

DRAFT
UNOLS COUNCIL MEETING
Web Conference
Monday and Tuesday, August 15 & 16, 2016 – 1:30 pm EDT

Appendices:

I	Participant List
II	2016 Fleet schedules and science operations, and 2017 ship scheduling
III	Agency Recommendation for 2017 Fleet Operations
IV	NOAA Report
V	Ad hoc Committee on Medical Questions/Medical History Form/Pregnancy at Sea
VI	Regional Class Research Vessels
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VIII	Request for UNOLS Designation of R/V <i>Sally Ride</i>
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Summary of UNOLS Action Items – New and Continuing

Action Item	Assignment	Status
Modify UNOLS STRS Schedules so that each calendar day is accounted for.	Rose Dufour, Mike Prince, Liz Brenner, and Alan Hilton (Ex Officio Jon Alberts and Annette DeSilva)	On-going.
Ad hoc Committee on Medical Questions/Medical History Form/Pregnancy at Sea – provide recommendations.	Debbie Steinberg, Clare Reimers, Scott Ferguson, Bruce Appelgate, and Jon Alberts	On-going
Request preliminary results of the WHOI study on harassment for presentation at the Fall Council meeting	UNOLS Office	Contact WHOI in the Fall
Form a Nominating Committee to prepare the 2016 Slate of Council Candidates	Chris Measure (Chair) Mark Brzezinski, Craig Lee. (Annette DeSilva - Office)	On-going
Form the Non-Operator Committee for review of the Agency recommendations for 2017 Fleet operations	Mark Brzezinski, Greg Cutter, and Tammi Richardson (Jon Alberts – Office)	On-going
Annual Meeting Featured Speaker(s) suggestion- High latitude speakers	Chris Measures and UNOLS Office	On-going

<p>UNOLS Charter Review – required every 3 years. Must be complete for membership vote in the fall.</p>	<ul style="list-style-type: none"> • Committee Chairs – review respective Committee terms of reference. • Ad hoc committee to review Charter text: <ul style="list-style-type: none"> * Kipp Shearman * Bruce Corliss * Peter Ortner 	<p>On-going</p>
<p>Conduct community survey to assess priorities regarding marine seismic:</p> <ul style="list-style-type: none"> • NSF will provide the survey questions to UNOLS Office. • UNOLS Office will provide the questions to the MLSOC and Council for feedback. • Release the survey for community input by end of May • End of June, the responses will be provided to Council and NSF 	<p>UNOLS Office, Council, MLSOC, community</p>	<p>Survey is on-going</p>
<p>Science Party Cruise Orientation PowerPoint – Develop a standard deck of UNOLS slides that are similar to those used on R/V <i>Falkor</i></p>	<p>Subcommittee – Annette DeSilva, Doug Russell, Scott Ferguson, Jon Alberts, and Pete Girguis.</p>	<p>continuing</p>

Monday, August 15, 2016

Call the Meeting to Order: Chris Measures, UNOLS Chair, called the meeting to order and provided an opportunity for introductions. The meeting was held via web conference. The participant list is available as ***Appendix I***.

2016 Fleet schedules and science operations, and 2017 ship scheduling - Doug Ricketts, Ship Scheduling Committee Chair, provided the report.

Doug reviewed the 2017 operational plan for each UNOLS ship. Details are included in ***Appendix II***. Next Doug reviewed the charts that were included in the Agencies’ letter regarding Fleet operations for 2017. The charts are included as ***Appendix III***.

Modify UNOLS STRS Schedules to Account for each Calendar Day – Jon reported that in the recent months the UNOLS Office has been working on data calls from NSF. Congress has been interested in learning how our ships are used. Each year the ships are involved in many activities that extend well beyond their operational charge days. Activities include mob and de-mob, maintenance, inspections, etc. Over the last couple of months we have worked to develop standard definitions for maintenance, inspections, etc. The ship schedulers will meet at the end August to discuss this further.

Bob Houtman – The motivation for accounting for each calendar day is the RCRV project. NSF has been frequently asked about the actual utilization of the ships throughout the year. The

FOY definitions and operational day trends make it appear that the Fleet has excess capacity. In reality the ships have many necessary activities that are not “operational days.” We need to be able to better articulate all activities of the ships.

