RUSSIAN MARITIME REGISTER OF SHIPPING

CIRCULAR LETTER	**No. 381-08-1156c**	dated 02.08.2018

Re:

amendments to the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships, 2018, ND No. 2-020101-040-E

Item(s) of supervision:

material, product, activities, ship

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

amends Circular Letter No. **381-08-1143** dated **20.06.2018**

Number of pages: 1+7

Appendix(-ces):

text of amendments to Part I “General Regulations for Technical Supervision”

Director General Konstantin G. Palnikov

Text of CL:

We hereby inform that in connection with coming into force of a new revision of IACS Unified Requirement (UR) Z17 (Rev.13 Jan 2018) “Procedural Requirements for Service Suppliers” and based on the proposals entered in SRPAA RS ND, Part I "General Regulations for Technical Supervision” shall be amended as specified in the Appendix to the Circular Letter. These 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/RHO locations with the provisions of the Circular Letter.

2. Apply provisions of the Circular Letter.

3. Clarify the content of the Circular Letter to all interested parties in the area of the RS Branch Offices' activity.

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

Part I: Table 8.1.1, paras 8.1.1.1.2, 8.1.1.1, 8.3.1, 8.3.1.1.8, 8.3.3, 8.3.3.1 — 8.3.38, 8.3.18.

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Appendix

to Circular Letter

No. 381-08-1156c dated 02.08.2018

RULES FOR TECHNICAL SUPERVISION DURING CONSTRUCTION OF SHIPS AND MANUFACTURE OF MATERIALS AND PRODUCTS FOR SHIPS, 2018, ND No. 2-020101-040-E

PART I. GENERAL REGULATIONS FOR TECHNICAL SUPERVISION

8 RECOGNITION OF SERVICE SUPPLIERS

Para 8.1.1.1.2 shall be amended to read (for the English version only):

“Service supplier (a service supplier or a category of service supplier may be referred to hereafter simply as "Supplier") is a person or a firm not employed by the Register, who at the request or on behalf of an equipment manufacturer, a shipyard, a shipowner, an owner of offshore installation or other client provides services for a ship or an offshore installation, such as measurements, tests, repair or maintenance of safety systems and equipment, the results of which are used by the RS surveyors in making decisions affecting classification or statutory certification of a ship or an offshore installation and services provided thereto;”.

Table 8.1.1. Code **22001000**. Kind of activity shall be amended to read:

22001000	Thickness measurements on ships and offshore installations under supervision of the RS surveyor:

Code **22003000**. Kind of activity shall be amended to read:

22003000	In-water survey on ships and offshore installations by diver or remotely operated vehicle (ROV)

New code **22025600** shall be introduced reading as follows.

22025600	Survey using remote inspection techniques (RIT) as an alternative means for close-up survey of the structure of ships and offshore installations

Para 8.1.1.1 shall be supplemented with new para **8.1.1.1.6** reading as follows:

“.6 A term “ship and offshore installation” means any ship (including floating dock, mobile offshore drilling unit (MODU), floating offshore oil-and-gas production unit (FPU)) and fixed offshore platform (FOP)”.

Para 8.3.1 shall be amended to read:

“8.3.1 Requirements for firms engaged in thickness measurements on ships and offshore installations (codes 22001001, 22001002).

Firms engaged in thickness measurements on ships and offshore installations (hereinafter referred to as “TM service supplier”) are subdivided into the following categories:

category I: firms engaged in thickness measurements under supervision of the RS surveyor on any ship types, other floating facilities (including floating docks, mobile offshore drilling units (MODUs), floating offshore oil-and-gas production units (FPUs)) and fixed offshore platforms (FOPs) regardless of their gross tonnage;

category II: firms engaged in thickness measurements under supervision of the RS surveyor on fishing vessels only regardless of their gross tonnage, and **non-ESP** ships less than 500 gross tonnage”.

Para 8.3.1.1.8 shall be amended to read:

"**8.3.1.1.8** Details of category I TM service supplier recognition.

TM service supplier recognition and issuance of the Recognition Certificate (СП) (form 7.1.4.2) are conditional on a practical demonstration of thickness measurements on board the ship, other floating facility and fixed offshore platform performed under supervision of the RS surveyor, as well as satisfactory reporting being carried out based on the results of thickness measurement.

The Register shall issue Certificate of Vocational Training (СПП) (form 7.1.34) to the operator/supervisor who has carried out thickness measurements confirming his/her appropriate qualification for carrying out thickness measurements on ships and offshore installations in accordance with the RS normative documents.

