

RULES

FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE WITH ANNEXES

ND No. 2-020101-012-E

RULE CHANGE NOTICE

ENTERS INTO FORCE:

01.07.2024



**St. Petersburg
2024**

RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE WITH ANNEXES

The present Rule Change Notice to the Rules for the Classification Surveys of Ships in Service with Annexes (hereinafter — RCN) has been approved in accordance with the established approval procedure and contains information on amendments and additions, except for editorial amendments. RCN amendments come into force on 1 July 2024 (excluding earlier approved amendments of an urgent matter, published by the Circular Letters after entering into force of the previous version of the Rules for the Classification Surveys of Ships in Service with Annexes, specified in the Revision History and highlighted in yellow).

REVISION HISTORY

RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE

| Item | Applicability | Description | Remarks |
|---|--|--|---------|
| Part I, Chapter 2.1 | Ships Definitions and explanations Determination of the ship technical condition | Definition "Substantial corrosion" has been amended | |
| Part I, Chapter 2.3 | MODU and FOP Definitions and explanations Abbreviations | Abbreviation "MODU/FOP Rules" has been deleted. New abbreviation "MODU Rules" and "FOP Rules" have been introduced | |
| Part II, para 2.2.7.10.6 (new) | Sea-going ships Electrical equipment Electromagnetic compatibility | New para has been introduced containing requirements for measurement of total harmonic distortion. Existing para 2.2.7.10.6 has been renumbered 2.2.7.10.7 | |
| Part II, para 2.4.2.2.5 | Ships in service Special survey Hull structures in the engine room | Phrases that allow for ambiguous interpretation of the requirements for the scope of survey and repair of hull structures have been deleted | |
| Part II, para 2.4.2.5.6 | Ships Tightness tests at special surveys Sea chests, log and echo-sounder trunks | Reference to Annex 10 to the Guidelines on Technical Supervision of Ships in Service, containing explanations on the performance of tightness tests, has been introduced | |

Rules for the Classification Surveys of Ships in Service with Annexes

| Item | Applicability | Description | Remarks |
|--|---|--|---------|
| Part II, para 2.4.7.1.9 (new) | Sea-going ships Electrical equipment Electromagnetic compatibility | New para has been introduced containing requirements for measurement of total harmonic distortion | |
| Part II, para 2.5.4.3.3 | Ships, normal operation of which provides positioning on the seabed (including ships having distinguishing mark NAABSA in the class notation) Bottom survey | Reference has been amended as regards the requirements of these Rules determining the intervals between bottom surveys of group 1 ships for which minimum two of such surveys shall be carried out during each five-year RS class period | |
| Part II, para 2.5.5.3.1 | MODU and FOP Periodical surveys Bottom surveys | Reference to "the MODU/FOP Rules" has been replaced by the reference "the MODU Rules, FOP Rules" | |
| Part II, para 3.2.1 | Ships and offshore installations in service Surveys associated with changing of class notation, type/subtype and ship's other characteristics | Requirement on necessity of the shipowner's initial application to the Register Head Office has been deleted. Table 3.2.1 has been specified as regards the technical documentation required at extension of area of navigation within the prescribed area | |
| Part II, para 3.2.2 | Ships and offshore installations in service Surveys associated with changing of class notation, type/subtype and ship's other characteristics | Requirement on necessity of confirmation by the Register Head Office of the nature of conversion (major/minor) has been deleted | |

| Item | Applicability | Description | Remarks |
|---|--|--|--|
| Part II, para 3.2.4 | Ships and offshore installations in service Surveys associated with changing of class notation, type/subtype and ship's other characteristics | Requirement on necessity of confirmation by the Register Head Office of the possibility to assign new class notation, type, subtype, to extend area of navigation within the prescribed area has been deleted. Provision has been introduced on the possibility to include distinguishing marks and descriptive notations in the class notation based on the confirmation of the ship's compliance with the RS requirements for such distinguishing marks and/or descriptive notations according to the documentation previously approved by RS, the entries made in the Classification Certificate, and the RS survey reporting documents | |
| Part II, para 3.2.6 | Ships in service Occasional survey Change of class notation | Information on actions of the RS surveyor who revealed the violations of conditions of distinguishing mark, has been transferred to Part II "Carrying Out Classification Surveys of Ships" of the Guidelines | |
| Part II, para 4.8.2.1.2 | Ships under the fleet monitoring system Survey | The number of occasional surveys has been amended | Entry-into-force date: 01.01.2024 (Circular Letter No. 311-05-1983c of 26.12.2023) |

Rules for the Classification Surveys of Ships in Service with Annexes

| Item | Applicability | Description | Remarks |
|---|--|---|-------------------------------------|
| Part III, para 1.1.1 | Oil tankers and combination carriers Definitions | Definitions "Oil tanker", "Double hull oil tanker", "Ballast tank (for ESP ships only)" have been corrected | IACS UR Z10s |
| Part III, para 1.4.3.1.6.4 (new) | ESP ships On-board documentation | New para containing a requirement for a shipowner's inspection report to be prepared and kept on board the ship has been introduced | IACS UR Z 10.3 (Rev.21 Aug 2023) |
| Part III, para 2.2.5.1 | Single hull oil tankers and combination carriers Special survey Cargo tank testing | Conditions for acceptance by the RS surveyor of the cargo tank testing performed by the crew have been amended | IACS UR Z10.1 (Rev.25 Feb 2023) |
| Part III, para 3.2.5.1 | Double hull oil tankers Special survey Cargo tank testing | Conditions for acceptance by the RS surveyor of the cargo tank testing performed by the crew have been amended | IACS UR Z10.4 (Rev.18 Feb 2023) |
| Part III, paras 5.2.2.3 and 5.2.2.3.1 | Single skin bulk carriers and single skin combination carriers Special survey Ballast tanks | Requirements regarding performance of annual examination of ballast tanks with coating in less than GOOD condition have been strengthened | IACS UR Z10.2 (Rev.37 Feb 2023) |
| Part III, paras 5.4.2.2.1.2 and 5.4.2.2.1.3 | Single skin bulk carriers and single skin combination carriers Intermediate survey Ballast tanks | Requirements regarding performance of annual examination of ballast tanks with coating in less than GOOD condition have been strengthened | IACS UR Z10.2 (Rev.37 Feb 2023) |

