

Modernization of RV Aranda

ERVO meeting
Helsinki, 14 June 2017
Jukka Pajala,

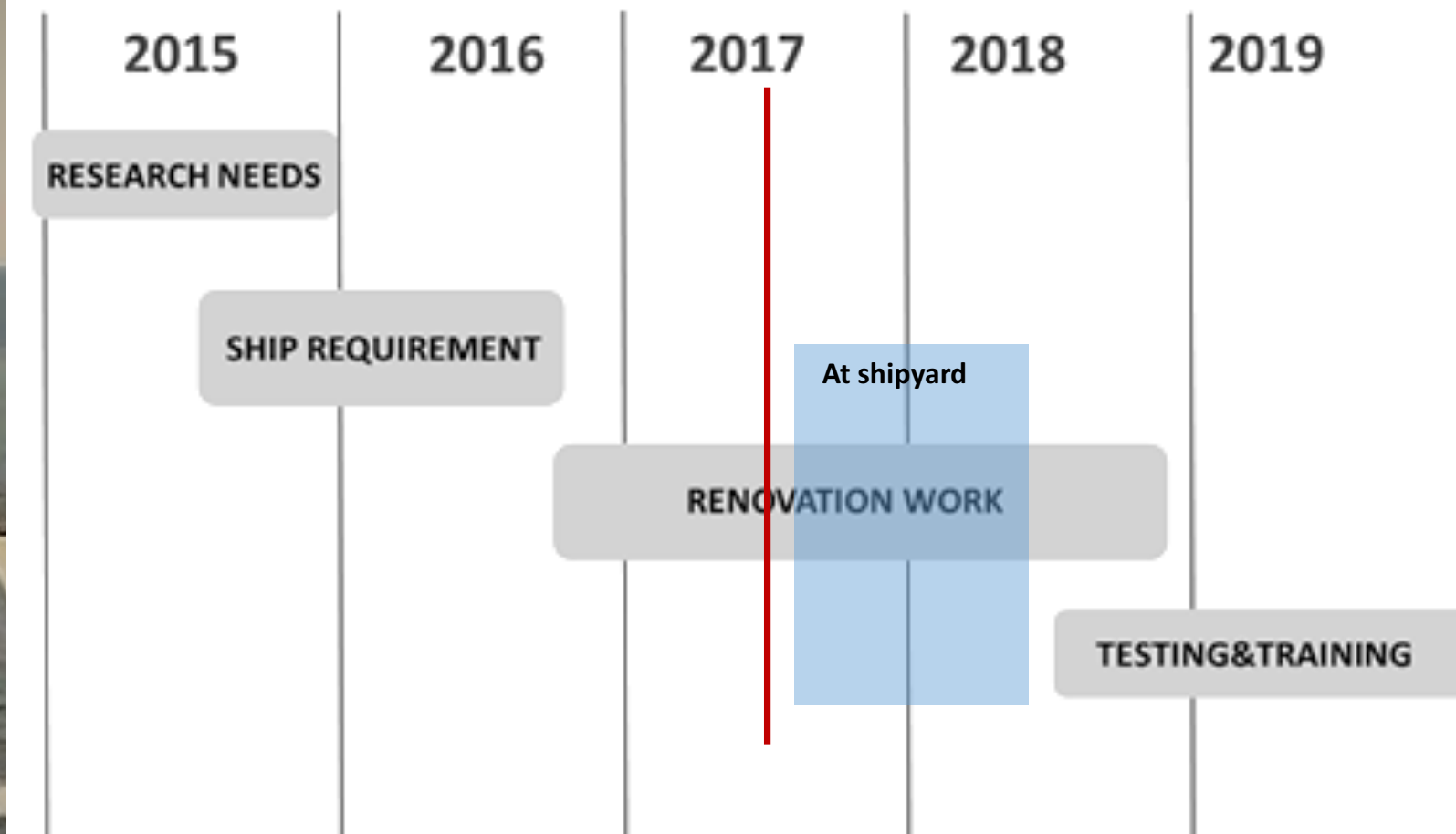
Marine Research Centre, Finnish Environment Institute



