

MSROC - Summer Zoom Meeting

27 July 2020

Virtual Meeting

Doug Russell	John Orcutt	Bob Houtman	Rose Dufour
Jim Holik	Lee Ellett	John Collins	Robert Steinhaus
Sean Higgins	Peter Sack	John Mutter	Ross Parnell-Turner
Jim Gaherty	Brandon Shuck	Kathy Gunn	Maria Beatrice Magnani
Adrien Arnulf	Masako Tominga	Kent Satterlee III	Debbie Smith
Lindsey Worthington	Anne Becel	Holly Smith	Candace Major
Bridget Harrell-Donze	Emilie Hooft	Juan Pablo Canales	Nathan Miller
Jamie Austin	John Hopper		Nathan Bangs

34 Participants

Doug Russell – Welcome

John Orcutt – MSROC Updates

- Solicitation for new member. Everyone encouraged to suggest someone.
- AGU is having a virtual conference. They put out a solicitation for papers.
- We will be having our winter meeting online as well.
- Virtual Symposium for the fall?

Candace Major - NSF Update

- Columbia University purchasing LANGSETH. NSF support operations through 2024.
- Will be accepting proposals for using the LANGSETH. But it will be a regional plan. The plan is not yet set, but we would like to have the help of the MSROC in developing the plan for moving the ship around the world. Complications due to COVID-19.
- OBSIC subcommittee – had second meeting just last week. Prioritizing new instrumentation.

Bob Houtman – NSF Update Continued

- End of year and time to look at budgets.
- Many trips are rescheduled for 2021.
- So far have been able to prevent the introduction of COVID-19 to any of our ships.
- COVID-19 has really affected the funding for 2020. Significant strain to NSF and ONR budgets for 2021. WE don't know what the FY 2021 budget looks like at this point.
- Plans to reoccupy NSF bldg. Phase 2. Voluntary entry into the bldg. PPE social distancing. Phase 2 does not have a planned end date yet.
- NSF had put a solicitation on the street for a facilitator officer for seismic. Since then we have had and accepted an offer for Columbia for taking ownership and operating LANGSETH. Based on the fact that LANGSETH will be in the fleet for future, NSF has

decided to close that solicitation without making an offer. We view LANGSETH as a bridge. And we anticipate further communication within the community for some capabilities as LANGSETH in the future.

Sean Higgins – LANGSETH Update

- Working through all of the paperwork required to transfer the vessel to Columbia University ownership. Last regulatory shipyard in early 2020.
- Started doing surveys in January. Operated for 120 days. In early May we returned to Newport, OR, where we have been ever since. We are looking at the Cascadia project which was supposed to start June 1 and the Lindsay Worthington Queen Charlotte Fault Project. Both were deferred until 2021. Currently Queen Charlotte Broadband OBS Deployment Project scheduled to start in AUG if we get approval for our COVID-19 mitigation plan. Working with multiple medical teams to develop our plan. Then we have a six-week project from Dutch Harbor to Adak. Both missions have very small science parties to reduce density on board.
- Will have multiple quarantines going on in various locations. We have been getting good support from those folks. Logistical challenge. But we are excited about being able to complete the NSF schedule safely.
- End of 2021 we will have what will be our last major shipyard, and then have ship end of life in 2024.

Lee Ellett – Sean, is it worth talking about new satellite communications system on the ship?

Sean Higgins – just added three new domes for satellite communications. Seeing really good throughput up to double the speed.

John Collins – Impact of Covid on OBSIC

- Were able to work in lab, with PPE and social distancing. Not at 100% but are able to work.
- WHOI, SIO and LDEO labs have similar policies.
- At-Sea Operations since October 2019
 - NOV-DEC Cruise – Boettcher GoFar Cruise
 - Wilcock Bransfield Strait Active/Passive Experiment Recovery Cruise
- Took many months to get the van back from Punta Arenas
- 2021
 - Boettcher Gofar Year 2 deployment/recovery
 - Gaherty ORCA Year 2 recovery or Laske Pacific Deployment
 - Wilcock Axial Seamount Year-1 Deployment
 - Canalase Cascadia
 - Worthington Queen Charlotte Active Source
 - Worthington Queen Charlotte Passive Source

- Instrument availability is a big constraint. Even if the ships are available the OBS might not be available.

Jim Gaherty – OBSIC Subcommittee

- Stood up OBSIC subcommittee in fall of 2019. Face to face meeting in October of 2019. We had a virtual meeting last week, it was our “Spring Meeting”.
- We see our role as supporting anyway we can.
- Issues that have risen to the forefront:
 1. Try to help guide OBSIC to prepare for opportunities to refurbish the equipment. Broadband fleet. Aging fleet. Cascadia built in 2009-2010. The sensor level - the sensors are aging and difficult and expensive to maintain. Data loggers are difficult to maintain and need to be replaced. Prioritizing how to go about process of replacing aging equipment.
 2. Second try to work with OBSIC to clarify some of their policies and procedures. Specifically, how to request and fund OBSIC work. Significant ambiguity with unusual or high-risk deployments. Doesn’t specify whose responsibility to do what.

Sean Higgins – Do you have a sense of scale on funds to modernize the fleet? 5 million, 8 million?

Jim Gaherty – \$100,000 per instrument. Rough number. Fleet of 100 instruments you get to 10 million dollars. Modular aspects of this. The reality is we want to be prepared in case there is an influx of money. But it is more likely we will get smaller amounts and doing it as we can.

Sean Higgins – is it more about modernizing or increasing.

John Collins – it is both.

Lee Ellett – Scrips Portable MCS

- Single 2020 cruise has been deferred.
- Renting vs Owning portable compressors
 - Significant operational advantage is working with known equipment.
- Portable compressor acquisition considerations:
 - Support typical GI sound source configuration
 - Platform flexibility
 - Redundancy
 - Long term support
 - Cost – Benefit analysis

James Holik – What are the costs for a compressor?

Lee Ellett – \$600,000 per compressor containerized.

James Holik – And you need three compressors?

Lee Ellett – No for this one we need two. 385 CFM per unit.

John Orcutt - Seismology Symposium

- The Marine Seismology Symposium which was scheduled for this fall and had to be moved to next fall 2021, in Maryland.
- The question is should we have a virtual symposium this fall to have a larger part of the community participate?
 - Young people would be able to give talks. And we can discuss what may come in the next four years or so.

Candace Major – It is my understanding is that the Marine Seismology Symposium is re-scheduled for March 9-10, 2021. There is hope to have it in person. But they are thinking of a virtual back up.

Sean Higgins - I would like to hear more about what Candace said about the how to request the LANGSETH.

Candace Major – NSF would like to put out some kind of announcement that has some direction, but we felt it was premature to do that without some input from the MSROC community on how to proceed with that.

John Orcutt – We can wrap up for today.

Doug Russell – We will put up the notes and the presentation on the website.

Action Items:

- Follow up with Candace Major to discuss process for reviewing and developing the regional plan for ship time on R/V Marcus Langseth.
- John Orcutt to Follow up with Emily Roland to decide whether or not to host an on-line Marine Seismology Symposium this fall. Perhaps in concert with the virtual AGU Annual Meeting.
- UNOLS Office post Call for Nominations to fill the one open position on MSROC