

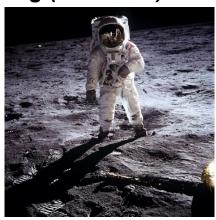


Ocean Class AGOR Names Armstrong Class R/Vs

R/V Neil Armstrong (AGOR 27)







R/V Sally Ride (AGOR 28)





Tuesday, September 25, 2012 - Secretary of the Navy Ray Mabus announced today that the first Armstrong-class Auxiliary General Oceanographic Research (AGOR) ship will be named Neil Armstrong, after the first man to walk on the moon during the 1969 Apollo 11 mission who died in August 2012 at age 82. Armstrong's widow, Carol, will serve as the ship's sponsor.

On April 12, 2013 Secretary Mabus announced that AGOR 28 will be named in honor of the first woman in space and former Scripps/UCSD Professor, Dr. Sally Ride. "Sally Ride's career was one of firsts and will inspire generations to come," Mabus said. "I named R/V Sally Ride to honor a great researcher, but also to encourage generations of students to continue exploring, discovering and reaching for the stars."





Ocean Class AGOR Quad Chart



Key Characteristics:

Hull Material Steel; Aluminum pilothouse

Length 238 ft
 Beam (Max) 50 ft
 Draft 15 ft

• Displacement 3043 LT (Full Load)

Sustained Speed 12 kts
Range 10,545 nm
Endurance 40 days

Propulsion
 4 x 1044 kW Diesels, 2 x 879 kW Electric

Propulsion Motors, 2 x Controllable Pitch

Propellers, Bow & Stern Thrusters

Accommodations
 20 crew, 24 science berths

Mission: Integrated, interdisciplinary, general purpose oceanographic research in coastal and deep ocean areas. Oceanographic sampling and data collection of surface, midwater, sea floor, and sub-bottom parameters.

Quantity: Two (2)

User: Woods Hole Oceanographic Institution (AGOR 27),

Scripps Institution of Oceanography (AGOR 28)

Ship Names: R/V Neil Armstrong (AGOR 27)

R/V Sally Ride (AGOR 28)

Builder: Dakota Creek Industries, Inc.

Contract: FFP

Contract Value: \$177.4M

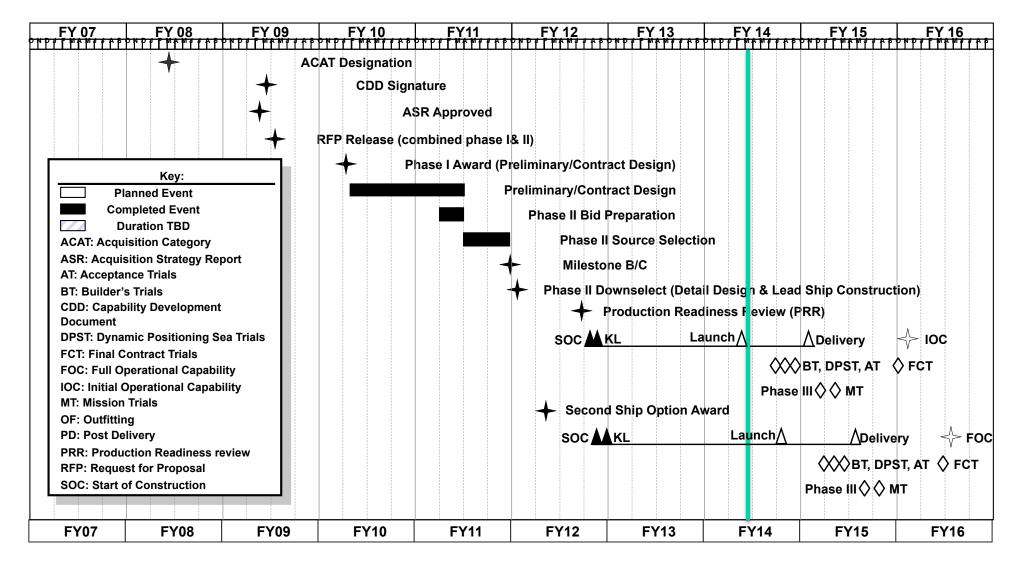
ROM Unit Cost: \$74.1 M (lead), \$71.0M (follow)

Key Events:	Date:
 Phase I Contract Award 	Jan 10
 Milestone B/C 	Sep 11
 Phase II Contract Award 	Oct 11
 Follow Ship Award 	Feb 12
 Start Construction (Lead Ship) 	Jun 12
 Start Construction (Follow Ship) 	Jul 12
 Launch 1st Ship 	Feb 22, 2014
 Launch 2nd Ship 	~ Aug 2014
 Delivery (Lead Ship) 	Jan 15 **
 Delivery (Follow Ship) 	Apr 15
** Delivery delayed by 3 months	





