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UNOLS COUNCIL MEETING The Holiday Inn at Ballston 4610 North Fairfax Drive , Arlington, VA 22203 Tuesday, October 21, 2014

Meeting Minutes

Appendicies:

I: Meeting Agenda

II: Attendance Sheet

III: Non-Op Comm. Report for 2015 Fleet Operations

IV: RCRV Community Feedback

V: FIC Meeting Summary

VI: 2014/2015 UNOLS Goal

VII: Fleet Risk Mitigation, Crystal & Company

VIII: Post Cruise Assessment Reports

Summary of New Action Items:

- Review/refresh <u>Criteria and Process For Recommending Non-Operational Periods of Ships in The UNOLS Fleet (2006)</u> A subcommittee that included Peter Ortner, Tammi Richardson, Miles Sundermeyer, and Wilf Gardner was formed to conduct the review.
- Recommendation regarding Number of Regional Class Research Vessels (RCRVs) A
 Council subcommittee was formed to draft a UNOLS response to NSF. Subcommittee
 members included Peter Ortner, Craig Lee, Chris Measures, and Debbie Smith. The
 UNOLS response to NSF is due on November 10, 2014.
- UNOLS Cruise Opportunities Debbie Smith volunteered to work with the UNOLS Office to develop and implement a new UNOLS cruise opportunity process
- UNOLS Winter Meeting The UNOLS Office will do a cost analysis for holding the meeting in Hawaii and discuss it with agency sponsors.

Summary of Council Motions:

- Full Optimal Year (FOY) for UNOLS vessels The Council passed a motion to adopt the new FOY range definitions as presented by FIC (Corliss/Measures).
- A Council motion was made and passed to extend the terms of the Ocean Observing Science Committee (OOSC) members for another year (Steinberg/Richardson).

Meeting Summary Report

Call the Meeting: Peter Ortner, UNOLS Chair, called the meeting to order and provided an opportunity for introductions. The agenda is included as <u>Appendix I</u> and the attendance list is included as <u>Appendix II</u>.

Non-Operator Committee Report for 2015 Fleet Operations – Wilf Gardner provided the non-operator committee report. His slides are included as *Appendix III*. The Non-operator committee members include Wilf Gardner, Tammi Richardson, and Miles Sundermeyer.

The committee response letter focused on 3 key areas:

- Retirement of R/V Point Sur
- Reduce Costs, Identify Other Funding Sources, Reduce Carry-Forward
- West Coast Intermediates ship schedules

R/V Point Sur - MLML has informed NSF that they will retire the vessel from the Fleet.

Reduce Costs - The committee evaluated the potential of finding additional funding sources and reducing Fleet costs. Some of their observations and recommendations included:

- There is no consistent trend on funding from states/institutions. Institution funding for infrastructure upgrades could be substantial. It is doubtful if states will bring new money at this time.
- Ship operators could learn from others on non-traditional sources.
- Operators seek outside industrial funding, within constraints. Perhaps the rules regarding non-traditional funding sources should be revisited.
- There should be greater onus placed on scientists and program managers to more carefully consider the size of the ship and number of days required for science operations.
- Group purchases on insurance, equipment, and fuel are encouraged.
- All steps must be taken to maximize days at sea with available dollars rather then carrying them forward to the next calendar year.
- NSF is not allowed to fund any single institution more than 1% of total GEO budget averaged over a 5-year period, without special permission
- It appears that the decrease in ship days in recent years results from flat funding and an increase in ship operating costs (see charts included in Appendix III).

West Coast Intermediate Ships - Scenarios for potential layup of a west coast intermediate vessel included:

- 1. Laying up either *Oceanus* or *New Horizon* and losing some institutional days.
- 2. Operating two intermediate ships with less than optimal schedules, but maintaining capacity for unexpected events
- 3. Have each ship do a partial layup in 2015 to complete all work, maintain excess capacity, preserve shipboard and shore-based personnel and expertise.

The 2006 UNOLS Non-Op Committee Guidelines addressed the issue of lay-ups and cautioned that the impact on retaining experienced ship personnel should be considered.

In closing, the non-op committee recommended that close communication and interaction is needed as decisions regarding future operations are made.