Rules for the Classification Surveys of Ships in Service with Annexes

| Item | Applicability | Description | Remarks |
|---|--|---|------------------------------------|
| Part III, paras 6.2.2.3 and 6.2.2.3.1 | Double skin bulk carriers; ore carriers and combination carriers Special survey Ballast tanks | Requirements regarding performance of annual examination of ballast tanks with coating in less than GOOD condition have been strengthened | IACS UR Z10.5 (Rev.20 Feb 2023) |
| Part III, para 6.2.2.3.3 (new) | Double skin bulk carriers; ore carriers and combination carriers Special survey Void spaces bounding cargo holds | New para has been introduced containing requirements for survey of void spaces with POOR coating condition | IACS UR Z10.5 (Rev.20 Feb 2023) |
| Part III, para 6.2.2.3.4 | Double skin bulk carriers; ore carriers and combination carriers Special survey Void spaces bounding cargo holds | Requirements regarding drawing up of survey results for double skin void spaces have been supplemented | IACS UR Z10.5 (Rev.20 Feb 2023) |
| Part III, para 6.3.4 (new) | Double skin bulk carriers; ore carriers and combination carriers Annual survey Double-side skin void spaces bounding cargo holds | New para has been introduced containing requirements regarding survey of double skin void spaces | IACS UR Z10.5 (Rev.20 Feb 2023) |
| Part III, paras 6.4.2.2.1.2 and 6.4.2.2.1.3 | Double skin bulk carriers; ore carriers and combination carriers Intermediate survey Ballast tanks | Requirements regarding performance of annual examination of ballast tanks with coating in less than GOOD condition have been strengthened | IACS UR Z10.5 (Rev.20 Feb 2023) |

| Item | Applicability | Description | Remarks |
|---------------------------------------|--|---|---|
| Part III, Chapter 8.7 | Ships carrying liquefied gases in bulk Survey before and after the first loaded voyage | Requirements for survey during the first loading/unloading have been amended | Entry-into-force date: 01.01.2024 (Circular Letter No. 311-05-1983c of 26.12.2023) |
| Part III, Chapter 10 | Ships carrying industrial personnel and/or special personnel Goals, functional requirements and regulations for the safe carriage | The assumption of application of the 2008 SPS Code to ships carrying special personnel have been clarified upon the decision of the Flag State MA. New provisions have been introduced concerning the issuing of certificates for the carriage of special personnel to the ships flying the RF flag | Amendments to the Merchant Shipping Code of the Russian Federation, entering into force on 1 March 2024 Entry-into-force date: 28.02.2024 (Circular Letter No. 311-05-1997c of 28.02.2024) |
| Part III, Section 19 | MODU and FOP Additional surveys Hull, equipment and machinery surveys | Throughout the text of the Section, the term "the MODU/FOP Rules" is replaced by the term "the MODU Rules and the FOP Rules" | |

ANNEXES TO THE RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE

| Item | Applicability | Description | Remarks |
|---|---|---|---------|
| Annex 1, Appendix 1.2, para 1.2 | MODU and FOP Technical documentation Calculations of stability, resistance to flooding and freeboard | Reference to "the MODU/FOP Rules" has been replaced by the reference "the MODU Rules" | |
| Annex 2, para 4.1.10 | Ships Determination of the hull technical condition | For ships transferred from the class of the losing society — IACS member, the prohibition of simultaneous application for hull members with wear of the standards defined in 4.2.1 — 4.2.3 and 4.2.6 has been deleted | |
| Annex 2, para 4.2.6.1 | Ships Determination of the hull technical condition | For ships having unchanged RS class since their construction, the application for hull members with wear of the standards determined according to 4.2.1.2, 4.2.1.3, 4.2.2 — 4.2.3 has been allowed | |
| Annex 2, para 4.5.2 | Ships in service Determination of the ship technical condition Application of standards for structures with substantial corrosion | Additional requirements have been introduced to determine the upper and lower levels of substantial corrosion area | |

RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE

PART I. GENERAL PROVISIONS

2 DEFINITIONS AND EXPLANATIONS

2.1 DEFINITIONS APPLIED TO ALL SHIPS

Definition "Substantial corrosion" is amended as follows:

"Substantial corrosion is an extent of ~~corrosion~~actual wear such that assessment of ~~corrosion~~wear pattern indicates a wastage in excess of 75 % of allowable ~~margins~~wear determined according to the RS rules, but within acceptable limits.

For ships constructed ~~in compliance with~~under the IACS Common Structural Rules (CSR ships), substantial corrosion is ~~such degree when measured value lies in the range~~an extent of corrosion such that the assessment of the corrosion pattern indicates a measured thickness between $t_{ren} + 0,5$ mm and t_{ren} . Where t_{ren} is the allowable thickness, in mm, below which renewal of structural members shall be carried out."

2.3 ABBREVIATIONS

Abbreviation "MODU/FOP Rules" is replaced by the following text:

"FOP Rules — Rules for the Classification and Construction of Fixed Offshore Platforms.

MODU Rules — Rules for the Classification and Construction of Mobile Offshore Drilling Units."

PART II. SURVEY SCHEDULE AND SCOPE

2 PERIODICAL SURVEYS

2.2 ANNUAL SURVEY

New para 2.2.7.10.6 is introduced reading as follows:

"**2.2.7.10.6** Values of the total harmonic distortion on the main busbars of electrical distribution system shall be measured annually on board the ship under seagoing conditions according to the methods given in Appendix 10 to Section 10 of the Guidelines on Technical Supervision of Ships under Construction. The date of measurements shall be as close to the annual survey as possible so as to provide the RS surveyor with the information about the total harmonic distortion on the main busbars of electrical distribution system. The total harmonic distortion shall be measured in operating mode with the greatest amount of distortion. Based on the measurement results, an entry showing which equipment was running and/or filters in service shall be recorded in the engine log book. The measurement results shall be stored on board the ship for at least 5 years and shall be made available at the next periodical survey. The results may be submitted and stored both in hard copy and electronic format.

The total harmonic distortion shall be measured following any modification to the ship's electric power plant or ship's electric power users comprising semi-conductor convertors.

Measurements shall be taken by a qualified technical crew personnel or an outside organization. Records of the measurements taken shall be made available upon request of the RS surveyor at each periodical survey."

Existing para 2.2.7.10.6 is renumbered **2.2.7.10.7**.

2.4 SPECIAL SURVEY

Para 2.4.2.2.5 is amended as follows:

"**2.4.2.2.5** At special survey the engine room shall be surveyed. Particular attention shall be given to tank tops, hull shell plating at tank tops, brackets connecting side shell frames and tank tops, engine room bulkheads in way of tank tops and bilge wells. Particular attention shall be paid to the ~~sea suction openings in shell plating~~, sea water cooling piping and as well as overboard discharge valves and their connections to the shell plating. ~~Where wastage is evident or suspect,~~ Thickness measurements shall be carried out in suspect areas. Where ~~wastage corrosion wear~~ exceeds allowable limits, ~~renewals or repairs of damaged parts of hull structures~~ shall be made."

Para 2.4.2.5.6 is amended as follows:

"**2.4.2.5.6** Sea chests, log and echo-sounder trunks shall be ~~tightness tested~~ tested for tightness at special surveys in accordance with Annex 10 of the Guidelines on Technical Supervision of Ships in Service. ~~They are tightness tested during launching of the ship.~~"

New para 2.4.7.1.9 is introduced reading as follows:

"**2.4.7.1.9** The total harmonic distortion on the main busbars of electrical distribution system shall be measured in accordance with 2.2.7.10.6."

