UNOLS Council Meeting Thursday, November 1st, 2018: 830AM – noon

Holiday Inn Hotel & Suites Alexandria, Old Town Ballroom C/D 625 First Street, Alexandria, VA

Meeting Minutes

Appendices:

I: Attendance List
II: Review of Completed Council Action Items
III: Response to Agency Recommendations for 2019 Fleet Operations
IV: New UNOLS Office – status of transition
V: MERAS Report on Activities and Plans for the Coming Year
VI: Post Cruise Assessment Reports (PCAR)
VII: IRSO Report
VIII: <u>UNOLS Goals</u>
IX: Change in National Oceanographic Facility Designation
X: UAS Guidance Document on Operations from UNOLS Vessels
XI: STEMSEA Report on 2018 Activities and Plans for 2019
XII: Satellite Network Advisory Group (SatNAG) Report

Thursday, November 1st

Call the Meeting – Deborah Steinberg, UNOLS Chair, called the meeting to order at 8:30 am on November 1, 2018. She provided an opportunity for introductions, and the attendance list can be seen as *Appendix I*.

Deborah reviewed the completed Council Action Items (on-going items will be reported below). The slides of the completed tasks can be found as <u>Appendix II</u>.

The new UNOLS Office will be hosted by the University of Washington. Transition activities will be reported on later in the meeting.

Discussion:

- Sandy Shor: What are the implications of removing Chapter 18 from the Research Vessel Safety Standards (RVSS)? Jon Alberts: Chapter 18 was unattainable and the Council recommended removal.
 - Sandy Shor The state of Hawaii made a state law that takes word-for-word the RVSS Chapter 18. He is amazed that this was removed considering deaths have resulted from using uninspected vessels.
 - o *Rose Dufour*: She was at William and Mary Council meeting when this was discussed. She thought that Chapter 18 would be removed from the RVSS but made into a stand-alone document. She hopes that Chapter 18 will be made into a guideline document that the agencies can use.

o *Mike Prince*: When Chapter 18 was first implemented it was at the request of agencies. Over the years, agencies didn't seem to use it and it became less enforceable.

Response to Agency Recommendations for 2019 Fleet Operations – This year's non-operator committee included Tammi Richardson, Rhian Walker, and Anna-Louise Reysenbach. Their recommendations can be seen as *Appendix III*.

Bob Houtman thanked the Council for reviewing the agency letter and thanked the subcommittee for their recommendations.

Jon Alberts read the non-op letter recommendations. It was noted in their recommendations that there are challenges faced by the science parties during 2-ship operations. Communications and sample sharing can sometimes be less than optimal.

New UNOLS Office: status of transition – The report was provided by Jon Alberts and Doug Russell. Their slides can be seen as *Appendix IV*.

Doug reviewed the new UW team members that have been confirmed. He will serve as the Executive Secretary and Alice Doyle will be the new Deputy Executive Secretary.

Office transition activities are already taking place. He and Alice are having weekly web conferences with Jon and Annette.

Areas of focus for UW are:

- IT transfer The goal is to bring this in-house at UW.
- Ship Time Request and Scheduling (STRS) System The STRS is an older system. They are starting to look into the future, but making the transition of STRS to UW is the immediate focus
- Post Cruise Assessment Report (PCAR) system The PCAR committee evaluated options over the past year(s) and have made recommendations. Based on the recommendations, Jon Alberts will prepare a Statement of Work (SOW) for a new PCAR system. He will provide the SOW to Doug who can move forward with a subcontract for development.

Doug thanked the Council for the opportunity to serve as the new Executive Secretary.

Discussion:

- *Bruce Appelgate*: What is the status of the medical advisory service, will it be competed? *Doug R*: Yes, it will be broadcast nationally.
- *Mike Prince*: Whenever the medical advisory service was up for rebid, he always went out to the Marine Sups for feedback regarding the service.
- Jon Alberts: The current office at URI will end on April 30th, but we will still be around to answer questions.

