



**RULES
FOR THE CLASSIFICATION AND CONSTRUCTION
OF SMALL SEA-GOING SHIPS**

**PART I
CLASSIFICATION REGULATIONS**

November
2023

GDAŃSK

RULES FOR THE CLASSIFICATION AND CONSTRUCTION OF SMALL SEA-GOING SHIPS prepared and edited by Polski Rejestr Statków, hereinafter referred to as PRS, consist of the following Parts:

- Part I – Classification Regulations
- Part II – Hull
- Part III – Hull Equipment
- Part IV – Stability and Subdivision
- Part V – Fire Protection
- Part VI – Machinery Installations and Piping Systems
- Part VII – Electrical Equipment and Automation

in regard with materials and welding requirements of *Part IX – Materials and Welding of Rules for the Classification and Construction of Sea-going Ships* are in force.

Part I – Classification Regulations – November 2023 was approved by the PRS Board on 13 November 2023 and enters into force on 13 November 2023.

- From the time of entry into force, the requirements of *Part I – Classification Regulations* apply to:
- new ships, the building contract for which will be signed on or after 1 January 2021 – within the full scope,
 - existing ships – from the nearest classification survey.

The present *Part I* replaces *Part I – Classification Regulations – October 2020*.

The requirements of *Part I – Classification Regulations* are extended by the following Publications:

- Publication 51/P – Procedural Requirements for Service Suppliers
- Publication 102/P – EU RO Mutual Recognition of Type Approval
- Publication 118/P – Requirements for passenger ships constructed of polymer composites, engaged on domestic voyages
- Publication 120/P – Requirements for Vessels and Units with Dynamic Positioning Systems (DP)
- Publication 123/P – Safe Entry to Confined Spaces
- Publication 16/I – Shipbuilding and Repair Quality Standard
- Publication 27/I – Guidelines for Approval/Acceptance of Alternative Means of Access
- Publication 100/P – ~~Safety requirements for sea-going passenger ships and high-speed passenger craft~~

© Copyright by Polish Register of Shipping*, 2023

* *Polish Register of Shipping* means *Polski Rejestr Statków S.A.*, seated in Gdańsk, al. gen. Józefa Hallera 126, 80-416 Gdańsk, Poland, registered in the Register of Entrepreneurs of the National Court Register, under entry number 0000019880. Polish Register of Shipping, its affiliates and subsidiaries, their respective officers, employees or agents are, individually and collectively, referred to as Polish Register of Shipping or as PRS for short.

CONTENTS

Page

1 General	5
1.1 Scope of Application.....	5
1.2 Definitions	5
2 Scope of Survey	7
3 Class of Ship	7
3.1 General Requirements	7
3.2 Period of Ship's Class Validity.....	7
3.3 Main Symbol of Class	7
3.4 Additional Marks in the Symbol of Class.....	8
3.5 Symbol of Machinery	13
3.6 Additional Descriptive Information	13
4 Assignment of Class	13
4.1 General	13
4.2 Ship Built under PRS Survey	13
4.3 Ship with valid Class Assigned by other Classification Society.....	14
4.4 Ship Not Classed before	15
4.5 Ship with PRS or other Classification Society Class Withdrawn	15
5 Maintenance of Class – Intervals between Surveys and Surveys Scope	16
5.1 General Requirements	16
5.2 Intervals between Periodical Surveys.....	18
5.3 Extent of Periodical Surveys.....	19
5.4 Thruster Survey	26
5.5 Occasional Surveys	26
6 Suspension of Class	27
6.1 Reasons for Ship's Class Suspension.....	27
6.2 Notification to Owners and Flag States	28
7 Withdrawal of Class and Withdrawal Ship from PRS Register	28
7.1 Reasons for Ship's Class Withdrawal.....	28
7.2 Withdrawal the Ship from PRS Register	28
7.3 Notification to Owners and Flag State.....	29

1 GENERAL

1.1 Scope of Application

1.1.1 Rules for the Classification and Construction of Small Sea-going Ships, hereinafter referred to as the Rules apply to ships, of length less than 24 m in length, intended for restricted navigation in regions specified by these Rules. The Rules do not apply to passenger ships engaged on international voyages, oil tankers, chemical tankers and gas carriers.

1.1.2 The present Part of the Rules applies both to ships under construction and the ships in service.

1.1.3 Upon PRS agreement, the Rules may also be applied to classification of ships not mentioned in 1.1.1.

1.1.4 Regulations relating to the scope of PRS survey, the survey procedures, kind of the issued documents, as well as procedures of approval of plans and design data are given in PRS *General Survey Regulations*.

1.2 Definitions

In the present Part, the following definitions have been adopted, they are also applicable to other Parts of the *Rules*:

Base plane – a horizontal plane which crosses amidships the top of a flat keel or the intersection of the inner surface of the plating with the bar keel.

Classification cycle – a cyclical period starting from the date of completion of the Initial Survey for Assignment of Class, carried out after the ship's construction completion or from the date of Class Renewal Survey completion, equal to class validity period (in general 5 years) and covering all due Periodical Surveys.

Class of a ship – compliance of the ship's structure, workmanship and condition (the condition of hull, machinery, installations, equipment) with the relevant requirements of the present Part of the *Rules*, confirmed by Certificate of Class.

Crab fishing vessel – a vessel specially built or adapted for catching crabs.

Domestic voyage – sea voyage from the home flag port to the same or other home flag port.

Examination:

- *External examination (general)* – a visual inspection of structure or machinery, without dismantling, to provide a general assessment of their condition and to determine, where necessary, the scope of an additional close-up examination.
- *Internal examination* – a visual examination of structure or machinery in dismantled condition (partially or wholly) or a visual examination of an arrangement (boilers, pressure vessels) from the inside, aimed at the assessment of their condition and determination, where necessary, the scope of an additional close-up examination.
- *Close-up examination* – a survey where the details of structure, machinery or equipment are subject to close visual inspection by the Surveyor, i.e. normally within the Surveyor's hand reach.

Fishing vessel – a ship specially intended and equipped for fishing and for excavating other living resources of the sea.

Grounding – contact, by a ship, with the water bed or a navigation obstacle, reported by the master as marine accident.

Industrial personnel – all persons who are not passengers, special personnel or members of the crew, but being on board of the crew boat for serving offshore installations.

International voyage – sea voyage between two ports of different countries.

Length of ship (L) – 96% of the total length on a waterline at 85% of the moulded depth, measured from the base plane, or the length from the fore-side of the stem to the axis of the rudder stock on the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel, the waterline on which this length is measured is to parallel to the design waterline.

Operation tests – close-up examinations of machinery or appliance under working conditions, combined with the measurements of essential operation parameters.

Passenger – every person on board the ship other than the master and the members of the crew or other persons employed on board in any capacity (special personnel) and a child under one year of age.

Passenger ship – a ship intended for the carriage of more than 12 passengers.

Pontoon – a vessel without propulsion and crew intended for the carriage of deck cargo, having no hatches on deck except for access openings such as manholes which are closed by covers.

Rescue ship – a ship intended and equipped for the rescue of life at sea in all weather conditions.

Special personnel – all persons who are not passengers or members of the crew but being on board in connection with the special purpose of the ship, e.g. persons engaged in the processing of living resources of the sea, scientific personnel, the personnel of laboratories, workmen, engineering and administrative staff of floating workshops, students and instructors in training ships or persons necessary during sea trials, etc.

