



UNIVERSITY OF
GOTHENBURG

RV Skagerak: Designed for world-class research and education



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- 1. Capabilities and Facilities**
- 2. Management**
- 3. Operations and looking forward**

Capabilities and Facilities



Length: 49.1m
Width: 11m
Max. draft: 4.13m
Freeboard, working deck:
2.1m

A special Purpose Ship,
ice-strengthened with
Polar Ship certification

Dynamic positioning
system for enhanced
stability

Current capacity of 35
(incl. 6-7 crew and 1
technician)



Laboratories:

- Atmosphere Laboratory, 11m²
- Wet Laboratory, 9m²
- Dry Laboratory, 13m²
- Main laboratory, 29m²

Other spaces:

Hangar, 38m²

CTD room, 9m²; workplaces for control of LARS & CTD winch

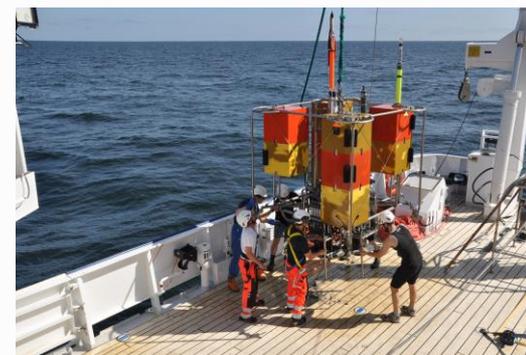
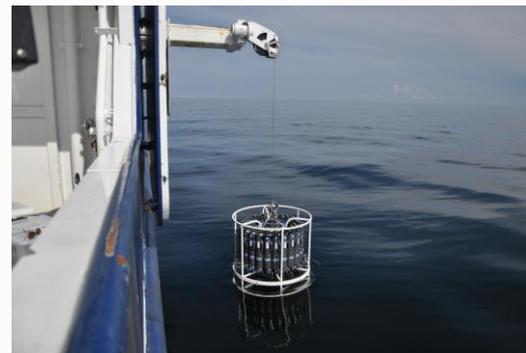
Free working space, aft deck: approx. 110 m²

Overnight capacity of 22 (14 with 6 crew; 12 with 7 crew)



State-of-the-art facilities and capabilities

System	Equipment	Parameters
Ferrybox Jena engineering -4H-	SBE38	Temperature
	SBE45	Salinity
	Cyclops-7	Fluorescence (phycocyanine)
	Wetlabs FLNTU	Fluorescence (chlorophyll-a)
	Aanderaa Oxygen Optode 4835	Oxygen
Weather station	Observator OMC-160	Wind speed/direction
	Observator OMC-506	Air pressure
	Observator OMC-406	Temperature/Humidity
	Kipp & Zonen PQS 1	Photosyn Active Radiation
	Kipp & Zonen CMP11	Pyranometer
ADCP	Ocean Surveyor 75 kHz (2008)	Currents
CTD	Seabird911 with 24 bottle rosette	
	SB3	Temperature
	SB4	Salinity
	SBE43	Oxygen
	Wetlabs FLNTURT	Fluorescence
	Wetlabs FLNTURT	Turbidity
Echos sounders	Kongsberg EM2040-07	Echo sounder multibeam
	Kongsberg TOPAS PS40	Echo sounder subbottom
Acoustic positioning system	Kongsberg HIPAP 501	

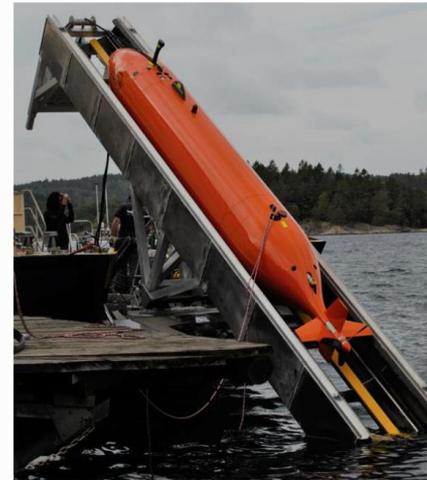


Onboard data archiving and visualisation system "TECHSAS" connected to all onboard systems

Kongsberg Hugin AUV - Ran

Equipped with:

- Multibeam echo sounder, Kongsberg EM2040
- Conductivity, temperature and depth sensor (CTD), dual systems SeaBird 911 19plusv2
- Oxygen sensor, SeaBird SBE43 (dual system)
- Carbon dioxide sensor, Contros HydroC
- Nitrate sensor, SeaBird Deep SUNA
- Chlorophyll/turbidity sensor, SeaBird WetLabs ECOtriplet (FLBBBCD)
- Side scan sonar (= acoustic "camera"), EdgeTech 2205.
- Bottom-penetrating sonar





