

# Arctic Icebreaker Coordinating Committee (AICC) Meeting

Dec. 2 & 3, 2008

Rainier Room  
Coast Guard Integrated Support Center  
Seattle, WA

# Schedule

## Day 1 (Dec. 2)

- 0800 Continental breakfast
- 0830 Start meeting
- 1015-1030 morning break
- 1130-1300 Lunch off Base
- 1430-1445 afternoon break
- 1630 Adjourn

6:30 Group Dinner at Local Restaurant (FX McCrory's)

## Day 2 (Dec. 3)

- 0800 Continental breakfast
- 0830 Start meeting
- 1015-1030 morning break
- 1200-1300 Lunch on Base
- 1500 Adjourn?

# AICC Membership

- New Member!
  - Lee Cooper - Chemical Oceanographer
- ARVOC Representative (John Anderson) could not attend.

# Minutes from June 2008 Meeting

# AICC Action Items from June 2008

Develop bibliography of publications resulting from past Healy and Polar(s) cruises	Dave, Phil, AICC	Thought about
Develop recommendation that the Polar Sea be effectively utilized and that refurbishment, upgrade and maintenance of science capabilities be done	AICC	Done
Develop recommendation to at least maintain POLAR STAR in caretaker status	AICC	Done
Identify clear process for approval of isotope use - who is the RSO, what are the limits or conditions of authorized use. (look at old recommendation)	AICC, Dave, NSC	?
Recommend that OPP buy the general purpose van, Coast Guard and/or OPP evaluate and if practical refurbish the old vans to UNOLS Check list	AICC	Done. Van ordered (Renee). CG Vans?

# AICC Action Items from June 2008

Determine how to take advantage of the potential science opportunities offered by industry as outlined by Mead Treadwell.	AICC	Thought about
Recommend that initial scheduling and cruise planning processes should take place earlier in the year, including identifying chief scientists and support for them.	AICC	Not Done
Recommendations from the debriefs regarding upgrades and priorities for equipment purchases, upgrades, replacements, repairs.	AICC	To be Done after Debriefs
Update web site to better describe berthing policy that indicates CG will use unused berths	Dave, AICC, Healy	?

# AICC Action Items from June 2008

Document and Bank Interactions by AICC, USCG, Pis on what they have done, what works well, what to avoid. Update Draft at the NSF.	AICC	Not Done
Remind Renee of AICC recommendations from August 2006 teleconference	Carin	Done
Identify date for retreat in Alameda in late 2008	Carin, Don Peltonen	Explored but not endorsed
Add info to Healy cruise planning questionnaire re: mid-rats planning	Dave	?
Develop protocol for getting major science instrumentation for ice-breakers that involves science input	Lisa, Renee	?

# AICC Action Items from June 2008

Provide and get information about the use of Internet bandwidth	?	? Add Contact info for ? to web site?
Continue discussion of habitability and provide feedback to CG. CG to provide feedback on “experiment”	AICC, OPS, (XO)	On Agenda
Request Town Hall Meeting at Fall AGU to discuss Icebreaker and Arctic Topics	Carin, John F.	Done by John F., Dec. 18
Disseminate action items to meeting attendees	Carin, Mike	Done
Check in with the NSF re: the Medical Recommendation	AICC	? NSF REPORT ?



# AICC Action Items from Nov. 2007

Update web site to better describe berthing policy that indicates CG will use unused berths	Dave, AICC	Done? Review?
Document and Bank Interactions by AICC, USCG, Pis on what they have done, what works well, what to avoid		Not Done
Initiate discussions with northern communities re: Polar Sea Trip	D17	Done?
Request more detailed prospectus to be developed for each cruise with authorship and content clearly defined	Kate will find example	Example has been found?
Add info to Healy cruise planning questionnaire re: mid-rats planning	Dave	Not done

# Extra Action Item Gleaned from Minutes

Add information on what AICC does and does not do to Icefloe web site	?	
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# AICC Activities in 2008

