

**Arctic Icebreaker Coordinating Committee- (AICC)
Ranier Room- US Coast Guard Facility- Alaskan Way
Seattle, Washington
December 9-10, 2010**

Executive Summary

The UNOLS-AICC Committee held the winter meeting at the U.S. Coast Guard Base in Seattle, Washington on December 9 & 10, 2010. This was our second in-person meeting for 2010 and was well attended. Please see the attendance list in the Appendices table.

Action Item List

Item #	Issue	POC	Comments
1	Who will cover Nome logistics		
2	Alameda Visit- The AICC needs to set goals and agenda to request visit with Admiral.	AICC Chair & UNOLS Office	
3	Post Lee's primer on how to be a good Ch Scientist on UNOLS AICC Page	Lee & UNOLS Office	Done
4	Get pCo2 installed for Jeremy Mathis acidification cruise	Dale	
5	Data Release Policy	Dave Forcucci	
6	Does AICC think we should make improvements and keep these on deck scoreboards?	AICC	
7	Need an NSF decision on whether the winch pools at WHOI or SIO is the place to put a TSE mooring winch.	NSF	
8	AICC needs to at Healy science matrix system and provide feedback.	AICC	
9	Van Locations on Healy need AICC feedback	AICC	
10	AICC to comment on NIC.	Don Perovich Karen Frey	

Appendices	
Item	Title
I	Agenda
II	Attendance
III	AICC Chair Report
IV	UNOLS Report
V	NSF Report
VI	CH2MHILL Report
VII	USGS Report
VIII	NOAA Report
IX	USARC Report
X	USCG District 17 Report
XI	Sikuliaq Report
XII	Healy Report
XIII	Polar Sea/Star Report
XIV	Healy Science Mods
XV	USCG Healy Mods

Minutes

The AICC meeting convened on Thursday, 9 December 2010, at 0830 with welcome remarks by AICC Chair, Dr. Robin Muench. Introductions around the room were made.

General business and reports

The Committee accepted minutes from the April 27-28, 2010 meeting. Minutes were approved as written, with corrections to the CG study on the audit and the addition of a link on the Noise study by Ethan Roth (UCSD and Val Schmidt (UNH) from the Healy 2009 ECS cruise.

AICC Chair Report

Robin gave a summary and Power Point of the 2010 season on the Healy with things that worked well and issues that were overcome. Debriefs were held and discussed.

Review of Action Items- Robin presented the past action items and status of each, as well as a list of new action items and previous action items which are now on hold.

Next meeting, tentatively scheduled for 19-20 April, 2011 at NSF in Arlington, VA.

This was later changed to 20-21 April, still at NSF.

Discussion on the terms for Observers and Marine Mammal Observers- We need to stop referring to the North Slope participants as "observers" as we confuse them with marine mammal observers, which are now called Protected Resource Observers, no longer Marine Mammal Observers. These members from the local community should be referred to as "participants" now.

UNOLS Reports

Jon Alberts presented a Power Point on recent UNOLS activities. Items of interest to AICC included news that UNOLS office is fully staffed, recent efforts to sign an MOA between the CG and UNOLS for MST training, Appendix B of the Research Vessel Safety Standards, and the new UNOLS Committee looking at science mission requirements and the current science questions for a Polar Research Vessel. The CG-UNOLS training for CG Marine Science Techs has been active for many years however a formal MOA had never been signed.

NSF Report

Hedy Edmonds provided the NSF report as she is filling in for Renee Crain.

The "Ship-Based Science Technical Support in the Arctic- STARC" solicitation to identify an institution to provide NSF funded science support for Healy and Polar Sea and Polar Star has gone out. Proposals were due in November and a panel is scheduled for early winter with an award being made in April 2011.

Community Observers are planned for all three Healy cruises. Faustine Bernadac/CH2MHill stated that finding participants is hard because of the high priority for subsistence hunting.