MERAS Report on Activities and Plans for the Coming Year – The report was presented by co-Chairs, Deb Steinberg and Mark Brzezinski. Their slides can be seen as $\underline{Appendix \ V}$. The topics that were discussed include the following:

- Scott Ferguson has rotated off the subcommittee, so there is an opening.
- Civility at Sea Video Project
 - o Module 1: NOAA is funding the module 1 video which applies to all research vessels. The final version will be available by the end of the year.
 - Module 2 applies to the academic research fleet and is being funded by NSF and ONR
 - MERAS has outlined four scenarios to be addressed in Module 2. They
 cover various stages of an expedition, from staging to post cruise
 activities. Deb reviewed the four scenario details.
 - They are now ready to provide the outline to the contracted producer, MTS, for scripting and scoping.
 - o Module 3 is not a video, but instead is ship specific posters. These posters provide information for shipboard participants on how to report incidents.
 - The one area that still needs resolution is whether there should be a fleet-wide reporting system, eg. RAINN. MERAS may want to get Council feedback on whether a fleet-wide RAINN system is desired. Some institutions already have their own subscriptions with RAINN.
- In other activities, NSF requested a position paper from MERAS regarding milestone ceremonies. MERAS is developing a white paper in response.

Dialogue/ comments -

- Craig Lee: Regarding the shipboard reporting of incidents. On a cruise, it gets confusing because you have the ship's institution and the PI's participating institution. I'd there any guidance? Deb S: This is the tricky part. Chris Measures: When the ship gets back to port, it is typically the respondent's institution that takes the case because they can take action. Getting the title IX offices to talk is challenging.
- Rose Dufour: NSF has a small Title IX office now.
- Lisa Clough: Anyone is welcome to report to NSF at any time. They now have a secure portal for reporting. NSF is doing two site visits a year and they are asking for the Department of Education to assist. There is a new NSF policy regarding harassment that has been distributed. Any institution receiving NSF funds is responsible for reporting if an individual has been involved or charged in an incident. There is a portal to report this, but also other incidents can be reported. Also, there is now "best" practices on their website.
- Chris Measures: He is on the University of Hawaii (UH) ethics committee. He was hoping that NSF's title IX could assist in determining which institution would take over the case. Lisa C: She is willing to determine if that is the role NSF's office could take on.

Alice Doyle provided a report on RAINN. RAINN has an initial start-up fee of \$50K and \$27K annually, and it goes up from there if they provide customized services. There are institutions who already have the help lines in place. So the question is whether there should be a fleet-wide service that would in some cases duplicate what is already in place. It might also present some

confusion on which service should be used when sailing on the vessels that already have a RAINN service.

• Rose Dufour: They were thinking more of a help line, as opposed to a hot line. The UNOLS current medical advisory service, George Washington (GW) offers a help service.

General Discussion:

- *Mark Brzezinski*: Returning to the issue of who takes the case. His institution Title IX office will coordinate with the other institution Title IX office to get the case moving forward. He doesn't know if all institutions do this. *Sean Higgins*: LDEO does the same thing. You can end up with multiple Title IX offices working on the same case. This seemed to be part of their policy.
- Lisa C: There is a wide landscape. If there is something that cannot be resolved, the NSF Title IX office could get involved.
- Jon Alberts: Harassment assault incidents would fall under the current medical advisory services. However counseling services would involve psychiatrics. This would have to be added to the current medical services provided and would be expensive. GW could offer fleet customized services for counseling.
- *Mark B*: When he goes on a cruise, he brings his institution's Title IX contact information with him on.
- Rose D: Module 1 will be released on 1 January. The video was shown at IRSO and was well received. NERC has indicated that they will start using it on their ships. Module 2 will apply to the academic research fleet (ARF) as well as USAP ships.
- *Tim Schnoor*: There is a Navy policy regarding milestone ceremonies. They will share this with MERAS.
- Sandy Shor: The UH crew aren't employees of UH.
- *Sean Higgins*: The sensitivity of these issues is resulting in higher attention throughout the fleet. There is much more awareness.

Post Cruise Assessment Reports (PCAR) – Jon Alberts provided the report. He discussed the status of the subcommittee activities, plans, and PCAR professional services evaluation. His slides can be seen as *Appendix VI*.

