CIRCULAR LETTER

No. 314-26-1611c

dated 10.08.2021

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:

01.09.2021

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 IV "Stability"

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 the provisions of the Circular Letter during review and approval of the technical documentation on ships contracted for construction or conversion on or after 01.09.2021, 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 01.09.2021, as well as during review and approval of the technical documentation on ships, the delivery of which is on or after 01.09.2021.

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

Part IV: paras 1.2.1, 1.4.6.3, 1.4.11.3, 1.4.12, 1.6.1, 1.6.4, 3.1.3, 3.2.3.1, 3.2.6, 3.3.2, 3.3.9, 3.4.1.1, 3.5.6, 3.5.11, 3.7.2.1.1 and 4.1.1.1.1

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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 1.2.1	Definitions "Diagram of limiting moments", "Capsizing moment", "A special facility" and "Universal diagram" have been deleted	314-26-1611c of 10.08.2021	01.09.2021
2	Para 1.4.6.3	Requirement for calculation of windage area lever has been specified	314-26-1611c of 10.08.2021	01.09.2021
3	Para 1.4.11.3	Requirement for the Booklet as per SOLAS regulation VI/7.2 has been specified	314-26-1611c of 10.08.2021	01.09.2021
4	Para 1.4.12	Terminology has been harmonized with that of 12.2 of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships	314-26-1611c of 10.08.2021	01.09.2021
5	Para 1.6.1	Requirements have been specified considering 2.1.1 of part A of the International Code on Intact Stability (2008 IS Code)	314-26-1611c of 10.08.2021	01.09.2021
6	Para 1.6.4	Requirement has been specified considering the experience of documentation review	314-26-1611c of 10.08.2021	01.09.2021
7	Para 3.1.3	Requirements have been specified considering the experience of documentation review	314-26-1611c of 10.08.2021	01.09.2021
8	Para 3.2.3.1	Requirements have been specified considering 3.4.2.2 of part B of the International Code on Intact Stability (2008 IS Code)	314-26-1611c of 10.08.2021	01.09.2021
9	Para 3.2.6	Repeated requirement has been deleted	314-26-1611c of 10.08.2021	01.09.2021
10	Para 3.3.2	Requirement for procedure of accounting of buoyancy of timber deck cargo has been specified — the requirement has been transferred from 3.3.9	314-26-1611c of 10.08.2021	01.09.2021
11	Para 3.3.9	Requirement for procedure of accounting of buoyancy of timber deck cargo has been transferred to 3.3.2	314-26-1611c of 10.08.2021	01.09.2021
12	Para 3.4.1.1	Requirements for loading cases where stability is checked have been specified considering IMO circular MSC.1/Circ.1537	314-26-1611c of 10.08.2021	01.09.2021
13	Para 3.5.6	Requirement has been specified considering the experience of documentation review	314-26-1611c of 10.08.2021	01.09.2021

Nos.	Amended paras/chapters/ sections	Information on amendments	Number and date of the	Entry-into-force date
			Circular Letter	04.00.0004
14	Para 3.5.11	Requirement has been specified considering the area of application of the Rules for the Classification and Construction of Small Sea Fishing Vessels	314-26-1611c of 10.08.2021	01.09.2021
15	Para 3.7.2.1.1	Repeated requirement has been deleted	314-26-1611c of 10.08.2021	01.09.2021
16	Para 4.1.1.1.1	Requirements for determination of heeling moment M_L have been specified considering IMO resolution MSC.415(97)	314-26-1611c of 10.08.2021	01.09.2021

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

ND No. 2-020101-138-E

PART IV. STABILITY

1 GENERAL

- 1 **Para 1.2.1.** Definitions "Diagram of limiting moments", "Capsizing moment", "A special facility" and "Universal diagram" are deleted.
- 2 **Para 1.4.6.3** is replaced by the following text:
- "1.4.6.3 Windage area lever z_{ν} shall be determined as a vertical distance, in m, between the centre of the windage area and the centre of the underwater hull lateral area projected on the centreline for an upright ship in smooth water, unless otherwise stated. The position of the centre of windage area and the centre of the underwater hull lateral area is determined by a method generally applied for determining the coordinates of the centre of gravity for a plane figure."
- 3 **Para 1.4.11.3** is replaced by the following text:
- **"1.4.11.3** Where bulk cargoes other than grain are carried, the Booklet as per SOLAS regulation VI/7.2 (specifying the information on stability and strength during loading, unloading and stowage of bulk cargoes other than grain) shall be available on board, which shall be developed in accordance with 1.4.9.7, Part II "Hull"."
- 4 **Para 1.4.12** is replaced by the following text:

"1.4.12 Requirements for onboard software for stability calculations.

