

SPECIFICATIONS



Principal Particulars:

Vessel type:	Research/Survey/Passenger
Flag/Reg Port:	Norway, (NIS) Grimstad
Built as Rescue vessel	NRS/2017, Kime/1996, Båtervice 1986,
Class:	DNV +1A-1 ICE-C - E0 (Bow 1B1)
Safety compliance:	Norwegian Maritime Directorate
Radio Certification:	NMD/Telenor
LBP:	31.38 metres
LOA:	37.25 metres
Beam:	7.01 metres
Draft/AirDraft:	4.25 metres max./16.25 metres
Tonnage:	329 GT / 98 NT
Displacement:	442 tonnes
Material hull/superstructure:	Steel/Aluminium
Speed/consumption/Range:	4 knots/0.6t - 7 knots/1.4t- 10.5 knots/2.4t 5000/6000nm (Dep. speed selection).
Cargo Capacity:	Open deck area 51.m2 / load 12/15 T Cargo hold 54 m3 Forpeak -114 m3

Tank Capacity:

Fuel:	2x 8.56 m ³ + 2x 5.82 m ³ + 2x 14.91 m ³ + 1x17.50 m ³ Total = 76.06 m³
Day tank:	2x 0.72 m ³
Fresh water:	2x 7.30 m ³
Black/Grey water:	6.30 m ³
Waste oil:	0.62 M ³
Trim Tank:	5.30 M ³ + 13.25 M ³
Other:	Anti-roll tank 12 M ³

Accommodation:

6xPax/surveyor en suite doubles-14 Beds
8xCrew cabins 2 en suite/singles-13 Bed
Pax Surveyor dining area 12/16 seats
Officers/Guides dinig area 6/7 seats
Crew mess 5 seats
TV Lounge / Bar
Observation Lounge / Survey Room
Clean Workshop / Wet Lab
Changing Room / Mud Room
First Aid Station / Ship Office
Hotel Galley / separate crew galley
Laundry 2x washing/ 2x dryers
6 m³ Freezer Room, 6 m³ Cooling Room
500 liter freezer box / 200 liter freezer box
Bonded Store, Dry Store, Liner Lockers

Machinery:

Main engine:	Grenaa 6FR 24T 750 BHp @ 750 rpm. Primary engine Controls / PMH / DP Secondary control original GrenaaHydraulic. Autronica E0 system
Auxiliary engine:	Valmet ,620D SMG,110kW/220V/50Hz air start. Valmet, 620D SMG,110kW/220V/50Hz el.start Silent Deck genset Cummins 25-GF/50Hz/25kW MTAG-7000d 7kW
Emergency generator:	
Propeller:	Grenenaa C/P 4 Blade
Thrusters:	2x PMH ST 60-80 (60-80HK) 8mm Steel
Rudder type:	Active Becker type
Steering gear:	Frydenbø HS12 01 (1990) with Frydenbø – Mjølnær PTE 1 1/4 pump no. 1 (1990) + Ulstein PE 1 1/4 pump no. 2 (1996)
Lube oil separator:	Alfa Laval , MAB 103
Heater:	Pyro , 35 kW oil/electrical

Compressor:	Sperry HLF 2/27 with Leroy Somer LS100LT 3 phase Motor 3kW
Transformer:	Noratel 3MSO-91.22 60 kVA Palmier Robin 50 kVA
Water maker:	HEM water maker 6 000 l/24h Aqua Pro UV- 24 GPM-HTM water filter Ultraviolet water Sterilizer between tanks and taps
Fire pump:	2 x Delta 400-serie, 500 l/min, 15 bar
Other:	Mastervolt Mass 24/25 25 Amp battery charger.ME Cooling Pump Desmi 550-32-135/D09 14 M3
HPU 1:	Crane/Anchor Winch/MOB Boat: Brueninghaus hydromatik pump a10VSO 100 DFR1/31
HPU 2:	A-Frame and aft deck winches: 3 Phase induction motor EN 60034, 50 Hz
HPU 3:	PMH DP system: 2x Saur Danfoss 90l 130cc mounted on ME
Firefighting engine room:	CO2

