Ocean Class AGOR Update

FIC Meeting
March, 2015
J.M. Prince
Status on Test, Trials and Delivery

• R/V Neil Armstrong (AGOR 27)
  – Undergoing Builder’s Sea Trials
    • Last Week Vendor Grooming, power runs, maneuvering runs, and noise & vibration measurements.
    • This Week DP Grooming and Trials
    • April – SONAR Self Noise testing, bubble sweep down and lastly a Mock INSURV, practice acceptance trials.
  – June 12th – Acceptance Trials, Navy INSURV
  – July 17th Delivery
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.
  – August – complete commissioning and Builder’s trials
  – September 14th – Acceptance Trials, Navy INSURV
  – October 30, 2015 Delivery (contractual date)
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.
  • Go beyond vendor acceptance tests.
  • Scheduled after completion of Phase III science mission equipment installation and testing and the transit to the Gulf of Mexico.
  • Some testing activities will take place during the transit.
  • The actual amount of time will depend on the final schedule of events.
  • Currently scheduled for sixty-five days with a mixture of both at-sea and in-port days.

• The purpose of the science verification program will be to:
  • Characterize science system performance
  • Establish the viability of publication-quality scientific data collection.
  • Confirm that various science systems function successfully, both individually, and with other systems.
  • Assure future science users of the ship’s capability of both science related systems and general work flow
  • Identify areas that require modification or enhancement.
  • Provide the opportunity to create ship-specific operating and safety procedures
Post Delivery – Science Verification

- WHOI has created a draft plan that is intended to:
  - Identify the discrete pieces of equipment and systems to be tested,
  - Define how much time will be required for verification,
  - Under what operating conditions (sea state, weather, etc.),
  - How success will be measured,
  - Identify which scientists will be participating in the various legs of the science verification cruise.
  - Create a schedule of cruise legs and agenda of activities.

- 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.

- The WHOI Plan is in it’s preliminary draft stage with some test details being filled in by the WHOI Shipboard Scientific Services Group (SSSG). In the near future this plan will be circulated more broadly.

- The Science Verification Period will culminate with the 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 – Science Verification

## Associated Cruises

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<tr>
<th>Date</th>
<th>Type</th>
<th>Port</th>
<th>Duration</th>
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Agency: NAVY | Funded: 97, Pending: 0, Total: 97
# Post Delivery – Science Verification

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## Post Delivery – Science Verification

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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. Contact Coast Guard 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 un-approved 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.
Questions?