# **GERMAN RESEARCH VESSELS\***

except RVs from the Ministries of Defence (1 RV), Agriculture (3 RV), Traffic (6 RV)



#### Replacement for Polarstern is in process of planning. A shipyard tender was published January 2016.

## 16-37a 24-49 12-34 06-8ke U-W

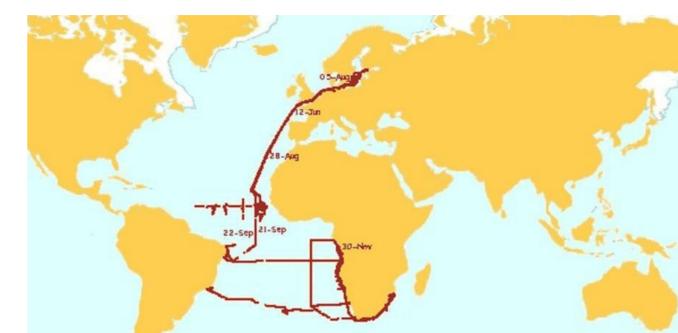
## POLARSTERN

Last 34 years for AWI, Bremerhaven

- Arctic & Antarctic expeditions
- 310 days per year

supplies German Antarctic
 Station Neumayer-Station-III





### METEOR

328 working days in 2015
In 2015 the dry dock overhaul ran without any problems.
In 2016 there was no dry dock overhaul. Neither events of special importance. At the moment minor problems with Parasound.

- Former considerations concerning the installation of new engines are no longer being pursued.
- The German government decided that one new research vessel will be built supposed to replace both, METEOR and

May 2015 – April 2016



### SONNE

The first year of operation was successfully accomplished without any notable failures.
360 working days in 2015

#### Positive:

- Good usage as multidisciplinary research vessel.
- Excellent manoeuvring and sea handling qualities.
- Concepts for hangar, laboratories, cranes, winches and deck area has proved as high function value
- Heave compensating is working well.
- Anticipated problems with the A-frame haven't materialized.
- Vessel complies with ICES 209 and runs extremely silent.

#### Negative:

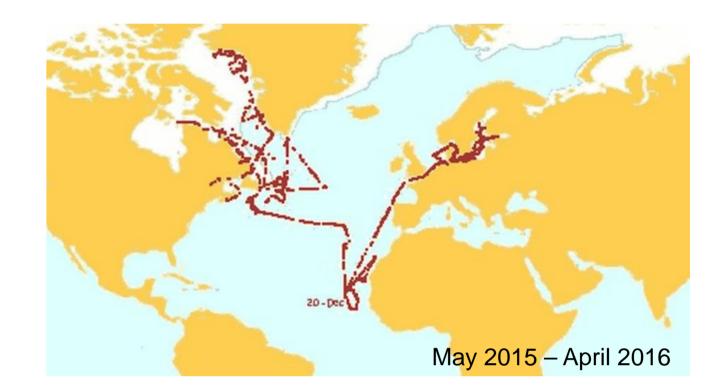
- Despite its size the storage

capacities are quite tight.Due to the complexity of the vessel



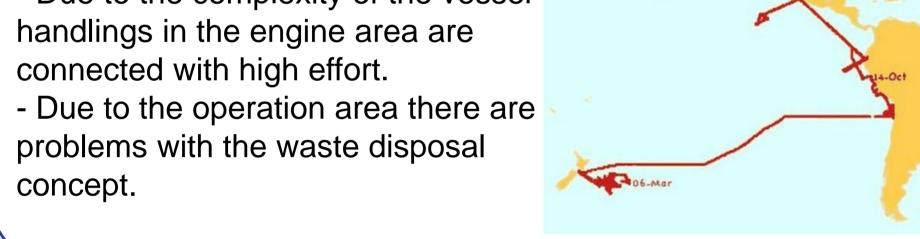


## MARIA S. MERIAN



- 267working days in 2015
- 10 years yubilee in 2016
- Persisting problems with the POD drive (inverter and pole wheel position sensor).
  Apart from that a very reliable vessel.

## POSEIDON





- 288 working days in 2015

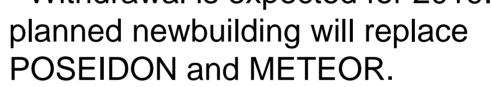
- Major dry dock overhaul including overhauls of the machine, the laboratories, the winches and the steelworks in 2015/16.

ALKOR

May 2015 – April 2016

- Problems with legionella bacteria as result of a too high cold water temperature. Howefer, approbriate action has been initiated already.

- 289 working days in 2015
- 40years yubilee in 2016
- Dry dock overhaul with extended steelwork and maintenance measures in 2015/16.
- Complete color renewal at the underwater areas (with Waterblast) in Las Palmas in March 2016.
  Withdrawal is expected for 2019. A





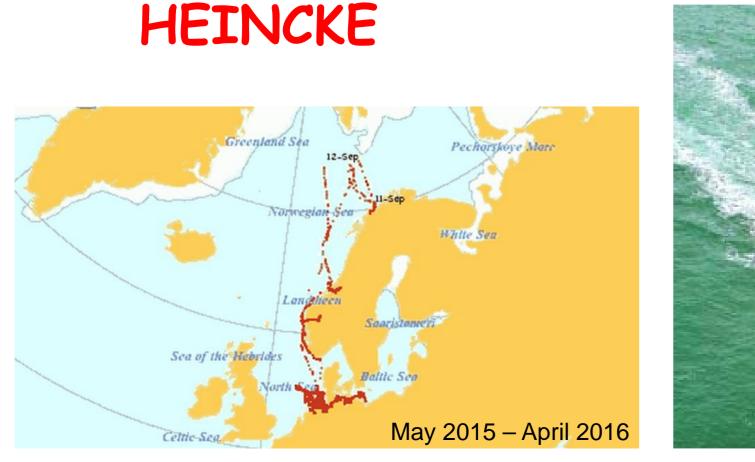


## ELISABETH MANN BORGESE



- Major dry dock overhaul including new engines and diesel exhaust aftertreatment with SCR and particle filter in 2015.

- Positive experiences after the first year of operation.
- Effectiveness might be improved by a better cooperation between engine manufacturer and service providers of diesel exhaust aftertreatment.









- Smooth operation without any failures in 2015 and 2016.
- Procurement of two mobile winches, one of which includes an active heave compensating.
- New development of an automatic pure water analysis with thermosalinograph and fluorometer.

Tina Knuth Klas Lackschewitz ERVO, 2016