Tim Schnoor commented that there is definitely a good reason to have each day classified.

Agency Recommendation for 2017 Fleet Operations – Bob Houtman reviewed the agency recommendations for 2017 fleet operations. The agency’s efforts to right-size the fleet have been effective.

Bob thinks that by the end of 2017, there will be approximately 3000 operating days based on previous years utilization trends. Additional NSF days from the proposals that are being submitted now are expected. The charts from the Agency letter are included as **Appendix III**.

Non-Operator Committee for 2017 Fleet Operations – The committee members include Mark Brzezinski, Greg Cutter, and Tammi Richardson. Jon Albert explained that they are currently reviewing the agency letter recommendations. The agency letter will be shared with the community. The committee will provide a reply within 30 days.

Discussion:

- Chris Measures – There is some concern over the decline in demand in 2017.
- Jon Alberts – More STRS are being submitted now.
- Annette DeSilva – The 2016 chart mirrors the chart that was in 2015 Agency letter, so hopefully additional requests can be expected.

Agency Reports:

National Science Foundation (NSF) – Bob Houtman provided the NSF report. The Senate made a request that NSF’s budget be increased by \$53M. The House request was level funded. The Senate increase was primarily focused on the RCRV project. The Senate recommended three RCRVs and this is why they increased the funding. The House recommended that no RCRVs are needed. This will go to conference between the House and Senate, but the timing is unclear. NSF had requested funds for two RCRVs.

In other news, NSF sent out a Dear Colleague letter (DCL) to the community on August 9th regarding marine seismic planning. NSF is seeking written expressions of interest regarding new financial and/or managerial models that would provide the marine seismic capabilities to meet the expected needs of academic research scientists. The DCL is part of OCE’s effort to develop a long-term, stable seismic capability, and expressions of interest may or may not involve to varying degrees R/V *Langseth*. Responders are asked to provide their input by November 11, 2016.

Navy – Tim Schnoor provided the Navy report. Navy funded ship time requests will likely be flat. The Navy has acoustic projects and a couple new projects each year, mostly physical oceanography and meteorology. Most of the time these programs generate fieldwork, but not necessarily in the UNOLS fleet.

For 2017 there are more than 500 Navy days, but some of the days are on the USCG Icebreaker *Healy*. Those days are expensive and will exceed Tim's base budget, but ONR has been generous in the past with support for fieldwork.

Fifty ship days annually are expected from Navy labs.

Navy had a requirement for a ship shock trial. The Navy likes to use UNOLS vessels for this.

Tim is hopeful that funds for a mid-life refit for *Atlantis* will be allocated, allowing the refit to be scheduled in 2019. Rose Dufour – Hopefully this can be scheduled to coordinate with *Alvin's* recertification.

National Oceanic and Atmospheric Administration (NOAA) – Colin Little provided the NOAA report. Colin is replacing Tracy Miller. Colin presented the NOAA Fleet allocation plan. His slide is included as **Appendix IV**. There are about 180 days at sea for each of the NOAA ships. *Okeanos Explorer* will still be operating in the Pacific in 2017. NOAA is operating 16 ships.

Discussion:

- Chris Measures – This year *Revelle* supported some of NOAA's TOA work.
- Colin – NOAA would like to continue these bartering arrangements.
- Rose Dufour – The barterers were a one-time deal and they went well. Future barterers will depend on whether the agencies can match the exact number of days.

Ad hoc Committee on Medical Questions/Medical History Form/Pregnancy at Sea - Ad hoc Committee members include Debbie Steinberg, Clare Reimers, Scott Ferguson, Bruce Appelgate, Chris Measures, and Jon Alberts. Jon provided the report. His slides are included as **Appendix V**.

Jon reviewed the membership and the actions completed to date:

- UNOLS ship operators were surveyed to gather information on procedures and policies regarding medical history forms, pregnancy and nursing mothers policy, and harassment prevention procedures.
- The MTS Sexual Harassment Prevention Video has been provided to all UNOLS ships.
- A new banner has been added to the UNOLS home page titled: "Discussing the Gender Climate at Sea" with links to the UNOLS Power Point on Harassment Prevention and pertinent articles.
- The UNOLS *Research Vessel Safety Standards (RVSS)* - 10th Ed includes Chapter 6- *Personal Behavior and Individual Safety*. There is also Appendix E- *Harassment Prevention*.