- As a result of discussions during a late February teleconference and at the November 2007 and June 2008 AICC Meetings, the AICC put forward five recommendations:
  - 1) That the NSF review and define new requirements for medical pre-cruise assessment for science participation and on-board medical expertise for US icebreaker Arctic cruises (Spring)
  - 2) That the NSF support the proposed replacement of the existing HEALY Seabeam system with a Kongsberg EM122 multibeam system during a planned drydock in 2010 (Spring)
  - 3) That the NSF purchase a laboratory van to be used on the icebreakers, and, when not needed, to be part of the UNOLS van pool. That the NSF and CG refurbish CG vans according to UNOLS standards (Summer).
  - 4) That the NSF and the CG enable Science of Opportunity (SOO) on non-science missions on board POLAR SEA and other icebreakers through open calls to the community (Summer)
  - 5) That the NSF support upgrades/maintenance to existing science equipment on POLAR SEA and that the NSF continue to support the POLAR STAR in caretaker status until a decision is made regarding replacement or refurbishment of the POLARS. This recommendation required and received UNOLS Council review and endorsement. (Summer)

# AICC Activities

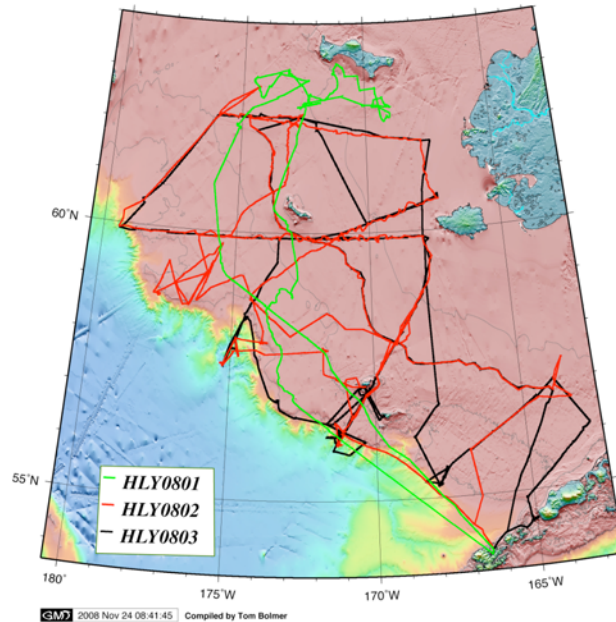
- Conducted debriefs of six Healy cruises (hly0801 - hly0806)
- Helped with SOO Announcement for Polar Sea fall cruise (presently ongoing). Reviewed letters of interest from four scientists.
- Initiated discussion with AEWFC Chair Harry Brower and the AEWFC Executive Director regarding the 2009 Planned Healy Cruises
- Touched base with Evan Bloom (Dept. of State) and Simon Stephenson regarding notification of northern communities of clearance requests by foreign research icebreakers

# New Action Item Format

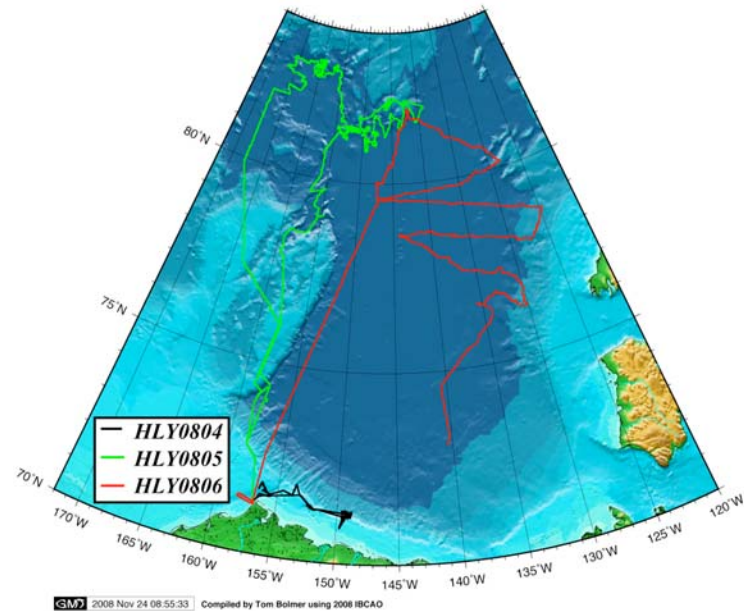


# 2008 Healy Cruises

*HLY0801, HLY0802, and HLY0803 Cruise Tracks*



*HLY0804, HLY0805, and HLY0806 Cruise Tracks*



- **BEST/BSIERP**
- HLY0801: 13-26 March, L. Cooper, NSF-oceanography, helo ops
- HLY0802: 29 March - 6 May, C. Ashjian, NSF -oceanography, helo ops
- HLY0803: 20 June - 18 July, R. Sambrotto, NSF - oceanography, moorings
- <http://bsierp.nprb.org/index.htm>

