CIRCULAR LETTER

No. 315-22-1774c

dated 25.05.2022

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2022, ND No. 2-020101-152-E, in connection with coming into force of IACS Unified Requirement (UR) E25 (Rev.2 Mar 2022)

Item(s) of supervision:

steering gear control system

Entry-into-force date:

01.07.2023

Cancels / amends / adds Circular Letter No.

dated

Number of pages:

1 + 2

Appendices:

Appendix 1: information on amendments introduced by the Circular Letter

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

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 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 as well as on equipment installed onboard the ships contracted for construction or conversion on or after 01.07.2023.

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

Part XI: paras 5.5.11 and 5.5.12

Person in charge: Mikhail A. lukhnev

315

+7 (812) 605-05-17

"Thesis" System No. 22-72782

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 5.5.11	Requirements for visual and audible alarm of steering gear control systems have been specified	315-22-1774c of 25.05.2022	01.07.2023
2	Para 5.5.12	Requirements for visual and audible alarm of steering gear control systems have been specified	315-22-1774c of 25.05.2022	01.07.2023

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS, 2022,

ND No. 2-020101-152-E

PART XI. ELECTRICAL EQUIPMENT

5 ELECTRIC DRIVES AND CONTROL OF STEERING GEAR

- 1 **Para 5.5.11** is replaced by the following text:
- **"5.5.11** For control systems required in 2.9.14, Part III "Equipment, Arrangements and Outfit", visual and audible alarm shall be initiated on the navigation bridge in case of:
 - .1 power supply failure of each power unit, the control system, as well as the earth faults;
 - .2 short circuit, broken connections, earth faults in command and feedback loops;
- **.3** data communication errors, computer hardware and software failures (if programmable electronic systems are used);
 - .4 low oil level in any tank of the hydraulic system;
- .5 critical deviations between rudder order and response unless rudder's actual position reaching the set value position within acceptable time limits for feedback control systems (e.g., for the follow-up control system and autopilot). The alarm may be actuated with mechanic, hydraulic or electric failures.

Besides, means shall be provided to indicate operation of electric motors of the steering gear power units.".

2 **Para 5.5.12** is replaced by the following text:

"5.5.12 Failures, including those specified in 5.5.11, that can cause uncontrolled movement of the rudder blade shall be clearly identified. In case of the failures identification the rudder blade shall be fixed in the current position without manual intervention. For mechanical failures such as sticking valves and failure of static components (pipes, cylinders), the system response without manual intervention is not mandatory, and the operator can follow instructions on the steering gear control station on the navigation bridge in case of such failures.

Where hydraulic locking, caused by a single failure, may lead to loss of steering, an audible and visual alarm, which identifies the failed system, shall be provided on the navigation bridge.".