

**Arctic Icebreaker Coordinating Committee (AICC) Meeting  
November 19 & 20, 2015- Thursday & Friday  
Rainier Room-U.S. Coast Guard Facility  
Alaskan Way- Pier 36-Seattle, WA**

**Executive Summary-**

The AICC held their annual meeting on Thursday 19 November and Friday 20 November, 2015 in Seattle, Washington. The meeting was hosted by the US Coast Guard at the USCG Base in Seattle at Pier 36. We had a quorum of AICC members. The meeting was well attended by federal agency representatives, US Coast Guard personnel, AICC, and support groups, including STARC.

**DRAFT Minutes-**

Lee Cooper/Univ. of MD and AICC Chair called the meeting to order at 1300 hrs. on 19 November 2015.

**AICC Chair Report/Lee Cooper**

Upon delivering his welcome remarks, Lee then reported on recent activities the AICC has been engaged in during the past year. This included topics and action items that resulted from the AICC tele-conference held on June 9, 2015. New members to the AICC were welcomed and thanks of appreciation to those AICC members who are rotating off the committee were recognized. Highlights from the GeoTRACES cruise were presented as well as details on the Japanese R/V *Mirai* cruise which was conducted in September and October 2015. Other issues such as the foreign ships working in the Arctic and issues of concern over the past season were shared.

Minutes from the AICC telecom held on 9 June 2015 were approved as written. These minutes as well as all presentations on posted on the UNOLS-AICC pages.

**UNOLS Report/Jon Alberts**

Jon Alberts reported on UNOLS meetings, current staffing, new early career initiatives, as well as upcoming workshops.

**Agency Reports**

**US Arctic Research Commission (USARC)**

John Farrell/USARC presented slides on the USARC starting with the duties of this government agency and the current membership of the commission. A new publication is now available titled:

*The Report on the Goals and Objectives for Arctic Research 2015-2016.*

The federal Arctic research policy and process was outlined along with the current goals for Arctic research. The USARC Arctic Update Newsletter is available and can be subscribed to at: [www.arctic.gov](http://www.arctic.gov)

On news from the executive branch, President Obama signed an executive order in January 2015 to further promote coordination of national efforts on Arctic research. This will be chaired by White House Office of Science and Technology Policy (OSTP) with a list of policies having recently been published.

Details on the US commitment to the Arctic including highlights of President Obama's trip to Alaska were covered. The budget outlook for new US Coast Guard icebreaker (s) was shared. The President's budgets for Arctic research from FY 13-to FY 16 were reviewed.

### **US Coast Guard Report**

Cdr. Eric Peace/USCG presented the report on Pacific Area-District 17 and USCG Headquarters activities of interest to the AICC.

The *USCGC Polar Sea* is enroute to Portland, OR for a shipyard period. This will be a ship preservation dry-docking to arrest any further deterioration and to conduct a material condition survey.

The *USCGC Polar Star* departed Seattle on November 18, 2015 in support of Operation Deep Freeze. Ship will stop in Honolulu then New Zealand before heading for the US Antarctic Base at McMurdo.

The ship's science capabilities have atrophied which is a concern to the AICC.

The *USCGC Healy* is being considered for a midlife refit to extend the life of the cutter. The Coast Guard is currently looking at beginning this in 2021 or 2022, with 2021 being the earliest start for a midlife. The appropriations would need to be in next fiscal year's budget for a 2021 start. There may be a 3-4 year period during the refit that the *Healy* might not be available for all months in a field season. The work will be done using an incremental approach. The STARC team is thinking about this in their planning and they need to be part of the whole package.

President Obama committed to working with Congress to allocate funding to the Coast Guard for up to two new icebreakers. The next step will be acquisition phase with the Coast Guard trying to move as quickly as possible. They will be looking at existing designs which would shorten the time frame. This will be a heavy ice breaker and a minimum of two hulls are being considered. The Coast Guard is informing industry as to what is involved, and an operational requirements document will be finished by Dec 2015.

### **National Science Foundation Report**

Renee Crain/NSF PLR gave the report from NSF. She reported on the trip this past summer to Alaska with NSF Director. This was a good opportunity to showcase the issues in Alaska around Arctic research.

Renee discussed the budget outlook, although NSF doesn't have a budget for FY 2016 yet, it looks better than in other years.

Renee also reported on the Forum of Arctic Research Operators (FARO). The Arctic Science Summit week will be held in Fairbanks, AK on March 12-18, 2016. The 2015 FARO Meeting was held in April 2015 in Toyama, Japan.

The Interagency Arctic Research Policy (IARPC)- has had new life brought into it with more meetings, stepped up effort and an increase in coordination across agencies. Renee is working on an IARPC logistics working group which will be able to post where assets, (ships and planes) are working. This is a governmental agency group.

Renee also updated us on the NSF Risk Management Workshop and some new policies on risk management, code of conduct and physical qualifications. Guidelines are still being developed and the workshop report is now available online at: <http://rslriskworkshop.com>  
An overview of the 2015 Field Season projects and a location map was in the slides.

