



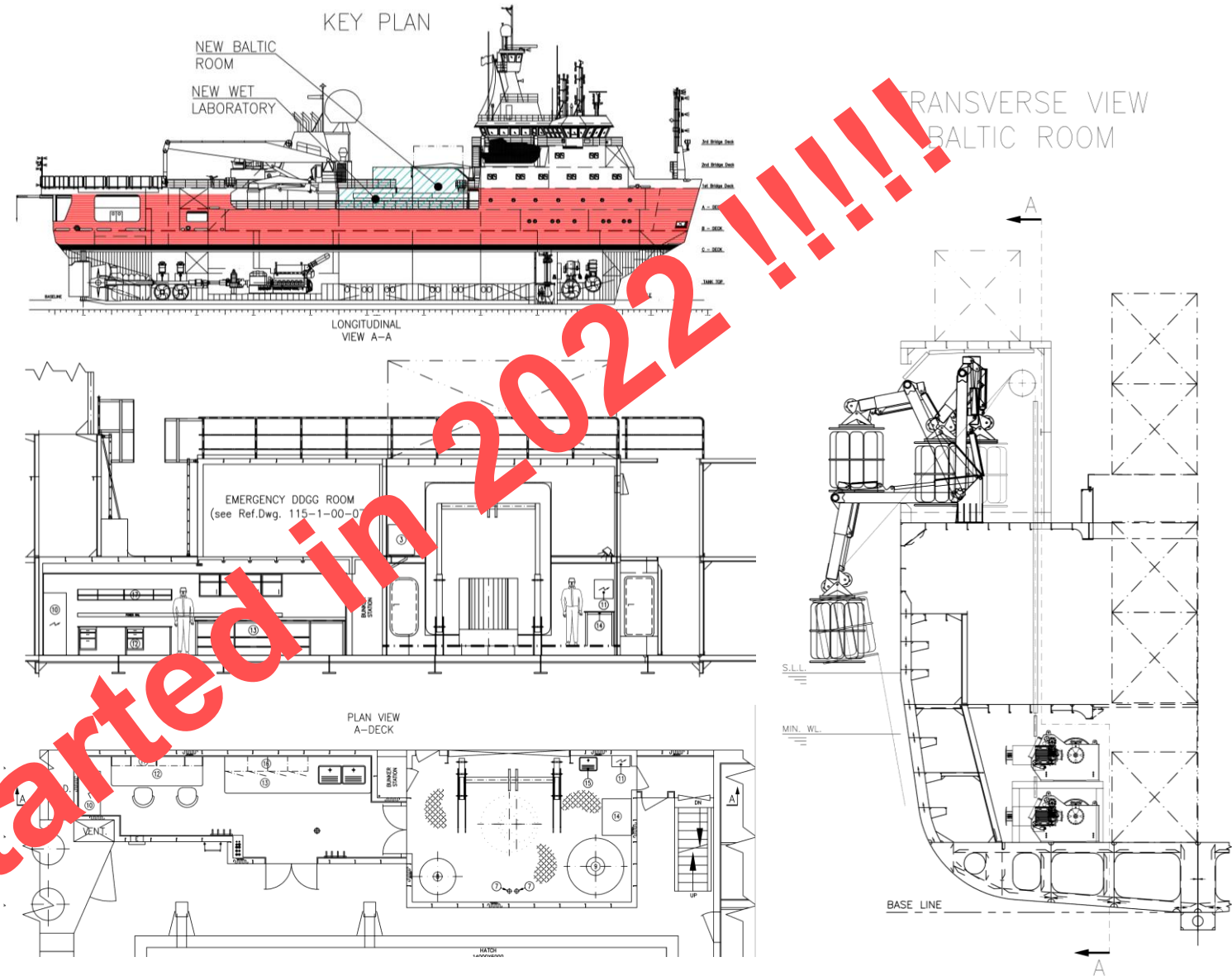
Laura Bassi – The latest Antarctic Expedition, new installations and Other contingencies

