



## RESEARCH VESSEL PROFESSOR LOGACHEV

### VESSEL SPECIFICATIONS

Project	12883M
Built	1991, Nikolaev Shipyard
Year of modernization	2016
Shipowner	"Polar Marine Geosurvey Expedition"
Register class	KM L2 [1] AUT2 special purpose ship
Flag	Russian Federation
Registry number	8934691
Port of Registry	Saint-Petersburg
IMO identification N	8834691
MMSI	
Call sign	UADZ

### MAIN SPECIFICATIONS

Length, width, draft	104,5 m; 16 m; 5,8m	Engines	2ME, iCE (64H40/46-OM4) 5152 kW
Reserves:		Endurance:	
light oil	1200 t	Fuel	85 days
oil	48,1 t	Provisions	70 days
water	64,8t	Operational speed/ fuel consumption	
provisions	22,8 t	(days) :	
Deadweight	1750 t	2 engines	13,5 knots / 20 t
Register tonnage, t:		1 engine	10 knots / 10 t
gross/nett	4504 / 1351	at anchorage	- / 3 t
Displacement: full	5612 t	Cruising range	21 000 miles
		Crew / Scientists	32 / 37 persons

### MAIN VESSEL EQUIPMENT

#### AUXILLARY EQUIPMENT

Bow Azimuth thruster GRA 1350 Shaft generator IFC2 564-4	500 kW
Emergency diesel-generator D-16C-A	2 x 1600 kW
Emergency diesel-generator	3 x 450 kW
Crane (stern) YQ 12-20	100 kW
Crane (central) YQ 5-14	12t x 20m
Water distiller SWD-25-85	5t x 14m
Freshwater heaters PC-30	2 x 25 t/days
System of waste disposal	2 pcs
Separator of bilge-ballast water	10 m3/h
Biological water treatment ECOMAR-50	21 m3/day

#### FIRE-EXTINGUISHING SYSTEM

Fire alarm system	MPC
Fire smothering system	KASKAD

#### RADIO NAVIGATION AND COMMUNICATION SYSTEMS

Radars	ECAT2 252, ECAT2 253
GPS/GLONASS Receiver	TRANZAS T701, TRIMBLE SPS 351
Mapping system (ECDIS)	NAVI Sailor NS4000 EDIS
Induction log	Skipper DL 850
Receiver	NAVTEX NT-1800JMS-1
Communication Satellite station	VSAT SeaTel-9707D-70, Fleet-250
GMDSS system	FELCOM -12 FURUNO
Gyrocompasses	Navigat, OCTANS IV
Echo sounder	Skipper Electronics CDS 101
Meteo station	VAISALA
Telephone station	ACM-CAB24-800

#### LIFE-SAVING EQUIPMENT

Lifeboats	2x40 pers
Life rafts (PSN-10, PSNS-20)	4x10 pers, 2x20 pers

## SURVEY SYSTEM AND LIFTING EQUIPMENT

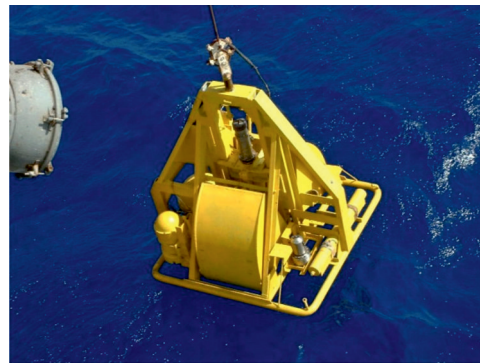
Movement control system	NAVIS JP4000
USBL/LBL underwater navigation system	HiPap 101 (accuracy - 0,2% of slant range)
Towed acoustic system (sonar/profiler)	MAK-1M-1
Electric field channel (EP)	Together with MAK-1M-1
Remotely operated vehicle (ROV)	SubFighter 30k (with multibeam echosounder SeaBat 7125)
Towed television system	SPERRE
Multibeam echosounder	ATLAS Hydrosweep MD/30
Hydrophysical sonde	SBE 911 plus/SBE 32 Carousel/ADCP
Hydraulic grab with TV-control (for hard rock)	GK-6T (more than 1m3)
Hydraulic grab with TV-control (for half rock)	DG-1 (up to 1m3)
Sampling equipment	Kasten corer, Box corer, gravity pipe corer, dredges
Laboratories (in the vessel's hull)	7
Laboratories (in the 20 ft containers)	3

### LIFTING EQUIPMENT:

Hydraulic stern A-frame	12t (for towed vehicles)
Hydraulic portside A-frame	20t (for heavy vehicles)
L-frame starboard	10t (for sampling)
Transit cable winch	16t (for MAK-1M-1)
Cable winch	16t (for TV and ROV)
Wire winch	16t (for sampling)
Oceanographic winch	3t (for STD)



Hydraulic grab with TV-control (for hard rock)



Hydraulic grab with TV-control (for half rock)

## TYPES OF WORK

- COMBINED SONAR/PROFILER/ELECTRICAL SURVEY
- PHOTO-TELEVISION AND BOTTOM MULTIBEAM SURVEY
- STUDY OF HYDROPHISICAL AND HYDROCHEMICAL PARAMETERS OF WATER
- MULTIBEAM ECHOSOUNDER (HALL) SURVEY
- GEOLOGICAL SAMPLING
- ENVIRONMENTAL MONITORING
- SEARCH AND PHOTO/VIDEO SURVEY OF THE SUNKEN OBJECTS

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