The Non-Operator Committee also recommended that a review/refresh of the 2006 guidelines is needed. A subcommittee that included Peter Ortner, Tammi Richardson, Miles Sundermeyer, and Wilf Gardner was formed to conduct the review.

Discussion:

- Sandy Shor –NSF does not negotiate indirect rates. Indirect cost rates cannot be changed after the rates are negotiated. Institutions rely on these funds.
- Peter Ortner Group purchases don't always lower costs.

- David Fisichella There is a myth about ship time proposals reducing chances of funding award. Wilf Gardner – The myth was addressed in an Eos article. Deb Steinberg

 When she goes to meetings, she still gets these comments about the reduced chances of award if ship time is included.
- The decrease in ship utilization is partially related to fewer ships in the fleet due to retirements.
- Tim Schnoor –Navy vessels are allowed to take on non-agency funded programs. U. Hawaii and SIO take on non-agency work. U. Washington gets Neptune Canada funding for cruises. The ship schedules can support 25% of non-federal ship time.
- Peter Ortner When he evaluated non-traditional funding sources with Nancy Rabalais they found that there were issues associated with maintaining the R/V designation. There were also issues associated with commercial competition. These issues were associated with NSF.

NSF letter Regarding Number of Regional Class Research Vessels (RCRVs) – Jon Alberts provided a summary of the community response to NSF's letter regarding the number of RCRVs. His slides are included as *Appendix IV*.

NSF sent a letter to the Fleet Improvement Committee (FIC) Chair on March 11, 2014 regarding recommendations on the number of RCRVs. The letter indicated that, "OCE is seeking UNOLS community concurrence to move forward with a preliminary request for Major Research Equipment and Facilities (MREFC) funding in FY 2017 to support construction of three RCRVs."

Clare Reimers, FIC Chair, removed herself from this FIC activity because of her role as PI for the RCRV project at OSU. A FIC Subcommittee was formed and included Dave Bradley/PSU-chair, Joan Bernhard/WHOI, Greg Cutter/ODU, and Sandy Shor/UH. They prepared a written response and provided it to the UNOLS Council in July 2014. Key points in the FIC subcommittee response included:

- "FIC Subcommittee agrees with NSF and UNOLS Council that building three RCRVs is the appropriate number, and that this supports the best estimate of the affordable research requirements from NSF and other federal agencies for the next 10-20 years.
- FIC absolutely agrees that getting three new, capable, technologically advanced research vessels into the fleet, one on each coast, is essential to support US ocean research.
- Financial estimates given in the five NSF letter scenarios could not be duplicated with information we have and therefore we do not specifically endorse any particular plan to remove one ship from the fleet.
- Replacement or layup of ships must be based on actual needs and distribution at time of decision and not on 2014 budget projections alone.
- The subcommittee sees a shift toward research on anthropogenic processes and impacts in the coastal region."

The UNOLS Office solicited broad community input regarding the number of RCRVs during an open period from August to October 2014. Responses were received from 17 researchers. Jon reviewed the community responses (see Appendix IV).

Discussion:

- Sandy Shor When the recommendations are sent to the UNOLS representatives, it should be made clear to the UNOLS reps to distribute them to their institutional colleagues.
- Bruce Corliss He feels that the case has been made for the past 10 years that there is a need for RCRVs. The letter should reference this case.
- Peter Ortner Additional community responses are welcome.

A Council subcommittee was formed to draft a UNOLS response to NSF. The Council subcommittee would consider the FIC response as well as the community feedback. Subcommittee members included Peter Ortner, Craig Lee, Chris Measures, and Debbie Smith. The UNOLS response to NSF is due on November 10, 2014.

