BASA Agenda

December 16 2014, 2014 6:30 PM to 9:00 PM

Arctic Community Meeting Space: AGU 2014 Room One
American Geophysical Union Fall Meeting
Location: The Marriott Foothill E, 2nd Floor

1. **Introductions of Barrow/Atqasuk Science Advisors , UIC Science Staff and Invited Guests**

Hank Loescher, NEON
Jennifer Mercer, NSF (on behalf of Renee Crain)
Vladimir Romanovsky, UAF
Nagruk Harcharek, UIC Science
Naomi Whitty, Polar Field Services
Katrine Gorham, NEON
Ryan Cody, UTEP
Larry Hinzman, IARC, UAF
Andy Mahoney, UAF
Carin Ashjian, WHOI
Stan Wullschleger, ORNL
Aram Kalhori, SDSU (on behalf of Donatella Zona)
Anna Schemper, Polar Field Services
Jon Dunham, UIC Science
Anne Jensen, UIC Science
Karl Newyear, UIC Science
Araina Danner, UIC Science
Anna Lilijedahl, UAF (via teleconference)
Hank Statscewich, UAF (via teleconference)

2. **Election of committee officers** – tabled until a later date
3. **UIC Science - discussion of committee purpose and how this will facilitate science in the Barrow/Atqasuk area (Committee feedback and interaction encouraged)**

We talked about the name change from UMIAQ to UIC Science and the consolidation of the two businesses into one.

a. Facilities

We talked briefly about the need for a facilities plan to move the improvement of the NARL campus forward and to fulfill the promise of the unbuilt 4 phases of the BARC.

i. The BARC and the 5 phases to complete

Discussed the fact that only phase one of the BARC has been built and we are reaching a critical point where current facilities may be not be enough to meet demand during the

summer months. Phases 2-5 include a warehouse/ shop, additional laboratory space, classroom and office space, and a dormitory with cafeteria.

BARC vacuum and compressed air. There have been issues with functionality of some of the BARC features such as the vacuum and compressed air. UIC Science has been addressing these issues one by one to ensure functionality is available when needed.

ii. Residential facilities (existing & proposed)

We discussed that housing is a current critical issue with much of it being old (world war II era) and requires significant maintenance. It was also identified as a critical issue in the NSF Increasing Arctic Accessibility over the next 20 year report on logistics.

We discussed preliminary plans UIC Science has to remodel the 200 wing of NARL Bldg. 360 and Bldg. 361 to accommodate researcher housing. Comments from the committee about these plans were mixed. There needs to be privacy for some groups who are together all the time. Some concerns about traffic through the wing. Housing should be a mix of housing types. One comment we received was that some researchers don't like bunk beds. UIC Science staff asked that they take time to review the plans to remodel Bldg. 360 and 361 before deciding on their acceptability.

Researchers should not be segregated from the Barrow community. Don't turn Barrow into to Toolik! Contact with community is an advantage. The key component of having an area for social interaction was also raised by committee members. Where that would be is unclear if it cannot be the cafeteria in Bldg. 360. The BARC additions will have a cafeteria and housing, but will isolate researchers from the community.

The question was asked, "How beds were needed in a research season and how many are available?" UIC Science did a count of researcher use and figured the minimum number of beds needed was 71 for 2014, with the possibility of up to 90 beds needed with NEON on-site in 2015-16. Mention of need for surge capacity to handle ship transfers, etc. Consensus that demand will grow. Need for space for field classes.

