

RULES

FOR THE CLASSIFICATION AND SURVEY OF SMALL CRAFT

ND No. 2-020101-147-E



**St. Petersburg
2022**

RULES FOR THE CLASSIFICATION AND SURVEY OF SMALL CRAFT

Rules for the Classification and Survey of Small Craft of Russian Maritime Register of Shipping have been approved in accordance with the established approval procedure and come into force on 1 January 2022.

The present edition of the Rules is based on the 2021 edition taking into account the amendments developed immediately before publication.

The Rules are published in the following parts:

Part I "General";

Part II "Survey Schedule and Scope".

On the entry into force of these Rules, the Rules for the Classification and Survey of Small Craft, 2021 become void.

The Rules are published in electronic format in Russian and English.

The Rules are intended for surveyors, crews of the small craft and shipowners.

REVISION HISTORY¹

(purely editorial amendments are not included in the Revision History)

Amended paras/chapters/sections	Information on amendments	Number and date of the Circular Letter	Entry-into-force date
Part I, para 1.1	Characteristics of small craft to which these Rules do not apply have been specified	340-04-1802c of 09.08.2022	15.09.2022
Part I, para 3.1.2	Russian River Register has been renamed	340-04-1802c of 09.08.2022	15.09.2022

¹ Amendments and additions introduced at re-publication or by new versions based on circular letters or editorial amendments.

PART I. GENERAL

1 APPLICATION

1.1 Rules for the Classification and Survey of Small Craft¹ apply to small craft, the length of the hull L_H of which does not exceed 20 m and the total number of persons on board of which does not exceed 12, except for:

craft weighing up to 200 kg inclusive and with engine power (in case of installation) up to 8 kW inclusive;

undecked non-self-propelled craft the length of which does not exceed 12 m;

pleasure craft;

sailing racing yachts;

manned submersibles and ship's diving systems;

boats or other craft being part of the small craft.

¹ Hereinafter referred to as "the Rules".

2 DEFINITIONS AND EXPLANATIONS

2.1 For the purpose of these Rules the following definitions have been adopted.

Category is a criterion establishing the permissible area of safe navigation of the craft depending on its technical and operational characteristics, permissible wave height, wind force and a distance to the place of refuge or to shore ([refer to 3.2](#)).

Decked craft is a craft covered along the whole its length with the deck, superstructure or cockpit preventing water ingress inside the hull.

Distance to the place of refuge is the maximum permissible distance in nautical miles (or kilometers) which is measured along the shortest navigationally safe path from any point on the route selected for sailing to the nearest port or place of refuge.

Distance to the shore is the maximum permissible distance in nautical miles (or kilometers) which is measured along the shortest navigationally safe path from any point on the route selected for sailing to the nearest shore where disembarkation of persons from the craft can be provided.

Length of the hull (overall) L_H , in m — is the length that includes all structural and integral parts of the craft, such as wooden, plastic or metal stems or sterns, bulwarks and hull/deck joints.

This length excludes removable parts that can be detached in a non-destructive manner and without affecting the structural integrity of the craft's hull, e.g. spars, bowsprits, bulwarks, pulpits, stemhead fittings, rudders, outdrives, outboard motors and their mounting brackets and plates, diving platforms, boarding platforms, rubbing strakes and permanent fenders.

This length does not exclude detachable parts of the hull, which act as hydrostatic or dynamic support when the craft is at rest or underway.

With multihull craft, the length of each hull shall be measured individually. The length of the hull of such craft shall be taken as the longest of the individual measurements.

Undecked craft is a craft not being a decked one.

Wave height with 1 % probability of overtopping $h_{1\%}$, in m is a design height of irregular waves which, being assumed, implies that over a continuous long period of observation 1 % of the actual waves may have a height exceeding the design height.

Wave height with 3 % probability of overtopping $h_{3\%}$, in m is a design height of irregular waves which, being assumed, implies that over a continuous long period of observation 3 % of the actual waves may have a height exceeding the design height.

3 PRINCIPLES OF CLASSIFICATION AND CATEGORIES

3.1 PRINCIPLES OF CLASSIFICATION

3.1.1 Classification of a small craft means establishing a category that takes into account probable wind and wave conditions of navigation and a distance to the place of refuge or the shore based on the actual technical condition of the small craft and technical documentation. Classification of a small craft is carried out without issuance of a classification certificate and assignment of class of the Russian Maritime Register of Shipping¹.

3.1.2 For a small craft designed or built taking into account the requirements and having the documents confirming compliance with the requirements of:

State (National) standards of the Russian Federation (GOST);

Directive 2013/53/EU (cancels Directive 94/25/EC, as amended by Directive 2003/44/EC);
IMO resolutions;

International Organization for Standardization (ISO);

another classification society (ACS) — member of the International Association of Classification Societies (IACS) (ACS — IACS member);

Russian Classification Society (RCS);

State Small Vessel Inspectorate of the Ministry of the Russian Federation for Civil Defense, Emergencies and Elimination of Consequences of Natural Disasters²;

Technical Regulation of the Customs Union "On Safety of Small-Size (Leisure) Vessels" (CU TR 026/2012);

World Sailing Offshore Special Regulations (OSR) of the International Sailing Federation (ISAF);

IMMARBE's Codes of Standards for Yachts in commercial or private use (The Code of Standards for Yachts of less than 24 metres — The Small Yacht Code);

Commercial Yacht Code (Merchant Shipping Directorate, within the Authority for Transport in Malta),

based on the results of survey depending on the category specified in the documents confirming the compliance, the closest related category taking into account probable wind and wave conditions of navigation and a distance to the place of refuge or the shore (with reducing the category to the safe side) shall be established by the Register.

3.1.3 For a small craft designed or built without regard for the requirements of [3.1.2](#), without review of technical documentation or without technical supervision of ACS — IACS member, supervisory or certification bodies, based on satisfactory completion of survey, the minimum category shall be established by the Register. The category specified by the shipowner shall be established after the development and satisfactory review by the Register of technical documentation containing stability data in accordance with [Appendix 2](#), or upon conducting the tests in compliance with [3.1.4](#).

If a small craft refers to a series of craft having been previously tested, the documentation may be submitted to RS for review without performing the tests.

3.1.4 Where it is not possible to develop documentation containing stability data, the seaworthiness properties shall be determined during testing on the basis of GOST 19356-79 "Pleasure craft row boats and motor boats. Test methods"/GOST 19105-79 "Pleasure crafts-row boats and motor boats. Types, basic parameters and technical requirements" or the documents listed in [3.1.2](#).

¹ Hereinafter referred to as "the Register, RS".

² Hereinafter referred to as "the SSVI".

3.1.5 Area of navigation may be changed provided the documentation containing stability data in accordance with [Appendix 2](#) is submitted to the Register, the outfitting of the small craft with the required equipment and outfit ([refer to Appendix 3](#)) is carried out, and on the basis of satisfactory completion of the occasional survey of the small craft performed by the Register. Where it is not possible to develop documentation containing stability data, the seaworthiness properties are specified in compliance with [3.1.4](#).

3.1.6 For the small craft, technical characteristics of which do not comply with the characteristics specified in the Technical Passport or Owner's Manual or other similar documentation, the RS surveyor shall check the availability of the RS-reviewed technical documentation confirming the amendments. Where such documentation is not available, the RS surveyor shall impose a requirement on the development of technical documentation and provision of the documentation to the small craft.

3.1.7 Results of technical documentation review by the Register are prepared in compliance with Section 8, Part II "Technical Documentation" of the Rules for Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships.