**After 46 days from today –
DOCKING!**



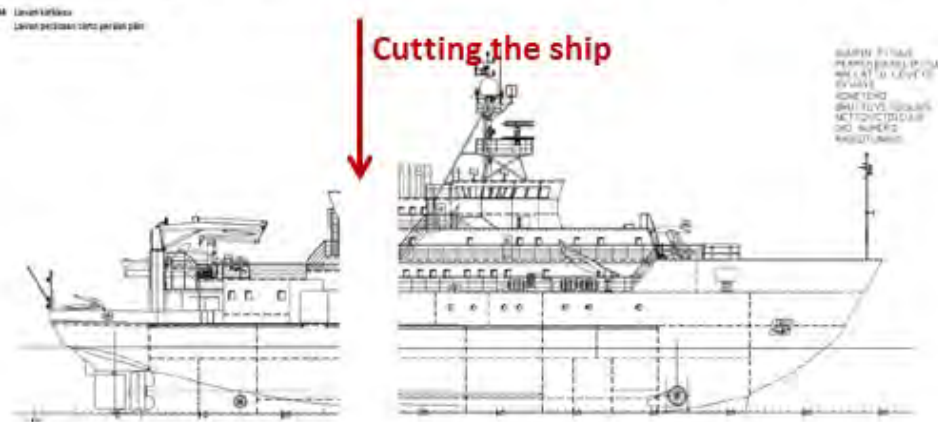
Modernization schedule



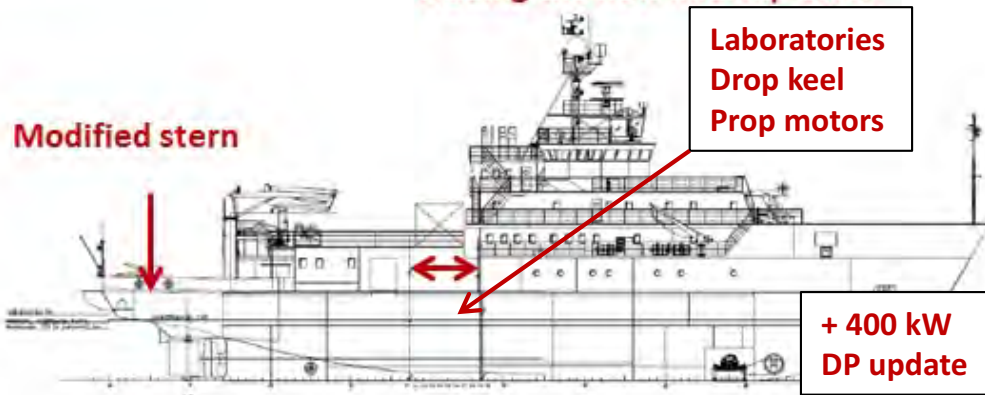
The ship as it is today.



