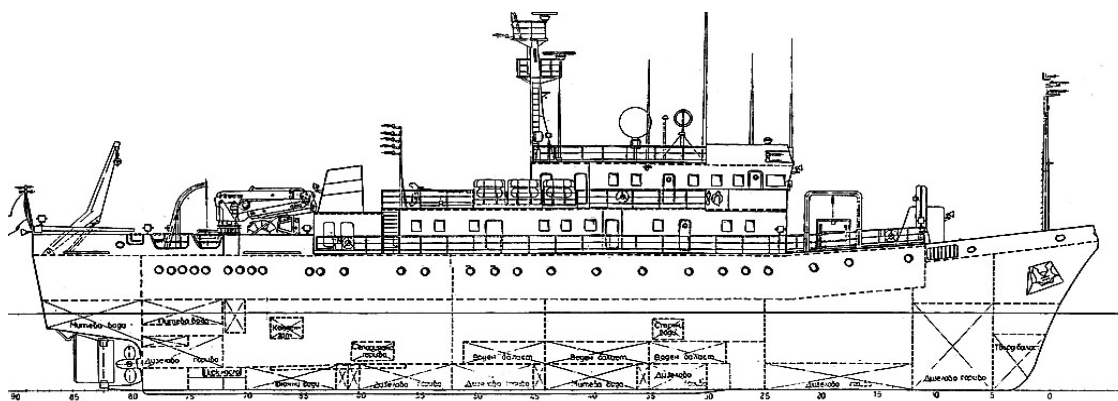




RV AKADEMIK

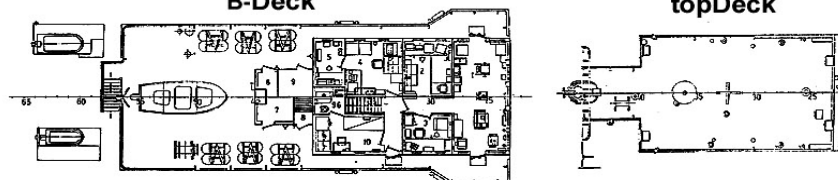
RV AKADEMIK TECHNICAL SPECIFICATIONS



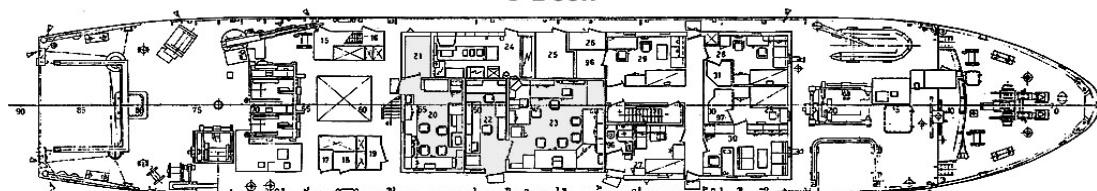


B-Deck

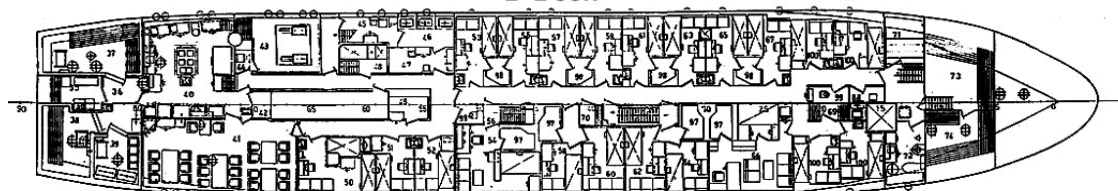
topDeck



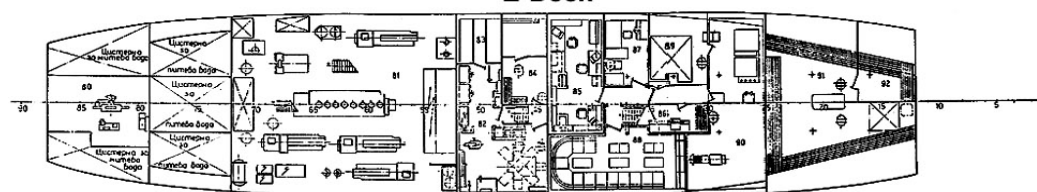
C-Deck



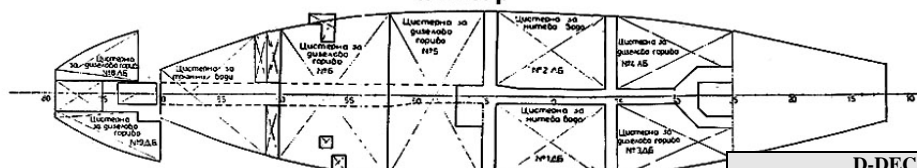
D-Deck



E-Deck



tanktop



B-DECK	
1	Bridge
2	Navigation room
3	Geomorphologic laboratory
4-5	Radio rooms
C-DECK	
16-19	Service rooms
20-21	Geophysics laboratory
22	Wet room
23	Multi-purpose laboratory
24-26	Electric power rooms
27	Second officer room

