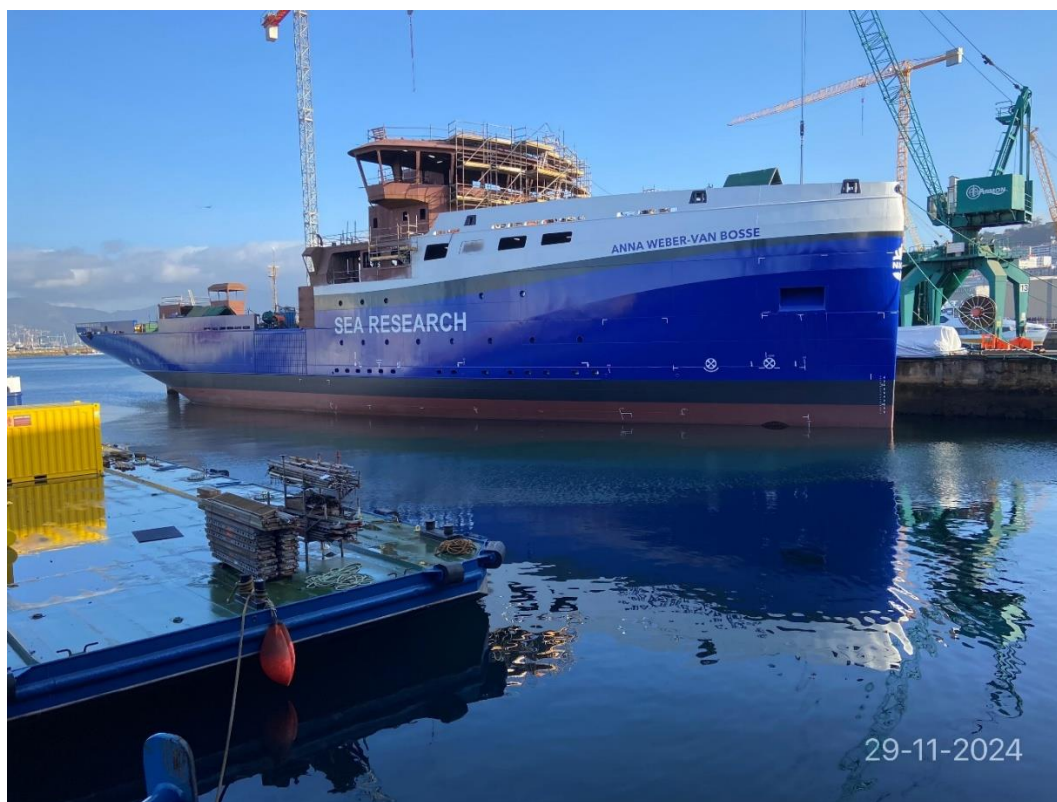


Construction RV *Anna Weber-van Bosse*



Progress report #20: November 2024

@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

Following the launch in late October, the shipyard continued adding the last remaining sections to complete the hull. The cabin deck, quarterdeck and wheelhouse sections have all been welded to the hull, and the other sections will follow later. The missing hydraulic pump unit for the scientific winches has also been delivered and installed aboard.

A large team from the shipyard has continued work on the piping, the cable ducts and various other finishing tasks. The carpenter has also begun adding insulation where necessary. Subcontractors SOLEM and Navaliber continued work on the cable ducts and ventilation shafts.

The yard has also begun sandblasting and painting the cabins. The next task is to lay the cables and finish the layouts for these decks.

The crew visited Kongsberg in Norway last month to discuss and finalise the open items regarding the navigation equipment. This work is moving in the right direction, and we have been able to complete the concept design for the consoles.

Representatives of the classification society and the NIOZ were on location at EST Floattech this month to observe the delivery of the Octopus battery pack. The batteries meet all of the necessary specifications.

The NIOZ ICT team met with NMF to discuss the external communications equipment. They have decided to remove this equipment from the shipyard contract, and instead to purchase it from Inmarsat as a complete package. The package will offer sufficient security for the vessel's communications, and provide good coverage for V-Sat, 4G and Low Earth Orbit (LEO). We have also received the computer hardware specification from the shipyard, and the ICT department has reviewed the documents.

