Construction RV *Anna Weber-van Bosse*

27-03-25

Progress report #24: March 2025

@ResearchFleetNL

INTRODUCTION

When it is complete, the RV *Anna Weber-van Bosse* will serve as the ocean-going research vessel for the Netherlands' national research fleet. The fleet is owned and operated by the National Marine Facilities (NMF), a department of the Royal Netherlands Institute for Sea Research (NIOZ). The NMF fleet consists of three vessels capable of conducting research from the shallow coastal waters out into the open ocean. The Anna Weber-van Bosse will be built by Astilleros Armon in Vigo, Spain as hull number 147. Delivery is scheduled for late 2025.

A LOOK BACK OVER THE PAST MONTH

The shipyard is operating at full staffing levels, with an average of about 150 shipyard employees and subcontractors working on board each day. The yard can scale up and down fairly quickly, depending on the need and progress on board.

The shipyard is installing the various onboard components on board, cable ducts and piping. The cabling in the cabins and technical areas is starting to take shape. Many of the necessary power cables are in place alongside the data cables in the cable ducts leading through the cabins. Between 60 and 70 kilometres of cable have been laid so far.

We recently held a kick-off meeting with the ROV supplier to discuss engineering and deliveries, and we now have a clear idea of the impact for on-board integration. The required provisions for mounting the ROV have been communicated with the shipyard and will be integrated into the vessel's design. This also helped determine the position of the sliding door for the ROV in the bulwark.

NIOZ visited Sormec in Italy in week 11 to take delivery of some of the cranes. The factory tests were satisfactory, and the cranes that were ready were extensively functionally tested. Everything worked properly and the Somac cranes also have an attractive finish.

Management visited the shipyard in week 11 to inspect the new construction project and attend the regular meeting with Armon's management. They also inspected the model cabin on board to clarify the standards for the yard and for NIOZ. The Captain and Chief Machinist of the RV Pelagia visited the yard in week 12 to conduct an on-board inspection and to join the site team for the Somac HAZID meeting for the methanol system.

Altum is the subcontractor of Armon responsible for the HAZID studies and FMEAs for the yard. Around 13 people attended the HAZID meeting in person, and another 12 people joined in via Teams. The participants represented Bureau Veritas, the Dutch flag registry, NIOZ, Armon and various subcontractors such as the electrician and the generator supplier.

The yard has now made the ship largely wind- and watertight. Most of the portholes have been taped off, and large hatches have been installed where possible. The openings that are still present will be boarded up. We are also entering a more favourable season in terms of weather, which will cause less inconvenience on board.

The paint work is progressing steadily, and several areas have been sandblasted and painted. These are not yet the final coats of paint; only the first coats to ensure that the hull is properly covered. The cabins will receive their final finish once favourable construction is complete.

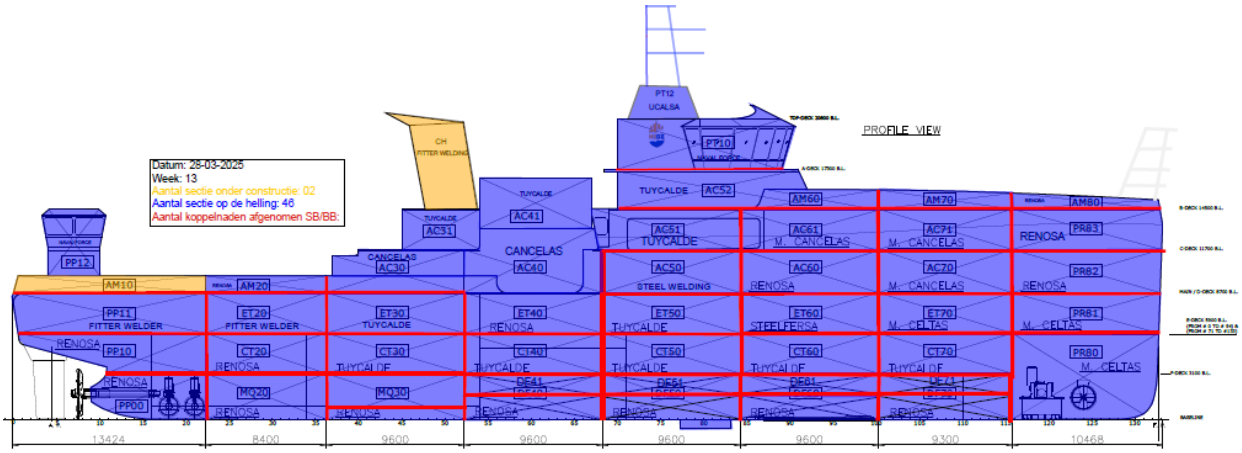
The yard is busy adding finishing items such as landings, mountings, railings, hatches and other details. This is happening at a reasonable pace. Much of the work is done in direct consultation with the site team.