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RV Skagerak

RV Skagerak is a Special Purpose Ship, designed to support multidisciplinary coastal and oceanographic research, education and surveys



Technical Specifications

General

Vessel Name:	R/V Skagerak
Owner:	University of Gothenburg
Managing Company:	Northern Offshore Services
Flag:	Sweden
Call sign:	SEYD
IMO:	9775963
MMSI:	266459000
Port of registry:	Gothenburg, Sweden
Built:	2014-2021
Builder:	Nauta Shiprepair Yard SA, Gdynia Completed at Falkvark, Sweden
Range:	Sea area A (all seas)
Classification:	Special Purpose Ship
Class notation:	Unrestricted navigation, Comf noise 3, CPS(WBT), Comf-Vib 1PK, Aut -Ums, Green Passport, BWT, OWS-ppm, CleanShip, Ice Class 1B

Dimensions

Length Overall:	49.15 m	Draft (max):	3.9 m
Length waterline:	46.44 m	Air draft:	22 m
Width:	11.25 m	Gross Tonnage:	916
Depth to maindeck:	2.1 m	Light ship weight:	916.45



Contact:

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RV Skagerak

Accommodation

Single cabins:	5 (for the crew)
Double cabins:	5
Three-person cabins:	2
Total accommodation:	21 persons (incl. crew)
Comfort cabins:	Toilet, shower, air con
Vessel Facilities:	Dayroom, mess, internet, TV

Machinery/Propulsion/Electricity/DP

Propulsion:	Diesel Electric, Main engine: Nidec 1120 kW
Generator sets:	4 x Volvo Penta D16, 420 kW
Stem Thrusters:	Pending installation August 2022
Bow Thrusters:	Brunvoll 250 kW
Dynamic Positioning:	Pending thruster installation August 2022

Survey (equipment)

Multibeam:	Kongsberg EM 2040 0.4x0.7 degree dual RX/single swath, 200/300/ 400 kHz with EM16 Hull Unit
Subbottom:	Topas PS40
USBL positioning:	Kongsberg HIPAP 501, manual gate valve
Gyro/Motion reference:	Kongsberg MRU 5+ (SeaPath 330+)
Current Profiler:	RDI, Ocean Surveyor 150/600 kHz
Ferrybox:	Jens engineering -dH-, Salinity, Temperature, oxygen, fluorescence (phycocyanine and chlorophyll-a)
CTD:	Sea-Bird, SBE911 and SBE 32, 24 bottles incl. turbidity, fluorescence, oxygen and PAR

Navigation equipment

Sperry bridge	2 x VHF Sailor 6248
2 x ECDIS, Vision master	2 x VHF Sailor 6222
X-band radar, Vision master	MF/HF Sailor 6301
S-band radar, Vision master	3 x VHF Sailor SP3520 (Portable)
2 x DGNSS/DGPS, SAAB	Navtex Furuno NX-700
LRTI, Inmarsat C	2 x Inmarsat Mini C Sailor 6006
AIS, SAAB	EPIRB Tron 60s
VDR	EPIRB Tron 40s MK11
BAMS	EPIRB Tron 40 VDR
BNWAS	2 x SART Tron 20
CCTV	AT WORKING DECK CRANE
Sound Reception System	
Speed log	
2 x Gyro compass	
Echo sounder	
2 x Anemometer	

GMDSS A3

Multifunctional work deck

Deck space:	132.64 m ² , executed with container fittings in different configurations
Hanger:	38.3 m ²
A-Frame:	Moveable, Reach 7 m, 8 tonnes
Deck crane:	Triplex KN10, max 10m SWL 2000kg / 6m SWL 4000kg
Provided power:	Power outlets for 400 V 125 A (for ROV), 400 V 32 A and 230 V 16 A (on deck and in hanger), 230 V 10 A in laboratories

Oceanographic winch:	2000 m (12 mm) wire with fiber- optic and electric cable, 4 tonnes
CTD/ROV-winch	4000 m (8.3 mm) fiber-optic and electric cable, 4 tonnes
Plankton winch:	1000 m (6 mm) galvanized wire
2 x general purpose winches:	2 x 2000 m (16 mm) galvanized wire
Telescop boom:	Triplex, max 3.8 m SWL, 3000 kg

Capacities

Speed:	Service speed 11.5 knots, max. speed approx. 14 knots
Time at sea:	Up to 3 weeks, normally 2-5 days
Crew:	5-7 persons depending on length and purpose of expedition
Fuel:	93.8 m ³
Freshwater:	46 m ³ , as well as possibility to produce freshwater on board
Sewage sludge:	30 m ³
Sewage holding tank:	75 m ³