- Brandi Murphy will be rotating off the PCAR subcommittee and they will be looking for an RVTEC replacement.
- The committee is looking to revamp the PCAR form. Jon will finalize a statement of work for a new on-line PCAR form and then hand it off to UW.
- Currently there is one form for all groups —> Science party, Masters, and Technicians. The subcommittee would like to have three different forms, one for each group.
- Qualtrex offers a nice product. It provides automated replies and can be accessed from mobile devises.
- Development of a new form would have to be a competitive bid.

Dialogue/ comments –

• Brian Midson: do you see this as being able to capture the feedback from captains and techs in response to a science PCAR? Jon A: This is something that will need to be addressed.

• *Jon A*: Another thing that needs to be considered is distribution of the form.

IRSO Report – Bob Houtman provided the IRSO report. His slides can be viewed as <u>Appendix</u> VIII.

The meeting was held in Barcelona and there were over 100 attendees from around the globe. It was a very productive meeting with useful exchange of marine operations information.

There are some the common themes from meeting-to-meeting:

- Research vessel construction, modifications, and performance
- Manning, safety, and training. The Civility at Sea video was presented.
- Scientific technology
- A special topic this year included the ICES 209 Icebreaker Design Zero
- Legal issues and insurance
- Cooperation and outreach

The 2019 meeting will be at CSIRO. They have taken delivery of R/V *Investigator*, which is a large vessel.

The US maintains the IRSO.org website through UNOLS, and presentations are now on the website.

Bob reported that Tim Schnoor, Rob Sparrock, Rose Dufour, Jon Alberts, and Doug Russell all attended

Bob has moved into the IRSO immediate past chair position.

Dialogue/ comments -

- *Chris Measures*: He often gets asked about the UNOLS model from other countries including China. It might be good to invite some of these countries to our meetings because they might be interested in attending. China and Korea are very interested.
- Jon A: We have had the Chinese and Korean visit the US and UNOLS.
- *Chris Measures*: We should bring them to the Council meeting.

Facility Plans and Acquisition Activities: There was an opportunity to report on areas requiring Council attention regarding the Global Mid-Life Refits and RCRV projects.

Global vessels - Tim Schnoor reported that *Revelle* will enter its mid-life refit in April 2019. There might be a delay in the start of the *Atlantis* refit which is planned for May 2020. A ship is needed to support the EXPORTS program in the Atlantic. The refit might slip to July 2020. There can be some potential scheduling issues. The refits should nominal take 12 months, but there could be slippage.

Brian Midson added that *Alvin* is scheduled to have its upgrade during the same period as the *Atlantis* mid-life. NSF will fund the upgrade, which will take longer than a year to complete. Fabrication is less than a full year, but then there is the testing, etc. to follow.

Jon Alberts: The EXPORTS program needs 45 days on Atlantis and Armstrong, so perhaps Alvin can begin its upgrade during that period.

Status of California state effort to acquire a vessel to replace *Robert Gordon Sproul* – Bruce Applegate gave a brief. There are no slides.

SIO is still working on various replacement options for *Sproul*, but the big vision is the ZeroV green vessel. They are considering a range of options; from the UW model of buying an existing ship constructing a new vessel. There are other institutions within California that would be users of the vessel.

Break

UNOLS Goals:

2017/2018 Goal: Improve quality of life and morale at sea (food, exercise, internet, etc.) – The ad hoc committee includes Kipp Shearman, Rhian Walker, and Deb Steinberg (15 minutes). Their slides can be seen as <u>Appendix VIII</u>. Deb Steinberg remarked that improving quality of life on ships would in turn help productivity.

Rhian provided the report. The ad hoc committee sent a survey to the ship operators (marine sups, tech, crew). There were 29 responses. A common theme was Faster internet.

The next steps include a larger survey that is broadly distributed. They could use input from the Council on what questions should be in the survey.

Dialogue/ comments -

- Bruce Appelgate: Were the responses from the crew or ship operators or science? Rhian: these were from crew and ship operators. Deb S: They would like to get a bigger response.
- *Mark Brzezinski*: Were there any remarks on food? *Deb*: no.
- Chris Measures: The crew and science interactions should be increased. On his cruises they have cribbage contests; no additional funds are required. The games are organized by the PI. Deb: She does this sort of thing too.
- Luc Lenain: They could have the crew initiate activities. Rhian: They need to be cautious because if the request comes from the Captain, the crew may see it as work.

