



ATLAS

MICRO RESEARCH PLATFORM



A FIELD PLATFORM FOR ARCTIC RESEARCH

ATLAS EXPEDITIONS offers its partner sailboat the ATLAS a unit specially designed, equipped and thought as a microplatform for exploration, research and documentation at the service of specialists.



General information, **Roman Hapka, president: +41 (0)79 601 76 64**

Technical information, route planning and media inquiries, **Arnaud Conne, skipper: +41(0)76 679 55 30**

Submissions by email: **info@atlasexpeditions.org**

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ATLAS

The ATLAS is a unique vessel, built to the highest standards of the Dutch shipbuilding industry. Its construction specifications are particularly well suited to the demanding working conditions of the Arctic regions.

The main benefit of this unit is the sense of safety it provides, the shelter offered by the pilothouse and its ability to operate comfortably both on open seas and inshore, between the islets and across the arctic fjords.

The crew and researchers share common and multifunctional spaces spread over several floors.

With a 360° view over the ocean and a central location, the pilothouse is the main steering and watch position. It houses the navigation instruments, hydraulic control panels, a dedicated data workstation, a comfortable chair and a bunk. The pilothouse's roof also offers an interesting observation post in settled conditions.

The deck is solid, clear, antislip and secured by a high continuous stainless steel railing. The cockpit (*aft*) also feels very safe and offers good shelter from wind and spray.

The engine hold and on-board systems are located in the center of the boat (*under the pilothouse*), while the aft compartment is entirely dedicated to storage.

A few steps down from the pilothouse, a galley (*kitchen*) leads to the saloon, which is a space for work and socializing during the day, converting to a comfortable resting place at night.

At anchor, the crackling of a fire in the wood stove, after a long day in the field, makes it feel like a cosy mountain hut!

The forward cabin is defended by a solid watertight door and offers a toilet space, a second sink with hot water, the medicine cabinet, clothing storage and two additional bunks in a Breton bed.

Each crew member is assigned his or her own personal storage space and finds the bunk that suits them best.

Participation, flexibility, respect of the essential life (*cooking, hygiene, sleep*) and security routines are expected from everyone. As in a space station, organization, good mood and pro-activity are key factors for a mission's success!

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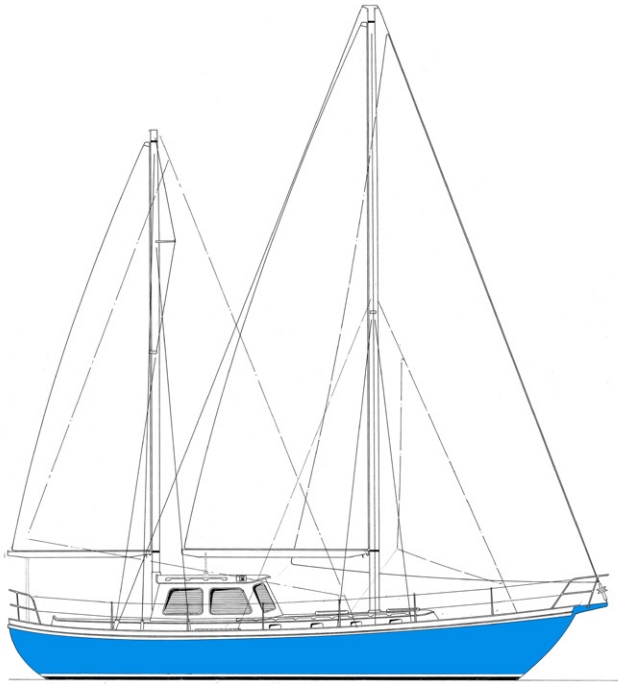
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OFFICIAL DATA

Vessel ID	ATLAS
Flag	Switzerland
Home port	Basilea - CH
Register n°	06217
Call Sign	HBY 4987
MMSI	269 109 120
Engine type / n°	Volvo MD50A / 05223467
Insurances	Allianz - Murette AG CCS, 3000 Bern 6, Schweiz Ref. 57.59'499 / 02524 - Zone C, D, Arctic waters RC: CHF 8 Mio. Passengers: 6
Skipper	Arnaud Conne
Licence type / n°	ICC - Offshore / C-19843-1
Radio certification / n°	LRC - Long Range Certificate / 912832