Strength tests:

- *Destructive strength test* – a load is applied to test samples and increased until the sample is damaged. Parameters of the destructive load are recorded in the test record.
- *Non-destructive strength test* – a test load, specified by PRS, is applied to the test object or product. The test object should not be damaged during testing.

Subdivision – capability of a ship to maintain buoyancy and stability in accordance with the requirements specified in *Part IV – Stability and Subdivision*, after damage and flooding of a single compartment or a group of adjacent compartments, located below the bulkhead deck.

Substantial corrosion – an extent of corrosion such that assessment of corrosion pattern indicates wastage in excess of 75% of allowable margins, but within acceptable limits.

Survey – a set of activities relating to a ship, its machinery, appliances, equipment, etc. realized through carrying out appropriate examinations, measurements and tests.

Suspect areas – locations showing substantial corrosion or considered by the Surveyor to be prone to damage or rapid wastage.

Symbol of class – a group of conventional marks and notations, specifying a class of a ship, kind of survey during the ship's building and in service, as well as ship's structural features and operational limitations, if any. Symbol of class consists of the main symbol of class and additional marks.

Symbol of machinery – a group of conventional notes specifying kind of survey during construction of machinery.

Tightness test – a pressure of the liquid or gas medium is applied to the tested body. Kind of medium, test procedure and pressure value are to be agreed with PRS.

Tug – a ship intended and equipped for towing.

2 SCOPE OF SURVEY

2.1 Classification survey covers the ship's hull and its equipment, the machinery and electrical equipment, as well as refrigerating plants, including their systems and other equipment, referred to in the Rules.

2.2 Stability, subdivision and fire protection are also subject to survey, according to the principles set forth in the Rules.

2.3 If the symbol of class contains additional marks, the corresponding items of hull, machinery and electrical equipment and other equipment are subject to classification survey.

2.4 During Periodical Classification Surveys, the ship's equipment not covered by classification survey is subject to PRS technical survey with respect to the Flag State requirements and/or the possible hazard to the ship's safety.

3 CLASS OF SHIP

3.1 General Requirements

3.1.1 PRS may assign a class to a ship built under the survey of PRS, as well as to confirm, renew or recover the class of a ship in service, classed by PRS.

3.1.2 PRS may suspend or withdraw the ship's class for reasons specified in Chapters 6 and 7, respectively.

3.1.3 Class of a ship is confirmed by Certificate of Class.

3.1.4 In the Certificate of Class, the main symbol of class with additional marks, as specified in 3.4, is given.

3.1.5 Class of machinery is confirmed by Machinery Certificate.

3.2 Period of Ship's Class Validity

3.2.1 Class of a ship is assigned or renewed, in general, for 5 years.

3.2.2 Having regard to the technical condition of the hull, machinery or electrical equipment, PRS may assign a class to a ship for a shorter period or may shorten the class validity, as a result of the Class Renewal Survey, inserting an appropriate additional mark in the symbol of class – see 3.4.3.1.

3.2.3 In well-grounded cases, PRS may extend the ship's class validity (see 6.1.3.1 and 6.4).

3.3 Main Symbol of Class

3.3.1 Main Symbol of Class of a Ship Built under PRS Survey

3.3.1.1 The main symbol of class of a ship built under PRS survey, upon completion of the Initial Survey for Assignment of Class (see 4.2), consists of:

- * **mKM** – for ship with mechanical propulsion,
- * **mK** – for ship without mechanical propulsion.

3.3.2 Main Symbol of Class of a Ship Built under the Survey of the other Classification Society

3.3.2.1 An existing fishing ship built under the survey of the other Classification Society, upon completion of the Initial Survey (see 4.3 and 4.5), PRS Class is assigned, is given following main symbol of class:

- mKM** – for ship with mechanical propulsion,
- mK** – for ship without mechanical propulsion.

3.3.3 Main Symbol of Class of a Ship Built without the Survey of any Classification Society

3.3.3.1 An existing ship built without the survey of any Classification Society, upon completion of the Initial survey (see 4.4), PRS Class is assigned, is given following main symbol of class:

- (mKM)** – for ship with mechanical propulsion,
- (mK)** – for ship without mechanical propulsion.

3.4 Additional Marks in the Symbol of Class

3.4.1 General

3.4.1.1 Additional marks in the symbol of class indicate the ship type, obligatory requirements or limitations relevant to the ship or its operation ability, as well as additional ship structure or adaptation features.

3.4.1.2 Additional marks are affixed to the symbol of class upon compliance of the requirements specified in the relevant Parts of the Rules.

3.4.1.3 Additional marks in the symbol of class are put after the main symbol of class in order ensuing from 3.4.2, 3.4.3, 3.4.4, 3.4.5 and 3.4.6 for example:

* **mKM I Lm1 hol**

3.4.1.4 PRS may alter or delete the additional mark in the symbol of class in the case of modification of conditions, upon which the mark has been affixed or at the Owner's request.

3.4.1.5 PRS, at Owner's request, may place in the symbol of class an additional mark existing in other PRS Rules, defining additional features of ship structure or adaptation, after fulfilling requirements specified for such mark in the other Rules. PRS may respectively limit the requirements for this mark if this is justified by technical or operational reasons. In such case, information on the scope in which the ship does not fulfil the requirements for the additional mark is placed in the Class Certificate in paragraph "Additional Information".

3.4.2 Restricted Service Marks

3.4.2.1 The ship built in compliance with the requirements specified in the *Rules* related to the given restricted area of navigation is assigned marks **I**, **II** or **III** in the symbol of class, which have the following meaning:

- I** – navigation on open seas up to 200 nautical miles from the place of refuge and with an allowable distance between two places of refuge up to 400 nautical miles and navigation on enclosed seas;

- II** – navigation on open seas up to 50 nautical miles from the place of refuge and with an allowable distance between two places of refuge up to 100 nautical miles and navigation on enclosed seas, within the limits determined for each case and specified in the Certificate of Class;
- III** – navigation on the open and enclosed seas up to 20 nautical miles from the coast line, within the limits determined for each case and specified in the Certificate of Class.

3.4.2.2 Additional restriction or extension of the area of ship's navigation due to ship's features or technical condition are noted down in the Appendix to the Certificate of Class, e.g. to Baltic Sea.

3.4.3 Mark of Limited Period of Class Validity

If, as a result of survey, the necessity to shorten the classification cycle has been stated, the appropriate mark of class validity period is placed in the symbol of class:

< **3** – when the classification cycle is shortened to 3 years,

< **2** – when the classification cycle is shortened to 2 years,

< **1** – when the classification cycle is shortened to 1 year.

3.4.4 Subdivision Mark

The ship complying with the relevant subdivision requirements set forth in *Parts: III – Hull Equipment, IV – Stability and Subdivision and VI – Machinery Installations and Piping Systems*, is assigned the following additional mark in the symbol of class:

[1]

which means that after flooding one watertight compartment the ship shall remain afloat and shall comply with damage stability criteria.

3.4.5 Ice Strengthening Marks

3.4.5.1 If ice strengthenings of a ship comply with the relevant requirements of *Part II – Hull and VI – Machinery Installations and Piping Systems* of the Rules, the mark:

Lm1

put after a subdivision mark, is affixed.

The mark means that the ship is allowed to sail aided by an icebreaker or unaided in fine ice pieces.

