



FRS 'ALGOA'

Steel hulled Fisheries Research Ship

Converted French Wetfish Stern Trawler

SPECIFICATIONS

Classification	Bureau Veritas
Built	1975
Builders	Atliers et Chantiers (France) (Converted by Dorbyl Marine, Cape Town 1993)
Flag	South Africa
Port of Registry	Cape Town
IMO Number	7410369
Call Sign	ZR 4311
Official Number	19112
Cruising speed	10.0 knots
Maximum speed	12.5 knots
Range	6000 nautical miles
Endurance	20 – 30 days
Compliment	Crew 19, Scientists 16
Affiliation	Department of Environmental Affairs, Republic of South Africa
Directorate	Marine Research

MAIN DIMENSIONS

Length OA	52.55m
Breadth	10.8m
Draft	3.75m
GRT	759.38T
NRT	227.81T
Power	1472 kW

PROPULSION

Single Crepelle SN, turbo charged and intercooled 12 cylinder 4 stroke diesel engine driving an Eyscher Weiss controllable pitch propeller.

Maximum Power	1472 kW @ 200HP
Bowthruster	Schottel SRP 170 LSV, 280 kW retractable
Bunker Capacity	138T

ELECTRICAL POWER

Two M.A.N. diesel gensets, each 280 kVA, 380/220 v, 3 phase, 50 Hz at 0.8 PF.

Shaft generator
Stabilised Supply

NAVIGATION EQUIPMENT

Gyro Compass	SIMRAD RGC 50
Magnetic Compass	Cassens and Plath
Autopilot	SIMRAD AP-50
Radar	FURUNO FR-2125 3cm Furuno NAVNET 10cm
Speed Log	Furuno DS-70
Echo Sounder	SKIPPER GDS 101- 50kHz transducer (1000m depth) SIMRAD EK60 – 38 kHz transducer (5000m depth)
GPS	2xLeica MX-412 DGPS
Navtex	Furuno NX-500
Anemometer	SIMRAD Is-12 Young Wind Tracker
Sea Surface Temp	Seacat Thermosalinograph
Electronic Charts	MAXSEA Charts
AIS	Furuno FA-100
Direction Finder	1 x VHF, type Regency (Multi directional on all channels)

METEOROLOGICAL EQUIPMENT

Weatherpak by Coastal Environmental System, giving wind direction and speed (relative and true), air temperature, relative humidity, barometric pressure and biospherical QSR2100 PAR sensor for underway light data.

All meteorological data is networked over the NDS as well as, the Seabird SBE 45 Thermosalinograph with SBE 38 remote temperature probe, water depth and vessel navigation information.

COMMUNICATIONS AND GMDSS

- Sailor VHF (RT 2048)
- Sailor VHF DSC (RM 2042)
- Sailor SSB (RE 2100)
- Sailor HF SSB Receiver (RM 2125)
- Sailor Sat C Msg Terminal (H 2098)
- Sailor Sat C Transceiver (H 2095)
- Sailor Sat C Printer (H1252B)
- Sailor HF SSB Telex/DSC (RM 2151)
- Thrane and Thrane Fleet 77 Satellite connection (Voice and Data)

WINCHES AND DAVITS

Anchor Windlass	GHM Marine, Guindeau 24, electric
Mooring Winches	1x port aft, 1x starboard aft, electric (SWL = 0.5T)
Deck Crane	PETREL, hydraulic knuckle boom crane KC-40-8.4-3.6. (SWL: at 6.5m = 6.0T; at 8.4m = 3.6T) Winch Capacity 40m x 20mm IWRC galvanized rope, with a 7.5T SWL Sling hook.
Rescue Davit	Rescue boat davit, manual slew, electric hoist. (SWL = 1t) Winch Capacity 20m x 10mm IWRC Galvanized rope, with a 1.0T SWL off load quick release hook.
Main trawl winch	Brissoneau and Lotz, electric. (SWL = 5.0T). Warp capacity 3500m x26mm. 4 auxiliary drums
Net Drum Winch	Gear driven from main trawl winch. (SWL = 5.0T)
Net Sonde Winch	Atlas, electric
Hydrographic Winch	LEBUS, medium pressure, hydraulic. (SWL = 1.0T) Drum capacity 2000m x 9.5mm, 4-core conductor cable, via accumulator system to hydraulic A-frame, midships

Vertical Plankton Winch	LEBUS, medium pressure, hydraulic. (SWL = 1.0T) Drum capacity 1500m x 9.5mm, 4-core conductor cable, Via accumulator system to hydraulic A-Frame, midships.
Large Towing Winch	PETREL, medium pressure, hydraulic drum capacity 500m x 11.76mm, 10-core conductor cable. Fair lead direct to main gantry aft. (Not onboard)
Small Towing Winch	PETREL, medium pressure, hydraulic. (SWL – 1.0T). Drum capacity 1000m x9.5mm, four core conductor cable. Cable lead to hydraulically slewed davit and accumulator on starboard aft gantry platform.

LABORATORIES AND SCIENTIFIC SPACES

Bridge deck, starboard aft	Acoustics laboratory
Main deck, port side, midships	Operations room
Main deck starboard	Wet Laboratory - General purpose
Main deck, port	Dry Laboratory – Chemical
Lower deck, aft	Wet fish laboratory
Lower deck, aft	Dry fish laboratory
Tank top, midships	Computer room
Tank top, forward of computer room	Sonar compartment

SCIENTIFIC WORKING AREAS

Forecastle deck and main trawl deck.

Trawl ramp can be decked or open ramp, provided ample request time is given.

ON BOARD SCIENTIFIC SYSTEMS

The windows based underway data acquisition and distribution system on the NDS is interfaced to a variety of navigational, meteorological and winch systems, displaying these data on terminals housed in all scientific spaces.

The Local Area Network (LAN) facilitates interaction between the various spaces and the NDS and permits the storing and processing of time and historical data at each work station.

Seabird 911 plus CTD, with 12L rosette and 3rd party sensors. Seabird SBE 45 Thermosalinograph with SBE 38 remote temperature probe.

Ocean Surveyor SDCP 75 kHz by RD Instruments.

MCM Universal Underwater Unit.

MCM Electronic Dish measuring boards

HABITABILITY

The officers, fishing master, bosun, chief steward and chef are accommodated in single berth cabins and there are six double berth crew cabins.

Scientists are accommodated in four three berth cabins and two double berth cabins.

Officers & Crew = 19 berths

Scientists = 16 berths

Meals are served in a saloon area. The vessel carries bottled water for all to enjoy.

UPDATED AS AT 1 DECEMBER 2016