New build RV Anna Weber-van Bosse

Progress report #18: September 2024

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

A team from the NIOZ visited the shipyard in the week of 2 September for a general inspection, meetings, and to discuss the power management system. This is a reasonably complex part of a diesel-electric installation, which uses batteries as a supplemental power source. Fortunately, the shipyard and the electrical supplier Ingeteam both have a wealth of experience, which should help speed up the process. We also went to Vigo to speak with Kongsberg about the network for the scientific instruments. This meeting resulted in several good action items that will be addressed in collaboration with the NIOZ ICT department and the scientific community.

We have observed an increase in activity at the shipyard to prepare the hull for launch. The building crew on board is growing almost daily, and the progress made so far shows it. Over the past few weeks, around 105 people have worked on the hull, and their numbers are still growing.

A first draught of the lubricant list has been drawn up in consultation with the yar, and Armon has submitted the first orders for lubricants for the equipment needed for the launch.

A preliminary plan has also been drawn up for measuring the URN in Heggernes, Norway. This plan will be elaborated, and a new meeting will be scheduled to finalise the details.

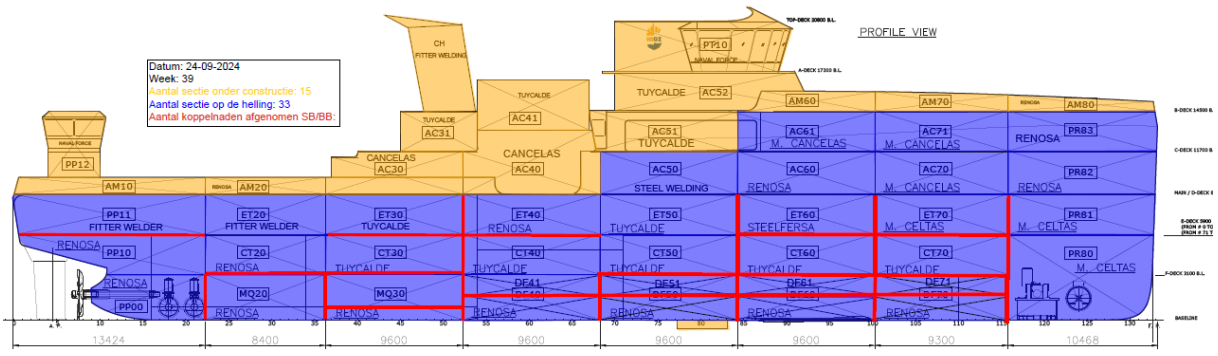
The team also discussed the update of the engine room layout, and the definitive locations of most of the major components have been finalised. The ventilation shafts were another item on the agenda: the strict requirements for the working climate requires a large volume of air in the engine room, which in turn requires very large ventilation shafts.

The yard has started adding the protective coating to parts of the hull, so that the vessel can be placed on blocks for the launch. The yard is also sandblasting and coating the engine room,

USBL trunk and propulsion room, so that the main components can be installed. The main components must be brought on board before the topside decks are closed, so that the vessel can leave the production facility.

PROJECT STATUS

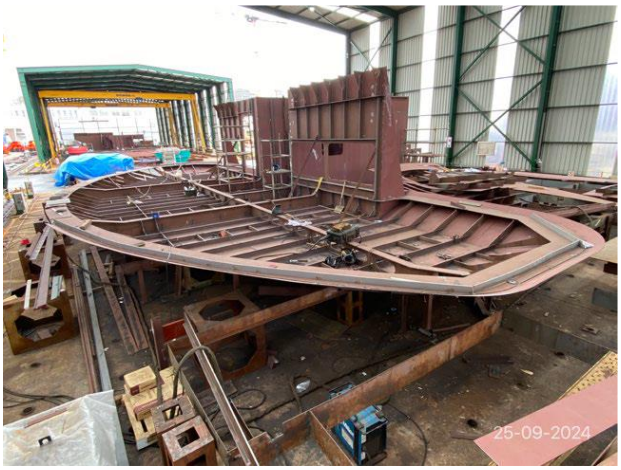
The shipyard is hard at work on manufacturing the sections, and the sections highlighted in yellow below are currently in production throughout the yard. The lower three layers of sections (highlighted in purple) have been accepted by the NIOZ and placed on the slipway, bringing the vessel to its full length.



All of the hull sections are currently in production. The fore and aft bulwarks have also been installed. Only the wheelhouse section (PP10) and the quarterdeck (AC52) will not be installed before the launch, due to the maximum height of the production facility. The other sections will be installed inside the facility. The wheelhouse and quarterdeck will be added after the vessel is in the water.

The yard is currently working on pressurising the tanks and conducting the NDT survey. Several tanks will be depressurised to check if everything is watertight.

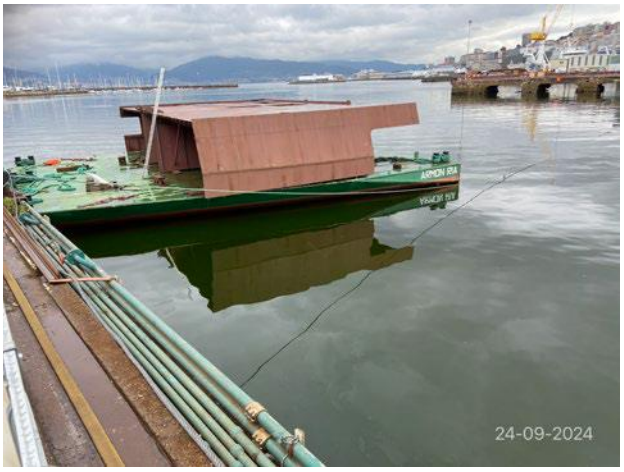
The photos below show some of the sections currently under construction and a general overview of the production facility.