3.4.5.2 If ice strengthenings of a ship comply with the relevant requirements of *Part II – Hull and VI – Machinery Installations and Piping Systems* of the Rules, the mark:

Lm2

put after a subdivision mark, is affixed.

The mark means that the ship is allowed to sail unaided occasionally in fine ice pieces.

3.4.6 Dynamic Positioning System Marks

If automatic systems and machinery of a ship comply with the relevant requirements specified in *Publication 120/P*; such ship may be assigned one of the following marks affixed to the symbol of class:

DP1

alternatively

DP2

alternatively

DP2+

which means, that the ship complies with more strict criteria for keeping position and route than DP2, but less than DP3;

alternatively

DP3

3.4.7 Additional Marks Indicating Ship Type

3.4.7.1 Ship complying with the basic requirements, specified for the given type, as well as with the relevant additional requirements, specified in particular Parts of the *Rules*, is assigned one of the below-stated marks, affixed to the symbol of class:

3.4.7.1.1 Passenger ship engaged on domestic voyages

A passenger ship engaged on domestic voyages is assigned, in the symbol of class,, one of the following additional marks:

pas A – means a passenger ship engaged on domestic voyages in Areas A, B, C and D

pas B – means a passenger ship engaged on domestic voyages in Areas B, C and D

pas C – means a passenger ship engaged on domestic voyages in Areas C and D

pas D – means a passenger ship engaged on domestic voyages in Area D

Areas A, B, C and D are defined as follows:

1. *Area A* – means a sea area outside of areas B, C and D.
2. *Area B* – means sea area, whose geographical coordinates are at no point more than 20 miles from the line of coast, corresponding to the medium tide height, but which is outside of areas C and D.
3. *Area C* – means a sea area, whose geographical coordinates are at any point no more than 5 miles from the line of coast, corresponding to the medium tide height, but outside of sea area D if any.

Additionally the probability of the significant wave height exceeding 2,5 metres shall be smaller than 10 % for a period of one year for all-year-round operation, or for a specific period for seasonal operation, such as summer period operation.

4. *Area D* – means a sea area, whose geographical coordinates are at any point no more than 3 miles from the line of coast, corresponding to the medium tide height

Additionally the probability of the significant wave height exceeding 1,5 metres shall be smaller than 10 % for a period of one year for all-year-round operation, or for a specific period for seasonal operation, such as summer period operation.

A passenger ship engaged on domestic voyages, constructed of polymer composites and complying with the requirements of *Publication 118/P*, is assigned the following additional mark in the symbol of class:

frp

3.4.7.1.2 Fishing vessel:

sr

3.4.7.1.3 Crab fishing vessel

krb

The assignment of such a mark means that the vessel meets stability criteria other than PRS criteria for fishing vessels. These may be criteria applied to such type of vessels by the flag State administration under which the vessel is built e.g. the British standard contained in MSN 1872 (F).

3.4.7.1.4 Tug:

hol

3.4.7.1.5 Rescue vessel:

rat

3.4.7.1.6 Crew boat:

sdpp-crew boat

Ship intended for transport of industrial personnel, complying with the requirements equivalent to requirements specified for special purpose ship, given in particular Parts of the *Rules for the Classification and Construction of Sea-going Ships*: Part II – Table 22.3.3.1 and Table 22.3.4.1; Part III – Para. 4.1.2, 5.2.1.1, 13; Part IV – Para. 3.6, 5.3.5, Appendix 3; Part V – Para. 6.5; Part VIII – Para. 22.6.

3.4.7.1.7 Pontoon:

pon

The design and construction of the pontoon's hull shall comply with the requirements for ships specified in *Part II* and its towing and mooring equipment with the requirements specified in *Part III* of these *Rules*.

The fastening and securing of cargo and equipment on the pontoon's deck shall be in accordance with the requirements of the *Code of Safe Practice for Cargo Stowage and Securing*.

The stability and subdivision of the pontoon, appropriate to its navigation area, and the scope of required calculations should be in accordance with the requirements of *Part IV* of the *Rules for the Classification and Construction of Sea-going Ships*.

The mooring, stability and anchoring of pontoons, which constitute a working platform for the operation of other equipment, are subject to individual consideration.

3.4.7.2 PRS may assign to the ship another mark indicating the ship type if considers it technically justified. In such case, the additional requirements are specified by PRS in each particular case.

3.4.8 Additional mark of ship whose compliance with certain requirements has been verified directly by the Flag State Administration

3.4.8.1 An existing ship whose compliance with the fire protection requirements of SOLAS 74/78 as amended, Ch II-2, European Directives, has been verified directly by the Flag State Administration is assigned the following additional mark in the symbol of class:

(FP)

3.4.8.2 An existing vessel, which compliance with the intact and damage stability criteria has been verified directly by the Flag State Administration is assigned the following additional mark in the symbol of class:

(STA)

3.5 Symbol of Machinery

3.5.1 Symbol of Machinery Built under PRS Survey

3.5.1.1 The main propulsion machinery, built under PRS survey (see 4.2.1), upon completion of the Initial Survey for Assignment of Class covering the survey of machinery installation on board and sea trials survey, is given the following symbol of class:

* **mPRM**

3.5.2 Symbol of Machinery Previously Classed by Other Classification Society

3.5.2.1 The main propulsion machinery, built and installed on board under the survey of another Classification Society, upon completion of the Initial Survey for Assignment of PRS Class (see 4.3 and 4.5), is given the following symbol of class:

mPRM

3.5.3 Symbol of Machinery Not Classed Previously

3.5.3.1 The main propulsion machinery, built and installed on board without the survey of Classification Society, upon completion of the Initial Survey for Assignment of PRS Class (see 4.4), is given the following symbol of class:

(mPRM)

3.6 Additional Descriptive Information

Other ship's class related additional requirements, conditions or restrictions, not denoted by additional marks in the symbol of class, are entered in the Appendix to the Certificate of Class/Temporary Certificate of Class.

4 ASSIGNMENT OF CLASS

4.1 General

4.1.1 PRS may assign a class to a new ship or to an existing ship. The condition for assigning class to a ship is the Owner's written request for PRS class assignment, submitting the required technical documentation and satisfactory result of the Initial Survey for Assignment of Class.

4.1.2 After completion of the Initial Survey for Assignment of Class, PRS Branch Office issues Temporary Certificate of Class to enable the ship to sail. The results of the Initial Survey are subject to the PRS Head Office verification.

4.1.3 Assignment of class is confirmed by the issue of Certificate of Class and an appropriate entry made in the PRS Register. Assignment of class means that the ship, in full measure or to a degree considered by PRS acceptable, complies with the relevant requirements of the Rules.

4.1.4 Where structural details of a ship to be classed with PRS or her equipment do not comply with the requirements of PRS *Rules* and the Owner presents evidence of the ship's or equipment satisfactory behaviour during the ship hitherto operation, PRS may accept the evidence as technically equivalent.

4.2 Ship Built under PRS Survey

4.2.1 A new ship, built under PRS' survey, may be assigned PRS class after satisfactory completion of the following activities:

- approval of technical documentation within the scope required in particular Parts of the *Rules*,



- survey of the manufacture of the main propulsion (main engines, gears, clutches, shaft lines, thrusters and, where fitted, main boilers or main generator sets),
- survey of the manufacture of other machinery and equipment, materials and components required in particular Parts of the *Rules*,
- survey during construction of hull,
- survey of installation of machinery, equipment and systems required in particular Parts of the *Rules*,
- survey of dock and sea trials.