The ODEN Workshop held in Sweden. March 30-April 1- 2015 and another cruise is planned for 2018 that is yet to be defined.

A “dear colleague letter” should come out soon.

**NOAA Arctic Research Program** –NOAA/Arctic was unable to send a representative to the meeting this year.

#### **National Ice Center Report-**

Jon Lloyd/NOAA presented slides on the National Ice Center. His focus was on the organizational set-up at NIC, products and data available, icebreaker support, and how to request information

Some discussion followed that having a response back from NIC to acknowledge a request has been received would be helpful. Some operators felt unsure that their request for products had actually been received, although the NIC tries to report back within 24 hours with the products as requested.

There were some issues during the summer 2015 season, but Eric Peace reported that these issues were resolved through the National Geospatial-Intelligence Agency.

A question was asked if there is a process for requesting new products. NIC responded that there is not a formal process, but if you tell us what you are looking for we can develop them. They will be obtaining a MrSID license.

NIC will provide support to any government project and is willing to send analysts on cruises.

#### **CH2MHill Polar Services (CPS) Report**

Anna Schemper /Science Project Manager provided the report on the support and services that CPS provides to the National Science Foundation. The UMIAQ organization is now called UIC. See slides for the current organizational chart.

The Community Observer Program continues to hire and arrange community observers and provides information back to the native communities.

The Marine Mammal Observers and Protected Resource Advisors as required for an IHA permit through NOAA continues.

CPS continues to assist in coordination of research vessel port calls in Barrow, although there are no stopovers planned for 2016 on *Healy*. The R/V *Sikuliaq* may stop during the Juranek/Sipler cruise in 2016. CPS may provide ground support for the Grebmeier cruise to disembark from the *CCGS Laurier*, in late July 2016.

Icefloe Community Primer- the map of whaling areas and windows could be added to Icefloe in more detail.

UIC is starting a newsletter on science activities in the area to share with the local communities.

#### ***R/V Sikuliaq Update*** –

Steven Hartz/UAK-Fairbanks provided an update on the *R/V Sikuliaq*. A recent video of the ship was shown which highlighted a recent cruise. Details on how the CTD handling system, multibeam systems, and the National Deep Submergence AUV Sentry were provided. A discussion on the acquisition of ice images, interactions with the National Ice Center and recent ice work from the ship were discussed.

Other topics of interest on the *Sikuliaq* are:

- A new A-frame will be installed in the upcoming shipyard period in Alameda, CA. The original A-Frame failed due to a design flaw in the original design.
- They are sailing with a 20 person crew, 3 techs, and a science party of 24 if there are 2 technicians and if they are carrying 3 technicians, the science party has 23 science berths.
- The coring system will be tested in the near future with a team from Oregon State University which will include testing of a piston coring system.
- Uncontaminated Seawater system pumps and piping are being replaced as they were built using stainless steel which failed.
- Unmanned Aircraft Vehicles have been flown off the vessel following FAA regulations.
- The ship schedule for the *Sikuliaq* for 2015 and 2016 are posted. Contact the UNOLS Office for more details.

#### **Arctic Waterways Safety Committee-**

Lee Cooper reported on the Arctic Waterways Safety Committee meeting which is scheduled to be held on December 10 & 11, 2015 in Anchorage. The workshop will focus on strategies and

communication protocols to mitigate impacts of research vessels on Alaska Native subsistence hunts in the High Arctic.

This committee was formed about a year ago to bring together stakeholders with an interest in Arctic research. Main focus will be to bring co-management entities together and to help organize and regulate where vessels are operating and at what time of year.

See the slides in the appendices for more information. The web site is:

[www.arcticwaterways.org](http://www.arcticwaterways.org)

To date the AICC hasn't been actively engaged with this committee but will need to follow this closely going forward as it may impact our research in the Arctic.

## **Friday 20 November 2015- Day Two**

### **BOEM Report**

Dee Williams/BOEM- Alaska Office presented recent activities within his organization. There have been some significant turning points in recent months and BOEM is evaluating the impact of this now. The departure of Shell Oil from the region has created a situation which requires further study, although BOEM anticipated this happening. The upcoming field season may require an adjustment in plans, with the challenge to reprioritize efforts in the Chukchi Sea. Shell has not relinquished their leases at this time and there is still a lease sale planned in the next 5 years.

BOEM will have a light schedule in next year, but will continue aerial surveys on smaller scale. In the Beaufort we have two field programs. Ken Dutton in the Boulder Patch and the MARES program contract has been let.

BOEM recognizes that scientific research is a major impact to native communities and we need to work to improve relations. BOEM takes these challenges seriously and we are communicating this to the Alaskan Native communities. BOEM is aware of a perception of conflicts, we are working to understand their viewpoint and what are the issues of concern.

### **Outline of *Healy* BOEM cruise**

Francis Wiese is the PI for Stantec and Ch. Sci. This is an usual situation for BOEM as we can only make certain tasks public at certain points. BOEM is delivering orders to Stantec as to what field effort will look like.

