

PLANNING FOR A REFIT OF THE RV SIMON STEVIN



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ervo
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VESSEL OPERATORS




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VLIZ

RV Simon Stevin

- In operation since May 2012
- 36m LOA – 9,4m width – 3,6m draught
- ICES 209 – DPO
- Designed for coastal operations
- 170 days at sea – 220 planned
- Daytrips and multiple day campaigns
- Endurance of 5 days – 10 scientists, 9 crew
- Multibeam – ADCP
- Vibrocoring – ROV operations – Subbottom Profiler – USBL
- ICOS station
- Diving operations

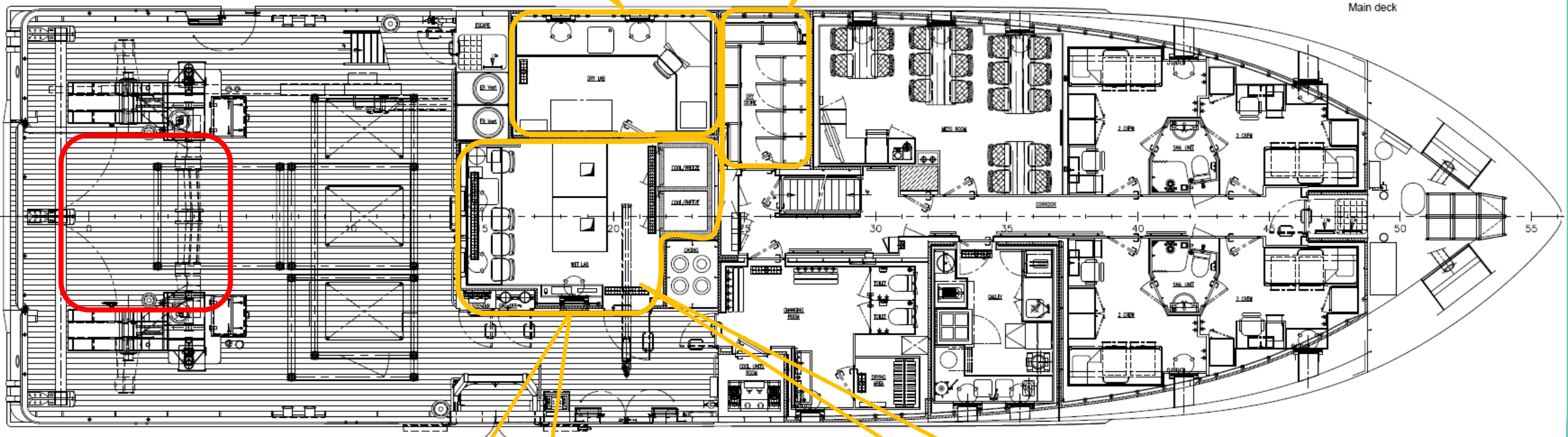


RV Simon Stevin

- Lack of space
- Improving scientific operations
- Improving vessel availability
- Greening operations

Dry lab 15m² : underway measurements
2 separate systems :
TSG, Fluorimeter, pCO₂, Turbidity & O₂
Plankton Imager, Particles/DOM/spectral
characteristics

