CIRCULAR LETTER

No. 314-04-1550c

dated 19.04.2021

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships considering experience in application of the Rules

Item(s) of supervision:

fiber-reinforced plastic ships under construction

Entry-into-force date:

Valid till:

Validity period extended till:

01.06.2021

Cancels / amends / adds Circular Letter No.

dated

Number of pages:

1 + 3

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part XVI "Structure and Strength of Fiber-Reinforced Plastic 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 after 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 and interested organizations 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 01.06.2021, in the absence of a contract, the keels of which are laid or which are at a similar stage of construction on or after 01.06.2021, as well as during review and approval of the technical documentation on ships, the delivery of which is on or after 01.06.2021.

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

Part XVI: paras 2.2.3.5, 2.2.4 and 2.3.5.1

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Information on amendments introduced by the Circular Letter (for inclusion in the Revision History to the RS Publication)

Nos.	Amended	Information on	Number and date	Entry-into-force
	paras/chapters/sections	amendments	of the Circular	date
			Letter	
1	Para 2.2.3.5	New para has been	314-04-1550c	01.06.2021
		introduced containing	of 19.04.2021	
		requirements for necessary		
		indication of information on		
		fire hazardous properties		
		of material in Type		
		Approval Certificate (CTO)		
2	Para 2.2.4	Requirements for carrying	314-04-1550c	01.06.2021
		out of fire safety tests of	of 19.04.2021	
		FRPs have been specified		
3	Para 2.3.5.1	Duplication with regard to	314-04-1550c	01.06.2021
		fire hazardous properties	of 19.04.2021	
		has been eliminated		

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2020,

ND No. 2-020101-124-E

PART XVI. STRUCTURE AND STRENGTH OF FIBER-REINFORCED PLASTIC SHIPS

2 MATERIALS

- 1 **New para 2.2.3.5** is introduced reading as follows:
- **"2.2.3.5** The Type Approval Certificate (CTO) shall be provided with indication of the fire hazardous properties of the material with the reference to the International Code for Application of Fire Test Procedures, 2010, adopted by IMO resolution MSC.307(88) (FTP Code), and appropriate protocols based on tests of FRPs carried out in laboratories recognized by the Register. In the absence of such tests, the Type Approval Certificate (CTO) shall contain the following text: "fire hazardous properties of the material were not determined".

In addition, the following text shall be entered in the Type Approval Certificate (CTO): "In the case of using the material as part of fire-proof divisions, these divisions shall be tested in compliance with the International Code for Application of Fire Test Procedures, 2010, adopted by IMO resolution MSC.307(88) (FTP Code)"."

- 2 Para 2.2.4 is replaced by the following text:
 - "2.2.4 Technical supervision during manufacture of hull/structures using FRP.
 - **2.2.4.1** Prior to manufacture, the manufacturer (a shipyard) shall submit the following:

approved technical documentation in the scope specified in 1.4.2 (technical specifications on FRPs, technological instruction);

reports on fire test results of FRPs carried out in laboratories recognized by the Register, with a conclusion on compliance of the fire-proof division with the requirements of these Rules according to which the ship design is approved, if applicable;

protocols on tests of the fire-proof divisions carried out in laboratories recognized by the Register in accordance with the requirements of the International Code for Application of Fire Test Procedures, 2010, adopted by IMO resolution MSC.307(88) (FTP Code);

where FRPs other than those stated in this Part of the Rules are used, protocols on FRP tests carried out in accordance with the test program approved by the Register (refer to Appendix 2).

2.2.4.2 Technical supervision shall include the following:

review of documents submitted by the firm (manufacturer) in a scope specified in 2.2.3.2 to confirm its capability of manufacturing FRP products of stable quality in required volumes;

survey of the firm (manufacturer) to assess its capability of manufacturing FRP hulls/structures and quality control systems;

technical supervision during manufacture in a scope specified in 1.5.1;

technical supervision during tests of FRP specimens cut out from manufacturing allowances or witness sample (as applicable), complying with the technical documentation on the product manufactured:

technical supervision of hull defects detection and repair.

Upon results of technical supervision during construction of hull or structure using FRPs, the report documents of shipyard shall be signed by the Register surveyor in accordance with the provisions of Section 13 "Technical Supervision at the Shipyard during Construction of Ships", Part I of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships, attaching Register Certificates for materials.

2.2.4.3 Where the Register Certificate for FRP is not available during technical supervision in the course of construction of hull or structure using FRPs, in addition to the requirements specified in Section 13 "Technical Supervision at the Shipyard during Construction of Ships", Part I of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships the Report on Survey (form 6.3.29) shall be drawn up to confirm that the requirements for FRP specified in this Part of the Rules are met."

3 **Para 2.3.5.1** is replaced by the following text:

"2.3.5.1 FRPs used in hull structures shall comply with the following basic requirements: have elasticity and strength characteristics required for making an effective hull structure, and operability under repeated static, permanent, vibration and impact loads;

maintain their elasticity and strength characteristics, as well as operability within specified limits in the course of long-term operation in water and in different climate conditions for at least 20 years;

have low water absorption and high water resistance in sea water;

be resistant to oil and petroleum products as well as marine organisms.

The requirements for fire hazardous properties shall be determined depending on the ship type and provisions of the RS rules according to which the ship design was approved.".