On the participants, there continues to be some communication issues, not knowing who would be on until last minute and what their responsibilities will be. It is not a requirement, unlike the Protected Resource Observers. AEWG makes the request. We'd like to have a pool of enthusiastic observers and get the person identified early.

BASC hires the community participants.

Polar Research Vessel Refresh Project- Alex Isern

The PRV study from 2002-2006 is undergoing a project refresh with the establishment of a UNOLS- PRV committee, chaired by Rob Dunbar of Stanford. All the previous documents, workshop reports, and presentations are now posted on the UNOLS site and Raytheon Polar Services has it on their site as well. The current charter for the Nathaniel B. Palmer ends in May 2012. Looking into funds to possibly capitalize a new vessel through the MREFC process.

The 2002-2006 study did not address Arctic science issues, but this refresh will. Also OPP and OCE are working closer together in the UNOLS model. The Palmer and the Gould are now using the UNOLS scheduling system.

This is happening in parallel with the 15 year study for Antarctica which is an NRC study focused on high-priority science issues, which will be followed by a blue ribbon study.

This PRV study is on a fast track with a planned interim report completely by June 2011 and a final report due the end of 2011. Primary goal is to clearly articulate what science is driving a specific science mission requirement (SMR).

NSF is preparing an RFP for another vessel to cover when the Nathaniel Palmer contract runs out. Options include a 5 year contract with a possible 5 year extension.

Dale offered that the timeline is very short and should be looked at. Alex agreed and this is being reviewed now.

Robin asked what role will the PRV have in regards to the McMurdo resupply?

Alex responded that the resupply month of January is the one month when our science demand is the highest. Resupply of Palmer Station is also being reviewed.

After the current PRV study is finished, then a solicitation for a project office in the style of the Sikuliaq will be put in place, perhaps fall of 2011.

Phil McGillivray offered that the CG could offer advice on the PRV project.

CH2MHill Polar Services (CPS) Report

Faustine Bernadac/CPS provided a power point on recent activity at CPS, the NSF Arctic Logistics coordinator/contractor. They are

supporting ~150 science projects in the Arctic, including Alaska, Greenland, Canada, and Russia.

In Barrow, Alaska, BASC is not longer part of the NSF logistical support. CPS works directly with UMIAQ (Ukpeagvik Inupiat Corporation's professional services subsidiary) to manage the logistics support in the Barrow area.

Personnel Changes- Steve Hastings will leave CPS early in 2011 and will be replaced by Joshua Bacon. Faustine and Joshua will be the Barrow on-the-team CPS team. Matt Irinaga will be available from their Fairbanks office.

Dale asked if CPS safety training for aviation, bears, Arctic survival had been offered recently.

For Barrow, the point of contacts will be Joshua (josh@polarfield.com) and Faustine (Faustine@polarfield.com). For the rest of Alaska, Naomi Whitty (Naomi@polarfield.com) will be the POC.

For non-NSF programs such as NASA or NOAA, they have worked with Renee in the past. These agencies usually need to pay for this service and a more organized approach would be more cost effective.

There was a question as to what CPS's responsibility is outside of Barrow. AEWCR reach is far beyond Barrow.

For Barrow port calls, CPS work with the local contractor, UMIAQ, to arrange all port call logistics, including cargo ops, and lodging. If necessary, they will assist the chief scientist to contact AEWCR and/or other local organizations. This helps addressing local communities concerns and identifying the need for a community observer (now called "participants"), whether there is a port call in Barrow or not.

Action Item- Who will cover Nome logistics? Some of these out ports are not well serviced.

Extended Continental Shelf Report

Larry Mayer gave a Power Point presentation on the Healy- HLY1002, Extended Continental Shelf (ECS) cruise. This was the first extensive use of the Healy's multibeam system.

