**CIRCULAR LETTER** 

No. 315-05-1327c

dated 12.02.2020

Re:

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

Item(s) of supervision: electrical equipment

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Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

Appendix 2: text of amendments to Part XI "Electrical equipment"

**Acting Director General** 

Vladimir I. Evenko

#### 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, as well as interested organizations and persons in the area of the RS Branch Offices' activity.
- 2. Apply the provisions of the Circular Letter during review of plan approval documentation of ships and during surveys of ships contracted for construction or conversion on or after the entry-into-force date of the amendments.

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

Part XI: paras 2.2.1.3, 2.9.14, 5.8.3, 6.8.3 – 6.8.9, 7.7.1, 7.7.1.3 – 7.7.1.7 and 19.10.3.2

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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 2.2.1.3	A misprint in Formula (2.2.1.3-2) has been corrected	315-05-1327c of 12.02.2020	12.02.2020
2	Para 2.9.14	Requirements for cables of intrinsically safe circuits have been specified considering IEC 60079-14 and IEC 60079-25	315-05-1327c of 12.02.2020	12.02.2020
3	Para 5.8.3	The requirements for the position of the second switch of general shipboard ventilation considering regulation II-2/5.2.1.2 of SOLAS 74	315-05-1327c of 12.02.2020	12.02.2020
4	Para 6.8.3	The para has been deleted	315-05-1327c of 12.02.2020	12.02.2020
5	Paras 6.8.4 – 6.8.7	Paras have been renumbered 6.8.3 – 6.8.6, accordingly	315-05-1327c of 12.02.2020	12.02.2020
6	Para 6.8.5 (renumbered 6.8.6)	Requirements for the alarm system of navigation lights have been specified	315-05-1327c of 12.02.2020	12.02.2020
7	Paras 6.8.7 – 6.8.9	New paras with requirements for navigation lights have been introduced considering IMO resolution MSC.253(83)	315-05-1327c of 12.02.2020	12.02.2020
8	Para 7.7.1	References to Section 7, Part III "Equipment, Arrangements and Outfit" have been specified	315-05-1327c of 12.02.2020	12.02.2020
9	Paras 7.7.1.3 and 7.7.1.4	Paras have been deleted	315-05-1327c of 12.02.2020	12.02.2020
10	Paras 7.7.1.5 – 7.7.1.7	Paras have been renumbered 7.7.1.3 – 7.7.1.5, accordingly	315-05-1327c of 12.02.2020	12.02.2020
11	Para 17.2.1	The definition of "Electric propulsion plant" has been specified	315-05-1327c of 12.02.2020	12.02.2020
12	Para 19.10.3.2	Requirements for spaces of electrical equipment distribution gear and start-protection devices have been specified	315-05-1327c of 12.02.2020	12.02.2020

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

#### PART XI. ELECTRICAL EQUIPMENT

#### **2 GENERAL REQUIREMENTS**

1 Para 2.2.1.3. Formula (2.2.1.3-2) is replaced by the following text:

"
$$U_{p,k} = \sqrt{U_k^2 + \sum_{h=-1}^{h=+1} U_{c,k}^2 + h}$$
, B (2.2.1.3-2)".

- 2 **Para 2.9.14** is replaced by the following text:
- "2.9.14 Cables of intrinsically safe circuits shall be laid separately from other cables and shall comply with the requirements of IEC 60079-14 and IEC 60079-25."

#### 5 ELECTRIC DRIVES FOR SHIPBOARD MECHANISMS AND EQUIPMENT

- 3 **Para 5.8.3** is replaced by the following text:
- **"5.8.3** The electric motors for general shipboard ventilation shall have at least two switches for remote disconnection of the motors, one of the switches being fitted in the wheelhouse and the other located at an easily accessible position outside the space being served. This position shall not be readily cut off in the event of a fire in the spaces served.

For ships with electrical installation of low power (other than passenger ships) it is permitted to use one disconnecting switch."

#### **6 LIGHTING**

- 4 Para 6.8.3 is deleted.
- 5 The **existing paras 6.8.4 6.8.7** are renumbered **6.8.3 6.8.6**, соответственно.
- 6 **Existing para 6.8.6** (new para 6.8.5) is replaced by the following text:
- "**6.8.5** Independent of the navigation light switching indication referred to in 6.8.4, provision shall be made for visual and audible alarms operating automatically in case of:
  - .1 failure, including short circuit, of any navigation light with the switch in the "on" position;
  - .2 failure of power supply to navigation lights switchboard.

Alarms shall be supplied from a source or feeder other than that used for power supply to navigation light switchboard or from an accumulator battery.".

- 7 **New paras 6.8.7 6.8.9** are introduced reading as follows:
- "6.8.7 For navigation lights using light-emitting diodes (LEDs) in addition to the indication of navigation lights switching as required in 6.8.4 and the alarm as required in 6.8.5, provision shall be made for visual and audible alarms operating automatically in case luminous intensity of the light reduces below the level required in 3.1.7, Part III "Signal Means" of the Rules for the Equipment of Sea-Going Ships. In the absence of such alarms, it is permitted to use LEDs within their lifespan notified by the manufacturer.
- **6.8.8** All indicators on the navigation lights switchboard shall be dimmable, the brightness of a display, if fitted, shall be controllable.
- **6.8.9** Navigation lights switchboard shall support standard serial interfaces for data exchange with shipboard systems. For transferring alarms to external systems and receiving acknowledgements of alarms from external systems a bi-directional interface complying with IEC 61162 series shall be used.

Pre-programmed navigation lights group settings may also be provided.".

#### 7 INTERNAL COMMUNICATION AND SIGNALLING

- 8 **Para 7.7.1** is replaced by the following text:
- "**7.7.1** Indication of closing watertight doors as required in 7.1.9, 7.1.11, 7.1.13, 7.12.2, and 7.12.4 7.12.6 Part III "Equipment, Arrangements and Outfit" shall meet the following requirements:".
- 9 **Paras 7.7.1.3** and **7.7.1.4** are deleted.
- 10 **Existing paras 7.7.1.5 7.7.1.7** are renumbered **7.7.1.3 7.7.1.5**, accordingly.

#### 17 ELECTRIC PROPULSION PLANTS

11 Para 17.2.1. The definition "Electric propulsion plant" is replaced by the following text:

"Electric propulsion plant — set of equipment for distribution and conversion of electrical power into mechanical one in order to reproduce a predetermined torque by one or more propeller propulsions.".

### 19 REQUIREMENTS FOR ELECTRICAL EQUIPMENT PROCEEDING FROM SHIP PURPOSE

- 12 **Para 19.10.3.2** is replaced by the following text:
- "19.10.3.2 Electrical equipment distribution gear and start-protection devices specified in 19.10.3.1 shall be installed in spaces separated from catch processing spaces.".