

# R/V Rachel Carson



# 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



10/26/2018

UNOLS Annual Meeting - Fall 2018

12







