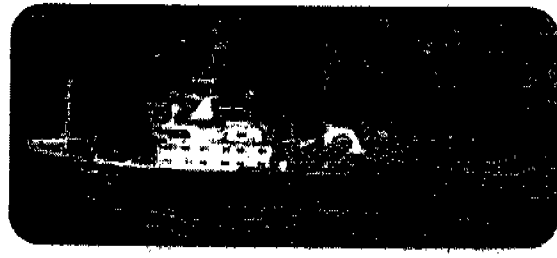


ANEXO D

**INFORMACIÓN GENERAL DEL BARCO
"AKADEMIK SHATSKIY"**

VESSEL DETAILS



MAIN PARTICULARS

SHIPS NAME	Akademik Shatskiy
CALL SIGN	UAIR
OWNER	Joint-stock company SMNG (Sevmorneftegeofizika)
PREVIOUS NAME	N/A
FLAG STATE & PORT OF REGISTRY	Russia / Murmansk
RUSSIAN REGISTER No.	852820
IMO No.	8407010
MMSI NUMBER	273 452 600
BUILDERS / YARD No.	B - 93 / 2 No. 109302
DATE OF BUILD	1986
HULL No. AND TYPE OF VESSEL	Special Purpose Ship/Rescue
YARD BUILT	Szczecin, Poland
DATE CONVERTED/POWER UPGRADED	1991
YARD CONVERTED	Germany
CLASSIFICATION SOCIETY	Russian Register of Shipping
CLASS	III - A2 (Russian) Ice Class/ Special Purpose Ship
CLASSIFICATION MACHINERY SYSTEM	A2
CLASS APPROVED MAINTENANCE SYSTEM	N/A
INTERNATIONAL SAFETY	
MANAGEMENT(ISM) CODE COMPLIANCE	Yes
SAFE MANNING CERTIFICATE (MINIMUM)	see certificate
HELIDECK	Weight capacity-8.6 t, Dia-19 m
SERVICE RANGE	Unrestricted, reinforced ice class, in easy ice conditions (summer-autumn) shipping season an Arctic and the whole year in freezing non-Arctic seas.

VESSEL DETAILS



PRINCIPAL PARTICULARS

GROSS TONNAGE (GRT)	3211 RT
(GRT) NATIONAL & INTERNATIONAL	3211 / 3211 RT
(NRT) NATIONAL & INTERNATIONAL	963.00 RT
LIGHTSHIP DISPLACEMENT	2561.0
DEAD WEIGHT	1259.0 RT
LENGTH OVER ALL (LOA)	82.05 m
LENGTH BETWEEN PERPENDICULARS	73.50 m
BREADTH (MOULDED)	14.80 m
BREADTH (EXTREME)	19.00 m
DEPTH (MOULDED)	7.50 m
DRAFT (MAX)	5.40 m (6.0 m with blaster)
DRAFT (MEAN)	5.00 m
AIR DRAFT (HEIGHT MAX - DRAFT)	7.50 m (total height)
HELICOPTER DECK RATING	08.63 t
HELICOPTER DECK DIAMETER (DIA)	18.95 meter
HELICOPTER DECK MARKINGS STANDARD COMPLY WITH :	CAA - CAP 457 (16.02.1999) and Helicopter Service (21-07.1997) Norway

