



RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER

No. 313-14-1583c

dated 10.06.2021

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2021, ND No. 2-020101-138-E

Item(s) of supervision:

ships under construction

Entry-into-force date:

01.07.2021

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Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part VI "Fire Protection"

Director General

Konstantin G. Palnikov

Text of CL:

We hereby inform that in connection with implementation of IMO resolution MSC.429(98)/Rev.2, IACS Unified Interpretation (UI) SC197 (Rev.2 Mar 2021), IACS Unified Requirement (UR) F7 (Rev.3 June 2020) (Corr.1 Nov 2020), 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 01.07.2021, in the absence of a contract, which commence conversion on or after 01.07.2021.

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

Part VI: paras 2.1.1.6 — 2.1.1.9, 2.1.1.10.2 and 2.1.3.3, Table 2.2.1.5-2, para 3.1.2.1 and 3.7.1.1, Table 5.1.2, paras 5.1.22 and 5.1.24, Table 5.2.1, paras 7.1.2 and 8.7.4.1

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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 2.1.1.6	Requirements have been specified for the primary deck coverings	313-14-1583c of 10.06.2021	01.07.2021
2	Para 2.1.1.7	Requirements have been specified for materials used on ship surfaces and for adhesives used for "A", "B" and "C" class divisions	313-14-1583c of 10.06.2021	01.07.2021
3	Para 2.1.1.8	Requirements have been specified for ship surfaces that shall have low flame spread characteristics	313-14-1583c of 10.06.2021	01.07.2021
4	Para 2.1.1.9	Requirements have been specified for testing of draperies, curtains and other suspended textile materials in accordance with the FTP Code	313-14-1583c of 10.06.2021	01.07.2021
5	Para 2.1.1.10.2	Requirements have been specified regarding installation of non-combustible bulkheads, linings and ceilings with combustible covering on fishing vessels of 45 m in length and over and/or 500 gross tonnage and upwards	313-14-1583c of 10.06.2021	01.07.2021
6	Para 2.1.3.3	Requirements have been specified for watertightness tests of pipe penetrations and cable transits for their type approval in compliance with IMO resolution MSC.429(98)/Rev.2	313-14-1583c of 10.06.2021	01.07.2021
7	Table 2.2.1.5-2	Requirements have been specified for fire integrity of decks of passenger ships carrying not more than 36 passengers	313-14-1583c of 10.06.2021	01.07.2021

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
8	Para 3.1.2.1	The reference to outdated IMO circular has been deleted. In Footnote 10 to Table 3.1.2.1 the references have been specified to the up-to-date version of IMO circular MSC.1/Circ.1395/Rev.4 in connection with implementation of IACS UI SC197 (Rev.2 Mar 2021)	313-14-1583c of 10.06.2021	01.07.2021
9	Para 3.7.1.1	The value of low and medium foam expansion ratio has been specified	313-14-1583c of 10.06.2021	01.07.2021
10	Table 5.1.2	In item 15.2, the number of gas analyzers for flammable gases on oil tankers and combination carriers has been specified. In item 15.3, the number of gas analyzers for oxygen content on oil tankers and combination carriers has been specified. New item 19 has been introduced containing the requirements for fitting the container ships and other ships of 500 gross tonnage and upwards designed to carry containers on or above the weather deck with a water mist lance	313-14-1583c of 10.06.2021	01.07.2021
11	Para 5.1.22	Requirements have been specified for gas analyzers on oil tankers and combination carriers in compliance with IACS UR F7 (Rev.3 June 2020) (Corr.1 Nov 2020)	313-14-1583c of 10.06.2021	01.07.2021
12	Para 5.1.24	New para has been introduced containing requirements for a water mist lance	313-14-1583c of 10.06.2021	01.07.2021
13	Table 5.2.1, item 8.5	Reference to the RS ND has been specified containing requirements for ship fitting with spare parts for electrical equipment of fire extinguishing systems	313-14-1583c of 10.06.2021	01.07.2021
14	Para 7.1.2	The definitions "ADN" and "IMDG Code" have been specified	313-14-1583c of 10.06.2021	01.07.2021

