

***Marcus Langseth Science Oversight Committee
(MLSOC)***

Sunday December 11, 2016

Golden Gate University

536 Mission St.- Room 5224

San Francisco, California

Summary-

The Marcus Langseth Science Oversight Committee, (MLSOC) met in San Francisco on Sunday Dec 11, 2016 for the annual committee meeting. The meeting was well attended with 35 participants, which included all the committee members. The main focus of the meeting was to discuss and plan for the transition from the MLSOC committee structure into the UNOLS standing committee, Marine Seismic Research Oversight Committee, (MSROC).

Opening Remarks

Nathan Bangs/MLSOC Chair opened the meeting with welcome remarks and introductions. He provided an overview of the meeting agenda and goals of the meeting.

UNOLS Report

Jon Alberts/UNOLS gave this report with some of the highlights from the UNOLS Council which met on Nov 30 and Dec 1, 2016. The new UNOLS chair is Debbie Steinberg/Virginia Institute of Marine Sciences and the new UNOLS Chair Elect is Craig Lee/UW. The new charter for the Marine Seismic Research Oversight Committee Charter- MSROC was approved by the UNOLS membership and has been adopted as part of the UNOLS Charter, dated December 1, 2016. The terms of reference are located at:

<https://www.unols.org/what-unols/unols-charter#Annex%20IX>

The new program within the NSF Division of Ocean Sciences, which was announced in the NSF Dear Colleague Letter (DCL), provides an opportunity for researchers to use the *JOIDES Resolution* drill ship for sediment coring up to 100 meters below seafloor. There is also an IODP workshop aimed at Demystifying the IODP Proposal Process for Early Career Scientists in the Northern Atlantic and Gulf of Mexico operating areas is planned for January 23-25, 2017 in Austin, Texas.

Lamont-Doherty Earth Observatory Operators report

Sean Higgins/LDEO presented the operators report which included the *Langseth* 2016 schedule and an outlook on expeditions planned for 2017, both funded and pending. A worklist of completed projects from the Tampa shipyard period held in August/September 2016 was

reviewed. LDEO recently purchased a list of equipment from a retired seismic vessel “*Western Pride*” which included compressors, ship spares, lead-in winches and an evaporator system purchased from a salvaged vessel. There was some discussion on equipment which would be required for a 3D experiment in the future. This includes approx. 8 km of streamer which would be required either through a lease or a purchase agreement. Sean also thanked some of the R/V *Marcus Langseth* crew members who would be retiring after serving decades on LDEO ships. This included Captain O’Loughlin who retired after 34 years and Paul Ljunggren who will retire sometime in 2017.

NSF Report- Candace Major/NSF

Candace shared the news from NSF. The new terms of reference for the new Marine Seismic Research science oversight committee have been reviewed.

NSF did receive letters of interest from various groups interested in presenting operational models for the *Langseth*. NSF has requested additional information from some of the responses and it is projected that NSF will make an announcement sometime this spring when their plans will be made public. They will be using the UNOLS survey results and are taking a broad view by looking at the assets and the real impact that these tools make. NSF is encouraging the community and MLSOC members to stay involved.

Candace showed the NSF slide on various research topics and the importance of each piece of infrastructure to that science. NSF has requested that the MSROC work to further develop this table. Their continues to be more discussion on this table.

A question was asked as to what is the objective of NSF table. The reply was that the new MSROC committee can move forward and add detail to this table, by adding what is useful or needed. Jamie Allen/NSF added that this table is a tool to make sure we aren’t leaving any science behind?

There was concern that there are other areas of science that we won’t be involved in as a committee. To this Dan Lizarralde/WHOI suggested that any research topic which has been marked “critical” will require us to make sure there is a facility associated with this science.

Candace stated the table will help NSF in determining where to build infrastructure as well as what is the science driving the investment in that infrastructure.

Question asked: How are we going to receive this input?

Response: One possible answer is from workshops.

Question: Can you help me understand how we are trying to build capacity when we are decreasing our capacity by potentially losing the *Langseth*?

NSF will need input on how to prioritize these programs while keeping in mind the limited budgets. Some of this information and feedback into the agencies will come from workshops.