The price of oil will dictate what happens in the Chukchi Sea but the research should continue so that when the next round of lease sales comes we will have good research upon which to make decisions.

As long as the native communities are involved, then we can find work arounds to these conflicts. BOEM is at a decisive moment. The Waterways Safety Committee and the AEWC meeting in Anchorage in February 2016 is an important time to get the plans for moving forward. Dee Williams stated that he felt scientific research is more of an impact than industrial activities and BOEM needs to provide a response.

### **Arctic GeoTRACES Program**

Ana Aguilar-Islas/UAF provided an overview of GeoTRACES with slides and pictures of all the over the side operations. The scientific intent and purpose of GeoTRACES was explained, the cruise track was reviewed and some of the challenges and successes were shared.

### **Office of Naval Research- Arctic Ops**

Scott Harper/ONR presented a report from ONR via webex. His slides are found in the appendices. There were two ONR programs in 2015 on the *R/V Sikuliaq*. These are the CANAPE pilot cruise and the sea state DRI cruise

CANAPE- This was on the *Sikuliaq* from Nome to Nome from July 23 to August 21, 2015. Scott provided an overview of the cruise. The goal of the 2015 CANAPE Pilot Study cruise was to obtain data on acoustic propagation under the ice conditions now prevalent in the deep Arctic with the focus on deploying a DLVA sound source. There was more ice than ship could get through so cruise tracks had to be adjusted. This was a pilot program with a follow on project planned for a 2016 program. The *Healy* will do the 2016 moorings, then in 2017 they will recover the moorings so they will have a year-long record.

The SEA State DRI program was the second cruise on *Sikuliaq* from Nome to Dutch Harbor, Sept. 30 to November 9, 2015. This was a shipboard and buoy measurement cruise in the Beaufort and Chukchi seas during fall 2015 as part of large collaborative ONR Department Research Initiative (DRI).

Some of the environmental challenges included ship issues in that the ship rolls a lot and clanging of the anchors was annoying.

The National Ice Center supported us with ice images. CSTARs ice images also helped.

ONR had consulted with the National Marine Fisheries Office, but the local Alaska office had questions on Navy plans. The Navy's N45 worked on this and helped clear up the issues. ONR will attend Arctic Waterway Safety Committee meeting in December.

### **Operations, Scheduling, and Planning- Recap of 2015 and plans for 2016**

Dave Forcucci/USCG reported on the *Healy* cruises from the 2015 field season with a slide presentation.

HYL-1501 was the US Coast Guard research and development cruise. The Research and Development Center was on board *Healy* for a third consecutive summer to test and evaluate new technologies for Coast Guard units to use in the Arctic. Previously, their research looked into the use of unmanned air and submersible vehicles for oil spill detection, monitoring, and response. This year, the focus of the research is on another significant Coast Guard mission: search and rescue.

HLY-1502 was the GeoTRACES program cruise which sailed on 9 August 2015 from Dutch Harbor. The GeoTRACES cruise track took the *Healy* to the North Pole and returned to Dutch Harbor on 12 Oct 2015.

Cruise outcomes, challenges, and success were discussed in detail as well as the pre-cruise planning effort that went into this program

Dave Forcucci also explained the “Float Your Boat” Program. [www.floatboat.org](http://www.floatboat.org)  
This program is a US Coast Guard educational outreach program to provide young people with opportunities to learn about the Arctic.

The *Healy* dry-docking schedule is planned from January 3, 2016 to March 30, 2016 with the location to be determined. For 2016 there are 3 missions in the plans, HLY-1601 for the BOEM Mares program, HLY-1602 for the ONR Canape program and HLY-1603 in September for the Hopcroft.

### **STARC Support, Science Modifications, infrastructure and equipment**

Dan Schuller/SIO provided the STARC report and his slides are in the appendices.

The current STARC team is Dan Schuller/SIO and Andrew Woogan/OSU.

Dan gave an explanation of the background of STARC program, the annual maintenance and what’s new.

New for 2015

- 2 science vans moved to the deck forward of the Healy bridge known as the “front porch”.
- Upgraded berthing with flat panel televisions and pull down bunks were added.
- POSMV motion sensor antenna was installed
- Sippican XBT system was installed.

STARC did a shakedown cruises from May 26-29, 2015. STARC was also very active in planning for the GeoTRACES program.

### **ESU Report of the Science Data Net**

Genevieve Bryant/USCG gave a brief overview of the Wide Area Network and ESU activities onboard the *USCGC Healy* and *Polar Star*. Current project and the group’s personnel list were provided.

### **GeoTRACES Debrief-**

A debrief of the GeoTRACES cruise was then conducted with the AICC, Coast Guard and the GeoTRACES Chief Scientist Dr. David Kadko via webex. Debrief notes are not included in these meeting minutes.

**Meeting Adjourned-** 1630- Friday November 20, 2015