

# UNOLS FIC Meeting



**March 1-2, 2005**

**UNOLS Office – Reports**

# FIC Action/Task List

## October 2004 Meeting

Task Description	Action
<b>Regional Class Actions:</b>	
<ul style="list-style-type: none"> <li>• <b>Review Regional Operational Capabilities</b> and send to NSF by the end of October 04</li> </ul>	FIC/RCAC - COMPLETE
<ul style="list-style-type: none"> <li>• <b>UNOLS Regional Class Rep</b> - Recommend a community representative to be the UNOLS rep to the IPT. [Note – Agency input is needed to complete]</li> </ul>	Dave, Wilf, RCAC, Office
<ul style="list-style-type: none"> <li>• <b>Stay engaged in acquisition process</b></li> <li>§ Provide feedback to NSF</li> <li>§ Insure community input</li> </ul>	FIC, RCAC
<p><b>Ocean Class Planning</b> – Provided input as requested</p>	FIC and OCSC – ongoing

# FIC Action/Task List

## October 2004 Meeting

Task Description	Action
<b>KILO MOANA Actions:</b>	
<ul style="list-style-type: none"><li>• Continue Debrief Interviews – focused and more selective</li></ul>	FIC - Ongoing
<ul style="list-style-type: none"><li>• Obtain feedback from WESTERN FLYER and KILO MOANA Captains</li></ul>	Mike Prince
<ul style="list-style-type: none"><li>• Compile Debriefs for posting on the UNOLS website</li></ul>	Office -Ongoing
<ul style="list-style-type: none"><li>• Draft Summary document</li></ul>	Annette & Dave

# FIC Action/Task List

## October 2004 Meeting

<b>Task Description</b>	<b>Action</b>
<b>Global Class: Update SMRs</b>	Global Class Steering Committee – ongoing
<b>ADA Guidelines draft White Paper</b>	Terry Whitledge – ongoing
<b>Amend SMRs:</b> <ul style="list-style-type: none"> <li>• Amend Regional and Ocean Class SMR to include ADA requirements (Terry’s white paper)</li> <li>• Carefully review the “Lessons Learned” and PCA comments. Incorporate as appropriate into the SMR documents</li> </ul>	RC and OC Steering Committees - ongoing
<b>PCAR Comments</b> - Review PCAR comments with regard to facility improvements.	FIC - Ongoing

# FIC Action/Task List

## October 2004 Meeting

<b>Task Description</b>	<b>Action</b>
<b>FOFC Fleet Plan Update</b> - Provide the Working Group information when requested.	FIC
<b>Update Fleet Improvement Plan:</b> <ul style="list-style-type: none"> <li>• First draft – March 2005</li> <li>• Final draft – 30 September 2005</li> </ul>	FIC – ongoing
<b>Updated Vessel Retirement Dates and SLEP Estimates:</b> <ul style="list-style-type: none"> <li>• Address report inconsistencies (by Oct 26) and provide draft report to FOFC Working Group. - COMPLETE</li> <li>• Finalize Report</li> </ul>	FIC
<b>Ocean Observatories</b> – Stay in contact with ORION Office.	Dave Hebert – ongoing
<b>Design and Constructions Efforts</b> - Stay engaged in ongoing design and construction efforts (ARRV, EWING replacement, CHRV, etc.)	FIC - Ongoing

# General Purpose Global Vessel SMR Mid Life Refit considerations



**2006 - *THOMPSON***

**Global Class SMR  
Steering Committee  
Formed**



**2011 - *REVELLE***



**2012 - *ATLANTIS***

# Global Class Steering Committee

- Bruce Howe (UW), Chair – Ocean Observatories
- Tom Althouse (SIO) – Marine Superintendent
- Jim Broda (WHOI) – Coring
- Bob Embley (NOAA/PMEL) – ROVs, MG&G
- Ken Johnson (MBARI) – Chem O.
- Paul Ljunggren (LDEO) – Marine Superintendent
- Dan Schwartz (UW) – Marine Superintendent
- Niall Slowey (TAMU) – FIC Rep, MG&G
- Al Suchy (WHOI) – Marine Superintendent
- Woody Sutherland (SIO) – Marine Technician
- Randy Watts (URI) – Phys. O
- Patricia Wheeler (OSU) – Biol. O.