VESSEL DETAILS



CAPACITIES AND ENDURANCE

CABLE / TOWPOINTS / SUBARRAYS	2 streamer
HP.AIR SOURCE, STANDARD m ³ / HOUR	2 X LMF, Type 370/VCS 2413 W14
FRESH WATER	107 t
FRESH WATER MAKER PRODUCTION	7.8 m ³ / day
FUEL CAPACITY, ALL TANKS TOPPED	730 m ³
FUEL, USEFUL FOR 100 % CONSUMPTION	647 m ³
FUEL TYPE	Diesel, Sulfur cont. less than 0.5 %
FUEL TANK HEATING	No
LUB. OIL (ME - CAT'S - LMF)	16 m ³ , 3 m ³ , 7.5 m ³
CABLE OIL, KEROSENE	24.5 m ³
BALLAST, SEA WATER	472 t
SPEED, TRANSIT, MAX. IN CALM SEA	11.5 kn
SPEED, TRANSIT ECONOMY, DITTO	10.0 kn
CONSUMPTION OF FUEL , FULL SPEED	12.9 m ³
CONSUMPTION OF FUEL, ECONOMY SPEED	11.0 m ³
MAX. DAYS AT MAX. TRANSIT SPEED	50 days
MAX. DAYS AT ECON. TRANSIT SPEED	58 days
OPERATIONAL ENDURANCE	50 days (seismic operation)
ENDURANCE OF FUEL DURING SURVEY	16.0 m ³
CONSUMPTION OF FUEL IN PORT	3.5 m ³

VESSEL DETAILS



BRIDGE NAVIGATION EQUIPMENT

RADAR No 1	Kelvin Hughes NUCLEUS – 5000A - 1pc
RADAR No 2	Kelvin Hughes NUCLEUS – ARPA Manta -1pc
GYRO COMPASS	MERIDIAN SG Brown
ARCS/ENC Equipment	TRANSAS MARINE NF3000
AUTO PILOT	Robertson AP9 MK3
ROB TRACK	Robertson STS 500 / SIMRAD
GPS RECEIVERS	Shipmate RS 5800 + JRC J-NAV 500
SPEED LOG	Doppler Speed Log FURUNO DS-80
ECHO SOUNDER	NEL-M3B (Russian)
RADIO'S, VHF, GMDSS*	2 x NAVICO SRH -150 + 1 x Simrad Axis50
WEATHER FACSIMILE	FURUNO DFAX
NAVTEX RECEIVER	FURUNO NX 500
UPS, POWER SUPPLY TO ALL GMDSS RADIO'S	Res : Batteries 140Ah 24V + Main. Ship Board 220V

VESSEL DETAILS



COMMUNICATION EQUIPMENT

RADIO STATION LICENCE No.	AX - 00119 / expired 30/12/2014
RADIO ACCOUNT CODE	SU 04
CORR. CATEGORY/CLASS	CO.CP/A1, A2, A3
SHIP / AIR CRAFT RADIO	JOTRON TR-6102
PORTABLE SHIP / AIRCRAFT RADIO	Dittel FSG-5
HELICOPTER BEACON 410 KHZ	No
GMDSS - STATION:	FURUNO RS-1500-1T
RECEIVER MF / HF - DSC	Furuno - AA - 50
AIS	Sperry Marine R4
SHIP SECURITY SYSTEM	SSO TT3026M
TERMINAL MF / HF	DSC - 6
TRANSMITTER SSB	Furuno ES 1502 25
TRANSMITTER / RECEIVER, MAIN SHIP	2 x Furuno FM - 8500
TRANSMITTER / RECEIVER, MAIN DSC	2 x Furuno FM - 8500
PRINTER 2pcs.	Furuno PP 510
BATTERY MONITOR	Furuno 1500 - 1T
RADIO, PORTABLE, UHF	4 x STANDARD JOTRON TR-6102
RADIO, PORTABLE, VHF	1 x UNIDEN
No. 1 VHF	Sailor RT 2048
No. 2 VHF	Sailor RT 2048
No. 3 VHF with DSC	2 x FURUNO FM - 8500
BOOSTER UNIT FOR PORTABLE RADIO (VHF)	Navico CTC (3pcs) / AD95 (2pcs)
EMERGENCY RADIO BEACON (EPIRB)	Cospas-Sarsat TRON 40S (406.025 & 121.5 MHZ) (1pc)
RADAR TRANSPONDER	TRON SART, JOTRON (2pcs)
LIFEBOAT RADIOS (Type/Make)	2 x GMDSS Navico 1 x Simrad TC50
RADIO VHF (MOB USE)	STANDARD RS-8000 BTE/N MKP