SPECIFICATIONS

Architect / design n°	Dick Koopmans / 228
Vessel type	Sailing vessel - Long keel, heavy displacement pilothouse ketch
Class / capability	Class A / Offshore and arctic waters
Material (hull)	Steel 7, 6 mm (<i>to the waterline</i>) and 5 mm (<i>topsides</i>)
Material (deck & superstructure)	Stainless steel 4 mm
Displacement	19 t
Engine	6 cylinder - 75 Hp - Volvo MD50A
Propeller	Fixed 3 bladed, Ø 72cm Spare 4 bladed, Ø 50cm Inline propeller shaft Ø 50 mm
Fuel capacity / Range	600 L + 50 L / 700 nm
Consumption	4.2 L/h @ 6.0 kn / 1200 rpm
Speed (<i>motoring</i>)	Cruising 6.2 kn - Idle 2.8 kn - Full throttle 8.5 kn
Speed (<i>sailing</i>)	Max 7.2 kn, average 5.5 kn
Length	12.7 m - 43 ft
Beam	3.8 m - 12.5 ft
Draft	1.9 m - 6.3 ft
Sail surface (<i>upwind</i>)	75 m ²
N° of masts	2



COMMUNICATION / NAVIGATION / SAFETY

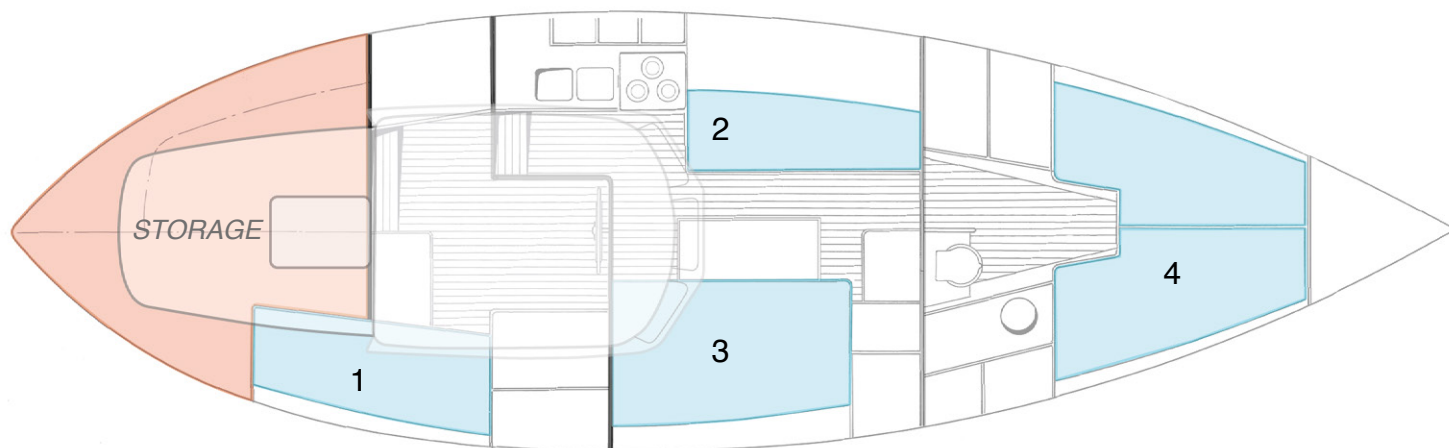
VHF	1 fixed, 2 handheld ASN
Satellite communications	Iridium GO (<i>Weather, oceanographic, ice forecasts, phone, data, email</i>) Garmin InReach (<i>Backup GPS positioning, PLB</i>)
GPS	Fixed multi-constellation antennas, multiple backup devices
Chart plotter	Lenovo X1 / OpenCPN / Navionics
AIS	Class B AIS transponder
RADAR	Raytheon R40X
EPIRB	OCEAN SIGNAL RESCUE ME - 269109120
Lifejackets	6 x 275N SECUMAR SCOUT + Life lines
Liferaft	ARIMAR Offshore 6 persons
Flares	SOLAS standards
Watertight compartments	4 steel wall separated compartments, watertight bow cabin
Bilge pumps	High flow hydraulic pump, engine driven, manual override 4 dedicated pumping points in: bow, saloon, engine room and stern.



