

***Arctic Icebreaker Coordinating Committee (AICC) Tele-conference Meeting  
June 13, 2018- Wednesday  
Webex Teleconference 1200-1400 EDST  
Host/Facilitator- UNOLS Office***

**Attendees:**

Bob Campbell/URI	Jeff Welker/Univ. of Alaska-Anchorage
Lee Cooper/UMCES	Andrew Woogen/OSU
Brett Hembrough/SIO	Ana Aguilar-Islas//UAF
Jim Swift/SIO	Rajiv Kandpur/USCG
Frank Rack/NSF-OPP	Bill Woityra/USCG
Mike Lomas/Bigelow	Ken Boda/USCG
Sam Laney/WHOI	Greg Tlapa/USCG- <i>Healy</i> CO
Ola Perrsson/Univ. of CO	<i>Healy</i> OPs
Doug Russell/UW	Dave Forcucci/USCG
Ana Aguilar-Islas//Univ. of Alaska- Fairbanks	Jay Minnett/USCG
Doug Baird/Univ. of Alaska-Fairbanks	Ryan Young/USCG
Steve Hartz/Univ. of Alaska-Fairbanks	JonAlberts/UNOLS- facilitating

**Summary**

The AICC held a summer tele-conference on Wednesday June 13 from 1200 to 1400 EDST. The UNOLS Office facilitated this call and we had good representation from the U.S. Coast Guard, National Science Foundation, and the AICC.

***Welcome and Introductions***

AICC Chair – Bob Campbell/URI- Chair of the AICC made the welcome remarks, reviewed the agenda and allowed for introductions.

***Agency Reports***

**NSF Update:**

Frank Rack/NSF-OPP provided an update from NSF. NSF is supporting cruises on the *Sikuliaq* and the *Healy* this summer. He is working on a cruise on the Canadian ship *Louis St. Laurent*. The MOSAIC workshop was held in late May. Budget decisions are coming out now. The *Oden* cruise will depart in late July.

### **USCG Headquarters Report**

Bill Woityra gave the Coast Guard report and covered 4 topics of interest to the AICC.

A dry-dock maintenance period is planned for late 2018 into 2019. This will be an extended maintenance period of up to 6 months with a focus on preservation work. The dry-dock location is to be determined, but if the yard is away from the Seattle area, it may curtail 2019 science operations.

In 2020, the U.S. Department of State has requested the Coast Guard assist in an Antarctic Treaty Inspection. This may require 75-90 days which would impact the 2020 Arctic season. The ship is limited to 185 days away from their home port.

The memorandum of understanding between the NSF and the USCG is now being refreshed. Current version dates back to 2010. The Coast Guard is working with Frank Rack at NSF.

### **Heavy Icebreakers-**

Ken Boda/USCG reported that the USCG has completed Acquisition Decision Event 2A & 2B, and has released the RFP with industry to begin the source selection process. An award is expected to be made in 2019.

### **Mission and current activities of the NSF/OPP Advisory Committee's polar research vessel subcommittee-**

Jim Swift/SIO shared the news from the NSF/OPP Advisory Committee which is working with NSF-OPP to conduct a review of the science mission requirements of vessels supporting science and logistics in the Antarctic.

Main areas are:

- Review and verify the continued validity of the University-National Oceanographic Laboratory System (UNOLS) 2012 Polar Research Vessel Science Mission Requirements, the 2016 NSF/OPP Antarctic Vessels Request for Information, and the 2018 ASC-provided Vessel Studies Reports.
- Prioritize each proposed vessel's capabilities and operational requirements."
- Consider the two-ship operational model of the US Antarctic Program, and evaluate the advantages and disadvantages of moving to a one-ship operating model."
- Engage the broader scientific community to ensure vessel capabilities and characteristics are able to meet a majority of anticipated needs.
- Include a summary of the outreach efforts and input received from the science community in the final report.

Jim will provide an update to the AICC at the next meeting.

## **Operations, scheduling, planning for 2018 Summer Season**

*HEALY* Schedule and Research Vessel Matrix-

Dave Forcucci/USCG covered these two topics. The *Healy* sea trials began on May 29, 2018 with a pre-shake down leg, then two more shake-down cruises in June. They will leave Seattle on July 24, 2018 for the Arctic season. The loading for the season is taking place this week, June 13-15.

The science cruises this year are the Bob Pickart-NOAA program in August which is similar to the 2017 program. There will be a personnel drop-off in Nome. In September the ONR-SODA program with Craig Lee will take place. This is a 40 day leg with ice station deployments north of Barrow. Then the NSF program for Bob Pickart to do mooring work. This is late in the season, but they are confident it will be okay.

Research Vessel Cruise Matrix, Dace Forcucci with input from various sources, including the U.S. State Dept., keeps up to date a vessel matrix of research vessels operating in the Bering Straits and Arctic Ocean. This document has been helpful in keeping the Alaska Eskimo Whaling Commission and local communities informed on which vessels are operating in the area.

