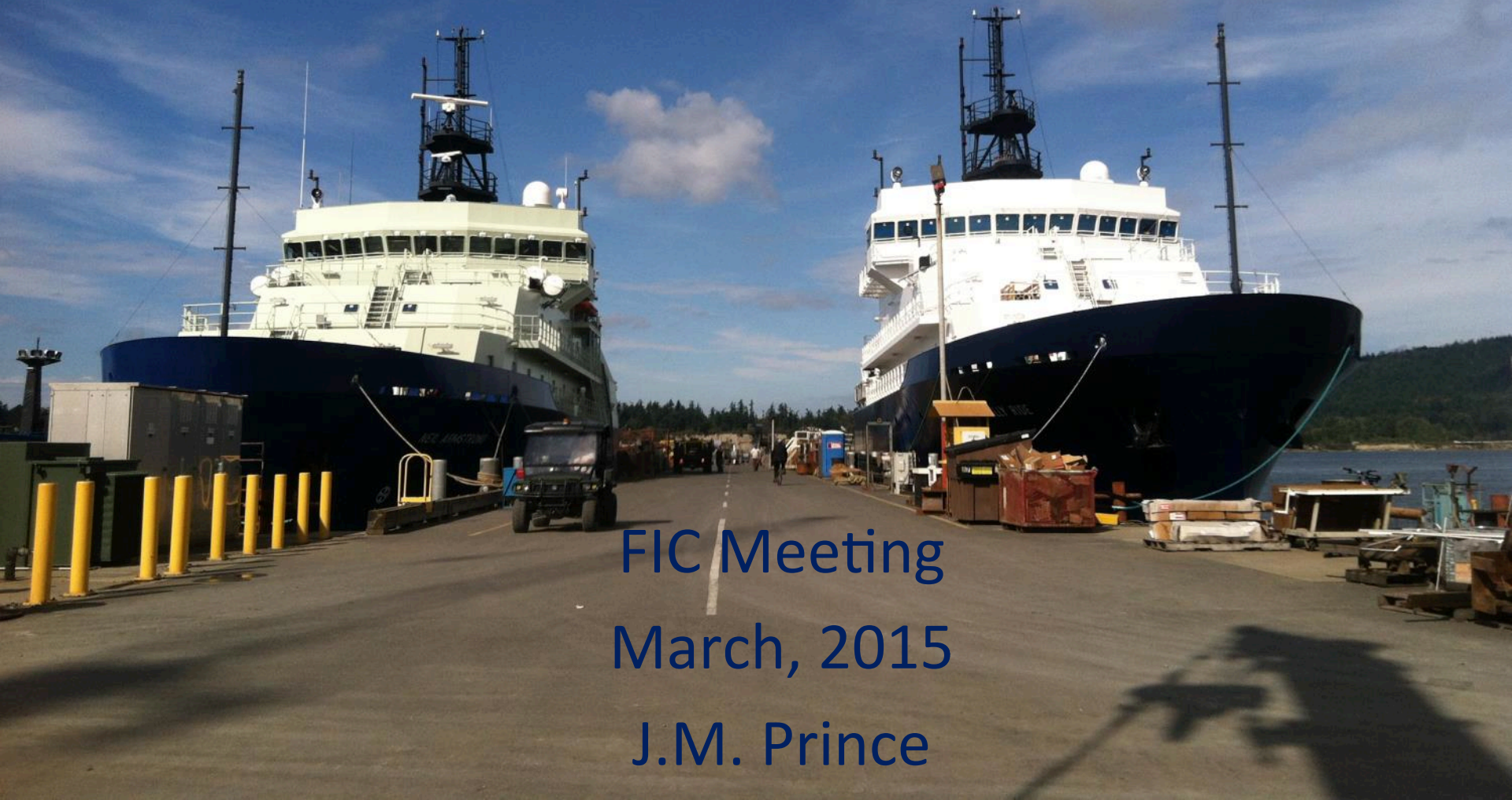


Ocean Class AGOR Update



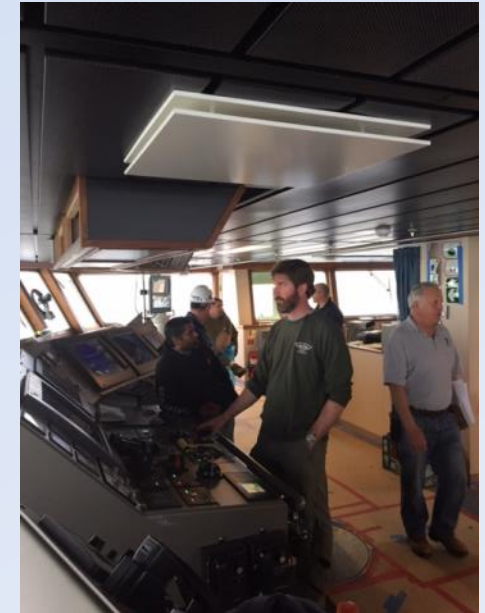
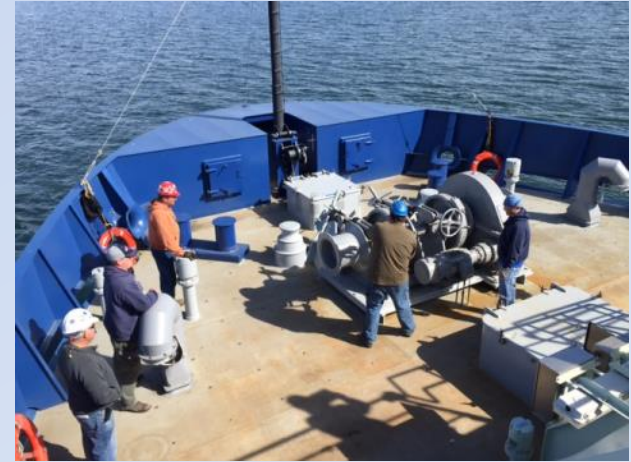
FIC Meeting
March, 2015
J.M. Prince

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*
 - *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.*
 - *August – complete commissioning and Builder's trials*
 - *September 14th – Acceptance Trials, Navy INSURV*
 - *October 30, 2015 Delivery (contractual date)*
 - *November & December – Fitting Out Availability and installation of Acoustic Systems & Mission Equipment.*

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

[Duplicate Schedule](#)

2015 - [Neil Armstrong](#)

LOI #1

Letter Of Intent - ID #12292 Version #1 - 3/9/2015

Eric Benway

Scheduling Contact(s)

ebenway@whoi.edu

(508) 289-3770



[View Details](#)



[Set Default](#)

Associated Cruises

Dep	Arr	Start Port/End Port	PI/Purpose/Project #	Days/Agency/Status	
01 Jan	17 Jul	Anacortes/Anacortes	Shipyard/		View
18 Jul	25 Sep	Anacortes/Anacortes	/PHASE III Fit Out/	70/INST-WHOI/NonOp	View
26 Sep	03 Oct	Anacortes/San Diego	/Shakedown Leg 1/	11/NAVY-ONR/F	View
07 Oct	20 Oct	San Diego/Balboa	/Shakedown Leg 2/	14/NAVY/F	View
