# Marcus Langseth Science Oversight Committee (MLSOC) August 6, 2015 tele-conference

#### **Attendees**

Nathan Bangs/UT Austin
David Scholl/Univ. of AK/Fairbanks
John Orcutt/SIO
Sean Higgins/LDEO
Jeff Rupert/LDEO
Dave Martinson/LDEO
Suzanne Carbotte/LDEO
Sandy Shor/UH
Bobby Reece/TAMU
Sarah Mesrobian/NSF
Holly Smith/NSF

Jim Holik/NSF
Rose Dufour/NSF
Candace Major/NSF
Tom Janecek/NSF
Brent Evers/IRIS
Debbie Hutchinson/USGS
Dale Sawyer/Rice
Greg Mountain/Rutgers
Jon Alberts/UNOLS

# **Summary-**

The Marcus Langseth Science Oversight Committee, (MLSOC) held their summer teleconference on August 6, 2015. The topics discussed included agency reports, an overview of 2015 cruises to date, the outlook for the 2016 ship schedule, the operator's report and plans underway for a seismic workshop to be held in Arlington, VA on September 30 and Oct 1, 2015.

#### **Notes:**

Nathan Bang/MLSOC Chair opened the meeting with a welcome and introductions.

#### **Agency Report**

Jim Holik/NSF provided the NSF report leading off with news that the LDEO proposal to purchase the new Sercel streamer had been awarded. Maurice Tivey/WHOI has stepped off the MLSOC and is a new rotator at NSF in the MG & G program.

### **2015 Operations**

Debbie Hutchinson/USGS provided a report on her recent cruise on the Langseth which was conducted from Charleston, SC to New York, NY from 10 April to 2 May, 2015. This was a marine geophysics cruise for the purpose of determining geologic framework, landslide hazards, sediment thickness, and crustal nature in support of delimiting the US extended continental shelf under provisions contained in Article 76 of the Convention on the Law of the Sea and better understanding offshore landslide hazards. Warren Wood/NRL also did a water column seismic study as part of this cruise.

The cruise was very successful; however there were some challenges in maintaining tracklines across the Gulf Stream. The at-sea processing greatly improved the cruise results.

Greg Mountain/Rutgers also reported on his recent cruise on Langseth from 1 June to 6 July, 2015, New York to New York. The purpose of this cruise was to use the R/V Marcus Langseth to acquire a 600 sq. km 3D seismic volume encompassing the (3) IODP Expedition 313 drill-sites on the inner-middle shelf of the New Jersey (NJ) continental margin. This cruise was also very successful. They only had a few marine mammals which resulted in 8 hours of downtime. There was no evidence of harm to the environment. The set up was P-cable hybrid which had some issues which required recovering the arrays. Some redesign is needed to reduce the stretch in the cable. The sercel cable worked very well with zero downtime.

#### Gardner cruise-

The Gardner cruise on the Langseth ran from 30 July to 27 August, New York to Woods Hole. The purpose was to conduct high resolution multibeam bathymetric surveys of the U.S. continental margin along the Atlantic Coast. Multibeam bathymetric field surveys are a key component in developing a U.S. ECS claim, pursuant to Article 76 of the United Nations Convention on the Law of the Sea (UNCLOS). These surveys will require multibeam mapping to take place in depths of 1000-5000m.

### **Operators Report**

Sean Higgins/LDEO provided the operator report. The ship underwent the NSF ship inspection by JMS Naval Architects from May 19-21, 2015 in New York and the inspection was the "best report to date."

Several maintenance projects were completed including compressor and auxiliary generator maintenance and the installation of a new work boat davit. The ventilation system received some upgrades as well.

In June a week long ENAM seismic processing workshop was held at LDEO with good result and attendance.

### Sercel Streamer 408 Upgrade

The recent funding by NSF has allowed LDEO to move forward on the procurement of the Sercel streamer. Training of the new system is part of the contract. It will take 4-5 weeks to install the streamer which will be conducted in NY or RI, to be determined at this time. The approximate cost is 1.6 million.

# **2015 & 2016 Ship Schedule**

Sean provided a Power Point presentation on the current 2015 ship schedule and the plan for 2016. In late October the Langseth will depart the US east coast for Piraievs, Greece to support the Hooft program in December 2015.

The current outlook for 2016 includes two cruise in the Atlantic basin and a transit through the Panama Canal to position the ship for a program off Chile and the west coast of South America.

# **MLSOC Meetings**

The MLSOC will hold their winter meeting on Sunday December 13, 2015 in San Francisco prior to AGU. We will follow the same format of having the business portion in the morning followed by science talks in the afternoon.

## **Regional Plan**

The regional plan for the Langseth was distributed by NSF in June 2015 as a means of increasing scheduling efficiency. The regional plan will let PI's know where the ship will be operating in general ocean basins in 2017, 2018, and 2019 and this should encourage proposals. It is too early to tell if this will be successful and the next few years will be critical. If we start seeing increased proposal pressure, then we will have been successful. Sean Higgins has been informing the international community to let them know the ship will be in the SE Pacific in 2016. The Ocean Drilling program went to a regional planning model and it took 1-2 years for the schedule to settle down.

### **MLSOC** membership

We currently have (2) vacancies on the committee and a call for nominations has resulted in (4) possible candidates. The call closes on August 28, 2015 and the MLSOC will need to put forward two names to the UNOLS Council for the Council's approval.

# Seismic Workshop

A seismic workshop is planned for September 30 and October 1, 2015 in Arlington, VA. The purpose of the workshop will be to evaluate portable seismic systems as an option for providing the necessary tools to the US scientific community to conduct marine seismic profiling. The workshop will help to determine the science priorities in the next decade and to discuss the question of whether active source seismic investigations are viable on other ships other than the R/V Marcus Langseth. In addition the option of using industry vessels to conduct academic research will be investigated.

A written report from the workshop will assist NSF is decided on a path forward.

#### **Meeting Adjourned**

The tele-conference was completed at 1600.