Riccardo Codiglia
27th ERVO Annual Meeting



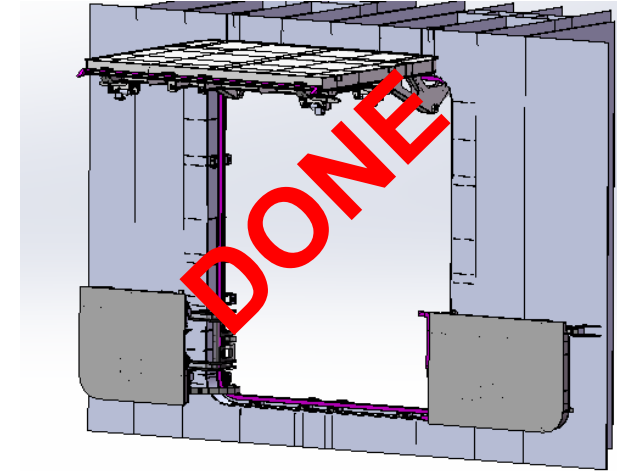
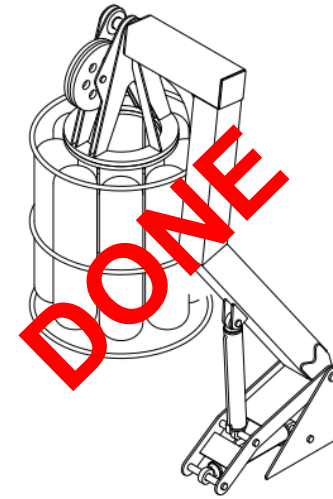
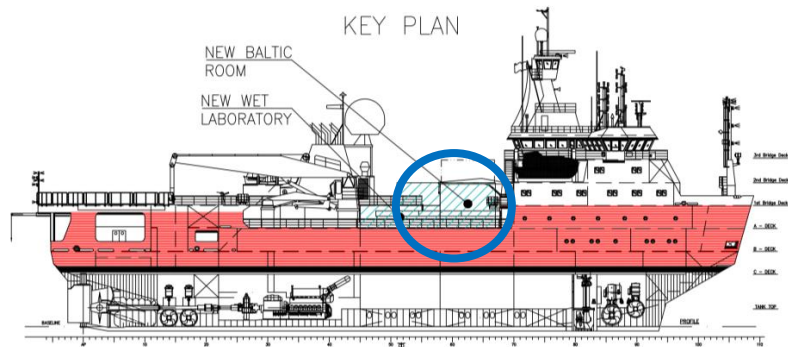
The Baltic Room

- Goals:
 - Reduce motions
 - Increase distance from propellers
 - Straightforward deployment in air conditioned room
- Constraints:
 - Keep load capacity
 - Add a clean rosette