# Global Class SMR Update

- **Task Items:**
  - **Review the past SMRs and other documentation to form the basis of the SMRs.**
  - **Develop mission scenarios.**
  - **Solicit input and feedback from the larger science and operator community throughout process**
  - **Produce SMR document.**
  - **As a follow-on activity incorporate Heavy Lift considerations, and Seismic Capabilities**
- **Website:**  
<[http://www.unols.org/committees/fic/global/global\\_smr.html](http://www.unols.org/committees/fic/global/global_smr.html)>



# Global Activities

- Draft Terms of Reference for the Global SMR Committee – Complete and Posted
- Review the Ocean Class and 1989 Global Class SMRs to determine what should be included in the SMR document.
- Draft Community Survey –Post for Community input – mid April. Deadline for Response – end May/early June.
- Compare current Global Class vessel capabilities with the Ocean Class and 1989 SMRs to determine how well the SMRs describe current and future science requirements.

# Global Activities (continued)

- Evaluate construction projects under development in other countries (UK ship, GOSars vessel).
- Identify modifications that have been made to the current Global Vessels since they entered service.
- ORION Requirements
- Review past workshop recommendations (ocean drilling, NSF Futures documents, Cowles/Atkinson report, etc).
- ORION Requirements

# Global Activities – (continued)

- Investigate technology developments in new commercial ship construction
- Identify impacts of new and emerging regulatory requirements (ICES Noise standards, ADA, Marine Mammal and Acoustic Permitting, USCG Inspected, SOLAS ships, HAZMAT, International Requirements, Double Hulls, Ice Capable classifications, Etc.)
- Contact major funding agencies to determine if they have new science requirements.
- Compile large ship utilization trends and ship demand.

# KILO MOANA Debrief Responses

2002 - 2004

# Debriefs Conducted

1. Doug Capone: 22 Sep – 17 Oct 2002
2. Bob Bidigare: 23 Nov – 27 Nov 2002
3. Tom Gregory: 16 Dec – 21 Dec 2002
4. Karin Bjorkman 8 Mar – 10 Mar 2003
5. Tom Gregory 20 Mar – 24 Mar 2003
6. Christopher Kelley 1 Apr – 3 Apr 2003
7. Nancy Kachel 4/17–5/9 & 11–29/9 2003
8. Scott Stalin 20 May – 11 Jun 2003
9. Brian Popp 18 June – 5 August 2003
10. Ken Bruland 6 Aug – 8 September 2003
11. Karin Bjorkman 30 Sep – 10 Oct 2003
12. Tom Gregory 13 Oct – 17 Oct 2003
13. Jerome Aucan 3 Nov – 7 Nov 2003
14. Sadler, D (Karl – PI) 8 Nov – 12 Nov 2003
15. Kelley, Christopher 15 Nov – 20 Nov 2003
16. Fernando Santiago 08 Dec – 17 Dec 2003
17. Ken Buessler 7 Jan – 13 Jan 2004
18. Mak Saito 22 Feb – 2 March
19. Kenia Whitehead 5 Mar – 14 Mar 2004
20. Mandujano, F. (Karl-PI) 18 Mar – 22 Mar 2004
21. Martinez, Fernando 6 Apr – 9 May 2004
22. Ken Buessler 20 Jun – 10 Jul 2004
23. William Cochlan 15 July – 24 Aug 2004

# KILO MOANA

## Focused set of Questions

1. The sea-state in which the operation was conducted,
2. The method used,
3. Whether this method was done in a safer and more efficient way than would have been done on a monohull vessel,
4. Ways to improve the method used,
5. Whether the sea-keeping characteristics of the ship made it easier or more difficult to conduct the scientific operation,
6. Whether the layout of the deck and lab space made it easier or more difficult to conduct the scientific operation.