2.5 SURVEY OF THE OUTSIDE OF THE BOTTOM OF SHIPS AND OFFSHORE INSTALLATIONS

Para 2.5.4.3.3 is amended as follows:

"**2.5.4.3.3** The minimum of two bottom surveys shall be carried out during each five-year RS class period. One such survey shall be carried out in conjunction with the special survey for renewal of the Classification Certificate (class renewal survey) taking into account the provisions of ~~2.5.3.4~~ 2.5.4.1.2.

The second (intermediate) bottom survey in dry dock shall be carried out at the second/third or, if applicable, at intermediate survey for confirmation of the Classification Certificate.

The other three annual bottom surveys shall be carried out as in-water surveys according to 2.5.8 with the relevant record made in the List of Survey's Status."

Para 2.5.5.3.1. The first paragraph is amended as follows:

"These requirements shall apply to underwater pontoons, particular MODU, FOP and other platforms, as well as FPU, which primarily designed for long-term positioning on the specially prepared seabed in accordance with the MODU/~~FOP~~ Rules, FOP Rules and the

Rules for the Classification and Construction of Floating Offshore Oil-and-Gas Product Units (hereinafter referred to as "the FPU Rules")."

3 OCCASIONAL SURVEYS

3.2 SURVEYS ASSOCIATED WITH CHANGING OF CLASS NOTATION, TYPE/SUBTYPE AND SHIP'S OTHER CHARACTERISTICS

Para 3.2.1 is amended as follows:

3.2.1 When a shipowner has an intent to change the class notation of the ship, its type/subtype, extend area of navigation within the prescribed area, increase the cargo carrying capacity and the number of persons (including the crew, passengers, special personnel, etc.) on board the ship, as well as make modifications to the ship structure ~~ship structure~~, machinery, electrical installation, equipment, outfit, arrangements, and other items of supervision covered by the RS Nomenclature, the shipowner shall send a request to RHO ~~(for ships of 100 gross tonnage and less — to the RS Branch Office for in-service supervision or the RS Branch Office which is located in the area of permanent operation of the ship)~~ explaining the reasoning behind the changes requested.

~~These~~The changes shall be substantiated, if necessary by an explanatory note, technical calculations, drawings and schemes verifying compliance with the Register relevant requirements. Examples of set of documents for various types of the most frequent changes are given in Table 3.2.1.

The final set of documents shall be defined in each particular case based on the estimated changes, RS ~~ND~~ requirements, as well as applicable provisions of international conventions, codes, etc. (refer to also to Section 6 of Part I "General Provisions"). Matters relating to changing of class notation towards decreasing (for example, area of navigation, ice class, unsinkability category (subdivision), etc.), deletion of distinguishing mark, descriptive notation, etc. shall also be reviewed by RHO ~~(for ships of 100 gross tonnage and less — by the RS Branch Office for in-service supervision or the RS Branch Office which is located in the area of permanent operation of the ship)~~. If necessary, the Register may request the shipowner to submit additional documentation containing substantiation of the decision to be made, action plan, and also as regards the equipment, arrangements relating to the distinguishing mark, descriptive notation to be changed/deleted.

Table 3.2.1

| Document | Variants ¹ | | | | | |
|--|--|--|----------------|---------------------------------------|--------------------------|----------------|
| | I | II | III | IV | V | VI |
| Explanatory note | + | + | + | + | – | + |
| Assessment of ship compliance with the applicable requirements of the Rules for the Classification and Construction of Sea-Going Ships | + | + | + | + | – | + |
| | (Parts II and III, IV, VII, VIII, XI, XVII, as applicable) | (Parts II, III, V, VII, VIII, XVII, as applicable) | (Part II) | (depending on the ship type proposed) | | |
| Stability calculations | + ² | – | + ² | + ² | – | + ² |
| Tonnage calculation or request to RHO to make calculation | – | – | + | + | – | – |
| Stability Booklet and, where applicable, loading manual, Damage Stability Booklet, loading instrument, stability instrument | + | + | + | + | + | + ² |
| | | (assessment of the ship's | | | (including general cargo | |

| Document | Variants ¹ | | | | | |
|--|-----------------------------------|---------------------|----------------|---------------------------------|---------------------------|------------------------|
| | I | II | III | IV | V | VI |
| | | stability in icing) | | | loading conditions) | |
| Assessment of ship compliance with the applicable requirements of the Rules for the Equipment of Sea-Going Ships | + | - | - | + | - | + |
| | (Parts II and III) ^{2,3} | | | (Parts II and III) ³ | | (Part II) ³ |
| Analysis of ship compliance with the applicable requirements of the international conventions, codes | - | - | - | + ² | - | + ² |
| Projects involving ship's conversion/modernization | + ² | + ² | + ² | + ² | - | + ² |
| Freeboard calculation, load line drawing or request to RHO to make calculation | - | - | + | + ² | - | + ² |
| The shipowner's written confirmation that the ship primarily carries or will carry general cargoes | - | - | - | - | + | - |
| Cargo Securing Manual | - | - | - | + ² | + | - |
| | | | | | (if unavailable on board) | |
| Analysis of ship compliance with ILO provisions (ILO Convention No.92 and No.133) and MLC | - | - | - | - | - | + ² |
| List of measures | - | - | - | + ⁴ | - | - |

¹ Variants:
1 — Extension area of navigation;
2 — Ice class assignment or changing the existing ice class to a higher one;
3 — Increasing carrying capacity;
4 — Changing the ship type (except for the cases of changing the ship type "bulk carrier" to "general cargo ship");
5 — Changing the ship type "bulk carrier" to "general cargo ship" for ships the keels of which were laid or which were at a similar stage of construction before 1 January 2009 (refer to IMO resolution MSC.277(85));
6 — Increasing number of persons on board.
When combining variants, the set of documents for the relevant cases shall be considered.
² Where applicable/required.
³ For ships not covered by SOLAS requirements.
⁴ Additional measures that shall be taken by the shipowner for the purpose of changing of the ship type (e.g., amendment of the ship's technical documentation, indication of changes in equipment and outfit depending on the inclusion/exclusion of cargo intended for transportation, confirmation of the ship compliance with the applicable requirements of international conventions, codes and etc.).

Para 3.2.2 is amended as follows:

"3.2.2 Upon results of the request review, Register takes a decision on the possibility of the requested changes in the ship class notation, type/subtype, as well as on extension of area of navigation within the prescribed area, increasing cargo carrying capacity and number of persons on board, based on which conditions for making such changes and scope of occasional survey shall be assigned. In case when the RS Branch Office reviewing the project determines that conversion will be major, ~~and this is confirmed by RHO,~~ the RS Branch Office which has approved this project shall record this information in the conclusion letter and specify to which part/element of the ship this major conversion applies."