Summary of Fleet Improvement Committee Meeting and Action Items that required Council Attention - Clare Reimers provided a summary of the FIC meeting. Her slides are included as **Appendix V**. The major topics included:

- Full Optimal Year (FOY) The FIC has completed its compilation of Full Optimal Year (FOY) ranges for the fleet. The range definitions are included in Appendix V. Fleet utilization was plotted with the new FOY ranges (see slides).
 - The operators should reassess the FOY ranges regularly.
 - The Council was asked to approve the adoption of the new FOY ranges for the purpose of assessing fleet capacity (# operational days). Discussion:
 - Tammy Richardson In many cases the new FOY ranges are below the old FOY definitions. Clare Some of the vessels are getting older requiring more maintenance. The past FOY were defined by ship class as opposed to mode of operation.
 - o The Council passed a motion to adopt the new FOY ranges (Corliss/Measures).
- New acquisition feedback FIC has formed a subcommittee to develop post cruise assessment/debrief questions for chief scientists leading cruises on new vessels coming on-line (*Sikuliaq, Armstrong, Ride*): FIC volunteers include Greg Cutter, Allan Devol, and Sandy Shor. This follow-up will help inform fleet upgrades and future new acquisitions.
- Cruise Planning Form A discussion of Autonomous System Requirements led FIC to discuss the need for UNOLS to help PIs differentiate what systems are expected to be user provided and what is ship operator provided. Development of cruise planning forms to be completed soon after funding decisions was endorsed.
 - Peter Ortner commented that RVTEC is addressing this issue with a planning tool in development.
- Fleet Improvement Plan FIC is drafting a new Fleet Improvement Plan as a web-based document. This plan is being designed to re-enforce i) near future fleet planning actions such as the need for mid-life refits for the *Thompson* class and ii) priorities for new phased fleet renewal activities after completion of the RCRVs. The new FIP will include the R/V *Barnes* replacement in projections for the Coastal/Local Class and will express support for other renewals made possible by state and private funding. The FIP will continue to advocate for sustainable "green" solutions for the fleet. The FIP will

recommend that we begin developing an acquisition strategy for new general purpose, and HOV-supporting global class vessels to renew the fleet when the *Thompson* Class reaches its end of service life. A review of the Global Class SMRs will be the first step. Council will be asked to review and approve the FIP once it is completed.

• FIC Membership - In Spring 2015, UNOLS will seek for nominations for a new member of FIC from an Operating Institution (A. Devol, UW term ending 2/15). In summer 2015, UNOLS will seek for nominations for a new FIC Chair (C. Reimers, OSU term ending 10/15).

Coastal and Estuarine Research Federation (CERF) – UNOLS Workshop Proposal for 2015 CERF Convention – Clare Reimers reported that she worked with Doug Russell and Jon Alberts to draft an abstract for a CERF workshop. The abstract has been submitted (and since accepted). The 2015 CERF meeting will take place on November 8-13 in Portland, OR.

2014/2015 UNOLS Goal – Peter Ortner opened a discussion welcoming Council suggestions for a new UNOLS goal for the upcoming year.

- Clare Reimers Can UNOLS be of more assistance with getting funding into ocean sciences. Perhaps we need more than scientists to assist with this endeavor.
- Kenneth Coale More help is needed. Other organizations have lobbyists, but we don't.
- Peter Ortner UNOLS did write a parallel letter with COL to NSF encouraging the Decadal Survey. The community needs to raise awareness on the importance of the Oceans.
- Deb Smith Other nations have claimed mining rights on large portions of the ocean.
- Peter Ortner It would be good if the US signed the Law of the Sea.
- Dan Schwartz UNOLS could reach out to other organizations that already have established lobbying efforts (e.g. MTS, etc.)
- Wilf Gardner The Gulf of Mexico observatory group brings in private/industry (oil industry, BP, etc.) funding.
- Chris Measures We need to determine what the target audience is.
- Greg Cutter He has participated in advocating effort with various ocean science groups by meeting with state leaders. He has been trying to get junior scientists involved. These are effective efforts.
- Kenneth Coale When will there be a significant increase in NSF budget? It is critical.
- Bruce Corliss It is important to get the Congressional leaders on-board individually. He met with the Senator of West Virginia recently. A one-hour meeting with the Senator was useful in providing information on the importance of the Oceans.
- Peter Ortner Establishing dialogs with Congressional staff can also be effective.