C-DECK	
28	First officer room
29	Scientific coordinator room
30	Captain room
31	Lavatory
D-DECK	
35-39	Galley and fridge-cameras
40	Galley
41	Mess room
42-49	Engine service rooms
50-67	Double rooms
73-74	

D-DECK	
54	Chief mechanic room
55	El. Mechanic room
66	Chief Scientist room
68	Common shower-bath
71-72	Laundry and drying rooms
E-DECK	
80-83	Main Engine rooms
84-86	Stores
87	Computing room
88	Lounge/meeting room
90	Air-conditioning
91	Scientific store

SHIPDATA

OWNERS

Managing Owner:

Address: 1040 Sofia, 15th of November 1
 Fax: (+359) 2 981 66 29

Operator:

Institute of Oceanology
 Address: 9000 Varna, PO Box 152, First May 40
 Phone: (+359) 52 370 484
 Fax: (+359) 52 370 483
 E-mail: office@io-bas.bg

REGISTRATION & CLASSIFICATION

Port of registration: Varna (Reg. No5100388 Port registry vol. IV, p.337)
 Classification: KM 13 - SRS under Bulgarian Register
 Official nr: 1435301
 IMO nr: 8138463

SHIP / SHORE COMMUNICATION

Call Sign: LZDA
 Satcom. Phone nbr: 00.761.673.075
 Satcom. Fax nbr: 00.761.673.076
 GSM nr: 00.359.897.868.541
 Radio transceivers Sailor MF/HF/VHF

PARTICULARS

Length over all: 55,50 mtr.
 Beam: 9,8 mtr.
 Depth molded: 6,80 mtr.
 Summer draft: 4,80 mtr.
 Gross tonnage: 905 tonnes
 Nett tonnage: 272 tonnes
 Displacement: 1125 tonnes
 Deadweight: 309,6 tonnes
 Max. speed: 10,5 knots
 Max fuel consumption: about 4 t MDO per day at service speed

TANK CAPACITIES

Fuel oil: 150 t MDO
 Fresh water: 100 m³ f.w. generating capacity; RO-plant 5t/d
 Ballast water: 100 m³
 Lubricating oil: 4 mt
 Hydraulic oil: 1 mt
 Used oil: 1 mt

ACCOMODATION

Total cabins: 7 single berth (5 of which with toilet/shower)
 18 double berth (10 of which with toilet/shower)
 two common lavatories and two shower rooms
 Crew: 20 persons
 Scientists: 22 persons
 Messroom: 25.5 m²
 Meetingroom: 18 m²
 Laundry+drying room: 7 m² + 4 m²
 Changing room: 16 m² + toilet and shower
 Aircondition: suitable for tropics

SAFETY EQUIPMENT

Man overboard boat: 1 x 4 persons
 Life rafts: 12 dinghies for 126 persons total + 37 survival suits
 Fire-alarm system: yes

MAIN DIESELENGINES

SKL8 MVD 48AV: 736 kW

PROPELLOR

Number: 1 - with variable pitch
 Revolutions: 370 - 0 - 370 rpm

ELECTRIC SUPPLIES

Boardnet alternators: 4 x diesel driven
 Power: 2 x 150 kVA and 2 x 100 kVA and
 Boardnet supply: 3 x 380 Volt - 50 Hz
 Laboratory supply: 1 x 380 Volt + zero - 50 Hz
 Laboratory supply: 1 x 220 Volt-single phase - 50 Hz
 Shoreconnection: 3 x 380 Volt. - 125 Amp.

