CIRCULAR LETTER   No. 314-26-*820c*   dated *03.06*2015

Re:

Editorial amendments to the English version of the Rules for the Classification and Construction of High-Speed Craft

Item of technical supervision:

Ships under construction

Implementation	01.07.2015
Valid: till	-
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Cancels / Amends/ Supplements Circular Letter No.	- dated -

Number of pages:	1+2
Appendices:	Editorial amendments to Chapter 5, Part II "Hull Structure and Strength" in the English version of the Rules for the Classification and Construction of High-Speed Craft (hereinafter, the Rules) in 2 sheets

Technical Director - Head of Classification Directorate   Vladimir I. Evenko

Amends   Chapter 5 of Part II "Hull Structure and Strength" in the English version of the Rules for the Classification and Construction of High-Speed Craft, 2013

We hereby inform that the editorial amendments to the English version of the Rules for the Classification and Construction of High-Speed Craft, 2013 shall come into force on 1 July 2015. The editorial amendments are given in the Appendix (in English only) to the Circular Letter.

It is necessary to do the following:

1) *Apply the provisions of the Circular Letter in the practical activity from 1 July 2015.*
2) *Bring the content of the Circular Letter to the notice of the RS surveyors, interested organizations and shipowners in the area of the RS Branch Offices' activity.*

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DMS "THESIS" No.	Text.		

Amendments to

the Rules for the Classification and Construction of High-Speed Craft, 2013

Part II. Hull

5.2 Norms and permissible stresses

Table 5.2.5 shall be amended to read:

"**Table 5.2.5**

Alloy category (alloy grade)	Thickness of connected plates, mm	Weld nugget dangerous force	
		T_0 shear, kN, to the weld nugget	Q_0 breakout, kN, from the weld nugget
1530 1550 1561	2÷2	4,4	2,2
1561H 1575	3÷3	7,4	3,7"

5.3 Hull general strength calculation.

1. Formula (5.3.4.5-1) shall be replaced by the following:

   "$M_{des}^{trans} = M_{st.w}^{trans} + M_w^{trans} + M_d^{trans}$".

2. Formula (5.3.5.1-2) shall be replaced by the following:
   "$M_{des}^{hog} = M_{st.w.} - M_d^{hog}$".

3. In explication to Formula (5.3.9.1) the formulae for determining f shall be replaced by the following:

   "$f = \{1 - \exp\left[-\left(17\frac{h_{3\%}}{L} - 2,9\right)^2\right]\}\frac{h_{3\%}}{L}$, if $\frac{h_{3\%}}{L} \leq 0,095$,

   $f = 0,077$, if $\frac{h_{3\%}}{L} > 0,095$.".

4. Formula (5.3.7.2-1) shall be replaced by the following:

$$\text{``}Q_{des}^{sag} = Q_{st.w} + \frac{1}{L}[4M_w^{\otimes}K_N^w + 5{,}8M_{d1}^{\otimes}K_N^d + 3{,}2M_{d2}^{\otimes}K_N^w]\text{''.}$$

5. Formula (5.3.7.2-2) shall be replaced by the following:

$$\text{``}Q_{des}^{hog} = Q_{st.w} - \frac{1}{L}[4M_w^{\otimes}K_N^w + 3{,}5M_{d1}^{\otimes}K_N^d + 1{,}6M_{d2}^{\otimes}K_N^w]\text{''.}$$

6. In explication to Formula (5.3.8.1) the definition of k_T shall be replaced by the following:

"k_T = 1,0 – for gliders with the usual hydrodynamic arrangement;
k_T = 1,07 – for the ships with the bottom air cavity.".

7. In explication to Formula (5.3.9.1) the formula for determining ρ_y^{-2} shall be replaced by the following:

$$\text{``}\rho_y^{-2} = J_y g(1 + m_\psi)/\Delta L^2(1 + m_z)\text{''.}$$

8. In explication to Formulae (5.3.9.2.1-1) and (5.3.9.2.1-2) the formula for coefficient M_w shall be replaced by the following:

$$M_w = 0{,}059 a\rho g(0{,}8 - 4{,}9B_k/L)(1 + 2Fr_L - 0{,}3Fr_L^3)B_k L^3 f k_M^{b}\text{''.}$$

9. Formula (5.3.10.2-1) shall be replaced by the following:

$$\text{``}\sigma_u = \frac{\alpha_u M_{des}}{W_u} \le \sigma_{per} = n_s \sigma_0\text{''.}$$

10. In explication to Formula (5.3.9.1) the formula for determining m_z shall be replaced by the following:

$$\text{``}m_z = 1{,}57\rho g\frac{B_{hull}^2 L\alpha^2}{\Delta(1+\alpha)}\text{''}$$

11. In explication to Formula (5.3.9.1) the formula for determining m_ψ shall be replaced by the following:

$$\text{``}m_\psi = 0{,}131\rho g\frac{B_{hull}^2 L}{\Delta\rho_y^2}\frac{\alpha^2}{(3-2\alpha)(3-\alpha)}\text{''}$$

12. In explication to Formula (5.3.9.1) shall be corrected determination of the density of sea water:

"ρ is the density of sea water;"

13. Explication to Formula (5.3.9.1) shall be added determination of ρ_y:

"parameter ρ_y is determined according to 1.3."