Greg Cutter and Kenneth Coale were tasked with drafting a new UNOLS goal statement for 2014/2015. The goal is included in *Appendix VI*: "A broad spectrum of US industries have direct interests in oceanographic research, including those directly involved in manufacturing of ships and sensor systems, to data management and insurance companies. Since they benefit from NSF-supported research facilitated by UNOLS assets, we should partner with industry leaders in advocating for increasing (maintaining) Federal support of oceanographic research. "

Medical Review of Scientists – Jon Alberts reported that the topic of medical reviews for scientists was raised during the last International Research Ship Operators (IRSO) meeting. Many of the international ship operators have a more formal process in place. Perhaps UNOLS should take a closer look at this in terms of the number of medical diversions that have been necessary. Another suggestion that came out of IRSO was cold-water survival training.

Discussion:

- Dennis Nixon In the recent loss of the Taiwanese research vessel, the casualties were with the science party. We need to take this as an important lesson and review it.
- Chris Measures He has been on ships that require medical standards. They vary from ship to ship.
- Jon Alberts UNOLS has had a number of medical diversions and they are costly.
- Sandy Shor Many of the medical diversions on the U. Hawaii ships have been with the crew. This could be related to an aging crew. One was a mental health issue and could have been avoided.
- Mike Prince In addition to actual diversions, there are quite a few near misses. Perhaps data can perhaps be gathered from the medical advisory service, SOS.

Break

Fleet Risk Mitigation and a Possible Pool for Over-the-Side Insurance – Corey Crawford, Crystal & Company, provided a presentation on Fleet Risk Mitigation and a possible pool for over-the-side insurance. His slides are included as **Appendix VII**.

Corey reported that the risks associated with research vessel operations are dynamic and vary across the fleet with operator size, project types, and many types of equipment. It is a high-risk environment. There is a lack of a consolidated database. Underwriters want to see data.

A dynamic solution is needed for a shared risk pool that includes a multi-tiered structure, that is rated by equipment/exposure, has adjustable deductible structures, and losses that can be grouped by class. Corey explained that the benefits of a shared risk pool are:

- Centralized
- Less administrative burden
- Known insurance rates
- Better pricing as a group
- Diluted impact of losses
- Data to aid in future loss prevention

Corey proposed a UNOLS Risk Survey that would assess:

- Current insurance method
- Equipment schedule and values
- Deployments
- Losses
- Cause of losses
- Current risk mitigation measures

With a larger database, the nature of the losses can be better understood along with whether or not the risk can be mitigated. A risk survey would provide better data to present underwriters.

Corey concluded by stating that insurance and risk management bring certainty and continuity in an uncertain funding and operational environment. Corey offered to conduct the survey at no cost.

Discussion:

- Rose Dufour How do you keep the over-the-side insurance costs from impacting the ship insurance rates? When ABE was lost, it impacted the WHOI ship insurance rates. Corey In terms of ABE, AIG may have underpriced the insurance.
- Peter Ortner Are insurance costs included in the ship day rates. Rose Dufour Basically yes, but not for over-the-side equipment.
- Peter Ortner He doesn't include over-the-side equipment insurance in his science proposals. Chris Measures He does include the insurance costs in his proposals.
- Chris Measures How do insurance companies deal with emerging technologies risks? Corey He is working with someone who is working with the Google Drive car. There is data that can be collected and applied to this situation.
- Dennis Nixon He is in favor of gathering data. However, Government policy does not allow insurance of government property. When equipment is transferred to the institutions, it becomes an institutional risk. There are many different instruments with various operating modes and modifications. Dennis questions whether over the next few years we can collect the data that an insurance company would be willing to accept to insure at a reasonable rate. Group Fleet insurance policies were investigated in the past and we found that differences in rates across the membership varied greatly. The group insurance purchase effort was abandoned.

Peter Ortner suggested that David Fisichella/RVTEC, Jon Alberts, and Corey work together to further investigate the feasibility of collecting data.

Post Cruise Assessment Reports (PCAR): Caitlin Mandel provided a summary of the PCAR submittal rates and assessments. Her slides with are included in *Appendix VIII*.

Caitlin presented a series of plots with PCAR statistics. Over the period from 2003 through 2013, PCAR submission rates were declining, but in 2013 chief scientist and marine technician submissions were up. To help increase submission rates, the UNOLS office now sends out quarterly reminders to PI's to complete their post cruise assessment reports.

