Dr. Fridtjof Nansen Replacement – Building progress Update by 30th April 2016



Main milestones: First steel cut: 13.01.2015

Keel laying: 23.04.15 Launch of vessel: 23.12.15

Scheduled trial start up: Dockside trials 25.07.16 – Sea trials: 15.09.16

Scheduled delivery: 06.10.16

General comments:

- EMC meeting week 14 Applica provided training in EMC principles and working methods for AG and Proelsur electricians.
- Neptun Marine performed inspection of electrical performance, cable ducting and laying. Some remarks given, but electrical supervisor was overall satisfied with AG's standard and execution of electrical work.
- Test of workboat week 17 some remarks given and final acceptance postponed until these are rectified and final test report received.

Progress:

- Average workforce on board is now 140 150, (Steel & piping 55 Electricians 45 Accommodation & Insulation 35 Painters 10-15) working 10-12 hrs/day 5 days/week. Accommodation workers, electricians and painters also working Saturdays.
 - Accommodation contractor (LIDO) will man up with 20-25 men from next week planning for nightshifts.
- Due to limited details of outfitting activities in presented in Master Plan, it is difficult to get good measurement of progress versus achievement of milestone dates (trials start up etc.), but there is a clear fall back from plan in several activities. Our assessment is that present status is 4 weeks behind the MP4 plan. (Accommodation and insulation more than 5 weeks)
 - o AG has on their MP 4 plan of 29.04, made some adjustments displacing and extended activities that are delayed.
- Despite the latest efforts taken (manning up, shifts etc.) it will be hard to obtain the present lag.
- Yard will by end of May present a detailed start up and trial plan.

Despite the challenging work and tight schedule, the overall workmanship and quality is still good.

- Hull Construction: External outfitting:
 - Units 47 & 54 (Casing and main mast) still not assembled on board
 - Final alignment of winches 02,03, 05 &24 ongoing.
 - Rail mounting and installation of ventilation louvers ongoing.

Piping:

Last month's increase in workforce has kept stable progress, but previous lag not obtained, still a lot of aux systems in engine & tech. areas to be completed.

Steel piping: Zone 400 (structural tanks etc.) 98%,

Zone 500 (Engine & aux rooms) 60%

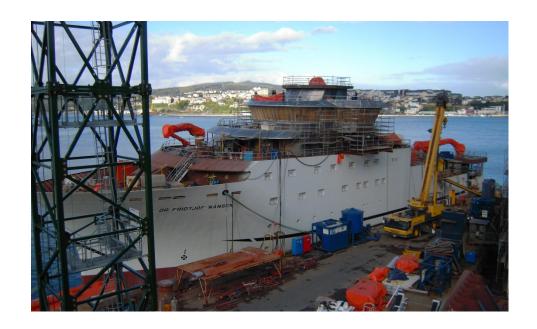
Zone 700 (technical work areas, Labs) 60%

Zone 800 (Accommodation) 90%

- o Sanitary piping, water mist piping and HVAC: Accommodation areas Tween Dk to 2nd dk completed.
- o Pressure test on parts of Ballast, Cool water, Bilge and sanitary system started.
- Clean seawater piping started this week
- Propulsion and maneuvering: connection of auxiliary systems (fuel, lub, cooling etc.) ongoing.
- Scientific equipment and Labs: Cable trays and sanitary piping completed, cable pulling stated in Labs on Main deck.
- Electrical: Cable trays and cabling
 - Cable trays:
 - Main Cable trays on decks up to Bridge deck 90% completed
 - Electrical cabling work started March 1st, 3 weeks behind plan and despite high activity we can't see that this start up delay is obtained.
 - Termination of cables in MSWB and some accommodation areas ongoing.
 - Pulling of Cat 7 cables ongoing no termination work yet.
- Accommodation: Wall paneling started week 14 (5 weeks behind schedule) Main cabin &corridor panels installed on tw deck to 2nd dk. Floating floor installation almost completed.
 Door mounting not started. Insulation work ongoing in all technical areas.
- Painting: Trawl winch room metalized, started sandblasting of FW tanks overall good quality

Alongside outfitting berth





Double cabin Tween dk



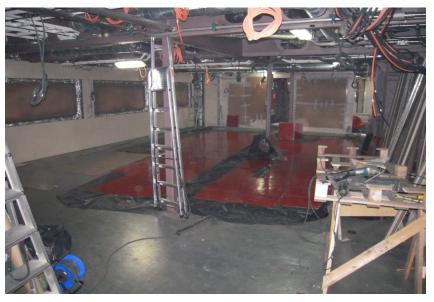
Single cabin Main Dk



Steward cabin 1st dk.



Messrom



Auditorium 1st dk



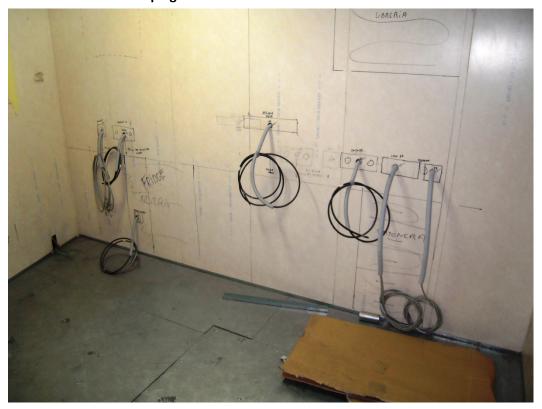
Wheelhouse – raised floor and cable trays in progress – Consoles are ready with the equipment mounted at KM in Vigo.



Cable pulling in Labs started (L11&12)



Cables to cabins developing



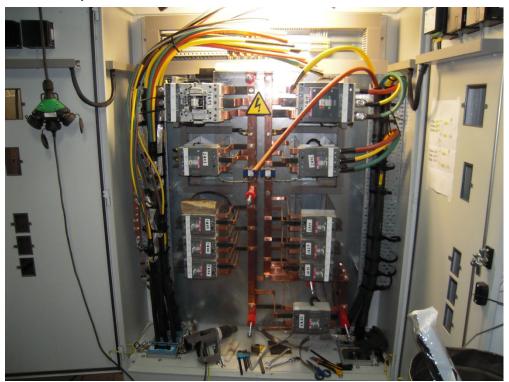
Cat 7 cable - LAN distribution on Main dk.



Termination in main switchboard



Busbar 1 Propulsion room



Fuel oil system - manifold and piping



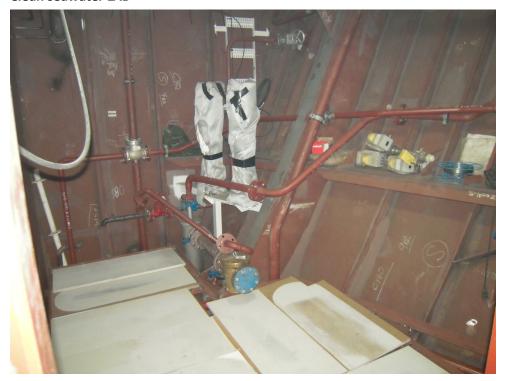
Central heating system developing



Engine room ventilation fans installed



Clean seawater LAB



Clean seawater piping started



Work boat weight test



Work boat sea test