Para 3.2.4 is replaced by the following text:

"3.2.4 If the ship complies with the RS requirements for a certain distinguishing mark, descriptive notation, which is confirmed in the RS conclusion letter based on results of the technical documentation review, the entries made in the Classification Certificate, and the RS survey reporting documents, upon agreement with the shipowner, the RS surveyor may include such distinguishing mark(s) and/or descriptive notation(s) in the ship class notation at occasional or any periodical survey with re-issue/updating of the ship's documents and the RS reporting documents (as applicable)."

Para 3.2.6 is amended as follows:

"3.2.6 ~~Suspension of distinguishing marks.~~ The Register may, at its own initiative, delete or alter a distinguishing mark in the class notation, where the survey ascertains that conditions for insertion of the distinguishing mark concerned have been changed or violated. One of such conditions may be a failure to submit in due dates the items of technical supervision with respect to which a corresponding distinguishing mark is inserted. ~~The matters of distinguishing marks deletion from the class notation shall be considered by RHO.~~ When the above items of technical supervision are not covered by mandatory requirements of the RS rules and/or provisions of the international conventions, do not affect the safety of the ship, personnel on board and the environment, the ship class may not be suspended.

Invalid distinguishing mark may be reinstated based on results of occasional survey upon rectification of the identified deficiencies in the prescribed manner with regard to the provisions of 4.11 of Part II "Carrying Out Classification Surveys of Ships" and Annex 17 ~~to~~ of the Guidelines.

In case where the information on violation of conditions of distinguishing mark was reported after the prescribed periodical survey, the Register, within the shortest possible time agreed with the shipowner, shall carry out an occasional survey of the ship to verify that the detected violations do not affect the safety of the ship, personnel on board ~~or~~ and the environment, and that the alternative measures are provided, where necessary, to maintain the safety of the ship, personnel on board and the environment, to comply with the requirements of the RS rules and provisions of international conventions. In case where the violations of conditions of distinguishing mark have been revealed during the prescribed periodical survey, this shall be confirmed by the RS surveyor upon completion of the current survey.

~~In both cases, the RS Branch Office that revealed the violations of conditions of distinguishing mark, shall perform the following:~~

- ~~.1 — draw up and send to RHO a request for change of the class notation;~~
- ~~.2 — on receipt of the RHO confirmation on the change of the class notation, the appropriate entries shall be made in the ship ПИД (first informational document) and ship's documents where the class notation is indicated, according to the procedure established by RS;~~
- ~~.3 — the shipowner shall be advised of deletion of the relevant distinguishing mark from the class notation;~~
- ~~.4 — in case of inability of the RS surveyor to attend the ship and re-issue and/or update the ship's documents indicating the ship class notation, the relevant entries shall be made by the RS Branch Office for in-service supervision in the classification section "Memoranda for Shipowners and Surveyors" of the List Survey's Status. These entries shall contain the information on the fact that from the date of receipt of the RHO confirmation, the relevant~~

distinguishing mark is invalid and that the Classification Certificate shall be replaced on board during the next ship attendance with indication of the new class notation;

~~.4.1 examples of an entry:~~

~~.1 "Distinguishing mark [specify] in the class notation is invalid from [DD.MM.YYYY — specify the date of RHO confirmation of changing the class notation]";~~

~~.2 "At the nearest ship attendance, the RS surveyor shall re-issue the Classification Certificate with the expiry date remaining unchanged and deletion of the distinguishing mark [specify] from the class notation"."~~

4 OTHER SURVEYS

4.8 ADDITIONAL MEASURES AIMED AT MAINTENANCE AND IMPROVEMENT OF THE TECHNICAL CONDITION OF SHIPS

Para 4.8.2.1.2 is replaced by the following text:

"4.8.2.1.2 Effective period of fleet monitoring system shall be not less than ~~12~~24 months. While the ship is under the fleet monitoring system, at least ~~one occasional survey~~ two occasional surveys shall be carried out in accordance with 4.8.3."

PART III. ADDITIONAL SURVEYS OF SHIPS DEPENDING ON THEIR PURPOSE AND HULL MATERIAL

1 GENERAL

1.1 DEFINITIONS

Para 1.1.1. Definition "Oil tanker" is amended as follows:

"Oil tanker is a ship primarily designed for carrying oil in bulk, ~~referred to this type of ships are also~~ in cargo tanks forming an integral part of the ship's hull including ship types such as combination carriers (oil/ore carriers, etc.) but excluding ships carrying oil in independent tanks not part of the ship's hull such as asphalt carriers."

Definition "Double hull oil tanker" is amended as follows:

"~~Double skin-hull~~ oil tanker is a ship primarily designed for carrying oil in bulk ~~in cargo tanks protected over the entire length of a cargo area with the double skin, which comprises double sides and double bottom spaces used for water ballast or as void spaces,~~ which has the cargo tanks forming an integral part of the ship's hull and is protected by a double hull which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces."

The Note remains unamended.

Definition "Ballast tank (for ESP ships only)" is amended as follows:

"Ballast tank (for ESP ships only) ~~is a term applied:~~ in Sections 2, 5 and 6 of this Part and a term which means a tank that is being used solely for water ballast;

~~in Sections 3 and 4 of this Part and a term which means a tank that is being used primarily for water ballast~~ a tank which is used primarily for the carriage of salt water ballast.

The space of a bulk carrier or double skin bulk carrier used for both cargo and ballast shall be treated as a ballast tank when substantial corrosion has been found in that tank. The double skin tank of the double skin bulk carrier is considered as a separate tank, even though it is connected with a top side or hopper side tank."

1.4 DOCUMENTATION ON BOARD ESP SHIPS

New para 1.4.3.1.6.4 is introduced reading as follows:

"**6.4** structural condition inspections, submitted as reports using the form given in Appendix 1.4;".

2 SURVEYS OF OIL TANKERS AND COMBINATION CARRIERS

2.2 SPECIAL SURVEY

Para 2.2.5.1 is amended as follows:

"**2.2.5.1** The minimum requirements for ballast tank testing at special survey are given in 2.2.5.3 and Table 2.2.5.1. The minimum requirements for cargo tank testing at special survey are given in 2.2.5.4 and Table 2.2.5.1.

