

Ocean Class AGOR Update

A photograph of two large icebreakers docked at a pier. The ships are white with dark blue hulls. The pier is paved and has yellow bollards on the left. There are various pieces of equipment and supplies on the pier. The sky is blue with some clouds.

UNOLS Council Meeting
July 2015

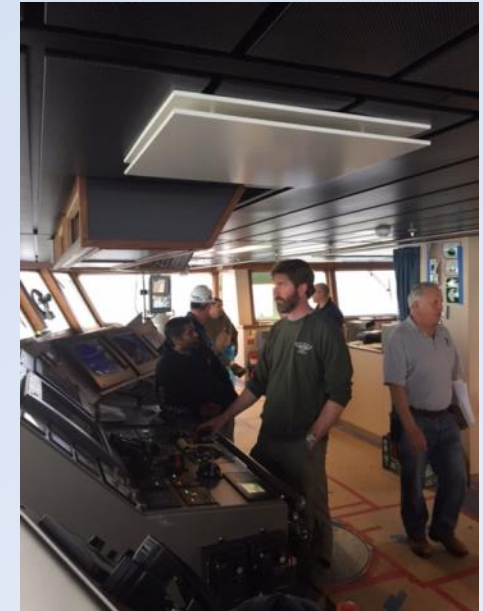
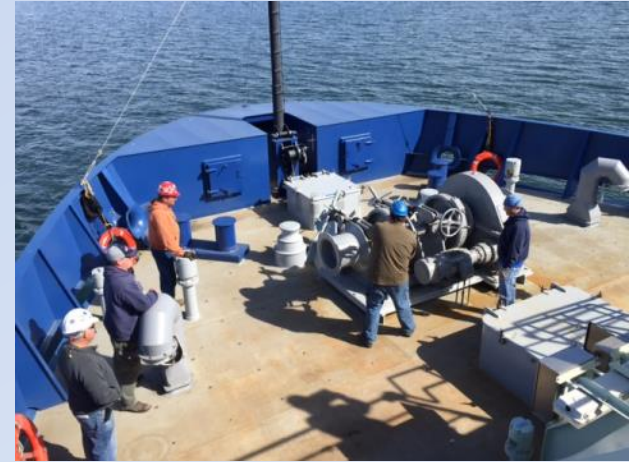
Tim Schnoor/ J.M. Prince

Status on Test, Trials and Delivery

- *R/V Neil Armstrong (AGOR 27)*
 - *Completed Builder's Sea Trials in May*
 - *Completed - Vendor Grooming, power runs, maneuvering runs, and noise & vibration measurements. Also completed DP Grooming and Trials and further propulsion system grooming. Conducted dock tests of winches and handling systems.*
 - *Mock INSURV completed with some demonstrations redone or deferred to June/July*
 - *May 6-8 – SONAR Self Noise testing cruise to waters outside Puget Sound,*
 - *Some bubbles when headed into seas (SS3-4) with pitching; cavitation from leading edge of bilge keels (easily fixable) and some cavitation from props that may be caused by raised bolt heads and keeper bar (needs further investigation).*
 - *August 3rd – Acceptance Trials, Navy INSURV*
 - *September 23rd Delivery*
 - *September/October/November – Fitting Out Availability and installation of Acoustic Systems & Mission Equipment.*
 - *Mission Equipment availability now being competed due to schedule conflicts at DCI.*

Status on Test, Trials and Delivery

- *R/V Neil Armstrong (AGOR 27)*



Status on Test, Trials and Delivery

- *R/V Sally Ride (AGOR 28) - tentative according to DCI*
 - *Currently undergoing outfitting and some testing*
 - *Mostly pulling wires, installing piping and joiner work*
 - *Began completion of noise dampening and insulation*
 - *See slide on MLV*
 - *Handling equipment and winches being installed.*
 - *Load Bank Testing of Generators took place in May*
 - *Commissioning of various systems on-going*
 - *Fall/Winter – complete commissioning and Builder's trials*
 - *11 January 2016– Acceptance Trials, Navy INSURV*
 - *Late February/Early March 2016 Delivery (anticipated date)*
 - *March/April/May – Fitting Out Availability and installation of Acoustic Systems & Mission Equipment.*

Construction Progress

- *R/V Sally Ride (AGOR 28)*



Post Delivery – Science Verification

- Before the R/V Neil Armstrong can be designated as a vessel operating within the University-National Oceanographic Laboratory System (UNOLS) fleet and capable of full-scale science operations, she must undergo a series of post-delivery tests, evaluations, and inspections.
 - Currently scheduled for sixty-five days after the transit to the Gulf of Mexico and completion of Phase III science mission equipment installation and testing with some testing activities during the transit. The actual amount of time will depend on the final schedule of events.
- Some of the purposes of the science verification program is to characterize science system performance, identify areas that require modification or enhancement and provide the opportunity to create ship-specific operating and safety procedures.
- WHOI has created a draft plan and working to finalize it.
- As the plan is developed WHOI has requested input from their own Marine Operations Committee, the Ocean Class Advisory Committee and other interested members of the community.
- The Science Verification Period will culminate with an NSF style Inspection and designation as a UNOLS Vessel by the end of March, 2016.
- The Navy will conduct final acceptance trials with INSURV later in 2016.