3.2 CATEGORIES

3.2.1 The categories and wind and wave restrictions are specified in [Table 3.2.1](#).

Table 3.2.1

Categories of setting restrictions on the small craft navigation

Categories of the small craft	Permissible areas of safe navigation
0	No restrictions
I	Navigation in sea areas at seas with a wave height up to 8,5 m with 3 % probability of overtopping and wind force up to 25 m/s, with the small craft proceeding not more than 200 miles away from the place of refuge or the shore
II	Navigation in sea areas at seas with a wave height up to 7 m with 3 % probability of overtopping and wind force up to 20 m/s, with the small craft proceeding not more than 100 miles away from the place of refuge or the shore
III	Navigation in sea areas at seas with a wave height up to 3,5 m with 3 % probability of overtopping and wind force up to 15 m/s, with the small craft proceeding not more than 50 miles away from the place of refuge or the shore
IV	Navigation in coastal sea areas

3.2.2 Permissible areas of safe navigation in the coastal sea areas for the small craft of category IV are given in [Table 3.2.2](#).

Table 3.2.2

Permissible areas of safe navigation for the small craft of category IV

Area of navigation of small craft of category IV	Maximum wave height with 1 % probability of overtopping, in m	Maximum distance to the place of refuge or the shore			
		Decked small craft		Undecked small craft	
		miles	km	miles	km
IV-1	1,8	12	22	—	—
IV-2	1,5	7	13	—	—
IV-3	1,2	6	11	2,7	5
IV-4	0,6	2,7	5	1,7	3
IV-5	0,25	1,1	2	0,3	0,5

4 PREPARATION FOR SURVEYS

4.1 Survey of a small craft shall be carried out only in the area of the RS Branch Office's activity. The RS Branch Office for in-service supervision is the RS Branch Office according to the place of state registration of the small craft. All surveys shall be carried out by the Register only on the basis of written requests of the shipowners or their authorized persons. Contract-Request for Classification and Survey of Small Craft (form 430.1.10) and Contract-Request for Survey of Small Craft in Service (form 430.1.10-1) can be downloaded from the RS official website, section "Services" — "Ships" — "Small Craft".

4.2 The shipowner shall notify the Register in written form of any changes in the craft recording data (e.g. change of the shipowner, flag, place of state registration, identification number, small craft's name (if any), etc.).

4.3 For efficient conduct of the survey and fulfilment of the survey scope prescribed by these Rules, the shipowner shall prepare the small craft in an appropriate way which includes at least the following:

all spaces of the small craft shall be made accessible for the survey;

all items shall be in good working order;

in necessary cases access, opening-up and/or dismantling shall be provided.

4.4 Responsibility for timely submission of the small craft and the craft's items of technical supervision for surveys and timely implementation of the RS surveyor's requirements and comments set out in the Register documents lies with the shipowner. Performance of testing, thickness measurements and testing for defects, as well as development of the required technical documentation for the small craft are the responsibility of the shipowner or a person authorized by them.

4.5 During the survey, the shipowner shall, upon the Register request, submit documents issued by the Register, including all the latest reports of the small craft survey performed by the Register or another authorized body, all documents for the master and instructions regarding stability issues.

4.6 The shipowner shall ensure all the necessary conditions for quality and safe survey or testing of the small craft items of technical supervision. All machinery, equipment and instruments installed on board the small craft shall be in working order (except cases of repairs and accidents).

4.7 Conditions for survey of hull structures. The small craft hull shall be prepared for execution of the survey and, simultaneously, the following conditions shall be provided for a safe execution of the survey:

tanks, holds and other spaces shall be safe for access, i.e. gas-freed, ventilated and illuminated;

to allow for through examination, all spaces shall be cleaned including removal from surfaces of all corrosion products. Spaces shall be sufficiently clean and dry and their surfaces shall be free from water, scale, dirt, oil residues, etc. to the extent to reveal corrosion defects, deformation, fractures, damages or other structural deterioration as well as the condition of the spaces coating, and to carry out examination thereof. However, those areas of structure whose renewal has already been decided by the shipowner need only be cleaned and descaled to the extent necessary to determine the limits of the areas to be renewed;

sufficient illumination shall be provided to reveal substantial corrosion, deformation, fractures, damages or other structural deterioration.

4.8 Responsibility for non-fulfilment of the conditions specified in this Section, which may result in additional costs due to unpreparedness of the small craft and its items, lies with the shipowner.

5 DETERMINATION OF COMPLIANCE OF THE SMALL CRAFT TECHNICAL CONDITION WITH THE REQUIREMENTS OF THESE RULES

5.1 When evaluating the compliance of the small craft technical condition with the requirements of these Rules, the possibility of assignment, confirmation and reinstatement of the small craft category, as well as of assessment of the necessary scope of repairs ([refer to Appendix 1](#)) shall be determined.

5.2 Responsibility for technical condition of the small craft hull, its machinery, equipment, arrangements, systems and outfit, as well as for their maintenance in operational condition for the small craft in service lies with the shipowner, who shall ensure performance of required checks and examinations for detection of possible defects and faults.

5.3 The Register carries out assessment of the technical condition of the small craft hull, its machinery, equipment, arrangements, systems and outfit during examinations, verifications and operational testing, the scope of which is specified in the relevant parts of these Rules.

5.4 Compliance of technical condition of the above items of technical supervision with the applicable RS requirements means that they are in technical condition recognized as fit for service, i.e. they are capable of performing their intended functions.

5.5 If during the survey of the small craft hull, its machinery, equipment, arrangements, systems and outfit the technical condition is found not to comply with the applicable requirements of these Rules, the technical condition of the small craft shall be recognized as not complying with the RS requirements, and documents confirming the small craft category shall not be issued or endorsed until the identified nonconformities are eliminated and technical condition of the small craft items of technical supervision is brought into line with the applicable requirements of these Rules. Nonconformities (damages, faults, etc.) identified during the survey of the small craft affecting safe operation of the small craft, safety of life at sea, pollution prevention from the small craft shall be eliminated prior to survey completion and prior to the small craft departure (prior to the small craft commencing service).

5.6 If during the survey damages/faults are detected, the shipowner shall take the appropriate measures to eliminate nonconformities which have caused these damages/faults.

6 DOCUMENTS TO BE ISSUED

6.1 Upon satisfactory completion of the initial/special survey, a report as per form 6.3.80 shall be issued to the small craft with assignment/confirmation of the category, assignment/confirmation of conditions and areas of navigation.

6.2 Upon satisfactory completion of the intermediate/occasional survey, a report as per form 6.3.80.1 shall be issued to the small craft.

6.3 When it is found during the small craft survey that its characteristics and/or technical condition do not comply/not fully comply with the requirements of these Rules and/or documentation of the designer/manufacture, a report as per forms 6.3.80.1/6.3.10/6.3.82rf shall be issued to the small craft, where the identified nonconformities shall be indicated. After elimination of nonconformities, an occasional survey of the small craft shall be carried out upon the shipowner's request.

6.4 Based on the results of the occasional survey, when elimination of the nonconformities is confirmed, the relevant entry on compliance with the requirements shall be introduced in the report as per forms 6.3.80.1/6.3.10/6.3.82rf.

6.5 Upon completion of the survey it is permitted to make a mark indicating the receipt of the report by the shipowner directly in the survey report or issue the List of documents issued upon the survey of the ship (form 6.4.7-1).

