



Regional Class Research Vessel (RCRV)



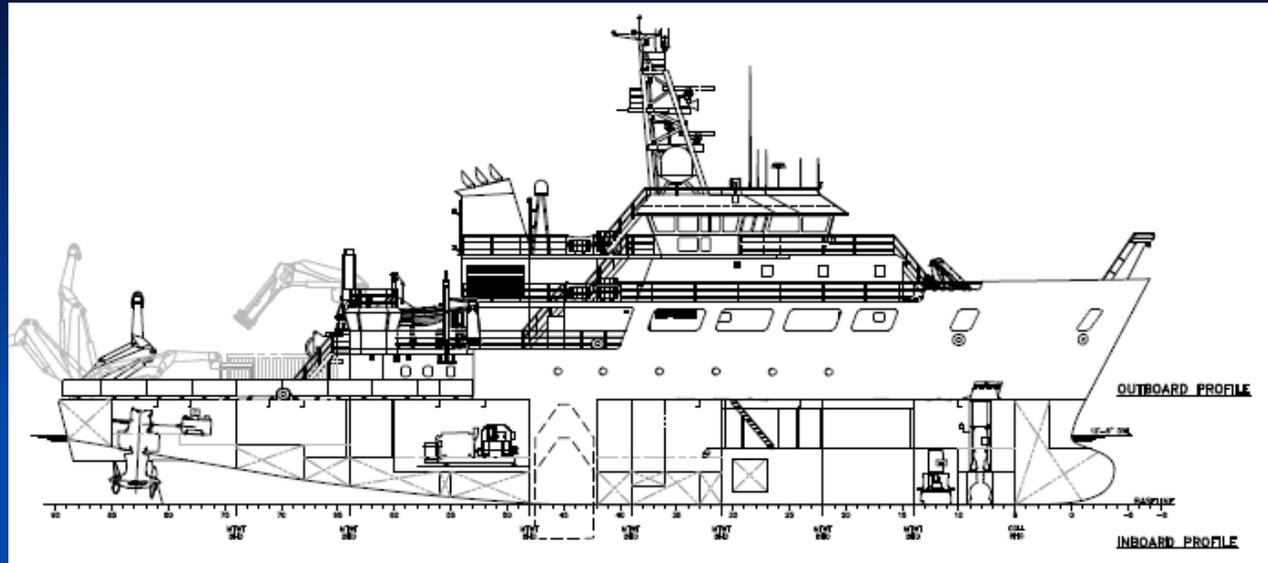
RVTEC Meeting

October, 2017

Jim Holik



Regional Class Research Vessel (RCRV)



- Construction Stage – started in July 2017
 - US Congress includes \$121.88 M in FY 2017 NSF budget for RCRV
 - OSU Contract with Gulf Island Shipyards for one ship, and options for two more
 - Design Verification and Transfer, 10 months
 - Keel Laying for RCRV-1, June 2018
 - Deliveries in 2020, 2021 and 2023
 - One year of sea trials and science verification before operations commence



Regional Class Research Vessel (RCRV)



■ Operations –

- Oregon State University to operate RCRV-1
- Additional operators, if needed, determined by competition
- Operators involved from DVT through transition to operations
 - Will assist in region-specific requirements
 - Improve vessel familiarity