Cruise report- This was a collaborative effort with Louis St. Laurent and Healy, from 2 Aug to 6 Sept, 2010. B.D. Edwards was the Chief Scientist on Healy. The ECS objectives were on multibeam, coring, and seismics. An ancillary program on ocean acidification was run by Lisa Robbins. These were the first measurements in northern ice covered areas of the Canada Basin.

A question on how many more years these ECS cruises will continue? Larry Mayer said this is hard to answer as the area is so poorly mapped that it's hard to predict where to map. Also as other countries are making their submissions new ideas about what to claim are evolving. In 2011, the plan is to go far north beyond in Nautilus Basin to the northern side of the Alpha/Mendelev Ridge. The Canadians have not planned on joint cruises beyond 2011, but they may extend.

Office of Naval Research

Mike Prince

Mike is an IPA from San Jose State for at least another year, maybe more.

He is representing ONR to UNOLS community for construction of the Ocean Class ships.

On ONR interest in Arctic, the Navy will announce some departmental research initiatives will be coming out in the next few years, amount of field work is to be determined. Program Managers at ONR are Lynwood Vincent, Scott Harper, and Terri Paluszkiwicz. Also hiring an IPA, Martin Jeffries to work on Arctic issues.

Ocean Class Research vessels are in phase one design process. Marinette Marine and Glosten have their design maturity assessment in mid December, and then move from preliminary to contract design phase. Both have progressed to hull design and model tests. Dakota Creek/Anacortes and Guido Perla/Seattle will have their design assessment in mid January.

NAVSEA-PEO-Ships will then select one team and a contract award will be made in August 2011 with a projected delivery dates of mid 2014 to late 2014. First ship to WHOI, then second ship to Scripps about 6 months later. WHOI and SIO each have a team who are providing community input to them. They are also getting input from FIC on specific transducers.

NOAA Arctic Research Program

Kevin Wood provided a power point and reported on the work of the RUSALCA program which is US and Russia collaboration. Started in 2004 and will continue until 2012.

This is a long term monitoring and climate change detection program and this collaboration lets us go to areas where US normally couldn't go. Russia flag vessels have been required so far due to the classified data. There is a complicated data release process, with a delay of 5-6 months. Some issues include logistics and Kevin works on marine ops planning approx 2 months per year with the Russians. They are doing sea floor mapping as well as water column physical oceanography.

On other NOAA activities, the National Ocean Survey and the NOAA Ship Fairweather continue charting in the Bering Strait. And the Pacific Marine Environmental Lab did 18 cruises in 2011 with the Dyson(8), Thompson(2), contract vessel (5)

BEST/BISERP

The Distributed Biological Observatory (DBO) program is ongoing with repeat stations from ships on many cruises and from different organizations. Per Lee Cooper the international collaboration is a group of scientists and NOAA is being encouraged to participate.

Dale: Karen and others published a DBO summary in EOS this spring.

<http://www.agu.org/pubs/crossref/2010/2010EO180001.shtml>

National Ice Center – They did not send a representative to this meeting. The new Director of NIC is John Simms (John.Simms@noaa.gov)

US Arctic Research Commission- John Farrell- See Power Point
<http://www.arctic.gov>

John provided a history of USARC and the policy act of 1984.

There are 8 commissioners who work on various Arctic issues, all on their website. USARC makes recommendations to the Congress and the White House on Arctic research.

In July 2010 the National Ocean Policy was signed.

Arctic research moved from NSF to NSTC- National Science and Technology Council
Subscribe at www.arctic.gov for newsletters on issue pertinent for AICC.

US Coast Guard Report-

Mike Krause- no Power Point

The Healy is operational. On the Polar Star there are lots things circulating on aging assets in Congress. Current plan is to have the Star ready for ops approx a year after the industrial work ends. The Coast Guard hopes budget authority comes back to CG. We have requested this for FY 2012. We will continue a good working relationship with NSF and CG.

Dec 2012- back by 2012 from industrial operation, the about a year to get operating
Readiness operation in 2013, means ready for ops.