6.6 The RS documents become invalid in the following cases:

- in case of the small craft departure from the place of submission prior to survey completion and/or elimination of nonconformities;
- in case of failure to submit the small craft for the survey in due dates;
- in case of non-compliance with the RS requirements;
- in case of violation of the prescribed conditions of navigation;
- in case of conducting works related to structural changes in the small craft without preliminary agreement with the Register;
- after the accident;
- in case of deregistration of the small craft from the Register;
- if the invoice for the services rendered by the Register is not paid by the shipowner within 90 days.

6.7 During survey of the small craft technical appliances, equipment and outfit, the documents confirming compliance with the requirements of [3.1.2](#) shall be taken into account.

PART II. SURVEY SCHEDULE AND SCOPE

During technical supervision of the small craft, the following types of survey shall apply:

initial survey;

periodical surveys:

 intermediate survey;

 special survey;

occasional survey.

1 INITIAL SURVEY

1.1 Initial survey is carried out in the scope of special survey for confirmation of the small craft compliance with the requirements of these Rules and assignment of the category to the small craft. The survey is carried out as in-water survey and survey on the shore/in dry dock.

1.2 SURVEY PROCEDURE

1.2.1 The small craft has previously undergone registration in one of the registers of ships of the Russian Federation (hereinafter referred to as "registers of ships"):

.1 the shipowner shall submit to the Register a contract-request as per form 430.1.10 for the initial survey. Upon satisfactory completion of the survey, the Register shall issue a report as per form 6.3.80.

1.2.2 The small craft has not previously undergone registration in one of the registers of ships:

.1 Contract-request for identification and examination of the ship (form 430.1.14) shall be submitted to the Register.

Identification and examination of the small craft include:

review of the documents on the small craft and technical documentation submitted by the shipowner and establishing of the small craft category ([refer to 3.1, Part I "General"](#));

general examination of the small craft during which the RS surveyor shall carry out assessment of the small craft technical condition and draw up the Conclusion on the results of identification and examination of the ship (form 6.3.82rf) where the RS surveyor shall record the information on the small craft identification, evaluate the small craft compliance with the statement concerning small craft details, give an assessment of the small craft technical condition and in this regard, confirm that necessary requirements are complied with or the list of nonconformities is available;

at the shipowner's discretion, survey of the outside of the small craft bottom (bottom survey).

During the small craft identification and examination, the items that have been examined shall be photographed;

.2 upon registration in the register of ships and receipt of the vessel certificate, the shipowner shall send to the Register a contract-request as per form 430.1.10 for the initial survey. In case of satisfactory completion of the survey, the Register shall issue a report as per form 6.3.80.

2 PERIODICAL SURVEYS

2.1 SUMMARIZED SCOPE OF THE SMALL CRAFT PERIODICAL SURVEYS

2.1.1 The scope of the periodical surveys and intervals between them are given in [Table 2.1.1](#) which contains the summarized list of items of technical supervision. When specifying the scope and periodicity of the survey, the requirements set forth in the relevant sections of these Rules shall be taken into account.

2.1.2 The extent of particular examinations, measurements and testing may be changed by the RS surveyor depending on the specific conditions.

O — examination with access, opening-up or dismantling being provided where necessary; close-up survey (where applicable according to these Rules);

C — external examination;

P — operational testing of machinery, equipment and arrangements, external examination included;

E — control of the availability of necessary documentation as well as valid documents and/or stamps testifying to the instrumentation being calibrated, if subject thereto.

Table 2.1.1

Nos.	Item to be surveyed	Survey type	
		Intermediate	Initial/Special
1	Hull		
1.1	Underwater hull (external examination)		
1.1.1	Stems and stern frames, keel, propeller shaft brackets		C
1.1.2	Shell plating		C
1.1.3	Sea chests, trunks for logs, echo-sounders, submerged and rotary-submerged arrangements		C
1.2	Above-water hull (external examination)		
1.2.1	Stems and stern frames	C	O
1.2.2	Shell plating	C	O
1.2.3	Upper deck plating	C	O
1.2.4	Superstructures, deckhouses (shell plating, decks, bulkheads)	C	O
1.2.5	Coamings of hatches, companionways and ventilators	C	O
1.2.6	Bulwark and freeing ports, guard rails	C	O
1.2.7	Seatings of winches, windlasses and capstans, stoppers, bollards, fairleads and bits	C	O
1.2.8	Load line and draught marks	C	C
1.3	Spaces inside the hull		
1.3.1	Void spaces, chain lockers, cofferdams		O
1.3.2	Tanks:		
	.1 fresh water tanks, ballast tanks and sewage holding tanks	C	O
	.2 fuel oil tanks and lube oil tanks		O
1.3.3	Machinery spaces (including seatings of main and auxiliary machinery)	C	O
1.3.4	Other spaces in hull, superstructures and deckhouses		O
1.3.5	Air pipe automatic heads	C	O

Nos.	Item to be surveyed	Survey type	
		Intermediate	Initial/Special
2	Equipment, arrangements and outfit		
2.1	Closures		
2.1.1	Hatch covers and closures of manholes on open deck areas and inside superstructures, outer doors of superstructures and deckhouses, scuttles, closures of ventilating cowls and closing appliances for ventilator openings	C	C
2.2	Steering gear	CP	COP
2.3	Anchor arrangement		
2.3.1	Hawse pipes	C	C
2.3.2	Anchors, chain cables and wire ropes	C	C
2.3.3	Stoppers and devices for releasing the chain cable	C	OP
2.4	Mooring arrangement		
2.4.1	Bollards, hawse pipes, fairleaders, ropes and other equipment	C	C
2.5	Towing arrangement		
2.5.1	Bollards, towing bitts, hawse pipes and tow lines	C	C
2.6	Masts	C	C
2.7	Repair kit	C	C
3	Fire protection		
3.1	Structural fire protection		
3.1.1	Fire doors	CP	CP
3.2	Fixed fire extinguishing systems		
3.2.1	Water fire main system, sprinkler system, pressure water spraying system, drenching system	P	OP
3.2.2	Foam fire extinguishing system	P	OP
3.2.3	Carbon dioxide smothering system, aerosol fire extinguishing system	P	OP
3.3	Fire-fighting outfit, spares and tools	EC	ECP
3.4	Instrumentation	C	C
4	Machinery installation		
4.1	Internal combustion engines:		
4.1.1	Main internal combustion engine	C	P
4.1.2	Auxiliary internal combustion engines	C	P
4.2	Shafting, propeller, sterntube arrangement and active means of the ship's steering (AMSS)	C	P
4.2.2	Propeller	C	CP
4.2.3	Main AMSS (azimuth thrusters, waterjets)		CP
4.3	Auxiliary machinery		
4.3.1	Pumps	C	P
4.3.2	Compressors	C	P
4.3.3	Ventilators in dangerous spaces	P	P
4.3.4	Steering engine	P	P
4.3.5	Anchor machinery	P	OP
4.3.6	Mooring machinery	P	OP
4.3.7	Spare parts	C	C
4.4	Outboard motor	CP	CP
5	Systems and piping		
5.1	Bilge, ballast and heeling systems, remote drives	P	OP
	.1 scuppers carried through sides, decks, bulkheads and platforms, mud boxes, compensators		O
5.2	Air, overflow and sounding pipes, blowing, gas-freeing and vent arrangement for tanks	C	O