We have had detailed discussions with the yard and the crew to decide which electrical connections everyone needs on the various decks. We have clarified the amps and phases needed per connection, so the shipyard can start work on the electrical system. The implementation of the shore connection has also been decided upon with the shipyard.

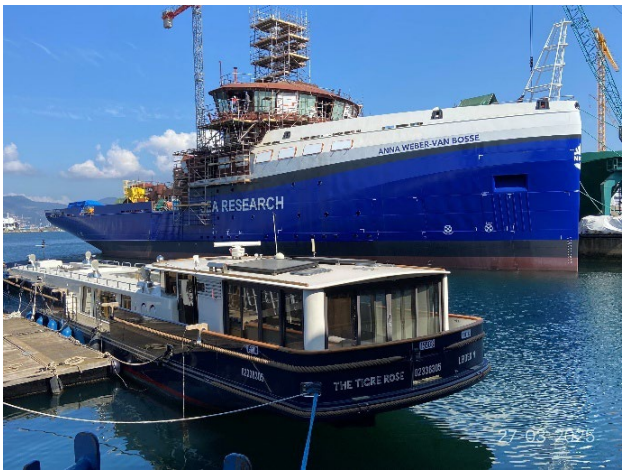
The scientific community has also reviewed the 3D blueprints of the laboratories, and their comments have been passed on to the shipyard. The layout seems to be in accordance with the NIOZ' requirements.

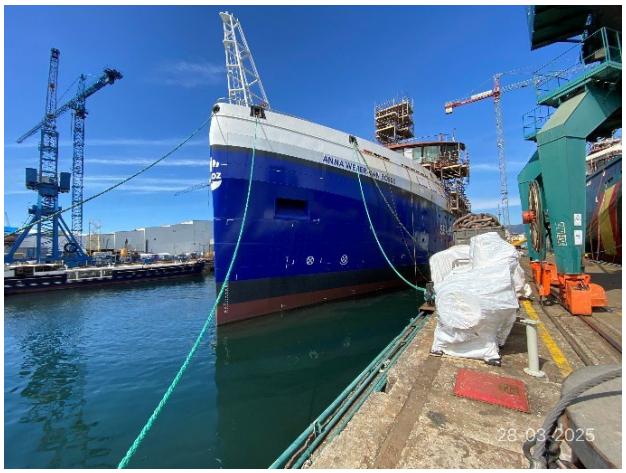
PROJECT STATUS

All of the sections have been assembled, and most have been welded together by now. Only the yellow sections still need to be added to the hull. The red lines show the welded seams between the sections that the NIOZ has inspected and approved.

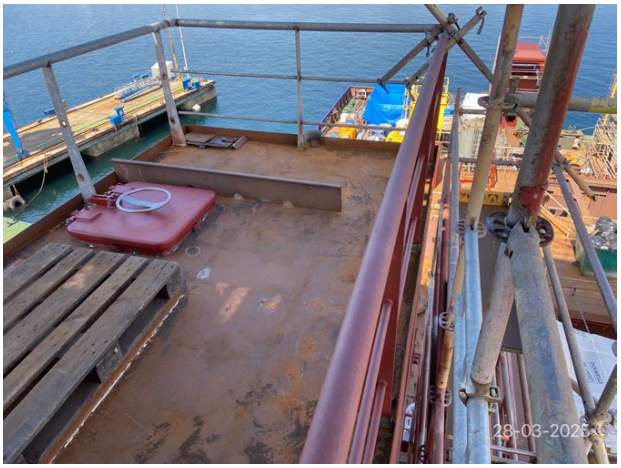


The photos below show the latest on board the ship.