FY budget transfer to CG in 2010, in FY2011-

USCG District 17 –PACAREA Report/Greg Somers- see Power Point

We will continue Arctic domain awareness flights and science of opportunity flights.

Also the VMS- vessel monitoring system in the Bering Straits will continue.

No foreign requests for 2011 right now, but I expect they will come in Jan /Feb 2011.

Foreign Scientist Clearance process is on IceFloe. Visit request, we only have one person entering this into the system so it takes some time.

Would like to use icebreaker for community outreach if NSF approves.

Polar Sea- We have a notional schedule, with repairs to be completed in mid July 2011 with an August shakedown/training. Then CART and TSTA in November and perhaps available for Deep Freeze Standby, then winter 2012 science mission for Dr. Carin Ashjian. Training is an issue when ship is laid up, so we are looking for other ships to put them on. Some going to foreign icebreakers.

Healy schedule for FY2011 is final with a few days for multibeam characterization in June. NASA, ECS and Pickart cruises planned. In June a multibeam characterization effort is planned.

Action Item

Alameda Visit- The AICC needs to determine what goals are and an agenda should be set for a visit to the Admiral's Office. The AICC Chair and UNOLS Executive Secretary would attend.

Note: The USCG announced in March 2011 that the Polar Sea would be decommissioned in 2011.

Update on the R/V Sikuliaq

Steve Hartz provided an update via Power Point on the Sikuliaq

After some re-engineering resulting in issues surfacing in the most recent design review by the shipyard working with Guido Perla as their naval architect. The length is now 260 feet, displacement: 4,053 long tons, power: 5,750 BHP. At present the steel is there at Marinette Marine in Wisconsin.

The bow stores loading crane was lost in the redesign, elevator was eliminated, pilot house is smaller and superstructure is aluminum. The intent was to be able to load stores at the bow while loading science gear without interfering with each other.

NSF inspection (pre-science cruise) is now thought to be in late 2013. It was asked if this was a 6 month schedule slip. Steve stated the shipyard is working on strategies to keep the build on schedule. Regarding the dock in Seward they won't have to dredge and will be putting in two sets of dolphins and extend the pier by 100 feet. Testing (bottom type) was done last week. But we also have dock space at the cruise ship facility. Some talk of closing in a basin at the Seward Industrial Center.

Operations, Scheduling, and Planning for 2011 and beyond

Healy 2011 Cruise Schedule- Dave Forcucci- see Power Point.

The schedule was finalized the other day and will be very similar to last year.

Shakedown in May, transit to Honolulu, then Dutch Harbor, for multibeam testing. NASA cruise in late June. Then helo transfer at Barrow for Mayer ECS 47 day cruise, then over to Provideniya for port call and outreach. Skirting around subsistence hunting. Then the Pickart cruise and this science party will embark by helo.

Polar Sea Repairs, maintenance and 2011 cruise activity

Michael Ciaglo gave a Power Point on recent maintenance projects and a ship status report. Mike is part of the Surface Forces Logistics Center (SFLC) which supports icebreakers and buoy tenders.

Healy had successful cruises, currently in Tailored Shipboard Training, (TSTA), Also maintenance, engine overhaul, replacing starting air compressors and engine controls.

Polar Sea is down this year. Relocated the Miranda Davit after swamping a small boat. Main Prop controls. All 6 mains and all generators are down w/ significant wear. Root Cause Failure Analysis conducted and no one smoking gun, many contributing factors. Rebuilding all 6 mains and 2 generators w/ CG in-house effort w/ Fairbanks on-site tech support. About to test run the first rebuilt engine. Expected completion of engine rebuilds mid-summer 2011. Shifted regular maintenance availability to start earlier than normal so all is done at the same time. Digital fuel control on other turbines. Improved controls on shafts.