An entry on the type of service shall be made in the Annex to the Recognition Certificate (СП) reading as follows: "22001001 —- Category I: firms engaged in thickness measurements under supervision of the RS surveyor on any ship types, other floating facilities (including floating docks, mobile offshore drilling units (MODUs), floating offshore oil-and-gas production units (FPUs)) and fixed offshore platforms (FOPs) regardless of their gross tonnage". During survey of recognized TM service suppliers for renewal of the Recognition Certificate (СП), it shall be confirmed that they comply with the applicable requirements of the RS normative documents concerning the TM service supplier recognition, and that the residual thickness measurements during the period of validity of the Recognition Certificate (СП) have been carried out on particular ships, other floating facilities, FOPs under supervision of the RS surveyor or under supervision of the ACS — IACS member surveyors whose Recognition Certificates (СП) are also available at the TM service supplier. It shall be also confirmed that thickness measurement reports have been duly signed and stamped by the RS or ACS — IACS member surveyors. Particular attention shall be paid to the relevance of the list of the TM service supplier operators/supervisors and to the availability of the necessary documents confirming the NDT personnel qualification.”

Paras 8.3.3, 8.3.3.1 — 8.3.3.8 shall be amended to read:

“8.3.3 Requirements for firms carrying out an in-water survey on ships and offshore installations by diver or remotely operated vehicle (ROV) (code 22003000).

8.3.3.1 Extent of engagement — in-water survey in lieu of a docking survey and/or the internal hull survey of compartments filled with water on ships and offshore installations by diver or ROV.

8.3.3.2 Training of personnel.

The firm is responsible for the qualification of its divers, ROV operators and supervisors and for their training in the use of the equipment utilised when carrying out inspection. Knowledge of the following shall be documented:

ship’s underwater structure and appendages, propeller shaft, propeller, rudder and its bearings, etc.;

non-destructive testing in accordance with a recognised national or international industrial NDT standard. This requirement only applies if an in-water survey firm performs non-destructive testing (visual testing (VT), ultrasonic testing (UT), ultrasonic thickness measurement, etc.);

certification as a firm when conducting thickness measurements under water on ships and offshore installations;

bearing clearance measurements on rudders and propeller shaft;

underwater video monitoring with TV-monitors on deck, as well as still picture work;

operation of underwater communication system;

any special equipment necessary for the work carried out.

8.3.3.3 A plan for training of personnel in the reporting system, minimum requirements of the RS rules for relevant ship and offshore installation types, ship’s and offshore installation’s underwater structure, measuring of bearing clearances, the recognition of corrosion damage, buckling and deteriorated coatings, etc. shall be included.

8.3.3.4 Supervisor.

8.3.3.4.1 Diving supervisor.

Diving supervisor shall be qualified according to the firm’s general requirements and shall have a minimum of two years’ experience as a diver carrying out inspection.

8.3.3.4.2 ROV supervisor.

ROV supervisor shall have a minimum of two (2) years of experience conducting inspections with ROVs.

8.3.3.5 Divers and operators.

8.3.3.5.1 Divers carrying out inspection.

The diver carrying out the inspection shall have had at least one year’s experience as an assistant diver carrying out inspections (including participation in a minimum of 10 different assignments).

8.3.3.5.2 ROV operators

ROV operators shall have at least one year of experience working with ROVs conducting inspections on ships and offshore installations.

8.3.3.6 Equipment.

8.3.3.6.1 The following shall be available for firms:

closed circuit colour television with sufficient illumination equipment;

two-way communication between diver and surface staff;

video recording device connected to the closed circuit television;

still photography camera;

equipment for carrying out thickness gauging, non-destructive testing and measurements (e.g. clearances, indents, etc., as relevant to the work to be performed);

equipment for cleaning of the hull.

8.3.3.6.2 In addition to above 8.3.3.6.1, the following shall be available for firms carrying out survey by ROV:

remotely operated vehicle (ROV);

adequate controls or programming for the ROV functions required.

8.3.3.7 Procedures and guidelines.

8.3.3.7.1 The firm shall have documented operational procedures and guidelines for how to carry out the inspection and how to handle the equipment. These shall include:

two-way communication between diver and surface;

video recording and closed circuit television operation;

guidance of the diver along the hull to provide complete coverage of the parts to be inspected.

8.3.3.7.2 In addition to above 8.3.3.7.1, documented operational procedures and guidelines for firms carrying out in-water survey by ROV shall also include:

guidance for the operation and maintenance of ROV, if applicable;

methods and equipment to ensure the ROV operator can determine the ROV's location and orientation in relation to the ship or offshore installation.

8.3.3.8 Verification of services rendered by the recognized firm.

All in-water surveys of ships and offshore installations shall be performed by the firm under supervision of the RS surveyor. The firm shall have the surveyor's verification of each separate job performed in accordance with the RS normative documents, documented in the report of the firm by the attending surveyor(s) signature and stamp".

New para 8.3.18 shall be introduced reading as follows:

"8.3.18 Requirements for firms engaged in survey using remote inspection techniques (RIT) as an alternative means for close-up survey of the structure of ships and offshore installations (code 22025600).

8.3.18.1 Terms and definitions.

Close-up survey — is a survey where the details of structural components are within the close visual inspection range of the RS surveyor i.e. normally within reach of hand.

Remote inspection techniques (RIT) — is a means of survey that enables examination of any part of the structure without the need for direct physical access of the RS surveyor (refer to IACS Rec. No. 42 — the latest revision). RIT may include the use of:

unmanned robot arms;
remotely operated platforms, including ROV;
unmanned aerial vehicles (UAV)
drones ;
climbers;
other means acceptable to RS.

