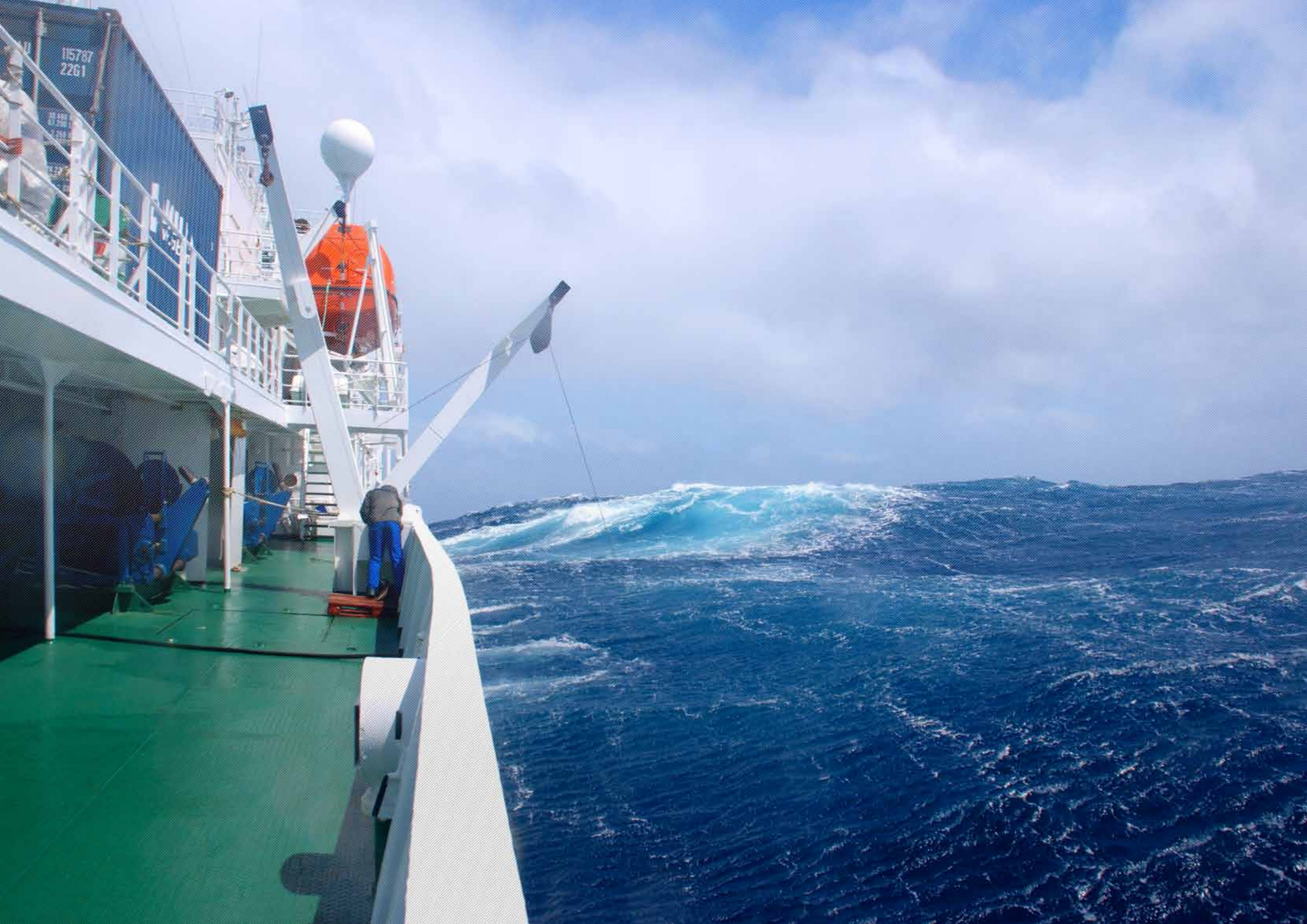




**OCEAN
EXPEDITION
CENTER**

**OF THE P. P. SHIRSHOV INSTITUTE
OF OCEANOLOGY OF THE RUSSIAN
ACADEMY OF SCIENCES**



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OCEAN EXPEDITION CENTER

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In March 2016 the head of the Federal Agency of Scientific Organizations (FASO of Russia) Mikhail Mikhailovich Kotyukov signed a Provision to set up an Ocean Expedition Center (OEC). OEC was formed under P. P. Shirshov Institute of Oceanology of RAS. OEC has under its operative control research vessels of unrestricted navigation having an ice class.