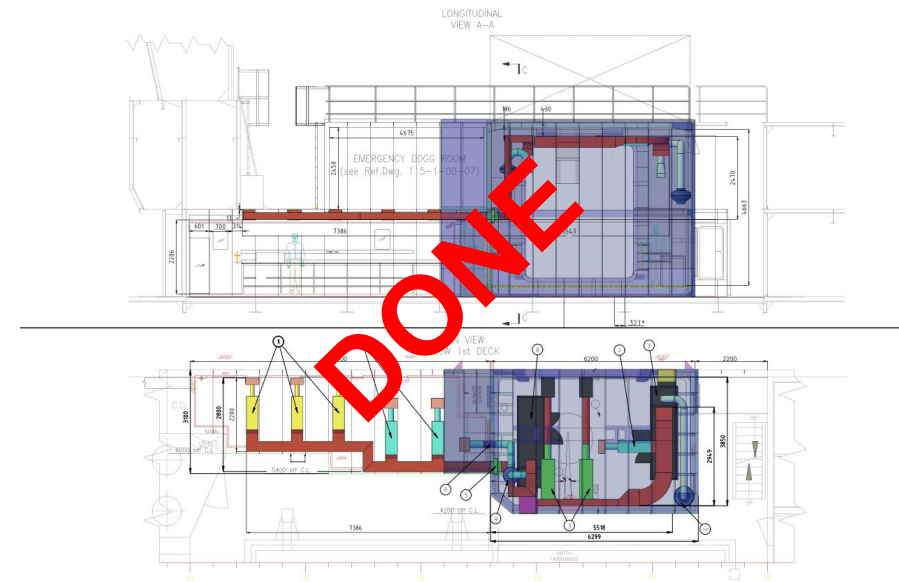




The Baltic Room

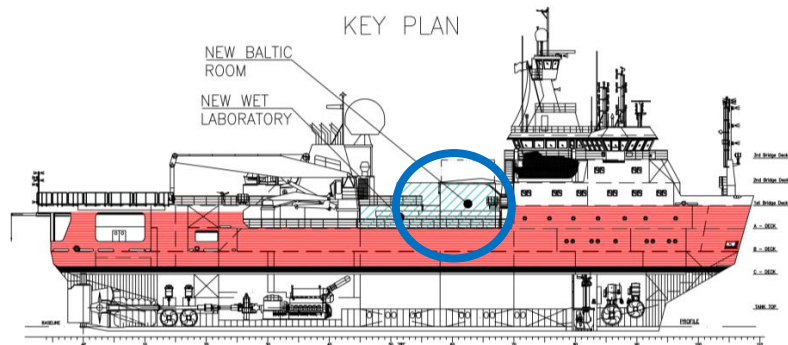


What was missing last year....





The Baltic Room



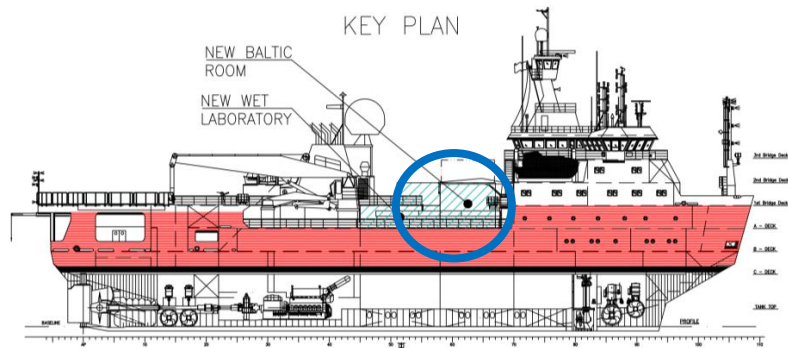
....The head of system







The Baltic Room



....The new CTD rosette LARS





Just a step back....

2023 – the year of the record

SCIENZA

Rea
maLa nav
Progra

Nave Lau

Italian Reachi



staff @M_Fedriga
@staff_M_Fedriga · Follow

Mai nessuna nave prima d'ora c'era riuscita. Grande giornata per la Laura Bassi, la nave rompighiaccio dell'@OGS_IT, che nel corso della 38ª spedizione @ItaliAntartide - #PNRA, ha toccato la il punto più a sud mai raggiunto da una nave.



4:25 PM · Jan 31, 2023

[Read the full conversation on Twitter](#)

20



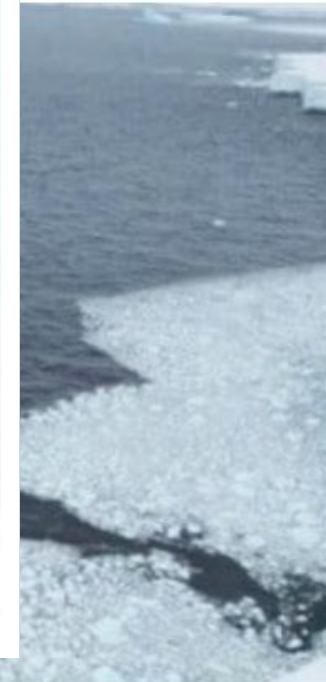
Reply



Share



Record South



ord

r
t

to be set



78° 44.280' S,
Bay of Whales

Laura Bassi traveled to the further point south in the Ross Sea in Antarctica (OGS photo)

PUBLISHED FEB 1, 2023 5:48 PM BY **THE MARITIME EXECUTIVE**



.... but 2025 was the year of record low temperature!



