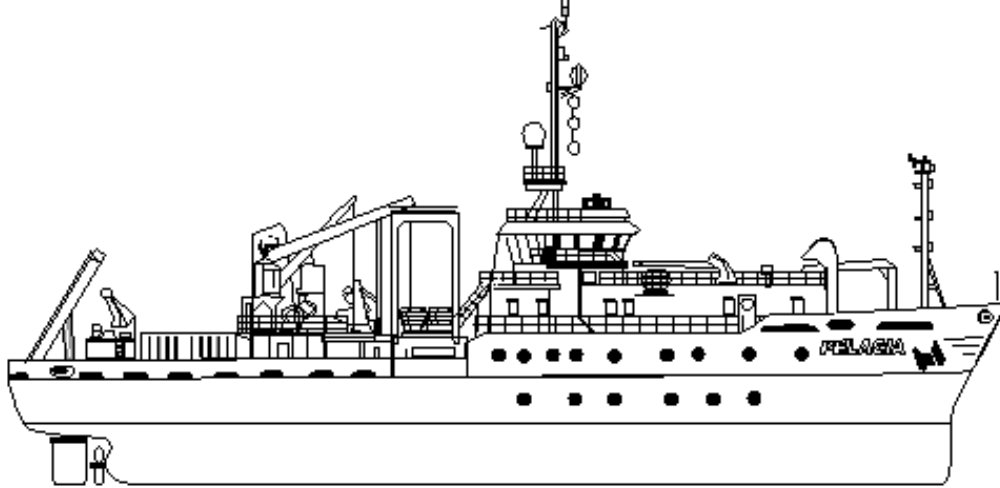


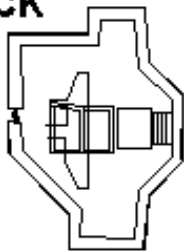


RV PELAGIA TECHNICAL SPECIFICATIONS

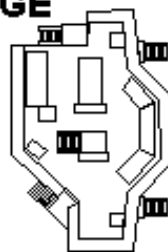




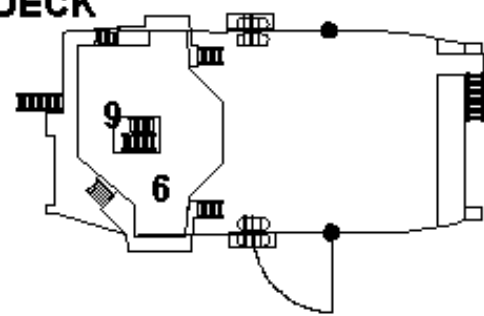
TOPDECK



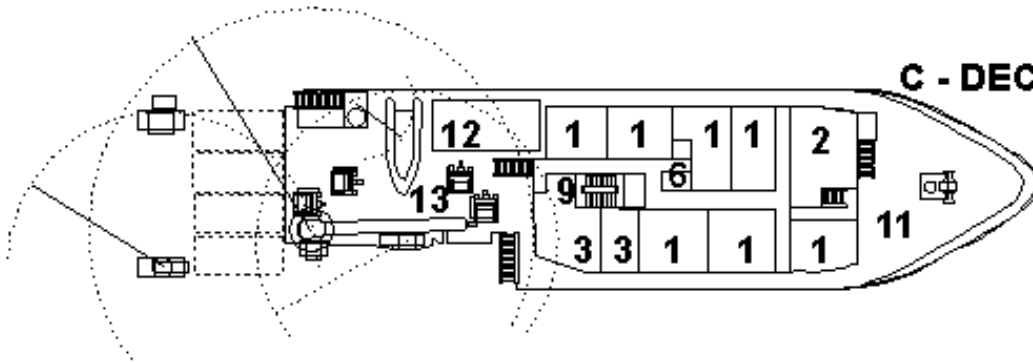
BRIDGE



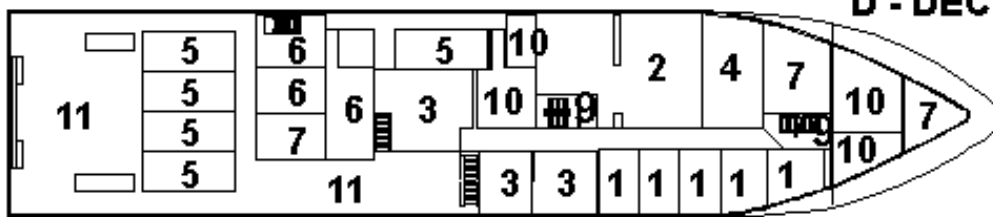
B - DECK



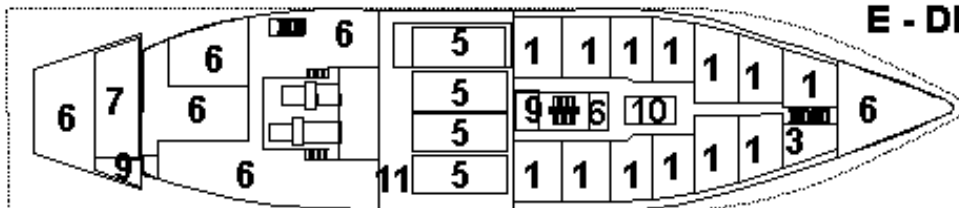
C - DECK



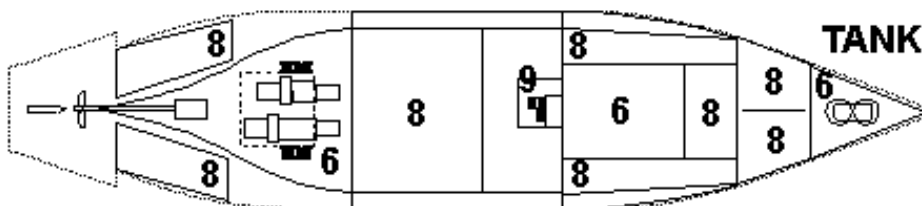
D - DECK



E - DECK



TANKTOP



- | | |
|----|----------------------------|
| 1 | Single cabins |
| 2 | Mess/lounge
Meetingroom |
| 3 | Laboratories |
| 4 | Galley |
| 5 | Containers |
| 6 | Technical spaces |
| 7 | Stores |
| 8 | Tanks |
| 9 | Staircase |
| 10 | Public space |
| 11 | Workspace |
| 12 | Hatch |
| 13 | Winch deck |

Research Vessel *PELAGIA*

Netherlands Institute for Sea Research

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SHIPDATA

OWNERS

Nederlands Instituut voor Onderzoek der Zee (NIOZ)
Address: P.O.Box 59, NL-1790 AB Den Burg, Holland
Phone: (+31) (0)222 369479
Fax: (+31) (0)222 319674

REGISTRATION & CLASSIFICATION

Port of registration: Texel
Classification: Bureau Veritas
1 3/3 E Deep Sea
Ice 111. AUT. MS
Official nr: 18179 ZR 1991
IMO nr: 9001461

SHIP / SHORE COMMUNICATION

Call Sign: PGRQ
Sattelite communication
Satcom. Phone nbr: 00.871.1300.673