Communication/Connectivity

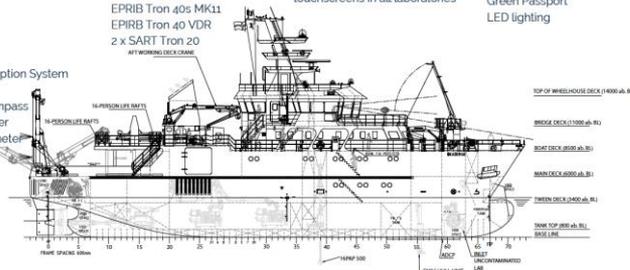
VSAT
Inmarsat Fleet Broadband
Iridium
LTE (4G)
Wifi

Additional facilities

Ifrermer shipboard software on
touchscreens in all laboratories

Sustainable features

Diesel Electric propulsion
Green Passport
LED lighting

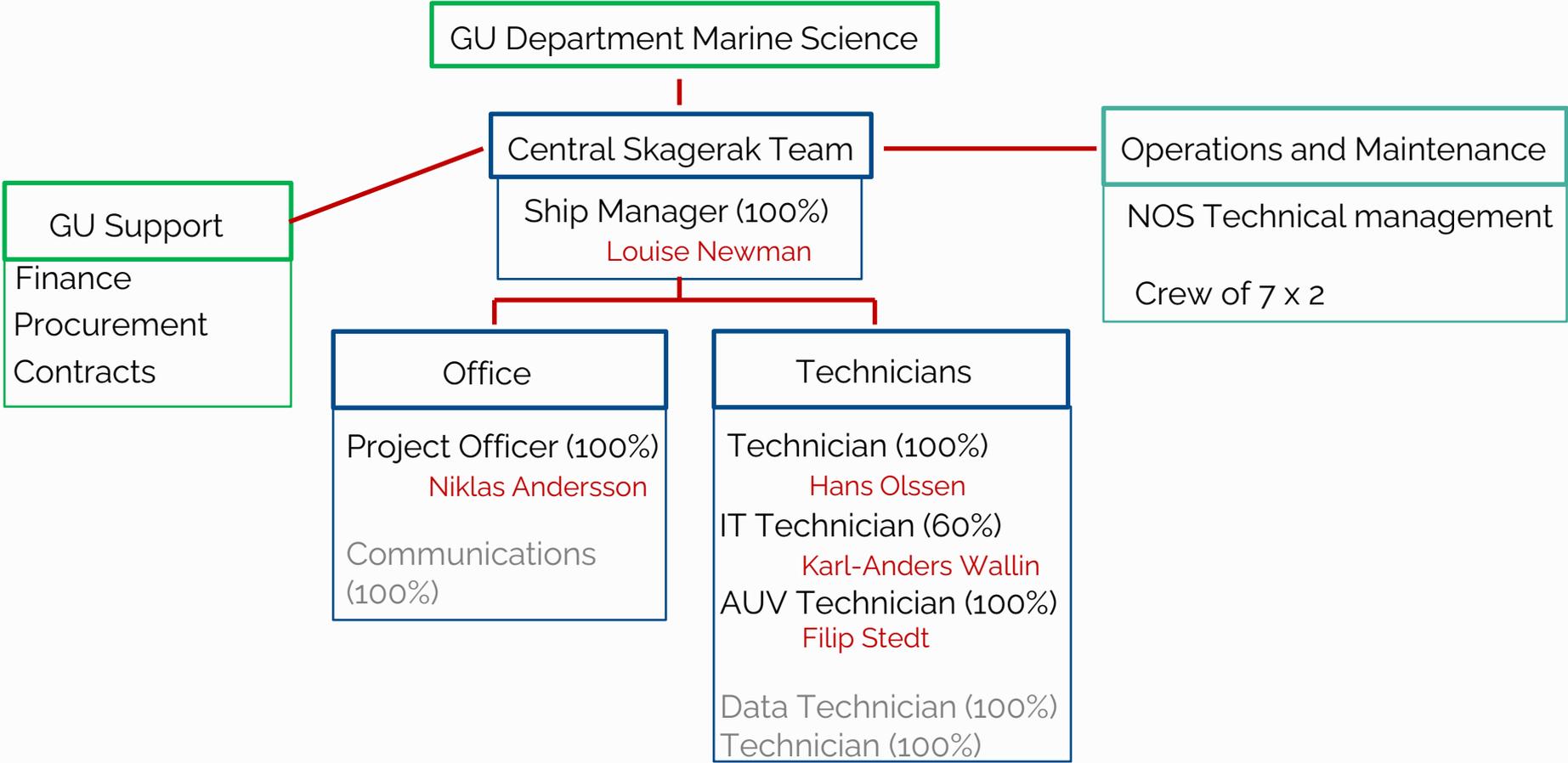


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Management



Skagerak Management



Booking, scheduling and scientific inventory management

Welcome to Marine Facilities Planning

This website allows Scientists to apply to use marine facilities from the NERC, NIOZ, GEOMAR and CSIC.