Healy- maintenance- see slides

Polar Star- at Todd shipyard, mid way through overhaul. Slides showed the work

Interaction with others- clearances, permits, and native communities

District 17- Phil McGillivray report-

Some outreach efforts which continue are the white (PFD) vests for whalers. In a 2008 CG boating safety effort the CG found many whalers not wearing PFD's because they were orange, so the CG made white ones. These were successfully tested during the whaling season, and the Alaska Eskimo Whaling Commission has requested additional white PDFs for the future.

Working on issues from last year's deployment of small boats experiment w/ props and gravel beaches, which led to prop damage. The Coast Guard is testing water jet propulsion engines to address this issue as an improvement to address local conditions.

Might do some outreach en route north w/ icebreaker on future missions if NSF allows.

We were planning a winter BEST cruise for Carin Ashjian before the Polar Sea engines failed.

New informational material for investigators on IceFloe- Lee Cooper reviewed the work he is doing to create a "A primer for Marine Science in the Arctic" This will be a tool for Chief Scientists on the ins and out of cruise planning. It will be available on the web. Lee said he would maintain it for the foreseeable future. We need experienced Arctic Ch Sci's to give it a read through. Also AEWEC should do a read through. http://arcticcbl.umcesedu/AICC_page

Annual Summary Cruise Description Charts

Dave Forcucci has created a chart/sat images for past cruises, This will help on cruise planning, as it shows ice coverage, tracks, and EEZ boundary lines.

Friday 10 December 2010

Science Modifications, Infrastructure, and Equipment

Healy Priorities and Status-

Dale Chayes provided an extensive Power Point presentation on recent modifications, upgrades, installation and planning for future science systems on the Healy. This included an overview of the multibeam replacement process, ADCP and the new TSG/PCO2.

We have discussed this for years. The PCO2/TSG estimated costs for hardware and technical labor are about \$. There is a significant effort to

update documentation on new and old systems.

Action Item- Get pCO₂ installed for Jeremy Mathis acidification cruise

Computer Lab Estimate- The space renovation and upgrade planning continues.

Multibeam replacement- installation of the EM122 was completed. We are planning post shipyard trials, and a shakedown on the transit to Honolulu. This was first proposed by AICC back in 2003 and the system was accepted in June 2010. Performance characterization work is yet to be done. The transit was from Honolulu to Dutch on/about May 31 to June 12, 2010. Good combination of benthic types to test system. Dale showed data results from new multibeam system. In 60-70 meter of water we had very reasonable results; we probably don't need a shallow water system on Healy as approximately 90 % of science done is in this area.

ADCP – The old 150 kHz was replaced with a newer OS150 and we changed from VMDAs to UHDAS.

NSF STARC- Arctic solicitation to support Arctic research closed in November. Dale and LDEO will work on a transition plan if necessary with whoever is awarded the grant.

Action Item- Data Release Policy needs to be reviewed and updated

Dale described the underway data systems which should be part of the data policy.

Look at Icefloe where the policy is already there. Dave Forcucci stated we need to document the policy to the Ch. Sci. and enforce it.

Need to compare to what NSF and other agencies data policy are and get ours in line.

If we release it up front, we get a chance to make use of that investment.

Acoustic Communication- We are proposing to install a transducer in a spare well so that we don't have to dangle a transducer over the side. John Kemp has been in touch with Dale on this and the budget estimate for this is \$36K

Scoreboard Replacement- AICC discussed the value of the on deck displays which provide readouts on the wires and winches. These were not designed for weather decks.

Action Item- Does AICC think we should make improvements and keep these on deck scoreboards.

Deck Sockets- Mooring Winch – Need an NSF decision on whether the winch pools at WHOI or SIO is the place to put a TSE mooring winch.

Hull temperature sensor installed and working well.

USCG Modifications to the Healy

Eric St. Pierre/USCG- provided a power point update on recent improvements to the Healy which included:

CTD deployment system- we are working on a rail system for handling the CTD rosette, should be ready for next year-

- Science conference lounge- replacing the aging storage cabinets
- Added two flat screen LCD computer displays for presentations.
- Adding a science work station.
- Replace all chairs, new carpet, sound system replaced.
- Lighting control will be replaced for better viewing of presentations.

