CIRCULAR LETTER

No. 314-18-1636c

dated 04.10.2021

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2021, ND No. 2-020101-138-E considering the experience in application of the Rules

Item(s) of supervision:

ships under construction

Entry-into-force date:

01.11.2021

Cancels / amends / adds Circular Letter No.

dated

Number of pages:

1 + 5

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.
- 2. Apply provisions of the Circular Letter during review and approval of the technical documentation on ships contracted for construction or conversion on or after 01.11.2021, 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 01.11.2021, as well as during review and approval of the technical documentation on ships, the delivery of which is on or after 01.11.2021.

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

21-229320

Part III: paras 3.1.3, 3.6.2, 7.4.3.5, 7.12.1.1, 7.12.8, 8.5.4, 8.5.4.2, 8.5.4.3 and 8.8.2

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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 3.1.3	Requirements for selection of the Equipment Number have been specified	314-18-1636c of 04.10.2021	01.11.2021
2	Para 3.6.2	Requirements for device for securing and releasing the inboard end of the chain cable have been harmonized with the international requirements	314-18-1636c of 04.10.2021	01.11.2021
3	Para 7.4.3.5	Calculation formulae for securing and locking devices have been specified	314-18-1636c of 04.10.2021	01.11.2021
4	Para 7.12.1.1	Reference to the requirements for fishing vessels has been introduced	314-18-1636c of 04.10.2021	01.11.2021
5	Para 7.12.8	New para has been introduced containing requirements for watertight closing appliances for fishing vessels	314-18-1636c of 04.10.2021	01.11.2021
6	Para 8.5.4	Section has been renamed	314-18-1636c of 04.10.2021	01.11.2021
7	Para 8.5.4.2	Requirements for stairways in escape routes on passenger ships have been specified	314-18-1636c of 04.10.2021	01.11.2021
8	Para 8.5.4.3	Requirements for stairways in escape routes on cargo ships have been specified	314-18-1636c of 04.10.2021	01.11.2021
9	Para 8.8.2	Requirements for opening of shipside pilot doors have been specified	314-18-1636c of 04.10.2021	01.11.2021

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2021,

ND No. 2-020101-138-E

PART III. EQUIPMENT, ARRANGEMENTS AND OUTFIT

3 ANCHOR ARRANGEMENT

- 1 **Para 3.1.3** is replaced by the following text:
- **"3.1.3** For all ships other than fishing vessels, the anchoring equipment shall be selected from Table 3.1.3-1, for fishing vessels from Table 3.1.3-2. For fishing vessels, when Equipment Number exceeds 720, the anchoring equipment shall be selected from Table 3.1.3-1.

The Equipment Number is determined in compliance with 3.2 for ships of unrestricted service and of restricted area of navigation **R1**, and is reduced:

- by 15 % for ships of restricted areas of navigation **R2**, **R2-RSN**, **R2-RSN(4,5)** and **R3-RSN**; by 25 % for ships of restricted area of navigation **R3**, taking into account the provisions specified in 3.1.4, 3.3.1, 3.3.2, 3.4.1, 3.4.2, and 3.4.3.".
- 2 **Para 3.6.2** is replaced by the following text:
 - "3.6.2 Device for securing and releasing the inboard end of the chain cable.
- **3.6.2.1** The parts of the device for securing and releasing the inboard end of the chain cable shall be able to withstand a force not less than 15 % BL nor more than 30 % BL (where BL = breaking load of the chain cable).
- **3.6.2.2** The fastening shall be provided with a mean suitable to permit, in case of emergency, an easy slipping of the chain cables to sea, operable from an accessible position outside the chain locker.
- **3.6.2.3** In fiber-reinforced plastic ships, the device for securing and releasing the inboard end of the chain cable shall be fastened by bolts with the use of steel gaskets on both sides of the bulkhead. Bolt connections shall comply with the requirements of 1.7.4, Part XVI "Structure and Strength of Fiber-Reinforced Plastic Ships"."

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

- 3 **Para 7.4.3.5** is replaced by the following text:
- "7.4.3.5 Securing and locking devices shall be designed to withstand forces F_1 or F_2 , in kN, determined by the formulae:

for doors opening inwards:

external force
$$F_1 = AP + p_p l_p; (7.4.3.5-1)$$

internal force

$$F_2 = F_c + 10Q; (7.4.3.5-2)$$

for doors opening outwards:

external force

$$F_1 = AP;$$
 (7.4.3.5-3)

internal force

$$F_2 = F_c + 10Q + p_p l_p (7.4.3.5-4)$$

where for $A,\,p_p$ и l_p , refer to 7.4.2.6;

for *P*, refer to 7.4.3.4;

 F_c = an accidental force due to loose of cargo, to be uniformly distributed over the area A and to be taken not less than 300 kN or 5A, in kN, whichever is the greater.

For small doors, such as bunker doors or pilot doors, the value of F_c may be reduced provided the appropriate technical background has been submitted. However, the value of F_c may be taken as zero, provided an additional structure such as an inner ramp is fitted, which is capable of protecting the door from accidental forces due to loose cargoes;

for Q, refer to 7.4.2.6.