## KILO MOANA - Focused set of Questions

- A. What were the most positive aspects of your research cruise on the R/V KILO MOANA with a SWATH hull form compared to your previous experience on a monohull?
- B. What were the most negative aspects of your research cruise on the R/V KILO MOANA with a SWATH hull form compared to your previous experience on a monohull?
- C. Did you have difficulty loading/unloading the scientific gear from the ship?
- D. Were the labs adequate (location, size, accessibility) for you?
- E. Were the underway systems (thermosalinoograph, running seawater) working adequately?

## KILO MOANA - Focused set of Questions

F. Were communications with the bridge, winch and crane operators easy to conduct?

G. Were the accommodations adequate (e.g., size, location, accessibility)?

H. Was the computer network system adequate?

- Ease of hook-up
- Initial start-up
- Adequate access points across various labs, meeting rooms, staterooms and other areas.

I. What is the habitability of the lounge, staterooms, mess deck, and fitness room?

J. Are there any noise and vibration feedback concerns?



## KILO MOANA - Focused set of Questions

- K. Were there ship vibrations or other motions that made it difficult to work and live on the ship?
- L. At any time, did you feel the ship was not seaworthy at certain sea states? Were there times when you felt that you rather be on a monohull ship? A SWATH ship?
- M. Were deck crane and winch operations safe and efficient? Did it take more personnel to perform the operation that you expected?
- N. Were there any weight distributions problems with heavy science payload such as vans?
- O. Was dynamic positioning used? And was it useful?

## KILO MOANA - Focused set of Questions

- P. Were the multibeam or acoustic Doppler systems working properly under all conditions?
- Q. Were any heavy gear deployments undertaken such as moorings or sediment sampling?
- R. Were there any pre-cruise planning measures and shore facility communications that were necessary and unique to the SWATH operations?
- S. What advice would you give a colleague that was going to sail on a SWATH vessel such as the R/V KILO MOANA?
- T. Any additional comments?

# KILO MOANA - Focused set of Questions

## New Questions/Issues?

- Station Keeping issues – Bow thruster performance? radiated noise? Vehicle tracking capabilities?

# KILO MOANA 2004 Debriefs

<b>Start</b>	<b>End</b>	<b>PI Name</b>	<b>Area</b>	<b>Purpose</b>		<b>Days</b>	<b>FIC Vol.</b>	<b>Status</b>
1/7	1/13	Buesseler,K.	Hawaii Is	VERTIGO		7	Dave H	Complete
2/22	3/2	Saito,M.	Hawaii Is	Marine Cyanobacteria		8	Terry W	Complete
3/5	3/14	Verdugo,P.	Hawaii Is	Global Element Cycles		10	Ron B	Complete
3/18	3/22	Karl,D.	Hawaii Is	HOT Series		5	Chris M	Complete
4/6	5/9	Martinez,F	S Pac	East Lau Spreading Ctr		38	Niall S	Complete
5/20	6/2	Kuehl,S.	S Pac	Sediment Dispersal		17	Clare R	
6/20	7/10	Buesseler,K.	N Pac	VERTIGO		21	Dave H	Complete
7/15	8/24	Wells, Mark	N Pac	Iron Complexing		41	Toby G	Complete
9/8	10/15	Langmuir,C.	S Pac	Eastern Lau Spreading Ctr		41	Niall S	
10/17	11/5	Taylor, B.	S Pac	Student Cruise		12	Chris M	
11/8	12/16	Silver,E.	S Pac	Stratovolcano Collapses		42	Toby G	

