Construction RV *Anna Weber-van Bosse*

Progress report #25: April 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 has assigned a large crew to the project, including in-house employees and several subcontractors. The building crew varies from day to day, but there are usually around 160 people working on the vessel on any given day. One day last week even saw almost 180 builders working on the vessel. That is a large group of people to manage, but the work is progressing rapidly.

The yard has been hard at work installing the decking on the other decks. Most of the decks have been fitted with the correct framing, and now builders are installing the supports for the bulkheads. The full layout of all the cabins is starting to take shape. The insulation team is doing a good job of keeping up with the work on the various decks, including the cabins, the laboratories and the technical spaces fore and aft.

Much of the piping for the cabins - drinking water, hot and cold plumbing and the pipes and ducts for ventilation and drainage - has already been installed and tested. The cabin decks appear to be around 80% complete.

The installation of several vital components on board is progressing on schedule. Everything delivered by external suppliers is quickly installed on board, and around 60% of the major components are complete. That gives the electricians plenty of opportunities to connect the components to the electrical system.

The yard is currently installing the piping in the technical spaces, and progress seems to be falling behind schedule. Fortunately, the shipyard is aware of the situation. Technicians have begun connecting the engines to the supply lines for lubricants and coolant in the engine room tank top. But now they must wait for the GRE piping, which is next in line for installation in the major piping systems.

The technicians are also making good progress laying the cables in the cable ducts. Electricians have connected the switch boxes in the cabins, and the cables have been tucked neatly away as much as possible. Several cables have also been laid in the technical spaces, and the electricians are making good progress connecting switch boxes here too. The yard

has begun installing the Kongsberg switch boxes for the acoustic instruments in the transceiver room, which is located on the same deck as the cabins. There have been several meetings with the scientific crew, the electricians and the ICT team to discuss the layouts of the 19” computer racks and the structure of the scientific networks.

In week 17, a team from the NIOZ visited the yard again for the scheduled six-week meeting. Several crew members also joined this visit to validate the console layouts. Together with the crew, we also examined the waste storage facilities on board and the best locations and transport options. While the team was in Spain, they also visited Redcai, one of the suppliers of the vessel’s major systems, including the CCTV, IPTV, Infotainment, PA-IP telephony, the central clock system and UHF communications.

On 2 April, one of the NIOZ captains attended the factory acceptance tests for the navigation and dynamic positioning equipment at Kongsberg in Norway. The equipment looks good and worked properly during the test.

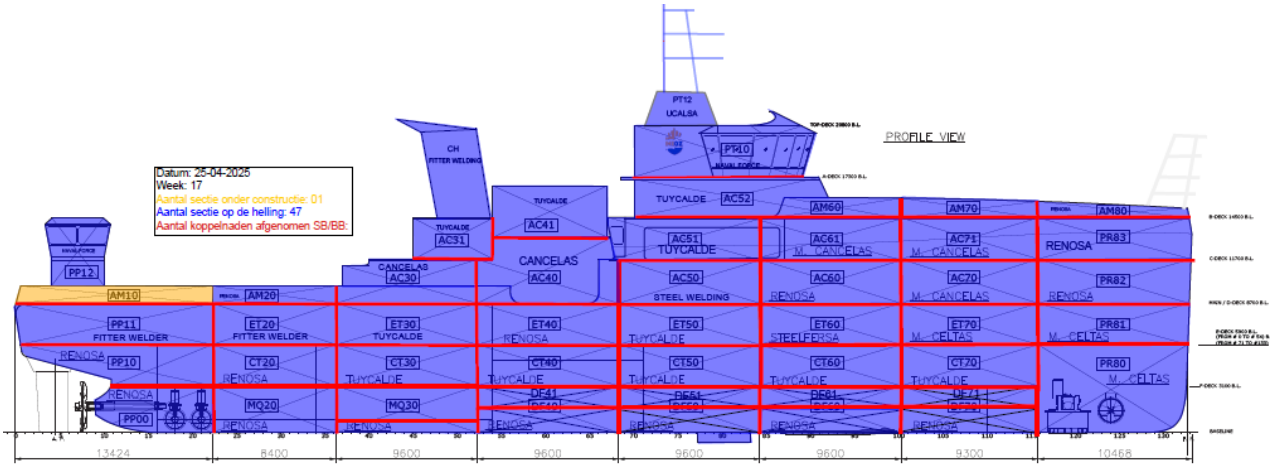
In week 15, Altum hosted the Battery HAZID meeting at the shipyard. Altum is the subcontractor of Armon responsible for the HAZID studies and FMEAs for the yard. Around 10 people joined in the HAZID meeting via Teams, which went smoothly.

The paint work is progressing steadily, and several areas are being sandblasted and painted. The yard has begun sandblasting the first forward tanks. They have already sandblasted the forepeak, chain lockers and boatswain hold.

