the centre of damage lies within $0,4L_{ice}$ from the forward and aft perpendiculars, respectively, and $0,015L_{ice}$ in other areas."