HARBOUR -/- EMERGENCY SET

Power: 220 kVA
 Voltage: 1 x 380 V - 50 Hz

NAVIGATION SYSTEMS

Auto pilot (adaptive): AIST
 Arpa radars: RACAL-DECCA-970 B5
 DECCA-1090/6
 Speedlog: SIMRAD - NL Doppler speed log
 Echosounder: SIMRAD-ED 161
 Echosounder: SIMRAD EA-200 (triple frequency - 200/27/12 KHz)
 Decca; Loran – C; Omega navigator: RACAL-DECCA MNS-2000
 DGPS: RAYTHEON RC320

NAUTICAL INSTRUMENTS

NAVTEX Receiver: MARCONI MARINE 1xDS 100
 Weather Fax Receiver: FX 7181-Koden
 Direction finder VHF: (Optional)

LABORATORIES -- DECKSPACE -- WORKSHOPS

Control room: 4.5 m² on E-deck
 General wet lab: 9.5 m² on C-deck
 Wet multi-use lab: 22.5 m² on C-deck aftship
 Dry measuring lab: 14 m² + 3.2 m² on C-deck
 Computing room: 8 m² on E-deck
 Containers available: 1 x 10 feet in hold between funnels on C-deck aftship
 1 + 1 x 20 feet (spare) - on B- and C-deck
 Workspace C-deck: 89 m² without containers

UNIVERSAL CABLING SYSTEM for semi-permanent equipment

Copperbar/litz for: Earthsystem with 1 massa conn.
 Multi twisted-screened copperpairs for: Low freq.sign. DC 100 kHz or
 low speed data till 100 KBaud
 Coaxial cables, 50 and 75 Ohm for: High freq.signals, 100 kHz - 100MHz
 and data transfer up to 256 kbit/second
 Special cable for: High powered pulsesignals

This cable system interconnects relevant places such as masts-bridge-computer room-measuring room-laboratories-various cabins-deck workshops-winch-stands and afterdeck onto which semi-permanent equipment can be connected in order to transmit / receive data / signals to and from the above mentioned places. Permanently fixed equipment is already hooked up to the system and this data can be received in the before mentioned places, if desired.

DATA COMMUNICATION SYSTEM

Network infrastructure: Ethernet IEEE-802.3
 Protocols: TCP / IP + NFS + SMB
 PC network software: PC - NFS - Native MS-Windows networking
 Peripherals: HP - laserjet 5M-PS (PCL) printer
 HP – 920c colour-deskjet printer
 E-mail: Operational; messages are received/sent
 once a day (On request more than once a day)

Guest scientists who carry their own PC aboard ship wishing to connect it to the ship's network have to provide for their own matching hard- and software.

SCIENTIFIC EQUIPMENT (permanently installed)

Scientific echosounder: SIMRAD EK 200
 Meteo system: MARCONI MARINE 1xDS 100
 Chest freezer for samples 200 l
 Chemical dryers 2

SIDE - A - FRAME: on C-deck front pb
 Swl: 3 tonnes
 Height above deck: 3.1 mtr
 Framewidth: 2.3 mtr
 Control: bridge + on site (portable)

SIDE-WINCHE on A-frame (hydraulic driven)

Type: RCW 15H (1 conductor)
 Max pull: 2.5 tonnes
 Cable size/ ength: 6,4 mm / 7000 mtr
 Slipring - Rekofa: SM16-500 4 poles
 Control: bridge + on site (portable)

SIDE - L - FRAME: on C-deck back pb
 Swl: 2tonnes
 Height above deck: 2.7 mtr
 Framewidth: 2.1 mtr
 Control: bridge + on site (portable)

HYDROGRAPHIC WINCH on L-frame:

Type: RCW 15H (1 conductor)
 Max pull: 1.5 tonnes
 Wire: stainless steel
 Cable size / length: 6,4 mm / 5000 mtr
 Control: bridge + on site (portable)

STERN-A-FRAME: on C - deck aft.
 Swl: 7 tonnes
 Height above deck: 4.3 mtr. working height
 Framewidth: 3.7 mtr
 Control: bridge and cabin onside

STERN-WINCHE (hydraulic driven)

Type: RSW 50H double drum cable/wire
 Max pull: 5 tonnes
 Wire/ cable size: 6/8/10/12 mm on both drums
 Wire length: 5000/ 4500 mtr
 Slipring - Rekofa: SM16-500 12poles
 Control: bridge and cabin onside + measuring room

CRANES (hydraulic driven)

CONTAINER-CRANE: on stern C-deck sb
 Type: HIAB 360 telescopic
 Lifting capacity - swl: 8 - 2,7 tonnes
 Reach min--max: 2,1 – 11,8 mtr
 Slewing angle: 360 degr. Continuous
 Control: on site cabin

FOOD CRANE: On fore C-deck sb
 Lifting capacity - swl: 1.7 - 0,7 tonnes
 Reach min - max: 1,45 -5.4 mtr
 Slewing angle: 320 degr.
 Control: on site (portable)

FOR MORE INFO, CONTACT:

office@io-bas.bg Fax. (+359) 52 370 483

Institute of Oceanology, PO Box 152, First May St. 40, Varna9000, Bulgaria.