RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER **No. 312-11-**1140c dated 08.06.2018

Re:

amendments to the Rules for the Classification and Construction of Sea-Going Ships, 2018, ND No. 2-020101-104-E relating to the scope of plan approval documentation and detailed design documentation for a ship under construction as regards automation equipment

Item(s) of supervision:

ships under construction

Implementation:	Valid till:	Validity period extended till:
from the date of publication	-	-

~~Cancels / amends / adds Circular Letter No.~~ - dated -

Number of pages: 1+2

Appendix(es):

text of amendments to Part I "Classification"

Director General Konstantin G. Palnikov

Text of CL:

We hereby inform about the amendments related to requirements for scope of plan approval documentation and detailed design documentation for a ship under construction as regards automation equipment. The text of amendments to Part I "Classification" of the Rules for the Classification and Construction of Sea-Going Ships is given in the Appendix to the Circular Letter. The above amendments will be introduced into the Rules at their re-publication.

It is necessary to do the following:

1. Familiarize the surveyors of the RS Branch Offices with the content of the Circular Letter.
2. Bring the content of the Circular Letter to the notice of the interested organizations in the area of the RS Branch Offices' activity.
3. Apply provisions of the Circular Letter during review of the ships' technical documentation.

List of ND amended and introduced paras/chapters/sections (to specify in the List of Circular Letters (form 8.3.36)):

Part I: paras 3.2.8 and 3.4.8

Person in charge:	Dmitrii A. Grubov	Department 312	+7 (812) 312-24-28

"Thesis" System No. 18-140227

Appendix to Circular Letter

No. 312-11-1140c dated 08.06.18

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SEA-GOING SHIPS

ND No. 2-020101-104-E

PART I. CLASSIFICATION

3.2 PLAN APPROVAL DOCUMENTATION

Para 3.2.8 shall be amended to read:

"3.2.8 Documentation on automation equipment.

3.2.8.1 General documentation:

.1 list and technical description of automation systems and devices with indication of their purpose, principle of operation, their functions, configuration, self-diagnosis principles, with mandatorily designated system integrator (shipyard or, by cooperation, contracted alternative organization/supplier) for each system as well as consoles and control switchboards in the main machinery control room and on the navigation bridge (**);

.2 list of controlled parameters with indication of unique identifier, parameter description, type of signal (i.e. analogue/digital, input/output, etc.), distribution by automation systems and devices depending on the signal intended functional purpose (control, alarms, protection, indication), distribution by automation equipment groups (*);

.3 general arrangement plans of automation equipment in the main machinery control room and on the navigation bridge (*);

.4 technical background containing substantiation of distinguishing automation mark for ships having distinguishing automation mark in the class notation (**);

.5 failure mode and effects analysis (FMEA) for dynamic positioning systems on the ships having distinguishing mark **DYNPOS-2** or **DYNPOS-3** in the class notation (**);

.6 diagrams of power supply for automation systems listed in 3.2.8.2.1 - 3.2.8.2.7 (*).

3.2.8.2 Documentation on individual automation systems and control and monitoring consoles.

.1 technical documentation on alarm and monitoring systems (AMS), centralized monitoring systems and integrated control systems and AMS, including functional diagrams, control console panels with indication of all devices (*);

.2 technical documentation on remote automated control for main machinery and propellers: including functional diagrams, remote automated control console panels with indication of all devices (*);

.3 technical documentation on automation of auxiliary engines and electric power plant, including functional diagrams, control console panels for electric power plant with indication of all devices (*);

.4 technical documentation on automation of boiler plant, including functional diagrams, control console panels with indication of all devices (*);

.5 functional diagrams of automation of compressor plants (*);

.6 functional diagrams of automation, including remote control, of bilge and ballast systems (*);

.7 functional diagrams of remote level indicating systems (*);

.8 diagrams of electric connections for automation systems and equipment listed in 3.2.8.2.1 – 3.2.8.2.7, with indication of cable types and places of installation of all system elements and devices (*);

.9 drawings of front panels of desks and boards of control and alarm systems in the main machinery control room and on the navigation bridge with indication of all devices (*);

.10 structural and mounting drawings of consoles and control and monitoring switchboards as well as mounting drawings of elements of automation systems and devices, sensors, signalling and instruments (*).

Note:

Technical documentation listed in 3.2.8.2 shall be submitted by the designer or system integrator specified in 3.2.8.1.1. In the latter case, the documentation shall be developed taking into account the solutions adopted in technical documentation listed in 3.2.8.1, and submitted for approval at the stage of delivery and installation to the RS Branch Office responsible for carrying out technical supervision during construction, together with the documentation according to 1.4.1 of Part XV "Automation" of these Rules, approved under technical supervision of automation equipment as required by Section 12 of Part IV "Technical Supervision during Manufacture of Products" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships".

3.4 DETAILED DESIGN DOCUMENTATION FOR A SHIP UNDER CONSTRUCTION

Para 3.4.8 shall be amended to read:

"**3.4.8 Documentation on automation equipment:**

.1 structural and mounting drawings of consoles and control and monitoring switchboards as well as mounting drawings of elements of automation systems and devices, sensors, signalling and instruments (*).

Note:

The documentation specified in 3.4.8 shall be submitted by the designer or system integrator (shipyard or, by cooperation, contracted alternative organization/supplier). The documentation shall be developed as regards the solutions adopted within the technical design documentation.