Nos.	Item to be surveyed	Survey type	
		Intermediate	Initial/Special
5.3	Ventilation systems:		
	.1 vent ducts passing through watertight and fire-fighting divisions, their dampers	P	OP
5.4	Fuel oil system of liquid fuel, compensators, flexible joints and flame-retardant coatings	P	OP
5.5	Lubricating oil and hydraulic system	P	OP
5.6	Cooling water system	P	OP
5.7	Compressed air system	P	OP
5.8	Hydraulic drive system	P	OP
5.9	Bottom and side valves	CP	OP
5.10	Drainage pipes	C	O
5.11	Instrumentation	E	E
6	Electrical equipment		
6.1	Electric propulsion plants:		
	.1 main generators, exciters	P	OP
	.2 switchboards	P	OP
	.3 desks and panels for control and monitoring	P	OP
6.2	Main and emergency sources of electrical power:		
	.1 generators	P	OP
	.2 accumulator batteries	P	OP
6.3	Converting devices feeding essential consumers	P	OP
6.4	Switchboards:		
	.1 main and emergency switchboards	P	OP
	.2 navigation-light switchboards	P	OP
	.3 switchboards:	P	OP
	.4 switchboards, desks and panels for control, monitoring and signalling	P	OP
6.5	Cabling:		
	.1 cables and wires	C	O
	.2 cable protection (additional), cable penetration through watertight and fire-fighting bulkheads and decks	C	O
6.6	Electric drives of the essential devices and machinery and their monitoring, protection and control equipment:		
	.1 pumps, compressors, anchor arrangements, fans	P	OP
	.2 steering gear, autopilot	P	OP
	.3 mooring machinery	P	OP
6.7	Lighting:		
	.1 spaces and zones essential for maintaining propulsion and safety of the small craft and habitability thereof	C	OP
	.2 other spaces		OP
	.3 emergency lighting	P	OP
	.4 navigation lights and flashing lights	P	OP
6.8	Electrical heating and cooking appliances and devices:		
	.1 stationary heating and cooking appliances	P	P
6.9	Electrical equipment and cables in dangerous spaces and zones	C	C
6.10	Signalling and internal communication facilities	P	OP

Nos.	Item to be surveyed	Survey type	
		Intermediate	Initial/Special
6.11	Protective devices:		
	.1 lightning arrester	C	C
	.2 protective earthing	C	C
7	Automation equipment		
7.1	Integrated automation systems (of the small craft, machinery installations)	P	OP
7.2	Centralized monitoring systems	P	OP
7.3	Automation systems (remote control systems and remote automated control systems of main machinery):	P	OP
	.1 main engines	P	OP
	.2 electric power plant (with systems of synchronization and load distribution)	P	OP
	.3 diesel-generators	P	OP
	.4 compressors	P	OP
	.5 separators, filters	P	OP
7.4	General automation systems:		
	.1 ballast system	P	OP
	.2 bilge system	P	OP
	.3 fuel transfer system	P	OP
	.4 fire extinguishing system	P	OP
	.5 ventilation system	P	OP
7.5	Automation devices:		
	.1 regulators of level, pressure, temperature, viscosity, etc.	P	OP
	.2 level, pressure (differential pressure), temperature, flow, salinity, vibration sensors and signalling devices, etc.	P	OP
	.3 control, monitoring and alarm boards and panels	P	OP
	.4 remote control instrumentation	E	E
8	Life-saving appliances and arrangements		
8.1	Liferafts with release gear and launching appliances; lifebuoys, lifejackets, immersion suits and thermal protective aids	EC	EC
8.2	Line-throwing appliances	C	C
8.3	Harness	C	C
9	Signal means		
9.1	Signal shapes and pyrotechnic signal means	C	C
9.2	Sound signal means	P	P
9.3	Navigation lights	P	OP
10	Radio equipment (refer to Appendix 3)		
10.1	Satellite emergency position-indicating radio beacon (EPIRB)	EP	EP
10.2	VHF coast station	P	OP
10.3	MF radio installation; MF/HF radio installation	P	OP
10.4	NAVTEX service receiver	P	OP
10.5	Ship's radar search and rescue transponder and ship's AIS search and rescue transmitter	P	P
10.6	Ship-to-shore communication facilities	P	P

Nos.	Item to be surveyed	Survey type	
		Intermediate	Initial/Special
11	Navigational equipment		
11.1	Global navigation satellite system (GNSS) GLONASS receiver	P	P
11.2	Radar, radar reflector, barometer, prismatic binocular, magnetic compass	P	P
11.3	Echo sounder, log	P	OP

2.2 INTERMEDIATE SURVEY

2.2.1 General.

2.2.1.1 Intermediate survey of the small craft shall be carried out during the third year after completion of special survey or initial survey.

2.2.1.2 Prior to commencement of the survey, the RS surveyor shall verify that the shipowner has prepared the small craft for survey and ensured all the necessary conditions for quality and safe survey and testing of the small craft items of technical supervision ([refer to Section 4 Part I "General"](#)).

2.2.2 Hull.

2.2.2.1 At survey the following items shall be examined:

open decks, above-water part of shell plating;

ballast tanks;

superstructures, deckhouses;

coamings of cargo and companion hatches, companionways, ventilators and air pipes;

hatch covers of freeboard decks and superstructures, including cargo hatch covers;

funnel casings;

skylights, flush deck, side and non-opening scuttles, companion ladders;

closures of openings in outer contour;

deck and bulkhead penetrations in watertight structures;

scuppers and other drainage holes;

gangways and underdeck passages;

guard rails and bulwarks;

devices to ensure the watertightness of hatch covers and other closures of openings in outer contour; structures of main and auxiliary machinery spaces, refrigerating machinery spaces; propeller-shaft tunnels.

2.2.2.2 Hull structures made of steel and light alloys shall be thoroughly examined for the integrity of the structures as well as for the absence of:

through corrosion, holes;

cracks in the welds, missing or loose rivets and bolted connections of the plating;

damage of paint coating and oxide coating resulting in rapid destructive corrosion of hull structures made of light alloys;

cracks in the plating and framing;

intergranular corrosion and film corrosion that are characterized by distinctive grey bloom, deep pits, bulging and delamination of metal;

damage of insulating material at connections with other metals.

2.2.2.3 Hull structures made of fiber-reinforced plastic shall be thoroughly examined for the integrity of the structures as well as for the absence of:

plating lamellar tear and leaks in joints;

matting-in connections detachment from the plating and frame members;

cracks on plating and framing;

changing of actual geometric hull parameters (length, breadth, depth, keel line) as compared to those given in the specification;

other defects affecting the outer contour watertightness and hull structural strength.

2.2.2.4 Hull structure made of wood shall be thoroughly examined for the integrity of the structures as well as for the absence of:

worm channels in outer plating;

mechanical wear and rot in planks and longitudinals to a depth where the holding power of metal fastenings is reduced or seams and butts of outer plating or deck plating are weakened due to damage to caulking and leakage occurrence;

local rot in transverses and stems due to timber damage to a depth greater than 1/3 of the plank timber thickness;

rot in floor timbers and futtocks at a depth greater than 1/4 of the plank timber thickness at selected areas with total number of rotten girders above 20 % of the girders in the area between strength structural bulkheads;

rot in case of continuous damage to a depth greater than 1/5 of the thickness of futtocks or floor timbers in five and more successive girders;

girders with significant mechanical damage such as breaks, burrs, cracks and shearing that may affect the strength or tightness;

wear of metal fixing heads by more than 1/3 of their height and reduction of bolt and nail diameter by more than 1/10 of the initial value;

delamination of bonded parts of plating and framing;

visible damage of hulls made of bakelised plywood (buckling, notching and chafing, repair traces below waterline) that may result in leakage.