The scope of the required technical documentation to be forwarded to PRS, in addition to the a.m. documentation to be submitted for approval, covers also:

- documentation submitted for information, but to which PRS may have remarks: Technical Specification, General Arrangement Plan, Tanks Plan;
- workshop documentation which shall be agreed with the attending PRS Branch Office; the scope of this documentation is specified each time by this Branch Office.

The detailed scope of the surveys associated with the above-mentioned activities is specified each time by the attending PRS Branch Office on the basis of the *Rules*, approved technical documentation and the local building conditions. All these surveys constitute the Initial Survey of a ship.

Validity of the *Certificate of Class* will start from the date of the Initial Survey completion.

4.3 Ship with valid Class Assigned by other Classification Society

4.3.1 Conditions of Assignment of PRS Class

An existing ship, with valid class of another Classification Society, may be assigned PRS class upon completion of the Initial Survey for Assignment of Class covering:

- examination of the required technical documentation, referred to in 4.3.2, submitted by the Owner. If the Owner is not able to submit the required technical documentation (wholly or in part), he is to submit the equivalent information, within the scope enabling PRS to assess the ship's structure and equipment;
- verification of certificates for main engines, as well as for essential machinery and equipment, issued by Classification Society;
- carrying out all due and overdue surveys, specified in the ship's survey status by the previous Classification Society;
- fulfilment of all due and outstanding conditions of class, specified in the ship's survey status by the previous Classification Society;
- carrying out surveys of hull and machinery in scope of at least annual survey.

For ships of the tonnage 100 and above, scope of the survey for the assignment of PRS Class is to be carried out according to paragraph 4.3.3 of *Rules for the Classification and Construction of Small Sea-Going Ships, Part I – Classification Regulations*.

PRS *Certificate of Class* validity is determined by PRS in each particular case.

In the case where full Class Renewal Survey is not required, the validity of *Certificate of Class* issued by PRS cannot exceed the validity of the *Certificate of Class* issued by the previous Classification Society.

4.3.2 The Scope of the Required Technical Documentation

4.3.2.1 Main plans:

- general arrangement plan;
- information on stability and information on damage stability, where required.

4.3.2.2 Hull plans:

- midship section;
- longitudinal section;
- shell expansion (for glass-reinforced plastic ships, only in case when the shell plating varies in thickness);
- double bottom, fore and aft construction
- decks;
- transverse bulkheads;
- capacity plan;
- plan of permanent ballast distribution;
- rudder and rudder stock.

4.3.2.3 Machinery plans:

- machinery arrangement;
- fire control plan;
- intermediate, thrust and screw shafts, propeller;
- main engines, propulsion gears and clutch systems (or the manufacturer, type and rating information);
- bilge, ballast, fuel oil, oil, compressed air, cooling water, air vents., overflow and sounding pipe diagrams;
- wiring diagram (electric balance of a ship, principle diagram of power distribution circuits, principle diagram of the main and emergency switchboards);
- steering gear systems piping and arrangements and steering gear manufacturer and type information;
- diagram of earthing protection installations (applicable to glass-reinforced plastic ships).

4.3.2.4 Additionally, submitting the following documentation is recommended:

- the ship's data and specification,
- body lines,
- drawings of superstructures.

4.4 Ship Not Classed before

4.4.1 An existing ship, which has not been classed before, may be assigned PRS class upon completion of the Initial Survey for Assignment of Class covering:

- PRS approval of the submitted, by the Owner, technical documentation within the scope specified in 4.3.2.

Where the Owner is not able to submit the required technical documentation (wholly or in part), he is to submit the equivalent information, within the scope enabling PRS to assess the ship's structure and equipment;

- verification of certificates for main engines, as well as for essential machinery and equipment;
- completion of the Initial Survey within the scope of Class Renewal survey (see 5.3.5 and 5.3.6);
- survey of dock and sea trials, specified by PRS in each particular case.

PRS *Certificate of Class* validity will date from the time of the Initial Survey completion.

4.5 Ship with PRS or other Classification Society Class Withdrawn

4.5.1 The condition for assignment of class to a ship whose class was withdrawn is carrying out the initial Survey for class reinstatement within the scope determined in each particular case by PRS, with due regard paid to the reasons for class withdrawal.

5 MAINTENANCE OF CLASS – INTERVALS BETWEEN SURVEYS AND SURVEYS SCOPE

5.1 General Requirements

5.1.1 The conditions for maintaining the ship's class are:

- maintaining the ship – the ship's hull, machinery, installations and equipment in a satisfactory technical condition,
- ship's operation in accordance with conditions specified in *Certificate of Class*, the manufacturer's instructions and the principles of good seamanship,
- carrying out due periodical surveys at scheduled dates,
- fulfilment of conditions of class at scheduled dates,
- carrying out the required occasional surveys,
- timely payment of fees for survey services.

5.1.2 All ships classed with PRS, during each classification cycle are subject to the following Periodical Surveys:

- Annual Survey,
- Intermediate Survey,
- Class Renewal Survey,
- Bottom Survey,
- Propeller Shaft Survey,
- Thruster Survey, if fitted and intended for main propulsion.

5.1.3 All ships classed by PRS are subject to Occasional Surveys in cases specified in 5.4.

5.1.4 PRS informs the Owner on the dates of due Periodical and Occasional Surveys by a ship's survey status. Non-receipt of a ship's survey status does not absolve the Owner from an obligation to submit the ship for survey at the dates specified in the Rules.

5.1.5 The Owner is obliged to properly prepare the hull, machinery and electrical installations, as well as the ship equipment for each survey. The Surveyor may refrain from performing a survey if he considers that the ship has not been properly prepared for the survey or a threat to life or health exists.

If, during the survey, permanent means of access to ship's structure are not available, then alternative means of access shall be applied in accordance with the requirements specified in *Publication 27/I – Guidelines for Approval/ Acceptance of Alternative Means of Access*.

If, during the survey, entering a confined space is necessary, then the requirements contained in *Publication 28/I – Requirements for Safe Entry to Confined Spaces*, shall be observed.

5.1.6 Class Renewal Survey is to ascertain that the ship's hull and its equipment, machinery and installations comply with the requirements of the Rules, and to ensure that the ship is fit for its intended purpose for the subsequent 5-year period, subject to proper maintenance and operation.

5.1.7 Annual and Intermediate Surveys are to ascertain that the ship's hull and its equipment, machinery and installations are in a satisfactory technical condition.

5.1.8 The Annual, Intermediate or Class Renewal Survey may be considered complete if an appropriate survey of the ship's hull and machinery has been held within the scope defined in 5.3. PRS may extend the scope of surveys, depending on the ship's age, technical condition, as well as the type of equipment and structure.

5.1.9 After completion of Periodical Survey, PRS Branch Office endorses or issues the Certificate of Class. In the case of Initial Surveys, surveys after change of flag or major conversion of a ship PRS Branch Office issues Temporary Certificate of Class to enable the ship to sail. The results of Periodical Survey are subject to the PRS Head Office verification.

5.1.10 Intervals between Periodical Surveys of a ship built under the PRS classification survey will date from the classification cycle commencement.