## **STARC Report**

Brett Hembrough/SIO provided a thorough update on the STARC activities over the past 6 months.

This included a list of projects, activities, and cruise support:

- STARC has had techs working on site aboard the *Healy* 1-2 weeks per months. A few of the larger projects in CY 2018 are:
- Protection of Antenna Sensors and cabling during hot work maintenance periods. Improvements to the mounting systems have been made.
- New Ashtech model, ABX-TWO is the newest GPS was installed.
- New Wind sensors, including an Ultrasonic were installed. They now have 3 wind sensors.
- CTDs recalibrated
- Replaced the deionized water system with a Milli-Q IQ7000

PCO2 sensors- The pco2 received software updates and a new computer...the actual sensor is the same, but it did get a groom by a NOAA tech during the offseason.

- Gravimeter sent to Lockheed Martin for calibration, returned, and reinstalled.

- Sea Trials- May 29 to June 1, 2018- Jules Hummon/UH attended to the ADCP and UHDAS software systems.
- POS MV GAMS calibration- as the heading accuracy was reduced.
- Plans for Shake-down, Leg 1, Seattle to San Diego. There will be a QPS trainer aboard to provide SIS training. There will be three parts of the training, (Kongsberg, QPS with a trainer and ADCP/UHDAS training with Jules Hummon and Toby Martin. and UNOLS techs are invited to attend. They will do a CTD cast on the shake-down leg.
- Plans for Shake-down, Leg 2- San Diego to Victoria. There will be some training of SIO techs. Continuation of the documentation effort will be conducted.

### **Other STARC Projects**

#### **Cruise Planning**

Dave Forcucci has set up monthly tele-conferences for each mission's cruise planning. Brett is working with the new UNOLS Cruise Planning Module to develop it for the *Healy*. The questionnaire in the module may be used to replace the current Icefloe questionnaire.

**Icefloe Updates-** STARC has made minor adjustments to the site. Outdated USCG policies have been removed.

#### **Network Monitoring Tool**

This provides technicians the ability to monitor systems locally aboard ship. A Robotic Process Automation displays information on the various systems. This will aid in shortening the time to trouble-shoot issues. Remote techs can enter through a VPN to see the same information as the techs on board.

#### **Mapserver**

QINSY/QPS is a Hydrographic survey software suite that we are using to display 'similar layers as a GIS' software pack. The advantage of hydrographic software is that we can display real-time data alongside the "situational awareness" layers. (ice imagery, waypoints, tracklines, charts, etc).

### **Various Issues & Previous Action Items to Discuss**

**Eastern Arctic-** Frank Rack/NSF-OPP updated us on the discussion of work in the Eastern Arctic. NSF has had talks with the Swiss Polar Institute which is planning a circumnavigation of Greenland. Frank stated that until new vessels are brought online there are no plans at NSF to bring the *Healy* into the Eastern Arctic.

### **Shipping and Loading Policies in Seattle**

Dave Forcucci highlighted the difficulties for the Coast Guard Base to accept packages that are coming in for science parties via Fedex, UPS, and other small packages. The delivery of packages to the USCG Base is a recurring challenge with packages getting lost, and a lack of storage space. Going forward, scientists will need to send these to a shipping agent in the Seattle area and then arrange to have the consolidated shipment delivered to the USCG base at a scheduled time.

For loading for a cruise it is still best to load as much as possible in Seattle. It is understood that some shipments will still need to be sent to places like Dutch Harbor. The Memorandum of Understanding policy is that science shipments that require the ship's crane will be timed for 24 hours before getting underway.

### **Mobilization and Demobilization**

This needs to be carefully scheduled with the USCG. Normally you get one day to mobilize, if you need more time, this needs to be arranged in advance and worked into the schedule.

### **Debrief Process**

The USCG is starting to develop their own debrief process.

Dave Forcucci reminded us that the scheduling of the AICC debriefs has evolved in the past few years into holding them during the open meeting. In the past they were held in a closed meeting and the USCG has requested that we go back to this.

The AICC is also requested to look at the debrief questions and consider removing extraneous questions.

### **Operating Equipment at Sea and Deck Operations.**

There are routinely issues with deck operations and the focus continues to be on safety. To minimize the confusion, a list of types of gear and who will operate it will be developed. This will primarily be on weight handling gear. The USCG will have a draft document ready for the winter AICC meeting.

### **TSE Winch**

The USCG has procured a TSE winch which will be dedicated to the USCG and will be loaded on in San Diego this summer.

### **AICC Membership**

Bob Campbell's term as AICC chair will expire in January 2019. The AICC will need to do a call for nominations. The remainder of the membership will remain as it is.

### **AICC Winter Meeting**

January 2019 is going to be best for the USCG as well as for the UNOLS Office. December 2018 is fully booked at present.