2.2.2.5 Hull structures of inflatable small craft shall be thoroughly examined for the integrity of the structures as well as for the absence of:

defects in the fully inflated small craft along the bottom gluing line;

through cracks in the PVC fabric;

peeling of sealing tapes or ungluing of hull components;

horizontal warping of sides of inflatable small craft for more than 45°;

cracks and breaks at guard rail rings.

Inflatable small craft shall be divided at least into two buoyancy sections. Inflatable small craft shall maintain positive buoyancy at full load in case of damage to any single section.

2.2.3 Steering gear.

2.2.3.1 Assessment criteria for the determination of technical condition of the steering gear:

putting the rudder over from 35° on one side to 35° on the other side, for the outboard motor this angle shall be at least 30°;

absence of seizing during steering wheel rotation;

availability of information on the rudder blade position relative to the center line plane by means of the relevant indicator on the helmsman's position;

absence of broken yarns in the steering rope;

absence of damage to the rudder blade and steering gear components;

availability of emergency means of the small craft steering at slow speed.

2.2.4 Anchor arrangement.

2.2.4.1 Anchor arrangement is examined and operationally tested through dropping or lowering and hoisting of anchors.

2.2.4.2 Anchors, hawse pipes, swivels, stoppers, ropes and chains shall be examined externally.

2.2.4.3 In determining the technical condition of the anchor arrangement, the criteria given in [2.3.5](#) shall be taken into account.

2.2.5 Mooring arrangement.

2.2.5.1 Bollards, hawse pipes, reels, fairleads and ropes shall be examined externally. Mooring winches shall be operationally tested.

2.2.5.2 In determining the technical condition of the mooring arrangement, the criteria given in [2.3.6](#) shall be taken into account.

2.2.6 Towing arrangement.

2.2.6.1 Towing arrangement, as well as towing winches and their equipment, are examined and operationally tested. Tow hooks are subject to close-up survey.

2.2.6.2 In determining the technical condition of the towing arrangement, the criteria given in [2.3.7](#) shall be taken into account.

2.2.7 Fire protection.

2.2.7.1 Fire bulkheads and decks shall be examined, as well as closing appliances of openings therein, fire doors, closing appliances of external openings. The remote control systems of fire doors shall be operationally tested.

2.2.7.2 Fire extinguishing systems are examined and operationally tested complete with cylinders, tanks, arrangements, equipment and outfit. The piping of carbon dioxide smothering systems, fire extinguishing using freons, foam fire extinguishing systems shall be air-tested for free passage of the medium transferred. The aerosol fire extinguishing systems shall be checked by means of visual examination of the working order through indication on the remote control device and the efficiency of fastening of the system equipment and cables. The operational testing of fire extinguishing systems shall be carried out concurrently with that of the pumps, compressors, ventilators, boilers, apparatuses and pressure vessels, by which they are served, along with testing of their systems, connecting devices, remote control drives, automation systems and devices, monitoring devices. The visual and audible alarms warning about the fire extinguishing system starting shall be operationally tested. All cylinders for the storage of fire extinguishing medium shall be surveyed, and a check for completeness and external examination shall be carried out in respect of fire-fighting outfit, spares and tools.

2.2.7.3 For the purpose of survey of fire smothering systems, it shall be checked whether the volume of fire extinguishing medium is sufficient, whether the cylinders bear the stamps of competent organizations, as well as whether the certificates from a recognized laboratory or a competent organization confirming suitability of fire extinguishing medium for the use are available.

2.2.7.4 At survey of fire extinguishing systems, fire alarm systems shall be operationally tested.

2.2.8 Machinery installation.

2.2.8.1 Machinery installation, together with the machinery, systems, electrical equipment, arrangements, automation, signalling and monitoring equipment by which it is served, shall be inspected to verify whether any modifications have been introduced to the list of items of technical supervision, their design, arrangement and installation on board the small craft, equipment of machinery spaces, as well as to assess their technical condition.

2.2.8.2 Main and auxiliary machinery, emergency power sources and systems, by which they are served, shall be examined and operationally tested.

2.2.8.3 For the purpose of the main and auxiliary machinery operational testing, its availability for service is checked, as well as the serviceability of manoeuvring and starting devices, remote control, regulating and protection devices, machinery driven by the main engine and driving machinery, as well as of gear and couplings.

2.2.8.4 Diesel generators, pumps, turbochargers, ejectors, separators, compressors and ventilators shall be examined and operationally tested.

2.2.8.5 Speed governors and overspeed devices (only where the main machinery driving main generators or driving a propeller through a release gear, or a controllable pitch propeller (CPP) is concerned) shall be operationally tested.

2.2.8.6 Systems and valves, remotely controlled valves included, as well as bottom and side valves, shall be examined and operationally tested.

2.2.8.7 Heat exchangers, air receivers and other pressure vessels, filters and their safety devices shall be examined and checked together with the check of the systems.

2.2.8.8 Communication systems, telegraphs, audible and visual signal devices shall be examined and operationally tested.

2.2.8.9 At intermediate surveys, the following equipment shall be operationally tested: emergency drainage valve (if any); control systems of main, auxiliary and emergency steering gears.

2.2.8.10 In determining the technical condition of the machinery installation, the criteria given in [2.3.9](#) shall be taken into account.

2.2.9 Electrical equipment.

2.2.9.1 The following equipment shall be examined and operationally tested: electric power sources;

electric propulsion plants and their components;
switchboard and switchgear;
electric drives of machinery;
lighting;
internal communication and signalling;
cabling;
electric drive of a steering gear;
power transformers;
electrical power converters;
other electrical equipment not listed above, where requested by the Register.

2.2.9.2 The following switchgear shall be examined and operationally tested: main, emergency, section, distribution and navigation light switchboards, control, monitoring and signaling desks and panels.

2.2.9.3 The electric drives of devices and machinery, as well as their monitoring, protection, starting and control equipment shall be examined and checked in operation.

2.2.9.4 The main and spare sets of navigation lights fitted in their regular places shall be examined and operationally tested, as well as flashing lights. Spare navigation lights fitted in regular places instead of main ones shall be examined.

2.2.9.5 In determining the technical condition of the electrical equipment, the criteria given in [2.3.11](#) shall be taken into account.

2.2.10 Small craft systems and piping.

2.2.10.1 Bilge system, ventilation system, systems of air, overflow and sounding piping, fuel oil system and cooling system shall be examined and operationally tested together with relevant valves and machinery, as well as together with remote control, monitoring, protection and alarm systems.

2.2.10.2 When surveying air, overflow and sounding pipes, a check shall be carried out of availability and condition of shut-off valves on air pipes of sea chests, sight glasses on overflow pipes, self-closing faucets of short sounding pipes in engine room and self-closing test cocks located below them, level indicators.

2.2.11 Sailing rigging.

2.2.11.1 The sailing rigging of the small craft shall be examined and operationally tested.

2.2.11.2 In determining the technical condition of the sailing rigging, the criteria given in [2.3.13](#) shall be taken into account.

2.3 SPECIAL SURVEY

2.3.1 General.

2.3.1.1 Special survey, including bottom survey in dry dock, on a slipway or on the shore, shall be carried out at intervals not exceeding 5 years.

For a small craft, the in-water survey using underwater television carried out in accordance with Section 9, Part II "Carrying out Classification Surveys of Ships" of the Guidelines on Technical Supervision of Ships in Service may be permitted.