Satcom. Fax nbr: 00.871.1300.674
GSM nr: 06-51338399
Radio transceivers Sailor MF/HF/VHF

PARTICULARS

Length over all: 66,045 mtr.
Beam: 12,80 mtr.
Depth molded: 6,80 mtr.
Summer draft: 4,00 mtr.
Gross tonnage: 1615 tonnes
Nett tonnage: 484 tonnes
Displacement: 1671 tonnes
Deadweight: 525 tonnes
Max. speed: 12,5 knots
Max fuel consump: 7,5 m3 per day (max)

TANK CAPACITIES

Fuel oil: 200 m3
Fresh water: 100 m3
Clean seawater: 23 m3
Ballast water: 210 m3
Anti rolling tanks: 2 x 45 m3
Gray water: 1 x 32 m3 + 1 x 10,8 m3
Lubricating oil: 7,5 m3
Hydraulic oil: 3 m3
Used oil: 4,5 m3
Sludge: 2,8 m3

ACCOMODATION

Total cabins: 25 single berth + toilet / shower

Crew: 10 persons
Scientists: 15 persons incl. techn. support
Messroom + lounge: 28 m2 + 25 m2
Meetingroom: 18 m2
Gymnasium: 22 m2
Laundry: 12 m2
Changing room: 16 m2 + toilet and shower
Aircondition: suitable for tropics

SAFETY EQUIPMENT

Man overboard boat: 1 x 6 persons
Liferafts: 4 x 25 pers. dinghy + 17 survival suits
Fire-alarm system

MAIN DIESELENGINES - ALTERNATOR DRIVE

Port: 673 kW
Starb: 1020 kW

PROPULSION - ALTERNATORS

Port: 673 kVA - Maindiesel driven
Starb: 1030 kVA - Maindiesel driven
Voltage: 3 x 660 Volt

PROPULSION - ELECTRIC MOTOR

Power: 1000 kW
Voltage: 3 x 660 Volt
Revolutions, thyristor contr: 1000 - 0 - 1000 rpm