Better shipping and receiving information – for researchers**.** We discussed that there should be more details about how to ship materials and equipment to Barrow. There was some discussion about a tracking database and a freight handling system. It was pointed out that due to multiple shipping options UICS is reliant on scientists to provide

tracking info so we know what is coming and can be helpful. There was also discussion about where to provide those details, like the Barrow Bulletin.

b. Vehicles

We talked about the current fleet of trucks and vans; some will be converted to nature gas. NSF trucks are aging and may not be replaced. There are plans for other transportation that would be along the lines of 4-wheel drive side by side vehicles with heated cabs and street legal features. These vehicles have much better fuel economy and not every researcher needs a truck. Track kits could also be put on these vehicles for winter use. Having a range of different types of vehicles and thus more flexibility seemed to be well received by the committee. Concerns were expressed about repair capabilities long-term.

c. BARC services

i. New features: -80 freezer, Millipore system moved to BARC, icemaker, autoclave. RO system is 95% working. Walk-in freezer management planning being improved; BASA input would be helpful.

ii. BARC vacuum and compressed air. There have been issues with functionality of some of the BARC features such as the vacuum and compressed air. Scientists expressed interest in those systems. UIC Science has been addressing these issues one by one to ensure functionality is available when needed.

iii. There was the feeling a separate rad lab and stable isotope lab separate from the BARC facilities was a good idea.

iv. Having dry ice capability would be a good idea. We plan to purchase a dry ice maker and limited CO2 supplies until we can ship more from Seattle in the Fall 2015.

v. More -80 degree freezer space as back up space would be good. We'll review further.

vi. Management – need to communicate better with researchers about Hazardous Materials and batteries before they arrive in Barrow. Need for pre-proposal planning to ensure funds for proper disposal. Discussion about providing info on removal to make it look easy to researchers to encourage them to do the right thing.

vii. Instruments – microscopes with low power good for common use, high power one not so much. Balances would be good since they don't travel well. Getting drying ovens with various configurations seemed to be desirable. Cautions against getting things that can't be maintained. More researcher guidance would be helpful.

d. Conflict Reduction – we need to have guidelines for new researchers, avoid conflicts with existing projects, and avoid damage to environment, be aware of local issues that might not be

obvious. Also the committee could advise staff on reasonable decommissioning requirements; maintaining sustainability of land uses.

i. Electronics (wireless, radio, etc.) – we talked about the fact that the radios we currently use piggyback on the NSB radio carrier. They will be converting to digital soon and we will be compelled to do the same. We discussed the need to either convert with the NSB or run our own system. Issues with different projects inadvertently taking over spectrum from others. Also a mention by Hank Loescher that certain types of radios have been found to affect mass flow controllers remotely so they should be avoided.

ii. Airspace

iii. Water

iv. Land -- BAID really helping with this. Guidelines for boardwalks, etc. to avoid long-term damage.

v. Community interactions – Avoiding whaling. Need to be proactive. Saves a lot of trouble in the long run.

e. Infrastructural support

i. Electricity - BEO power line discussion -NEON adding a new spur to the existing line. Barrow one of few sites in AK where line power is available which opens up opportunities to do measurements that cannot be done elsewhere (Larry Hinzman) and limitations are being reached; more capacity needed. Power enables lots of science (Hank Loescher, NEON). It's important to make sure that things are up to (NEC) code. Discussed maintenance of the power line spur, but not the distribution system. The distribution system needs to be regularly checked to verify safe functionality and electric code compliance. Grounding is an issue

ii. DeLorme units available to researchers and staff. These enable tracking movements in the field and simple text communications to indicate status of team in the field.

iii. Safety supplies. Need to ensure the sheds in the field are adequately supplied and current.

f. Committee support and meeting frequency – generally agreed that the committee should meet monthly until a facilities plan is completed. Then two or three times a year.

g. Annual Work Plan for BASA – not discussed.

4. **BASA members** – discussion of what each researcher's expectations are for Barrow and Atqasuk – increasing infrastructure to meet demand. Power washer (off-hour availability stressed). The marine capability increasing our access to boats. Access to the ocean, fueling boats are issues for research currently. Vessel to shore connection capability important.

In Atqasuk – Would be good to have dedicated workspace there as well as additional beds. More ATVs and trailers, and maintenance on researcher trails and sites are needed. Better internet would be good. Satellite a possibility?

For the BEO or any other remote field excursion where there are no permanent restrooms, field sanitation needs to be improved.

5. **Next Actions by BASA** – write up minutes and schedule a teleconference for January.
6. **Adjourn**