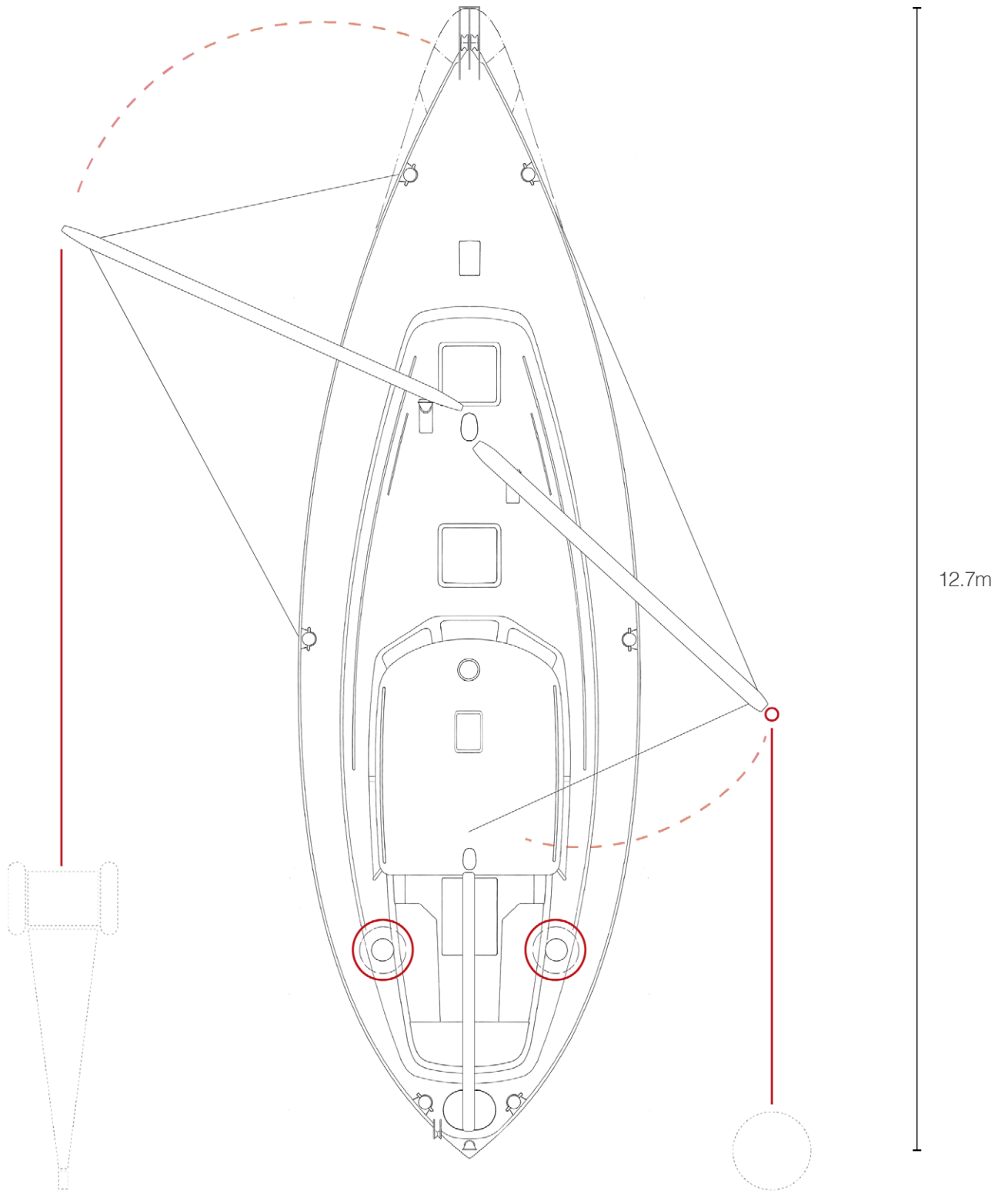


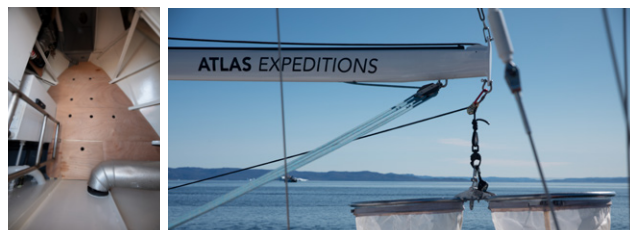
ACCOMODATION

Capacity	Max 5 p. total overnight in remote areas incl. captain and 1 st mate.
Berths	Single berth « <i>Lobster Cave</i> » in the pilothouse ¹ Single berth « <i>Watchman</i> » in the saloon ² Double berth « <i>Fireplace</i> » in the saloon ³ Double berth « <i>Bretagne</i> » in the bow cabin ⁴
Private cabin	No
Galley (<i>kitchen</i>)	Pressurised fresh water, hot water, sea water pump, sink, fridge (60L), 3 burner propane stove, oven
Shower	Hot shower on deck (<i>Even in the arctic regions it is a pleasure!</i>)
Head / toilet	1 in bow cabin
Heater	Diesel heater (8kW) - 5 radiators
Wood stove	Wood or coal stove (4kW) in the saloon
Hot water	Yes, from engine and central heating
Fresh water	500L in two stainless steel tanks
Fresh water production	ECHOTECH Desalinator / 50L per hour



DEPLOYMENT / TOWING / LIFTING





OPERATIONAL DATA

Service power	11kW service battery bank (460Ah 24V) 24V, 12V, 5V (usb) DC network 230V/1200W AC power inverter (EURO standard plugs)
Service power supply	2 dedicated engine alternators, wind generator, solar panels
Workstations	1 Dedicated workstation for data collection in the pilothouse (standing) 1 Lenovo X1 laptop (navigation, chart & weather analysis) 2 Lenovo 24V to USBC 65W power adapters Fixed server (Apple) for secure extensive data storage and backups
Tools	Comprehensive workshop toolset and spare parts onboard
Deployment poles	1 heavy duty + 1 light spinnaker pole
Deployment lines	1x120m 9mm nylon