PROPELLOR

Number: 1 - with fixed pitch
Revolutions: 230 - 0 - 230 rpm

BOW THRUSTER

Type: Omni directional
Power - Thrust: 450 kW - 4200 kg
Voltage: 3 x 600 Volt
Revolutions / drive: 0 - 600 rpm / electro motor

ELECTRIC SUPPLIES

Boardnet alternators: 2 x main diesel driven
Power: 275 kVA - each
Boardnet supply: 3 x 380 Volt - 50 Hz
Laboratory supply: 3 x 380 Volt + zero - 50 Hz
Laboratory supply: 220 Volt-single phase - 50 Hz
Lab supply via UPS: 220 Volt stabilised - 50 Hz
UPS: 1 x 10 kVa - 15 min. + 1 x 8 kVa - 10 min.
Shoreconnection: 3 x 380 Volt. - 125 Amp.

HARBOUR -/- EMERGENCY SET

Power: 230 kVA
Voltage: 3 x 380 V - 50 Hz

NAVIGATION SYSTEMS

Auto pilot (adaptive): Plath Navipilot MRID
Arpa radar: KH-HR 3000 A / 2 / 6 X-band
True motion radar: Furuno FR-2130S (10 cm)
Speedlog: Ben Galatee MK3
Video echosounder: Furuno FCV140 - 50 / 200 kHz
Echosounder: Radio Holland EL- 4242 C
Echosounder: Furuno FE-606 registrating

Decca navigator: Philips MK 5
Loran - C: (Optional) MLR-LRX 22P dual channel
DGPS: Sercel NR 53
Colour plotter: Electronic charts navigation computer
Transas ECDIS BA charts

NAUTICAL INSTRUMENTS

NAVTEX Receiver: Lokata NL-2
Weather Fax Receiver: Furuno FAX-214
Direction finder VHF: (Optional)

LABORATORIES -- DECKSPACE -- WORKSHOPS

Computer room: 8 m2 on C-deck
Measuring room: 20 m2 on C-deck
General wet lab: 30 m2 on D-deck
Dry laboratory: 15 m2 on D-deck
Wet chem. lab: 15 m2 on D-deck
Salt water lab: 12 m2 on E-deck
Containerised laboratories available:
1 Thermostrated - wet lab
1 Chemistry - clean lab
1 Isotopes-lab
2 Nutrients-analiser labs
1 container holding
6 x 400 liters cooling/freezing sample storage
Total container capacity 3 + 1 (spare) - on D-deck aftship
1 - in hold on D-deck
4 - in hold on tanktop
Workspace D-deck: 135 m2 without containers
75 m2 with 4 containers
Deck workshop: 20 m2 on D-deck
Eng. room workshop: 25 m2 on E-deck

GASSES to laboratories and lab - containers

Bottles with Nitrogen--Hydrogen--Oxygen--and 1 choice gas can be connected up in a gasstation on the aft. deck where the pressure will be reduced to approx 6 bar. Dry compressed air and propane are also available.

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
Glassfibre backbone and thinwire for: High speed data 10 megabit/second
Special cable for: High powered pulsesignals

This cable system interconnects relevant places such as masts--bridge--computerroom--measuringroom--laboratories various cabins--deckworkshop--lab. containers--winch-stands and afterdeck onto which semi-permanent equipment can be connected in order to transmit or to 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. (see data aquisition system)

DATA COMMUNICATION SYSTEM

Network infrastructure: Ethernet IEEE-802.3
Thinwire (3-COM)
Protocols: TCP / IP + NFS + SMB
PC network software: PC - NFS - Native MS-Windows networking
Server: 2 SUN Sparc-5 systems
Peripherals: HP - laserjet 5M-PS (PCL) printer
HP - 7550+ A-3 colour-penplotter
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. When in doubt please contact NIOZ.

SCIENTIFIC EQUIPMENT (permanently installed)

Scientific echosounder: Simrad EK 500
Penetr.echosounder: Datasonic Chirp CAP - 6000
Echosounder 3.5 kHz: Orettech 3010, 10kW
CTD / rosette sampler: Seabird / Technicap
Aqua flow system: Chelsea, connected via: ABC-system
Planktonpump: Membrane pump
Meteo system: KNMI

SCIENTIFIC EQUIPMENT (semi-permanent)

Acc.Doppler currentprofiler: R & D (towed by the ship)
Boxcores: Various types
Pistoncore: Up to 24 mtr at 8000m depth
Vibrocore: Up to 6 mtr at 100m depth
Fishing nets: Various types