Navigation Equipment:

ECDIS:	2x Furuno FMD-3100
MaxSea:	Dell computer with MaxSea 10 and charts from Dakar to North Atlantic
Radar:	Furuno FAR2817, Furuno FAR2117
Autopilot:	Robertson , AP9 Mk II
GPS navigator:	Furuno , GP-32, Furuno , GP-35
Navigation Echosounder:	Koden CVR010, Skipper EML224 (speed - log - water temp).
AIS:	Debeg , 3401 iXBlue S.A.S , Octans III Navtron , NT920 AHR heading repeater
Navtex:	JRC , NCR-300A
Watch Alarm System:	Alpha BNWAS
External communications:	SSB/ Sailor RM2150 HF SSB/ Sailor RE2100 Sat C / LRIT Furuno Felcom 15 Inmarsat C Sailor H 2095 C fleet broadband Iridium 9555 Satellite Phone Iridium Pilot open port dome Sailor RM 2048 DSC GMDSS Sailor RM 2042 DSC Sailor RT 4822 DSC Sailor 6300 MF/HF DSC Sailor 6222 VHF DSC 2x Sailor SP3520 Icom ICM71 Sailor SP3510 2x Raymarine RAY101E Megaphone
Internal communications:	Intercom Vingtor

Fire alarm unit: Servoteknikk , with 49 sensors
Radar Transponder SART: McMurdo S4 rescue SART, Sailor 5051 AIS SART and Jotron 9 GHz
EPIRB: Sailor SE406-II
 KANNAD Auto 406MHz
Other: Sailor DT4646e GMDSS computer terminal

Surveillance camera: HP Officejet 6500^a Plus printer
 3x CCTV Cameras connected to a Honeywell remote camera system with one camera in the engine room + one viewing aft deck and one in top of the mast

Deck Equipment:

Deck crane: 3.6 Ton Heila HLM 10-3S
A-Frame: 2 Ton SWL (Stored ashore)
Fixed Davit: 4 Ton Gantry Davit on Stern
 Diving Ladder
Winches: 2x 5 Ton el. winches on fixed gantry
 Hydraulic Survey Winch -stand alone HPU
Search light: 2x fixed ice light in bow, remote control search light (Norse Light) manual norse light
 4 fixed searchlights on AFT deck.
 Hydraulic Vestdavit C-194-2 0.7t swl

Survey Equipment:

Echo sounder: KM/Simrad 38KHz / Suzuki processor
 KM/Simrad 120KHz transd. / KM processor
 KM/Simrad 120KHz spare transd.
 Racaal Decca Single beam towfish

Olex Subsea 3D chart Full Version Olex Laptop PC
 Olex AIS Module

ROV 1: Saab Sea-eye Falcon 300 meter depth rating.16 kg Payload, 450-meter umbilical. BW camera, sonar. Portable control/daylight display system.

ROV2 AC - 100 for tank and inside pipeline inspection, 120m cable, standalone monitor/power supply.

Drone: Inspire 2 model T650, Max flight time 27 min. Max altitude 500m and distance range 7000m.

Monitors: 2 x 60' TV screens,
 8 x 17' Fujitsu

Safety Equipment:

MOB Boat: 4,5meter 20HP Yamaha, 2 stroke
Zodiac: 5 meter 50HP Yamaha, 2 stroke

Work Boat:	40HP Yamaha, 2 stroke
Life raft:	2x 20 DSB men liferaft, 2x 6 Viking men liferafts, 24 Viking men liferaft
Survival Suits:	20
Lifebuoys:	8
Life Jackets Rigid:	58
Life Jackets Inflatable:	6
Pains Wessex	MK8 smoke and light lifebuoy
Manoverboard:	

