Arctic Icebreaker Coordinating Committee (AICC) Tele-conference Meeting May 16, 2016- Monday Webex Teleconference 1-4 pm EDT Host/Facilitator- UNOLS Office

Executive Summary

The UNOLS Arctic Icebreaker Coordinating Committee, (AICC) held a spring tele-conference on May 16, 2016 via webex. The presentations are posted on the AICC web page on the UNOLS web site.

Attendees:

Bob Campbell/URI- AICC Chair Renee Crain/NSF

Holly Smith//NSF Eric Peace/USCG Ryan Young/USCG Jason Hamilton/USCG Bill Woityra/USCG

Dave Forcucci/USCG
Phil McGillivary/USCG
Karl Newyear/UMIAO

Anna Schemper/CPS Lee Ellett/SIO

Andrew Woogan/OSU

Bernie Coakley/UAF Steve Hartz/UAF Murray Stein/UAF

Jeff Welker/Univ. of AK/Anchorage

Sam Laney/WHOI Ola Persson/Univ. of CO Chris Polashenski/USACE Carolyn Ruppel/USGS Doug Russell/UW

Lee Cooper/Univ. of MD Mike Lomas/Bigelow Ana Aguilar-Islas- UAF

Minutes:

AICC Chair Report

Bob Campbell/URI and AICC Chair opened the meeting with welcome remarks, a general overview of the agenda and thanks to all in attendance. A motion to approve the minutes from our last meeting held in Seattle on Nov 19 & 20, 2015 was made and seconded. Minutes were approved.

The AICC membership remains stable with no changes to report. Although in September, Doug Russell/UW will rotate off as RVOC Chair to be replaced by Tom Glennon/URI as new chair of RVOC.

Bob Campbell reviewed recent issues and topics of interest to the AICC. This included the AEWC meeting held in February 2016. The cruise plans for the Sipler/Juranek program, funded by NSF and scheduled on the *R/V Sikuliaq* have been rejected by the AEWC. Discussions are ongoing.

The AICC responded to the Arctic Waterways Safety Committee report with concerns that the timelines for reporting are unrealistic. A pre-proposal meeting is impossible as there isn't a

funding mechanism to fund travel for a principal investigator to attend a meeting before a program is reviewed and funded.

The Coast Guard requested the AICC provide feedback on the following question: if the new, heavy icebreaker or the *Polar Star* were equipped for science, would science propose to use them?

Polar Star – Science is not being maintained. Cannot use winch or port side J-frame for deploying equipment, including CTD. Only current mission is the McMurdo resupply. The Coast Guard is considering removing the port side J-frame to put into storage to prevent further degradation.

New Coast Guard Heavy Icebreakers- AICC provided a written report citing examples of scientific missions that would benefit from the use of a science-equipped, heavy icebreaker as well as a list of reports that provide detailed information on mission requirements and scientific capabilities for heavy icebreakers. See slides for the list.

NSF has stated that they do not support science capabilities on the new heavy icebreakers as the budget impact upon NSF would be too great.

For foreign Vessels working in the Arctic this season, there will be (5) foreign ships in the western Arctic this summer. At present there are no major conflicts expected, although there could be potential issues with the Japanese ship *Mirai* off Barrow and the Canadian ship *Laurier* off Wainwright. Anna Schemper/CPS offered to assit as needed. The Russian ship for the RUSALCA project may not be the *Buytinskiy*, but some other research vessel. The whaling season was successful this spring and quotas were met in some villages, however it is possible a reallocation of permitted numbers may allow other villages to hunt this summer/fall.

Data from GEOTRACES 2015 cruise aboard the USCGC Healy

Bernie Coakley/UAF reported on gravimeter data. The gravimeter on the *Healy* is owned by the Univ. Of Alaska and each year Bernie submits a report on the data collected. This past summer, on/about 20 August 2016 the data collection stopped and it wasn't discovered until the next cruise. This resulted in a 50day gap in the data. STARC was contacted and they are continuing to look for this lost data, but have been unsuccessful to date. Lee Ellett/SIO reported that there is data collected as part of the met data but the sample rate is every 15 seconds which is not useful for gravity studies. There was a lack of reporting on this issue. Lee Ellett/SIO has been looking into this and will provide a full report as to the cause. One reason is that the GEOTRACES was a very busy cruise and they had 3 STARC Techs on board which were focused on keeping cruise objectives going. The gravimeter data is the only data stream that is missing. STARC has also installed a serial system to improve the tracking of data feeds. Renee Crain requested that in the future this be part of the cruise reports. She will review processes with STARC.