VESSEL DETAILS



SATELLITE COMMUNICATIONS

INMARSAT TYPE B	Saturn B NERA
INMARSAT TYPE C	Furuno Felcom 12 , Type IB - 581
INMARSAT B (PHONE AND FAX NO.)	327 322 410 / 327 322 411
KU-BAND (Q) SATELLITE TXRX SYSTEM	SeaTel Model 4003
VOICE/DATA COMMUNICATION	Downlink – 512 kbps / Uplink – 256 kbps
RADIO TELEX NBDP	Furuno DP-6
TELEX (Make/Model)	Okitex GE 5632K
TELEFAX 1 (Make/Model)	Panafax UF – 315
TELEFAX MACHINE A/B	PANASONIC
INTERNAL E-MAIL & PC-NETWORK	Available
VESSEL'S E-MAIL ADDRESSES	Captain – cap@shatskiy.marsatmail.com Party Chief - pc@shatskiy.marsatmail.com

VESSEL DETAILS



SAFETY EQUIPMENT

LIFE SAVING APPLIANCE ACC. CERTIFICATE	52 persons
LIFEBOAT TYPE AND No. OF BOATS 2PCS.	2 x 38 pers. Z 7.5 / 01-04, Glass-fibre plastics, Engine-LISTER
ENGINE, LIFEBOAT	Lister STW2 20 BHP 2300 RPM, England
LIFERAFTS TYPE	2 pcs. DSB 20 / 1pcs.Viking 20 3pcs RFD 20
NUMBER OF LIFE RAFTS	6 x 20 pers
LIFEJACKET Make/Type	50 pcs in cabins SEAMASTER 1983
LIFEJACKET Make/Type STOGI - II (Poland)	63 pcs storage box monkey island
LIFEJACKET Make/Type STOGI - II (Poland)	3pcs bridge, 1 pc. radio room, 3 pcs. engine room, 7pcs. instrument room
LIFE BUOYS	14 pcs (incl. 2 Smoke-lights, 4 lights) 6 pcs. Helly Hansen E 300 - 0
SURVIVAL SUITS, THERMO INSULATED	1 pcs. SPORTIS SURVIVAL - 1 51 pcs. Helly Hansen E 305 - 7
WORKING SUITS, THERMO INSULATED (MOB Boat)	6 pcs. Helly Hansen E 300 - 0
IMMERSION SUITS (Make/Type)	
MAN OVERBOARD BOAT (MOB)	NorMar- FRC 650
ENGINE, MOB AND SPEED OF BOAT	Bukh+Steyr SOLAS 236 / MO 236 K43 / 30 knots
WATERJET AND GEAR DRIVE, MOB	
WORK BOAT	N/A
ENGINE WORK BOAT AND SPEED OF BOAT	N/A
FIRE MAN'S OUTFIT (Make/Type)	4 / 1 for helicopter deck equipment
BA SETS (Make/Type) DREAGER	4 complete sets
BA SET / SPARE BOTTLES	6 pcs
COMPRESSOR FOR BA SET BOTTLES	Bauer J3VW 5208-1040 / 2 / 2 (Germany)

FIXED FIRE EXTINGUISHER SYSTEM

EXTINGUISHERS	Powder 12 kg ABE-45 pcs, powder 5 kg -18 pcs, powder 20 kg -2pcs, CO2 KA (AK-5AL-2)-10psc, powder 6 kg -5 pcs, powder NO-HA 50kg-3 pcs (for helideck)
FIXED FOAM SYSTEM	1500 L of foam, covers helideck, streamer reels, hold, cable store
FIXED CO2 SYSTEM	2 bottles of CO2 x 30kg, covers paint-store