OEC comprises the Atlantic fleet base (AFB) in Kaliningrad and the Pacific fleet base (PFB) in Vladivostok.


The main objective of OEC is to ensure full completion of the state assignment by FASO in the sphere of marine research.

OEC provides research vessels to all scientific organizations of FASO of Russia to conduct various marine works. OEC is responsible for repair, proper maintenance, operation, and safety of the research fleet, qualification of crew members, transport and procurement servicing of vessels.





RESEARCH VESSEL **FLEET OEC IO RAS**

 ATLANTIC FLEET BASE **KALININGRAD**



RV AKADEMIK SERGEY VAVILOV



RV AKADEMIK MSTISLAV KELDYSH



RV AKADEMIK IOFFE



RV AKADEMIK NIKOLAJ STRAKHOV



RV PROFESSOR SHTOKMAN



RV AKADEMIK BORIS PETROV





RESEARCH VESSEL **FLEET OEC IO RAS**

 PACIFIC FLEET BASE **VLADIVOSTOK**



RV AKADEMIK OPARIN



RV PROFESSOR GAGARINSKIY



RV PROFESSOR BOGOROV



RV AKADEMIK M.A.LAVRENTYEV





RESEARCH VESSELS PURPOSES

Professional equipment installed on vessels of OEC IO RAS fleet allows research to be done in various spheres:

- Oceanological research
- Hydrographical and geophysical works and research
- Meteorological and aerological observations
- Geological research
- Research and monitoring of global ocean biological resources
- Underwater engineering objects and pipelines inspection, mounting and maintenance of monitoring objects
- Ecomonitoring and environmental sea expeditions support
- Organization of international expeditions for Marine Institutes and Centers' students
- Testing the newest navigation, acoustic, scientific and electronic equipment on the vessels





RV AKADEMIK SERGEY VAVILOV / KALININGRAD



Flag	Russia
Call sign	UAUO
Built	Finland, 1988
Classification	KM (*) L1 [1] A2 passenger ship
Register port	Kaliningrad
IMO	8507729

Gross registered tonnage	6344 t
Displacement	6718 t
LOA	117,17 m
Beam	18,2 m
Hull height	10,0 m
Draught	5,9 m
Main engines	Main engine – 2 pcs: Pilstik Type: 6ЧН40/46ОМ4; capacity – 2 * 2576 kW; 520 rpm
Max. speed	15,0 knots
Fuel/water capacity	1100 / 387 (Fresh Water 349 t; Drink Water 38 t)
Endurance	Fuel 60 days, water 60 days
Crew/passengers	43/127

LIFTING GEAR:

- Electrohydraulic crane, bow, SWL – 3 t
- Electrohydraulic crane, stern, SWL – 5 t
- Hydraulic V-frame – 12 t

WINCHES:

- Cable winches – 24 kN
- Cable-rope winches – 40 kN
- Cable-rope winches – 100 kN

SCIENTIFIC ROOMS:

- Total area – 380 m², 19 laboratories

SCIENTIFIC EQUIPMENT:

- Echo sounder «KRUPP ATLAS PARASOUND»
- Multi beam echo sounders «ECHOS-ХД HOLLMING»
- Deep sea echo sounder «HONEYWELL-ELAC»
- Single beam echo sounder «KONGSBERG EA-600»
- Color sonar «Honeywell-ELAC FS 3700»
- Sonar «САРГАН»
- Correlation log «LOGAC 620»
- Acoustic Doppler Current Profiler «RDI-150»
- Acoustic navigation system «NAVAC LBL 616»;
- Meteorological station Aanderaa
- Complex «СТД- ROSETTE» to profiling and water sampling
- Profiler SBE-9p
- SBE-19 plus
- Altimeter Benthos PSA-900D





RV AKADEMIK MSTISLAV KELDYSH /

KALININGRAD



Gross registered tonnage	6259 t
Displacement	6345 t
LOA	122.2 m
Beam	17.82 m
Hull height	10.04 m
Draught	5.9 m
Main engines	Main engine diesel -4 units, capacity 4 x 1070 kW, WARTSILA 824TS
Max. speed	16 knots
Fuel/water capacity	Fuel supplies 1100 / Water supplies 149 t, 162 t - technical
Endurance	60 days / 20 000 nautical miles
Crew/passengers	44 / 86