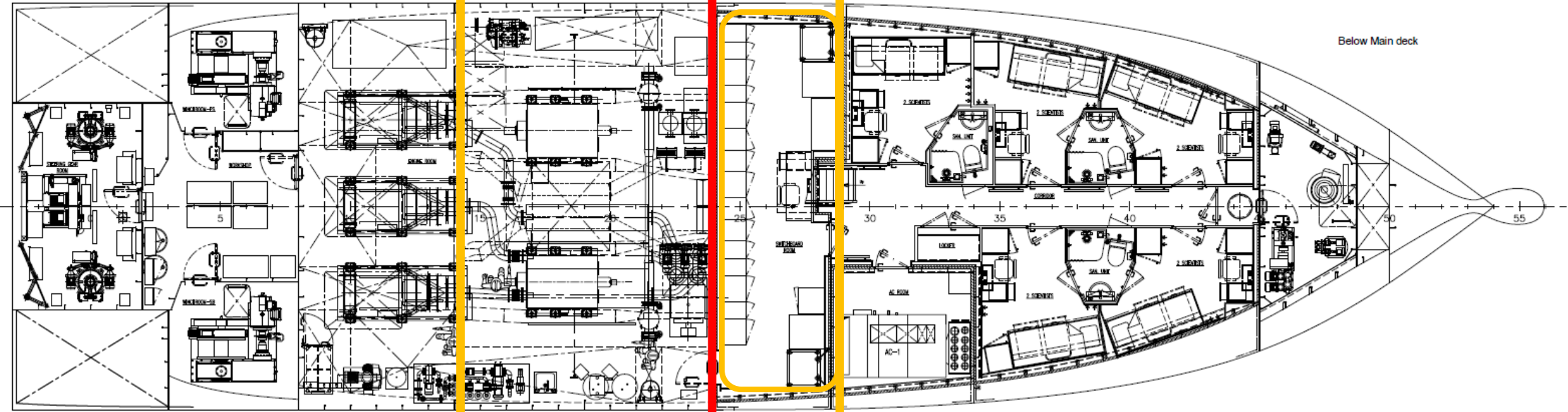
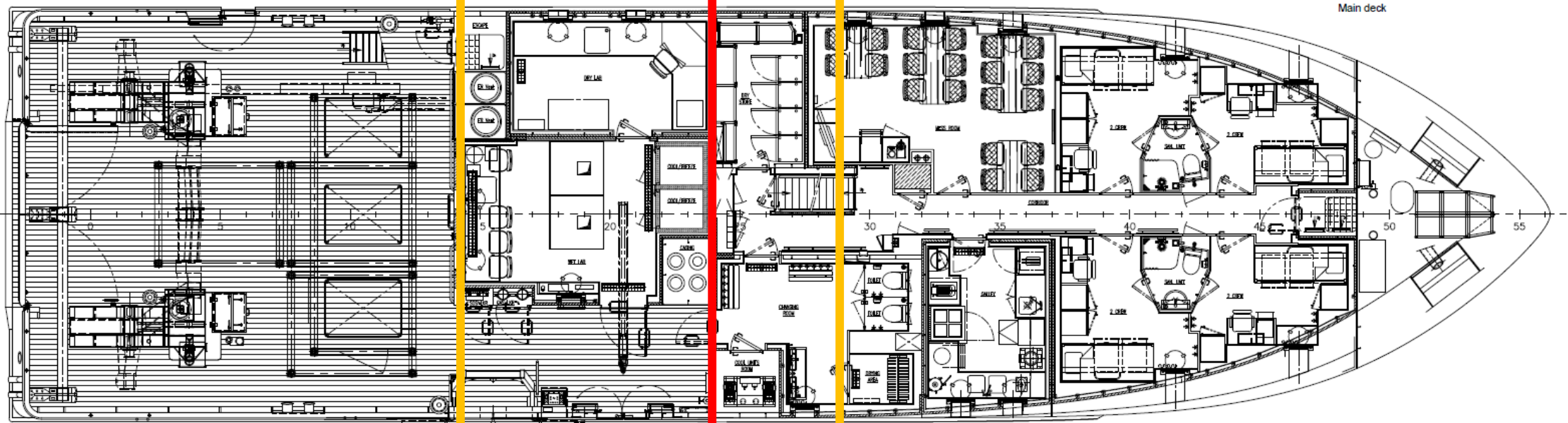
Pantry