The funnel, including the SCRs and exhaust mufflers, were built in week 17, so all of the sections are now on board the hull.

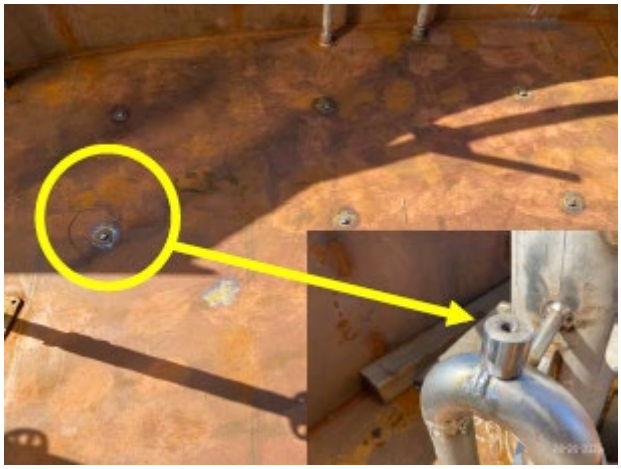
PROJECT STATUS

All of the hull sections are all complete and in their proper location. The sections highlighted in purple have been mounted to the hull, and finishing work is now underway. The red lines show the welded seams between the sections that the NIOZ has inspected and approved.



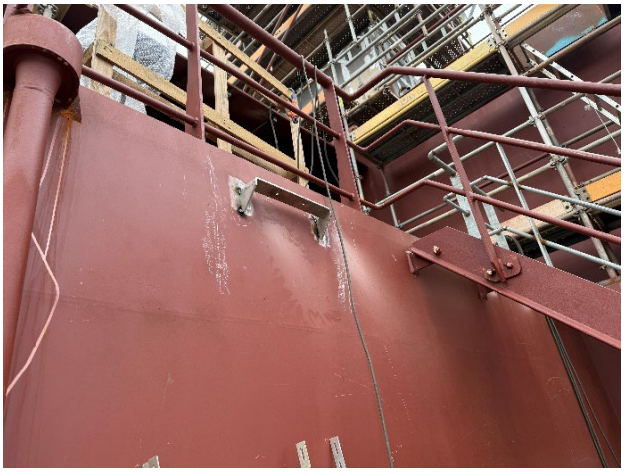
The photos below show the latest on board the ship.

Port and starboard views

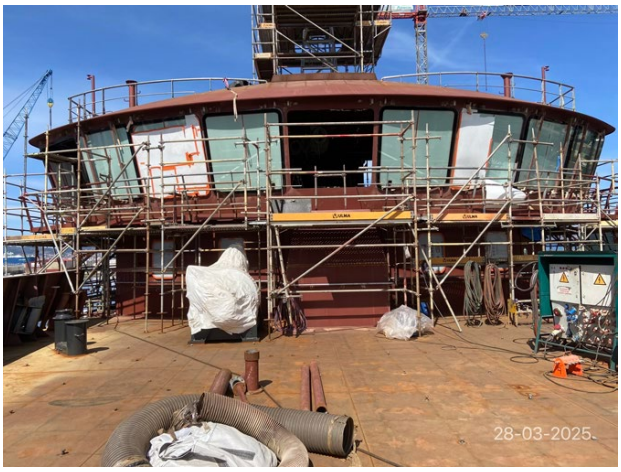


Finishing details top deck Extra rack for future antennas, and dust catcher mount

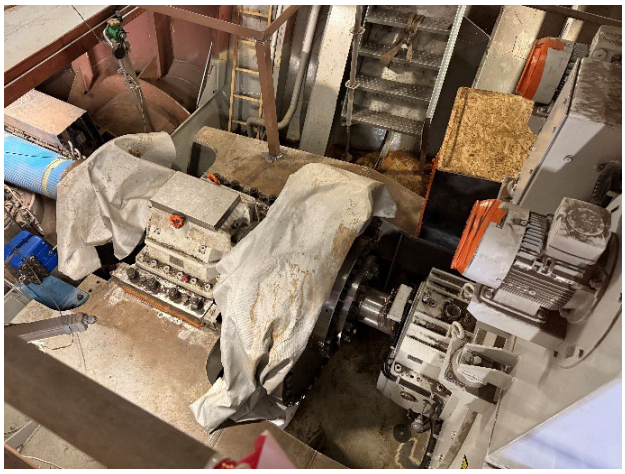
Almost all the portholes have been installed by now. The last porthole was left open to allow for the installation of the consoles.




Where possible, the mountings for lamps, etc., are all made of stainless steel.