PT 10. Wheelhouse

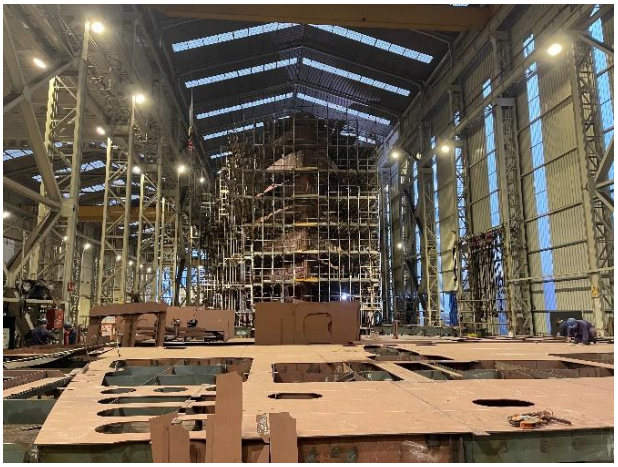
AC 30.

PP12, AC31, AC41, AC 52 complete



AC51. Complete:

Funnel ready for transport



Front and rear views of the production facility.

Preparations for fitting bolsters for the A-frame

SEA RESEARCH markings

Bolsters on the foredeck

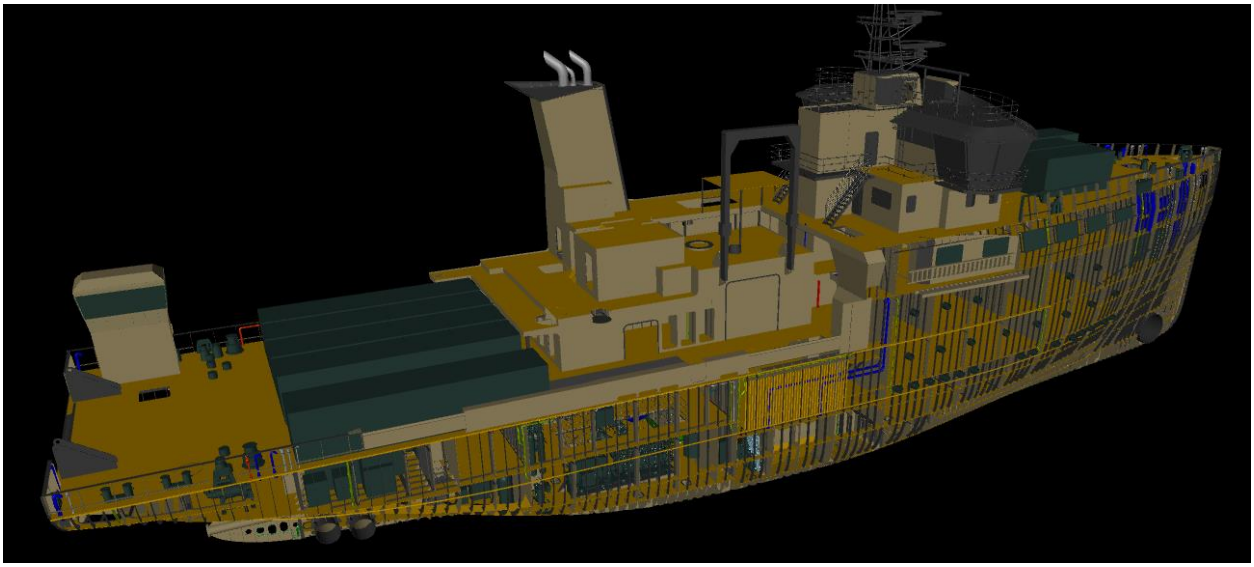
USBL trunk, with USBL pole installed

The shipyard has submitted new renders of the laboratory designs. We have made an appointment to visit Dimanlab together with representatives from the scientific community during the next visit, so that we can discuss the project and make the necessary final decisions. Dimanlab will then create a mock-up for NIOZ to evaluate. The design specifications include the main parameters for the laboratory layouts, and 3D designs will be produced in the near future.

The NIOZ regularly receives updates about the specifications, blueprints, layouts and schematics. Almost everything we receive at the moment is in preparation for the launch in

October. Together with the shipyard, we regularly review the 3D model to evaluate the routing of pipelines and the positions of components.

Finishing items will be dealt with in detail in a later phase of the project, but we already have two permanent finishing coordinators on board to serve as our points of contact.



Current status of the 3D model

SCHEDULE FOR THE MONTH AHEAD

The launch had originally been scheduled for 18 October, but it has since been postponed until 30 October. The shipyard is still waiting for delivery of certain components, so the launch date may need to be postponed again. Any delays should be identified within the next few weeks. Other items on the agenda for the coming month include the Factory Acceptance Tests (FAT) of the EST Floattech batteries. We will attend these tests together with the classification society.

Part of the crew will also visit Kongsberg in Norway to discuss the last details regarding the navigation and communication system.

The scientific crew will visit Dimanlab in Spain, probably in combination with the launch at the end of the month.

In the meantime, the yard will finish work on the outer hull and the exterior markings, etc.

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