Construction RV *Anna Weber-van Bosse*

Progress report #26: May 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 180 people working on the vessel on any given day.

The yard is still working on the last heavy construction tasks involved in building the funnel and the ROV mountings. Work started relatively late on the ROV mountings, as the ROV supplier was chosen relatively late in the building process.

Work on the cabins is progressing, even as the carpenter's team has shrunk over the past month. They are almost finished laying the decks in the cabins. The yard has also begun filling the gap between the cabin partition bulkheads and the steel deck overhead. This will help enhance the comfort of passengers and crew, and requires careful precision to accommodate the cable and ventilation ducts that run through the overheads. Several cabins already have their deck finish, so the furnishings can be brought aboard.

The installation of several vital components on board is progressing on schedule, and everything has been installed relatively quickly. Around 65% of the major components have been installed on board so far. That gives the electricians plenty of opportunities to connect the components to the electrical system. The large research winches have not been installed yet. Some of the winches were brought on board to check the correct positions for the mountings. They were then taken ashore again to prevent damage and spool up the cables. The Sormec cranes still need to be installed due to delays in the manufacturing and delivery of the mountings.

The yard is hard at work installing the piping in the technical spaces. The piping in the tanks will be accepted during the last inspection before painting, and so far it all looks good. Technicians are installing the engines, and have begun connecting the exhaust lines. The yard has also begun installing the freshwater coolant lines in the engine room and bow thruster room. The saltwater coolant system has been delayed due to the late delivery of the GRE piping. Work is also progressing on the piping for the methanol system. Several fill/suction lines have been installed and pressurised in the methanol tanks, and have been accepted by

the site team. The yard is also hard at work installing the secondary hydraulic units and lines to the cranes and other hydraulic equipment.

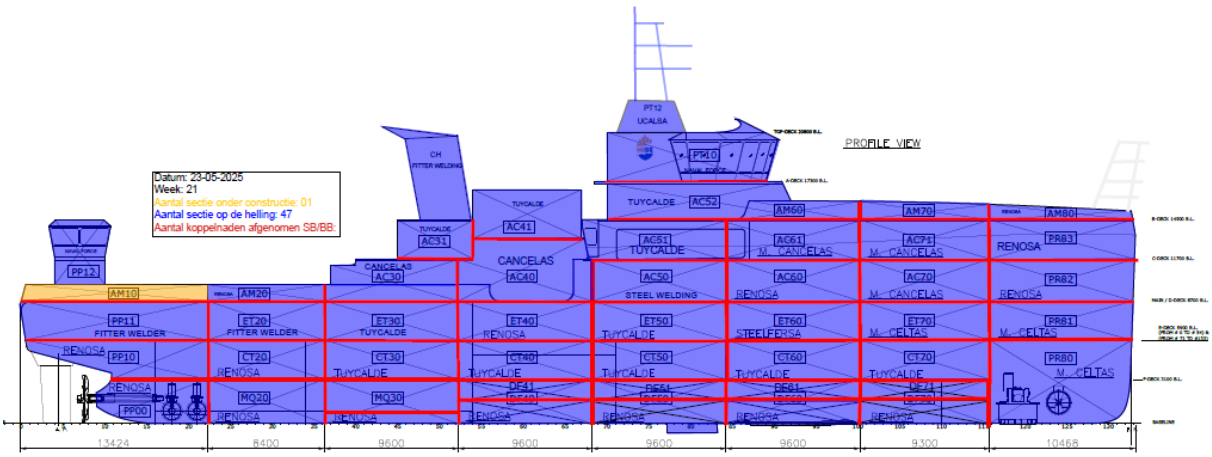
The technicians are also making good progress laying the cables in the cable ducts and installing the switchboxes. Around 125 km of the estimated 180 km of cables have been installed so far. Switchboxes are installed almost as soon as they are delivered. Kongsberg delivered a large shipment of switchboxes and console instruments in week 22. This project requires a large number of switchboxes, and it is occasionally difficult to find space for them on board. Armon and NIOZ have decided to increase the scientific UPS from 15 kVA to 50 kVA, to provide enough time to switch off scientific instruments to prevent damage and/or data loss in the event of a power outage.

The scientific crew has discussed the technical issues with the ship's electricians and the ICT team, so the electricians have a good idea which extra cables and equipment need to be installed aboard. They also created a list of file formats for the scientific equipment data exports to ensure proper processing in the Science Data Management System (SDMS).

The paint work is progressing steadily, and several areas have been sandblasted and painted. The yard is currently sandblasting and painting the tanks and cofferdams that offer extra protection for the methanol tanks.

