The Challenge

• Replace the 50+ year old R/V Clifford A. Barnes
Initial Plan

• Design and build a replacement vessel

Unable to secure funding for design/build of a new vessel
R/V AORA

UK Fisheries Research Vessel – found for sale online
Timeline - Milestones

- Identified RV AORA for sale in England late Dec 2016
- Visited / inspected RV AORA – Mar 2017
- Vessel Purchased – 8 Aug 2017 - $1.07M
- Shipyard Contract – major maintenance, some modifications – complete 5 Oct 2017
- Load Rachel Carson in Rotterdam for transport to US – 28 Oct 2017
- Arrive West Palm Beach, FL – 11 Nov 2017
- Rachel Carson moored in Ft. Pierce, FL awaiting next load/transport
- Load Rachel Carson on next transport ship – 30 Nov 2017
- Arrive Victoria, BC 25 Dec 2017
- Move Rachel Carson to UW 28 Dec 2017
- Jan-Mar 2018 – prep for science, develop processes /procedures
- Apr 2018 – enter service, retire R/V Clifford A. Barnes
  - First cruise – 7-11 April
  - 11 cruises completed as of 26 Oct
- Accepted as a UNOLS vessel in the U.S. Academic Research Fleet – 24 July 2017
Drydocked at MacDuff Shipyard - Fraserborough, Scotland

Onloading RC on to M/V Transporter – Rotterdam, NL
Shipyard Work
MacDuff Shipyard, Fraserborough, Scotland

• Engine maintenance
• Harbor Generator engine replacement
• Electrical system repairs
• Battery bank replacements
• Stern Bulwark removal
• Gantry cross beam removal
• Move crane / winch controls
• Hydraulic system maintenance (inc. fitting/piping renewals)
• Stateroom modifications (increased berthing from 9 to 13)
• Drydock Inspection – shafts, rudders, through hull fittings
• Painting touch up & top coat plus full blast/paint for aft end of ship
Rachel Carson Prep for Science Ops

since arrival at UW

• Summary of what’s been accomplished since RC arrival at UW
  – Improved egress from lower berthing
  – Installed new Engine Room CO2 fire fighting system
  – Hydraulic controls (winches, crane) upgraded including addition of wireless controls
  – Cross-decked winches from Barnes to Carson
  – Completed Gantry Modifications
  – Added 115V 60 Hz power for labs & Pilothouse
  – Added Shore Power converter
  – Completed important Engine Maintenance
  – Replaced Port Generator control
  – Added fire extinguishing system for Hydraulic Space
Rachel Carson Prep for Science Ops cont’d

– Replaced stern tube cooling failing piping/fittings
– Completed major maintenance on watertight closures
– Added 2nd life raft – now 28 person capacity
– Cross decked CTD system from Barnes
– Added Rosepoint electronic charting
– Added SCS
– Verified Data network
– Added VHF radio & multiple remotes
– Installed met sensors & integrated into data system
– ES-60 / EK-60 calibrated
– Completed U.S. Coast Guard safety inspection
– Completed JMS inspection
The Old and the New
First Science Cruise
- Ocean Acidification in Puget Sound (Dr. Jan Newton)

“I'm very impressed by the ship! .... Frankly, I sort of fell in crush with the ship. I know its early, but I'm so very pleased. “
Already supporting a wide variety of scientific & academic activities