A document that provides guidelines and recommendations on these topics is almost ready for distribution. The main points of the document include:

- Importance of Operator's Policies – readily available
- Types of Documents Collected and purpose for collection
- Importance of security in handling, storage, and disposal

- Pregnancy Policy and accommodations for nursing mothers with examples from US Navy, US Coast Guard, and Cruise Lines
- Harassment Prevention and Importance of Harassment free workplace
- Tools available, Guidelines and Suggestions on how to handle situations

Discussion:

- Chris Measures – Does the document become a UNOLS policy? Jon – The document can be incorporated into the RVSS to strengthen Chapter 6. This would go through the ship safety committee.
- Bruce Appelgate – As a practical matter, when the document is complete, will the ad hoc committee send a letter to the safety committee requesting it be incorporated into the RVSS? Jon – Yes, he recommends this.
- Doug Russell – RVOC will review the document to make sure that it is adopted properly.
- Masako Tominaga – If a scientist is not from the operator institution, who is responsible? Chris Measures – The operator is in charge at sea. However, the question is what happens when they return to shore? They are going to try to get the Title IX people at each operator institution to talk and work out these details. They don't want things to fall through the cracks.

Break

Marine Seismics Oversight Structure - Chris Measures reported that during the May Council meeting, NSF asked the Council to consider transitioning the Marcus Langseth Science Oversight Committee (MLSOC) to a marine seismics oversight committee. The charge for the new committee would be broader than MLSOC's terms and address all marine seismic work.

Between Jun 13th and July 1st, 2016, the UNOLS office conducted a survey of the marine geoscience community to assess priorities for seismic work in their research. One of the primary goals was to assess the size and breadth of the marine seismology community, which collects, processes and interprets the data, and how large and broad the community of "non-specialist" users of the data is. Among other things, the survey was also intended to assess the types of marine seismic data that are in demand and with what priority.

Nathan Bangs, MLSOC, reviewed the survey results. There was a good response with 263 respondents. A summary of the responses is available at: https://www.unols.org/sites/default/files/Marine_seismic_survey%20_summary.pdf.

Discussion:

- Tom Janecek – NSF is reviewing the survey results.
- Chris Measures thanked Nathan Bangs for a nice job summarizing the results.
- Nathan Bangs – The survey indicated that there is a lot of need for facilities.
- Candace Majors – Some members of the community have provided suggestions regarding processing.
- Bob Houtman – NSF is interested in supporting a seismic training cruise in 2017. If the community is serious, then a member of the science community needs to step up.

- Rose Dufour – A proposal for hosting a seismic early career workshop should be submitted to Rose. There are a lot of models for chief scientist training.
- Annette – UNOLS can share information about past training programs and their curriculums.
- Jim Holik – What will be the platform? Permits may be the issue.
- Rose Dufour – The ship may not be the *Langseth*.
- Jim Holik – Is there an option that the training cruise could be on the *Langseth*? Rose – The problem with *Langseth* is cost as they are at their cap. Jim Holik – There are portable systems can be used on other ships.
- Deb Smith - She encouraged Nathan to talk to Donna Blackman regarding a training cruise.

Jon Alberts continued and indicated that the second part of this issue is the topic of transitioning the MLSOC to the Marine Seismic Research Oversight Committee (MSROC). The MLSOC sent the Council a letter with concerns over the transition in that oversight of the R/V *Marcus Langseth* would be diminished. Nathan Bangs commented that the issues that are specific to *Langseth* would be lost. A suggestion is to either leave MLSOC or to make MLSOC a subcommittee of MSROC.