VESSEL DETAILS



FIXED HALON SYSTEM	Freon 114 B2. 2x250 L. covers main engine room, aux. engine room, emer gen. room, compressor rooms port & stb.
MAIN FOAM PUMP (Type/Make)	QVP-2-5/330, Iron A/S Denmark
MAIN FIRE PUMP (Type/Make) 100m3/h	PS 100 CUB. M/H. CENTRIFUGAL
EMERG. FIRE PUMP (Type/Make) 40m3/h	40 CUB.M/H, CENTRIFUGAL
S(Type) (from UNITOR)MOKE ANTO-SENSORS	61 pcs. in cabins and corridors
FIRE DETECTION MONITORING SYSTEM	UCPP-20 (Poland) (146 heat,45 manual,14 smoke detectors)

HULL OUTFITTING

ANCHOR	2 / 2250 kg
WINDLASS (Make/Type)	WKS 2,Stolzia Szhzecinska Poland
CAPSTAN No 1	1 VSP 5 / GDR (East Germany), electric 50 kn 0 25 m/sec
DECK CRANE No 1 & 2 FORWARD	SWL 0 5 t
DECK CRANE No 3. STARBOARD AFT	TOWIMOR P4/12 5 AO1 SWL 4 0 t
DECK CRANE No.4. STORAGE DECK AFT	SWL 0 5 t
ANTI ROLLING DAMPING SYSTEM	N/A
HEELING CORRECTION SYSTEM	N/A
BUNKERING AT SEA / EQUIPMENT	Bunker barge piping etc. side boat deck
BUNKER CONNECTIONS	quick disconnect joint 3 and 4"
BUNKER HOSE ONBOARD	No
CREW ACCOMMODATION, No. OF BUNKS	67
SINGLE BERTHS CABINS	16
DOUBLE BERTHS CABINS	21
CLIENT CABINS, SINGLE BERTHS	2
BUISNESS CONFERENCE AND TRAINING RM	3 rooms
HOSPITAL / SICK BAY	YES
SAUNA AND FITNESS ROOM	YES

VESSEL DETAILS



INTERNATIONAL OIL POLLUTION PREVENTION (IOPP) EQUIPMENT

BILGE / OILY WATER SEPARATOR TYPE	SKIT S DEB 2,5
OILY WATER / SLUDGE HOLDING TANKS	total 68.2 m3
OIL SPILL ABSORBENT / DAMAGE CONTROL	Sorbent booms, mats, spray chemical, sweepers

MACHINERY EQUIPMENT

AIR SOURCE, HP COMPRESSORS	2x LMF, 370/VCS 2413 W14
HP COMPRESSOR DRIVE MOTOR	El. Engine ECP 500L/6 630kWt-2pcs
MAIN ENGINE	6 ZL 40/40 3110,kWt, Zgoda-Sulzer, Poland, 505 rpm
AUXILIARY ENGINES (GENERATOR DRIVE)	2 pcs. BAL 20/24, 630 kWt 750 rpm
AUXILIARY ENGINES (ALTERNATOR)	2 pcs. GD8 sw-630-50/02 Ne 548 kWt, Doimel, Poland
SHAFT GENERATOR	GMR-136 C/03 P=1200KW, 400V, 50HZ, 1000 rpm
EMERGENCY GENERATOR ENGINE	21 ZPMa-39H6, PZL-Wola-Poland
EMERGENCY GENERATOR	GCh 114A/4 125kw, Elmor-Poland
PROPELLER	4 Blades. CPP PH 1150/4 .STEEL LH 13 NH
PROPELLER BLADE, SPARE	4 VPP LH 13 NM
UPS POWER TO INSTRUMENT ROOM	UPS-40 Kwa Emerson Computer Power 3x380
POWER SUPPLY INSTR.ROOM BACK -UP	UPS 2x1.5 kWt, 3x 1kWt
EMERGENCY & HARBOUR GENERATOR	212 PMA - 39 H6 , Rumecb, Poland
GENERATOR (Make/Type)	SO-1, Tezmat, Poland
COOLING SYSTEM FOR AUX ENGINES	Available
BOW THRUSTER	ZAMECH 11.3 - 220 Kw, Poland
FRESH WATER MAKER	11.3 - 11.3 PPA Laval, Danmark
BOILER, EXHAUST GAS & OIL FIRED	VX 710A - 17 Stocznia Gdanska, Poland
STEERING GEAR	Hydrostar ME 200 - 11 2 / S1, Poland