Ocean Class AGOR Acquisition Schedule



^{*} July 2002 – started work on Science Mission Requirements with workshop in Salt Lake City





Ocean Class AGOR Production Progress

- R/V Neil Armstrong successfully launched early on Feb. 22, 2014
 - Christening by Mrs. Carol Armstrong on Saturday March 29, 2014
- R/V Sally Ride moved to rails for completion prior to August 1st launch
 - Christening tentatively scheduled for Aug 9 pending SECNAV approval
- Outfitting continues on Armstrong with most major equipment installed with the exception of Cranes. Hydro winches and A-Frame are being installed now.
 - Late Delivery (Aug) of Main Crane results in 3 month delivery delay
- Major equipment is being landed on Ride (HVAC, UPS, Transformers). It is expected that the pace of outfitting will (should) accelerate on Ride.
- Logistics Spare Parts, Tech Manuals, Training are all on track and far ahead of other comparable projects – excellent quality.
- Planning for test and trials well under way and some tests have been completed.
 - Test procedures being released for government comment.
 - DCI has hired a new Test and Trials Manager





Ocean Class AGOR Science Mission Equipment

- Shortly after Delivery the following mission equipment systems will be installed at Dakota Creek under the supervision of WHOI and SIO
 - Multi-Beam Swath Mapping System: Deep Water Kongsberg EM-122 12 kHz 1° x 2°
 - Multi-Beam Swath Mapping System: Mid Water Kongsberg EM-710 0.5° x 1°
 - Acoustic Doppler Current Profilers: 38 kHz, 75 kHz (WHOI), 150 kHz (SIO), 300 kHz
 - Sub Bottom and Single Beam Profiler: Knudsen Chirp 3260, 16 Massa TR-1075 3.5
 kHz transducer array; and one12 kHz Single beam transducer
 - Attitude, Heading, Reference System (AHRS): Applanix PosMV 320, or IXSEA HYDRIN (or equal)
 - Sea Surface Sound Velocity System: Kongsberg SSVS, Seabird Thermosalinograph (or equal)
 - Flow Thru Seawater Instrumentation (piping and pumps by shipyard)
 - Broadband Satellite Communications System TBD Fleet Broadband, HiSeas Net, (C and Ku Band)
 - Acoustic Navigation and Tracking system Kongsberg HiPap or Sonardyne
 - Fisheries Echosounder System Kongsberg EK60 (frequencies tbd)
 - Local Area Network servers, printers, plotters, etc.







~ 6 months ago - Pilot House being installed on Neil Armstrong

















R/V NEIL ARMSTRONG Afloat alongside at DCI







R/V NEIL
ARMSTRONG
Galley, Mess
Deck and
Staterooms
Taking Shape















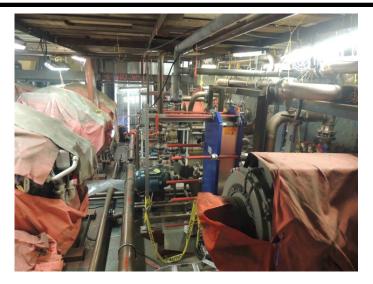
WHOI Logo placed on stack



Bridge Consoles being installed



Paint, Zincs, Ready to Float



Engine Room filling up with equipment



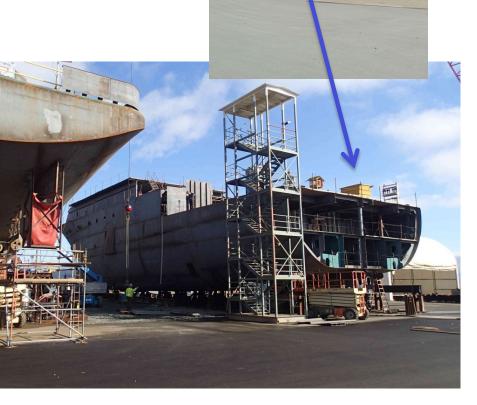


AGOR 28 (R/V Sally Ride) Production



Sally Ride – 6 months ago, modules coming together









AGOR 28 (R/V Sally Ride) Production



SALLY RIDE Now – Moved to the Rails - ready for launch in a few months





AGOR 28 Sally Ride Production



Pilot house being landed on Sally Ride





AGOR Production Pictures



Work Boat



Handling System FAT - Allied



Controllable Pitch Props being assembled



Mast Under Construction



Photos courtesy of Operator's On Site Reps and Lyn Carroll (SUPSHIP Bath)



Gary McGrath
Chief Engineer
Woods Hole Oceanographic Institution



Paul Bueren Chief Engineer Scripps Institution of Oceanography



Ocean Class AGOR







Program Organization OC AGOR