2.3.1.2 When carrying out special survey, the shipowner shall submit technical documentation ([refer to 3.1, Part I "General"](#)), as well as documentation on the small craft (documents of competent supervisory bodies, manufacturer's certificates, etc.). In case the shipowner is unable to submit technical documentation in full, measures shall be taken to provide the required documentation with conducting calculations and tests, if necessary.

2.3.1.3 The scope of the small craft survey at special survey consists of the scope of the small craft intermediate survey and the scope of additional surveys specified in the provisions of 2.3 below.

2.3.1.4 Prior to commencement of the survey, the RS surveyor shall verify that the shipowner has prepared the small craft for survey and provided all the necessary conditions for quality and safe execution of the survey and testing of the small craft items of technical supervision ([refer to Section 4 of Part I "General"](#)).

2.3.2 Hull.

2.3.2.1 In addition to the requirements for intermediate surveys, the special survey of hull of the small craft shall include examinations, tests and checks of sufficient extent to ensure that the hull is in satisfactory condition and is fit for the intended purpose for a new 5-year period, subject to proper maintenance and operation.

2.3.3 Closing of openings in the hull, superstructures and deckhouses.

2.3.3.1 The summarized extent of checks (tests) of closures of openings in hull, superstructures and deckhouses during survey of the small craft is given in [Table 2.1.1](#).

2.3.3.2 During the survey, to be examined and checked (tested) for tightness are hatch and manhole covers on the open area of freeboard deck and enclosed superstructures, as well as inside superstructures, which are not enclosed; closures of bow, side and aft openings in hull; companion hatches, skylights and ventilating trunks; scuttles; covers of ventilator pipe coamings on freeboard and superstructure decks and deckhouses.

2.3.3.3 Survey of hatch covers and coamings.

Hatch covers and coamings shall be surveyed as follows:

a survey of hatch cover plating and hatch coaming plating, shall be carried out;

checking of the satisfactory operation of all mechanically operated hatch covers shall be made, including:

stowage and securing in open condition;

proper fit and efficiency of sealing in closed condition;

operational testing of hydraulic and power components, wires, chains and link drives;

checking of the effectiveness of sealing arrangements of all hatch covers by hose testing or equivalent shall be carried out.

2.3.4 Rudder and steering gear.

2.3.4.1 Visible parts of rudder and steering gear including rudder blade, nozzles (including fixed nozzles), rudder pintles and gudgeons, rudder shaft, fasteners securing rudder blade/ steering nozzles to rudder shaft as well as hull members relating to rudder and steering gear shall be examined.

Welds in areas where fixed nozzles and rudder tubes fastened to hull shall be subjected to thorough examination.

The rudder and steering gear shall be checked for complete, free and smooth putting of rudder blade and/or steering nozzle hard-over to hard-over.

2.3.4.2 During survey of the small craft, the rudder and steering gear shall be operationally tested when the main and auxiliary steering gear, as well as the emergency steering gear are in operation. Rudder stops and steering nozzle are subject to external examination.

Parts of suspended rudder joints with rudder stock are subject to a thorough examination during each special survey of the rudder and steering gear in dry dock, on a slipway or on the shore.

During all types of checking of the rudder and steering gear underway, the rudder or steering nozzle shall be fully submerged.

2.3.4.3 Assessment criteria for the determination of technical condition of the steering gear: putting the rudder over from 35° on one side to 35° on the other side, for the outboard motor this angle shall be at least 30°;

absence of seizing during steering wheel rotation;

availability of information on the rudder blade position relative to the center line plane by means of the relevant indicator on the helmsman's position;

absence of broken yarns in the steering rope;

absence of damage to the rudder blade and steering gear components;

availability of emergency means of the small craft steering at slow speed.

2.3.5 Anchor arrangement.

2.3.5.1 The summarized extent of checks (testing) of the anchor arrangement during special survey of the small craft is given in [Table 2.1.1](#).

2.3.5.2 Anchors and hawse pipes, chain cables and wire ropes, stoppers and devices for releasing the inboard end of chain cable (where provided) shall be thoroughly examined. Means for drainage of the chain lockers shall be operationally tested. Anchor chains and ropes shall be rolled from the chain locker (if any), cleaned and arranged for examination, anchors shall be also cleaned and laid down for examination. Anchors and anchor chains shall be checked for completeness according to the manufacturer's documentation (if any).

2.3.5.3 During survey of the small craft, the anchor arrangement shall be operationally tested (where the anchor hoisting machinery is available). Besides, the operation of stoppers and the device for releasing the inboard end of chain cable shall be checked.

2.3.5.4 The basis for the assessment of technical condition of the anchor arrangement as not complying with the requirements of these Rules is the following:

reduction of the anchor mass due to corrosion wear more than 20 %;

wear of the anchor chain links for more than 12 % from the initial diameter;

number of broken wires of steel anchor rope is more than 10 % of their total number at any point of its length equal to eight times the diameter, as well as when the rope is excessively deformed;

ropes made of polymer materials with broken yarns, excessive wear and deformation.

2.3.5.5 Assessment criteria for the determination of technical condition of the anchor arrangement apply in compliance with the requirements of GOST 19105-79, GOST R 51722-2001.

2.3.6 Mooring arrangement.

2.3.6.1 At special survey of the small craft, the machinery, systems, electrical equipment forming part of the mooring arrangement shall be thoroughly examined and operationally tested.

2.3.6.2 During survey, bollards, hawse pipes, fairleads, ropes and other equipment are subject to external examination.

2.3.6.3 When assessing the technical condition of the mooring arrangement, the following shall be considered:

a steel mooring rope shall be replaced if the number of broken wires is 1/10 and more of their total number at any point of its length equal to eight times the diameter, or if the wire diameter is reduced by 40 % and more as compared to the initial value as a result of the surface wear or corrosion, as well as when the rope is excessively deformed;

fibre ropes and synthetic ropes shall be replaced if their yarns are torn, the ropes are rotten, excessively worn or deformed;

rollers of fairleads, guide rollers, bollards, hawse pipes and warping drums shall be free of excessive wear, scores or other damages.

2.3.6.4 Assessment criteria for the determination of technical condition of the mooring arrangement apply in compliance with the requirements of GOST 19105-79, GOST R 51722-2001.

2.3.7 Towing arrangement.

2.3.7.1 The summarized extent of checks of the towing arrangement during special survey of the small craft is given in [Table 2.1.1](#).

2.3.7.2 During survey, the machinery, systems and electrical equipment forming part of the towing arrangement shall be thoroughly examined and operationally tested.

2.3.7.3 Tow hooks complete with their remote controls and overload protection devices, towing rails, towing arches, cable stoppers, bollards, towing bits, hawse pipes and tow lines shall be thoroughly examined.

The remote controls of the tow hook shall be operationally tested.

2.3.7.4 When assessing the technical condition of the towing arrangement, the following shall be considered:

a steel towline shall be replaced if the number of broken wires is 1/10 and more of their total number at any point of its length equal to eight times the diameter, as well as where the tow line is excessively deformed;

a fibre rope shall be replaced if its yarns are torn, the rope is rotten, excessively worn or deformed;

hooks, bollards, towing bits and hawse pipes shall be free of excessive wear, scores or other damages.

2.3.8 Fire protection.

2.3.8.1 In addition to the requirements for intermediate surveys, the special survey of fire protection of the small craft shall include the following bellow.