VESSEL DETAILS



SEISMIC SPECIFICATIONS

ENERGY SOURCE

SOUCE TYPE	Bolt Air Guns, 1500LL and 1900 LLX
SUB-ARRAYS NO	6
GUNS NO PER SUB-ARRAY	8
COMPRESSOR TYPE	2 X LMF, Type 370/VCS 2413 W14
COMPRESSOR CAPACITY	2 x 1300 CFM (cubic feet per minute)
NOMINAL SOURCE PRESSURE	2000 p.s.i.
SOURCE VOLUME	0 - 5720 cub.in.
MAXIMUM PEAK TO PEAK	109,6 barn at 6m depth (Syntron 3, 0/6-218, 0/484)
SUBARRAY SEPARATION	7,5 m - 20 m
MAX. SOURCE WIDTH	75 m
SUBARRAY LENGTH	15 m
DEPTH RANGE	3 - 11 m
SOURCE CONTROLLER	GunLink 2000

RECORDING SYSTEM

TYPE	Sercel 408XL (SEAL)
CHANNELS NO	960 channels
AUXILIARIES CHANNELS	15
TAPE RECORDING ABILITY	3490E, 3590, 3590E, DLT, LTO IBM 3580
RECORDING FORMAT	4byte, SEG-D revision 2, demultiplexed, 32 bit IEEE, code 0055
PLOTTER SYSTEM	OYO-GS 624-2 Plotter
PRIMARY STORAGE MEDIA	SeisNet RAID system 3800 Gb
SECONDARY STORAGE MEDIA	IBM 3590 Tape recorder

STREAMER SYSTEM

TYPE	Sercel SEAL 24 bit digital
CAPACITY	12000m
SECTION LENGTH	150 m
DIAMETER SECTION	50 mm
HYDROPHONE	NH 95-200
HYDROPHONE PER GROUP	16 / 12,5 m
GROUP SENSITIVITY	17,4 V / Bar
GROUP CAPACITANCE	256 nF / 12,5m
NO OF DATA CHANNELS / MODULE	2
NO OF DIGITIZER BITS	24-bits

VESSEL DETAILS



CABLE OIL	Isopar M
TAIL BUOYS	Partnerplast
NO OF STREAMER WINCH	2
NO OF LEAD-IN WINCH	2

STREAMER CONTROL DEVICE

MANUFACTURER	GEOSPACE Technologies Navigator
TYPE	GEOSPACE Technologies Navigator
LEVELER AND COMPASS	GEOSPACE Technologies Navigator
STREAMER COMMUNICATION	FSK (Digital)
ACCURACY	+/- 0,5 deg
DEPTH ACCURACY	+/- 0,15 m

NAVIGATION

INTEGRATED NAVIGATION SYSTEM	SPECTRA Version 10.9.01
PRIMARY NAVIGATION	MRDGPS v.3.03.04, diff corrections via SPOT
SECONDARY NAVIGATION	MRDGPS v.3.03.04, diff corrections via INMARSAT
TAILBUOY POSITIONING	RGPS SeaTrack 220, Fugro
GYRO COMPASS	SG Brown Meridian
ECHO SOUNDER	SIMRAD EA400
ONBOARD NAV PROCESSING	SPRINT 2D Version 4.3.5

ON-BOARD PROCESSING

QUALITY CONTROL & PROCESSING	ProMAX 2D / 3D
SERVER WORKSTATION	Processor Intel Pentium D 2.8 GHz, 1024 Mb DDR2 RAM 333MHz, 200Gb ATA-100 HDD, 250Gb S-ATA HDD, E-PCI ATI Radeon x800XL Graphics card 256Mb DDR3 RAM, 2x DVD RW, 2x SyncMaster 930 display