..... and too much cold is never a good thing!



02-04/06/2024

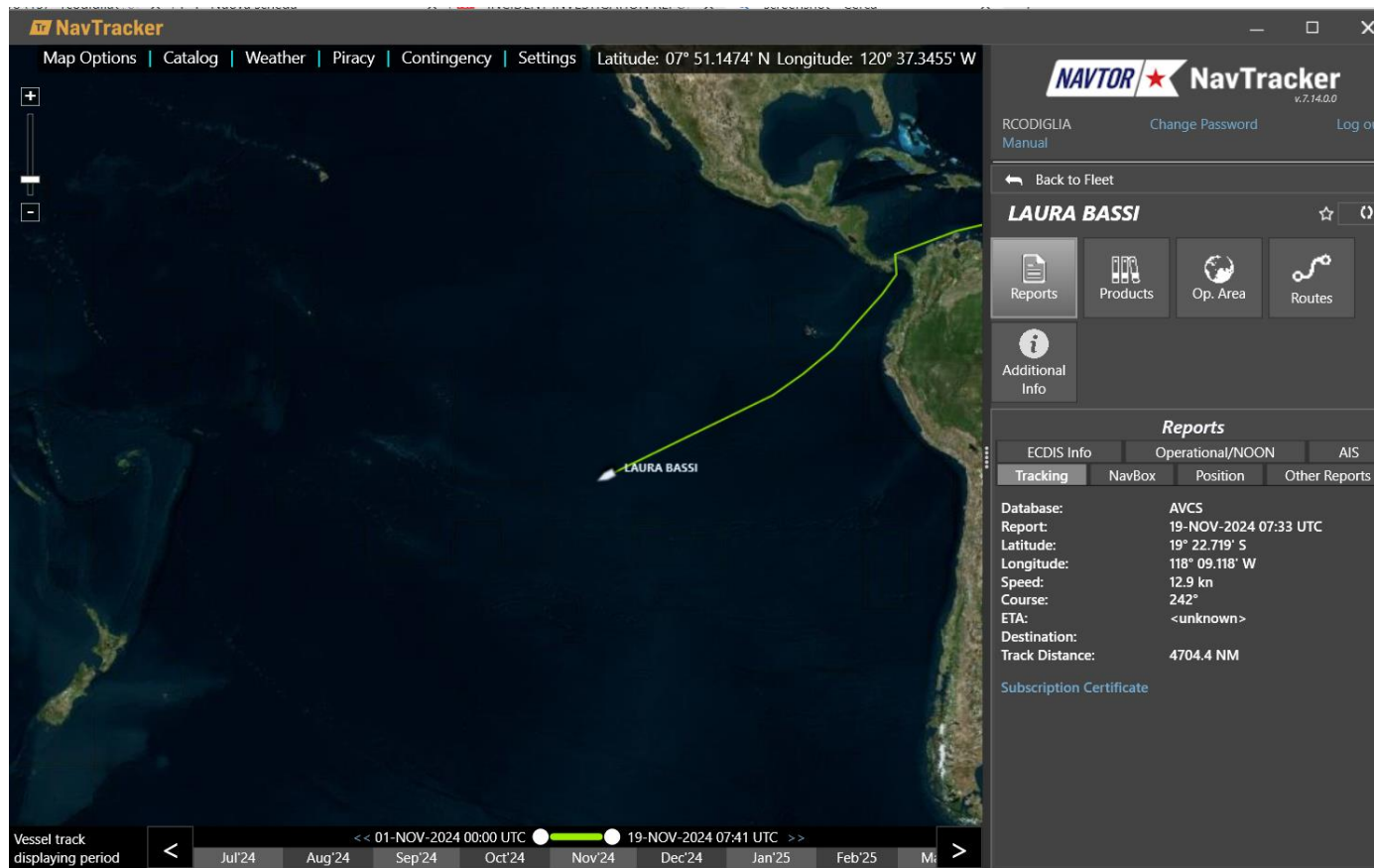


Riccardo Codiglia





..... but those was not the worst things!