8.3.18.2 Extent of engagement – close-up survey of ships' structure and offshore installations' structure by RIT. For in-water close-up survey of the internal compartments by ROV, firms shall also hold separate approval as a "firm carrying out an in-water survey on ships or offshore installations by diver or ROV" (refer to 8.3.3).

8.3.18.3 Training and qualification of operators.

The firm is responsible for the training and qualification of its operators to undertake the remote inspections. UAV and drone pilots shall be qualified and licensed in accordance with applicable national requirements or an equivalent industrial standard acceptable to RS.

Knowledge of the following shall be documented:

- marine and/or offshore nomenclatures;
- the structural configuration of relevant ships types, other floating facilities and offshore installations including internal structure;
- the remote inspection equipment and its operation;
- survey plans for examination of hull spaces of various configurations, including appropriate flight plans if using a UAV or drones;
- thickness measurement (TM) and non-destructive testing (NDT) in accordance with a recognised national or international industrial NDT standard when these are part of the service. Firms undertaking TMs shall hold separate approval as a "Firm engaged in thickness measurements on ships and offshore installations".

8.3.18.4 Training plan.

The firm shall maintain a documented training plan for personnel. The plan shall include requirements for training in the minimum RS rules requirements for the structure of relevant ships types, other floating facilities and offshore installations, the recognition of structural deterioration (including corrosion, buckling, cracking and deteriorated coatings) and use of the reporting system.

8.3.18.5 Supervisor.

The supervisor shall be certified according to the recognized national requirements or an equivalent industrial standard (e.g. XXX Level) if that is required by national legislation and shall have a minimum of two years' experience in the inspection of ship's and/or offshore installation's structure.

8.3.18.6 Operators.

The operator carrying out the inspection shall be certified according to the recognized national requirements or an equivalent industrial standard (e.g. YYY Level) if that is required by national legislation and have had at least one year's experience as an assistant carrying out inspections of ship's and/or offshore installation's structure (including participation in a minimum of five different assignments). The operators of those RIT which require, according to the international and national legislations, to be licensed for their use shall hold valid documentation issued by the appropriate bodies (e.g. UAV and drone pilots shall be qualified and licensed in accordance with applicable national requirements).

8.3.18.7 Equipment.

The following shall be available for the firm:

- remotely operated platform with data capture devices capable of operation within an enclosed space;
- means of powering the platforms with sufficient capacity to complete the required inspections, including spare batteries if applicable;
- data collection devices which may include cameras capable of capturing in high definition both video images and still images;
- illumination equipment;
- high definition display screen with live high definition feed from inspection cameras (when this is part of the RIT);
- means of communication;
- data recording devices, as applicable;
- equipment for carrying out thickness gauging and/or NDT, as relevant to the work to be performed (when this is part of the service).

8.3.18.8 Procedures and guidelines.

The firm shall have documented operational procedures and guidelines for how to plan, carry out and report inspections; how to handle/operate the equipment; collection and storage of data. These shall include:

- requirements for preparation of inspection plans when UAV or drones are part of the equipment.
- operation of the remotely operated platforms ;
- operation of lighting;
- calibration of the data collection equipment;
- operation of the data collection equipment;
- two-way communication between the operator, platform, RS surveyor, other personnel such as support staff and ships officers and crew;
- guidance of the operator to provide complete coverage of the structure to be inspected;
- guidance for the maintenance of the remotely operated platforms, data capture and storage devices and display screens, as applicable;
- requirements for the collection and validation of data;
- if data shall be stored, then requirements for location attribution (geo-tagging), validation and storage of data;

• requirements for the reporting of inspections, including the recording of damages and defects found during inspection and repair work.

8.3.18.9 Documentation and records.

The firm shall maintain the following:

• records of training:
• operator statutory and regulatory certificates and licences;
• equipment register for UAVs, robots, data collection devices, data analysis devices and any associated equipment necessary to perform inspections;
• equipment maintenance manuals and records/logbook;
• records of calibration;
• UAV, Drone Robot operation logbook.

8.3.18.10 Verification.

The firm shall have the RS surveyor's verification of each separate job, documented in the report by the RS attending surveyor(s) signature.

APPENDIX 1. NOMENCLATURE OF ITEMS OF THE REGISTER TECHNICAL SUPERVISION

In the column **4** a superscript "*" (only upon the RHO authorization) shall be deleted for all items of technical supervision, except:
engines of more than 55 kW — code 09010000;

diesel-engine geared set — code 09016000;

turbochargers —- code 09080200;

anti-fouling coatings of the ships' hulls — code 13370000MK.

In the column 4 the superscript "*" (only upon the RHO authorization) shall be assigned for turbochargers — codes 09080201, 09080202.

APPENDIX 6. PROCEDURE FOR TECHNICAL SUPERVISION DURING MANUFACTURE OF RADIO EQUIMENT AND NAVIGATIONAL EQUIMENT

The Appendix shall be renumbered as Appendix 3.