Discussion:

- Mark Brzezinski – it seems that *Langseth* could benefit from oversight.
- Chris Measures – MLSOC could be a subcommittee of MSROC.
- Tom Janecek – The operators of IODP put together technical oversight committees as needed to address technical issues.
- Bob Houtman – He thinks that NSF would be supportive of the MSROC with a subcommittee of MLSOC.
- Chris Measures asked Nathan Bangs if the subcommittee structure would work. Nathan Bangs – The preferred option would be to keep MLSOC. However he would rather have the MLSOC subcommittee instead of just an operator group. He thinks that this will work. He thinks that this will satisfy their concern and it could be written into the Charter Terms of Reference.
- Rose Dufour – Would the Regional Plan be part of the MLSOC? Nathan – It would fall under MLSOC, but they would report up to the parent committee.

Jon Alberts suggested that the MLSOC draft the new Terms of Reference for the MSROC. Bob Houtman invited MLSOC to share the draft MSROC terms with NSF.

Proposed Policy regarding UAS on UNOLS Vessels – Annette DeSilva reviewed the proposed policy:

With the recent publication of the FAA small UAS rule, a policy for UNOLS ships has become necessary. Effective immediately, operation of Unmanned Aircraft Systems (UAS), or drones, from or over UNOLS ships may not take place without demonstrated compliance with national or international regulations (ICSA, FAA) and specific approval of the ship's captain or designee, as a minimum. This applies to crew, techs and members of the science party, and refers to all operations, whether recreational, educational, or professional. Obtaining national approvals, such as FAA's Sec 333 exemption or Certificate of Authority or Waiver (COA), as well as pilot qualifications, are

not a guarantee the operations will be approved by the ship's captain. Recreational or hobbyist freedom of use over land is not available at sea, so the importance of contacting the ship's operator ahead of time is critical. Detailed policies and processes are in development by SCOAR to provide guidance and training.

Discussion:

- Bob Houtman – There needs to be a clear process followed during the pre-cruise planning for cruises with UAS. There should be a check box added to indicate use of UAS on the STRS form.
- This must be part of the pre-cruise planning.
- The SCOAR subcommittee is working to develop guidance information for UAS use on UNOLS ships.

UNOLS Charter Review – The Charter Subcommittee includes Kipp Shearman, Peter Ortner, and Bruce Corliss. The review is moving along and all Committee Chairs are reviewing their respective Annex.

There are a few questions that could use agency and Council feedback:

- Tim Schnoor – The operation of CIRPAS is transitioning. The facility will continue to be supported and might remain in Marina, but there is a question of whether it needs a center of excellence. The capability will possibly continue under the management of NRL. Once the transition is complete, we can discuss if CIRPAS should continue as a National Oceanographic Aircraft Facility.
- Chris Measures – The future role of OOSC is something that NSF is thinking about. It can be discussed further after the OOIFB is formed.

Facility Modernization and Upgrade Activities:

Ocean Class AGORs – R/V *Neil Armstrong* and R/V *Sally Ride* – Tim Schnoor reported that R/V *Sally Ride* left Anacortes shipyard last week and is undergoing a shakedown cruise. The ship is expected to arrive in San Diego, CA around August 26th. Science verification cruises (SVC) will follow.

R/V *Neil Armstrong*'s SVCs are mostly complete. PCARs for the SVCs have been submitted. WHOI has received many suggestions for improvements. These improvements are planned for the end of the year. ONR and the ship operators are working with NAVSEA on fixes that include the permanent ballast system, the anchor handling systems, etc. People seem pleased and mostly comfortable.

Regional Class Research Vessels (RCRVs) – Brian Midson provided an updated on the RCRVs. His slides are included as **Appendix VI**. NSF released a Request for Information (RFI) in May 2016. There were 14 respondents, including 7 shipyards. The responses are available at <http://ceoas.oregonstate.edu/ships/rcrv/procurement/>.

NSF has released the request for proposals (RFP) for up to three RCRVs. The Final Design Review is scheduled for November 2016.

The RCRV Operator Selection solicitation will be concurrent with FY18 budget request. The FY18 budget will likely be later than normal due to the administration change (April 2017).

Ocean Observatories Initiative (OOI) – Bob Houtman (NSF) reported that OOI completed its MRE-FC construction project at the end of May this year. The project team is now the “OOI Program” and they are rolling out enhancements. Most enhancements are focused on cyber infrastructure (CI). NSF continues to draft a solicitation for re-competition for operation of OOI and it will likely be released in the fall.

