Arctic Icebreaker Coordinating Committee (AICC) Meeting

Tuesday and Wednesday, April 27-28
Fourth Floor Conference Room
Consortium for Ocean Leadership
1201 New York Ave NW
Washington, DC

Schedule

Day 1: 0830-1700

- 0800 Continental breakfast
- 0830 Start meeting
- 1015-1030 morning break
- 1130-1300 Lunch (on your own)
- 1430-1445 afternoon break
- 1600 Adjourn for the Day
- 1600-1800 AICC Executive Session

1900 Group Dinner at **Tuscana West**

Day 2: 0830-1600

- 0800 Continental breakfast
- 0830 Start meeting
- 1015-1030 morning break
- 1200 - Adjourn

Agenda Updates

- Recheck head count for Tuesday dinner
- Update possible phone in participants
- Other?

Shipboard issues

- Gear handling cranes/booms/winches for *Polar Sea*
- Mooring deployment winch for use on all icebreakers
- Replace system used to talk to moorings
- 150 kHz ADCP replacement for *Healy*
- Linkages among ice imagery, navigation, mapservers
- Ice fouling of TSG
- Internet access
- Ongoing need to optimize use of science spaces
- Ongoing attention to livability issues (food, berthing, etc.)

Perennial pack ice in the southern Beaufort Sea was not as it appeared in the summer of 2009

David G. Barber, Ryan Galley, Matthew G. Asplin, Roger De Abreu, Kerri-Ann Warner, Monika Puc´ko, Mukesh Gupta, Simon Prinsenberg, and Ste´phane Julien

Received 22 October 2009; revised 13 November 2009; accepted 23 November 2009; published 24 December 2009.

[1] In September 2009 we observed a much different sea icescape in the Southern Beaufort Sea than anticipated, based on remotely sensed products. Radarsat derived ice charts predicted 7 to 9 tenths multi-year (MY) or thick first-year (FY) sea ice throughout most of the Southern Beaufort Sea in the deep water of the Canada Basin. In situ observations found heavily decayed, very small remnant MYand FY floes interspersed with new ice between floes, in melt ponds, thaw holes and growing over negative freeboard older ice. This icescape contained approximately 25% open water, predominantly distributed in between floes or in thaw holes connected to the ocean below. Although this rotten ice regime was quite different that the expected MY regime in terms of ice volume and strength, their near-surface physical properties were found to be sufficiently alike that their radiometric and scattering characteristics were almost identical.

Citation: Barber, D. G., R. Galley, M. G. Asplin,R. De Abreu, K.-A. Warner, M. Puc´ko, M. Gupta, S. Prinsenberg, and S. Julien (2009), Perennial pack ice in the southern Beaufort Sea was not as it appeared in the summer of 2009, Geophys. Res. Lett., 36, L24501, doi:10.1029/2009GL041434.

Planning and Logistics issues

- Ongoing modifications/clarifications of cruise planning form
- Follow up on science gear/facility availability and readiness
- Organization of shipping/onload/offload/dry storage space at CG base
- Gear storage in Seattle between cruises
- Testing of van labs prior to sailing
- Provision of adequate deck and on-ice safety gear
- Relative suitability of sites and methods for remote transfer/ onload/offload
- Ongoing discussion of health screening (UNOLS fleet wide, as well)
- New issue of foreign national clearance for USCG facilities

Ongoing Challenges

- Getting *Polar Sea* back up to full speed as a research vessel
- Keeping up with debriefs and recommendations for two ships rather than one
- Native Communities
  - The unofficial observer program
  - Maintaining good relationships despite increasing industry and foreign vessel pressure
- Defining relationship, if any, with ARVOC
- NSF to establish science logistics support that will cover issues like review of radioisotope use on the icebreakers
- Continue ongoing discussion of medical screening
- Deal with new foreign clearance issues

Communications with Native Alaskan Communities

- Cruise summary for season provided to AEWC and updated as needed
- Chief Scientists for cruises have initiated contact with potentially impacted communities
- Issues with “observers” continue to be discussed with the communities

Tentative list of 2010 research cruises

- *Alpha Helix*, US: Jackie Grebmeier
- *Araon*, Korea: Sang Lee
- *Xue Long*, China: Jinping Zhao
- *Mirai*, Japan: Itoh
- *Sir Wilfrid Laurier*, Canada: Bob Fudge
- *Healy*, US (3 cruises): Kevin Arrigo; ECS; Bob Pickart
- *Polar Sea*, US: Lee Cooper (Bering Sea: Completed)

The Seattle Times – 11 March 2010

Icebreaker docked in Seattle to be refitted for duty

The Coast Guard's top brass landed in Seattle Wednesday to announce the refitting of an old icebreaker, along with the need to act in the face of global climate change.

By Mark Rahner
Seattle Times staff reporter

The Coast Guard's top brass landed in Seattle on Wednesday to announce the refitting of an old icebreaker, along with the need to act in the face of global climate change.

Standing on the deck of the cutter Polar Star at the U.S. Coast Guard base on Pier 36, Adm. Thad Allen described the ship's $62 million facelift as well as what he said was "a clarion call for action regarding ocean policy, regarding climate change and regarding what's going on in our Arctic."

PREV 1 of 2 NEXT

enlarge MARK HARRISON / THE SEATTLE TIMES
The Polar Star, based in Seattle, is one of the nation's two Polar Class icebreakers.

Commissioned in 1976, the 399-foot Polar Star has been on ice, as it were — that is, docked in "caretaker status" to save money — since its last mission in 2006. In 1982 it circumnavigated Antarctica, the first ship to do so since 1843. It's one of only three U.S. icebreakers — all based in Seattle — and all three are necessary to patrol Alaska's Arctic coastline, do research in the Arctic and Antarctic and deal with emergencies, according to the National Research Council.

Next Meeting

Fall 2010 meeting scheduled for 9-10 December 2010 at the USCG base in Seattle

Action Items from December 2009 Meeting

- Work on Alaskan Community contacts
- IceFloe questionnaire improvements
- PACAREA Icebreaker Retreat in Alameda
- Science equipment MOA: NSF and USCG
- Polar sea science gear upgrades
- Foreign vessels, DOS, and Native Communities
- SOO cruise identification issues
- Observers' program: accountability, details, and obligations
- Adjustments to debrief form
- Budget estimate for currently identified upgrades