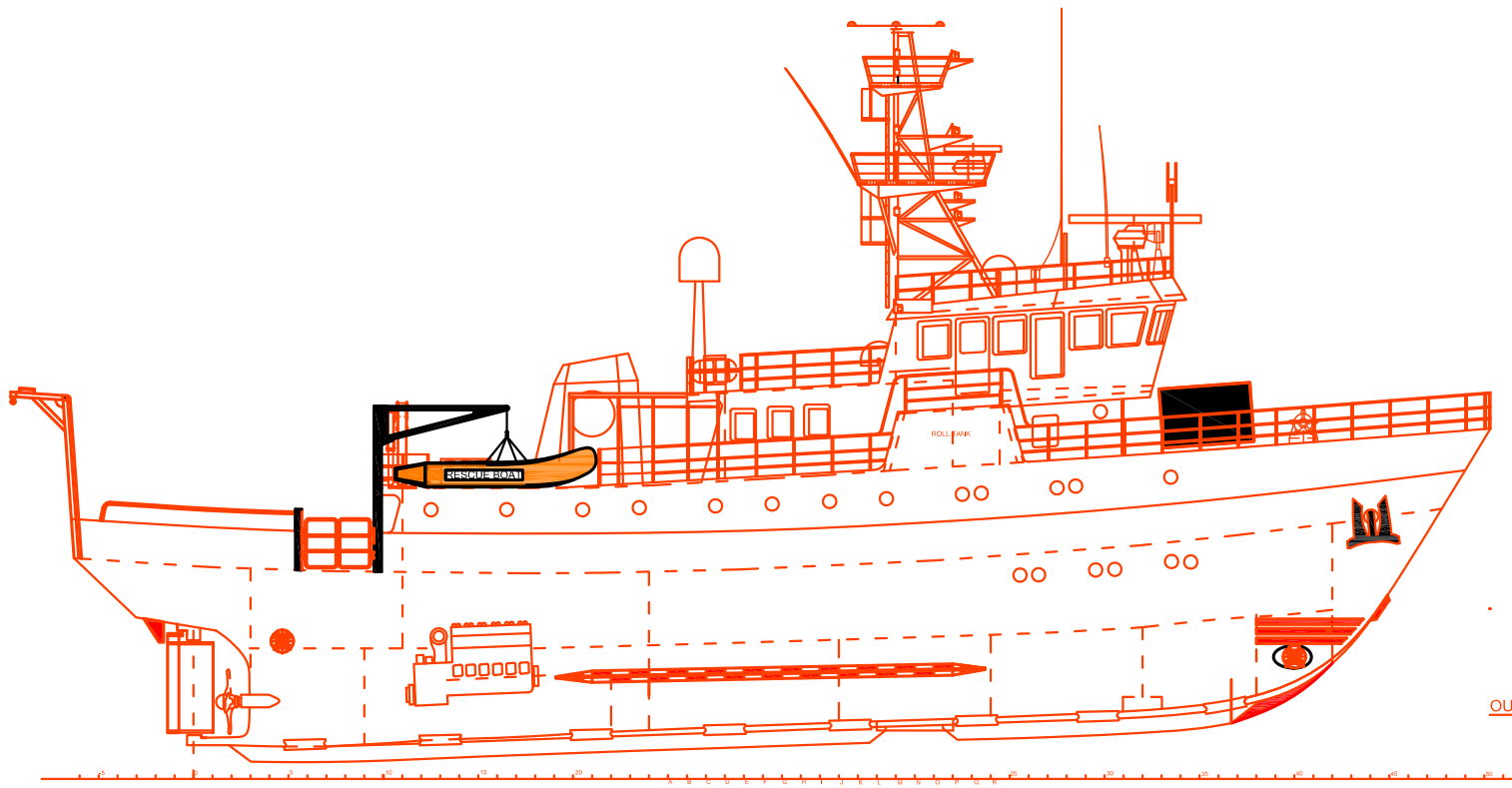
Survey Equipment Ashore:

2 Tons Certified A-Frame SWL Carbon fiber/Steel
Gondola for KM240 Multi beam system.
2x Side mounted Sonar Poles
2x Outrigger Pole for magnetom/side scan.
Plankton Net
Hydrographic Winch
26 unit Computer rack
13x 17" Fujitsu monitors,
2x 22" Dell monitors
3x Large CPU