Enter the system

Email

Password

Forgot Password

Login



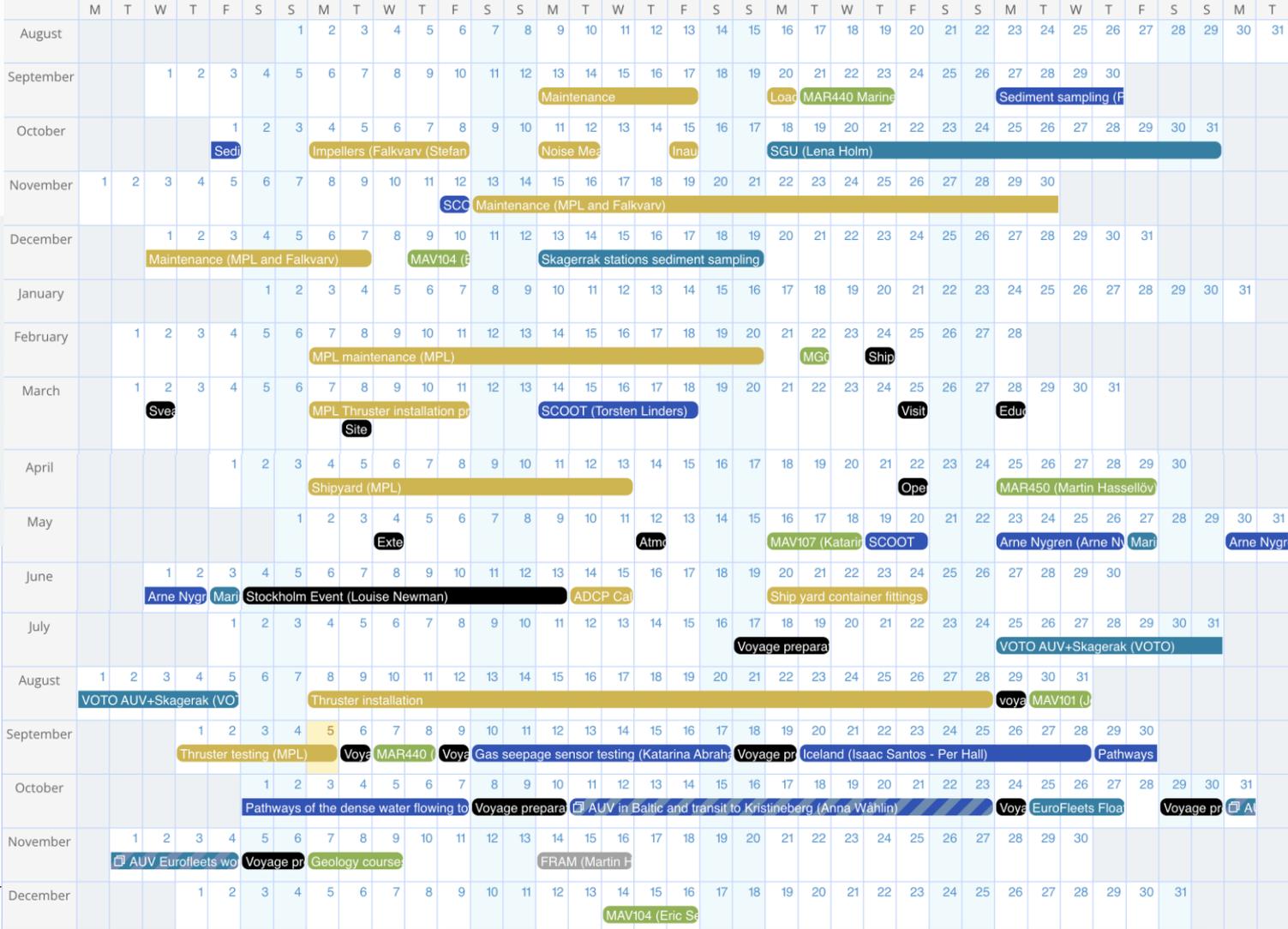
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Operations and Looking Forward





Calendars

- AUV
- External User Schedule
- GU Research
- GU Teaching
- Maintenance
- Not available
- Proposed

24 GU Education
 63 GU Research
 43 External
 18 AUV
 101 maintenance days

Looking forward – the year(s) ahead for Skagerak

Vision:

To develop Skagerak as a national- and world-leading research infrastructure that supports cutting-edge science and education, and delivers data and knowledge for global societal benefit

- Implementation of the Marine Facilities Planning booking, scheduling and equipment inventory modules
- Development and implementation of a data management strategy, aligned with the FAIR data principals that will ensure delivery of quality controlled data to international data repositories (e.g, COPERNICUS and EMODnet)
- Development of a strong user-base (nationally (Sweden) and internationally)
- Maintenance and growth of scientific capacity (expertise and equipment)



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More Information:

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