21 Oct	02 Nov	Balboa/Galveston	/Shakedown Leg 3/	14/NAVY/F	View
05 Nov	10 Nov	Galveston/St. Petersburg	/Shakedown Leg 4/	13/NAVY/F	View
18 Nov	25 Nov	St. Petersburg/St. Petersburg	/Shakedown Leg 5/	8/NAVY-ONR/F	View
			/AUTEC Range/	2/NAVY/F	
01 Dec	03 Feb	St. Petersburg/St. Petersburg	/Sci Verification/	35/NAVY/F	View
08 Feb	10 Feb	St. Petersburg/St. Petersburg	NSF Inspec/UNOLS DESIGNATION/	0/OTHER/NonOp	View
TBD	TBD	Woods Hole/Woods Hole	Navy INSURV/By January 2016/	0/OTHER/NonOp	View

Agency	Funded	Pending	Total
NAVY	97	0	97
Total	97	0	97

Post Delivery – Science Verification

Leg #	Start Date	Start Port	End Date	End Port	Days	Activities
1	Sep 26	Anacortes	Oct 3	San Diego	8	6 Transit, 2 for USBL, Knudsen
2	Oct 7	San Diego	Oct 20	Balboa	14	12 Transit, 2 SVC Days
3	Oct 21	Balboa	Nov 15	Galveston	13	9 Transit, 4 Deep Ocean Winch Testing
4	Nov 5	Galveston	Nov 10	St. Pete	6	3 Transit, 3 SVC Days
5	Nov 18	St. Pete	Nov 26	St. Pete	8	6 Transit, 1 AUTEC Range, 1 SVC Day
6	Dec 1	St. Pete	?	St. Pete	65	Currently 65 days on schedule
7	?	St. Pete	Feb 3	St. Pete	?	Need to define and break down
8						Into multiple legs
9						
10						