On the 19th of November 2024 at 19:35 LT, while the vessel was underway to Lyttleton, the port side main engine suffered a sudden “overspeed” which caused the damages to rocker arm and valves of cylinder head n. 6 and damages to high pressure fuel pump of cylinder n. 1

Vessel proceeded with only the starboard engine to Lyttleton reporting a delay of about 10 days.

What happened?

1. The loss of oil due to the rupture of a small pipe actually inhibited the correct functioning of the governor
2. A faulty connector caused the engine's emergency stop to malfunction defective electrical connector

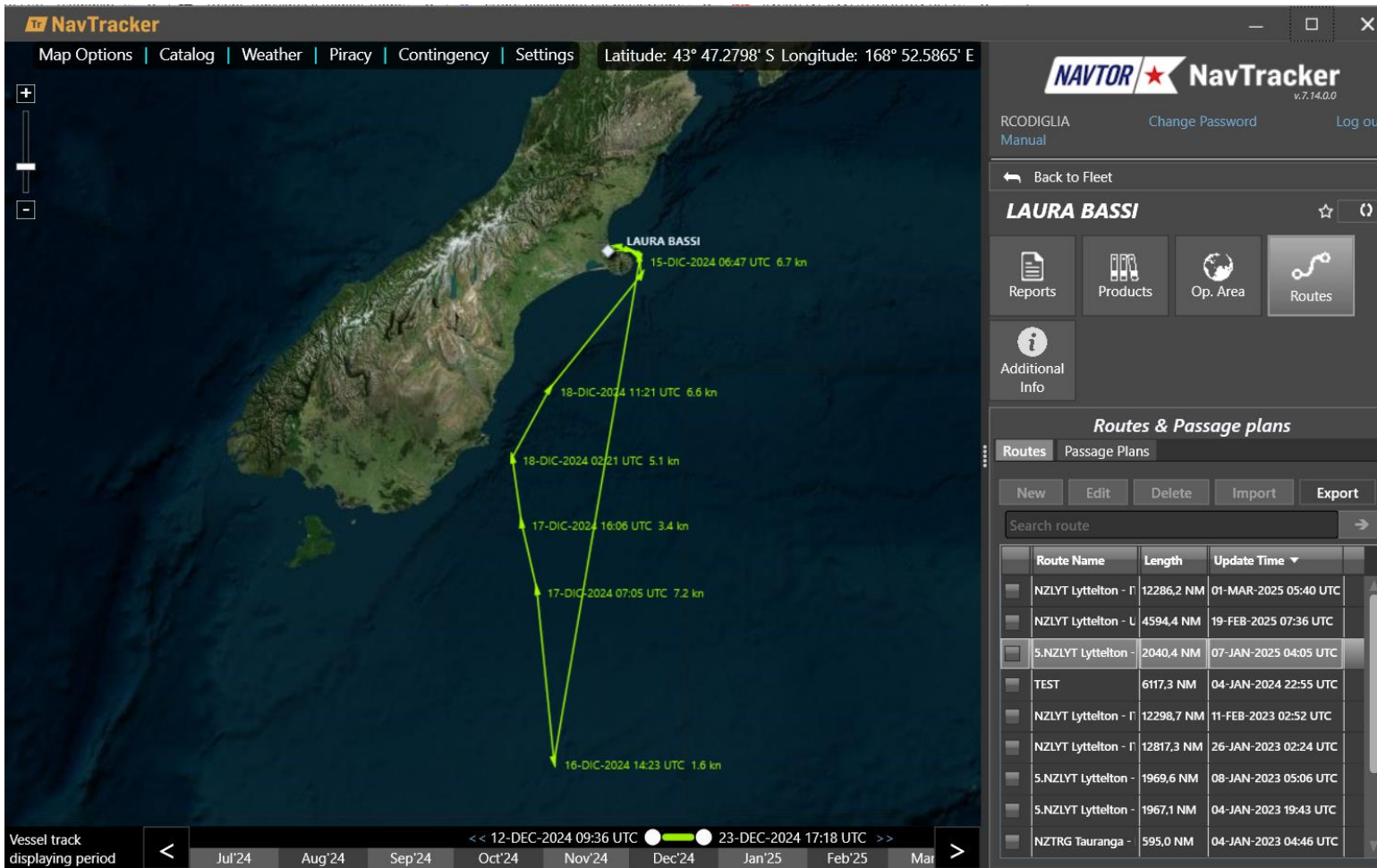
CONSEQUENCE....