DATA AOUISITION and PROCESSING SYSTEM

Make: NERC, Research Vessel Services (U.K.)
Type: ABC system
Parameters logged every few seconds:
Position from: Decca, Loran (optional), GPS and DGPS
Course from: Gyro compass
Speed from: EM. Speedlog
Depth from: Echosounder
Windspeed and direction--
airtemperature and relative humidity--
barometric pressure and
solar radiation from: PAR (NIOZ made)
Surface seawater fluorescence--
temperature--salinity and
dissolved oxygen from: Aqua flow system
Conductivity--Temperature--
Depth and optional oxygen
and carbon dioxyde from: CTD system
Data processing -software: Various UNIX-based data-
deriving and presentation-
programmes (mapping / graphs)

SIDE - A - FRAME:

on C-deck sb
Swl: 10 tonnes
Reach-outb/inboard: 3 mtr / 3mtr
Height above deck: 8 mtr
Framewidth: 3 mtr
Control: bridge + on site (portable)

SIDE-WINCHES (hydraulic driven)

CTD WINCH: on C - deck sb
Max pull: 5 tonnes
Rochester wire/type: 1-H-285A (1 conductor)
Wire size: 0,288" = 7,32 mm
Wire length: 8800 mtr
Workload: 18.5 KN (4150 lbf)
Breaking strength (min): 46.3 KN (10400 lbf)
Slipring - Rekofa: SM16-500 4poles
Wave compensation: spring compensator
Control: bridge + on site (portable)

SIDE WINCH: on C - deck sb
Max pull: 10 tonnes
Wire: steel 3 x 36
Wire size / length / strength: 14 mm I 3000 mtr / 131 kN
Control: bridge + on site (portable)

AUXILIARY WINCH: in side-frame
Max pull: 5 tonnes
Wire: steel
Wire size / length: 12 mm / ca. 250 mtr
Control: bridge + on site (portable)

HYDROGRAPHIC WINCH:
Max pull: 200 kg
Wire: stainless steel
Wire size / length: 6 mm / 500 mtr
Control: D-deck midship sb

STERN-A-FRAME

Swl: 10 tonnes
Reach-outb/inboard: 3 mtr / 5,5 mtr
Height above deck: 8 mtr. working height
Framewidth: 6,5 / 8 mtr - total width 12 mtr
Control: bridge and cabin aftdeck

STERN-WINCHES (hydraulic driven)

TOWING WINCH: on C - deck aft.
Max pull: 5 tonnes
Rochester type: 90463 I 3 cond + 3 coax
Wire size: 0,463" = 11,76 mm
Wire length: 900 mtr
Workload: 1,32 tonnes
Slipring - Rekofa: SM16-500 12poles
Control: bridge + measuring room
and cabin aftdeck

STERN WINCH: on C - deck aft
Max pull: 10 tonnes
Wire: steel 6 x 36 ws+st c
Wire size / length: 18 mm / 2000 mtr
Control: bridge and cabin aftdeck

AUXILIARY WINCH: 2x in stern. frame
Max pull: 5 tonnes
Wire: steel
Wire size / length: 12 mm / ca. 250 mtr
Control: cabin aftdeck + on site (portable)

CAPSTAN: 2 x on D-deck aft. ship
Max pull: 5 tonnes
Control : D-deck aft

OUTRIGGER: 2 pc a 6 mtr
Location: port + sb side of sternframe

CRANES (hydraulic driven)

CONTAINER-CRANE: on C-deck sb
Lifting capacity - swl: 10 / 7,5 tonnes
Reach min--max: 2,1 - 10.5 / 14,5 mtr
Slewing angle: 360 degr. continuous

CONTAINER HOIST: in containerhold midship
Lifting capacity - swl: 2 x 2 x 2500 kg
Reach: travelling through hold
Control: on site (portable)

FOLDING CRANES: 1 on sb C-deck
1 on sb D-deck aft
Lifting capacity - swl: 2 tonnes
Reach min - max: 0,6 - 9,9 mtr
Slewing angle: 360 degr. continuous
Control: on site (portable)

M.O.B. CRANE: On funnel
Lifting capacity - swl: 1100 kg
Reach - fixed: 3,40 mtr
hoisting speed: 18 mtr / min
Control: Remote lowering / el. hydr hoist

FOOD CRANE: On foredeck
Lifting capacity - swl: 600 kg
Reach min - max: 1,45 - 6 mtr
Slewing angle: 320 degr.

LIFERAFT CRANES: On C - deck- 1 x port and 1 x sb
Lifting capacity - swl: 2,1 tonnes
Reach - max: 4,35 mtr
Lowering speed: 30 - 40 mtr / min
Control: Remote-lowering-hand hoist



FOR MORE INFO, CONTACT:

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