Post Delivery – Science Verification

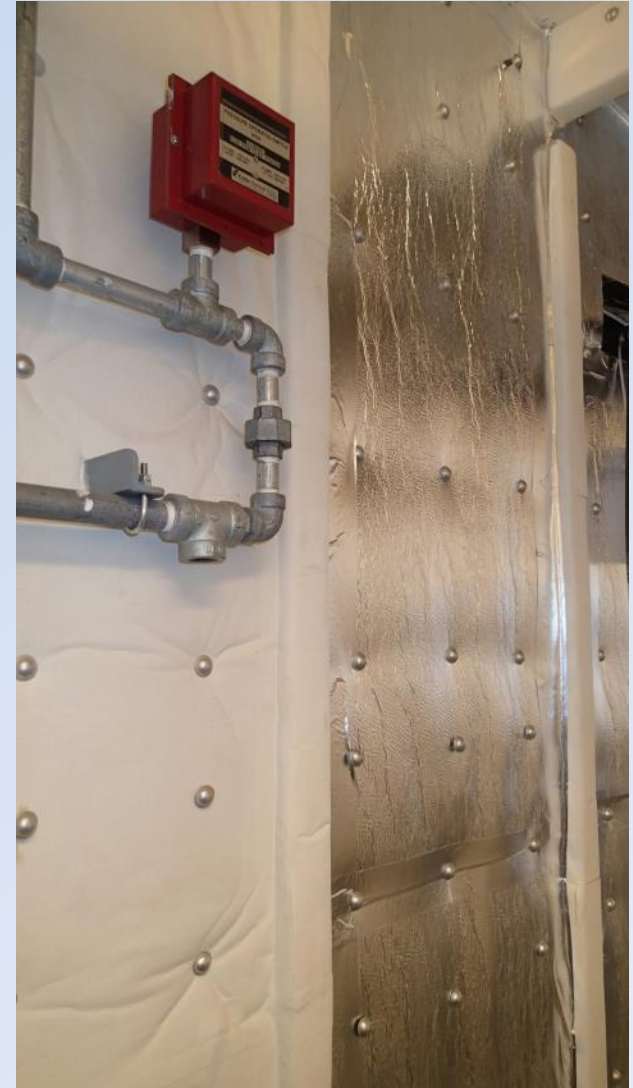
#	System Name	Req'd Test Days*	Leg(s)	Geographical Area of Testing	Supporting Scientist
1	EM122	3		Various	MAC
2	EM710	3		Various	MAC
3	Kongsberg SSVS	1		Along Track	
4	Knudsen Chirp 3260	2			
5	EK-80 SONAR	2			Lawson/Lavery
6	OS38 ADCP	1			J. Hummon
7	OS150 ADCP	3			J. Hummon
8	WH300 ADCP	1			J. Hummon
9	K-Sync	1			
10	Sonardyne USBL	1			
11	HiPAP Gantry	5			
12	POS MV	3		Along Track	
13	WaMoS II (defer to later)	1		Along Track	
14	XBT	1		Various	
15	Sci. Seawater	1		Along Track	
16	Incubation Area	4		Along Track	
17	C/Ku Band	1			
18	FBB	1			
19	Shipboard LAN	3		Dockside	
20	Printers/Plotters	1		Dockside	
21	Data Dist.	2		Dockside	
22	WHOI DAS	5		Along Track	

Post Delivery – Science Verification

#	System Name	Req'd Test Days*	Leg(s)	Geographical Area of Testing	Supporting Scientist
23	MET Sensors	1		Along Track	
24	CTD	1			
25	Multi Core	1			
26	Box Core	1			
27	MOCNESS	3			
28	Camera Sled	2			
29	ROV	3			
30	AUV	1			
31	Mooring Operations	2			
32	Towed VPR II	2		Transit Track	C. Davis
33	DP System	1			
34	Crane Handling	1			
35	Lab Vans	10		Dockside	
36	Fume Hoods				
37	Milli-Q DI System	10		Along Track	
38	Winch Monitoring				
39	CCTV/IP Cameras	10			
40	IMCOS (?)include with LAN?			Various	

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.



Un-approved

Approved

Questions?