2017/2018 Goal: Ensure a smooth transition for the new UNOLS Office, including analysis of existing structure and suggestions for future changes - Deb reported that this was accomplished through the UNOLS Office competition and selection. Transition activities are underway and were reported on earlier in the meeting.

Goals for 2018/2019 - Deb introduced this as an opportunity to suggest ideas for new goals.

Discussion:

- *Deb S* suggest a goal to make some assets/equipment that is not in the UNOLS pool more widely available. We have some things that are out there, but not being used. There is indeed insurance and liability issues that would need to be addressed.
- Bruce A: One of the things that we can do as an organization is formulate policy and guidelines that we can use to inform how the ships can communicate with the shore-side parties. We are not using the ships to their full capability. UNOLS could write a document that will justify the need for increased bandwidth and CI. We have a lot of data that is being collected that would be good to provide in real-time. UNOLS can come up with a vision and then come up with a paper or guidelines.
 - O Dave Emerson: DeSSC has talked a lot about telepresence and they have given this issue a lot of thought. They have formed a subcommittee to draft a white paper. Annette added that Chris German is leading the effort and it should be ready in December. It might be submitted as an Eos Article. It is focused on science use of telepresence. This could be a resource into Bruce's goal.
 - What about SatNAG? Jim Holik is looking at bandwidth use and coming up with a policy.
 - o *Bruce A*: this comes up in the PCARs. Being able to point to a document would be very helpful.
 - Deb S: There are more and more autonomous vehicle operations. The cruise she just came off of was very intense and they had to piece the information together.
 Bruce A: This shouldn't be the way; we need a guidance document to help justify additional resources.
 - o *Lee Ellett*: He will touch on this tomorrow during his report. The most common use of bandwidth is streaming data.
 - o Luc: There is more and more need for sending data from shore to sea.
 - o *Matt Erickson*: Have you looked at the PCARs regarding bandwidth? You can find out how many times it is mentioned.
 - o *Bob Houtman*: They recognize that it is a clear issue. By spring of next year, they will be able to present to the Council some options.
- *Craig Lee*: Going back to the first suggestion regarding shared access to different instruments/equipment. As a first step, there could be a UNOLS-like model for gliders. This is something that we can start talking about.
 - o *Annette*: You may want to refer to the 3rd party tool policy developed by DeSSC a number of years ago.

Change in National Oceanographic Facility Designation – CIRPAS is no longer a facility; however, operation of the Twin Otter remains. Luc Lenain, SCOAR Chair, provided the report and his slides can be seen as *Appendix IX*.

The UNOLS National Oceanographic Aircraft Facility (NOAF) consists of the Navy facility, CIRPAS. There have been changes, and CIRPAS operated by the Naval Post-graduate School (NPS) no longer exists. However, NPS retained CIRPAS' major asset, the Twin Otter, and its critical support personnel. The hanger is retained, and it is funded through ONR.

The Twin Otter is a great asset to the oceanographic community. The aircraft is able to fly at very low altitude, which is very valuable. There were a number of instruments designed for the Twin Otter.

At the SCOAR meeting in August, Haf Johnson (he manages the Twin Otter operation) presented an informative talk about the Twin Otter and its capabilities. There was a strong support for maintaining the Twin Otter as a UNOLS facility. The SCOAR recommends that it remain as a NOAF.

SCOAR would like to propose a revision to the Charter to rename the NOAF from CIRPAS to the NPS Twin Otter. The proposed Charter revision is included in the slides.

A motion was made to revise the Charter as recommended by SCOAR (Appelgate/Measures). Eleven voted in favor, with one abstaining (Dave Emerson). The motion passed.

Annette said that the Charter revision will need membership endorsement. A statement will be made during the Annual meeting requesting consent.

Status of Recent and on-going UNOLS Activities:

UAS Guidance Document on Operations from UNOLS Vessels – Luc Lenain provided the report. His slides are included as Appendix X.