NSF Report

Renee Crain/NSF gave the report. On the new Coast Guard icebreakers, it is NSF's position that the support of McMurdo and the break-in each year is the number one priority. The cargo, shipping logistics and fuel deliveries for McMurdo and South Pole are the top priority in the Antarctic. For any operations requiring both science and a heavy icebreaker a two-ship operation will be required. Until another ship is available to provide that logistical requirement, NSF can't

support the spending of funds for science equipment on the Polar Icebreakers. Other agencies are not contributing to infrastructure. There is no budget to maintain the equipment, no drivers to invest in support the equipment and with just occasional science, this is not a smart investment.

Healy- There has been a significant decrease in the number of proposals to use the *Healy*. The number of proposals to use the *Sikuliaq* versus the *Healy* is 10:1. In 2016 there are no NSF cruises on the *Healy*, but NSF will still supply STARC techs and will be reimbursed.

Arctic Waterways Safety Committee- there is progress being made developing good processes. A list of ships, dates, areas, and contacts is now available to help inform all stakeholders. The protocol of working within 30 miles needs more communication. Jessica Lefevre/AEWC legal counsel requested dates when research vessels will be operating near whaling villages.

NSF Program Manager- NSF has a job announcement for a new program manager in Polar.

USCG Report

Eric Peace provided the Coast Guard report.

The *USCGC Polar Sea* has undergone a preservation dry-docking and a material condition report will be available soon.

The *USCGC Polar Star* is in drydock with propeller hubs being reworked, and will continue to be assigned and dedicated to operation Deep Freeze. In regards to the science equipment, there is presently no money to remove it, maintain it or to do any recapitalization of this gear. There has been some work on the aviation capabilities, in particular the landing deck and hangar areas.

On the *Healy*, there are 3 cruises scheduled for the 2016 summer season in the Arctic. There are (2) NOAA cruises and (1) ONR cruises planned. The mid-life refit planning continues.

New Polar Ice-breakers- The CG is working on the operational documentation needed to create the specifications for construction. The Polar Icebreaker Industry Data Package document was released and an industry day was held.

The Coast Guard and NSF are having frequent meetings to discuss capabilities to ensure a unified approach.

Eric Peace/USCG reported that he will retire in early June 2016. Bill Woityra/USCG will take over in September and will be sailing until mid-August 2016. Dan Everett/USCG will replace Bill Woityra as Healy Ops officer.

STARC Report

Lee Ellett/SIO gave the STARC report. Some of the completed projects include the ice window on the EM 122 was removed, cleaned and then re-installed. Other completed maintenance projects are the CTD, rosette, autosal, met sensors, multibeam and a new POS MV, funded by NSF, was recently installed. In-progress projects include work on the highly purified water system and the pCO2. See slides in appendices for a complete list. The 12 kHz transducer was funded but not installed yet.

Lee reviewed the STARC tech support levels planned for this coming season.

The In situ Sea Water Isotope Analyzer was discussed briefly in this section. The instrumentation was requested by Jeff Welker and Renee Crain stated that if the AICC finds this is a community wide requirement she would consider it. It appears this is a project specific piece of equipment.

Other STARC news

Dan Schuller left Scripps the end of March and the STARC lead position is posted and interviews are being scheduled. Andrew Woogan/OSU is still on the STARC team. Renee Crain thanked the STARC team for their support this past year.

R/V Sikuliaq Update

Murray Stein/UAF reported on their recent activity. They will have MATE interns on the *Sikuliaq* this coming summer. He is working with the Arctic Waterways Safety Committee on various issues. The University of Alaska has offered to represent the science users to the AWSC and they are currently writing a document which will serve to describe standard operating practices. The *Sikuliaq* may stop at Barrow this coming season with dates to be determined. The *Sikuliaq* has two Arctic cruises this summer, the NSF program for Sipler & Juranek and an ONR program for Badiey & Turgut. Neither of these cruises should interfere with subsistence hunting however Murray reported that the AEWC has objections to the *Sikuliaq* cruises. Discussions are ongoing to find a workable solution to allow the Sipler/Juranek cruise to go forward.

Winter AICC Meeting – Some options for a winter meeting were briefly discussed but nothing was decided. November 7-11, 2016 was suggested. The meeting will be held in Seattle, Washington to allow broad Coast Guard participation. *Healy* returns to Seattle on/about October 20, 2016.

Meeting Adjourned- The tele-conference was completed at ~ 3 pm EDST