- **Arctic Ocean**
- HLY0804: 7 - 13 Aug., R. Pickart, ONR/NOPP - Moorings
- HLY0805: 14 Aug. - 5 Sept., L. Mayer, NOAA - Seabeam, Dredging, Mooring
- HLY0806: 6 Sept. - 1 Oct., J. Childs, NOAA - Seabeam, joint ship ops

# HLY0801 Debrief - Cooper

- Successful, though challenging because of the cold (-20°C with 20-40 kt winds). Efforts of CG to facilitate research under such adverse conditions much appreciated
- Diversity of sampling and participation of media and agency representatives made for a complex cruise. CG thanked for their patience and assistance in dealing with these challenges



# Suggestions/Points from HLY0801

- Cruise too short
- Last minute change to the departure time (from 9:00 to 16:00) was surprising
- Pre-cruise e-mail responses were slow
- Helicopter contract negotiated late; impacted what science could be done
- CTD support (Scripps) for only 12 hours a day
- Safety briefings prior to off-ship activities, while necessary, seemed too long, up to 20-30 minutes.
- Could not conduct ice stations and CTDs simultaneously.
- Ice deployments seemed to take a long time.
- Medical form submission continues to be a problem.
- The in-bound freight shipment web site was not updated.
- Mapserver praised by science and by CG
- Concern re: future ice imagery because of Radarsat not being available
- Freezing decks a problem
- Some hiccups with berthing assignments pre-cruise but resolved
- No backup -20 Freezer

# HLY0802 Debrief - Ashjian

- Very successful cruise. Achieved more than our planned objectives. Satiated the science party.
- On-board procedures/logistics were in general quite smooth.
- Ship's crew was helpful, cheerful, and a pleasure to work with
- MSTs and MSO were exceptional
- High praise to boat crews

# Suggestions/Points from HLY0802

- The on-line shipping tracking form was not updated even after the ship had sailed
- Difficulty in identifying radioactive isotope licensing
- Stable isotope documentation - need an appropriate form (not the radioactive isotope form)
- Difficulty in identifying and procuring vans.
- 24/7 e-mail access was extremely useful (and reliable!).
- Could not exchange e-mails with CG in a timely manner - useless
- Iridium phones did not make/maintain connectivity
- The berthing and food were good. Mid-rats were much improved on this cruise relative to previous ones. More chai in Java Hut?
- Mapserver excellent.
- Ship has no fax capability
- Concern expressed by science and CG regarding availability of useful ice imagery in 2009 (no Radarsat)

# More Suggestions/Points from HLY0802

- The failure of one of the -80 Freezers near the end of the cruise highlighted the necessity of having two.
- Note - no backup for the regular freezer...get one for next year
- Getting the medical form submitted was much too difficult
- Need more Small and Medium Mustangs
- Berthing assignments went very smoothly. Good coordination also with the Cooper cruise
- Offload should plan better to keep equipment sheltered from the elements
- Need to be ready with alternative solution to delivering ambient ( $\pm 1^{\circ}\text{C}$ ) SW to the on-deck incubators for when the science seawater might freeze up
- Vacuum cleaners extremely noisy (dying?)

## HLY0803 Debrief - Sambrotto

- A very successful cruise; achieved 80% of objectives. It was a very complicated cruise conducted at a time of year when the weather is very bad (wind, fog) in the Bering Sea. Healy performed well; as well or better than other research vessels.

# Suggestions/Points from HLY0803

- Too much e-mail. Use a “blog” to post information and science could go there weekly?
- Some anxiety at the start of the mission regarding the level of detail in the provided plans. Multiple groups and group needs confusing
- Science wanted to continue doing lab work after ship hit dock in Dutch - awkward
- Important for science to use the same name on all forms
- Hazmat left behind
- Food service good
- Vacuum cleaners.....loud and ineffective
- Excellent attention to safety on part of CG
- Continue to improve getting medical forms to ship
- Need to be vigilant regarding potential medical issues even with short-term visitors (e.g., outreach)
- One of the -80°C freezers may have been flaky (a new one is coming)

# HLY0804 Debrief - Pickart

- This was a very ambitious cruise. It was successful in no small part because of the hard work on the part of the Healy crew. Achieved 100% of objectives

# Suggestions/Points from HLY0804

- Confusion regarding to whom to talk in the CG. Provide list of names with “specialty”
- Cruise questionnaire not always consulted
- Helo hanger unavailable during onload; required a second trip to Seattle from East Coast. Avoid scheduling overlap in future.
- Some people at logistics meeting were not actually on cruise
- Four mooring techs rode from Dutch to Barrow, very helpful
- Mapserver impressive
- MSTs/MSTC/Palomares (Scripps) excellent
- Limited vegetarian protein options
- Berthing not optimal; triples and chief scientist doubled but there were empty rooms!