Post Delivery – Schedule – AGOR 27

Tentative as of July 8, 2015

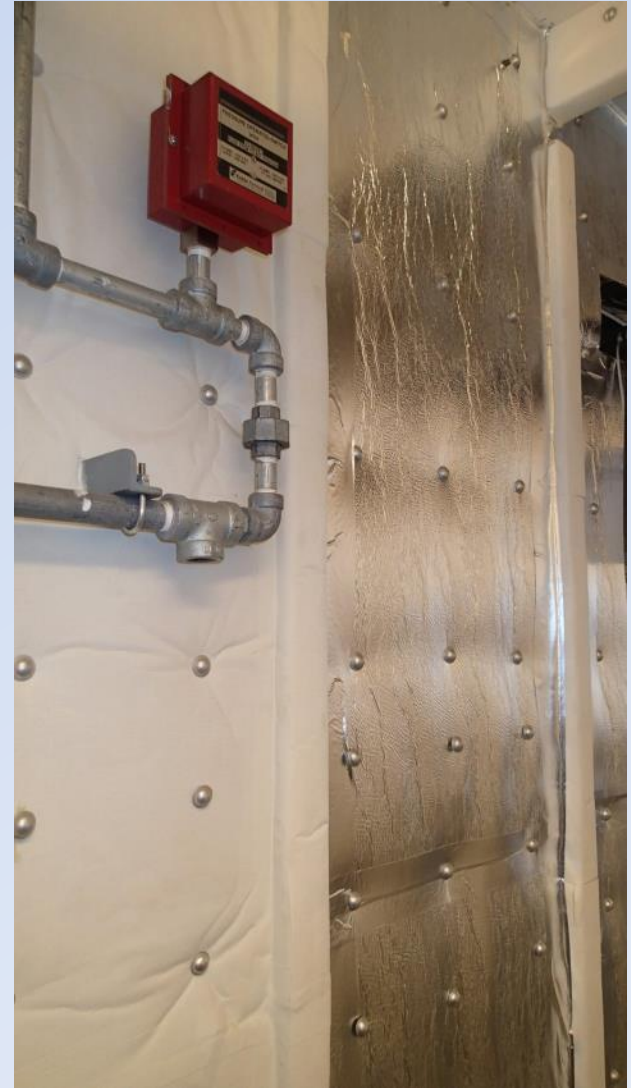
Dep/Arr	Start Port/End Port	Purpose	Duration
• 23 Sep	Anacortes	Delivery	
• 24 Sep/23 Oct	Anacortes/Anacortes	Fitting Out Avail.	30 Days
• 24 Oct/17 Nov	Anacortes/Charleston	Transit	25 Days
• 18 Nov/21 Jan	Charleston/Charleston	Mission Equipment Installation & Testing	65 Days
• 22 Jan/27 Jan	Charleston/Woods Hole	Transit	6 Days
• 30 Jan/22 Apr	Woods Hole/Woods Hole	Shakedown/Outfitting/Science Verification	

THE FOLLOWING ELEMENTS ARE SUBJECT TO NEGOTIATION & FINAL PLANNING

- April NSF Inspection/UNOLS Designation
- April/May Available for Scheduling
- July - August Final Contract Trials/INSURV
- September/October Post Shakedown Availability

Mass Loaded Vinyl (MLV)

- Mass Loaded Vinyl is used as a sound dampening material to achieve Airborne Noise Requirements. Alternative to lead – dense and thin.
- Used on NOAA FRV's, *Sikuliaq*, and many other ships around the world.
- Coast Guard NVIC (notice) last year indicated that this material was not approved by SOLAS or Coast Guard. Coast Guard to work with vessel owners/shipyards if material is installed or being installed.
- Dakota Creek (DCI) received notice from Coast Guard to stop installing MLV on *Sally Ride* (about 30% complete). *Armstrong* was complete.
- DCI has recently received notification that an alternative MLV material was approved with certain installation methods. DCI has started installing this material in *Ride*. Impact on Schedule not known, some delay, but DCI still indicates October delivery date.
- **Coast Guard Determination will affect many ships and is not expected prior to delivery of ARMSTRONG. Coast Guard plans to issue a COI without any reference to MLV issues.**
- NAVSEA completed independent fire safety testing on the installed materials.



Un-approved

Approved

Questions?