Supporting structures of doors shall be designed to withstand forces F_3 and F_4 , in kN, determined by the formulae:

external force

$$F_3 = AP;$$
 (7.4.3.5-5)

internal force

$$F_4 = F_C + 10Q. (7.4.3.5-6)$$
".

4 **Para 7.12.1.1** is replaced by the following text:

"7.12.1.1 Unless expressly provided otherwise, this Chapter covers ships to which the requirements of Part V "Subdivision" apply.

For other ships, the requirements of this Chapter apply to bulkheads which installation is covered by 2.7.1.3 of Part II "Hull"; for these ships, the requirements may be relaxed provided the analysis confirming safety of the ship has been submitted.

In ships indicated in 7.12.6.1, the requirements of 7.12.2 — 7.12.5 may be relaxed for doors fitted in watertight subdivision bulkheads dividing a cargo space from an adjoining cargo space provided the requirements of 7.12.6 are met.

Doors and closing appliances in watertight bulkheads of fishing vessels shall comply with the requirements of 7.12.8.".

5 New **para 7.12.8** is introduced reading as follows:

"7.12.8 Watertight doors of fishing vessels.

- **7.12.8.1** The number of openings in watertight bulkheads shall be reduced to the minimum compatible with the general arrangements and operational needs of the vessel. Openings shall be fitted with watertight closing appliances. Watertight doors shall be of an equivalent strength to the adjacent unpierced structure.
- **7.12.8.2** In vessels of less than 45 m in length, such doors may be of the hinged type, which shall be capable of being operated locally from each side of the door and shall normally be kept closed at sea. A notice shall be attached to the door on each side to state that the door shall be kept closed at sea.
 - **7.12.8.3** In vessels of 45 m in length and over, watertight doors shall be of the sliding type in:
- .1 spaces where it is intended to open them at sea and if located with their sills below the deepest operating waterline, except where it is impracticable or unnecessary taking into account the type and operation of the vessels; and
 - .2 the lower part of a machinery space where there is access from it to a shaft tunnel;
 - .3 otherwise watertight doors may be of the hinged type.
- **7.12.8.4** Sliding watertight doors shall be capable of being operated when the vessel is listed up to 15° either way.

- **7.12.8.5** Sliding watertight doors whether manually operated or otherwise shall be capable of being operated locally from each side of the door; in vessels of 45 m in length and over, these doors shall also be capable of being operated by remote control from an accessible position above the working deck except when the doors are fitted in crew accommodation spaces.
- **7.12.8.6** Means shall be provided at remote operating positions to indicate when a sliding door is open or closed.".

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

- 6 **Para 8.5.4** is replaced by the following text:
 - "8.5.4 Stairways and vertical ladders.".
- 7 **Para 8.5.4.2** is replaced by the following text:
- **"8.5.4.2** On passenger ships and special purpose ships carrying more than 60 persons, in escape routes providing access to the lifeboat and liferaft embarkation deck, the following conditions shall be met:
- .1 the width of stairways shall be not less than 900 mm, with handrails on each side. The minimum width of stairways shall be increased by 10 mm for every one person in excess of 90 persons. The maximum width between handrails where stairways are wider than 900 mm shall be 1800 mm. The total number of persons to be evacuated by such stairways shall be assumed to be two-thirds of the crew and the total number of passengers in the areas served by such stairways;
 - .2 all stairways sized for more than 90 persons shall be aligned fore and aft;
- **.3** the doorways, corridors and intermediate landings included in means of escape shall be sized in the same manner as stairways;
- .4 stairways shall not exceed 3,5 m in vertical rise without the provision of a landing and shall not have an angle of inclination greater than 45°;
- .5 with the exception of intermediate landings, the landings at each deck level shall not be less than 2 m² in area and shall increase by 1 m² for every 10 persons provided for in excess of 20 persons but need not exceed 16 m², except for those landings servicing public spaces having direct access onto the stairway enclosure;
- .6 in any case, the width of stairway forming means of escape from enclosed spaces within each main vertical zone shall be in accordance with the requirements of Appendix 1 to this Part.".
- 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 either 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 small spaces not greater than 60°. In ships of less than 500 gross tonnage in case of insufficient space at egress from the stairway with 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 **Para 8.8.2** is replaced by the following text:
- **"8.8.2** Ships engaged on voyages in the course of which pilots are likely to be employed shall be provided with pilot transfer arrangements. Construction and position of pilot transfer arrangements shall comply with the requirements specified in regulation V/23 of SOLAS-74, as amended (hereinafter, SOLAS), and IMO resolutions A.1045(27) and A.1108(29).

Interpretation: sub-paragraphs 1 and 2 of SOLAS regulation V/23.3.3 address two different and distinct arrangements — the former when only a pilot ladder is used; — the latter when

a combined arrangement of "an accommodation ladder used in conjunction with the pilot ladder" is used.

The length of climb on a single ladder shall be not more than 9 m regardless of the trim or list of the ship.

Shipside doors used for pilot transfer shall not open outwards.

SOLAS regulation V/23.3.3.2 and Section 3 of IMO resolution A.1045(27) apply to a combined arrangement of "an accommodation ladder used in conjunction with the pilot ladder" for "safe and convenient access to, and egress from, the ship" for which a 15° list requirement does not apply."