CIRCULAR LETTER

No. 314-18-1761c

dated 18.05.2022

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2022, ND No. 2-020101-152-E

Item(s) of supervision:

ships under construction, technical documentation

Entry-into-force date:

15.06.2022

Cancels / amends / adds Circular Letter No.

dated

Number of pages:

1+4

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part III "Equipment, Arrangements and Outfit"

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 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.
- Apply the provisions of the Circular Letter during review and approval of the technical documentation on ships contracted for construction or conversion on or after 15.06.2022, in the absence of a contract, on ships, the keels of which are laid, or which are at a similar stage of construction on or after 15.06.2022.

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

Part III: paras 2.9.12, 7.2.1.1, 7.2.2.4, 7.2.2.6, 7.10.2.1, 7.10.2.2, 7.12.4.2, 8.5.4.3 and 9.1.1

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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 | Para 2.9.12 | Requirement for arrangement of rudder stops has been specified | 314-18-1761c of 18.05.2022 | 15.06.2022 |
| 2 | Para 7.2.1.1 | Requirement for thickness of side scuttle glasses has been specified | 314-18-1761c of 18.05.2022 | 15.06.2022 |
| 3 | Para 7.2.2.4 | Requirements for type of side scuttle glasses has been specified | 314-18-1761c of 18.05.2022 | 15.06.2022 |
| 4 | Para 7.2.2.6 | Requirement for thickness of side scuttle glasses has been specified | 314-18-1761c of 18.05.2022 | 15.06.2022 |
| 5 | Para 7.10.2.1 | Requirement for fishing vessels has been rearranged as a separate paragraph | 314-18-1761c of 18.05.2022 | 15.06.2022 |
| 6 | Para 7.10.2.2 | Requirement regarding submission of technical background for reduction of the coamings height has been specified | 314-18-1761c of 18.05.2022 | 15.06.2022 |
| 7 | Para 7.12.4.2 | Requirement for doors has been specified in accordance with SOLAS regulation II-1/13-1 | 314-18-1761c of 18.05.2022 | 15.06.2022 |
| 8 | Para 8.5.4.3 | Requirement for number of stairway handrails has been specified | 314-18-1761c of 18.05.2022 | 15.06.2022 |
| 9 | Para 9.1.1 | Application of requirements for emergency outfit has been specified | 314-18-1761c of 18.05.2022 | 15.06.2022 |

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2022, ND No. 2-020101-152-E

PART III. EQUIPMENT, ARRANGEMENTS AND OUTFIT

2 RUDDER AND STEERING GEAR

- 1 **Para 2.9.12** is replaced by the following text:
- "2.9.12 The rudder shall be provided with a system of rudder stops permitting to put the rudder over either side only to an angle β° :

$$(\alpha^{\circ} + 1^{\circ}) \le \beta^{\circ} \le (\alpha^{\circ} + 1,5^{\circ})$$
 (2.9.12-1)

where α° = maximum hard-over angle to which the steering gear control system is adjusted but not over 35°; technical background for the greater hard-over angle, based on the constructional features of the steering gear, shall be submitted by the designer.

All the parts of the system of rudder stops, including those which are at the same time the parts of the rudder actuator, shall be calculated to take forces corresponding to an ultimate reverse torque M_{val} , in kN·m, from the rudder of not less than

$$M_{ult} = 1,135R_{eH}d^3 \cdot 10^{-4} (2.9.12-2)$$

where d = actual diameter of the rudder stock head, in cm; R_{eH} = upper yield stress of the rudder stock material, in MPa.

The stresses in these parts shall not exceed 0,95 times the upper yield stress of their material. The rudder stops of the system may be fitted on the sternframe, deck platform, bulkhead or other structural members of the ship's hull. These stops may be built in with the actuator design.

Where an active rudder is installed and putting the rudder over to an angle exceeding the maximum one is required, arrangement of stops at an angle provided by the rudder design may be allowed.".

7 OPENINGS IN HULL, SUPERSTRUCTURES AND DECKHOUSES AND THEIR CLOSING APPLIANCES

- 2 **Para 7.2.1.1** is replaced by the following text:
- **"7.2.1.1** The number of side scuttles in the shell plating below the freeboard deck shall be reduced to a minimum compatible with the design and proper working of the ship.

Fishing vessels mooring alongside each other or other ships at sea shall not have side scuttles under freeboard deck in the mooring zone, wherever possible. If in this zone side scuttles are fitted in the shell plating, they shall be so positioned that the possibility of their damage during mooring operations is excluded.

No side scuttles are permitted within the boundaries of the ice belt of the shell plating specified in Part II "Hull" in icebreakers and ice class ships.