1. Damages to rocker arm and valves of all cylinder heads
2. Damages to high-pressure fuel pump
3. Suspect damages on the turbocharger





..... Errare humanum est perseverare autem diabolicum!



On the 14th of December 2024 while navigating in the South Pacific Ocean from Lyttelton to Mario Zucchelli Station, at 03:22 the alarm for “cylinder 2 deviation” on the main engine No. 1 (the port engine) is triggered, and a few seconds later, the alarm for “high temperature on cylinders 1-5-4-6-3” of the same engine is activated.

For the second time the vessel proceeded with only the starboard engine to Lyttelton.

What happened?

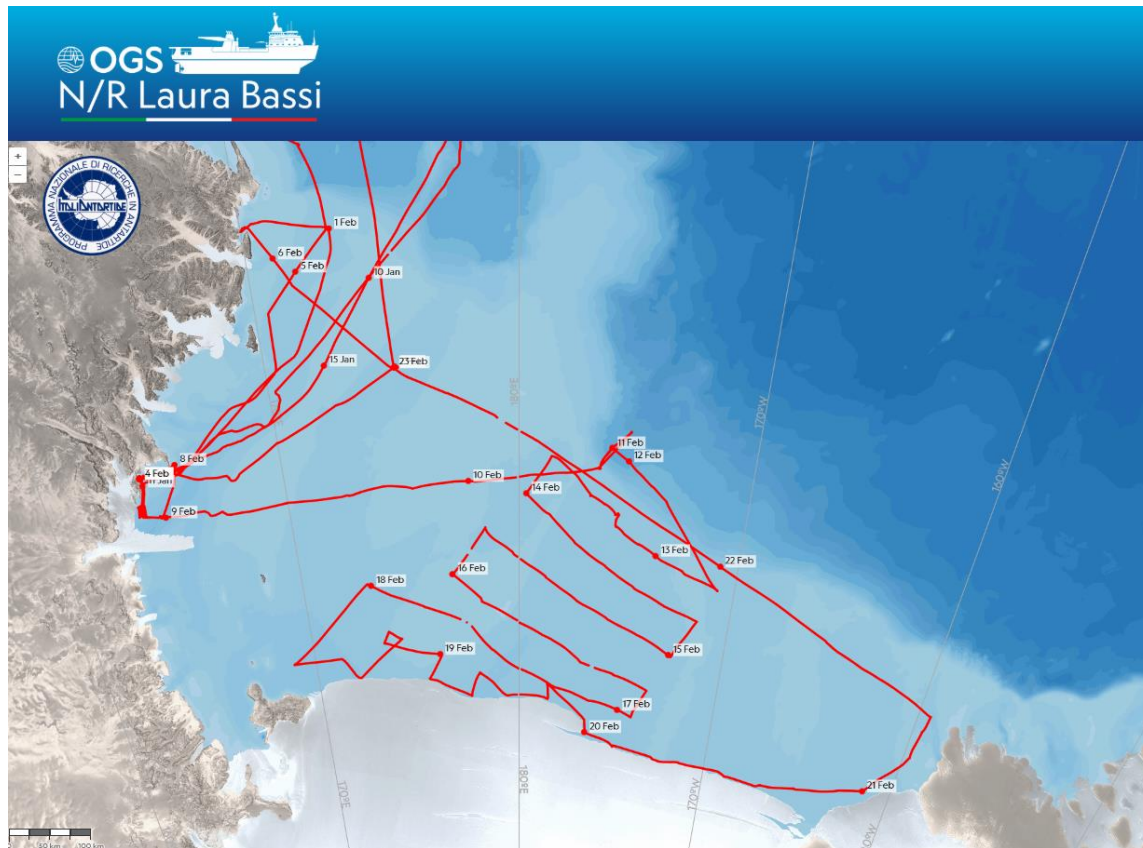
One of the two exhaust valves of the Cylinder n°2 broke down

CONSEQUENCE....