In 2013 the average PCAR Ratings were above 4.0 for each of the cruise categories (on a scale from 1-5, with 5 best). Meeting the science objectives for cruises scored high.

Caitlin reviewed the status of the 2013 Safety Reports and the new Safety Statistics form. During the third quarter of 2014, nine total accidents were reported; one resulted in lost time. At the last RVOC meeting, there were several requests for more details about the accidents occurring on board our vessels and for greater sharing of information about these accidents and lessons learned among the fleet. Quarter 3 was the first quarter this

new form was put to use. In addition to listing the number of accidents we now require operators to categorize them (using BLS Categories) and provide more details. UNOLS will create quarterly reports and post them to our website and email out them out to a safety listsery.

Discussion:

- Rose Dufour Is there a way to relate this to the sea days lost and the cost. Annette

 we should be able to do this because we know the day rate estimates and the
 number of days lost are reported.
- Dennis Nixon expressed interest in finding out how much was paid out under the institution's P&I policies as a result of medical and accident incidents.
- Miles Sundermeyer It would be interesting to learn how many of the medical incidents were the cause of pre-existing conditions. We should also sort it out incidents by science party and crew.
- Jon Alberts thanked Scott Ferguson, Wilf Gardner, and Joe Malbrough for their service on the PCAR subcommittee.
- Wilf Gardner emphasized the importance of timely submittals of the PCARs.
- Peter Ortner agreed and added that information from the PCARS is useful because improvements can be made before the next cruise.

Status of UNOLS Article for *Eos* – Debbie Smith reported that she drafted an *Eos* article and sent to the Council for review. The purpose of the article is to educate the community and to also let the community know how to be involved with UNOLS.

- Kenneth Coale appreciated the article. In his recent chief scientist training cruises on *Point Sur*, he learned that early career scientists are concerned with the impact of including ship time in proposals and award success. Chris Measures suggested that the article address this concern.
- Debbie Smith asked if the article should mention the chief scientist training opportunities. Clare Reimers before we do this, we need to make sure that more cruises are in the future. Rose Dufour For next year, opportunities using a Global vessel are being explored.

Student Cruise Opportunities on UNOLS Vessels – Debbie Smith reported that she would like to propose a new process for cruise opportunities on UNOLS vessels. In the past many individuals have volunteered for cruise opportunities; however very few cruise opportunities could be identified. The new proposed process would be as follows:

- 1) Chief scientists would be contacted to identify cruises with berth availability and a willingness to accommodate students.
- 2) Once cruises are identified, the opportunity would be offered to students. There would be an on-line application form.
- 3) All applications would be reviewed and screened. Potential matches would be identified.

Discussion:

- David Fisichella Should there be a check box on the STRS form asking if berths are available?
- Screening the student volunteers is very important. CVs and references will be required.

- Rose Dufour The Chief Scientists need guidelines as well. They had a case were a volunteer nearly brought down the cruise.
- Peter Ortner Debbie volunteered to assist in developing the new cruise opportunity process and will work with the UNOLS Office.
- Chris Measures At the recent DISCO /PODS there was great interest in going to sea.
- Annette DeSilva Depending on the number of applications, a subcommittee could be formed to carry out the screening process. Timing is important. There should be a timeline that will allow adequate advanced planning for the chief scientists and the student volunteers.
- Debbie Steinberg There is private funding available to get students to sea.

Committee Activities and Issues requiring Council Attention - Committee Chairs and Council Members had an opportunity to raise issues requiring Council attention.

- Ocean Observing Science Committee (OSSC) Larry Atkinson reported that the OOSC terms would be expiring. The committee members are willing to extend their terms for another year. A Council motion was made and passed to extend the terms of the OOSC members (Steinberg/Richardson).
- Scientific Committee for Oceanographic Aircraft Research (SCOAR) Dan Schwartz reported that his second term as SCOAR Chair would end in April 2015. There will be a call for nominations.

UNOLS Winter Meeting – Location/Date suggestions - Chris Measures volunteered to host the winter Council meeting in Hawaii. The dates of March 23-27 were suggested, as this is spring break. UNOLS will do a cost analysis for holding the meeting in Hawaii and discuss it with agency sponsors.

The meeting adjourned at noon.