It is permitted to reduce the thickness of side scuttle glasses provided that their strength characteristics are confirmed by comparative tests with hardened glass according to the relevant national or international standards.".

"7.2.2.4 The main frame, glass holder, deadlight and glass retaining ring shall be manufactured from steel, brass, aluminium alloy or other material approved by the Register.

The ear-nuts and nuts being screwed off by a special wrench shall be made of corrosion-resistant material.

Glass used for the side scuttles shall be hardened.

Other types of safe glasses with strength characteristics not less than those of the hardened ones may be used for the side scuttles.".

4 **Para 7.2.2.6** is replaced by the following text:

"7.2.2.6 The construction of the windows shall comply with the requirements of 7.2.2.2 — 7.2.2.4, except for the requirements for the deadlights.

The thickness of the window glass t, in mm, shall be not less than determined by the formula

$$t = 0.32kb\sqrt{p} (7.2.2.6-1)$$

where

b =lesser clear size of the window, in m;

p = pressure head, in kPa, calculated according to 2.12.3 of Part II "Hull"; distance z₁ being taken up to the middle of the window height;

k = factor determined by the formula

$$k = 13,42 - 5,125(b/a)^2$$
 (7.2.2.6-2)

where a = greater clear size of the window, in m.

It is permitted to reduce the thickness of window glasses in accordance with that specified in 7.2.2.1.".

5 **Para 7.10.2.1** is replaced by the following text:

"7.10.2.1 The height of hatchway coamings in positions 1 and 2 shall be at least 600 mm and 450 mm, respectively.

If the length of the ship is less than 24 m, the height of the coamings may be reduced down to 380 mm for ships of restricted area of navigation R2, R2-RSN, R2-RSN(4,5) and R3-RSN and down to 300 mm for ships of restricted area of navigation R3.

In ships of restricted area of navigation **R3** having the length of 24 m and over (except passenger ships) the specified height of cargo hatchway coamings may be reduced from 600 mm down to 450 mm and from 450 mm down to 380 mm, respectively.

In fishing vessels, the height of cargo hatchway coamings in position 2 may be reduced down to 300 mm.".

6 **Para 7.10.2.2** is replaced by the following text:

"7.10.2.2 The height of coamings of the hatchways specified in 7.10.1.2 may be reduced as compared to that required by 7.10.2.1 or the coamings may be omitted entirely provided that the cover tightness and securing means are found efficient and the following is submitted:

for hatches that are closed at sea technical background containing operational limitations considering designation and nature of hatch application;

for hatches that may be open at sea — technical background containing assessment of seaworthiness and deck flooding as well as confirmation that the safety of the ship is provided at any sea condition in accordance with the designated area of navigation.".

7 **Para 7.12.4.2** is replaced by the following text:

"7.12.4.2 Doors provided to ensure the watertight integrity of internal openings which are used while at sea shall be sliding doors with horizontal or vertical motion, they shall be both hand and power-operated.

Access doors and access hatch covers normally closed at sea, intended to ensure the watertight integrity of internal openings, shall be provided with means of indication locally and on the bridge showing whether these doors or hatch covers are open or closed. A notice shall be affixed to each such door or hatch cover to the effect that it shall not be left open.

If hand-operated, it shall be possible to open and close the door from both sides of the bulkhead with the ship listed 30°.

If power-operated, closing of the doors from the control station on the navigation bridge shall be possible.".

8 ARRANGEMENT AND EQUIPMENT OF SHIP'S SPACES. OTHER ARRANGEMENTS AND EQUIPMENT

- 8 **Para 8.5.4.3** is replaced by the following text:
- **"8.5.4.3** Stairways used as means of escape on cargo ships shall be at least 700 mm wide and shall be fitted with a handrail on at least one side. Stairways with a width of 1800 mm and more shall be fitted with handrails on each side. In cargo ships of less than 500 gross tonnage the width of stairways may be 600 mm. Angle of slope of ladders shall be usually 45° but not greater than 50°, in the machinery and in small spaces not greater than 60°. In ships of less than 500 gross tonnage and fishing vessels in case of insufficient space at egress from the stairway, the stairways may be installed with the angle of slope of ladders of 55° in accommodation and service spaces, with 60° on decks. The size of doors providing an access to any stairway shall be of the same size as the stairway."

9 EMERGENCY OUTFIT

- 9 **Para 9.1.1** is replaced by the following text:
- **"9.1.1** The requirements of this Section are optional. The shipowner, at his discretion, shall determine the necessity and completeness of emergency outfit on board, considering its service area, dimensions as well as national standards of the flag state."