

**CIRCULAR LETTER** 

No. 314-30-1445c

dated 01.10.2020

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2020, ND No. 2-020101-124-E

Item(s) of supervision:

ships under construction

Entry-into-force date:

Valid till: -

Validity period extended till: -

08.11.2020

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 08.11.2020, 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 08.11.2020, as well as during review and approval of the technical documentation on ships, the delivery of which is on or after 08.11.2020.

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

Part IV: Chapter 1.3, paras 1.3.2, 1.4.2.2, 1.4.2.3, 1.5.1.6, 1.5.5, 2.1.4.1, 2.2.3, 2.4.1, 3.4.1, 3.4.3, 3.4.6, 3.11.2 — 3.11.11, 4.2.5.1.2 and 4.3.3.3, Table 2.1.4.1

Person in charge:

Vitaliy S. Odegov

314

+7 812 605-05-29 ext. 2229

"Thesis" System No. 20-205918

## 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-<br>force date |
|------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------|
| 1    | Chapter 1.3                     | Chapter heading has been replaced taking into account the amendments introduced in the text of the Chapter                   | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 2    | Para 1.3.2                      | Amendments have been introduced to harmonize with the Rules for the Classification Surveys of Ships in Service               | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 3    | Para 1.4.2.2                    | Amendments have been introduced taking into account 7.5 of Part III "Equipment, Arrangements and Outfit"                     | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 4    | Para 1.4.2.3                    | Amendments have been introduced taking into account 7.5 of Part III "Equipment, Arrangements and Outfit"                     | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 5    | Para 1.5.1.6                    | Requirements for inclining test of fishing vessels have been specified                                                       | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 6    | Para 1.5.5                      | Requirements for light-weight check of passenger ships and fishing vessels have been specified                               | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 7    | Table 2.1.4.1                   | Note specifying the usage of wind gustiness addition <i>m</i> for ships of restricted area of navigation has been introduced | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 8    | Para 2.2.3                      | Requirements for ships with ratio <i>B/D</i> >2,5 have been specified                                                        | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 9    | Para 2.4.1                      | Para has been amended to harmonize with 3.3, 3.7, 3.8 and 4.1                                                                | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 10   | Para 3.4.1                      | Para has been amended taking into account the definition "A tanker" given in Part I "Classification"                         | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 11   | Para 3.4.3                      | Para has been amended in connection with deletion of duplicated requirement                                                  | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 12   | Para 3.4.6                      | Para has been deleted in connection with transfer of requirements to 3.4.3                                                   | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |

| Nos. | Amended paras/chapters/sections | Information on amendments                                                                                                                                                                    | Number and date of the Circular Letter | Entry-into-<br>force date |
|------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------|
| 13   | Para 3.11.2 — 3.11.11           | Para 3.11.2 has been deleted in connection with deletion of duplicated requirement. Existing paras 3.11.3 — 3.11.11 and references thereto have been renumbered 3.11.2 — 3.11.10 accordingly | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 14   | Para 4.2.5.1.2                  | Requirement for pontoons has been specified                                                                                                                                                  | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |
| 15   | Para 4.3.3.3                    | Requirements for docks have been specified                                                                                                                                                   | 314-30-1445c<br>of 01.10.2020          | 08.11.2020                |

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

#### **PART IV. STABILITY**

#### 1 GENERAL

1 **Chapter 1.3.** The heading is replaced by the following text:

#### "1.3 SCOPE OF TECHNICAL DOCUMENTATION REVIEW".

- 2 **Para 1.3.2** is replaced by the following text:
  - **"1.3.2** For every ship, the following documentation shall be submitted to the Register:
- **.1** prior to the commencement of ship's construction and conversion: technical documentation relating to the ship stability;
  - .2 during ship's construction, conversion and trials:

Stability Booklet;

Guidelines for Safe Ballast Water Exchange at Sea.".

- 3 **Para 1.4.2.2** is replaced by the following text:
- **"1.4.2.2** When calculating the cross-curves of stability, full account may be taken of the tiers of superstructure complying with the requirements of 7.5, Part III "Equipment, Arrangements and Outfit" for enclosed superstructures;

If a bridge or poop complies with the requirements of 7.5, Part III "Equipment, Arrangements and Outfit", but the doors in their bulkheads provide the only exits to the deck, and the upper edge of the sills of the superstructure doors in a fully loaded ship immerses at a heeling angle less than 60°, the effective height of superstructures shall be assumed to be half their actual height. If the upper edge of the door sills of a fully loaded ship immerses at a heeling angle equal to, or over, 60°, its effective height above the freeboard deck is taken to be its actual height."

- 4 **Para 1.4.2.3** is replaced by the following text:
- **"1.4.2.3** When calculating the cross-curves of stability, full account may be taken of the tiers of deckhouse on the freeboard deck, which:
- **.1** meet the requirements of 7.5, Part III "Equipment, Arrangements and Outfit" to the enclosed deckhouse:
  - .2 have an additional exit to the deck above.

If the deckhouses meet the requirements of 7.5, Part III "Equipment, Arrangements and Outfit", but there is no additional exit to the deck above, such deckhouses shall not be taken into account in calculations of the cross-curves of stability, however, any deck openings inside such deckhouses are assumed as closed.