1. Damages to rocker arm and valves of two cylinder heads
2. Damages to one liner
3. Severe damages on the turbocharger



RESULTS of the expeditions...



- First leg deleted
- Second leg 100% completed
- ✓ 1 Hydrographic project of MM (Italian Navy)
- ✓ 3 Research projects funded by PNRA
 1. GLOB (physical and chemical oceanography)
 2. IBIZA (marine biology)
 3. MORSEA (permanent ocean observatories)
- ✓ 1 reserach project OTAGO (geology, marine geophysics)



Some number and result....

One leg

40 days non stop on sea

58 people onboard





...a brief summary of this unfortunate year

2 times engine failure



Costs approx. 1.000.000 euro

at least 3 PNRA project to do next year

1 CTD Rosette lost



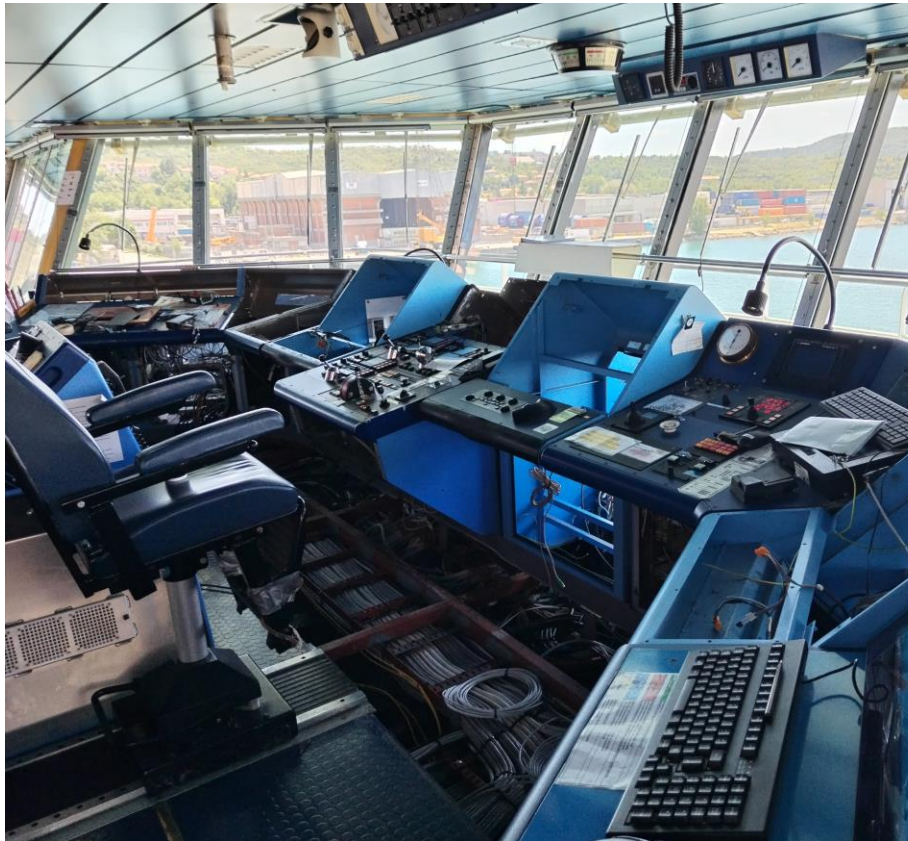
Costs approx 350.000 euro

to be repurchased within a year



What now

**New Integrated bridge system and Update
DP II system by KONGSBERG**





What now

Complete MMEE overhoul



-
- Thank you!

