

#### Status on Test, Trials and Delivery

- R/V Neil Armstrong (AGOR 27)
  - Undergoing Builder's Sea Trials
    - 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, practice acceptance trials this week
    - May 6-8 SONAR Self Noise testing,
      - Initial bubble sweep down results look very good No Bubbles under transducers. Some issues with cavitation from Propellers
  - June 12<sup>th</sup> Acceptance Trials, Navy INSURV
  - July 17<sup>th</sup> Delivery
  - August & September Fitting Out Availability and installation of Acoustic Systems & Mission Equipment.

# 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.
    - Will start lighting off generators and commissioning systems soon.
      - Load Bank Testing in May
  - August complete commissioning and Builder's trials
  - September 14<sup>th</sup> Acceptance Trials, Navy INSURV
  - October 30, 2015 Delivery (contractual date)
  - November & December Fitting Out Availability and installation of Acoustic Systems & Mission Equipment.

# **Construction Progress**

• R/V Sally Ride (AGOR 28)









#### Post Delivery – Science Verification

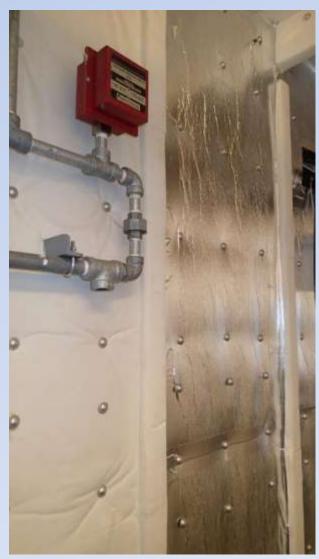
- Before the R/V Neil Armstrong can be designated as a vessel operating within the University-National Oceanographic Laboratory System (UNOLS) fleet and capable of full-scale science operations, she must undergo a series of post-delivery tests, evaluations, and inspections.
  - Currently scheduled for sixty-five days after completion of Phase III science mission equipment
    installation and testing and the transit to the Gulf of Mexico 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 will seek input from their own Marine Operations
  Committee, the Ocean Class Advisory Committee and other interested members
  of the community. ANY SUGGESTIONS FROM YOU ALL ARE WELCOME.
- The Science Verification Period will culminate with an NSF style Inspection and designation as a UNOLS Vessel by the end of February, 2016.
- The Navy will conduct final acceptance trials with INSURV later in 2016.

# Post Delivery – Schedule

Duplicate Schedule 2015 - Neil Armstrong								
LOI #1  Letter Of Intent - ID #12292 Version #1 - 3/9/2015								
Scheduling Contact(s)  Eric Benway ebenway@whoi.edu (508) 289-3770								
View Details    Set Default								
Dep	Arr	Start Port/End Port	Pl/Purpose/Project#				Days/Agency/Status	
01 Jan	17 Jul	Anacortes/Anacortes	Shipyard/					<u>View</u>
18 Jul	25 Sep	Anacortes/Anacortes	/PHASE III Fit Out/				70/INST-WHOI/NonOp	<u>View</u>
26 Sep	03 Oct	Anacortes/San Diego	/Shakedown Leg 1/				11/NAVY-ONR/F	<u>View</u>
07 Oct	20 Oct	San Diego/Balboa	/Shakedown Leg 2/				14/NAVY/F	<u>View</u>
21 Oct	02 Nov	Balboa/Galveston	/Shakedown Leg 3/				14/NAVY/F	<u>View</u>
05 Nov	10 Nov	Galveston/St. Petersburg	/Shakedown Leg 4/				13/NAVY/F	<u>View</u>
18 Nov	25 Nov	St. Petersburg/St. Petersburg	/Shakedown Leg 5/ /AUTEC Range/				8/NAVY-ONR/F 2/NAVY/F	<u>View</u>
01 Dec	03 Feb	St. Petersburg/St. Petersburg	/Sci Verification/				35/NAVY/F	<u>View</u>
08 Feb	10 Feb	St. Petersburg/St. Petersburg	NSF Inspec/UNOLS DESIGNATION/				0/OTHER/NonOp	<u>View</u>
TBD	TBD	Woods Hole/Woods Hole	Navy INSURV/By January 2016/				0/OTHER/NonOp	<u>View</u>
			Agency	Funded	Pending	Total		
			NAVY	97	0	97		
			Total	97	0	97		

# 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.
- No determination yet from Coast Guard regarding unapproved material already installed. May not get this for 5 or 6 months. Could impact other ships.
- NAVSEA is doing independent fire safety testing on the installed materials.



**Un-approved** 

**Approved** 