LIFTING GEAR:

- Crane manipulator for deep water descent vehicles – 22 t
- Crane beams – 0,9 t
- V-frame for “ROZETTA” – 2,4 t
- Stern V-frame – 10 t
- Bow crane –5 t
- Stern crane –5 t
- Right board crane – 12 t

WINCHES :

- Bow winch, right board – 1,6 t
- Bow cable winch (Rozetta), right board – 2,4 t
- Waist rope winch, right board – 1,6 t
- Stern cable winch, left board – 2,4 t
- Stern deep sea trawl winch – 10 t
- Stern cable winch, 5th deck – 800 kg

SCIENTIFIC ROOMS:

- 20 laboratories

SCIENTIFIC EQUIPMENT:

- Deep sea echo sounder EA 600 Kongsberg
- Deep sea Profiler SBE-9p
- On-board control device SBE-11p to profiler SBE-9p
- Carousel with pylon SBE-32
- Altimeter Benthos PSA-900D
- 30 Bathometers «General Oceanic» 10L
- Meteorological station Vaisala

Flag	Russia
Call sign	UFJI
Built	Finland, 1981
Classification	KM(*) L1[1] AUT2 DYNPOS-1 special purpose ship
Register port	Kaliningrad
IMO	7811018





RV АКАДЕМИК ИОФФЕ / KALININGRAD



Flag	Russia
Call sign	UAUN
Built	Finland, 1989
Classification	KM (*) L1 [1] A2 passenger ship
Register port	Kaliningrad
IMO	8507731

Gross registered tonnage	6450 t
Displacement	6718 t
LOA	117,1 m
Beam	18,2 m
Hull height	10,0 m
Draught	5,9 m
Main engines	2 x Pilstik, type: 6ЧН40/46OM4; capacity – 2 * 2576 kW; 520 rpm
Max. speed	15,0 knots
Fuel/water capacity	1150 / 387 (Fresh Water 349 t; Drink Water 38 t)
Endurance	Fuel 60 days, water 60 days
Crew/passengers	43/127

LIFTING GEAR:

- Bow crane – 3 t
- Stern crane – 5 t
- Stern U-shaped-frame – 10t
- G frame – 2t

WINCHES:

- Cable Winches – 24 kN
- Cable-line Winches – 40 kN
- Cable-line Winch – 100 kN

SCIENTIFIC ROOMS:

- Total area 340 m2

SCIENTIFIC EQUIPMENT:

- Long range echo sounder «HONEYWELL-ELAC»
- Parametric profilograph SES 2000
- Lowered Acoustic Doppler Current Profiler (ADCP) Sentinel Workhorse 300 kHz
- TRDI OS38 Acoustic Doppler Current Profiler
- CTD SBE 9p
- SBE 11p Deck Unit for CTD SBE 9p
- Benthos PSA-916 Altimeter
- Carousel SBE32 with pylon
- Thermosalinograph SBE21
- Plastic Bottles Ocean Test Equipment 5L
- Plastic Bottles General Oceanic 12 L
- Aanderaa
- Titrino Basic 794





RV АКАДЕМИК НИКОЛАЙ СТРАХОВ /

KALININGRAD



Gross registered tonnage	2318 t
Displacement	2685 t
LOA	75,5 m
Beam	14,7 m
Hull height	7,3 m
Draught	4,5 m
Main engines	Diesel, Type: 6ЧН 40/46 OM4, capacity 2576 kW;
Max. speed	14,8 knots
Fuel/water capacity	fuel supplies with 90% 450/ water supplies with 90% 152 t
Endurance	60 days, 12 000 nautical miles
Crew/passengers	32/42

LIFTING GEAR:

- Aft crane, SWL – 3 t

WINCHES:

- Seismic indicator winch, main deck, stern — 900 kg
- Stern Hydraulic Rope Winch, V-frame – 10 t
- Right side Stern cable winch — 1,5 t
- Sloop deck Stern cable winch — 2,4 t

SCIENTIFIC ROOMS:

- 7 laboratories

SCIENTIFIC EQUIPMENT:

- Shallow multi beam echo sounder SeaBat 8111
- Deep sea multi beam echo sounder SeaBat 7150
- GPS sensors and gyro-compass combined in device OCTANS
- Device of collection and treatment of data PDS2000
- External sensor for measuring of sound speed in water – SVP-30;
- High-frequency profiler EdgeTech 3300
- Deep Sea Profiler SBE-25
- Onboard controller device for profiler SBE-25

Flag	Russia
Call sign	UIMS
Built	Finland, 1985
Classification	KM (*) L1(1) AUT2 Special Purpose Ship
Register port	Kaliningrad
IMO	8211174





RV PROFESSOR SHTOKMAN / KALININGRAD



Flag	Russia
Call sign	UAUQ
Built	Finland, 1979
Classification	KM (*) L1[1] special purpose ship
Register port	Kaliningrad
IMO	7703027

Gross registered tonnage	1297 t
Displacement	1684 t
LOA	68,87 m
Beam	12,40 m
Hull height	6,03 m
Draught	4,21 m
Main engines	Diesel DEUTZ RBV6M358, capacity 1471 kW
Max. speed	13,5 knots
Fuel/water capacity	260/180 t
Endurance	Fuel – 40 days, Water -27 days
Crew/passengers	30/30

LIFTING GEAR:

- Crane — 3t
- A-frame — 4 t
- A-frame — 2t

WINCHES:

- Double-drum winch — 1.6 t
- Cable winch — 4 t
- Cable winch — 2.4 t
- Seismic winch — 0.9 t
- Rope winch – 0,5 t

SCIENTIFIC ROOMS:

- 5 laboratories, total square 64.5 m2

SCIENTIFIC EQUIPMENT:

- Long range echo-sounder, BATHY 2000
- Thermosalinograph SBE21
- Marine meteo station Aanderaa





RV AKADEMIK BORIS PETROV / KALININGRAD



Gross registered tonnage	2318 t
Displacement	2700 t
LOA	73,06 m
Beam	14,7 m
Hull height	7,3 m
Draught	4,5 m
Main engines	Diesel – 1 pcs.; Pilstik, type: 6ЧН 40/46 OM4; Capacity– 2576 kW; 520 rpm
Max. speed	13,5 knots
Fuel/water capacity	Fuel 450/ Water supply 200 t
Endurance	60 days, 12 000 nautical miles
Crew/passengers	32/42

Flag	Russia
Call sign	UDVX
Built	Finland, 1984
Classification	KM (*) L1 [I] AUT2 Special Purpose ship
Register port	Kaliningrad
IMO	8211150

LIFTING GEAR:

- Crane – 3,5 t

WINCHES:

- Stern Hydrolic Cable Winch – 100 kN
- Starboard Stern Electric Cable Winch – 27 kN
- Electric Cable Winch – 25 kN
- Bow Starboard Electric Cable Winch – 30 kN Portside Stern cable winch with manually turning frame

SCIENTIFIC ROOMS:

- 7 laboratories

SCIENTIFIC EQUIPMENT:

- Multi beam ATLAS Hydrographic “Hydrosweep DS-2”
- Parametric Profilograph (Echo-Sounder) ATLAS Hydrographic “Parasound”
- Seismic equipment МОФ-ОГТ
- Multi-channel gamma spectrum analyzer Nokia LP4700





RV AKADEMIK OPARIN / VLADIVOSTOK



Flag	Russia
Call sign	UFPD
Built	Finland, 1985
Classification	KM(*) L1[1] AUT2 special purpose ship
Register port	Vladivostok
IMO	8412376

Gross registered tonnage	2441 t
Displacement	2700 t
LOA	75,5 m
Beam	14,7 m
Hull height	7,3 m
Draught	4,5 m
Main engines	Number and Capacity 1*2576 kW; Type 6CH 40/46 OM4
Max. speed	13 knots
Fuel/water capacity	460/150 t
Endurance	39 days - Fuel, 60 days - Food, 24 days - Water
Crew/passengers	32/42

LIFTING GEAR:

- Bow hydraulic crane – 1,05 t
- Stern hydraulic crane – 3,0 t;
- U-shaped-frame

WINCHES:

- Hydrological Winch LE 55
- Double-drum winch – 15 kN

SCIENTIFIC EQUIPMENT:

- High pressure compressor Poseidon





RV AKADEMIK M. A. LAVRENTYEV / VLADIVOSTOK



Flag	Russia
Call sign	UBWR
Built	Finland, 1984
Classification	KM(*) L1[1] AUT2 special purpose ship
Register port	Vladivostok
IMO	8211162

Gross registered tonnage	2318 t
Displacement	2712 t
LOA	75,5 m
Beam	14,7 m
Hull height	7,3 m
Draught	4,5 m
Main engines	1 pcs, 2576 kW; Type 64H 40/46 OM4
Max. speed	12 knots
Fuel/water capacity	460/150 t
Endurance	60 days
Crew/passengers	32/42

LIFTING GEAR:

- Bow hydraulic crane – 1,05 t
- stern hydraulic crane – 3,0 t
- U-shaped- frame;

WINCHES:

- Hydrological Winch LE 55
- Double-drum winch – 15 kN

SCIENTIFIC EQUIPMENT:

- High pressure compressor Poseidon





RV PROFESSOR BOGOROV / VLADIVOSTOK



Flag	Russia
Call sign	UABD
Built	Finland, 1976
Classification	KM(*) L1[1] special purpose ship
Register port	Vladivostok
IMO	7406124

Gross registered tonnage	1275 t
Displacement	1671 t
LOA	68,8 m
Beam	12,4 m
Hull height	6,02 m
Draught	4,2 m
Main engines	Diesel - 1, capacity - 1472 kW, Type: DEUTZ RBV6M358;
Max. speed	13,5 knots
Fuel/water capacity	300 (fuel supplies with 90%) /180 t (water supplies with 90%)
Endurance	30 days
Crew/passengers	34/26

LIFTING GEAR:

- Bow hydroelectric crane – 3 t
- Stern hydroelectric crane – 3 t
- Right side V-frame for main trawl rope winch
- Stern V-frame for seismic and cable winches
- Rotary crane beam for two drums rope winch
- Rotary crane beam for main cable winch
- Rotary crane beam for small cable winch

WINCHES:

- Main cable hydraulic winch
- Small cable hydraulic winch
- Main trawl rope winch

SCIENTIFIC EQUIPMENT:

- Echo sounder ELAC NBS ico
- Deep sea echo sounder ELAC-ENIF
- Circular view sonar ELAC SUPER LODAR I lxx





RV PROFESSOR GAGARINSKIY / VLADIVOSTOK



Flag	Russia
Call sign	UFPP
Built	USSR, 1987
Classification	KM(*) L2[1] special purpose ship
Register port	Vladivostok
IMO	8822650

Gross registered tonnage	747 t
Displacement	1157 t
LOA	55,76 m
Beam	9,49 m
Hull height	5,16 m
Draught	4,22 m
Main engines	Main Engine, Diesel – 1 pcs, Propulsion - 736 kW; Type: 6NVD 48A-2U
Max. speed	12,2 knots
Fuel/water capacity	149/110 t
Endurance	fuel - 32 days; provision - 52 days; water 35 days
Crew/passengers	28/17

LIFTING GEAR:

- Stern hydraulic crane – 900 kg
- Electric cathead – 650 kgf

WINCHES:

- Electric cable rope winch: ЛОК-1-1 – 800 kgf
- Winch: electric hydraulic ЛГ-5 – 500 kgf

SCIENTIFIC EQUIPMENT:

- Echo sounder « ГЭЛ – 3»
- Compressor «ЭК-7.5 – 3»





📍 ATLANTIC FLEET BASE **KALININGRAD**

RV AKADEMIK SERGEY VAVILOV
RV AKADEMIK MSTISLAV KELDYSH
RV AKADEMIK IOFFE
RV AKADEMIK NIKOLAJ STRAKHOV
RV PROFESSOR SHTOKMAN
RV AKADEMIK BORIS PETROV



📍 PACIFIC FLEET BASE **VLADIVOSTOK**

RV AKADEMIK OPARIN
RV PROFESSOR GAGARINSKIY
RV PROFESSOR BOGOROV
RV AKADEMIK M.A.LAVRENTYEV



АКАДЕМИК
СЕРГЕЙ БАРИАХОВ



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