Healy Winch Monitor Upgrade- new system to bring it in compliance with RVSS Appendix A & B, to be funded by NSF.

HAZMAT- We are conducting a review of missing chemicals and looking at improving storage and handling of all hazmats.

Science Deck Scoreboards- The ship is questioning the cost and the time of maintaining these. The original units were not weather tight. The new ones are better but not perfect.

JMS visit- we are filling out the NSF ship condition form over the next few weeks. JMS can come week of Jan 18th, with specifics to be finalized in January with trials in May.

Healy Science Matrix- science equipment as to who is responsible for what gear, between ship's force, ESU, Scripps, etc- We are looking for feedback in the next week.

Action Item: AICC needs to look at it and give feedback.

Bow Van Relocation issues

Dave Forcucci gave history of van issue.

Elliot Bay did an NSF funded study on van locations. Looking at the 02 deck forward as the best option.

Action Item: We are asking for AICC feedback on van locations.

Dale estimates vans are needed about 70% of cruises and we need to determine weight.

Polar Sea science equipment-

Phil McGillivray-

The CTD which was loaned to NOAA was used in the Gulf of Mexico. and had to be cleaned. Working to get Polar Sea trained up on Research Vessel Safety Standards (RVSS) this spring.

Science Operations and Technical Support

Jim Wilson- ESU.

We had the new VSAT installed on Healy this year, worked well up to about 78 degrees north, over to about 140 west. Approximately 90 % of the time.

Used MESH system for the VOIP communication and data transfer with the Louis St. Laurent.

Polar Sea- No changes to network planned this year. They did let a contract to UCAR for mapserver support on Polar Sea which will start this month, (December 2010).

ESU is fully staffed and ready to provide science support. We have a new IT person- Whitty.

UPS on Healy- to standardize and bring it up to 100% with labor and equipment cost estimate is \$ 270,000.. A central UPS would be \$160,000. We could go with portable UPS systems at about 5K each. Feedback from AICC is to go with small portable UPS. Power on ship is a lot more stable now then it was when the ship was built. Dale stated that in general the type of UPSs on Healy is not “clean” or “conditioned power”, these are separate issues. He recommends we should get rid of our ad hoc collection of older UPSs, provide dual-conversion UPSs for critical, always installed equipment and update our planning process so that science parties can identify equipment that might need UPS power. Then the ship should have a few “backup” spares for the science party.

Icefloe.net

Dave Forcucci reported that we are upgrading icefloe to a Drupal back end right now.

Individuals and groups will be able to maintain their own content on the site. There will be a user name and password so that each group who has content can update all their own information.

Not going to change the cruise planning forms.

NGA deployment on Healy-

Jerry Hyman from NGA sailed last year and Jennifer Resio will sail in 2011.

Science Tech Support

Dale Chayes stated he doesn't know yet who is sailing next year. This will depend when STARC award is made and who wins.

Hedy reported they would let people know about STARC by end of February or early March. Lamont's current support contract is extended till end of January; we are in discussion to extend the end of June. Scripps- will not be providing CTD support unless they are awarded under STARC.

Ice Imagery- Dave Forcucci-

Dave thanked Renee for preparing the STARC proposal and Ice Imagery ideas.

We are getting improved support from Andrew Flemming at the UK British Antarctic Group that provides ice images in the Antarctic.

www.polarview.org

Polarview has been providing Envisat. Dave is working with them to get ice imagery available for us. It will give us real time Ice imagery from Radarsat, and it is quicker then what we have been getting but not actually “real-time”. Andrew asked for \$ 9K increment from NSF.

Raw data might be available; we would need to ask them.

Larry Mayer- this is an embarrassment that NIC can't provide ice images and we need to turn to a foreign entity to provide this.