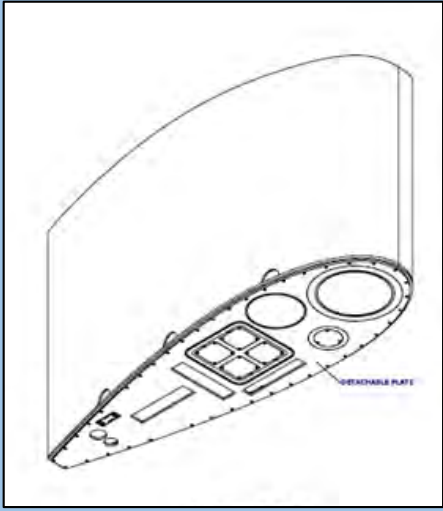
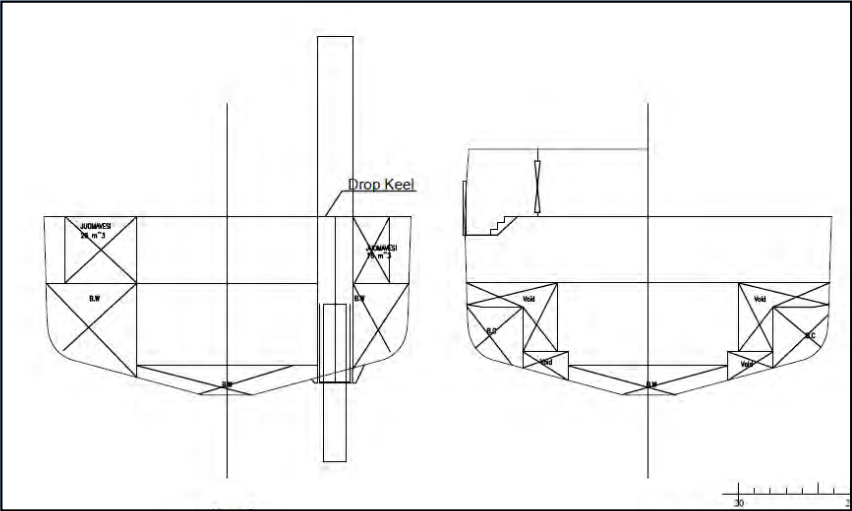
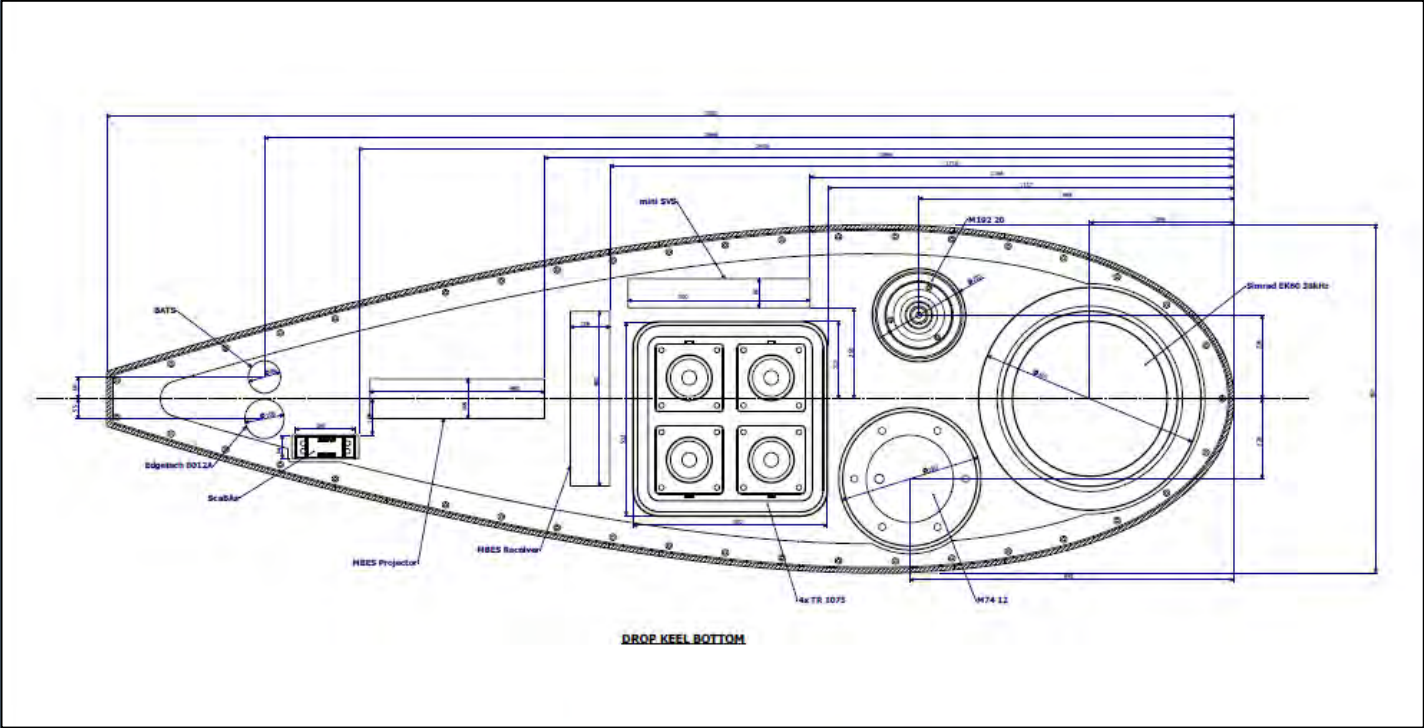
Cutting the ship



