Summary of Oct. 13th FIC Meeting

Emphasizing Topics of Major Discussion, Action Items and Areas for Council Attention

Clare Reimers FIC Chair

Fleet Renewal Activities

- FIC recommendations to NSF in response to questions relating to RCRV design issues were reviewed with follow-up from Bob Houtman
  - RCRV funding mechanism not yet identified at NSF
  - Solicitation for operator(s) under development (1-3 vessels). Early 2011 release likely.
  - Academic lead will be responsible for design refresh and expected to show a team with significant capability in directing vessel design and mission equipment specifications (similar to Sikuliaq process)

Ocean Class AGORs Mission Equipment Specifications

- **Input from FIC was requested by NAVSEA on specific mission equipment selections** as they move forward with OC AGOR design/construction.
- MES acquisition strategy is being developed consistent with SMRs and agreement between PEO Ships and ONR and the available budget in order to prioritize the actual equipment to be purchased and installed when the ship is delivered.
- Navy has developed a proposed Baseline Mission Equipment Specification consistent with known available AGOR Program budget.
- Actual ship construction costs and availability of additional funding sources will determine to what extent equipment beyond the Baseline can be provided.

Mission Equipment Prioritization Examples

System	Priority Level	Notes
Deep Water Multi-Beam System	Baseline	EM122, considering EM302
Echosounder/Sub-bottom profiler 12, 38, 120 & 200 kHz / 3.5 kHz	Baseline	Knudsen 3260 in lieu of Kongsberg SBP 120
Attitude, Heading, Reference System	Baseline	POS MV or IXSEA system
Broadband Satellite Communications	Baseline	FBB/Ka Band and/or C-Band
ADCP – 38 kHz	Baseline	New capability for deep water
Acoustic Monitoring System	Baseline	Needed to verify and monitor Acoustic performance
Uncontaminated Seawater system	Baseline	Low cost but required to meet basic science missions
Sound Velocity Measurement	Baseline	Calculated from SeaBird TSG

Immediate focus is mostly on systems that require cutting holes in hull

Fleet Renewal Activities cont.

- FIC tasked with suggesting a 4 member scientific advisory committee for OC AGORs
- R/V *Sikuliaq* bridge mock-up and ADA stateroom layouts reviewed (pictures provided by Dan Schwartz)
- R/V M. *Langseth* operations and capabilities reviewed by Sean Higgins
  - including initial recommendations from Glosten on two possible phases of modifications (by 2015):

I. main deck winch and winch house installment

II. stern modifications/hydroboom

Fleet Planning

- Projected Service Life End Dates
  - FIC tasked by NSF to prepare a document with updated service life end dates for all UNOLS vessels
  - New approach is based on ship inspection assessments of material condition and technological capabilities (*Pt. Sur* example)
  - Non cost SLEPs 5 years
  - Major investments SLEPs 10 years

Fleet Planning cont.

- Alex Isern reported on new interest in Office of Polar Programs at NSF to integrate Polar vessels into UNOLS
- In August National Science Board advised a refresh of the SMRs for a Polar Research Vessel (primarily to replace chartered *N.B. Palmer*)
- UNOLS will soliciting 8-9 committee members for SMR refresh