Where the ship's trim and stability is determined using software, the latter shall be approved by the Register in accordance with the requirements of 12.2 of Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships.

Availability of the onboard software approved by the Register to calculate the ship's trim and stability shall not be a substitute for any section of the approved Stability Booklet.".

- 5 **Para 1.6.1** is replaced by the following text:
- **"1.6.1** Under all loading conditions, the ship's stability, except for floating cranes, crane ships, pontoons, floating docks and berth-connected ships shall comply with the following requirements:
- .1 the ship shall withstand, without capsizing, simultaneously the effect of dynamically applied wind pressure and rolling the parameters of which are determined as specified in Section 2:
- .2 numerical values of the parameters of the righting lever curve for the ship on still water and the values of the corrected initial metacentric height shall not be below those specified in Section 2:
- **.3** the effect of consequences of probable icing upon stability shall be taken into account in accordance with Section 2;
 - .4 stability of a ship shall comply with additional requirements of Section 3.".

6 **Para 1.6.4** is replaced by the following text:

"1.6.4 When permanent restrictions on the area of navigation imposed on a ship are expanded or changed, the seaworthiness shall be additionally verified according to the risk assessment methodology for evaluation of loss of the ship's dynamic stability, specified in the Collection of Regulating Documents. Book Twenty Four, 2016 (refer to the circular MSC.1/Circ.1627), or other methodology agreed with the Register.".

3 ADDITIONAL REQUIREMENTS FOR STABILITY

- 7 **Para 3.1.3** is replaced by the following text:
 - **"3.1.3** The angle of static heel on account of turning shall not exceed 10°.".
- 8 **Para 3.2.3.1** is replaced by the following text:
- ".1 ship having a draught to the summer load line (with regard to 3.2.1.1), with holds and 'tween decks filled by homogeneous cargo, with deck cargo, full stores and with water ballast tanks empty:".
- 9 **Para 3.2.6** is replaced by the following text:
- **"3.2.6** In transporting non-cohesive bulk cargoes like grain having an angle of repose less than or equal to 30° as specified in the International Maritime Solid Bulk Cargoes Code (IMSBC Code), the stability shall comply with the provisions of Rules for the Carriage of Grain."
- 10 **Para 3.3.2** is replaced by the following text:
- **"3.3.2** The stowage of timber cargo shall comply with the requirements of the Load Line Rules for Sea-Going Ships as well as with the provisions of the Stability Booklet or special instructions.

In case the stowage of deck timber cargo does not comply with the requirements of the Load Line Rules for Sea-Going Ships, the buoyancy of timber deck cargo shall not be taken into consideration in the calculations of stability, while the ship stability shall comply with the requirements of 2.1 - 2.3."

- 11 **Para 3.3.9** is replaced by the following text:
- **"3.3.9** The requirements of this Chapter apply to other types of ships when they are used for the carriage of deck timber cargo.".
- 12 **Para 3.4.1.1** is replaced by the following text:
- **".1** ship having draught to summer load line¹, fully loaded with cargo, with full stores and with water ballast tanks empty;

13 **Para 3.5.6** is replaced by the following text:

"3.5.6 For ships in the loading condition of 3.5.4 in which the requirements of 2.2 for the righting lever curve cannot be fulfilled due to flooding of fish holds through hatches remaining open during fishing operations, the angle of flooding through such hatches shall not be less than 20°.".

In case the ship is assigned with a tropical load line, the stability shall be checked at draught up to the tropical load line.".

14 **Para 3.5.11** is replaced by the following text:

"3.5.11 Stability of fishing vessels of less than 24 m in length shall be checked in compliance with the requirements of Part IV "Stability and Freeboard" of the Rules for the Classification and Construction of Small Sea Fishing Vessels."

15 **Para 3.7.2.1.2** is replaced by the following text:

".2 minimum operational draught at which towing operations may be carried out, with 10 % of stores;".

4 REQUIREMENTS FOR THE STABILITY OF FLOATING CRANES, CRANE SHIPS, PONTOONS, DOCKS AND BERTH-CONNECTED SHIPS

16 **Para 4.1.1.1.1** is replaced by the following text:

".1 ships engaged in lifting operations in which the maximum heeling moment due to the lift is greater than that calculated by the formula

$$M_L = 0.67 \cdot \Delta \cdot GM \cdot \left(\frac{f}{B}\right) \tag{4.1.1.1.1}$$

where M_L = value for the heeling moment, in t·m, induced by the change of the centre of gravity of cargo handling gear and the load in the cargo handling gear;

GM = metacentric height, in m, with free surface correction, including the effect of the load in the cargo handling gear;

f = minimum freeboard, in m, measured from the upper side of the weather deck to the waterline;

B = breadth of the ship, in m;

 Δ = displacement of the ship, including the lift load, in t.".