5.1.11 Intervals between Periodical Surveys of ships which have entered PRS class with a valid class assignment by other Classification Society, ships that have not been classed before and ships with class withdrawn is determined by PRS (see 4.3, 4.4 or 4.5).

5.1.12 PRS may shorten the intervals between examinations, measurements or tests of hull members, particular items of machinery, installations and equipment if it is found necessary due to their technical or service conditions. In this case, new due dates of the examinations, measurements or tests are to be, in general, concurrent with Periodical Surveys.

5.1.13 In well-grounded cases, PRS Surveyor may dispense with a survey of particular items of machinery in dismantled condition or limit the scope of survey if external examinations, measurements and operation tests prove that the machinery item is in a good and efficient condition. The Surveyor may also limit the scope of surveys in dismantled condition of main engine and generator prime movers after analysis of maintenance records of the given engine.

5.1.14 Where, during the survey, damage to hull structure (buckling, grooving, detachment, fracture, etc.) over the allowable limits or corrosive wastage of surfaces, spaces or structure elements exceeding allowable limits, significant corrosion or other defects, which, in the opinion of the Surveyor, may affect the ship's structural integrity or the hull tightness, are found, they are to be promptly and thoroughly repaired.

5.1.15 Where the damage found on structure mentioned in Para. 5.1.14 is isolated and of a localised nature which does not affect the ship's structural integrity, consideration may be given by the surveyor to allow an appropriate temporary repair to restore watertight or weathertight integrity and issue a condition of class with a specific time limit.

5.1.16 Services, which constitute the basis for the ship technical condition assessment by PRS, such as:

- thickness measurements of hull structure;
- non-destructive and destructive tests;
- surveys and tests of fire-extinguishing systems;

as well as all repairs which affect the ship's technical condition, such as:

- hull structure repairs;
- renovations of machinery and equipment (such as: main engines, main gear, shafts, main and emergency generating sets, boilers and pressure vessels, anchoring equipment and steering gear, propellers, compressors, fire, bilge and water ballast pumps, main and emergency switchboards);
- repairs with use of special processes and procedures (welding, laminating, pulverization, Metalock repair, filling with chemosetting products),

are to be performed by service suppliers approved by PRS (see *Publication 51/P – Procedural Requirements for Service Suppliers*).

In well-grounded cases, PRS Surveyor may, at the Owner's request, agree on performance of services by a service supplier not holding PRS approval – on a single approval basis, after verifying the service supplier's ability to perform such services.

All above-mentioned activities, performed by a service supplier, are to be verified by the Surveyor.

5.1.17 Each measurement constituting the basis for the assessment of the structure, machinery or equipment technical condition is to be carried out with measuring devices calibrated to a recognized national or international standard. Each measuring device is to have valid calibration certificate. The Surveyor may accept, without confirmation of calibration:

- simple measuring equipment (e.g. rulers, measuring tapes, weld gauges, micrometers, etc.), provided they are of standard commercial design, properly maintained and periodically verified by the user;
- the equipment fitted on board ship and used for checking pressure, temperature or rpm, etc., provided their readings are compared with other similar instruments.

5.2 Intervals between Periodical Surveys

5.2.1 Annual Survey

Annual Survey is to be held within 3 months, before and after each anniversary of the assignment of class or the class renewal.

5.2.2 Intermediate Survey

The Intermediate Survey is to be held at either the second or third Annual Survey. Parts of the Intermediate Survey, which are additional to the requirements of the Annual Survey, may be surveyed either at or between the second and third Annual Survey.

5.2.3 Class Renewal Survey

- .1 Class Renewal Survey is to be held at 5-yearly intervals. In exceptional cases, however, upon PRS agreement, a maximum 3-month extension of class beyond the 5th year may be granted – see 6.1.3.
- .2 Regardless of the requirements stated in 5.2.3.1, where the Class Renewal Survey is completed within 3 months before and after the expiry date of class validity, the validity of the new Certificate of Class will be not longer than 5 years from the expiry date of the previous Certificate. For surveys completed more than 3 months before the expiry date of class validity, the period of class will start from the survey completion date.
- .3 Class Renewal Survey may be commenced at the fourth Annual Survey and be progressed so as to be completed by the fifth anniversary date. When the Class Renewal Survey started before the fourth Annual Survey, the entire survey is to be completed within 15 months. The new period of class will start from the survey completion date.

5.2.4 Bottom Survey of Hull

- .1 Bottom Survey of ships is to be carried out twice within each classification cycle: during Intermediate Survey and Class Renewal Survey. The intervals between consecutive surveys is not to exceed 3 years.
- .2 Depending on PRS decision, the Bottom Survey of ships assigned the mark of limited period of class validity, is to be carried out during the first or the second Annual Survey.
- .3 Intervals between consecutive Bottom Surveys of ships without mechanical propulsion may be, subject to PRS consent, extended over the periods required in 5.2.4.1.
- .4 Bottom Survey during Class Renewal Survey, is to be carried out in dry dock.
- .5 Bottom Survey of passenger ships is to be carried out in dry dock.
- .6 Bottom Survey may be carried out by divers, see 5.3.7.2.
- .7 Bottom Survey of glass-reinforced plastic ships may be, upon PRS consent, extended 5 years.

- .8 Occasional Bottom Survey may be required in the case of ship grounding.
- .9 The Owner is obliged to notify PRS whenever the ship's bottom can be examined in dry dock.

5.2.5 Propeller Shaft Survey

5.2.5.1 Depending on intervals between surveys and other conditions, propeller shafts are subject to Complete or Partial Surveys.

5.2.5.2 Complete Survey is carried out after drawing the propeller shaft from the tube. The interval between consecutive Complete Surveys can not extend 3 years.

5.2.5.3 In the case when:

- .1 the propeller shaft is fitted with a continuous liner or approved oil sealing glands, or is made of corrosion resistant material;
- .2 the shaft structural elements comply with the requirements of *Part VI – Machinery Installations and Piping Systems*;
- .3 Complete Survey was carried out within the scope, specified in 5.3.8.1;

the intervals between Complete Surveys may be extended up to 5 years.

5.2.5.4 For propeller shafts for which intervals between Complete Surveys were extended up to 5 years (see 5.2.5.3), at the Owner's request, PRS may consider prolongation of intervals between Complete Surveys, provided the Partial Survey is performed within the scope specified in 5.3.8.2. In each such case, the prolongation is not to exceed 2.5 years.

5.2.5.5 For propeller shafts having an oil sealing glands of the type other than the approved type, for which interval between consecutive Complete Surveys is 3 years, PRS may, upon written request of the Owner, extend this interval up to 5 years, subject to carrying out Partial Survey, see paragraph 5.3.8.2, excluding the requirement to carry out non-destructive testing of the shaft end for propeller fitted to a keyed shaft taper.

5.2.6 Thruster Survey

In case, when the vessel is fitted with thrusters (i.e. Azimuth , Voith-Schneider, water jet), than such devices, in case there are intended for main propulsion, are subject for surveys, which time interval shall not exceed 5 years. PRS may decide about different time period, after review of manufacturer guidelines. The scope of survey shall also be based of instructions prepared by manufacturer.