Cargo tank testing carried out by the ship's crew under the direction of the master may be accepted by the RS surveyor to the Register provided the following conditions are complied with:

.1 a tank testing procedure, specifying fill heights, tanks being filled and bulkheads being tested, has been submitted by the shipowner and agreed with the Register prior to the testing being carried out;

.2 the tank testing is carried out prior to overall survey or close-up survey;

.3 the tank testing is carried out within the special survey window and not more than 3 months prior to the date on which the overall or close-up survey is completed;

.24 the satisfactory results of the testing is recorded in the ship log book. Furthermore, the tank testing has been satisfactorily carried out and there is no record of leakage, distortion or substantial corrosion that would affect the structural integrity of the tank;

~~**.3** the tank testing has been satisfactorily carried out within special survey window not more than 3 months prior to the date of the survey on which the overall or close-up survey is completed;~~

.5 the satisfactory results of the testing is recorded in the ship's logbook; and

.46 the internal and external condition of the tanks and associated structure are found satisfactory by the RS surveyor to the Register at the time of the overall and close-up survey."

Table 2.2.5.1 remains unamended.

3 SURVEY OF DOUBLE HULL OIL TANKERS

3.2 SPECIAL SURVEY

Para 3.2.5.1 is amended as follows:

"**3.2.5.1** The minimum requirements for ballast tank testing at special survey are given in 3.2.5.3 and Table 3.2.5.1. The minimum requirements for cargo tank testing at special survey are given in 3.2.5.4 and Table 3.2.5.1.

Cargo tank testing carried out by the ship's crew under the direction of the master may be accepted by the RS surveyor ~~to the Register~~ provided the following conditions are complied with:

.1 a tank testing procedure, specifying fill heights, tanks being filled and bulkheads being tested, has been submitted by the shipowner and agreed with the Register prior to the testing being carried out;

.2 the tank testing is carried out prior to overall survey or close-up survey;

.3 the tank testing is carried out within the special survey window and not more than 3 months prior to the date on which the overall or close-up survey is completed;

.24 the satisfactory results of the testing is recorded in the ship log book. Furthermore, the tank testing has been satisfactorily carried out and there is no record of leakage, distortion or substantial corrosion that would affect the structural integrity of the tank;

~~**.3** the tank testing has been satisfactorily carried out within special survey window not more than 3 months prior to the date of the survey on which the overall or close-up survey is completed;~~

.5 the satisfactory results of the testing is recorded in the ship's logbook; and

.46 the internal and external condition of the tanks and associated structure are found satisfactory by the RS surveyor at the time of the overall and close-up survey."

Table 3.2.5.1 remains unamended.

5 SURVEY OF BULK CARRIERS

5.2 SPECIAL SURVEY

Paras 5.2.2.3 and 5.2.2.3.1 are amended as follows:

"**5.2.2.3** ~~Tank e~~ Corrosion prevention system of ship spaces.

5.2.2.3.1 The condition of the corrosion prevention system of ballast tanks shall be examined. For ballast tanks, excluding double bottom tanks, where a hard protective coating is found ~~in POOR~~ to be in less than GOOD condition and it is not renewed, or where a soft or semi-hard coating has been applied, or where a hard protective coating has not been applied from the time of construction, the tanks in question shall be examined at subsequent annual intervals. Thickness measurements shall be carried out as deemed necessary by the RS surveyor.

For double bottom ballast tanks, where a hard protective coating is found in POOR condition and it is not renewed, where a soft or semi-hard coating has been applied, or where a hard protective coating was not applied from the time of construction, the tanks in question may be examined at subsequent annual intervals. When considered necessary by the RS surveyor, or extensive corrosion exists, thickness measurements shall be carried out."

5.4 INTERMEDIATE SURVEY

Paras 5.4.2.2.1.2 and 5.4.2.2.1.3 are amended as follows:

"~~1.2~~ where ~~POOR coating~~ a hard coating is found to be in less than GOOD condition, corrosion or other defects are found in ballast tanks, ~~or where a soft or semihard coating has been applied~~, or where a hard protective coating was not applied from the time of construction, the examination shall be extended to other ballast tanks of the same type;

~~1.3~~ in ballast tanks, other than double bottom tanks, where a hard protective coating is found ~~in POOR to be in less than GOOD condition~~, and it is not renewed, or where a soft or semi-hard coating has been applied from the time of construction, or where a hard protective coating has not been applied from the time of construction, the tanks in question shall be examined and thickness measurements carried out as considered necessary at subsequent annual intervals. Where a hard protective coating is found ~~in POOR to be in less than GOOD condition~~ in ballast double bottom tanks, or where a soft or semi-hard coating has been applied, or where a hard ~~or semihard~~ protective coating has not been applied from the time of construction, the tanks in question may be examined at subsequent annual intervals. When considered necessary by the RS surveyor, or where extensive corrosion exists, thickness measurements shall be carried out;"

6 SURVEYS OF DOUBLE SKIN BULK CARRIERS

6.2 SPECIAL SURVEY

Paras 6.2.2.3 and 6.2.2.3.1 are amended as follows:

"~~6.2.2.3~~ Tank e Corrosion prevention system of ship spaces.

~~6.2.2.3.1~~ The RS surveyor shall examine the condition of the corrosion prevention system of ballast tanks shall be examined.

For ballast tanks, excluding double bottom tanks, where a hard protective coating is found ~~in a POOR to be in less than GOOD condition~~, and it is not renewed, or where a soft or semi-hard coating has been applied, or where a hard protective coating has not been applied from the time of construction, the tanks in question shall be examined at subsequent annual intervals. Thickness measurements shall be carried out as deemed necessary by the RS surveyor.

For double bottom ballast tanks, where a hard protective coating is found in POOR condition and it is not renewed, where a soft or semi-hard coating has been applied, or where a hard protective coating was not applied from the time of construction, the tanks in question may be examined at subsequent annual intervals. When considered necessary by the RS surveyor, or extensive corrosion exists, thickness measurements shall be carried out."

New para 6.2.2.3.3 is introduced reading as follows:

"**6.2.2.3.3** For double side skin void spaces bounding cargo holds for bulk carriers exceeding 20 years of age and of 150 m in length and upwards, where provided, the condition of the corrosion prevention system of void spaces shall be examined. Where a hard protective coating is found to be in POOR condition, and it is not renewed, or where a soft or semi-hard coating has been applied, or where a hard protective coating has not been applied from the time of construction, the void spaces in question shall be examined at annual intervals. Thickness measurements shall be carried out as deemed necessary by the RS surveyor."

Existing para 6.2.2.3.3 is renumbered **6.2.2.3.4**.

Existing para 6.2.2.3.3 is amended as follows:

"**6.2.2.3.4** Based on survey results, the RS surveyor makes a record on the necessity of ballast tanks and void spaces (refer to 6.2.2.3.3) to be examined at annual intervals into the relevant RS reporting documents, the List of Ship's Status taking into account the requirements of 6.2.2.3.1."

6.3 ANNUAL SURVEY

New para 6.3.4 is introduced reading as follows:

"**6.3.4** Examination of double side skin void spaces, for bulk carriers exceeding 20 years of age and of 150 m in length and upwards.