Nos.	Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
15	Para 8.7.4.1	Requirements have been specified for working pressure of water fire main pipes on cargo ships of less than 500 gross tonnage	313-14-1583c of 10.06.2021	01.07.2021

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

ND No. 2-020101-138-E

PART VI. FIRE PROTECTION

2 STRUCTURAL FIRE PROTECTION

1 **Paras 2.1.1.6 — 2.1.19** are replaced by the following text:

2.1.1.6 Primary deck coverings, if applied within accommodation and service spaces and control stations or on cabin balconies of passenger ships shall be of an approved material, which has low flame spread characteristics and shall not give rise to smoke, toxic or explosive hazards at elevated temperatures, this being determined in accordance with the FTP Code.

Where a floor covering is required to be low flame-spread, all layers shall comply with the requirement of 1.6.3.5. If the floor covering has a multilayer construction, the tests shall be conducted for each layer or for combinations of some layers of the floor coverings; at that, the Register approval is applicable to the tested combinations of layers.

Primer or similar thin film of paint on deck plating need not comply with the requirements of 1.6.3.5.

2.1.1.7 Paints, varnishes and other finishings used on exposed surfaces inside service and accommodation spaces, control stations and stairways enclosures shall not generate excessive quantity of smoke and toxic vapours, this being determined in accordance with the FTP Code.

This requirement applies to the finish materials of bulkheads, decks, floor coverings, linings and ceilings, but is not applicable to cables insulation, plastic piping and furniture.

Finish materials and primary deck coverings (refer to 2.1.1.6) with the total heat release not more than 0,2 MJ and peak heat release rate not more than 1,0 kW (both values are determined in accordance with Part 5 of the FTP Code) are considered as complying with the requirements of 1.6.3.2 without tests.

On board oil tankers, chemical tankers and oil recovery ships the use of aluminum coatings containing greater than 10 % aluminum by weight in the dry film is prohibited in cargo tanks, cargo tank deck area, pump rooms, cofferdams or any other area where cargo vapour may accumulate.

On passenger ships, paints, varnishes and other finishes used on exposed surfaces of cabin balconies, excluding natural hard wood decking systems, shall not be capable of producing excessive quantities of smoke and toxic products, this being determined in accordance with the FTP Code.

Adhesives used for "A", "B" and "C" class divisions shall be of an approved material, which has low flame spread characteristics, this being determined in accordance with Part 5 of the FTP Code.

2.1.1.8 In accordance with the FTP Code, the following surface shall have low flame spread characteristics:

.1 on passenger ships:

.1.1 exposed surfaces in corridors and stairway enclosures, as well as bulkheads and plating, ceiling linings in accommodation and service spaces (except saunas) and control stations;

.1.2 surfaces and grounds in concealed and inaccessible spaces in accommodation and service spaces and control stations;

.1.3 exposed surfaces of cabin balconies excluding natural hard wood decking systems;

.2 on fishing vessels of 24 m in length and over and on cargo ships of 500 gross tonnage and upwards:

.2.1 exposed surfaces in corridors and stairway enclosures and of ceilings in accommodation and service spaces (except saunas) and control stations;

.2.2 surfaces and grounds in concealed and inaccessible spaces in accommodation and service spaces and control stations;

The above requirements apply to finish materials of bulkheads, decks, decking systems, linings of bulkheads and ceilings, but are not applicable to plastic piping, electrical cables and furniture.

2.1.1.9 On passenger ships carrying more than 36 passengers in accommodation spaces, the furniture and furnishings of which constitute restricted fire risk, draperies, curtains and other suspended textile materials, upholstered furniture and bedding components shall be satisfactorily tested in compliance with the FTP Code (refer to 1.6.3.6 — 1.6.3.8). For other types of ships, the said requirements are recommended only."

2 **Para 2.1.1.10.2** is replaced by the following text:

".2 in case of ships fitted with an automatic sprinkler system complying with the provisions of the FSS Code, the above volume may include some combustible materials used for erection of "C" class divisions.

On fishing vessels of 45 m in length and over and/or 500 gross tonnage and upwards and on non-self-propelled ships without regard of their gross tonnage, it is permissible to fit non-combustible bulkheads, linings and ceilings with combustible covering less than 2 mm thick except corridors, stairway enclosures as well as control stations where thickness of covering shall not exceed 1,5 mm.