Lisa Clough continued and said that NSF is welcoming proposals to use OOI. Users who would like to add new instruments to the arrays or have project teams that need support should contact OOI. There are upcoming OOI workshops planned.

Mid-Life Refit Plans for *Thompson, Revelle, and Atlantis* – Tim Schnoor (ONR) reported that R/V *Thompson* has started its mid-life refit and is currently in dry-dock. The ship is expected to be out of the shipyard in the June/July 2017 timeframe.

R/V *Revelle* is slated to begin its refit in mid-2018. The Navy is finalizing the SIO contract for funding the refit effort and it should be complete in the next four weeks.

It appears that funds will be available to carryout refits on all three Global vessels.

Adjourn Day 1

Tuesday, August 16, 2016

Call Day-2 of the Meeting to Order: Chris Measures called Day-2 of the Council meeting webinar to order at 1:00 pm EDT.

UNOLS Annual meeting: Chris Measures reported that the dates for the Annual meeting are set, November 30 – December 1, 2016 (see ***Appendix VII***).

There was discussion on potential Keynote Speakers. There was general consensus that a speaker with polar research expertise would be of interest. Council members were asked to send suggestions to the UNOLS office within the next week.

Status of a California state effort to acquire a vessel to replace *Robert Gordon Sproul* – Bruce Appelgate (SIO) reported that SIO formed an ad hoc committee to draft a Dear Colleague letter to gauge the interest and support for a state vessel to replace R/V *Sproul*. There was a good response to the letter. SIO has partnered with Moss Landing Marine Lab (MLML) on this effort.

They are looking at a different operating model and hope to broaden the user base. They are still at the stage of reaching out to potential collaborators.

The next step in the project will be to refine the Science Mission Requirements (SMRs) for the vessel. They will explore funding sources within the state of California.

SIO and MLML will keep UNOLS informed on the status of the project. When the ship construction is complete, they would like to apply for UNOLS designation.

Request for UNOLS Designation of R/V *Sally Ride* – Bruce Appelgate reported that R/V *Sally Ride* is currently at sea. Clare Reimers was the first science customer as the lead on a Science Verification Cruise (SVC). The first paying customer will be the CalCofi program. SIO would like R/V *Sally Ride* to be a designated UNOLS vessel before the next Council meeting. Bruce asked if the Council would be willing to consider designation before the next meeting.

Jon Alberts reviewed the requirements for UNOLS designation (see **Appendix VIII**).

Scripps will need to send a letter to the Council requesting UNOLS designation. The Council can recommend approval of the designation, contingent on the successful completion of its ship inspection. There is very little time between the ship inspection and the first science cruise.

Discussion:

- Tim Schnoor reported that R/V *Sally Ride* has successfully completed the Navy INSURV inspection. Is this sufficient? This is a safety inspection.
- Annette DeSilva – In the past, the Council has approved the UNOLS designation contingent on successful completion of a safety inspection.
- Jim Holik – After the successful completion of the NSF inspection, NSF will sign off on the approval of the ship for operations, not before.
- It was decided that once the SIO letter is submitted, the Council would consider approval of the designation, contingent on the successful completion of the NSF Inspection.
- Jon Alberts – We should tighten up the requirements for the UNOLS Designation. The requirements simply state “Safety Inspection”

Committee Activities and Issues requiring Council Attention:

Fleet Improvement Committee (FIC)/Fleet Improvement Plan – Greg Cutter provided the report for Jim Swift. Slides are included as **Appendix IX**. The committee is conducting debriefs with the users of the *Sikuliaq*, *Armstrong*, and will do the *Ride* when the ship comes on-line.

The FIC plans to draft SMRs for Global Class vessels. This will be on their agenda for the fall meeting.

- Tim Schnoor – FIC should let him know if there features in the Global SMRs that could influence the mid-life plans for the *Revelle* and *Atlantis*.
- Doug Russell – Cautioned that during R/V *Thompson's* mid-life refit, they encountered some unexpected conditions when the ship was opened up.

Ocean Observing Science Committee (OOSC) – Larry Atkinson, OOSC Chair, provided the report. The SOC holds weekly meeting that Larry and Annette participate in. Larry continues to provide feedback during these meetings and shares it with OOSC.