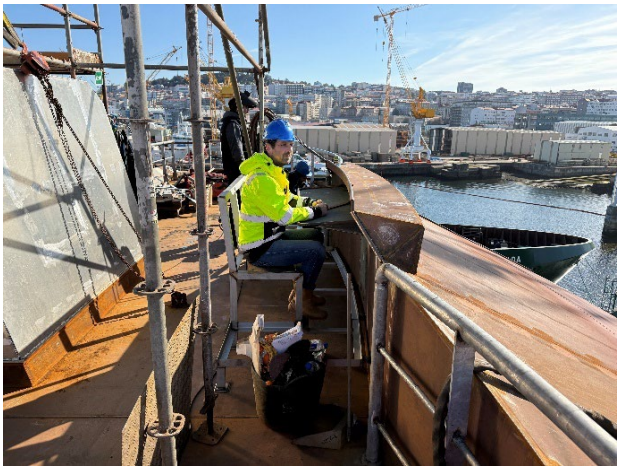




Port and starboard views



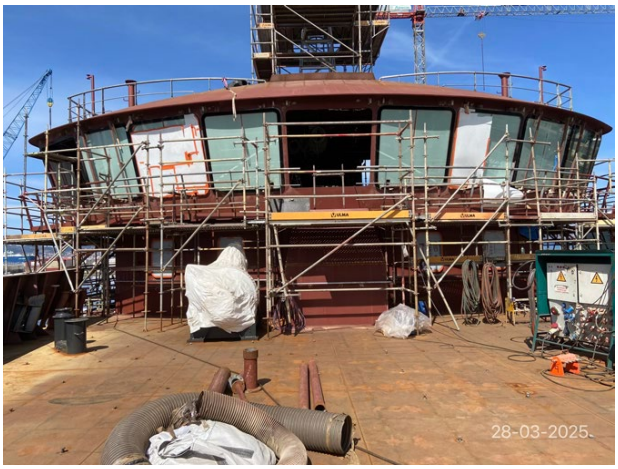
Finishing details top deck

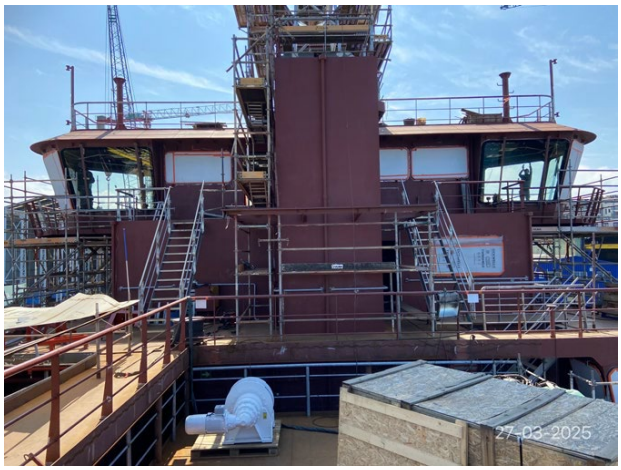


Birdwatching spot on the top deck

Switchboard room hatch

Foreship deck store finishing details





Front and rear accommodation and wheelhouse with taped-off portholes

Sliding door emergency controls

Pump starter lockers (MCC)

Emergency generator room insulation

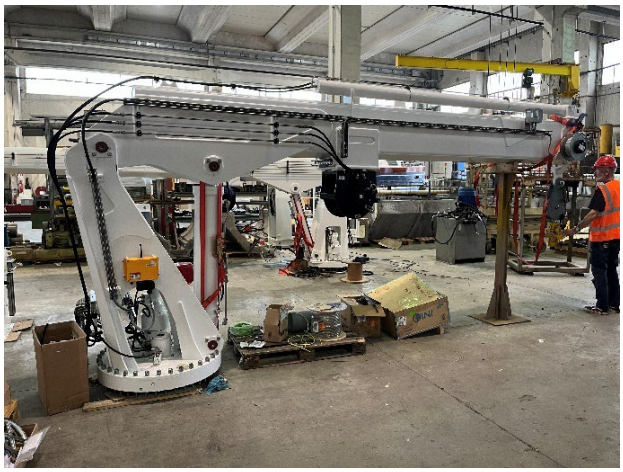
Chain locker lead for the anchor chain

Model cabin on F-deck (Science), reviewed by management

DPF and leads SCR for the generators

Alignment of rudder stock in the steering gear after casting.