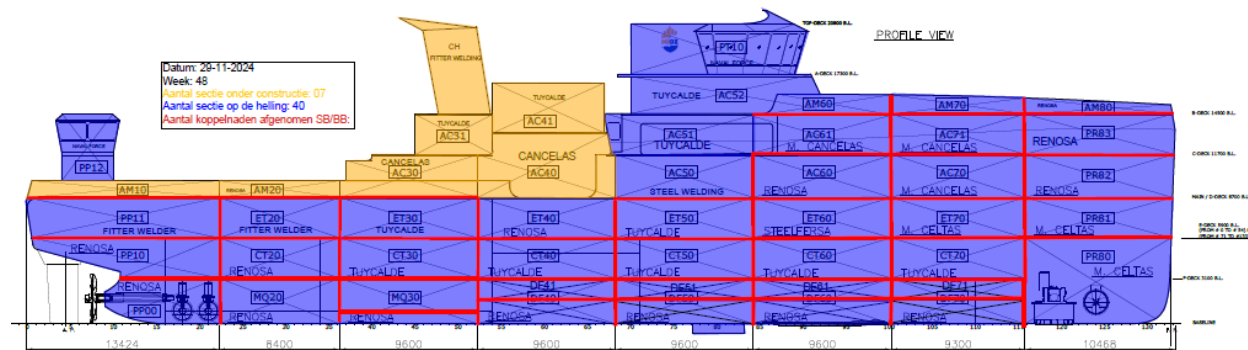
The yard and Dimanlab have also sent an update about the laboratory layouts, in response to our feedback. The scientific crew will review this update to see if it meets NIOZ' needs and the design specifications.

Ibercisa has sent us a large parcel of information about the electronic schematics, including the operating philosophy behind the scientific frames and winches. The shipyard has submitted a 3D model of the wiring for the winches as well. We have received a clear concept and plan for the operation of the piston corer from the deck. Together with the yard, we have made a decision about which cables should be used for the scientific winches, and we have looked at how the winches can be connected so that signals and data can be saved to the scientific network when in use.

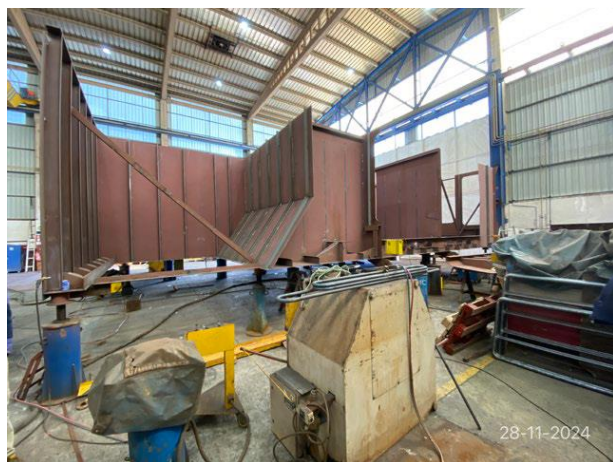
We have also discussed the best locations for the equipment in the technical cabins. We have chosen to move some of the equipment from the bow to the stern, due to the limited amount of space available in the bow.

PROJECT STATUS

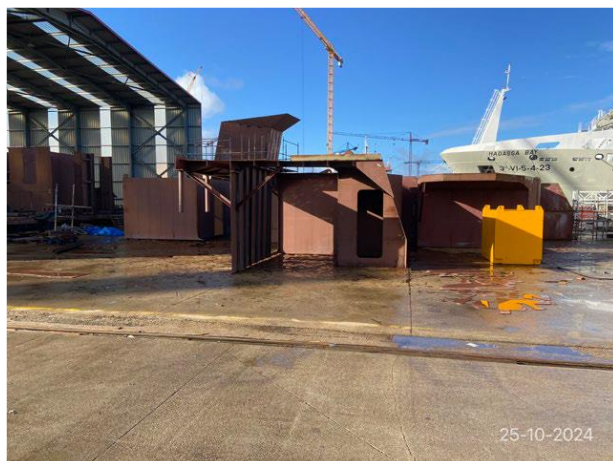
The shipyard is still hard at work manufacturing the sections, and the sections highlighted in yellow below are currently in production throughout the yard. The sections highlighted in purple have already been installed. The red lines show the welded seams between the sections that the NIOZ has inspected and approved. The sections assembled elsewhere - AC30 and A40 - have both been delivered to the Armon yard.



