Regional Class Research Vessel (RCRV)

RVTEC Meeting
October, 2017
Jim Holik
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

**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