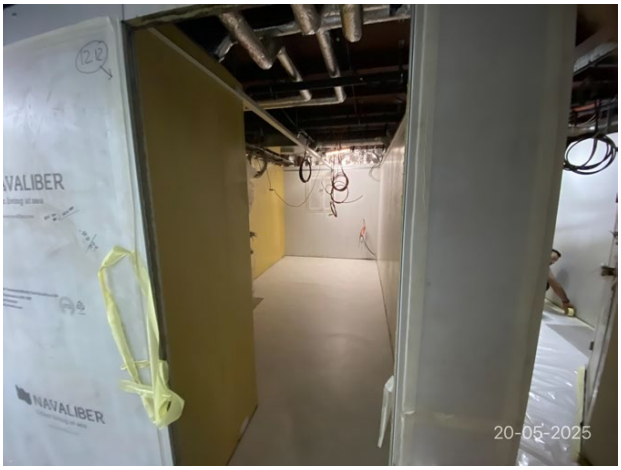
PROJECT STATUS

All but one of the sections have been assembled on board, and we have inspected and accepted all of the weld seams between the sections (indicated in red).

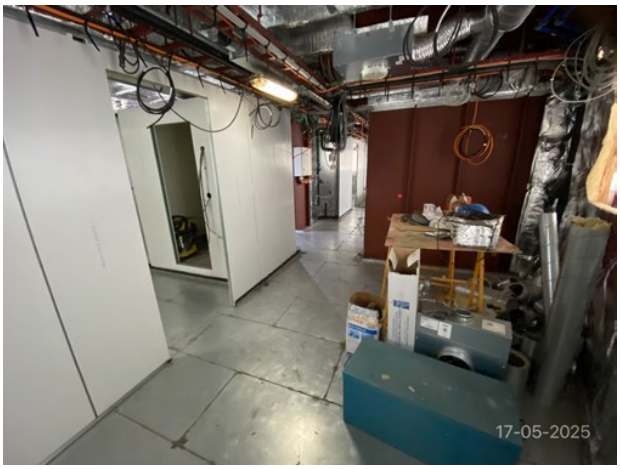


The photos below show the current state of affairs on board the ship.

Port and starboard views



E-deck cabins (crew).



Captain and Chief Engineer's cabins


Installing the galley appliances

Painting the topside forepeak

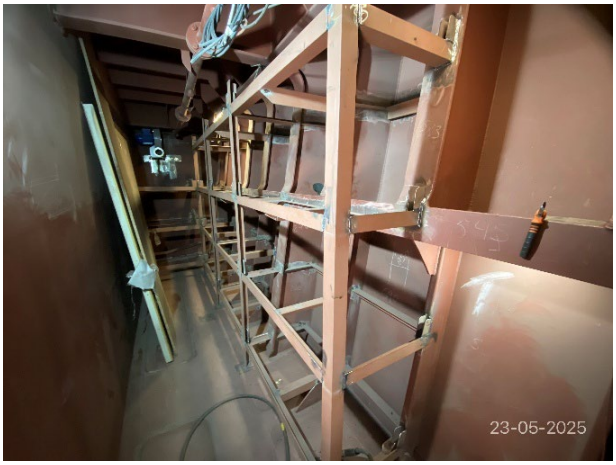
Heating elements in the tank

Wheelhouse porthole wipers

DP console

Traction winch

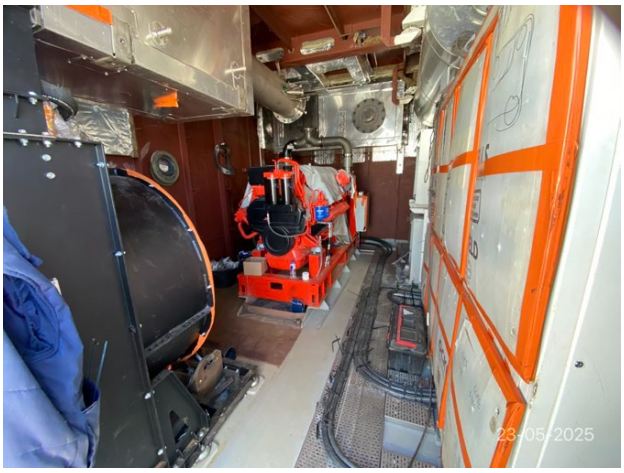
CTD Frame



Racks in the engine steering room and the paint locker

Lower hull door CTD room

Container hatch with tie-down points



Emergency generator room

Server racks in the dry lab

Secondary systems hydraulics unit

Sormec crane assembled

Forward coolant system

Hull hatch for starboard A-frame

The shipyard and subcontractors are hard at work finishing the hull. A team of around 180 people working on board are doing a good job. They include pipefitters, ironworkers, welders, insulators, cable layers, carpenters, etc. This is also the maximum number that can work on board at one time without getting in each others' way.

NIOZ has begun collecting deliveries from NIOZ suppliers in the Netherlands to arrange shipment to Spain. The first shipment left the Netherlands in the first week of June. The second shipment will leave for the shipyard later this year.

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