Topics covered included:

- Examples of UAS that can be operated from ships
- A general overview of the guidance document that has been developed.
 - The guidance document will be a living document
 - There is a decision making flow chart that provides a roadmap. This information was badly needed.
 - They added a timeline with tasks and when they need to be completed.
 - o The science user needs to make sure that what they are proposing to do is realistic. All of the approvals must be in place.
 - o The guidelines are for science and/or outreach UAS operations. Recreational use of UAS from vessels is not permitted.
 - o Luc reviewed the requirements and for the science user and the ship operator.
 - SCOAR will play a role in recording and keeping track of UAS flights from the ARF.

STEMSEA Report on 2018 Activities and Plans for 2019 – The report was provided by Sharon Cooper (LDEO). The slides can be seen as *Appendix XI*.

- She provided background information on the STEMSEAS program.
- 48 students participated this year (2018).
- There were 36 in 2016 and 2017.
- The participants are very grateful for the opportunity and have provided hand written notes. The also post personnel blogs and the students want to continue to go to sea.
- There are social media posts

- Articles have come out of the program (*Oceanography*)
- Collaborations are an important part of the program.
- Looking ahead to 2019:
 - o They are looking for a couple more transit cruise opportunities.
 - o The program could use some gently used microscopes.
- *Kipp* suggested that STEMSEAS checking out the OOI cruises, since they go out regularly.

Satellite Network Advisory Group (SatNAG) Report: progress report on the bandwidth policy and plans for the future – Laura Stolp (WHOI) provided the report via Webex. Her slides can be viewed as *Appendix XII*.

- SatNAG has drafted an internet use policy
- A SatNAG Pilot Program has been initiated. Nader the program:
 - Only one platform can be connected per user.
 - o If you go over the limit, you can't get back on until the next day.
 - o Technicians will work to identify any problems before reconnecting.
- They are close to being able to get metrics on the pilot program.
 With all of the different policies and institutions, it is hard to get everyone on the same page, but it is getting there.
- They are collecting CyberRome reports.
- They will work on setting expectations for users by sending out SatNAG the Bandwidth Policy as part of the pre-cruise information.
- They have a poster that was shown at RVTEC. The poster will be on the *Atlantis* early career scientist cruise in December.

Discussion:

- Annette: Did many people meet their daily quota? Laura: they don't go through it as quickly as you would think. Early in the cruise, use was higher.
- Bruce Appelgate: Did they look into security. Laura: They did looked into the security.
 They hope everyone has their updates installed. This is something else that SatNAG looks at.
- *Deb S*: How do users like What's App? *Laura*: They encourage folks to use the Google mobile instead of full blown version. Not sending pics helps. Some applications are better at reducing image size.
- Bob Campbell: Most people didn't have problem with the quota because the pipeline on/off the ship is so constricting. Laura: They haven't found the happy medium yet.

Committee Activities and Issues Requiring Council Attention:

Reflections on the UNOLS office re-competition process - Deb Steinberg spent a few minutes reflecting on the UNOLS Office re-competition process. It is healthy to think how it went. How do we want to do things next time?

She did get some calls from institutions in the Gulf region. In going forward, do we need to think about regional biases in the next office transition. Is a Council appointed 5-person

committee appropriate? As we move forward, do we have a good process in place. To be clear, she is thrilled with the way the process played out. Are there suggestions for next time?

Discussion:

- Rose Dufour NSF needs to be able to explain the competition process.
- Tim Schnoor For the ability to fund the UNOLS Office, the agency needs to say that it is truly a competition. A legitimate competition process must be in place. *Bruce A*: Did this process satisfy the competition requirement? *Tim S*.: ONR didn't have a role in it. So far it is okay.
- *Mike Prince*: When he submitted his UNOLS Office proposal, it was the only proposal. But he still had to submit it to NSF. There was nothing that prohibited another institution to bid. There are two levels for competition.
- *Chris Measures*: He was part of the proposal review and it was exactly the same way that you would look at an NSF proposal review. Regional distribution was not a consideration and is not a consideration for NSF. They evaluated on the set criteria. They had a unanimous opinion. He felt the proposal process was fair.
- *Deb S*: Do we want to consider regional in future competitions?
- Rose Dufour: Is there something in the UNOLS charter requiring the Office to move back and forth from Coast to Coast? Answer Don't think so.
- *Chris Measure*: To avoid institutional conflicts, review members were chosen from institutions not bidding on the Office.