Lifting	Main boom as crane for heavy gear (~200kg static)
Hydraulic power	Engine driven LINDE MPR 43 hydraulic pump
Hydraulic winches	2 x LEMAR 56 ST Hydraulic or manual operation Suitable for operation of any textile line from Ø 9-14mm
Sea water deck pump	High flow sea water pump - deck fittings for fire or cleaning hoses
Freshwater deck pump	To rinse equipments, shower. Hot water available.
Anchor	75m - Ø 10mm stainless steel chain 35kg Bruce (main), 35kg Stock anchor (spare), 15kg Stern anchor
Anchor winch	Vertical hydraulic - Deck or pilothouse operated
Mooring lines	4x16m 20mm nylon 1x100m 20mm nylon (towing line) 2x110m 16mm polypropylene (floating line)
Tender (zodiac)	3D Tender XPro 320 3.2m Tubes Ø 42cm Flat aluminum floor, 8Hp outbord engine (3.5Hp spare) Load capacity 600kg (incl. crew) Max speed 14kn Range 5nm
Air compressor	Bauer Junior II - Breathing air conforming to DIN EN 12021
Air cylinders	2x15L - 2x6L 230 bar
Storage	Stern locker 1m³/~300kg (non insulated, average sea temperature) 2 aluminium cases 830x490x490mm ~200kg (on deck)



The Atlas in Nordre Sermilik fjord, S.W. Greenland © Richard Mardens - Expedition Glacialis 2021

ATLAS EXPEDITIONS

- > a swiss non-profit organisation
- > supports scientific research, data collection and documentation
- > projects developed in partnership with local institutions and communities
- > production of media to raise awareness about Arctic environmental and social matters
- > logistical support and field technical assistance



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