Adding the new midship block

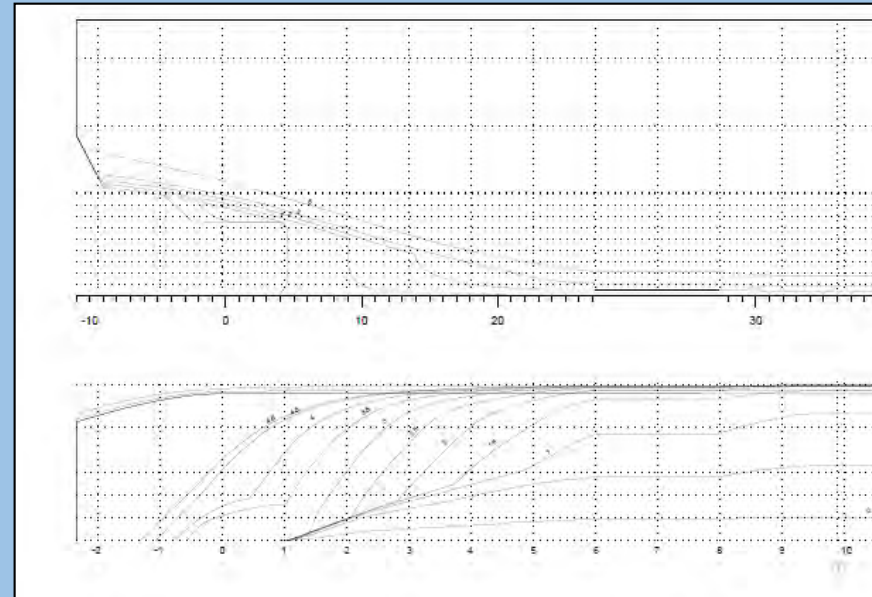
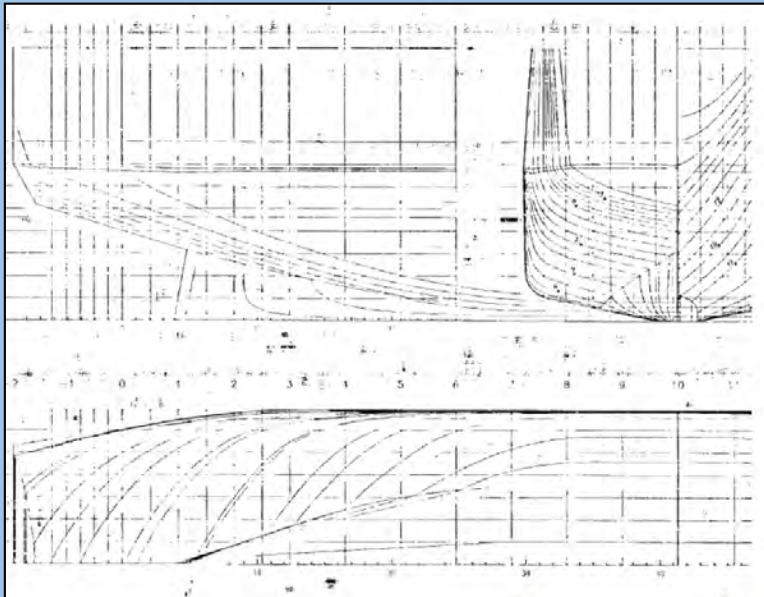
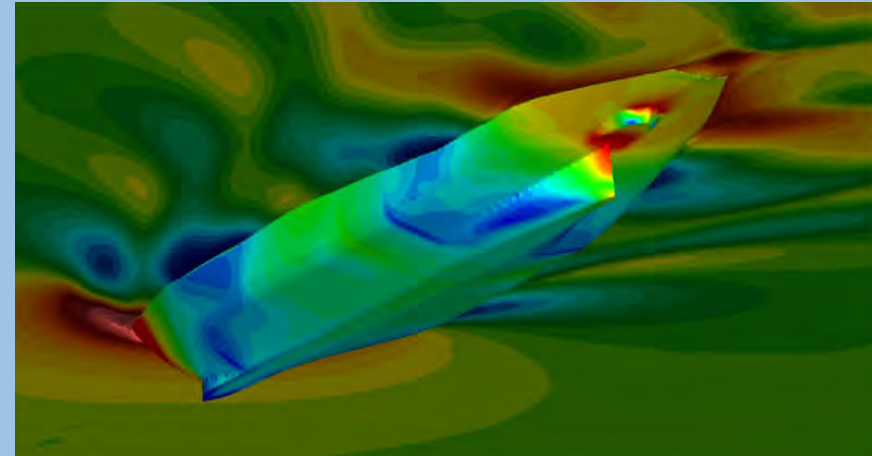
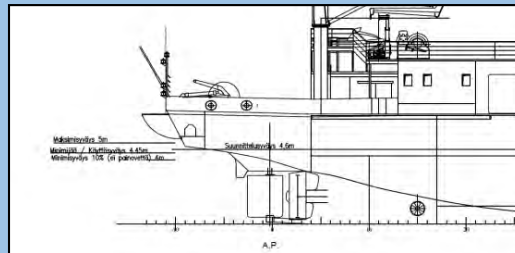