Comparison of Ocean Class to RCRV

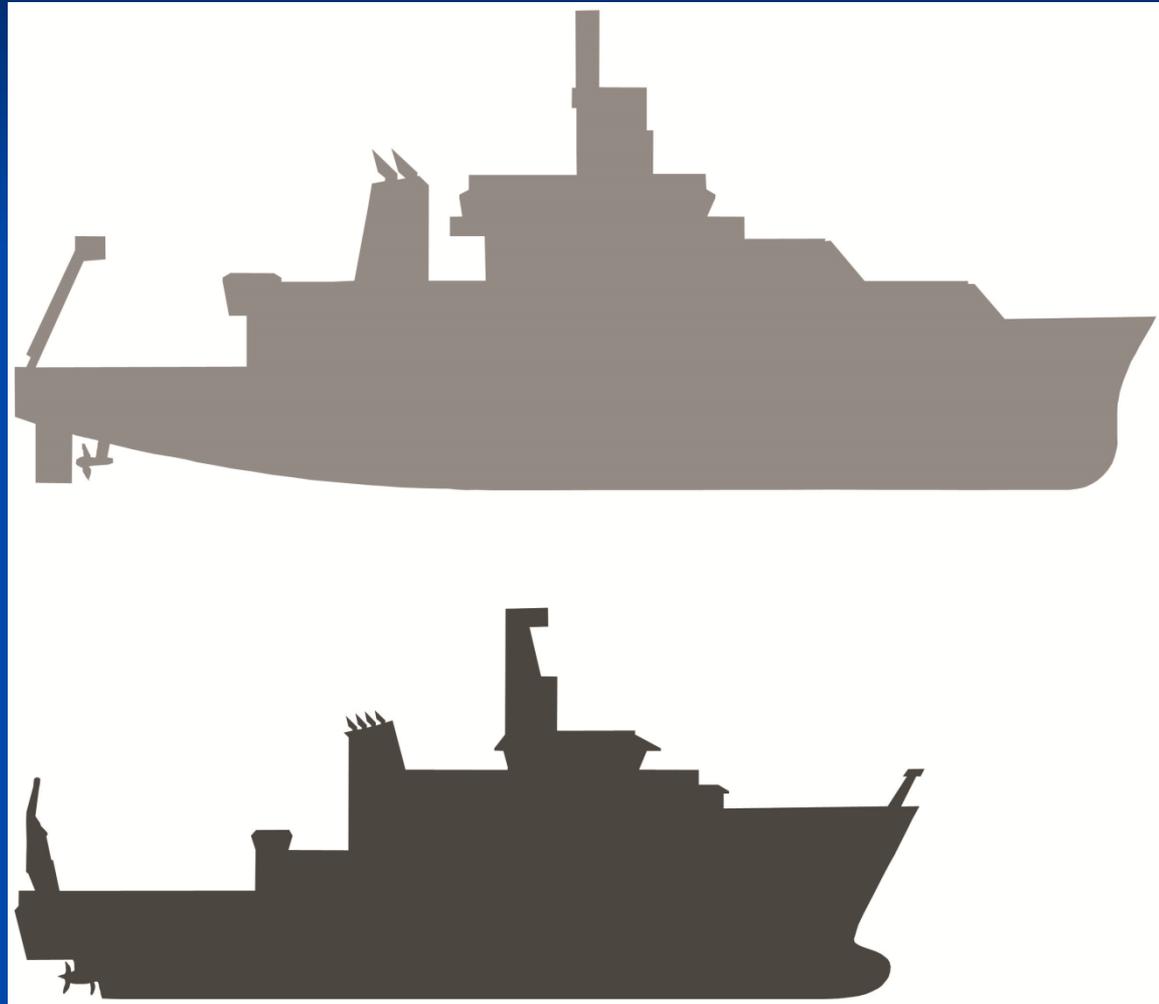


■ Ocean Class (OCRV)

- R/V *Sally Ride*
- R/V *Neil Armstrong*
- 238 ft.
- ~3000 tons displacement

■ RCRV

- 193 ft.
- ~1500 tons displacement



Principal Characteristics

| | |
|---|--|
| Length Overall | 193' – 0" |
| Length on Design Waterline | 178' – 0" |
| Beam | 41' – 0" |
| Depth, Baseline to Main Deck | 19' – 0" |
| Design Draft | 12' – 6" |
| Total Installed Power, Continuous..... | 2,685 bkW |
| Propulsion | (2) dual propeller Z-Drives |
| Bow Thrusters..... | 350 kW flush mounted, 280 kW retractable azimuthing thruster |
| Sustained Speed, Calm Water..... | 12 knots |
| Estimated Maximum Speed, Calm Water..... | 12.5 knots |
| Range, Sustained Speed | 5,400 nm |
| Endurance | 25 days |
| Displacement at Design Draft | 1,492 LT |
| Lightship Weight (estimated) | 1,183 LT |
| Science Payload & Portable Outfit Items | 66 LT |
| Ice Classification..... | ABS C0 |
| Main Lab..... | 510 ft ² |
| Wet Lab..... | 385 ft ² |
| Computer Lab | 175 ft ² |
| Datapresence Center | 215 ft ² |
| Main Deck (aft of the house) | 1,930 ft ² |
| Main Deck (including side deck)..... | 2,160 ft ² |
| Side Deck Length..... | 70 ft |
| 01 Deck (working area) | 600 ft ² |
| Accessible Science Berth | 1 Double Stateroom |
| Marine Technician Berth | 1 Double Stateroom |
| Total Science Berths (with Accessible & Marine Technician Berths) | 8 Double Staterooms |
| Crew Berths | 7 Single Berths, 3 Double Berths |
| Total Complement | 16 Scientists/Marine Technicians, 12 Crew |

Tank Capacities

| | |
|-----------------------------------|----------------|
| Diesel Fuel at 95% | 52,820 gallons |
| Ballast Water at 100% | 71,550 gallons |
| Potable Water at 100%..... | 6,800 gallons |
| Graywater Holding at 100% | 6,200 gallons |
| Blackwater at 100% | 700 gallons |
| Diesel Exhaust Fluid at 100%..... | 3,550 gallons |