



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 312-11-1473c

dated 26.11.2020

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships in connection with implementation of IACS Unified Requirement (UR) I2 (Rev.4 Dec 2019)

Item(s) of supervision:

ships under construction

Entry-into-force date:

01.01.2021

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Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to 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 at 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. 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 01.01.2021, in the absence of a contract, the keels of which are laid or which are at a similar stage of construction on or after 01.01.2021, as well as during review and approval of the technical documentation on ships, the delivery of which is on or after 01.01.2021.
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List of the amended and/or introduced paras/chapters/sections:

Part XVII: paras 1.2.1, 1.2.1.2, 1.2.1.3, Figure 1.2.2.1, paras 1.2.2.4, 1.2.2.7, 1.2.3.2.1.1, 1.2.3.2.1.2, 1.2.3.2.2, Table 1.2.12.2, para 1.2.13.2.1, Figures 1.2.13.2.1-1, 1.2.13.2.1-2, paras 1.2.13.3.1, 1.2.13.4.1

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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	Heading of para has been amended	312-11-1473c of 26.11.2020	01.01.2021
2	Paras 1.2.1.2, 1.2.1.3	New paras with definitions for length and displacement have been introduced in compliance with the provisions of IACS UR I2 (Rev.4 Dec 2019)	312-11-1473c of 26.11.2020	01.01.2021
3	Figure 1.2.2.1	Symbol for the length has been specified	312-11-1473c of 26.11.2020	01.01.2021
4	Para 1.2.2.4	Requirements have been specified in compliance with the provisions of IACS UR I2 (Rev.4 Dec 2019)	312-11-1473c of 26.11.2020	01.01.2021
5	Para 1.2.2.7	Symbol for the ship's length has been specified	312-11-1473c of 26.11.2020	01.01.2021
6	Para 1.2.3.2.1.1	Definitions for the length, distance x and displacement have been specified in the explication to Formulae. Numbering of Formulae has been corrected	312-11-1473c of 26.11.2020	01.01.2021
7	Formula (1.2.3.2.1.1-1) (former 1.2.3.2.1-1)	Formulae for determination of factors $f_{a_{i,1}}$ and $f_{a_{i,2}}$ have been specified	312-11-1473c of 26.11.2020	01.01.2021
8	Formula (1.2.3.2.1.1-2) (former 1.2.3.2.1-2)	Formula for determination of force has been specified	312-11-1473c of 26.11.2020	01.01.2021
9	Para 1.2.3.2.1.2	Definition for the displacement has been specified in the explication to Formulae	312-11-1473c of 26.11.2020	01.01.2021
10	Formula (1.2.3.2.1.2-2)	Formula for determination of force has been specified	312-11-1473c of 26.11.2020	01.01.2021
11	Para 1.2.3.2.2	Definitions for the displacement and ship displacement factor have been specified in the explication to Formulae	312-11-1473c of 26.11.2020	01.01.2021
12	Table 1.2.12.2	Symbol for the length has been specified	312-11-1473c of 26.11.2020	01.01.2021
13	Para 1.2.13.2.1	Definitions for $F_{IB,1}$, C , B , L_B , D and A_{wp} have been specified in the explication to Formulae	312-11-1473c of 26.11.2020	01.01.2021

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
14	Figures 1.2.13.2.1-1 and 1.2.13.2.1-2	Symbol for the breadth has been specified	312-11-1473c of 26.11.2020	01.01.2021
15	Paras 1.2.13.3.1 and 1.2.13.4.1	Symbol for the length has been specified	312-11-1473c of 26.11.2020	01.01.2021

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

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

1 REQUIREMENTS FOR POLAR CLASS SHIPS

1 **Para 1.2.1** is replaced by the following text:

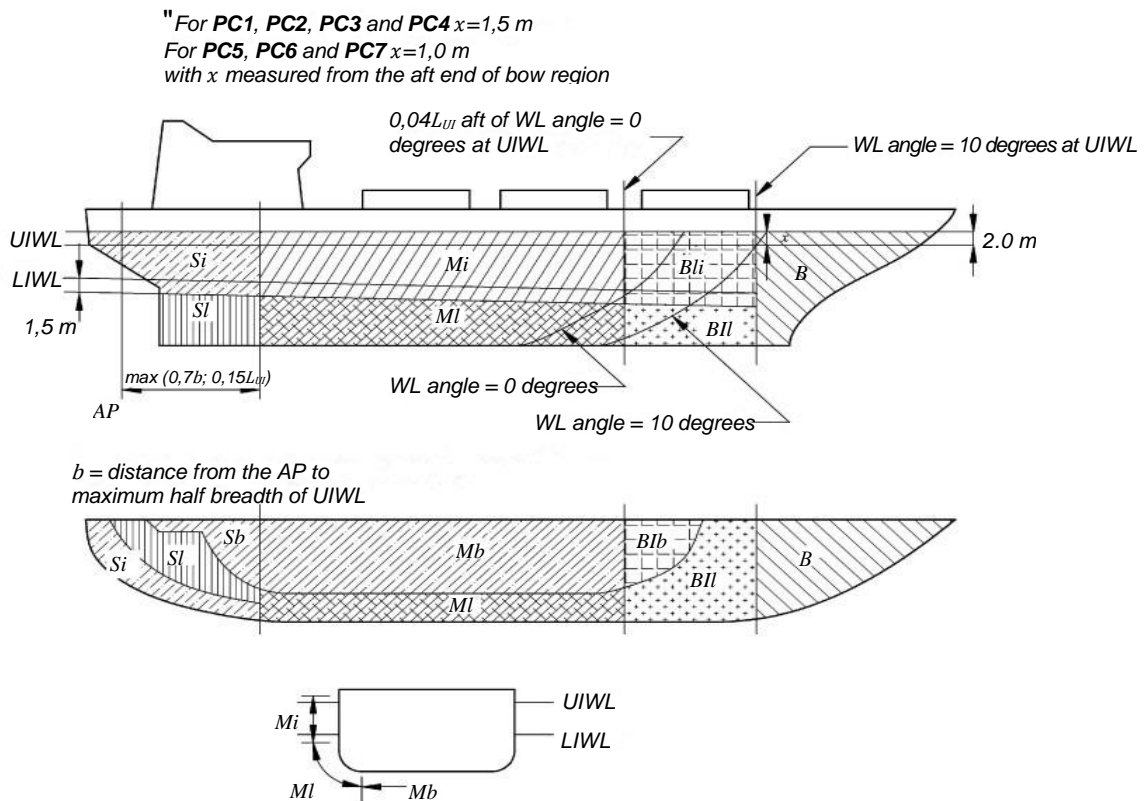
"1.2.1 Application and definitions."

2 **New paras 1.2.1.2 and 1.2.1.3** are introduced reading as follows:

"1.2.1.2 The length L_{UI} is the distance, in m, measured horizontally from the fore side of the stem at the intersection with the UIWL to the after side of the rudder post, or the centre of the rudder stock if there is no rudder post. L_{UI} shall not to be less than 96 %, and need not be greater than 97 %, of the extreme length of the UIWL measured horizontally from the fore side of the stem.

1.2.1.3 The ship displacement D_{UI} is the displacement, in kt, of the ship corresponding to the UIWL. Where multiple waterlines are used for determining the UIWL, the displacement shall be determined from the waterline corresponding to the greatest displacement."

3 **Figure 1.2.2.1** is replaced by the following one:



4 **Para 1.2.2.4** is replaced by the following text:

"**1.2.2.4** Fig. 1.2.2.1 notwithstanding, the aft boundary of the bow region need not be more than $0,45L_{UI}$ aft of the fore side of the stem at the intersection with the UIWL."

5 **Para 1.2.2.7** is replaced by the following text:

"**1.2.2.7** If the ship is assigned the ice class mark **Icebreaker**, the forward boundary of the stern region shall be at least $0,04L_{UI}$ forward of the section where the parallel ship side at the UIWL ends."

6 **Para 1.2.3.2.1.1**. Definitions for L , x and D in the explication to the Formulae are replaced by the following text:

" L_{UI} — ship length, in m, as defined in 1.2.1.2;

x — distance, in m, from the fore side of the stem at the intersection with the UIWL to station under consideration;

D_{UI} — ship displacement, in kt, as defined in 1.2.1.3, but not less than 5 kt;"

7 **Formulae 1.2.3.2.1-1 — 1.2.3.2.1-5** are renumbered **1.2.3.2.1.1-1 — 1.2.3.2.1.1-5** accordingly.

8 **Formula (1.2.3.2.1.1-1)** (former 1.2.3.2.1-1). Dependencies for determination of $f_{a_{i,1}}$ and $f_{a_{i,2}}$ are replaced by the following Formulae:

$$f_{a_{i,1}} = \left(0,097 - 0,68 \cdot \left(x/L_{UI} - 0,15 \right)^2 \right) \cdot \alpha_i / (\beta'_i)^{0,5};$$

$$f_{a_{i,2}} = 1,2 \cdot CF_F / (\sin(\beta'_i) \cdot CF_C \cdot D_{UI}^{0,64});"$$

9 **Formula (1.2.3.2.1.1-2)** (former 1.2.3.2.1-2) is replaced by the following one:

"force F , in MN:

$$F_i = f_{a_i} \cdot CF_C \cdot D_{UI}^{0,64};"$$

10 **Para 1.2.3.2.1.2**. The definition for D in the explication to Formulae is replaced by the following text:

" D_{UI} — ship displacement, in kt, as defined in 1.2.1.3, but not less than 5 kt;"

11 **Formula (1.2.3.2.1.2-2)** is replaced by the following one:

"force F , in MN:

$$F_i = f_{a_i} \cdot CF_{CV} \cdot D_{UI}^{0,47};"$$

12 **Para 1.2.3.2.2**. The definitions for DF and D in the explication to Formulae are replaced by the following text:

" DF — ship displacement factor:

$$DF = D_{UI}^{0,64} \text{ if } D_{UI} \leq CF_{DIS};$$

$$DF = CF_{DIS}^{0,64} + 0,10 (D_{UI} - CF_{DIS}) \text{ if } D_{UI} > CF_{DIS};$$

D_{UI} — ship displacement, in kt, as defined in 1.2.1.3, but not less than 10 kt;"

13 **Table 1.2.12.2**. The symbol L is replaced by L_{UI} .