New retractable platform for acoustic sensors



Modified stern shape - better performance

Wider and longer working deck
Better in ice
Lower open water resistance
Room for towing winch under the deck



Zero emission ship



European Union's Horizon 2020 research and innovation programme and Hydrogen Europe and N.ERGHY

MARANDA - Marine application of a new fuel cell powertrain validated in demanding arctic conditions

**Public presentation material 12.6.2017
- a short version**

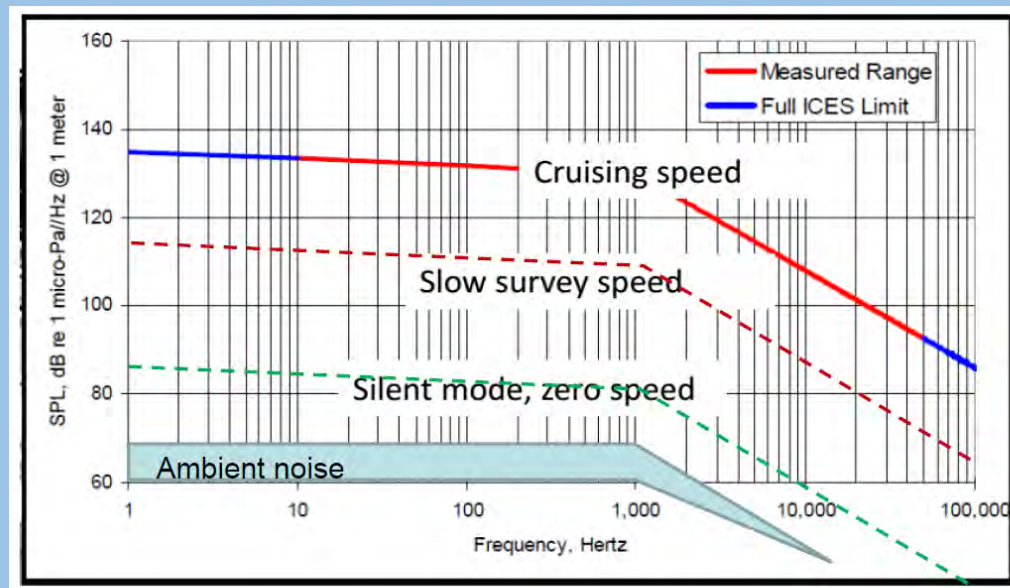
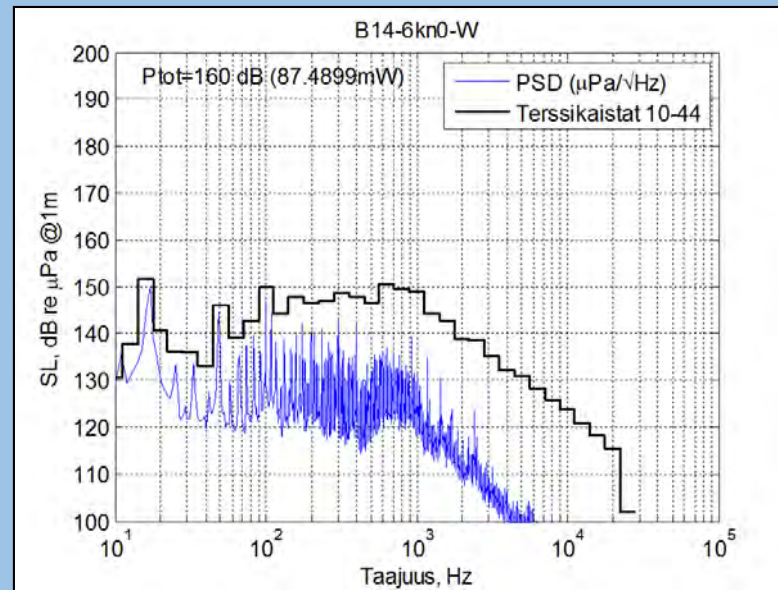
160 kW electricity and heat



S Y K E



Lower underwater radiated noise level



**DNV-GL Class 1A Research Vessel E0 ice (1A*)
Silent class AR, Special purpose ship code 2008
Polar code Category B ships, PC 7**

Endurance:
60 days
10 000 nm

Accommodation:
Crew 15
Scientists 29





**bright and
prosperous future**