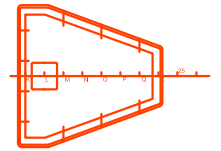
On open decks spaces:

4-person observation platform in mast
12-person open observation deck
20-person sheltered observation deck
Forward open deck
Open deck bar aft
Fish cleaning station
Fishrod lockers
Skeet/Clay shooting machine
Gas fired grill
Gas fired crab cooker
Electrical distillery

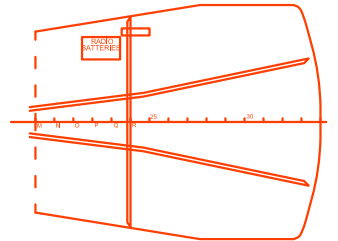
HYDROGRAPHIC RESEARCH VESSEL



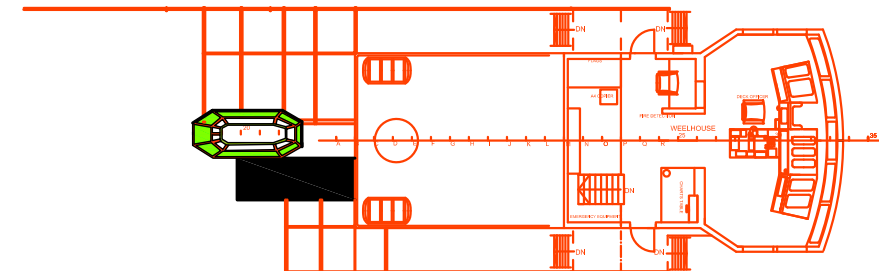
OUTBOARD PROFILE



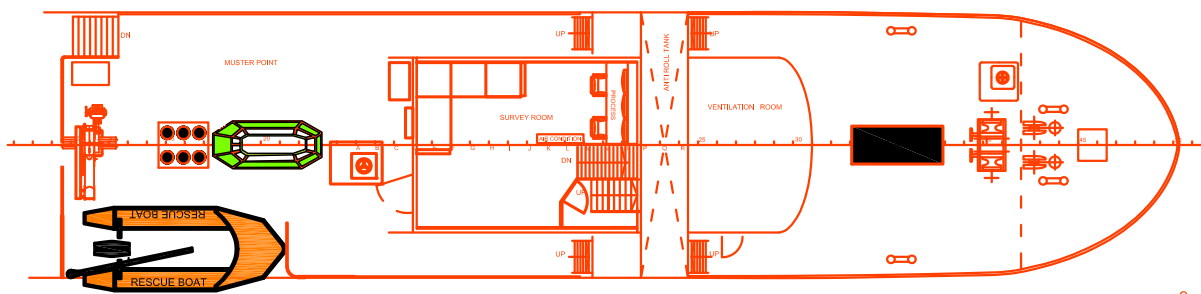