The furnishings specified in the present paragraph and applied on cabin balconies may not be taken into calculation required by the paragraph."

3 **Para 2.1.3.3** is replaced by the following text:

"2.1.3.3 If the "A" class divisions are penetrated, then such penetrations (cutouts) shall be tested in accordance with the FTP Code, considering the provisions of 2.2.1.4. The requirements of 12.1.12 and 12.1.19, Part VIII "Systems and Piping" are applied to ventilation ducts.

Tests may not be conducted if the pipes penetrations are made of steel or other equivalent material with a thickness of 3 mm or greater and a length of not less than 900 mm (preferably 450 mm at each side of the division) and do not have any openings. Such penetrations shall be insulated similar to the division itself.

In case where pipe penetrations and cable transits are constructed without structural sockets and consist of removable sleeves welded or bolted to the division and/or of soft or intumescent filling material, these sleeves shall be of minimum 3 mm thickness and of minimum 60 mm length and filling material shall be adequately secured by bonded materials or mechanical means in order to prevent damage or fall out. Such penetrations shall not impair fire integrity and structural strength of the divisions.

Type approval of pipe penetrations and cable transits fitted to ensure the watertight integrity of a bulkhead or deck where heat-sensitive materials are used shall include a prototype test of watertightness after having undergone the standard fire test appropriate for the location in which the penetrations shall be installed in accordance with the requirements of Part 3 of the FTP Code. The pipe penetration or cable transit shall then be tested to a test pressure of not less than 1,5 times the design pressure at flooding as defined in 1.3.4.1, Part II "Hull". The pressure shall be applied to the same side of the division as the fire test.

The fire tested pipe penetration or cable transits shall be tested for a period of at least 30 min under hydraulic pressure at least 0,1 MPa. There shall be no leakage during this test.

The fire tested pipe penetration or cable transits shall continue to be tested for a further 30 min with the test pressure. The quantity of water leakage shall not exceed a total of 1 litre.

The pressure test shall be carried out with the pipe section with plug and cable section used in the fire test still in place.

Any pipe insulation fitted for the purpose of the fire test may be removed before the pressure test.

The type approval shall be considered valid only for the tested pipe penetration considering its typology (e.g. thermoplastic and multilayer), pipe class, the maximum/minimum dimensions tested, and the type and fire rating of the division. For cable transit, the type approval shall be considered valid only for the tested cable transit considering its typology (insulation material and

type of shield), sealing material, the extent of filling the cable transit as well as fire rating of the division."

4 **Table 2.2.1.5-2.** In column 10, line "Cargo spaces", fire integrity "A-0" is replaced by the symbol "**".

3 FIRE-FIGHTING EQUIPMENT AND SYSTEMS

5 **Para 3.1.2.1.** Reference to "(refer to IMO circular MSC/Circ.914)" is deleted.

6 **Table 3.1.2.1.** In text of footnote 10, the references to "(refer to Table 1 of IMO circular MSC.1/Circ.1395/Rev.2)" and "(refer to Table 2 of IMO circular MSC.1/Circ.1395/Rev.2)" are replaced by the references to "(refer to Table 1 of IMO circular MSC.1/Circ.1395/Rev.4)" and "(refer to Table 2 of IMO circular MSC.1/Circ.1395/Rev.4)", accordingly.

7 **Para 3.7.1.1** is replaced by the following text:

"3.7.1.1 The foam fire extinguishing systems shall be capable to produce air mechanical foam for the use as an extinguishing medium depending on the foam expansion ratio:
of low expansion ratio (about 10:1 but not more than 12:1);
of medium expansion ratio (between 50:1 and 200:1); and
of high expansion ratio (about 1000:1).

Foam fire extinguishing systems may include units separately producing, but simultaneously supplying low expansion ratio foam and medium expansion ratio foam (combination foam)."

