Laboratories, offices, rooms

Crows nest and mast

- Air intake for pCO2 Monitoring System General Oceanics
- Magnetometer System (Magnetics)
- Panoramic Infrared Camera First Navy
- IR camera FLIR M400
- IR camera FLIR MD625
- Nautical X-band radar antenna (starboard side) for Ice radar (sigma S6) ;
- Scientific X-band radar antenna (port side) for Wave Radar System (WaMoSII) (wave and ice functionality)
- PanoMax 360° panoramic camera
- Mounting of several meteorological instruments
- Antennas for Radio-LAN (during MOSAiC)
- Antennas of Iridium system

Monkey deck / Bridge deck / P-Deck

- Mounting of several nautical radio systems
- Mountig of several meteorologica instruments; GPS antennas;
- Antenna for permanent data and communication line (leased line not applicable north or south of ca. +-71° latitude)

Deck A

- A-121 Bridge:
  Nautical operations:
  Helicopter flight control;
  Entrance to crows nest;
  (Slave) operation of Multibeam Echo Sounder Hydrosweep DS3; Operation of Fishnet Echo Sounders ; Trimble GPS Receivers ; Whale watching acquisition laptop; Operation of Underwater Positioning Systems ;
- A-113: Scientific working room.
  Operation of Fishing Echo Sounder (Simrad EK 80 with ADCP) ; Operation of Panoramic Infrared Camera First Navy ; Electronics for CCTV;
  Patch field for electric interface to other labs (winch room, aerologie-lab)
- A-112: Aerologie lab.
  Water Vapour Isotopes Analyzer ; Neutron Monitor ; Radiosondes Sounding System ; Operation of GPS Wave Buoy; Operation of Distrometer.
  Operation of Cloud Camera ;
  X-Band radar operation (for WaMoSII) - operation of WaMoSII system (wave and ice);
  Patch field for electric interface to other labs (A-113, winch room)
- A-106 Weather Station (Bordwetterwarte): Operation of all meteorologic devices
- Observation alley: Myon Detector ;
- A-107 Radio office: Operation of all communication systems (despite of bridge systems)
- A-111 Pantry and telephone room (Iridium telephone set)

outside:

- 2x Zodiac; Gangways; Mummy chair
- 10' Dangerous goods container (DG class 8)

Deck B

- "Blue Saloon" - Library
- B-241 Ship's office
- B-206 Helicopter office
- B-222 Chief scientist office

Deck C

- Helicopter hangar and helicopter landing zone
- Ballon filling room, balloon store and helium store (outside)
- Hospital
- Lecture room: Audio and video installation for presentations; MS Surface HUB
- Mess room II
- Red saloon
- Assembly point (see Ship safety instructions)

Deck D

- Winch control room: Operation station for winches and side bar cranes; Operation of winch measurement and control facility;
  Electric and phaser optic interface (patch field) to winch cables; Electric interface to other labs (A-113, aerologie-lab);
  Deck unit and control PC for CTD Probe with Carousel Water Sampler ;
  Deck units for COAX and phaser optic telemetry systems;

(Slave) operation of Multibeam Echo Sounder (Hydrosweep DS3) ; (Slave) operation of Sediment Echo Sounder (Parasound P70) ; (Slave) operation of Fishing Echo Sounder (Simrad EK 80 with ADCP) ;
- Winch control fore room: A4 printer
- Backward winch control room (i.a. A-Frame)
- Laundry
- Galley
- Mess room I and bar "Zillertal"
- Souvenir Shop
- Compressor room
- Entrance to carpenter workshop and suitcase store
- Petrol store
- Dangerous goods store (DG class 2)
- Dangerous goods stores (DG class 8 and 9)
- Dangerous goods stores - outside cabins on foredeck (DG class 4 and 5)
- Foredeck with capacity for 12x 20' container (in 1st layer)