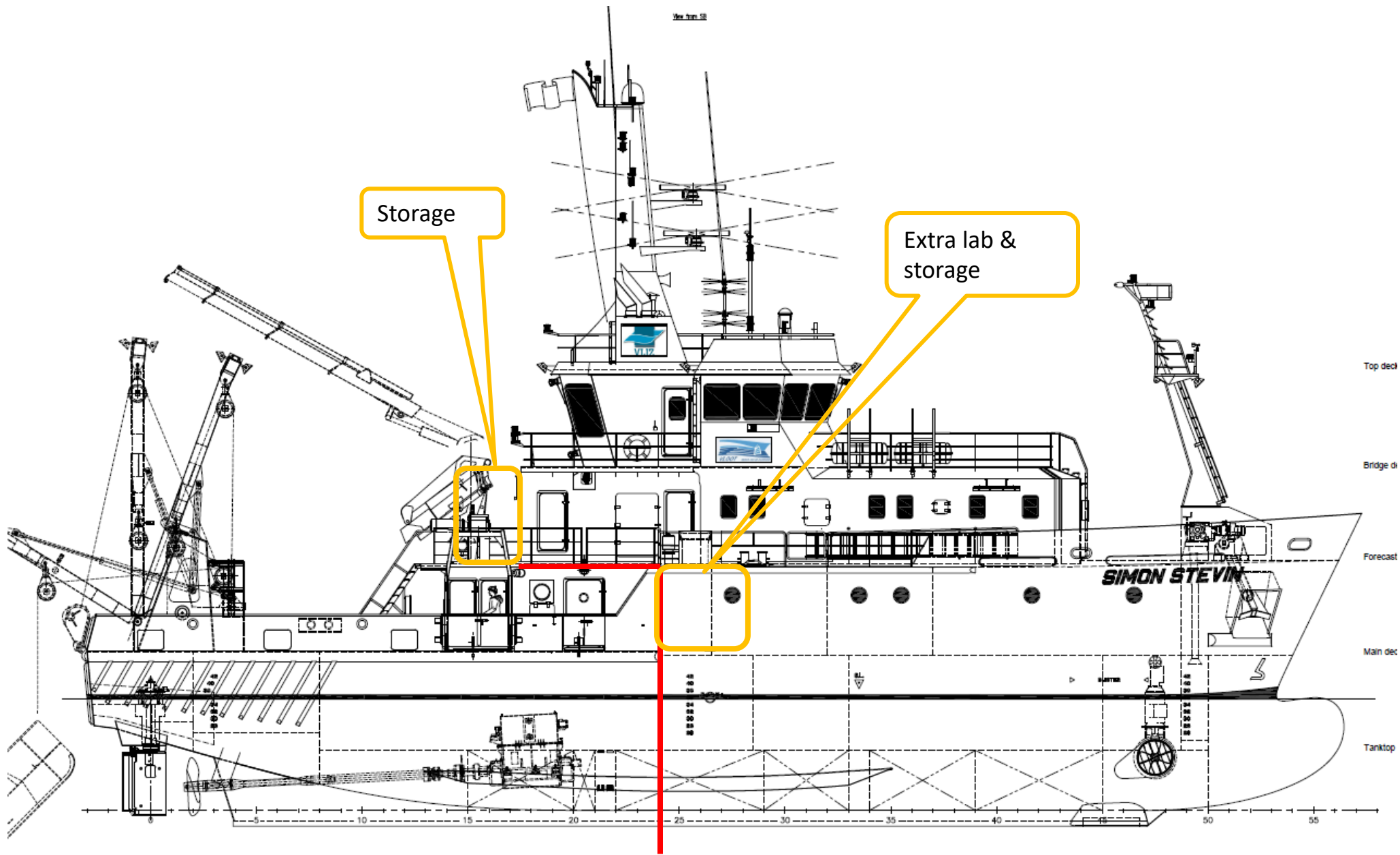
Wet lab 25m²
CTD Workstation
Fridge & Freezer too big