Examination of double side skin void spaces, for bulk carriers exceeding 20 years of age and of 150 m in length and upwards, shall be carried out when required as a consequence of the results of the special survey (refer to 6.2.2.3) and intermediate survey (refer to 6.4.2). When considered necessary by the RS surveyor, or when extensive corrosion exists, thickness measurements shall be carried out. If the results of these thickness measurements indicate that substantial corrosion is found, the extent of thickness measurements shall be increased in order to determine areas subject to substantial corrosion in accordance with Table 6.2.4.2.

These extended thickness measurements shall be carried out before the survey is credited as completed. Suspect areas identified at previous surveys shall be examined. Areas of substantial corrosion identified at previous surveys shall have thickness measurements taken. For ships built under the CSR, the annual thickness gauging may be omitted where a protective coating has been applied in accordance with the coating manufacturer's requirements and is maintained in good condition."

Existing para 6.3.4 is renumbered **6.3.5**.

6.4 INTERMEDIATE SURVEY

Paras 6.4.2.2.1.2 and 6.4.2.2.1.3 are amended as follows:

".**1.2** where a ~~POOR coating~~ hard coating is found to be in less than GOOD condition, corrosion or other defects are found in water ballast tanks, or where a ~~hard~~ soft or semi-hard coating has been applied, or a hard protective coating was not applied from the time of construction, the examination shall be extended to other ballast tanks of the same type;

.1.3 in ballast tanks other than double bottom tanks, where a hard protective coating is found ~~in POOR~~ to be in less than GOOD condition, and it is not renewed, or where a soft or semi-hard coating has been applied, or where a hard protective coating was not applied from the time of construction, the tanks in question shall be examined and thickness measurements shall be carried out as considered necessary at subsequent annual intervals. Where a hard protective coating is found ~~in POOR~~ to be in less than GOOD condition in ballast double bottom tanks, and it is not renewed, or where the soft or semi-hard coating has been applied, or where a hard protective coating has not been applied from the time of construction, the tanks in question may be examined at subsequent annual intervals. When considered necessary by the RS surveyor, or where extensive corrosion exists, thickness measurements shall be carried out;"

8 SURVEYS OF GAS CARRIERS

8.7 SURVEYS BEFORE AND AFTER THE FIRST LOADED VOYAGE

Chapter 8.7 is replaced by the following text:

"8.7 SURVEYS BEFORE AND AFTER THE FIRST LOADED VOYAGE

8.7.1 Application.

~~This paragraph applies to all the ships carrying liquefied natural gases (LNG) in bulk, which have satisfactorily completed gas trials. The requirements of this Chapter apply to all ships carrying liquefied gases in bulk.~~

8.7.2 Certification.

The following initial certificated ~~s~~ shall be "conditionally" issued at delivery subject to satisfactory completion of ~~the first cargo loading and unloading survey requirements below in the presence of a surveyor~~ all required testing and examinations according to 8.7.3 (as applicable):

- .1 Classification Certificate;
- .2 International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk.

Note. The Classification Certificate shall be issued for a period of 60 months. In the List of Survey's Status (form 6.3.51-1), Section "Conditions", the following entry shall be made: "Not later than DD.MM.YYYY, the overall performance of the cargo containment system shall be verified for compliance with the design parameters during the first full loading and discharging of the cargo, in accordance with the survey procedure, the IGC Code requirements concerning the conduct of survey and the MA requirements. Records of the performance of the components and equipment essential to verify the design parameters, shall be maintained and be available to the attending surveyor".

The period of time for fulfilling the requirements shall be sufficient to make the first loaded voyage, but shall not exceed 5 months.

The International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk (hereinafter referred to as "the International Certificate") shall be issued for a period of time sufficient to make the first loaded voyage, but shall not exceed 5 months. Under the title of the International Certificate, the following entry shall be made: "CONDITIONAL"/"SHORT-TERM", the conditions shall be stated in the International Certificate or the reference to the Ship's Survey Statement (form 6.1.03, supplemented by the Survey checklist as per form 6.1.01) shall be made therein specifying the following conditions:

the overall performance of the cargo containment system shall be verified for compliance with the design parameters during the first full loading and discharging of the cargo in accordance with the survey procedure, the IGC Code requirements concerning the conduct of survey, and the MA requirements. Records of the performance of the components and equipment essential to verify the design parameters shall be maintained and be available to the attending surveyor;

the cargo containment system shall be inspected for cold spots during, or immediately following, the first loaded voyage. Inspection of the integrity of thermal insulation surfaces that cannot be visually checked shall be carried out in accordance with recognized standards. The written statement shall be obtained from the master that the cold spot examination of the hull and external insulation of the cargo containment system was carried out by the crew during the first loaded voyage and found satisfactory. Report of findings shall be available to the attending surveyor.

8.7.3 Survey requirements.

~~8.7.3.1 First loading (considered to be full loading):~~

- ~~.1 priority to be given to latter stages of loading (approximately last 6 h);~~
- ~~.2 review cargo logs and alarm reports;~~
- ~~.3 witness satisfactory operation of the following:~~

~~gas detection system;
cargo control and monitoring systems such as level gauging equipment, temperature sensors, pressure gauges, cargo pumps and compressors, proper control of cargo heat exchangers, if operating, etc;
nitrogen generating plant or inert gas generator, if operating;
nitrogen pressure control system for insulation, interbarrier, and annular spaces, if operating;
cofferdam heating system, if operating;
reliquefaction plant, if fitted;
equipment fitted for the burning of cargo vapors such as boilers, engines, gas combustion units, etc., if operating;~~

~~.4— examination of on-deck cargo piping systems including expansion and supporting arrangements;~~

~~.5— witness topping off process for cargo tanks including high level alarms activated during normal loading;~~

~~.6— advise master to carry out cold spot examination of the hull and external insulation during transit voyage to unloading port;~~

~~.7— witness emergency shutdown system testing prior to commencement of unloading.~~

~~8.7.3.2— First unloading:~~

~~.1— priority to be given to the commencement of unloading (approximately first 4—6 h);~~

~~.2— witness emergency shutdown system testing prior to commencement of unloading;~~

~~.3— review cargo logs and alarm reports;~~

~~.4— witness satisfactory operation of the following:~~

~~gas detection system;
cargo control and monitoring systems such as level gauging equipment, temperature sensors, pressure gauges, cargo pumps and compressors, proper control of cargo heat exchangers, if operating, etc;
nitrogen generating plant or inert gas generator, if operating;
nitrogen pressure control system for insulation, interbarrier, and annular spaces, as applicable;~~

~~on membrane vessels, verify that the readings of the cofferdam and inner hull temperature sensors are not below the allowable temperature for the selected grade of steel. Review previous readings;~~

~~cofferdam heating system, if operating;
reliquefaction plant and review of records from previous voyage;
equipment fitted for the burning of cargo vapors such as boilers, engines, gas combustion units, etc., if operating;~~