Painting A-frame control stations

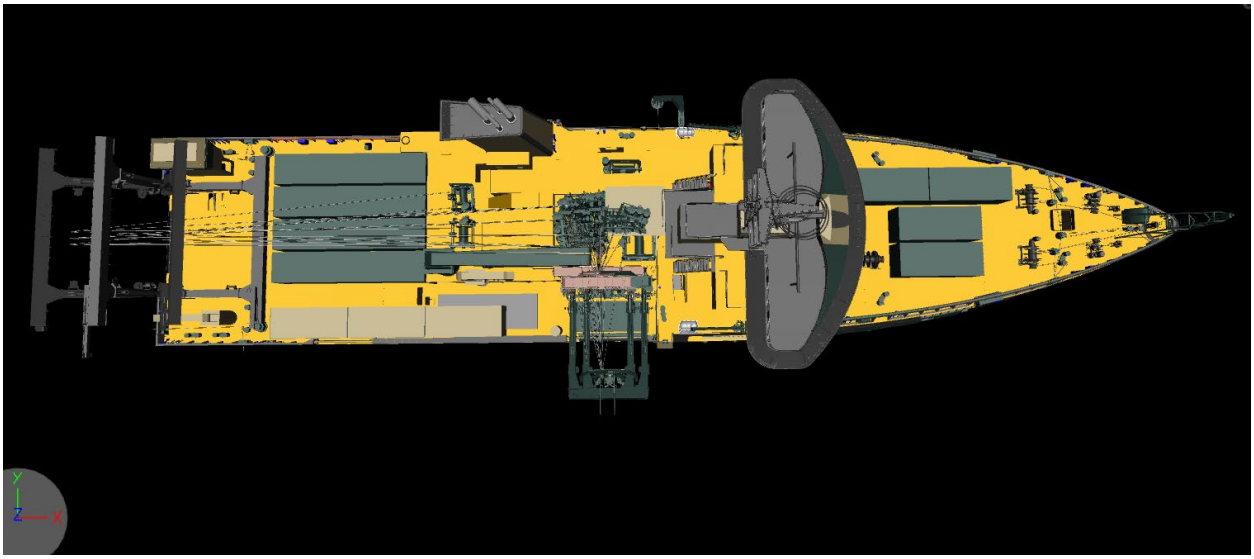
Purchase from Sormec.

The shipyard and subcontractors are hard at work finishing the hull. A team of around 150 people working on board are doing a good job. They include pipefitters, ironworkers, welders, insulators, cable layers, carpenters, etc. More pipefitters and carpenters will join the team over the next few weeks, to bring the total number of workers to 170.

A large staff of subcontractors are laying the cables, installing drainage pipes, water lines and HVAC ducts in the cabins.

The yard is doing as much sandblasting and painting as possible at the moment. All surfaces inside and outside the hull are sandblasted and given one or two coats of paint. The A-frames control station, chemical stores, wet lab, deck stores and engine room have all been painted by now.

The shipyard is in the process of installing the necessary piping. Much of the piping is cut to measure on board the vessel. Then it goes to the workshop to be welded and possibly galvanized. Plastic piping is measured on board and glued together on site.



Current status of the 3D model

SCHEDULE FOR THE MONTH AHEAD

The factory acceptance tests for the navigation system and the DP system are scheduled at Kongsberg in Norway in early April. One of the NIOZ captains will be present for these tests.

The shipyard and its subcontractors will continue finishing work on the various interior and exterior spaces. The ship will be weatherproofed with the installation of the final portholes and hatches in the outer decks. Several components still need to be installed and connected in the technical areas. The Sormec cranes also need to be installed.

The electrician will continue to install the distribution boards in the cabins and technical rooms. Several of the larger boards have already been installed over the past month, but the smaller distribution boxes will also be brought on board so they can be connected. Workers will also continue laying the cables throughout the vessel. The electrician will have to stay ahead of the carpenter's work though, so more electricians will probably be brought in to work on the cabin decks.

The carpenter will start scaling up capacity and installing the decking on several decks so that work can begin on the bulkheads.

The funnel is expected to be installed in late April/early May. All of the components for the exhaust system have been delivered, and the shipyard has already placed most of them on board.

The yard has not yet begun sealing the tanks, but that work is expected to start this month. Some of the piping and connections for the tanks have been approved, so workers can begin painting the tanks.

For more information, please visit: http://www.NewResearchFleet.nl