14 **Para 1.2.13.2.1**. The definitions for $F_{IB,1}$, C , B , L_B , D and A_{wp} in the explication to Formulae are replaced by the following text:

$$F_{IB,1} = 0,534 \cdot K_I^{0,15} \cdot \sin^{0,2}(\gamma_{stem}) \cdot (D_{UI} \cdot K_h)^{0,5} \cdot CF_L;$$

$$C = 1/(2 \cdot (L_B/B_{UI})^{e_b});$$

B_{UI} — moulded breadth corresponding to the UIWL;

L_B — bow length used in the equation $y = B_{UI}/2 \cdot (x/L_B)^{e_b}$, in m (refer to Figs. 1.2.13.2.1-1 and 1.2.13.2.1-2);

D_{UI} — ship displacement, in kt, as defined in 1.2.1.3, not to be taken less than 10 kt;

A_{wp} — waterline area corresponding to the UIWL;".

15 **Para 1.2.13.2.1.** The following text is deleted in the explication to Formulae:

"Where applicable, draught dependent quantities shall be determined at the waterline corresponding to the loading condition under consideration."

16 **Figure 1.2.13.2.1-1** is replaced by the following one:

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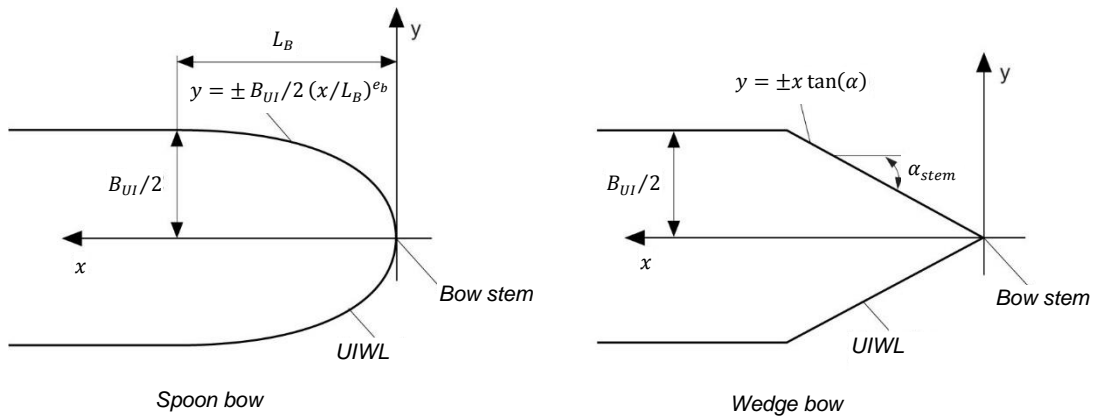


Fig. 1.2.13.2.1-1
Bow shape definition".

17 **Figure 1.2.13.2.1-2** is replaced by the following one:

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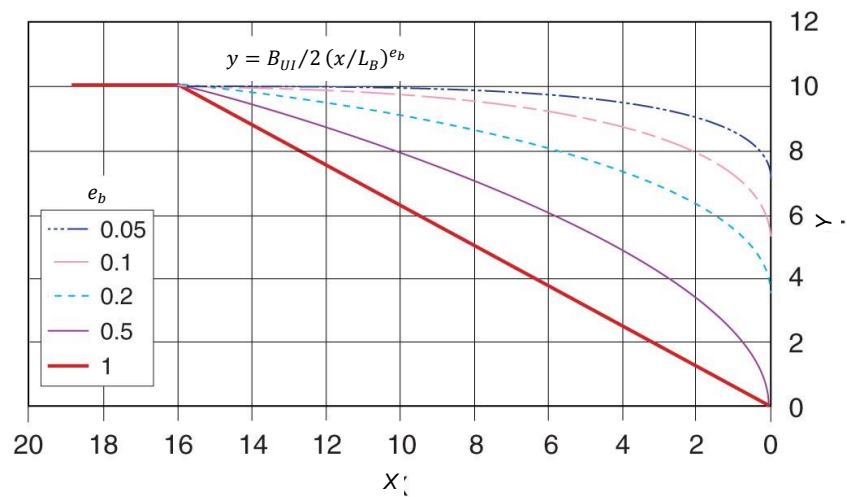


Fig. 1.2.13.2.1-2
Illustration of e_b effect on the bow shape for $B_{UI} = 20$ and $L_B = 16$ ".

18 **Paras 1.2.13.3.1 and 1.2.13.4.1.** The symbol L is replaced by L_{UI} .