# German Research Vessels

POLARSTERN • SONNE • METEOR • MARIA S. MERIAN POSEIDON • ALKOR • HEINCKE • ELISABETH MANN BORGESE



#### **RV POLARSTERN**

launched: 1982 length: 118 m 25 m beam: crew/science: 44/53

- · Major overhaul of cranes and hoists
- · New ice resistant underwater paint.
- · Arctic and antarctic expeditions with supply of German
- Neumayer-Station II in Antarctic.
- Ongoing shipyard tender process for built of POLARSTERN II.



#### **RV SONNE**

launched: 2014 length: 116 m beam: 21 m

32/40 crew/science:

- C-band communication installed.
- New in-situ seawater measurement system.
- · Improvements after first three years in service: air conditioning, exhaust gas treatment, ship automation, deck lightning, rope guiding system, physical scientific data network.





## **RV METEOR**

launched: 1986 lenath: 98 m beam: 16 m crew/science: 33/30

- Parasound MK2 upgrade.
- Replacement of Posidonia USBL System.
- Hardware exchange of integrated bridge navigation system.
- Sandblast of vessel hull and overhaul of steering gear. · Reinforcement of deck substructure for MEBO 200.
- One single new research vessel is supposed to replace both RV POSEIDON and RV METEOR.





# RV MARIA S. MERIAN

launched: 2006 length: 95 m beam: 19 m crew/science: 23/23

- Installation of Sonardyne Ranger II with deployment machine.
- · Overhaul of three main engines and seismic compressors.
- Retrofit of bridge equipment: Ice Radar and NACOS System.
- A-frame upgrade for MeBo200 use.
- · Overhaul of one diesel generator. · Repairs to vent pipes and winches.





# **RV POSEIDON**

launched: 1976 61 m length: beam:

11 m 15/11 crew/science:

- Installation of CO2 System for pH value of drinking water system.
- Overhaul of diesel generators and auxiliary engine. Overhaul of steering gear, winches, and hydraulic systems.
- · Corrosion repairs.
- Decommissioning planned for 2020.One single new RV vessel is supposed to replaced oth RV POSEIDON and RV METEOR in about 2022.





## **RV HEINCKE**

launched: 1990 length: 55 m 12 m beam: 12/12

crew/science:

- Renewal of rescue boat with new davit system.
- · Major overhaul of messroom, public area, and part of cabins. · First bigger cleaning of black carbon filter.
- · New fire detection system.
- · Overhaul of main and auxiliary crane.
- · Overhaul of scientific winches with new fibre optic 11mm cable.





## **RV ALKOR**

launched: 1990 length:

beam: crew/science: · Overhaul of pumpjet and active winch control.

- · New fire detection system. Overhaul of anchor winch.
- · Renewal of circuit breakers and radar equipment.
- · Repair works at the cran lifting provisions
- 500<sup>th</sup> research cruise ALK500 of RV ALKOR in 09/2017.





### **RV ELISABETH MANN BORGESE**

launched: 1987

56 m

beam: crew/science: 11/12

- Overhaul of diesel generators.
- New  $K\alpha$ -band antenna for improved internet connection.
- Installation of scientific data monitoring system D-Ship Werum.
- · Implementation of new insitu seawater system based on self
- monitoring boxes SMB.

  Overhaul of FIN stabilisers.



12 m

11/12