2.3.8.2 After repair and installation of new items of fire protection on the small craft, the tests shall be conducted as stipulated for their manufacture and installation onboard. After repair of fire extinguishing systems, the hydraulic tests of repaired items shall be conducted (piping and fittings for cylinders, reservoirs or tanks) and for the aerosol fire extinguishing systems, tests shall be conducted by means of simulating the actuation of the system with the fire extinguishing aerosol generators being switched off.

2.3.8.3 During survey it shall be verified whether the list of fire protection items, their completeness, structure, arrangement and installation, as well as specified characteristics comply with the requirements of these Rules.

2.3.9 Machinery installation.

2.3.9.1 Main machinery, shafting with auxiliary machinery and systems servicing them shall be tested in the presence of the RS surveyor during mooring and sea trials in order to check and confirm the specified characteristics.

The tests shall demonstrate the satisfactory operation of the equipment or system under realistic service conditions for both ahead and astern directions.

2.3.9.2 The technical condition of the machinery installation items shall be assessed based on the survey results using previous survey reports and information on in-service wear, damage, failures, repairs and replacements indicated in the documentation on the small craft (maintenance records, small craft protocols, machinery logs, etc.).

2.3.9.3 Permissible wear limits for machinery, units and components shall be determined using data contained in the manufacturer's instructions and data cards.

2.3.9.4 If wear, damages or failures exceeding permissible limits or dangerous for the small craft operation were revealed during the survey of machinery installation items, these items shall be recognized as not complying with the RS requirements until the defects are eliminated.

2.3.9.5 Assessment criteria for the determination of technical condition of the machinery installation:

reliable operation of the reversing arrangement (free movement of the reverse handle — secure fixing in the "ahead", "astern", "neutral" positions, impossibility of spontaneous reversing;

absence of engine vibration, outboard motor vibration exceeding the values permitted by the operational documentation;

absence of fuel and oil leakage;

reliable operation of the engine remote control system.

2.3.10 Shafting, propeller, sterntube arrangement and AMSS.

2.3.10.1 The summarized scope and schedule of surveys and tests are given in [Table 2.1.1](#).

2.3.10.2 Shafting and propeller do not comply with the RS requirements if the operational testing reveals the following: excessive vibration, hammering, abnormal heating of bearings, failures in lubricating system and pitch control unit. The cause of the above faults shall be identified, and defects shall be eliminated.

2.3.11 Electrical equipment.

2.3.11.1 The summarized scope and schedule of surveys and tests are given in [Table 2.1.1](#).

2.3.11.2 In addition to the requirements for intermediate surveys, the special survey of electrical equipment of the small craft shall include the following criteria of technical condition assessment:

reliable fixing of accumulator batteries and their protection from water ingress;

availability of natural or mechanical ventilation of the compartment where accumulator batteries are located;

watertight design of navigation lights, lighting fixtures, plug and socket connectors and switches located outside the small craft hull;

reliable fastening and integrity of cables;

cable insulation resistance shall be checked.

2.3.12 Small craft systems and piping.

2.3.12.1 Bilge system, ventilation system, systems of air, overflow and sounding piping, fuel oil system and cooling system shall be examined and operationally tested together with relevant valves and machinery, as well as together with remote control, monitoring, protection and alarm systems.

2.3.12.2 When surveying air, overflow and sounding pipes, a check shall be carried out of availability and condition of shut-off valves on air pipes of sea chests, sight glasses on overflow pipes, self-closing faucets of short sounding pipes in engine room and self-closing test cocks located below them, level indicators.

2.3.13 Sailing rigging.

2.3.13.1 The sailing rigging of the small craft shall be examined and operationally tested.

2.3.13.2 Assessment criteria for the determination of technical condition of sails (applicable only to the small craft the sails of which are critical equipment, i.e. having an effect on safe navigation of the small craft. Such small craft may be sailing craft without mechanical propulsion or motor-sailing craft which propulsion plant allows maneuvering in the port; however, it is not sufficient for independent voyage in the established area of navigation without the sailing rigging):

break of boltrope (rope for selvage (leech) lining of sails);

break of the sail seam by more than 10 % of the total seam length;

rupture of the sail canvas by more than 0,1 % of the total sail area;

break or significant degree of lacing eye wear (hole in the sail whipped with cotton or reinforced by a metal ring intended for passing of standing or running rigging through it) or grommet (fixing of running rope to the sail at one of the sail angles);

written conclusion of the small craft commission on the unsuitability of the sail for further use.

2.3.13.3 Assessment criteria for the determination of technical condition of the masts and standing rigging:

- average wear of steel mast plates shall not exceed 20 % of the as-built thickness;
- wooden masts shall be replaced if rotten by 10 % and more of their cross-sectional area;
- application of stressed components having an average wear of 10 % and more of their as-built thickness or diameter is not permitted;

- a steel rope shall be replaced if the number of broken wires is 10 % and more of their total number at any point of its length equal to eight times the diameter, as well as where the rope is excessively worn or deformed.

2.3.13.4 Assessment criteria for the determination of technical condition of the running rigging:

- fibre ropes and synthetic ropes shall be replaced if their yarns are torn, the ropes are rotten, in case of significant deformation, excessive wear of the rope or chafing gear of the synthetic rope and break of the core of synthetic rope when the chafing gear is undamaged;

- a steel rope shall not be used if:

- at any point of its length equal to ten diameters, the number of broken wires is 5 % and more of their total number of wires in the rope;

- there is any tendency towards bird-caging (i.e. separation of the strands or wires);

- a strand is broken;

- excessive wear is present which manifests itself by flat wire surfaces;

- it shows signs of corrosion, particularly of the internal corrosion;

- broken wires appear in one stand only or are concentrated in a shorter length of rope than ten diameters, or appear in the tucks of a splice;

- there is more than one broken wire immediately adjacent to a compressed metal ferrule (pressed clamp/bush) or fitting;

- the diameter of the rope is reduced below 90 % of its initial value.

3 OCCASIONAL SURVEYS

3.1 Occasional survey of the small craft shall be carried out upon the shipowner's request in following cases:

- after the accident;
- after repair or modernization of the small craft related to changing of its structure and/or equipment;
- upon compliance with the requirements imposed during the periodical surveys;
- prior to the small craft passage. The passage shall be carried out using the tug, with no persons on board, in compliance with Section 8, Part II "Carrying out Classification Surveys of Ships" of the Guidelines on Technical Supervision of Ships in Service;
- as prescribed by the state supervisory bodies;
- in connection with introduction (changing) of permanent restrictions on standard towing into the report as per form 6.3.80. Towing shall be performed in compliance with the provisions of Section 8, Part II "Carrying out Classification Surveys of Ships" of the Guidelines on Technical Supervision of Ships in Service. Review of issues on standard towing of small craft is within the competence of the RS Branch Office in which area of activity the towing is planned.

3.2 Conducting of occasional survey does not change the terms of the prescribed surveys.

3.3 Survey of the small craft, when it is submitted after the due date, shall be carried out in the scope of overdue survey with retaining the dates previously assigned for surveys in case of overdue intermediate survey, and assigning new dates from the actual date of survey completion in case of overdue special survey.

APPENDIX 1

1 Hull structures repair.

1.1 Damages to the hull structures which affect or, in the opinion of the RS surveyor, may affect the small craft structural integrity, structural strength and/or watertight and weathertight integrity, shall be promptly and thoroughly repaired.

1.2 Temporary repair means a repair providing retainment of validity of the documents issued by the Register for the time period assigned by the Register in each particular case considering the essential hull structures, mechanisms, systems, equipment and arrangements of the small craft to be repaired and depending on dimensions/particulars of the damages/failures.