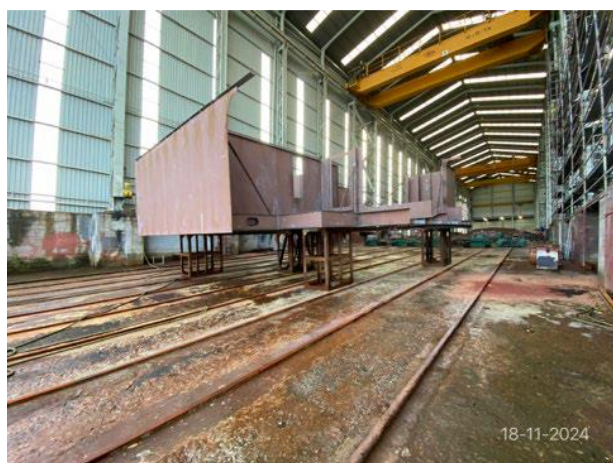
The photos below show some of the sections currently under construction and a general overview of the production facility.



AC 30



CH, AC31, AC41, AC52



AC40 (lower section)



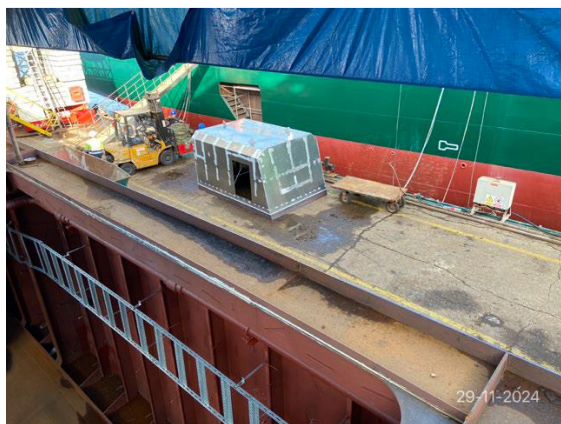
AC30 and upper section of AC40



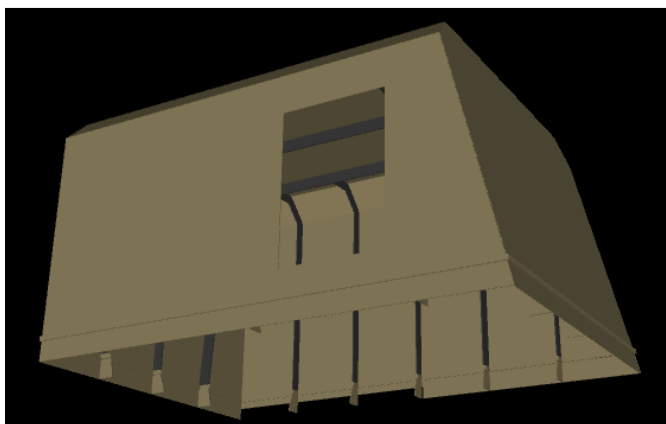
Location of the HPU

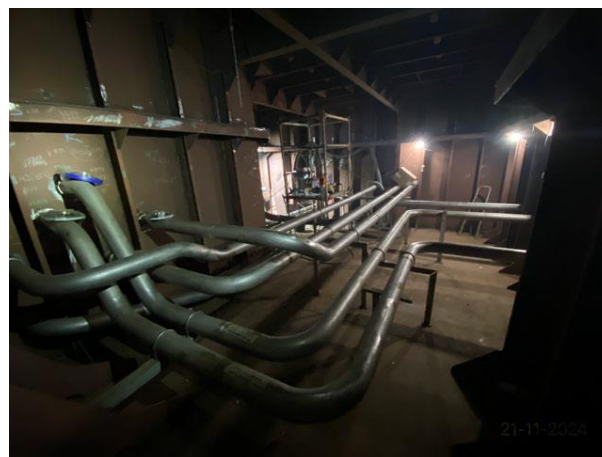


HPU scientific frames and cranes



PT12 Mast base / Bridge AC locker





Stainless steel piping in the fuel / methanol tanks

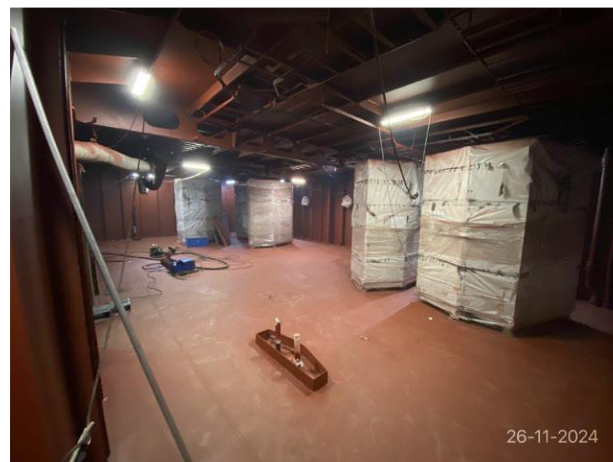


Batteries delivered to EST Floattech





Cabins F-deck

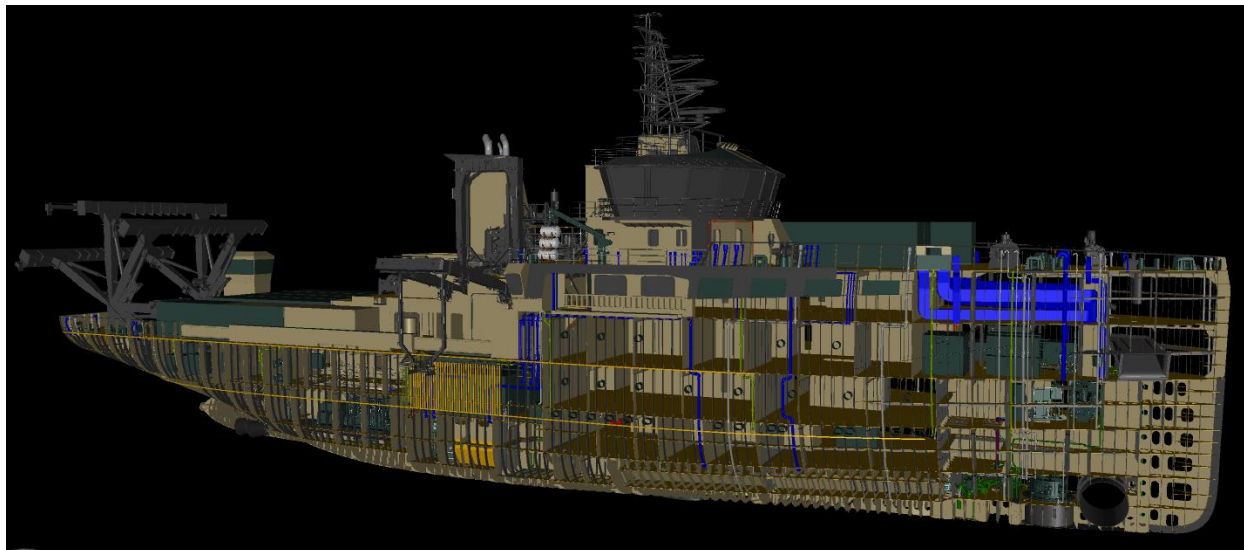


Cabins E-deck

We regularly receive specifications, plans, layout blueprints and diagrams throughout the month, either for approval or as updates to previous drawings. But we will have to pick up the pace to stay ahead of production. Several teams are currently putting the finishing touches to the hull, and they need a large amount of production information.

Over the past month, we have received several items related to laying the cables and finishing work. For example, the locations of the distribution boxes, switches and outlets have all been finalised. This information is essential to lay the cables to the correct locations. We have received the blueprints for the positions and dimensions of the gunwales, so the shipyard can begin work on these components as well. We will discuss this in more detail with the shipyard during our next visit.

The upgrade to methanol remains an area of concern. Many items are related to this issue, and space is limited aboard to house all the necessary systems. We are taking small steps forward together with the classification society Bureau Veritas, but it remains a complex issue.



Current status of the 3D model

SCHEDULE FOR THE MONTH AHEAD

We will continue to intensify the finishing work over the month ahead. The yard will begin laying the decks in the cabins and insulating the bulkheads. The distribution boxes will be installed in the electrical locker, and we expect that sections AC30 and AC40 will then be attached to close the gaps in the main deck. Then the electrician will begin laying the cables to the cabins decks. The HVAC ducts will also be installed on the cabin decks, and plumbers will begin installing the piping for the grey and black water.

We will also continue with our regularly scheduled visits to the shipyard, together with the NIOZ board.

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