Stowage scientific &
ship equipment

Lack of Space

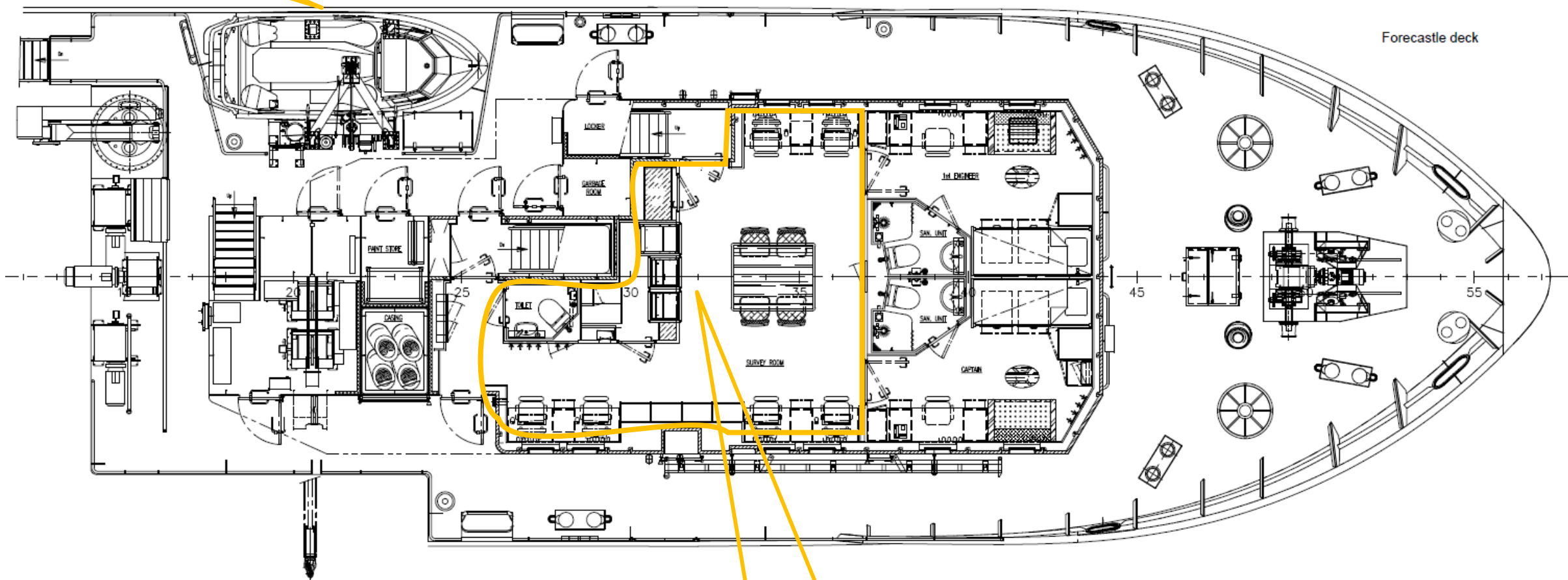


Lack of Space



Lack of Space

Work Boat



Reorganize Survey room
Enlarge server racks

Lack of Space

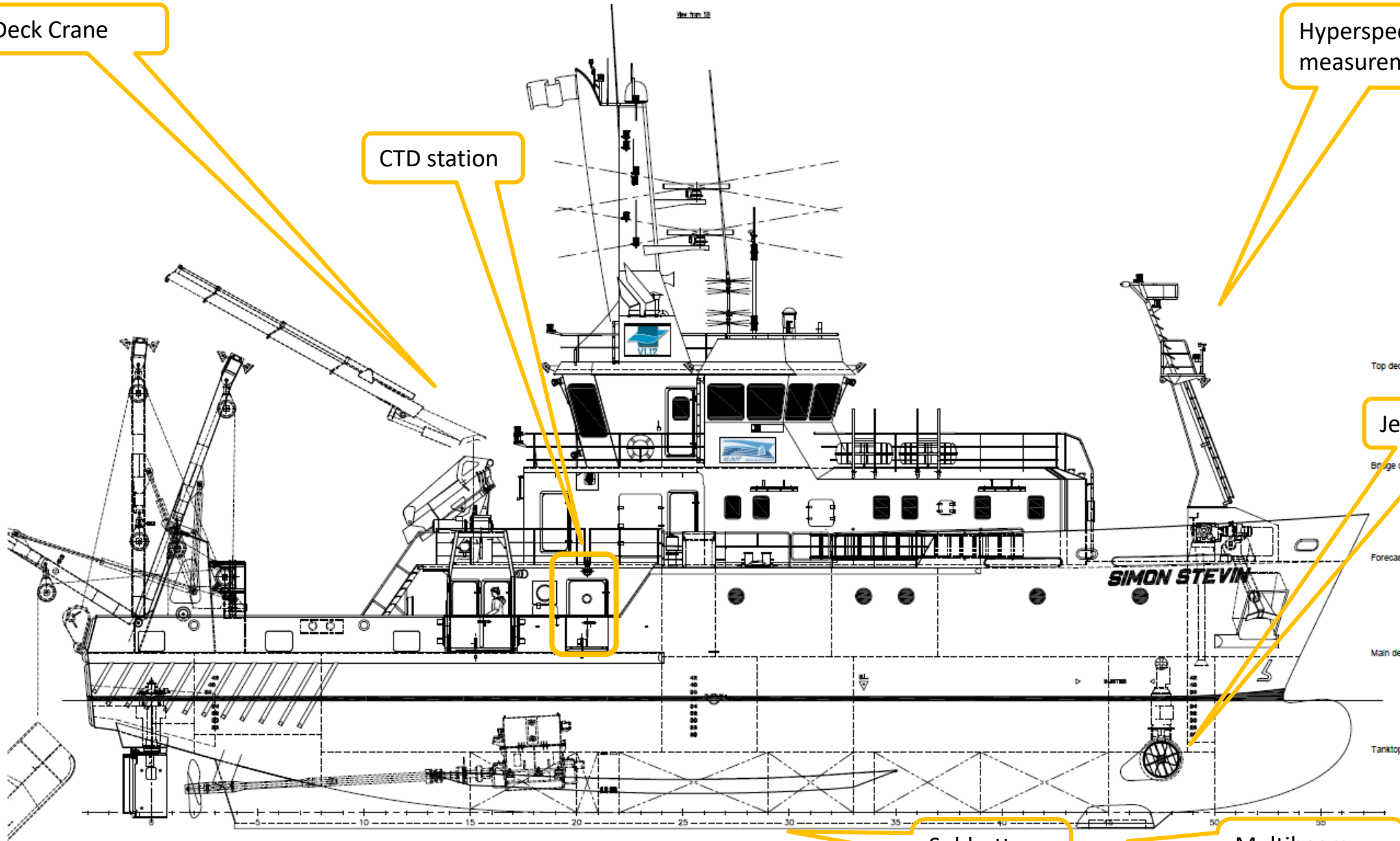
Extending RV Simon Stevin

- 458 GRT >> 550 – 600 GRT
- STCW certification of ship engineer & master
- Increase in operational costs
- Thickness of hull plates limiting
- Expected length extensions to be 1,5 - 2m max
- Positive effect on seakeeping behaviour
- Cost effective?