The OOSC NE Pacific OOI Workshop is the next big event. The steering committee members include:

- Jan Newton
- Richard Dewey
- Kendra Daly
- Meghan Cronin
- Larry Atkinson
- Deb Kelley
- Jack Barth
- Mike Vardaro
- Annette DeSilva

Participation in the workshop is by application. The workshop is at full capacity and there is a waiting list. Those on the waiting list will be offered participation via webinar.

OOI cruises that service the arrays can provide an opportunity for students to go to sea. Pete Girguis commented that the recommendation for additional opportunities to get to sea came out of the Chief Scientist Training Cruise that recently took place.

Research Vessel Operators' Committee (RVOC) – Doug Russell, RVOC Chair, provided the report. His slides are included as **Appendix X**. The committee is working to find a new Chair-Elect.

RVOC will develop a white paper on the electronic technical support requirements for vessel operations. Russel is the lead on the white paper. The ships are all very complex, including the small ships.

Chris Measures thanked Doug for all of his service to the Fleet and to UNOLS.

Research Vessel Technical Enhancement Committee (RVTEC) – Scott Ferguson, RVTEC Chair, provided the report. We are in the advanced stages of planning the RVTEC meeting that will be hosted by Scripps Institution of Oceanography. There is an agenda that is almost ready to be distributed. The dates for the meeting are November 1-3, 2016.

Marcus Langseth Science Oversight Committee (MLSOC) – Nathan Bangs, MLSOC Chair, already provided a report earlier in the meeting. He had one question regarding the transition of the MLSOC to the MSROC. Assuming that the UNOLS Charter revision is approved by the membership in December, what will be the plan for the December MLSOC meeting before AGU?

- The December MLSOC/MSROC meeting will be held as planned the day before AGU. The meeting will be helpful in terms of transition plans.

Chris Measures thanked Nathan for all his efforts and leadership on the MLSOC. The committee has had a lot to deal with. This is going to be very important for the future of Marine Geology and Geophysics.

Arctic Icebreaker Coordinating Committee (AICC) – Bob Campbell, AICC Chair, reported that after the May Council meeting he met with NSF representatives at NSF. The meeting was helpful to clarify NSF's positions regarding the USCG new heavy icebreaker plans.

Scientific Committee for Oceanographic Aircraft Research (SCOAR) – Annette DeSilva provided the SCOAR report for Luc Lenain who was unavailable. Slides on SCOAR activities are included as **Appendix XI**.

Deep Submergence Science Committee (DESSC) – Peter Girguis, DeSSC Chair, provided the report. His slides are available at:
https://www.unols.org/sites/default/files/201605desap_18.pdf

Pete became DeSSC Chair at a very active time with the loss of *ABE* and the upgraded *Alvin* coming on-line. Pete reviewed the current DeSSC membership and expressed the need for a vice chair. He provided a 5-year retrospective of DeSSC activities and the National Deep Submergence Facility (NDSF):

- AUV *Sentry* entered into service after the loss of *ABE*
- DeSSC provided community feedback into the *Alvin* upgrade project.
- NDSF Booth with *Alvin* Mock-up – Pete feels that more show-n-tell items would be very helpful.
- DeSSC developed a process for photo accreditation and attribution.
- Addressed issues regarding data management.
- Launched an annual early career program each December.
- Provided feedback on Jason's new launch and recovery system.
- Organized *Alvin's* SVC.
- Promoted NDSF data archiving.
- Developed and hosted the DESCEND-2 workshop
- Video Workshop

Chris Measures thanked Pete Girguis for his tremendous contributions.

Masako Tominaga commented that the support and training activities from UNOLS, DeSSC, Pete Girguis, Rose Dufour/NSF has been very beneficial in her career activities and accomplishments. She hopes that the announcements for early career scientist opportunities will emphasize that the UNOLS committees and Council are approachable and open to all.

Review suggestions for future UNOLS goals – Chris Measures asked the Council members to send him suggestions for UNOLS goals for the upcoming year.

Opportunity for Additional Reports and Discussion: Jon Alberts reported that UNOLS has transitioned its Fleet medical services provider to George Washington University Maritime Medical Access. The transition has gone smoothly.

A motion was made and passed to adjourn.