~~.5— examination of on-deck cargo piping systems including expansion and supporting arrangements;~~

~~.6— obtain written statement from the master that the cold spot examination was carried out during the transit voyage and found satisfactory. Where possible, the surveyor shall examine selected spaces.~~

~~RS surveyor attendance is required at the first cargo loading and first cargo unloading.~~

~~8.7.3.1 At gas trials or the first full cargo loading, as applicable to the cargo containment system, the survey shall be carried out in order to verify the satisfactory functionality of the following items of technical supervision:~~

~~emergency shutdown system during testing;~~

~~gas detection system;~~

~~cargo tank pressure monitoring system;~~

interbarrier spaces and insulation spaces pressure monitoring system, as applicable;
cargo tank temperature monitoring system;
cargo tank level indicating system;
interbarrier spaces and inner hull temperature monitoring system, as applicable;
inert gas generator, if operating;
nitrogen generating plant, if operating;
nitrogen pressure control system for insulation, interbarrier, and annular spaces, as applicable;
reliquefaction plant, if fitted;
equipment fitted for the burning of cargo vapours such as boilers, engines, gas combustion units, etc., if operating;
on-deck cargo piping systems including expansion and supporting arrangements, piping securing.

In addition, it is necessary to examine all piping systems, including valves, fittings and associated equipment for handling cargo or vapours.

Herewith, the master shall be advised the following recommendations:
regarding cold spot examination of the hull and external insulation during transit voyage to unloading port and record in ship's logbook;
regarding testing of high-level alarm(s) with liquid cargo during voyage and record in ship's logbook, when loading condition permits.

Note . At first full cargo loading, priority shall be given to latter stages of loading.

8.7.3.2 At gas trials or the first full cargo unloading, as applicable, survey shall be carried out in the following scope (the symbol (**)) indicates survey requirements only feasible to be carried out at the time of first full cargo loading/unloading):

survey of on-deck cargo piping systems including expansion and supporting arrangements, piping securing;

review of logbook entry of emergency shutdown system testing prior to commencement of unloading;

(**) review of cargo logs and alarm reports for cargo tank pressure, temperature, and level indicating systems;

confirmation of satisfactory operation of cargo compressors;

confirmation of satisfactory operation of cargo pumps;

confirmation of satisfactory operation of inert gas generator, if operating;

confirmation of satisfactory operation of nitrogen generating plant, if operating;

confirmation of satisfactory operation of nitrogen pressure control system for insulation, interbarrier, and annular spaces, as applicable;

review of records for satisfactory operation of the reliquefaction plant, if fitted;

(**) review of records for satisfactory operation of the equipment fitted for the burning of cargo vapours such as boilers, engines, gas combustion units, etc., if operating;

(**) on ships fitted with membrane tanks, review of the records of the cofferdam and inner hull temperature sensors to verify the readings are not below the allowable temperature for the selected grade of steel;

(**) confirmation of satisfactory operation of cofferdam heating system, if in operation;

(**) review of logbook entries for cold spot examination;

(**) review of logbook entry confirming performance of verification of high-level alarm(s) with liquid cargo. If cargo conditions did not permit verification, the RS surveyor shall require verification at the first occasion where cargo conditions allow for verification. The master shall

be advised to record verification in ship's logbook which shall be verified by the RS surveyor no later than the first annual survey.

Note . At first full cargo unloading, priority shall be given to the commencement of unloading.

8.7.3.3 Documentation submitted to the RS surveyor.

To confirm satisfactory functionality of the verifications, ship's master shall be required to arrange and provide to the RS surveyor print outs or screen shots showing:

.1 trends of cargo tanks pressure and temperature:

report on trends of pressure and temperature distribution of interbarrier space(s) and insulation space(s), and temperature distribution of inner hull, as applicable;

report on trends of performance of cofferdam heating system, when fitted;

report on trends of consumption of nitrogen gas, and whether any abnormality has been observed;

.2 list of any gas alarms, if occurred:

Cargo Tanks Containment System Cold Spot Inspection Statement;

report on activation of cargo tanks high-level alarm and overfill protection tests.

8.7.3.4 During testing and examinations at the first loading and unloading, gas trials performed under the RS supervision during construction of ship and meeting the requirements of 8.7.3.1 and 8.7.3.2 except those marked (**) in these paras, may be credited."

10 SURVEYS OF SPECIAL PURPOSE SHIPS

Chapter 10 is amended as follows:

"10 SURVEYS OF SPECIAL PURPOSE SHIPS CARRYING INDUSTRIAL PERSONNEL AND/OR SPECIAL PERSONNEL

10.1 GENERAL

10.1.1 Special purpose ships shall comply with the requirements of the Rules for the Classification and Construction of Sea-Going Ships because they have been developed with regard to requirements of the Code of Safety for Special Purpose Ships (SPS Code), as amended (refer to 2.1.6 of Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea-Going Ships" of the Guidelines. Ships, except high-speed craft, carrying industrial personnel and/or special personnel shall comply with the appropriate requirements of the Rules for the Classification and Construction of Sea-Going Ships as well as the Rules for the Equipment of Sea-Going Ships.

10.1.2 High-speed craft carrying industrial personnel shall comply with the requirements of Part XXI "Craft for Personnel Transportation" of the Rules for the Classification and Construction of High-Speed Craft.

10.1.3 In addition to the requirements specified in 10.1.1 and 10.1.2 of this Section, and unless otherwise provided for by additional State Flag MA requirements:

.1 ships of 500 gross tonnage and above engaged on international voyages and carrying special personnel shall comply with the requirements of the Safety Code for Special Purpose Ships, 2008, adopted by IMO resolution MSC.266(84) as amended (2008 SPS Code) (refer to 2.1.16 of Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea-Going Ships" of the Guidelines);

2 from 1 July 2024, cargo ships and cargo high-speed craft of 500 gross tonnage and above engaged on international voyages and carrying special personnel shall comply with the requirements of chapter XV of SOLAS-74 and the International code for the safety of ships carrying industrial personnel (IP Code) adopted by IMO resolution MSC.527(106) (refer to 2.1.15 of Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea-Going Ships" of the Guidelines). Before 1 July 2024, the cargo ships carrying industrial personnel are subject to the provisions of IMO resolution MSC.418(97) "Interim Recommendations on the Safe Carriage of More Than 12 Industrial Personnel on Board Vessels Engaged on International Voyages", according to which such ships shall meet the provisions of the mentioned IMO resolution and the 2008 SPS Code as amended or the equivalent requirements as decided by the Flag State MA (for example, the 1983 SPS Code).

10.1.4 Ships flying the flag of the Russian Federation and carrying special personnel (as defined by the legislation of the Russian Federation) shall comply with the requirements of 2.1.16 of Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea-Going Ships" of the Guidelines.