Deck E

- Cargo room 1: space for 10x 20' containers
- Science store: Generator and dewars for Liquid Nitrogen ; Gas bottles with reference gases for pCO2 devices; Moonpool device carriers; hydroacoustic underwater positioning systems; GPS Wave Buoy
- E-525A - Electronics for hydroacoustic systems:
  Multibeam Echo Sounder (Hydrosweep DS3); Sediment Echo Sounder (Parasound P70) ; Underwater positioning systems Ixblue POSIDONIA and Ixblue GAPS ; SyncUnit .
- E-550 - Hydroacoustic office:
  Operation of: hydroacoustic systems: Multibeam Echo Sounder (Hydrosweep DS3) ; Sediment Echo Sounder (Parasound P70) ; Fishing Echo Sounder (Simrad EK 80 with ADCP) ; Acoustic Doppler Current Profiler (ADCP); SyncUnit ; additionally 2 PC workplaces for bathymetry.(with Sound Velocity Probe (MIDAS SVP) interface)
- E-554 User room: equpped with several computers with Microsoft Windows and Apple; A3 printer; PCs with Internet connectivity.
- E-558 System manager room: Operation and control of nearly all IT infrastructure
- E-533 Server room: All servers and network devices; A0 plotter
- Wet lab I: 2x Fume hood; Connectivity to sea water; incubator; patch field for electric interface to other labs (winch room, aerologie-lab, A-113);
- Wet lab II: -80° freezer (500 liter capacity); Crush ice generator; combined GPS/Iridium transmitter to receive satellite data inside this lab. Millipore pure water systems (type 2 and type 1);
- Chemical lab: Millipore pure water systems (type 2 and type 1); Fume hood; freezer
- E-536 Dry lab I; E-534 Dry Lab II; E-532 Dry lab III; E-530 Dry lab IV - Bord/wall between dry labs can be removed
- E-526/528 Measure and record room.
- E-546 Dark room (formerly for photo development)
- E-523 Dangerous goods store (DG classes 6 and 8)
- E-523-A Salinometer room: 2x Optimare Precision Salinometer (OPS) ; storage of Sound Velocity Probe (MIDAS SVP)
- E-521 Telephone office
- E-519 Porter's office / telephone booth (Iridium telephone set)
- Moonpool room
- E-506 Pulser station
- Friction room: friction winch GE51.1/GE51.2; Winches GE72.1, FN62.1 and FN62.2;
- CTD station
- Working corridor: Waste station
- Working deck: Deck winches (EL031, SE32.1; SE32.2; AWI-004 (or alternatively EL030), net winch, mooring winch and horizontal capstan);
  Operation of devices lift up with 5t and 20t side bars;
  Place for 4 containers (+4 in second layer);
  Rear stern ramp;
  Storage and mount point for ice gangway
- Decks work shop

Deck F

- Rear container room: Store for radio active materials (DG class 7) ; Millipore pure water systems (type 2 and type 1);
  (Space for one or two temporarily installed deep freezers);
  Height of the room is limited so only containers with height of 8' can be stored.
  - Isotope Container: Equipped as laboratory with Szintillation Counter
  - 4x Bio laboratory container: Equpped as temerature regulated laboratory; taps for seawater, warm and cold freshwater.
- Fish room: Cold water generator with UV lamp
- F-602 Fish laboratory
- F-606/F-608/F-610 Freezing rooms: First one typically cooled to +5°, second to 0° and third to -20°.
- F-624 Winch room: Winches GE6352.1 and GE6352.2
- F-632 Gravimeter room: Marine Gravitymeter System (KSS32) ; Standby of LaCoste Romberg relative Gravity Meter; Motion Sensors (Hydrins 1 and Hydrins 2) ; Dual Axis Doppler Log (DO-Log) Electronic, Anschütz Gyrocompass
- F-621 Entrance to box keel
- Shops
- F-650 Swimming pool, gym room, sauna
- Fore container room: Capacity for 6 containers

Deck G

- Engine Control Room
- G-707: 4H-Jena Ferrybox ; pCO2 Monitoring System General Oceanics ; pCO2 Monitoring System OceanPack SAE (SubCtech)
  Water regulation infrastructure for these oceanographic systems

- G-711 Public laundry
- Staircase: Membrane pump and rotation pump for seawater supply (network 3); intake for seawater pipe cleaning liquid
- Intake for seawater network (6);

Deck H

- Bow cross propeller tunnel room:
  Automated Filtration for Marine Microbes (AUTOFIM) and its seawater intake (network 4);
  Intake for seawater network (3)

Box keel

- Thermosalinograph (TSG): 2x SBE21 and 2x SBE38 and its seawater intake (network 5);
  Intake for seawater network (1 and 2);
  Intake for seawater pipe cleaning liquid;
- outside: C-Keel Sound Velocity Probe ;
  Transducers of nautical systems: Navigation Echo Sounder ; Electromagnetic Log (EM-Log) ; Dual Axis Doppler Log (DO-Log) ;
  Transducers of scientific systems: Multibeam Echo Sounder (Hydrosweep DS3) ; Sediment Echo Sounder (Parasound P70) ; Fishing Echo Sounder (Simrad EK 80 with ADCP) ; Acoustic Doppler Current Profiler (ADCP) ; POSIDONIA (flush antenna) ;