Openings below the tiers of deckhouse above the freeboard deck are also assumed as closed.

The deckhouses whose closures do not comply with the requirements set forth in 7.5, Part III "Equipment, Arrangements and Outfit " shall not be considered in calculations of the cross-curves of stability. Any deck openings below them are regarded as Taclosed only if their coamings and means of closing comply with the requirements of 7.3, 7.7 — 7.10, Part III "Equipment, Arrangements and Equipment"."

#### 5 **Para 1.5.1.6** is replaced by the following text:

".6 fishing vessels over 30 m in length, in service, — after 10 years from the date of build or last inclining if stipulated by 1.5.5;".

#### 6 **Para 1.5.5** is replaced by the following text:

- "1.5.5 To determine whether ships specified in 1.5.1.5 and 1.5.1.6 shall be inclined, a light-weight check shall be carried out at periodical intervals:
  - .1 passenger ships;
  - .2 fishing vessels over 30 m in length after 10 years from the date of build or last inclining. Light-weight check shall be carried out at intervals not exceeding five years.

The ship shall be re-inclined whenever, in comparison with the originally approved Stability Booklet, the deviation of the light-ship displacement exceeds 2 % or the deviation of longitudinal centre of gravity exceeds 1 % of the ship's length is found out as a result of a light-weight check.".

#### 2 GENERAL REQUIREMENTS FOR STABILITY

#### 7 **Table 2.1.4.1** is replaced by the following one:

"Table 2.1.4.1

| Area of navigation     | Assumed wind pressure $p_{\nu}$ , in Pa | т    |
|------------------------|-----------------------------------------|------|
| Unrestricted           | 504                                     | 0,5  |
| Restricted R1          | 353                                     | 0,5  |
| Restricted R2          | 252                                     | 0,52 |
| Restricted R2-RSN      | 252                                     | 0,52 |
| Restricted R2-RSN(4,5) | 166                                     | 0,54 |
| Restricted R3-RSN      | 119                                     | 0,55 |

Note. If the ship of restricted area of navigation is covered by the International Code on Intact Stability (2008 IS Code), assumed wind pressure and m shall be taken equal to that for the ship of unrestricted area of navigation.

#### 8 **Para 2.2.3.** The first paragraph is replaced by the following text:

"2.2.3 Ships with ratio B/D > 2.5 may be allowed<sup>1</sup> to navigate having a reduced angle of heel where the maximum of righting lever curve occurs  $\theta_{max}$ , provided the following criteria are satisfied:

#### 9 **Para 2.4.1** is replaced by the following text:

"2.4.1 For ships operating during winter periods and within winter seasonal zones set up by the Load Line Rules for Sea-Going Ships, in addition to the standard loading conditions, stability shall be checked taking into account the icing in accordance with the instructions of this Chapter. In the ice accretion calculation, account shall be taken of increase in displacement, height of the centre of gravity and windage area due to icing. The stability calculation under icing shall be carried out for the worst loading condition as to stability. When checking stability under icing, the mass of the ice is considered as an overload and is not included in the ship's deadweight.

When checking stability of timber carriers, the icing consideration shall be made in accordance with 3.3.7, of tugs — in accordance with 3.7.1.3, and of vessels of dredging fleet — in accordance with 3.8.6.".

٠.

<sup>&</sup>quot;<sup>1</sup> If the ship is covered by the International Code on Intact Stability (2008 IS Code), the possibility of application of criteria specified in 2.2.3 shall be agreed upon with the Administration.".

#### **3 ADDITIONAL REQUIREMENTS FOR STABILITY**

- 10 **Para 3.4.1.** The first paragraph is replaced by the following text:
  - "3.4.1 Stability of tankers shall be checked for the following loading conditions:".
- 11 **Para 3.4.3** is replaced by the following text:
- "3.4.3 All oil tankers shall be fitted with a stability instrument approved by the Register, capable of verifying compliance with intact and damage stability requirements.".
- 12 **Para 3.4.6** is deleted.
- 13 **Para 3.11.2** is deleted.
- 14 Existing paras **3.11.3 3.11.11** and references thereto have been renumbered **3.11.2 3.11.10** accordingly.

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

- 15 **Para 4.2.5.1.2** is replaced by the following text:
- ".2 if the static angle of heel due to wind heeling moment determined according to 4.2.5.2 does not exceed half the open deck edge immersion angle;".
- 16 **Para 4.3.3.3** is replaced by the following text:
- "4.3.3.3 The heeling moment due to wind pressure in case of gust action, in  $kN \cdot m$ , shall be determined by the formula:

$$M_v = 2\frac{p_v A_v z}{1000} \tag{4.3.3.3}$$

where  $p_V$  — wind pressure, Pa, calculated in compliance with the requirements of this Chapter;

 $A_{\nu}$  — windage area, in m<sup>2</sup>, calculated in compliance with 1.4.6;

z — windage lever, in m, calculated as the distance from the centre of the windage area centre to the plane of the waterline of floatation.

The angle of heel of the floating dock under the effect of heeling moment due to wind pressure in case of gust action shall be determined from the static or dynamic stability curve.".