



ROSGEO
Russian State Geological Company

Dalmorneftegeophysica



Full compliance with SOLAS, Marpol 73/78 and other relevant maritime and industrial standards, E&P Forum and IAGC requirements.

SEISMIC SURVEY VESSEL АКАДЕМИК FERSMAN

GENERAL

VESSEL SPECIFICATIONS

| | |
|------------------------------------|--|
| Name/Type | Akademik Fersman/Seismic Survey Vessel |
| Built/Last Upgrade | 1986, Szczecin, Poland/2007, Singapore |
| Owner/Port of registry/Flag | JSC "Dalmorneftegeophysica"/Korsakov/Russia |
| Classification/Call Sign | RMRS - KM UL 1 A2/UFTQ |
| MMSI/IMO | 273455310/8313958 |
| Tonnage gross/net | 3108/932 t |
| Length/Beam/Draft | 81.85/14.8/5.0 m |
| Cruising Speed | 11.0 knots |
| Endurance/Navigation Area | 60 days/Unlimited |
| Accommodation | 50 + Hospital |
| Capacity Fuel/Fresh water | 765/216 t |

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|-------------------------------|--|
| Consumption Fuel/Fresh water | 12/14 m ³ (transit/survey)/10 t |
| Fresh Water Maker | SGG 12/16, 8 t/day |
| Cranes Front/Rear | 2x6 m (500 kg)/13 m (950 kg) & for Tail Buoy 8 m (3800 kg) |
| Main Engine | Zgoda - Sultzer 6ZL 40/48, 4200 BHP/3090 kW, 505 rpm |
| Shaft Generator | 1200 kW |
| Diesel/Emergency Generators | 2x504 kW/92 kW |
| Bow Thruster & Propeller | Zamech, 300 hp/220 kW & CPP PH 1150/4-R315, Ø 3000 mm |
| Incinerator Capacity | hard garbage - 50 kg/hour, oil mud - 30 kg/hour |
| Planning & Maintenance System | TM-Master |

COMMUNICATION AND NAVIGATION EQUIPMENT

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|--------------------------------|--|
| GMDSS Radio SSB/VHF | SAILOR 5000 MF/HF/SAILOR RT 5022 VHF with DSC |
| Emergency Radio | 3xHandheld VHF |
| VSAT (TracPhone V7 mini-VSAT) | PM: +1 609 3852353, Captain: +1 616 5223172; |
| Marlink | PM: +47 236 755 01; Captain: +47 236 755 00; |
| Inmarsat /C/Fax | Nera S90 & Fleet 77/Thrane & Thrane/+ 870 764 642655; |
| Internal/Public Access | Dial Exchange Station/Intercom Ryabina UB-5P |
| Iridium | +881 6 777 35 711; |
| Speed Log/Voyage Data Recorder | Furuno Doppler DS-80/Furuno VR-300-S |
| Weather Fax/Navtex | Furuno Fax 208 Mark II/Lo-Kata |
| GPS Navigator/Autopilot | Furuno GP-150/Robertson AP-30 |
| Radar 1/2 ARPA, GPS connected | Furuno FAR 2835S/Concilium Selux 340 WS with add-on ice device |
| Gyrocompass/Echo Sounder | Sperry Navigat X MK2/Furuno FE-700 |

SAFETY AND FIRE-EXTINGUISHING EQUIPMENT

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|---|---|
| SSAS/AIS | Sailor TT-3000SSA/Samyung Enc SIS-5R |
| Video Monitoring | Cameras on back mast, back deck. Control by network PC |
| Rescue Boat | MP-741 SPRINGER, Equipped after SOLAS |
| Survival Suits & Life Rafts/MOB Life Raft | 60 & 6x25 men/HAI AN 1x6 men |
| Life Ring/Line Thrower/Smoke Hoods | 12/Comet/50 |
| Life/Work Vests & Life Buoys | 100/10 & 8 |
| Fire Suits/Air compressor | 3 with BA-sets/Bauer 225 bar |
| Fire/Emergency pumps | 100/40 m ³ /hour |
| CO ² System | Paint store, Cargo hall, Main Engine & Emerg. engine rooms |
| ME/Compressor/Instrument rooms | Water system, foam & CO ² fire extinguishers |
| Streamer reel fire fighting | Water sprinkle system |
| Fire Extinguisher | 32xCO ² , Foam: 42x9 L, 1x150 L, 1x100 L, 3xDry powder |
| Drainage pumps | Main 63 m ³ , Aux. 10 m ³ |
| Medical Equipment | Certified to ships medicine no.10. First aid boxes |

SAFETY PROCEDURES

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|--------------------------|---|
| Fire/Lifeboat/MOB Drills | Every month |
| Equipment testing | In accordance with schedule/Every day |
| Safety meetings | Twice each shift |
| PPE | Safety shoes, hard hats, eye & ear protection |

SEISMIC EQUIPMENT SPECIFICATION

RECORDING EQUIPMENT



On-Board Equipment

In-Sea Equipment

| | | | |
|----------------------|--------------------------|---------------------------|------------------------------|
| Recording System | DigiSTREAMER | Streamer | DigiSTREAMER, gel |
| Recording Format | SEG-D, 32 bit IEEE, 8058 | Streamer/Section Length | 12000/150 m |
| Active/aux. channels | 648/12 | Group per section/Spacing | 8/12.5 m |
| Seismic QC | eSQC-Pro for Linux | Type/No of Hydrophones | Teledyne T-2BXE/8 |
| Recording device | external HD | Streamer Control | Digicourse SYS3, birds 5011E |
| Thermal Plotter | V24 iSys | Active Tailbuoy | TB 800L |

NAVIGATION



| | | | |
|------------------------|------------------------------|------------------------|------------------------|
| Integrated Nav. System | 2D Spectra, Concept | Inmarsat Corrections | POR, AOR, IOR-optional |
| Survey Company | Svarog(Fugro) | Interface program pack | Fugro MRDGPS |
| Primary Positioning | DGPS Starfix HP L1/L2 & RGPS | Navigation Processing | SeisPos & P1Tools |
| Secondary Positioning | Skyfix XP L1/L2 & RGPS | Gyrocompass | Meridian Standard |
| GPS receivers | StarPack | Echosounder | Simrad EA600 |

ENERGY SOURCE

QC PROCESSING



| | | | |
|----------------------|---|--|--|
| Type/No of arrays | Single Source/4 | Server | 2xDell PowerEdge R730 |
| Air Guns Type/Volume | G Gun, Sercel/up to 6080 in ³ | Processor / Memory (RAM)/ Internal disk volume | 2 x Xeon E5-2640v4 (2.4GHz, 10 cores)/ 192GB/48 TB |
| Gun Controller | GunLink2000, SeaMap | OS/Software | Linux /ProMax |
| Compressor | Cherko Joy WBF 74xYD Ariel JGJ/4 – 1600 SCFM | Thermal plotter | OYO 24" |