5.3 Extent of Periodical Surveys

5.3.1 Annual Survey of Hull and Hull Equipment

Hull and Hull Equipment Annual Survey covers:

- .1 Checking of:
 - validity of *Information on Stability*;
 - technical conditions for retention of ship's stability;
 - validity of *Information of Subdivision and Passenger Displacement Plan* (for passenger ships).
- .2 Examination of:
 - above-water part of the hull plating (from outside),
 - upper deck plating,
 - cargo holds and machinery spaces,

- bulwark, railings and freeing ports,
 - superstructures and deckhouses,
 - hatch, manholes and ventilator coamings,
 - closing arrangements of sounding and fuel supply pipes,
 - closing arrangements of inlets and outlets of ventilating ducts,
 - masts, their fittings and riggings,
 - passageways and escape routes,
 - attachment of the bottom and side fittings to the shell,
 - attachment of inserted tanks for glass-reinforced plastic ships,
 - attachment of fenders to the hull structure (applicable for aluminium and glass-reinforced plastic ships),
 - for tugs – examination of the towing hook with arrangements and fittings,
 - for passenger ships – examination of spaces for passengers, including passageways, stairways, escape routes with marking, arrangement and fitting of sitting places and access to embarkation stations.
- .3** Examination of suspect areas, if identified during Class Renewal Survey.
- .4** Thickness measurements of:
- above-water part of the hull, decks, hatch coamings in areas where during the survey substantial corrosion was identified;
 - areas of substantial corrosion identified during Class Renewal Survey or Intermediate Survey.
- .5** Operation tests of:
- closing appliances of cargo and other hatches and manholes on weather deck,
 - superstructure and deckhouse outer doors, skylights and side scuttles,
 - cargo ramps and side doors,
 - main and auxiliary steering gear,
 - anchor and mooring equipment,
 - towing rope release, without loading the hook in its various positions (applicable to tugs).

5.3.2 Annual Survey of Machinery Installations

Machinery Annual Survey covers:

- .1** Main internal combustion engine:
- external examination of M.E. crank case safety devices,
 - external examination of M.E. high pressure fuel pipelines jacketed piping system and checking the operation of oil leakage alarm,
 - external examination of elastic joints,
 - external examination of exhaust gas manifold and pipes,
 - operation tests of M.E. safety system,
 - tests of manoeuvring gear and starting arrangements,
 - examination of gears of auxiliary machineries driven by Main Engine.
- .2** Operation tests of generator prime movers, including protective devices.
- .3** Operation tests of pumps with independent drive: bilge, ballast, cooling water, general service pumps, fire pumps, oil fuel and lubricating oil pumps. In case of incorrect functioning internal examination is required.
- .4** Operation tests of bilge and ballast systems.
- .5** Operation tests of compressed air system, including the test of compressors, external examination of compressed air receivers and operation tests of safety valves on compressors and receivers.

- .6 Examination of heating appliances and liquefied gas cookers.
- .7 Operation test of the closing of the valves on fuel and lubricating oil tanks;
- .8 Operation test of the reverse mechanism of CP propeller (if fitted).
- .9 Operation test of the steering gear.
- .10 Fire protection equipment:
 - water fire main system:
 - external examination of the systems components for signs of damage,
 - corrosion and wear;
 - operation test, including the test of emergency fire pump;
 - hydraulic test of pipelines (to be carried out every 10 years for ships under 20 years old and every 5 years – for ships over 20 years old).
 - CO₂ high pressure fire-extinguishing system:
 - external examination of the station;
 - external examination of the system components (valves, flexible hoses for connecting cylinders with manifold, starting arrangements).

All flexible hoses made from synthetic rubber, intended for connecting high pressure carbon dioxide system cylinders, are to be replaced after 10 years from the date of manufacture;

- hydraulic test of high pressure CO₂ cylinders – to be carried out every 10 years for cylinders up to 20 years of age (counting from the date of manufacture), every 5 years for cylinders over 20 years of age and after each repair of cylinder (irrespective of its age).

The hydraulic test is to be carried out on not less than 10% of the total number of cylinders, the cylinders chosen for the test being in the worst technical condition. Prior to the hydraulic test, internal examination of the cylinders is to be carried out. Satisfactory result of the test will constitute the basis for certification of the remaining cylinders.

Cylinders are subject for hydraulic test after their each emptying if the last test was carried out over 10 years ago;

- hydraulic test of manifolds and pipelines from cylinders/storage tanks up to distribution valves and hydraulic test of distribution pipelines passing through accommodation and service spaces, to be carried out every 10 years for ships under 20 years old, every 5 years for ships over 20 years old and after each repair of the pipelines;
- the passage test of fire-extinguishing medium pipelines, from manifold to the nozzles – compressed air or nitrogen blow;
- checking the quantity of fire-extinguishing medium in cylinders. The permissible loss of CO₂ is 10% of the required quantity. The checking is to be carried out every 2 years, on passenger ships every 1 year;
- checking the system remote operation, operation test of the main and distribution valves, warning signalization and time-delay device, as well as automatic switching-off ventilating fans in protected spaces;
- operation test of control valves; internal examination of the valves – every 5 years;
- checking the closing arrangements in all openings in protected spaces;
- checking that the engine room and its machinery are free from contamination by combustible materials (oil leakages, etc.) that may constitute a fire risk;
- checking that the passenger ship is fitted with Passenger displacement plan;
- for passenger ships – examination of connection with sprinkler installation.

.11 Electrical equipment and automatic systems:

- main sources of electric power – load test, parallel test run, including the test of reverse current or reverse power protection;
- overload and short circuit protection of generators – checking the settings;
- electric power converting installations supplying essential consumers – external examination and tests;
- distributing devices: main and emergency switchboard, navigation lanterns switchboard, control and monitoring consoles, shore connection installations, section and terminal switchboards – external examination and tests,
- external examination and tests of electrical equipment on open decks and in machinery spaces (cable ducts, sockets, earth protection),
- external examination of electrical equipment in explosion hazardous spaces and zones,
- electric drive of essential machinery, together with control and monitoring devices of pumps, air compressors, anchoring arrangements, mooring and towing winches, steering gear, fans, watertight doors – operation tests,
- main lighting – external examination, emergency lighting – external examination and tests;
- operation tests of internal communication and alarm signalling,
- operation test of main propulsion remote control system,
- operation test of main propulsion safety and alarm system,
- operation tests of electric power supply and distribution control system,
- operation tests of automation systems of pumps and air compressors, as well as their safety systems,
- external examination and tests of electrical heaters,
- external examination of cable ducts,
- test of remote switching off the machinery,
- measurement of electric network and electrical equipment insulation resistance.
- DP systems:
 - *checking of DP documentation – watchkeeping checklist, routine checklists,*
 - *checking of periodical services reports, performed by manufacturer/approved service supplier*
 - *checking if in case of failure of one sensor other sensors work properly,*
 - *checking if DP system works properly on UPS supply, after main source of power failure,*
 - *checking if DP system works properly after failure of one reference system,*
 - *checking if after DP control system failure, the thrusters' system remains in stable condition,*
 - *checking of alarm system after failure of any sensor, peripheral equipment or reference system*
 - *checking emergency stop function of DP system,*
 - *test of DP system in working condition – as far as practicable,*
 - *tests which are necessary, due to FMEA – concerns DP2 and DP3 notations.*

for passenger ships – checking of emergency source of supply and operation tests of emergency supplied receivers described in *Part VI – Machinery Installations and Piping Systems* and *Part VII – Electrical Equipment and Automation*.

5.3.3 Intermediate Survey of Hull and Hull Equipment

Intermediate Survey of hull and hull equipment covers the Bottom Survey of Hull as required in 5.2.4, Annual Survey and internal examination of forepeak and afterpeak tanks.

