

# R/V Rachel Carson



University of Washington  
School of Oceanography

9/8/17

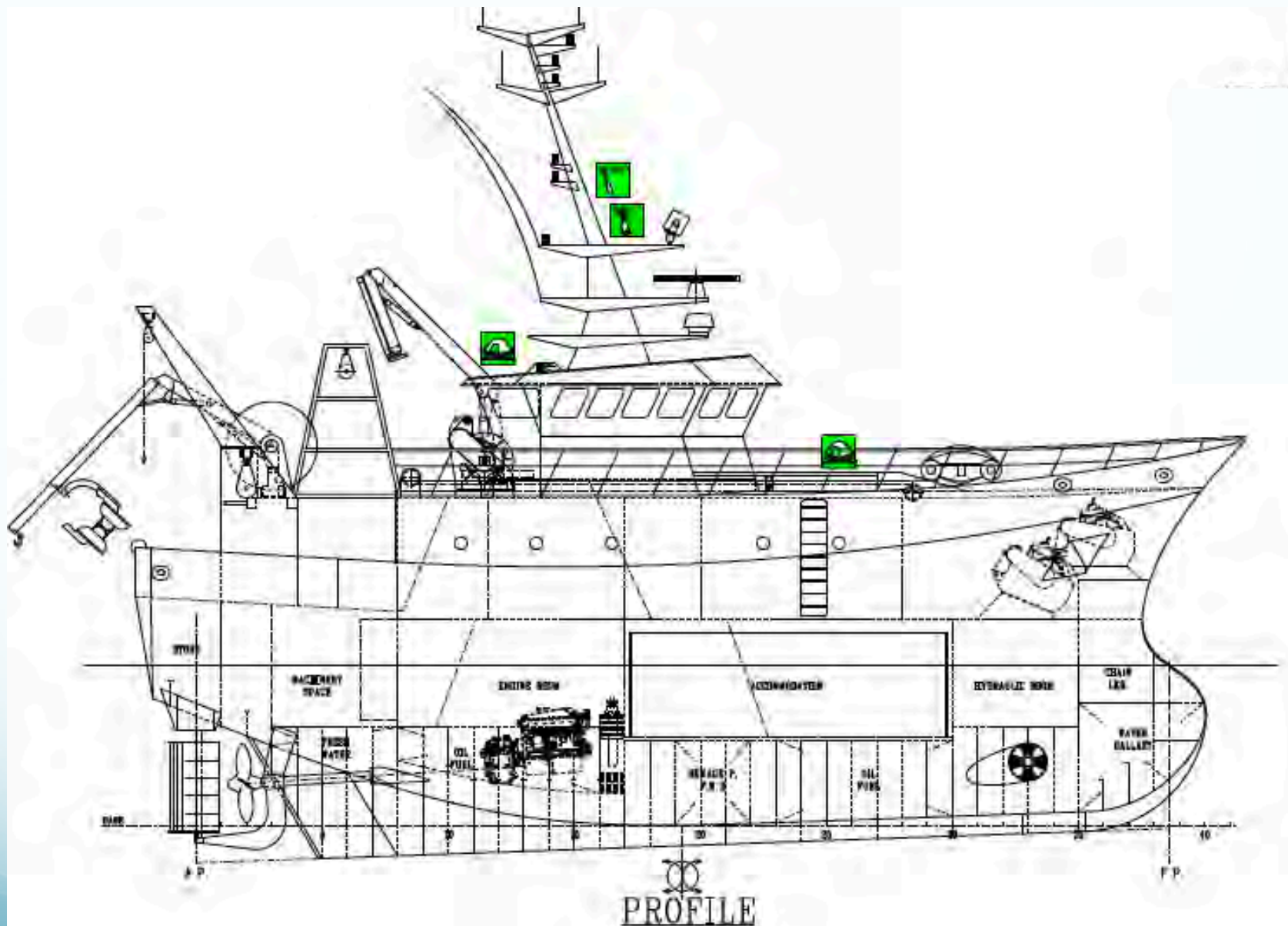
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# Update

- Purchase price: \$1,109,366M
- UW took ownership on 16 August 2017
- Vessel now in Scottish shipyard – original builder – for maintenance and modification
- Ship to US via cargo transport starting 25-30 October 2017. Arrive Victoria, BC 30-60 days later.

# Original Vessel Particulars

- 22m long
- 7.8m beam
- Twin screw diesel direct drive, bow thruster
- 14-day endurance
- Speed: up to 10.2 kts
- Sleeps: 9
- Wet & Dry Labs plus “Dry Locker”
- 7 hydraulic winches
- Articulating Crane w/good capacity
- Fixed A-frame
- 4 operating stations on the well equipped Bridge



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# R/V AORA at Delivery



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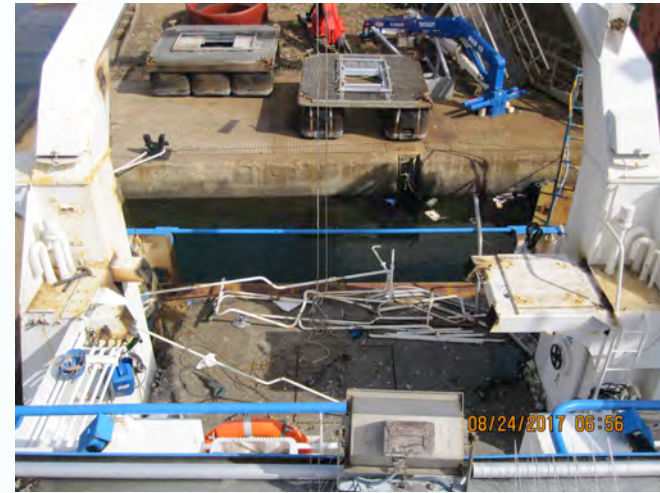
# Shipyard Work

- Engine maintenance
- Harbor Generator engine replacement
- Electrical system repairs
- Battery bank replacements
- Stern Bulwark removal
- A-frame cross beam removal
- Move crane / winch controls
- Hydraulic system maintenance (inc. fitting renewals)
- Stateroom modifications (incr. berthing from 9 to 14)
- Drydock Inspection – shafts, rudders, through hull fittings
- Painting touch up & top coat plus full blast/paint for aft end of ship

# Shipyards Work



Stern Bulwark Removed



A-frame cross frame removed



Stateroom Mods



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# More Shipyard Work



Relocated crane controls



Diesel engine major maintenance



Harbor Generator  
Engine Replacement  
& Generator Testing





# Costs

- Purchase Price: \$1.109M
- Transport Cost: \$325K (transported via cargo ship)
- Cost to Put Into Service: \$300K-\$550K
  - Shipyard: \$140K
  - Other expected costs
    - Science Prep - \$125K
    - Initial Power Mods - \$75K
    - **CTD Winch - ?**
    - Add'l outfitting? (e.g. fire extinguishers, SCBAs) - ?

# Notional Schedule

- 5 Oct - Depart Scotland
- 25-30 Oct – Transport departs for US
- 1-30 Dec – Transport arrives Victoria, BC, transit to UW
- Jan-Feb 2018 – prep for science, develop processes /procedures
- Mar 2018 – NSF Inspection, join UNOLS fleet
- Apr 2018 – enter service, retire R/V Barnes

# Key Issues to Address

- Winch to support CTD work
- Electrical modifications:
  - Shore power
  - Scientific loads
  - Develop short & long term plans for electrical system
- Develop operational & science support procedures
- Develop crewing plan dependent on science work
- Develop 5-year upgrade plan / MOSA
- Advertise - get scientists to submit proposals!!