Dale: We did get one “short turnaround” image from TerraSAR-X via NIC during the Bob Pickart's leg. It was a learning experience.

Action Item; AICC to comment on NIC. Don Perovich and Karen Frey to take the lead on this.

Review of Action Items- See Robin's power point

Hazmat issue- this is being worked on now.

Role of MSO- prior to cruise and during the cruise. We will remove this as an action item. It is hoped that Drupal will have a feature to let them know what in the cruise planning document changed. CG will write a job description of what the MSO job is.

TSE mooring winch- Jon to write an e-mail on adding a winch to pool.

On-Ice Operations- Don Perovich to write a document.

Capt Rall- we are also updating our on ice instructions.

IceFloe- continue to improve

Ice Imagery acquisition- This is an ongoing effort.

Alaskan Native Observers- ongoing action item

We discussed this at length in executive session and thought an outreach competition would be an idea. Jeremy Mathis will work on this. UAF has an outreach program that can help with this.

Polar Sea to full operations- This is an ongoing CG effort.

Science upgrades to Polar Star and future operations- This needs to be looked at in detail by NSF with AICC input. What is the current condition of what is there, what the science capabilities should be on both ships.
This an Action Item for AICC.

Outreach – presentation recorded during BARC science presentations and can be found on iTunes. Faustine Bernadac is POC for this.

Foreign Vessel Operations- AICC needs to track this as an ongoing effort. Perhaps Dept of State could provide more information in a timely fashion to avoid issues we had in 2010 when foreign ships were planning to appear at inopportune times.

Coordination of D17 and Alaskan Native Groups. –

Getting someone from these native groups to our meetings.

Joel Castro and Michelle Weber from D17 have a significant outreach group.

In the past we have had Carin and Lee doing it. Is NSF willing to fund this kind of activity? These in-person meetings are important and a part of their culture.

There can be confusion on what research is. It may be considered wildlife or oil exploration.

It is important to make contact with the individual villages because they feel Barrow does not represent them well sometimes.

Jeremy Mathis, being in Fairbanks could maybe do this for everyone as he is there.

Short flight to Barrow-

Science Equipment MOA- this just needs to be updated, not an action item.

The matrix should be separate from the MOA and referenced as a separate document.

Science equipment is dynamic and changes too fast to be embedded in a legal agreement

Such as an MOA between organizations of the scale as is the CG and NSF, but it is critical to keep it up to date.

Minus 80 freezer maintenance contract- Dave Forcucci has this.

PacArea Retreat- with Admiral

The question was asked what was the rationale for the one original event?

Mike Prince remembers that there has only been one. We had it because there were significant issues and Margo Edwards, Chair of AICC asked for it.

Lisa: went to two icebreaker COs conference prior to the one w/ Margo

to present science. Jeff Garrett: we had a full retreat one time based on some issues and that was

very valuable. We also had the COs conference a couple of times. It is

always valuable to have the highest level area commander high

visibility of the science issues. Perhaps the Chair and/or a rep or

two could pay a visit for an hour or two to provide the science

perspective to the boss and his staff.

Greg Somers: Retreat is full so it won't happen this time but a visit:

absolutely. Have briefed the staff and they are interested in an

agenda.

Jeff: CG is currently wrestling with huge issues and it would be

valuable to get a customer perspective once in a while.

Robin: UNOLS has money to support a "Robin and Jon" visit, perhaps

others.

Rall: also interested

Phil: could present ocean observing efforts also to make him aware.

Rall: visited a couple of weeks ago to update on summer visit. Helped inform the staff of how this process works.

Bunks:

We don't want the bunk conversions. Will provide a write-up.

Larry Mayer will walk-through the ship during this summer and makes notes e.g. make notes to help future chief scientists assign cabins, etc.

Officer Rotation:

Most of the senior officers (CO, XO, and OPS) are rotating over the course of the summer. Only one senior officer (EO) is staying.

MSO is staying.

1030 Meeting Adjourned