5.3.4 Intermediate Survey of Machinery Installations

Intermediate Survey of machinery installations is carried out within the scope of the Annual Survey.

5.3.5 Renewal Survey of Hull and Hull Equipment

Class Renewal Survey covers the Intermediate Survey and additionally the following activities:

- .1 Examination of:
 - cargo holds, machinery spaces, plating, bulkheads, decks, tween-decks, structural members, pipings, bilges, the watertight bulkhead penetrations,
 - forepeak, afterpeak, chain locker, ballast, fuel oil and fresh water tanks, and as well as slope and sludge tanks both forming structural part of the hull or installed in the hull structure together with their fittings,
 - masts, their fastenings and rigging,
 - seatings of the main and auxiliary machinery and generating sets,
 - mooring equipment – bollards, fairleads and ropes,
 - anchors, hawse pipes, chain cables, chain slips and stoppers.
- .2 Tightness tests, carried out depending on the survey results of forepeak, afterpeak and ballast tanks, and selected by PRS surveyor fuel oil, slope and sludge tanks, forming structural part of the hull or installed in the hull structure together with their fittings;
- .3 Closing arrangements of hatch covers and manholes on weather deck, superstructure and deckhouse outer doors, skylights and side scuttles.
- .4 Thickness measurements of:
 - hull structural members,
 - hatch covers on weather deck,
 - chain cable links.

In well grounded cases PRS surveyor may reduce scope of required thickness measurements depends on results of close-up examinations and/or spot measurements.
- .5 Test of towing device with pull test and towing rope release, with loading the hook (applicable to tugs).

5.3.6 Renewal Survey of Machinery Installations

Class Renewal Survey of machinery installations covers the Annual Survey and additionally the following activities:

- .1 Main internal combustion engine:
 - close-up examination of parts essential for the proper operation of the engine,
 - measurements of essential parts, required within the scope sufficient for the proper assessment of their technical condition,
 - close-up examination of essential parts of auxiliary machinery driven by the main engine,
 - close-up examinations of turbochargers,
 - close-up examination of vibration damper and verification that the manufacturer's service requirements are complied with,
 - measurement of crankshaft deflection,
 - checking the main engine securing to the seating.
- .2 Gearings

The following parts are to be opened up and examined within the necessary scope to ascertain their technical condition: pinions, gears, bearings, thrust bearing, disengaging couplings.

- .3** Couplings:
- slipping couplings – examination, including the dismantling of the cover, to assess the coupling elastic elements (springs);
 - rubber couplings – 5 years from the date of the coupling installation or rubber element exchange – examination. At the subsequent Class Renewal Survey – examination in the dismantled condition.
- .4** Intermediate shafts, including its bearings:
- close-up examination of shafts and bearings,
 - measurements of clearance in the bearing,
 - checking the bearing securing to the seating (after every dismantling).
- .5** Close-up examination and test of generator and generator prime movers.
- .6** Close-up examination of air compressors.
- .7** Air receivers
- Internal examination of the receivers, including the examination of fittings in opened-up condition. If the technical condition of the air receiver cannot be ascertained satisfactorily on the basis of internal examination, PRS may require that the wall thickness measurement and/or hydraulic test should be carried out. After repair hydraulic test of the receivers is required.
- .8** Close-up examination of the pumps with independent drive: bilge, ballast, general service, cooling water pumps, fire pumps, oil fuel and lubricating oil pumps.
- .9** Heat exchangers:
- internal examination,
 - hydraulic test required depending on the result of the examination and after repair of the heat exchanger;
- .10** Operation test of the signalling devices of machinery room;
- .11** Piping systems:
- close-up examination of the bilge and ballast systems,
 - close-up examination of the cooling water system (during engine test run),
 - external examination of the sewage piping (passing through ship's sides, decks and bulkheads),
 - external examination of the overflow and air piping systems.
- .12** Heating appliances and liquefied gas cookers – close-up examination and pressure test (compressed air);
- .13** Close-up examination of steering gear, windlass and the mooring winch – PRS may dispense with the examination or limit its scope if the operation tests reveal no defects of the appliance;
- .14** Operation tests of generator overload and undervoltage protection;
- .15** Close-up examination of cables, cable penetrations in watertight bulkheads and decks;
- .16** Close-up examination of lighting and earthing protection;
- .17** Checking of earthing condition for glass-reinforced plastic ships;
- .18** DP System:
- sea trials – at least 3 hours of proper service (no significant alarms).
 - change of command between DP control system, independent joystick system and individual thruster lever system
 - tests of the complete DP system (all operational modes, back-up system, joystick system, alarm system and manual override),
 - turning to manual control after DP control failure and in normal operating conditions,
 - tests which are necessary, due to FMEA – concerns DP2 and DP3 notations.

5.3.7 Bottom Survey

5.3.7.1 Bottom Survey at the Dry-dock

The Bottom Survey covers:

- .1 examination of bottom and side plating up to the maximum draught waterline, keel, stem, sternframe, shaft brackets, rudder trunk, bow and aft thruster tunnel, means of anti-corrosion protection;
- .2 examination of drain plugs of ballast and fresh water tanks – at the intervals of 5 years; drain plugs of fuel and lubricating oil tanks, as well as cofferdams – only when the plug is screwed out;
- .3 examination of bottom and side sea chests – at the intervals of 5 years;
- .4 examination of bottom and side fittings; survey in the opened up condition – at intervals of 5 years. Where bottom and side fittings are not fitted directly to bottom chest, sea chest or shell plating, the connecting pipes between chests or shell plating and fittings are subject to close-up examination in dismantled condition;
- .5 examination of rudder blade;
- .6 measurements of clearances in bearings of rudder arrangements and external examination when putting the rudder from side to side. Depending on the results of the clearance measurement in the bearings and external examination, dismantling of rudder blade or part of its suspension arrangements may be required;
- .7 examination of propeller (see 5.3.9), as well as measurement of clearances and wear-down of the propeller shaft stern tube bearing and checking the stern tube sealing tightness;
- .8 examination and measurements of other equipment connected with ship's manoeuvring, steering and roll stabilizing system;
- .9 for wooden ships, tightness test of ship's hull ballasted up to the maximum draught waterline or in a condition as agreed with PRS surveyor is to be carried out, however not less than 24 hours after launching;
- .10 thickness measurement of worn plating in glass-reinforced plastic ships.

5.3.7.2 In-water Bottom Survey

In-water bottom survey is carried out by PRS surveyors authorized for carrying out in-water bottom survey.

5.3.8 Propeller Shaft Survey

5.3.8.1 Complete Survey of Propeller Shaft

The scope of Complete Survey covers:

- checking the statement of person responsible for machinery confirming proper service of the shafting system;
- non-destructive tests by an approved crack detection method:
 - for propellers fitted to a keyed shaft taper – on not less than one third of the taper length, starting from its large end (from the shaft liner, if applied);
 - for propellers fitted keyless to the shaft taper – on the forward part of the taper starting from its large end;
 - for propellers fitted to a solid flange coupling at the end of the shaft – on the flange fillet area of the shaft;
- measurements of clearance or wear-down in the aft stern tube bearing (if applicable);
- examination of bearings;
- examination of oil sealing glands, if fitted, and tightness test.

