



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 specialized |
| Flag | Russian Federation |
| Registry number | M-42153 |
| Port of Registry | Saint-Petersburg |
| IMO identification N | 8834691 |
| MMSI | |
| Call sign | UIJT |

MAIN SPECIFICATIONS

| | | | |
|----------------------|---------------------|-------------------------------------|---------------------------|
| Length, width, draft | 104,5 m; 16 m; 5,8m | Engines | 2 x 3500 hp(64H40/46-OM4) |
| 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 | 1756 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 | 5620 t | Cruising range | 21 000 miles |
| | | Crew / Scientists | 33 / 37 persons |

MAIN VESSEL EQUIPMENT

AUXILLARY EQUIPMENT

| | |
|--------------------------------------|---------------|
| Bow Azimuth thruster GRA 1350 | 500 kW |
| Shaft generator IFC2 564-4 | 2 x 1600 kW |
| Emergency diesel-generator D16MGHE | 3 x 400 kW |
| Emergency diesel-generator | 100 kW |
| Crane (stern) YQ 12-20 | 12t x 20m |
| Crane (central) YQ 5-14 | 5t x 14m |
| Water distiller SWD-25-85 | 2 x 25 t/days |
| Freshwater heaters PC-30 | 2 pcs |
| System of waste disposal | |
| Separator of bilge-ballast water | 10 m3/h |
| Biological water treatment ECOMAR-50 | 21 m3/day |

FIRE-EXTINGUISHING SYSTEM

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|------------------------|--------|
| Fire alarm system | MPC |
| Fire smothering system | KASKAD |

RADIO NAVIGATION AND COMMUNICATION SYSTEMS

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|---------------------------------|---------------------------------|
| 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

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|------------------------------|----------------------|
| Lifeboats | 2x40 pers |
| Life rafts (PSN-10, PSNS-20) | 6x10 pers, 2x20 pers |

SURVEY SYSTEM AND LIFTING EQUIPMENT

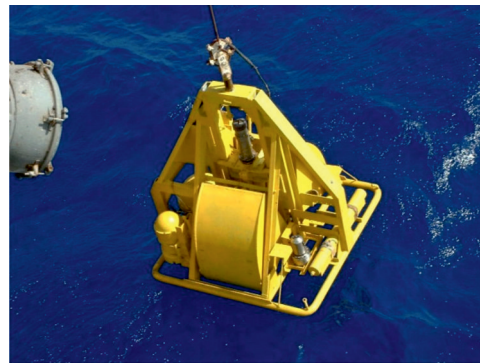
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|--|---|
| Movement control system | NAVIS JP4000 |
| USBL/LBL underwater navigation system | HiPap 101 (accuracy - 0,2% of slant range) |
| Towed acoustic system (sonar/profiler) | MAK-1M-1 |
| Electric field channel (EP) | Together with MAK-1M-1 |
| 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:

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|----------------------------|--------------------------|
| 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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