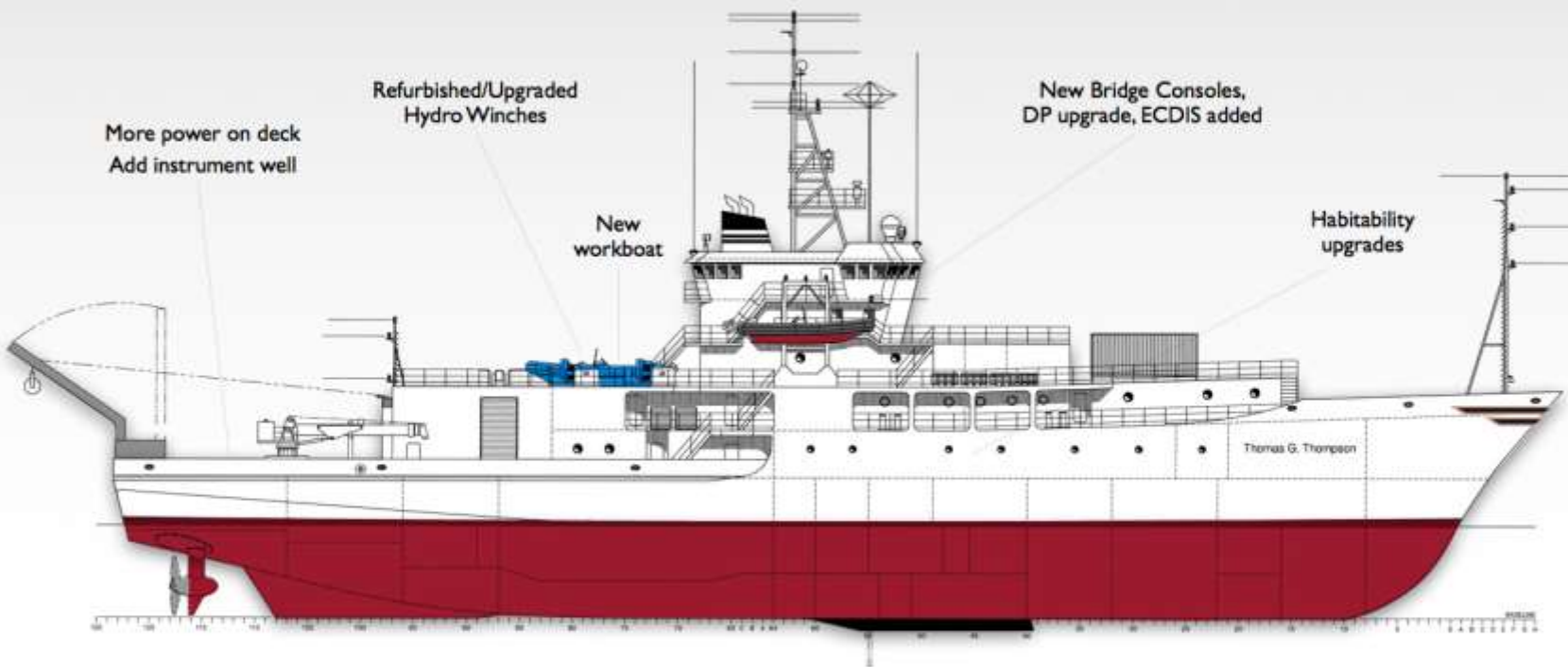


Thompson Mid-life Refit

Service Life Extension



RE-POWERING

- ✓ new engines
- ✓ alternators
- ✓ switchgear
- ✓ drives
- ✓ alarm/monitoring
- ✓ controls

ENGINEERING SYSTEMS UPGRADES

- ✓ A/C Plant replacement
- ✓ Firefighting systems upgrades
- ✓ RO Watermaker replacement
- ✓ Sewage system upgrades

SCIENCE SENSOR UPGRADES

- ✓ EM-302 upgrade
- ✓ Add 300 Hz ADCP

LAB SPACE IMPROVEMENTS

- ✓ Lab Lighting/Decks/Ventilation
- ✓ Remove Hydro-sweep

Mid-life Facts

- \$26+M contract with Vigor Marine Seattle
 - Ockerman Automation is the Propulsion System Integrator
 - Bruce Rosenblatt is Vigor's Naval Architect
 - 2 drydocking periods
- Ship enters yard: 16 June 2016
- Shipyard contract complete: 30 Apr 2017
- Planning for a month transition back to operations incl 10 day shakedown