



THE ONR RESEARCH FLEET

Delivered Sept 2015



R/V Neil Armstrong (AGOR-27)
Woods Hole Oceanographic Institution
Christening 29 Mar 2014
Delivery Jan 2015

Delivered Jul 2016



R/V Sally Ride (AGOR-28)
Scripps Institution of Oceanography
Christening 9 Aug 2014
Delivery 2015

Retired 2014 – Transferred
to Mexico May 2016



R/V Knorr (AGOR-15)
Woods Hole Oceanographic Institution
To be relieved by R/V Neil Armstrong

Retired 2014- Transferred
to Philippines May 2016



R/V Melville (AGOR-14)
Scripps Institution of Oceanography
To be relieved by R/V Sally Ride

- Navy research ships have global reach - regular two year expeditions
- Science teams rotate to ship for 18-25 day projects
- Navy owned ships have been scheduled via UNOLS since 1972
- Navy ships in UNOLS average 280 days/yr operations
- Daily operations costs are recovered via a "day rate" charged to agency research
- NSF is the major user, then Navy, NOAA, USGS, DOE
- Crews are university employees and professional mariners

Propulsion Control System Upgrade
2016



R/V Kilo Moana (AGOR-26)
University of Hawaii



R/V Atlantis (AGOR-25) & Alvin
Woods Hole Oceanographic Institution

Mid-Life Refit 2017-2018



R/V Thomas G Thompson (AGOR-23)
University of Washington

Mid-Life Refit 2018-2019



R/V Roger Revelle (AGOR-24)
Scripps Institution of Oceanography



R/P FLIP
Scripps Institution of Oceanography



AGOR-23 Class Mid-life Refit - Overhaul

- AGOR-23 Class R/Vs (*Thompson*, *Revelle*, *Atlantis*) are beyond the mid-point of their 30 year service lives
- Mid-life overhauls will address regulatory requirements, obsolescence, upgrade/replace problematic systems, and to extend the service lives of the vessels beyond 30 years
- Design work completed Jul 14 for *Thompson*; shipyard selected Aug 15; *Thompson* overhaul June 2016- July 2017 in Seattle at the Vigor shipyard
- Planning for 2018 overhaul of AGOR 24/*Roger Revelle* has begun.
- Funds permitting, we are anticipating a late 2019 overhaul project for *Atlantis*.
- Overhauls should extend the service life of these ships by 10-15 years.





New Ocean Class Research Vessels

AGOR 27 Neil Armstrong (Woods Hole) – AGOR 28 Sally Ride (Scripps)

A Support Ships, Boats and Craft Program Office (PMS-325) program with ONR as mission sponsor

- Construction Start: June 2012
- Delivery: Sep 2015 & July 2016
- Length: 238 ft; Beam: 55 ft; Draft: 15 ft
- Full load displacement: 3,024 LT
- Range: 11,500 nm; Endurance: 40 days
- Dynamic Positioning: ± 5 mtr in SeaState5
- Propulsion: Integrated Diesel Electric Drive
- Bow and Stern Thrusters
- Controllable Pitch Propellers
- Multi-beam Bottom Mapping Sonars: EM-122/EM-710
- Sub-bottom Profiler
- Deep, Shallow, Mid-Water Acoustic Doppler Current Profilers (ADCPs)

Neil Armstrong



Sally Ride





New Ocean Class Research Vessels

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Transition to Full Operations

- After Delivery both ships conducted shakedown cruises, deep water winch testing, sea acceptance testing (SAT) of acoustic systems and Science Verification cruises.
- Science Verification cruises (SVC) are “dress rehearsals” with experienced sea-going scientists conducting normal science operations and providing feedback on performance and areas for improvement.
- *Neil Armstrong* started normal science operations in May 2016 including an expedition to the North Atlantic and Iceland.
- Some SVC cruises are still planned to verify operations with the *Jason* ROV system and for Jumbo Piston Coring.
- *Sally Ride* is currently conducting SVC cruises and finishing with Science system outfitting. Science Ops begin in November.

Neil Armstrong
Winch Testing



Sally Ride
Testing Main Crane



Questions?