New Technologies and System Evaluations

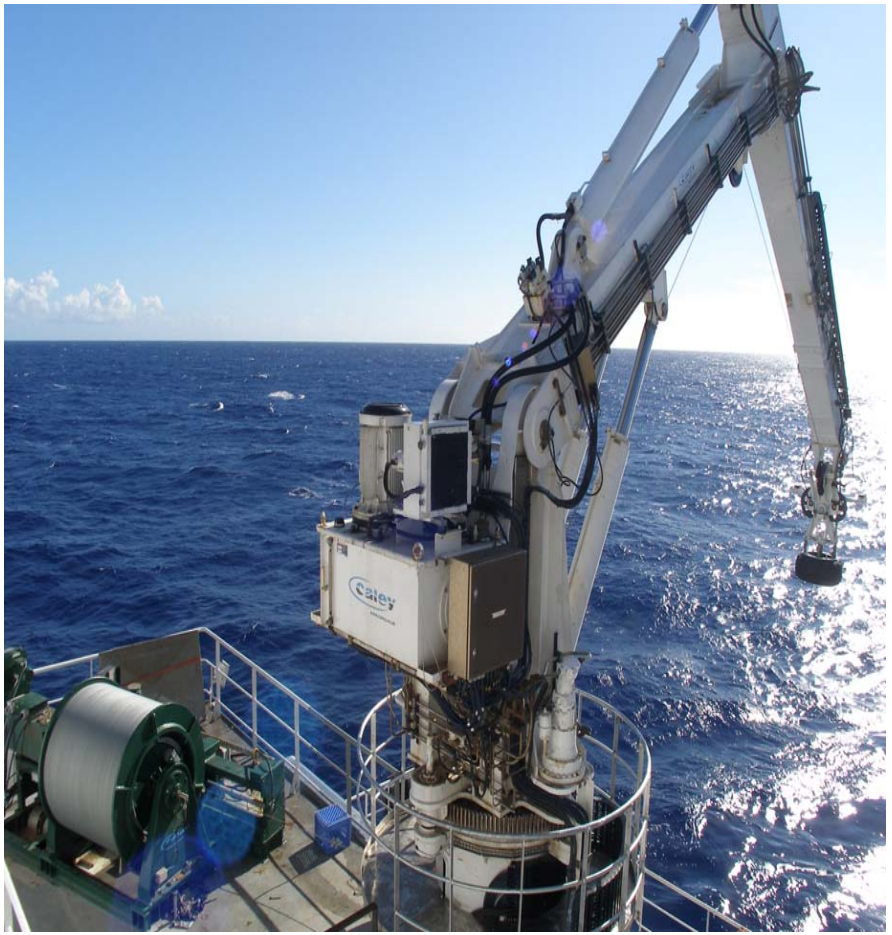
1. UH Caley CTD Handling system – Report from Sandy Shor

2. Long Core System - Bill Curry (WHOI)

3. R/V *Hugh R. Sharp*-Debrief process review,

   FIC will revise debrief question to solicit more informative responses e.g. with regard to DP noise.

   Debrief process to continue in 2011 with interviews of chief scientists new to *Sharp*



OOI Update on Ship Time Projections

OOI Estimated Ship Days * (inclusive of DAS, transit, mob/demob) - January 2010 Update

		Days by year							
Infrastructure	**Vessel Class**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
		Construction					Operations		
Atlantic									
Pioneer Array	Global				24	24	24	24	24
Pioneer Array	Intermediate		14						
Pioneer Array	< 80 ft.			4	12	12	12	12	12
Irminger Sea	Global				33	33	33	33	33
Argentine Basin	Global			24	24	24	24	24	24
Pacific									
Regional Scale Nodes	Global+ROV	29			64	59	40	40	40
Station Papa	Global			0	22	22	22	22	22
Southern Ocean	Global					24	24	24	24
Endurance Array	Global+ROV		0	0	5	5	5	5	5
Endurance Array	Global				8	8	8	8	8
Endurance Array	Intermediate	12	12	15	8	16	20	20	20
Endurance Array	< 80 ft.				54	54	54	54	54
Global testing	Intermediate	5							
	Global	5							
Total by vessel class									
UNOLS	Global	5	0	24	111	135	135	135	135
	Global+ROV	29	0	0	69	64	45	45	45
	Intermediate	17	26	15	8	16	20	20	20
	< 80 ft.	0	0	4	66	66	66	66	66

Chief Scientist Training Workshop

- **Two principal concerns of UNOLS today are (1) young investigators, especially those from non-operating laboratories, need opportunities to learn how to gain access to ship time and what ships offer for specific types of research, (2) running a successful research cruise requires leadership and communication skills and knowledge of Chief Scientist responsibilities. These are best taught by example.**

- **The UNOLS Chief Scientist Training Workshop (CSTW) will serve as a major forum for teaching young scientists how to effectively plan for, acquire, utilize and report on time at sea for academic research and education.**

FIC will present pre-proposal to Linda Goad and Lisa Rom

UNOLS Vessel Classes

Suggested new model from NSF

- Global (includes *Sikuliaq*)
- Ocean (includes intermediates)
- Regional
- Local (to include *Walton Smith*)

“Our current thinking is that the classes should be based on:

- Simplicity - 4 classes much easy for all parties to grasp.
- What the ship is capable of doing - not what she is necessarily doing now. AE is a good example as she was classed as an "intermediate" before her conversion.
- Ownership should not be a discriminator
- Small variations in length, tonnage, science berth, deck space etc. also should not be discriminators.”

FIC asked to provide comments on this scheme: FOY issues amongst others