Committee chairs and Council members will had an opportunity to raise any issues requiring Council attention:

- FIC Jim Swift reported that his first 3-year term as FIC Chair is ending. The committee has requested that he serve another 3-year term. Council approval is requested. A motion was made and passed to appoint Jim Swift for a second term as FIC Chair (Measures/Brzezinski).
- MSROC Pat reported that they have nominated four members and will request Council endorsement. He will send their nomination material to the Council.
- SCOAR Luc Lenain reported that his first 3-year term as SCOAR Chair is ending. The committee has requested that he serve another 3-year term. Council approval is requested. The Council approved the appointment of Luc Lenain for a second term as SCOAR Chair.

UNOLS Winter/Spring Meeting – Location/Date - The University of Rhode Island/Graduate School of Oceanography has offered to host the Spring meeting. The UNOLS Office will poll FIC and Council for their availability.

1205 The Council meeting adjourned.

UNOLS Council Action Items – New, Continuing, & Complete

New Action Items			
Task	Assignment	Status	
 Identify Goal(s) for 2018/2019 – suggestions: Making some assets/equipment that are not in the UNOLS pool more widely available. There are indeed insurance and liability issues. Shared access to different instruments. Example - create a UNOLS-like model for gliders. Formulate policy and guidelines that we can use to inform how the ships can communicate with the shore-side parties. UNOLS could write a document that will justify the need for increased bandwidth and Cl. We have a lot of data that is being collected that would be good to provide in real-time. UNOLS can come up with a vision and then come up with a paper or guidelines. Chris German is leading a similar DeSSC effort focused on Telepresence science use. Develop a UNOLS Policy regarding Cyber Security, Infrastructure, and Bandwidth monitoring and usage. 	Council		
Continuing Action Items			
Goal: Improve quality of life and morale at sea (food, exercise, internet, etc.). 2018/2019 UNOLS Goal Update – Improving quality of life and morale at sea – 3 questions: 1) What is needed to make life at sea better? 2) What resources are needed to implement these things? 3) What is available at your own institutions?	Deb Steinberg, Kipp Shearman, Rhian Waller	Questionnaire has been drafted.	
Goal: Ensure a smooth transition for the new UNOLS Office, including analysis of existing structure and suggestions for future changes.	Council	This is being addressed through the office recompete and weekly meetings between Office and UW team.	
Fleet Utilization Charts, Demand, and FOY Clarify definition of FOY Inform ship schedulers	UNOLS Office, FIC, Schedulers	FOY was discussed at FIC meeting and is still ongoing.	

Post Cruise Assessment Reports (PCAR): Investigate the use of an outside professional organization to develop a survey form to replace the current PCAR form. Preliminary steps: • Define the purpose of the form • Consult with RVOC and RVTEC – how can their response be increased? What information is of interest to them? • Consult with the users of the PCAR data – Agency reps, inspectors, ship operators • Consult with science users.	Ben Van Mooy, Brandi Murphy, John Bichy, Jon Alberts	On-going: Have looked into professional survey services. An SOW will be prepared for services.
 Video Project: Promoting a Positive Work Environment aboard the Academic Research Fleet (ARF) – 3 parts: Module 1 – Applies to General Oceanographic Research at sea Module 2 - focused on UNOLS Fleet Module 3 - Institution-specific Information regarding policies and reporting procedures (posters/PPTs available on web 	Video – NSF (Rose Dufour, Lisa Clough & Tim McGovern), ONR (Tim Schnoor & Rob Sparrock), UNOLS Staff, MERAS	On-going: Module 1 – complete Module 2 – working with MTS Module 3 – posters collected
RAINN: Evaluate whether RAINN service should be provided across the Fleet	Jon Alberts, Alice Doyle MERAS, NSF & ONR	Final decision needed
Alvin6500 White Paper - Brian Midson (NSF) requested DeSSC to provide an overview for the continued need by the research community for a 6500m-rated HOV. DeSSC prepared a paper summarizing past reports that resulted from community-based workshops and provides further scientific justification for a 6500m-rated HOV. DeSSC requests Council endorsement of the White Paper prior to sending it to NSF.	Council	Request sent to Council on 10/26/18