LOWER PLATFORM IN MAST



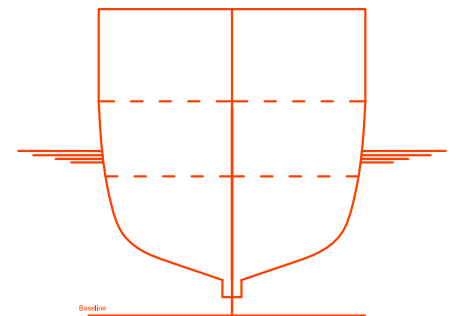
TOP OF WHEELHOUSE



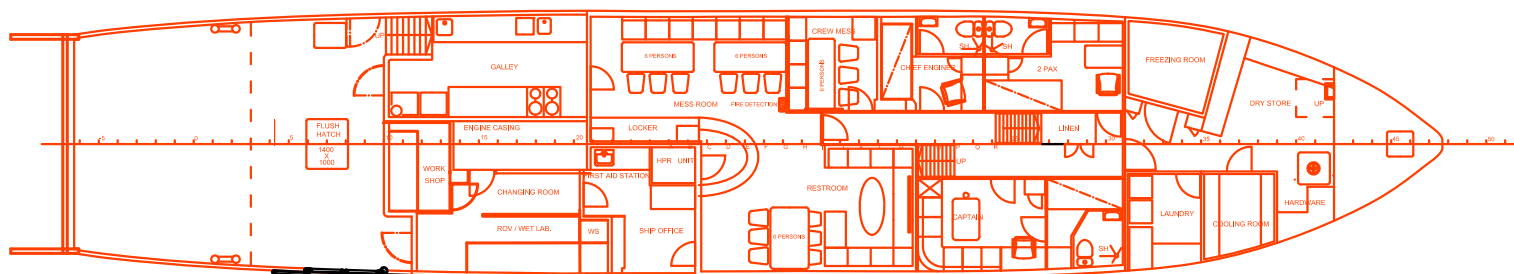
WHEELHOUSE



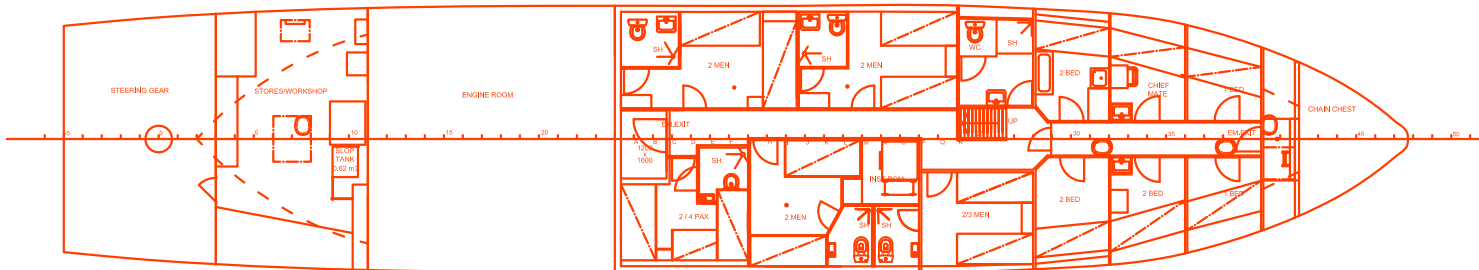
2nd DECK



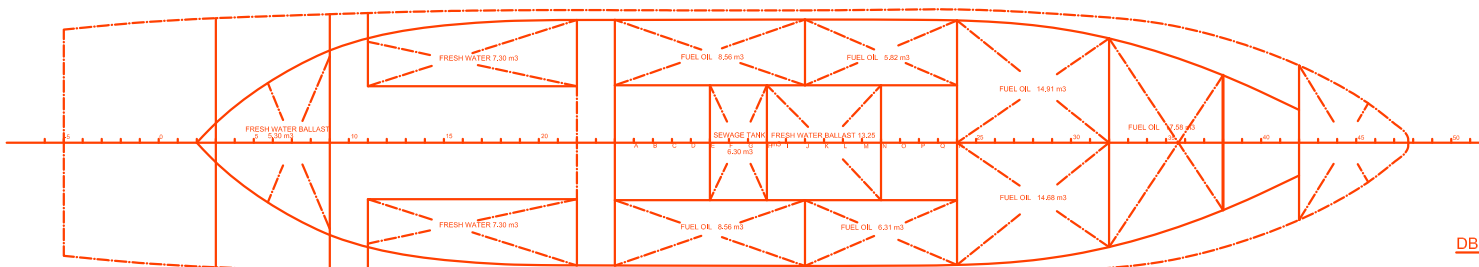
FRAME J



1st DECK



TANKTOP



DB ARRANGEMENT

PRINCIPAL PARTICULARS

IMO NUMBER 8423909	
LENGTH OVER ALL	37.25 m
LENGTH BETW PERP.	31.75 m
BREADTH	7.016 m
DEPTH TO 1.st DECK	4.30 m
DRAUGHT SUMMER	3.85 m

SCALE	Fit to paper
	DATE
	13.06.2017
	JPP