5.3.8.2 Partial Survey of Propeller Shaft

The scope of Partial Survey covers:

- checking the Chief Engineer’s statement confirming proper service of the system;
- examination of oil sealing glands, if exist, and tightness test;
- measurement of clearance or wear down in the aft stern tube bearings (if applicable);
- in the case of a propeller fitted to a keyed shaft taper, carrying out non-destructive tests of the shaft ends by an approved crack detection method.

In case of no possibilities to carry out the survey in compliance with above requirements, Complete Propeller Shaft is to be carried out.

5.3.9 Propeller Survey

5.3.9.1 Propeller Survey is carried out during the Bottom Survey.

5.3.9.2 The survey covers:

- external examination;
- in the case of the propeller dismantling, close-up examination of the shaft taper and non-destructive testing of the shaft ends, as well as examination of the propeller boss;
- examination of the propeller fastening to the shaft.

For controllable pitch (CP) propellers – tightness test of the propeller boss and the blade sealing, as well as checking the correctness of the CP propeller pitch change. The dismantling of CP propeller is not required unless considered necessary by the Surveyor.

5.4 Thruster Survey

The survey covers:

5.4.1 Checking:

- ASTERN maneuver is made by turning the column by 180°: turning time
- CP propellers: positioning the blades in AHEAD position in the case of executing system failure

5.4.2 Examination:

- screw joints transmitting forces turning the thruster around its axis
- screw joints transmitting thruster thrust force to the hull
- propulsion shafts, gears, flexible couplings
- propellers
- propeller pitch control mechanism

5.4.3 Operation tests:

- means for immediate stopping the propeller independently of the thruster remote control system
- blockade preventing engaging the coupling when turning speed of driving engine exceeds the specified value
- mechanism for emergency setting and blocking in AHEAD position
- control and monitoring systems

5.5 Occasional Surveys

5.5.1 Occasional Surveys of a ship or her respective machinery, arrangements, installations or equipment will be held upon request in all cases except Initial Surveys for Class Assignment and

Periodical Surveys. Occasional Survey may be carried out on request of the Owner, insuring company or may be caused by PRS control activity.

The scope of Occasional Surveys and their procedure will be determined by PRS, depending on the purpose of the survey, age, technical condition of the ship. Carrying out Occasional Survey resulted by PRS' control activity may be condition for maintenance of class.

5.5.2 One of Occasional Surveys is a survey after damage to which a ship is to be submitted in the case of ship's grounding, damage sustained by the ship's hull, machinery, arrangements, installations, equipment covered by the requirements of the *Rules* and subject to technical survey of PRS. The Owner is obliged to immediately notify PRS about ship's damage or grounding.

5.5.3 The after damage survey is to be carried out at a port where the ship is at the moment or at the first port the ship calls after the damage or grounding. The aim of this survey is to assess the extent of damage, specify the scope of work required in order to eliminate the consequences of damage and to determine the possibility and conditions for retaining the ship's class.

6 SUSPENSION OF CLASS

6.1 Reasons for Ship's Class Suspension

6.1.1 Ship's Grounding, Damage

The Owner is obliged to notify PRS of each case of ship's grounding and every damage sustained by the ship's hull, machinery, installations or equipment covered by the requirements of the *Rules*, as well as to agree with PRS the date of After Damage Survey and the procedure for:

- determining the extent of damage,
- determining the scope and date of repair.

The ship's class is automatically suspended from the time of damage occurrence until completion of After Damage Survey confirming elimination of class suspension reasons.

In well-grounded cases, after receiving notification from the Owner and its review, PRS may decide that the ship's class will not be suspended.

6.1.2 Transgression of Service Conditions Specified in the *Certificate of Class*

The Owner is obliged to inform PRS on every transgressing the service conditions specified in the *Certificate of Class* and PRS will make a decision on further proceedings. Transgression of service conditions, without PRS agreement, causes the ship's class automatic suspension until After Damage Survey completion.

6.1.3 Suspension of Class in the Case of Overdue Periodical Surveys

The ship's class is automatically suspended in the case when the Periodical Survey has not been completed by the due date.

The class will be reinstated upon satisfactory completion of the due survey.

The ship is disclassified from the date of suspension until the confirmation of *Certificate of Class* / issue of *Temporary Certificate of Class*.

In exceptional cases, at the Owner's justified request, PRS may grant an extension of class for a maximum of 3 months. In such case occasional survey is to be carried out which scope is determined by PRS each time.

6.1.4 Suspension of Class in Case of Overdue Conditions of Class

Each condition of class is assigned a due date for completion. Owners are notified by PRS of these dates and that the ship class will be subject to suspension if the item is not dealt with, or postponed by – subject to PRS consent in each particular case – by the due date.

The *Certificate of Class* validity is reinstated upon PRS verification that the overdue conditions of class have been fulfilled.

The ship will be disclassified from the date of class suspension until the conditions are fulfilled.

6.1.5 Owner's Financial Overdues

If the Owner has not paid PRS for its services connected with the ship survey at the agreed date, the ship's class will be suspended. Notice of PRS intent to suspend the class will be sent to the Owner one month in advance. The class will be reinstated automatically after settlement of payments.

6.1.6 Change of Ship Owner/Operator

To maintain class validity, a written notification of the intended change of the ship Owner/Operator is to be submitted to PRS.

On receipt of such notification, PRS will specify the need and scope of the required survey and the necessary changes to be made in the relevant documents.

6.2 Notification to Owners and Flag States

PRS will confirm the suspension of class and reinstatement of the ship's class by separate letters to the Owner and to the Flag State.

7 WITHDRAWAL OF CLASS AND WITHDRAWAL SHIP FROM PRS REGISTER

7.1 Reasons for Ship's Class Withdrawal

7.1.1 Introduction of alterations to hull, superstructures and deckhouses, machinery, equipment and installations, covered by the requirements of the Rules, without the prior agreement with PRS.

7.1.2 Suspension of class for a period exceeding 6 months.

At the Owner's request, PRS may grant a longer suspension period when the ship is not trading as in the event of awaiting PRS decision in the case of a casualty or attendance for class reinstatement.

7.1.3 The ship has sunk.

7.1.4 The ship has been transmitted for scrapping.

7.1.5 The written request of the Owner for the ship withdrawal from PRS Register.

7.2 Withdrawal the Ship from PRS Register

Withdrawal from PRS Register is consequent upon the ship's class withdrawal for reasons specified in 7.1.

7.3 Notification to Owners and Flag State

PRS will confirm the withdrawal of the ship's class and the ship's deletion from PRS Register by separate letters to the Owner and to the Flag State.

List of amendments effective as of 1 July 2023

<i>Item</i>	<i>Title/Subject</i>	<i>Source</i>
Page 2	Reference to Publication 100/P, added	PRS
3.4.7.1.1	Amendments related to the issuance of the new Publication 100/P	PRS

List of amendments effective as of 19 October 2023

<i>Item</i>	<i>Title/Subject</i>	<i>Source</i>
1.2.1	Definition of pontoon has been added	PRS
3.4.7.1.7	Mark of pontoon and requirements for its assignment have been added	PRS

List of amendments effective as of 13 November 2023

<i>Item</i>	<i>Title/Subject</i>	<i>Source</i>
1.2.1	Definition of Crab fishing vessel has been added	PRS
3.4.7.1.3	Mark of Crab fishing vessel and requirements for its assignment have been added	PRS