Environmental Permitting

Holly Smith/NSF then led this next agenda item on environmental permitting. The basic message is we need to improve our communications. Once you have a project, NSF needs greater communication between all involved parties. There are times when scientific parties think they can do more than what was proposed. You need to make you are following the science plan that you were funded for. If a change is needed for some unforeseen event, contact your NSF program manager to see if we need to make a change. For environmental permitting, we need to communicate.

For multibeam surveys, NSF will put out new technical guidance. NMFS wants to regulate multibeam and NSF is working with Larry Mayer/UNH to gather data. Right now we don't want to request a "take" for multibeam survey work.

Question was asked if the public can make a comment on this? NMFS will have a road map on sound in the marine environment. We need to stay in contact with Holly on how this is going to impact the UNOLS fleet.

Planning the Future- MSROC- getting this off the ground.

The meeting then began the conversation on how MSROC will interact with OBSIP.

Brent Evers/IRIS presented an overview of the organizational structure of the OBSIP group. He shared recent projects, goals of OBSIP, the increase of OBSIP visibility and plans for a 2017 OBS Symposium. IRIS has an Advisory Committee which is internal to IRIS. They have a governance structure in place with a focus on seismic science and direction.

Bobby Reece/TAMU is currently on the OBSIP oversight committee and on MLSOC/MSROC.

Oversight of the *Langseth*:

Question was asked as to which group will provide the oversight for the *Langseth*?

Response: LDEO could put together an oversight committee just for *Langseth*. Or a subcommittee of MSROC can be established to cover *Langseth*.

Comment: There is always go to be a natural tension between operational oversight and science priorities.

Lunch Break

Discussion on the transition continued...

The transition from the previous MLSOC to the MSROC will have some “bumps along the way”. A comment was made that the new committee could easily become the place where all problems land. To prevent this a clear path forward and a well thought out course of action needs to be developed.

Other comments:

“We need to recognize the scientific breadth of seismic research and what are the current options for doing seismic research”

“We have done a poor job of addressing the larger community.”

“We need to know what the expectations are”

“How broad is the community?”

“Important steps for the new committee will include long range planning and international collaboration.”

Regional Plan

Nathan Bangs as MLSOC Chair has solicited letters of interest from the marine seismic community. The call went out in early November 2016 and we have had 24 responses. The red stars on the regional map indicates where regions of interest are located. There is some interest from the New Zealand community which could tie in with other funded programs when the *Langseth* should be there in early 2018.

Comment : There is a fundamental problem in that the committee doesn't have any authority. Also for NSF, you can only submit a proposal once per year in MG & G. You are required to wait until a year later to resubmit.

Having all the dots on the map is important to showing the proposal pressure.

Invited Science Talks:

The meeting paused from discussing the transition to the committee for some science talks.

Adrien Arnulf/UTIG provided a science talk titled: Science Opportunities with *Langseth* long streamer/OBS & FWI. Please see slides presentation in appendices.

Masako Tominaga/TAMU presented her plan for an “EAGER proposal for at sea training for non-specialists”. This will be an early career workshop and cruise aboard a UNOLS ship to provide instruction on setting up a cruise, skills required to be a chief scientist, and some of the tools used in conducting marine seismic research. The cruise will be on a UNOLS global ship, however, not the *Langseth*.

NSF will fund this cruise off Newport, OR and the current plan is to use the *R/V Roger Revelle* in Sept 2017. Mitch Lyle, Greg Mountain, Anne Trehu and Nathan Bangs are working with Masako to develop the program. They will make the data available.

In March 2017, we will run 3 webinars prior to the cruise to help inform the applicants.

***Langseth* Regional Planning**

The meeting then turned to invited presentations on potential future marine seismic science plans beyond 2018, with a focus on locations, facilities needed, and general science goals. The Power Point slides from each presentation are in the appendices.

The discussion then turned to the regional planning map which has the “red stars” added to the map. These correspond to the letters of interest received as of December 2016.

Closing Remarks

The UNOLS Office will submit a call for nominations for new members to join the newly formed Marine Seismic Research Oversight Committee, (MSROC). Please see the UNOLS web page for details. (www.unols.org). The UNOLS Council with the assistance of the UNOLS office will review the candidates and make recommendations as needed.

The current members of the MLSOC recommended that the new committee, (MSROC) should meet in person twice in the first year, CY 2017. There will be lots of work to do to get this committee up and running.

Meeting Adjourned: We adjourned at 5 pm.