10.2 SURVEYS AND DOCUMENTS TO BE ISSUED

10.2.1 At survey of special purpose ships carrying industrial personnel and/or special personnel, the requirements set forth in Part I "General Provisions", as well as applicable requirements of Part II "Survey Schedule and Scope" and Part III "Additional Surveys of Ships Depending on their Purpose and Hull Material" of these Rules shall be fully complied with. ~~Instructions on survey of special purpose ships for compliance with the provisions of the SPS Code are specified in 2.1.6 of Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea-Going Ships" of the Guidelines.~~

10.2.2 Upon satisfactory results of survey of the ships specified in 10.1.1 and 10.1.2, the Register, when requested by the shipowner, draws up and issues the Classification Certificate.

10.2.3 In addition to 10.2.2, upon satisfactory results of survey of the ships specified in 10.1.3 and 10.1.4 of this Section, the Register, when requested by the shipowner, draws up and issues the documents in accordance with 2.1.6 and 2.1.15 of Part III "Survey of Ships in Compliance with International Conventions, Codes, Resolutions and Rules for the Equipment of Sea-Going Ships" of the Guidelines (as applicable).

Note: In respect of 10.1.3.2 of this Section, for a ship to which IMO resolution MSC.418(97) applies, a document certifying compliance with the said resolution shall be issued on instructions from the Flag State MA."

19 HULL, EQUIPMENT AND MACHINERY SURVEYS OF MODU AND FOP

Throughout the text of the Section, the term "the MODU/FOP Rules" is replaced by the term "the MODU Rules and the FOP Rules".

ANNEXES TO THE RULES FOR THE CLASSIFICATION SURVEYS OF SHIPS IN SERVICE

ANNEX 1

TECHNICAL DOCUMENTATION ON ITEMS OF THE RS TECHNICAL SUPERVISION

ANNEX 1.2

LIST OF SHIP'S TECHNICAL DOCUMENTATION OF MODU/FOP

1 GENERAL DOCUMENTATION OF MODU:

Para 1.2 is amended as follows:

"**2** calculations of stability, resistance to flooding and freeboard with verification of compliance with the requirements of the MODU/FOP Rules (at special request of the RS surveyor);".

ANNEX 2

INSTRUCTIONS FOR DETERMINATION OF THE TECHNICAL CONDITION AND REPAIR OF THE HULLS OF SEA-GOING SHIPS

4 STANDARDS FOR HULL WITH DEFECTS

4.1 GENERAL

Para 4.1.10 is replaced by the following text:

"**4.1.10** At the discretion of the shipowner or the authorized shipowner's representative, for hull members of ships transferred from the class of the losing society — IACS member, it is allowed to apply both the standards determined according to the rules of the losing society and the standards determined according to 4.2.1.2, 4.2.1.3, 4.2.2 — 4.2.3 and agreed by the Register.".

4.2 STRUCTURES WITH WEAR

Para 4.2.6.1 is amended as follows:

"**4.2.6.1** The standards stated below apply only to those ships, which Register class has not been modified since their construction, as well as to ships built to the RS class and which have not undergone major repair or modification upon completion of construction. At the discretion of the shipowner or the authorized shipowner's representative, for particular hull members, instead of the standards stated below, the standards determined according to 4.2.1.2, 4.2.1.3, 4.2.2 — 4.2.3 and agreed by the Register may be applied.".

4.5 STRUCTURES WITH SUBSTANTIAL CORROSION

Para 4.5.2 is amended as follows:

"4.5.2 Upper ultimate thickness of the hull member with substantial corrosion shall be determined from the following formula:

$$S_{[75\%]} = [S_i] + 0,25(S^* - [S_i]) \quad (4.5.2)$$

where $S_{[75\%]}$ = upper ultimate thickness of the hull member with substantial corrosion, in mm;

The condition under which the average residual hull member thickness S'_i is in the area of substantial corrosion

$$[S_i] \leq S'_i < S_{[75\%]} \quad (4.5.2-1)$$

where S'_i = average residual hull member thickness for total, local wear or pitting (S'_1, S'_3, S'_4), in mm;
 $S_{[75\%]}$ = upper level of substantial corrosion area, in mm, obtained from the formula

$$S_{[75\%]} = [S_i] + 0,25(S^* - [S_i]); \quad (4.5.2-2)$$

- S^* = hull member thickness, being decisive value in calculating permissible residual thickness (as-built or calculated according to the Rules for Construction — required or minimum), in mm;
- $[S_i]$ = permissible residual thickness for total, local wear and/or pitting ($[S_1], [S_3], [S_4]$) — lower level of substantial corrosion area, in mm.

Fig. 4.5.2 shows a pattern for determining the upper and lower level of substantial corrosion area in terms of total wear of the as-built thickness of the hull member.

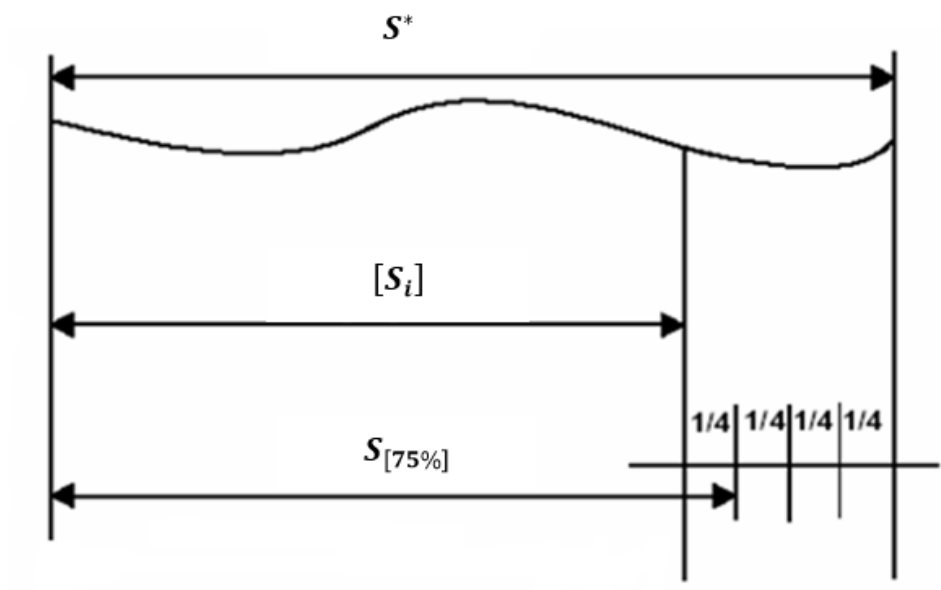


Fig. 4.5.2

Pattern for determining the upper and lower level of substantial corrosion area."

Russian Maritime Register of Shipping

**Rule Change Notice to the Rules for the Classification Surveys of Ships
in Service with Annexes**

Endorsed: 24-80473

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