# Suggestions/Points from HLY0804

- Mission planning forms need revamping. Too difficult to figure out what was wanted. Should not have to do an individual one for each mooring - use generic approach and discuss differences before each deployment/recovery. Took 3 days to fill them out.

# HLY0805 Debrief - Mayer

- A very successful cruise; achieved 80% of objectives. The inability to achieve 100% had to do with the seafloor and not the ship.

# Suggestions/Points from HLY0805

- Confusion regarding science berthing. One of plans had science party in triples even though science party was small. This was rectified after comms with CG
- The greater ECS program included this cruise in some unnecessary permissions/permitting on which the Chief Sci. now has to report
- CG generously offered to send something by FedEx post offload but this backfired - more difficult than anticipated
- No e-mail for CG at high latitudes and difficulty with e-mail between .mil and .others - negatively impacted science mission
- Mapserver is great
- WHOI mooring winch very helpful
- Need to include CG in discussions of needed helo transfers in 2009
- Mid rats much improved
- Plans for 2009 still not resolved

# HLY0806 Debrief - Childs

- A very successful cruise. Pre-cruise goals were exceeded. Canadian partners were extremely pleased with outcome. Pre-cruise trackline objectives achieved at 90% level. Science of opportunity (Gast and Sanders) goals were met or exceeded.

# Suggestions/Points from HLY0806

- Permitting for next year's cruise will be more difficult; NOAA and USGS need to get started ASAP
- A few glitches on offloading, particularly with security at the gate (truck couldn't get in). Chief scientist had to send someone to oversee (note: many scientists send someone to oversee the offload)
- Inability to communicate by e-mail between science party and CG in a timely fashion was cumbersome
- Louis St. Laurent had no e-mail capability. Wireless ship-to-ship worked somewhat.
- Not enough documentation from one of the ancillary programs regarding shipments of gear/supplies. Chief scientist didn't realize degree of organization ancillary programs required

# Suggestions/Points from HLY0806

- Mapserver worked wonderfully and is a great tool. Steve Roberts is to be commended
- Gravity data not as accessible as CS had hoped (?). May be because LDEO is not tasked to do much more than simply monitor it several times a day
- Food good but mid-rats inadequate and limited protein choices for vegetarians
- Vacuum cleaners did not work well at all
- 42 days for ECS work next year; apportioning between this type of work and Larry Mayer's type of work is unidentified at this time.

# Common Points

- All cruises highly successful
- Berthing confusion
- E-mail between CG and Science
- Freezer reliability (note; backup -20 raised in 2007)
- Mapserver is excellent - Steve Roberts
- Concern about ice imagery in 2009
- Vacuum cleaners
- Food service improved but still some issues
- Medical form submission for early cruises
- Safety briefings or documentation cumbersome on some cruises
- Some onload/offload issues
- CG shipping website not up dated for early cruises

# Next Steps

- Identify area of responsibility for each key point
- AICC to provide ranking of importance of key points
- AICC to provide recommendations to appropriate party if necessary



# Review and Revision of Debrief Questions

- Need “committee” composed of AICC members, CG (Healy, shoreside)
- Emphasize to the Chief Scientists the need to
  - Query science party prior to debrief
  - Provide written responses to questions prior to debrief; these will be used by all on debrief call. This much improves quality of debrief



# AICC Membership

- Carin Ashjian, 1/10, 2nd; BO
- Lee Cooper, 9/11, 1st; CO
- Erica Key, 5/11, 1st, satellite/met.
- Robin Muench, 1/10, 1st; PO
- Kate Moran, 6/10, 1st; GO
- Bernie Coakley, 11/09, 2nd; GO
- Rebecca Woodgate, 11/09, 2nd; PO
- Don Perovich, 5/11, 1st; ice
- Dan Schwarts, RVOC Rep
- Steve Hartz, RVTEC Rep

# Future Meetings

- Spring/summer meeting at the NSF during Healy “break” in June-July
- Winter meeting post 2009 season; December or January?