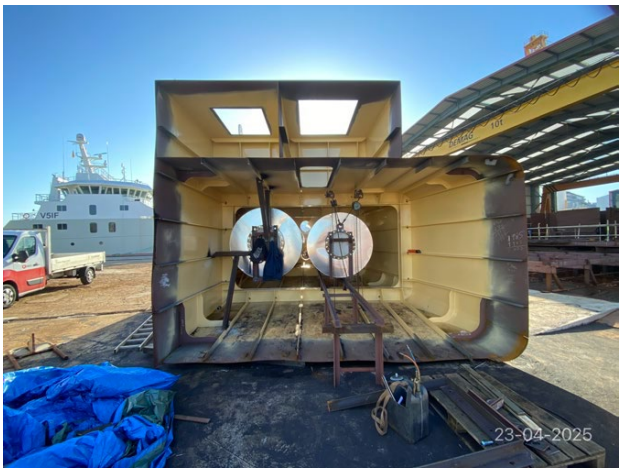


Fore- and aft cabins, and wheelhouse with covered portholes



Flexible linkage between the engine and drive shaft has been installed.

SCR units installed



Mufflers installed in the funnel

Waste processing equipment has arrived at the shipyard

Galley deck drain

Dry provisions hold

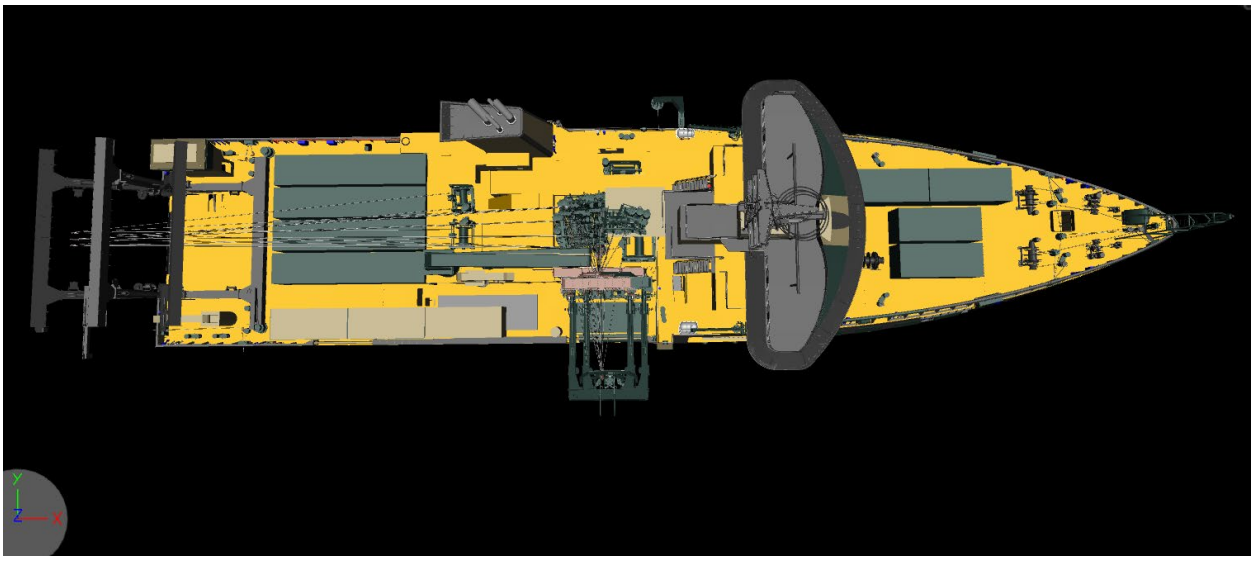
DP-2 and Navigation systems acceptance

Inspection of consoles before installation

The shipyard has submitted an updated load sheet for the planned maintenance system, along with their comments. The yard will have to pay more attention to this issue in the weeks ahead. The NIOZ chief machinist will need to take a critical look at the issue when he starts on the project in June.

As we stated above, the shipyard has begun sandblasting and painting the storage tanks. The preservation of the methanol tank requires special care and attention.

NIOZ has begun collecting deliveries from NIOZ suppliers in the Netherlands to arrange shipment to Spain. A list of action items has been drawn up, and will be implemented over the coming weeks.



Current status of the 3D model

SCHEDULE FOR THE MONTH AHEAD

Finishing work is progressing steadily, thanks to the efforts of a large team of technicians. We expect that the staffing levels will remain about the same for the near future.

A meeting is scheduled for early May with Kongsberg and the ICT team to discuss data processing: how the packets of information will be stored in the network. They will also examine how the NIOZ Science Data Management system (Ships Data) and the Kongsberg Blue Insight system will operate in parallel.

A team from the NIOZ will visit the shipyard again in the week of 12 May for the regularly scheduled 6-week meeting. During this visit, the team will take a close look at the schedule and discuss the progress made with Armon.

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