1.3 Thorough repair means a repair made for renovation of the damaged structure in compliance with the requirements of these Rules up to the level where there is no necessity to set any requirements or conditions regarding the object repaired and to perform technical supervision of the latter until the next periodical survey, and no additional repair is required.

1.4 Installation of cement boxes/doublers is accepted as a temporary repair and cannot be considered by the Register as a thorough repair of the hull. The possibility of repair of the small craft hull structures by means of doublers shall be determined by the Register in each particular case and the repair shall be performed in accordance with the procedure approved by the Register.

1.5 It is permitted not to remove doublers installed without agreement with the Register subject to the following conditions:

close-up survey of the installed doublers by the RS surveyor;

watertightness tests of structures in way of doublers;

annual monitoring of the areas of doubler installation by the shipowner.

In this regard, the responsibility for technical condition of the small craft hull as well as its maintenance in operational condition for the small craft in service lies with the shipowner.

1.6 These Rules contain overall requirements for checks and surveys during repair. If the performance requires implementation of the specific standards not available in these Rules, the RS surveyor shall use the reviewed technical documentation including standards, specifications and technological instructions.

1.7 The replacing or strengthening hull members contributing to the small craft strength shall be made of material with a grade not lower than that used during construction, and of the same or higher strength.

STABILITY

1 General.

1.1 All calculations shall be made by the methods generally accepted in naval architecture.

1.2 Stability of the small craft shall be checked in accordance with the following requirements:

the maximum righting lever shall be at least 0,25 m at a heeling angle of not less than 25°;

weather criterion shall be at least 1,0, check of stability for compliance with the weather criterion shall apply to the small craft of (0 — III) categories;

down-flooding angle of not less than 40°;

the angle of heel on account of turning shall not exceed 10°;

the angle of heel on account of turning and the angle of heel on account of passengers crowding to one side shall be not more than 12°;

the corrected initial metacentric height under all loading conditions shall be not less than 0,5 m.

1.3 Righting lever curve.

Righting lever curve shall be plotted with regard for free surface effect.

1.4 Loading conditions.

1.4.1 The small craft stability shall be checked for the following loading conditions:

small craft without cargo, but with full stores;

small craft without cargo, but with 10 % of stores;

small craft with the maximum cargo and number of persons on board, with full stores;

small craft with the maximum cargo and number of persons on board, but with 10 % of stores.

1.4.2 If the loading conditions anticipated in normal service of a small craft as regards stability are less favourable than those listed above, stability shall also be checked for these conditions.

APPENDIX 3

Table 1

Supply standards for the small craft outfit

Item No.	Item	Small craft with length $L_H \leq 6$ m	Small craft with length $6 < L_H \leq 12$ m	Small craft with length $L_H > 12$ m	Non-self-propelled small craft
1	Lifejackets	According to the number of persons on board			
2	Buoyant rescue quoit attached to not less than 15 m of buoyant line or lifebuoy attached to not less than 15 m of buoyant lifeline	1	—	—	—
3	Lifebuoys attached to not less than 15 m of buoyant lifeline	—	1	2	1
4	Lifebuoy with self-igniting light	—	1	1	—
5	Steering arrangement (oars, paddle or boat-hook) or one anchor with anchor-rope	1	—	—	—
6	Anchor with anchor-rope (anchor-chain)	—	1 ¹	1 ¹	1 ¹
7	Fire extinguisher	1 ²	1 — 2 ³	3	1
8	Buoyant bailer or hand pump with a hose the length of which allows to pump water from the hold overboard	1	—	—	1
9	Means of bailing water from the hold (for multihull craft, they shall be provided in each hold)	—	1	1	—
10	Sound signal means	1 ⁴	1 ⁴	1 ⁴	1 ⁴
11	Waterproof electric torch	1	—	—	1
12	Searchlight	—	1	1	—
13	Red rocket parachute flares or red hand flares	2 ⁵	3 ⁵	6 ⁵	—
14	Survival craft	1 ⁶	1 ⁶	1 ⁶	—
15	GLONASS or GPS/GLONASS receiver	1 ⁷	1 ⁷	1 ⁷	—
16	Radio equipment	In accordance with Table 2			
17	First-aid outfit in waterproof case	—	1	1	—
18	Magnetic compass	1 ⁶	1 ⁶	1 ⁶	—
19	Navigation lights	1 ⁸	1 ⁸	1 ⁸	—
20	Immersion suits	— ⁹	— ⁹	— ⁹	— ⁹

¹ According to GOST R 51722-2001.

² The small craft with length $L_H \leq 6$ m shall be provided with a fire extinguisher when an inboard engine with securely attached fuel tank of any size or fuel-fired cooking/heating appliances are installed on board.

³ The small craft with length $6 < L_H \leq 12$ m shall be provided with one fire extinguisher and one additional fire extinguisher, when fuel-fired cooking/heating appliances are installed on board.

⁴ In compliance with the requirements of Rule 33 of the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs), for the small craft of category IV, the automotive-type electrical sound signal is permitted; for the small craft with length $L_H \leq 6$ m of category IV, the replacement by lifejacket whistle is permitted.

⁵ Pyrotechnic signal means shall comply with class III as per the classification of GOST R P 51270-99 "Pyrotechnic goods. General safety requirements".

⁶ The small craft intended for navigation in sea areas with the small craft proceeding more than 3 miles away from the shore shall be equipped with survival craft.

⁷ The small craft engaged on voyages in sea areas beyond the 20-mile coastal area (category 0 — III) shall be mandatorily equipped with GLONASS or GPS/GLONASS receiver.

⁸ The small craft not equipped with navigation lights complying with the requirements of the 1972 COLREGs, under conditions of limited visibility and from sunset to sunrise are prohibited for the use. The small craft with length $L_H > 12$ m shall be provided with signal flags and signs in compliance with the requirements of the 1972 COLREG.

⁹ The small craft is recommended to be equipped with immersion suits in the following cases: intended for operation at high latitudes; at low water temperature (below 12°C); small craft of category III and above; in areas where rapid assistance cannot be provided at water temperature below 20°C.

Table 2

List of the small craft radio equipment

Equipment	Category					
	0	I	II	III	IV	
					> 2,7 miles	≤ 2,7 miles
VHF coastal station (for radio communication on frequencies of the Maritime Mobile Service)	+	+	+	+	+ ¹	—
Ship-to-shore communication facilities	—	—	—	—	—	+ ²
MF radio installation	—	—	+	+ ³	—	—
MF/HF radio installation	+	+	—	—	—	—
Ship's radar search and rescue transponder and ship's AIS search and rescue transmitter	+	+	+	+ ³	—	—
Satellite emergency position-indicating radio beacon (EPIRB) ²	+	+	—	—	—	—
NAVTEX service receiver ²	+	+	—	—	—	—

¹ Use of portable VHF radiotelephone station having a degree of protection against water of at least IPX6 or maintained at the small craft control station in watertight box (container) is permitted. In case it is not possible to charge accumulator batteries, a set of accumulator batteries shall be available having the total capacity enabling continuous operation of the radio station within 24 h for at least 1 h for transmission and 24 h for receiving.

² Installation of equipment is recommended.

³ Shall be installed on board the small craft engaged on voyages beyond continuous communication area of the VHF coast station.

Russian Maritime Register of Shipping

Rules for the Classification and Survey of Small Craft

FAI "Russian Maritime Register of Shipping"
8, Dvortsovaya Naberezhnaya,
191186, St. Petersburg,
Russian Federation
www.rs-class.org/en/