# 2005 KILO MOANA Schedule

Start	End	PI	Inst	Area		Purpose	Days	Funding	Volunteer
1/7/	1/31/	Kuehl,Steven	VIMS	South Pacific	SP4	MARGINS	28	NSF	
2/4/	2/15/	Alexander, Clark	SIO	South Pacific	SP4	Sediment Dynamics	15	NSF	
3/24/	4/1/	Taylor,Brian	UHI	South Pacific	SP4	Student Cruise	1	STATE	
4/4/	4/26/	Hart, Stanley	WHOI	South Pacific	SP1	Somoan Hotspot Dredging	27	NSF	
4/29/	5/11/	Taylor,Brian	UHI	South Pacific	SP2	Student Cruise	4	STATE	
5/16/	5/20/	Karl,David	UHI	Hawaiian Islands	NP12	HOT Series	4	NSF	
5/29/	6/10/	Kelley,Christopher	UHI	Hawaiian Islands	NP12	Fisheries Research	5	STATE	
5/29/	6/10/	Kelley, Christopher	UHI	Hawaiian Islands		Fisheries Research	7	STATE	
6/13/	6/15/	Dickey,Tommy	UCSB	Hawaiian Islands	NP12	MOSEAN	2	NSF	
6/17/	6/21/	Karl,David	UHI	Hawaiian Islands	NP12	HOT Series	4	NSF	
6/24/	6/26/	Dickey,Tommy	UCSB	Hawaiian Islands	NP12	MOSEAN	2	NSF	
7/2/	9/7/	Armstrong,Andrew	NOAA	Gulf of Alaska	NP6	Sea Floor Mapping	68	NOAA	
9/9/	9/13/	Karl,David	UHI	Hawaiian Islands	NP12	HOT Series	4	NSF	
9/15/	10/2/	Porter, Michael	ONR	Hawaiian Islands	NP12	PMRF	17	NAVY	
10/6/	10/10/	Karl,David	UHI	Hawaiian Islands	NP12	HOT Series	4	NSF	
10/13/	11/4/	Taylor, Brian	UHI	Hawaiian Islands	NP12	Student Cruise	22	STATE	
11/7/	11/9/	Dickey,Tommy	UCSB	Hawaiian Islands	NP12	MOSEAN	2	NSF	
11/11/	11/15/	Karl,David	UHI	Hawaiian Islands	NP12	HOT Series	4	NSF	
11/17/	11/19/	Dickey,Tommy	UCSB	Hawaiian Islands	NP12	MOSEAN	2	NSF	

# FIC Projects and Priorities for 2005

## •Regional Class:

- Help identify UNOLS representative(s) for the IPT teams.
- Stay engaged in acquisition process (ongoing)
  - Provide feedback to NSF
  - Insure community input

## •Ocean Class: Stay engaged

## •Global Class: Update SMRs

## •ADA Guidelines - White Paper – Terry

## •Update Fleet Improvement Plan

## •Ocean Observatories – Initiate discussions with ORION Office.

## •Ongoing Design and Construction Efforts - Stay engaged in ARRV, EWING replacement planning, and CHR.V.

## •KILO MOANA – Continue debriefs (streamlined and selective)

- Obtain feedback from Captains
- Summary document of Debriefs

# FIC Membership

- **David Hebert, URI (Chair) – [at-large, 9/06] PO**
- **Newell Garfield, SFSU – [Non-op, 9/06] PO**
- **Jim Cochran, LDEO – [at-large, 9/07] MG&G**
- **Niall Slowey, TAMU – [Operator, 2/05] MG&G**
- **Terry Whitley, U Alaska – [Operator, 9/04] BIO/Chem**
- **Clare E. Reimers, OSU – [Operator, 1/06] Chem**
- **Ron Benner, USC – [Non-Operator, 1/06] Bio / Chem**
- **Bauer, Jim, VIMS – [Non-Operator, 9/06] Chem/Bio**
- **Marc Willis, RVTEC Rep (ex-officio)**
- **Al Suchy, RVOC Rep (ex-officio)**

## **Changes**

**Niall Slowey – first term ending 2/5**