5 FIRE-FIGHTING OUTFIT, SPARE PARTS AND TOOLS

8 **Table 5.1.2. Para 15** is replaced by the following text:

"

Nos.	Description of items of outfit	Number of items of outfit to be available in each ship
15	Gas analyzers (refer to 5.1.22):	
	.1 for vapours of flammable liquids and exhaust gases;	In ships carrying motor vehicles with fuel oil (other than diesel oil) in their tanks and in ships with spaces specified in 1.5.4.3, 1.5.4.4.1 and 1.5.9 — 1
	.2 for vapours of flammable liquids;	In oil tankers and combination carriers — 2 (refer to 5.1.22) In oil tankers fitted with inert gas system — 2 portable gas analyzers capable to operate in the inert gas atmosphere in addition to the above
	.3 for oxygen content;	In oil tankers and combination carriers — 2 (refer to 5.1.22)
	.4 for oxygen content and gas detection	In ships carrying solid bulk cargoes which are liable to emit toxic or flammable gases or cause oxygen depletion in the cargo space — 1

"

New para 19 is introduced reading as follows:

"

Nos.	Description of items of outfit	Number of items of outfit to be available in each ship
19	Water mist lance (refer to 5.1.24)	In container ships and other ships of 500 gross tonnage and upwards designed to carry containers on or above the weather deck — 1

"

9 **Para 5.1.22** is replaced by the following text:

"5.1.22 In oil tankers and combination carriers gas analyzers shall meet the following requirements:

- .1 provision shall be made for use of gas analyzers with gas sampling pipes as specified in 9.14.2, Part VIII "Systems and Piping";
- .2 suitable means shall be provided for the calibration of gas analyzers;
- .3 gas analyzers shall be provided with a set of spares supplied by the manufacturer; and
- .4 gas analyzers shall measure lower flammable limit (LFL).

Alternatively, ship may be equipped with two gas analyzers, each capable of measuring both oxygen and flammable vapour concentrations."

10 **New para 5.1.24** is introduced reading as follows:

"5.1.24 The water mist lance shall, as a rule, consist of an L-shaped tube with a piercing nozzle capable to penetrate a container wall impacted at its back side intended for hammer impact and producing a low pressure water mist (at the main pressure 1,2 MPa and less) inside a confined space of the container.

The water mist lance shall be fitted for connection to fire hoses and equipped with a closing arrangement.

The water mist lance set may include the following:

a lance consisting of a tube fitted for connection to fire hoses with the closing arrangement and a mist nozzle; and

a hammer with the cylinder-pointed tip capable of making with a single blow a hole of the required diameter in a container wall or a portable drill with the metal bit of the appropriate diameter."

11 **Table 5.2.1. Para 8.5** is replaced by the following text:

"

Nos.	Description of spare parts and tools	Number per ship
8	Miscellaneous items, for all systems:	
	.5 spare parts for electrical equipment of fire extinguishing systems	In accordance with Appendix 1 to Part VII «Machinery Installations»

"

7 SPECIAL REQUIREMENTS FOR SHIPS CARRYING PACKAGED DANGEROUS GOODS AND DANGEROUS GOODS IN BULK

12 **Para 7.1.2.** The definition "ADN" is replaced by the following text:

"ADN is the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways adopted by the ADN Administrative Committee including the ADN Regulations, applicability of which is specified directly in the current version of the ADN Regulations (ADN 2021 Regulations (ECE/TRANS/301) applicable as from 1 January 2021)."

The definition "IMDG Code" is replaced by the following text:

"IMDG Code is the International Maritime Dangerous Goods (IMDG) Code adopted by IMO resolution MSC.122(75), as amended by IMO resolutions MSC.157(78), MSC.205(81), MSC.262(84), MSC.294(87), MSC.328(90), MSC.372(93), MSC.406(96), MSC.442(99)."

8 REQUIREMENTS FOR FIRE PROTECTION OF CARGO SHIPS OF LESS THAN 500 GROSS TONNAGE

13 **Para 8.7.4.1** is replaced by the following text:

"8.7.4.1 The diameter of the fire main shall be based on the required capacity of the main fixed fire pump and the diameter of the water service pipes shall be sufficient to ensure an adequate supply of water for the operation of at least one fire hose. Water fire main pipes shall be designed for working pressure of at least 1 MPa."