Deck Crane

CTD station

Hyperspectral measurements



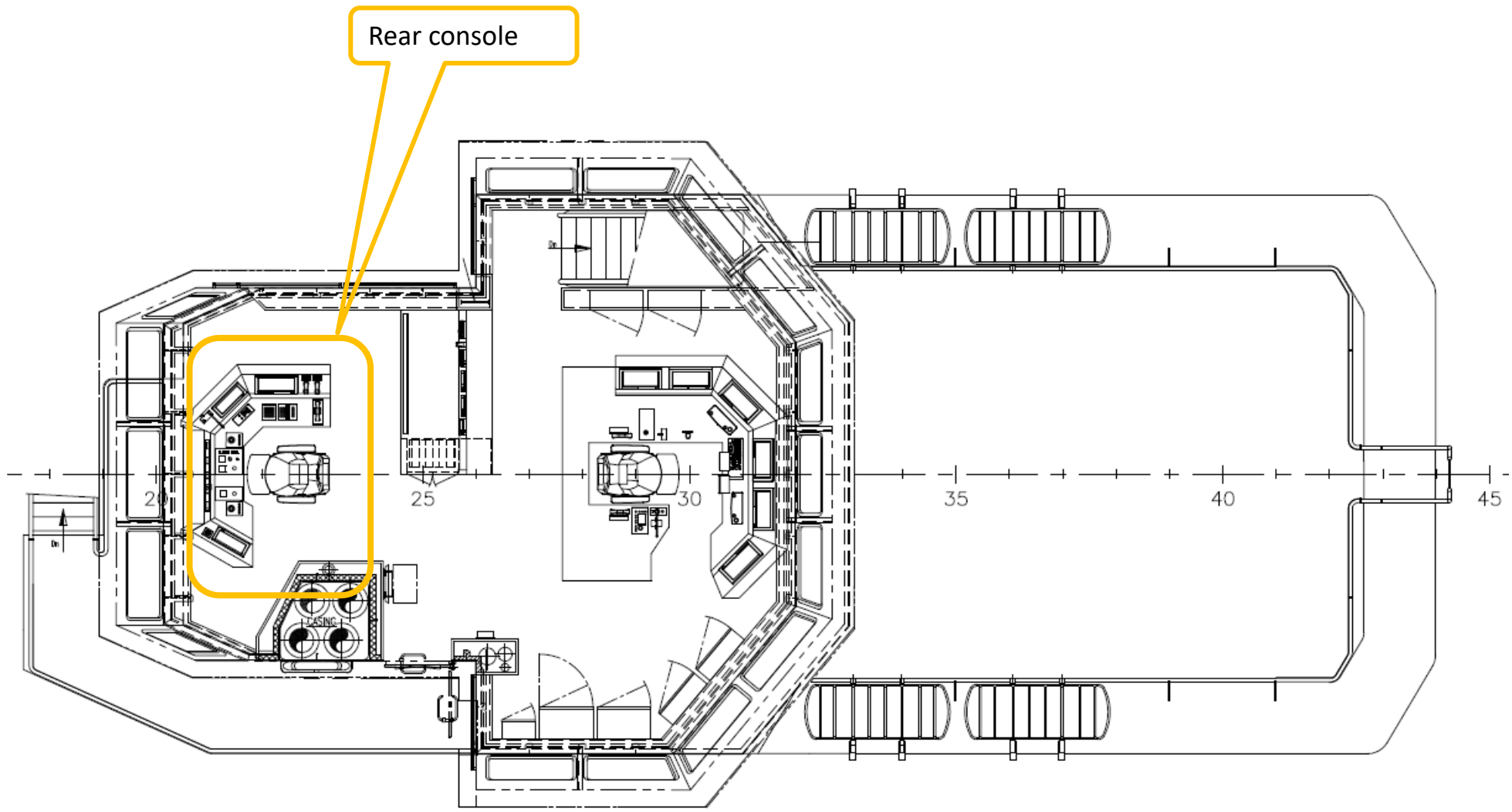
Jet propulsion

Subbottom Profiler

Multibeam replacement

Improve scientific operations





Improve scientific operations

RV Simon Stevin

- Designed to operate daytrips & less frequent multiple day campaigns
- Since 2015 increase in operational budget (380k€) to accommodate 40 days in continuous operation
- 3day campaigns Tue – Thu, every fortnight, not in summer
- Currently +70days in continuous operation, 5 week campaigns & 1 8-day campaign
- Keep mix of one day and multiple day campaigns
- Schedule at own convenience (not ship operators')
- ISPS certification
- Increase in Operational budget



RV Simon Stevin

Dual Fuel :

- Methanol
- ~~HVO~~

New propellers CLT design

- Less pull power, more speed
- URN capacity

RV Simon Stevin

- Specific/detailed study of need for space, CTD, survey room, propellers,....
- Get cost estimates (min – max) : consultants??
- Puzzle / prioritise with available funds
- Perform a number of improvements during regular drydocking (Foremast, new workboat)
- Plan for a minimal inavailability of the vessel, especially with regards to RV Belgica

Thank you

