

McMurdo Area User Committee

(MAUC)

ANNUAL MEETING

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Raytheon Polar Services Company
Centennial, Colorado

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Recommendations

Topic: The management plan of the Dry Valleys ASMA (Antarctic Special Management Area) was developed with scientific input, but the input needs to be broader and ongoing. After its first year of operation, some issues and areas for improvement have been identified by the grantee community.

Recommendation: A more thorough review of ASMA issues may be a topic for the next MAUC or for a subcommittee. If there is an opportunity for revising the Dry Valleys ASMA plan, that might be a topic for a subcommittee. The committee may recommend that NSF develop a process for receiving grantee input on future proposed management plans.

Topic: Staging space is needed for assembly, testing, and re-packaging for transport of scientific equipment to the deep field. 100% of groups surveyed last year said they will require increased staging space in the future. The ANDRILL project will displace 70% of the science in Phase 2 during the 2006-07 field season. No plans are in the works for improved staging space for science groups.

Recommendation: The committee recommends allowing science groups to use a temporary structure for staging space while ANDRILL requires much of the Crary Lab space. They also recommend that a longer term solution be determined.

Topic: A new charter for USAP user committees is being drafted and agreed upon by all user committees. An important aspect of the new charter is identifying sources for topics that can be addressed effectively by the user committees.

Recommendation: During outbrief meetings with individual science teams, request permission to flag issues that can be made available to MAUC and other station user committees. This will provide one possible source for topics for the committees to address.

NSF briefings

Icebreaker

- The Polar Star will be available this season;
- NSF is considering chartering *the Krasin* again to assist the Polar Star.

Re-supply challenges & alternatives

- A subcommittee of the OAC has been set up to look at long-term alternatives for station re-supply.
- The report can be found at http://www.nsf.gov/news/news_summ.jsp?cntn_id=104354&org=OPP&from=news

IPY preparations

- An announcement will be published in late August/ early September, calling for IPY proposals to be submitted by early December.
- NSF's IPY efforts will focus on
 - Ice sheet dynamics,
 - Observing systems, and
 - Polar night.

Alternate power for South Pole

- NSF is considering three ways to address this issue:
 - Conservation. There is a specific plan in place that targets a 10% savings in fuel
 - Overland traverse. The goal is to free up 90 to 100 LC130 missions. Funding is a limitation but NSF hopes to complete the proof-of-concept this next season.
 - Alternate power. NSF is working with the New Zealand program to investigate options.

RPSC briefings

Information technology / Communications

Communications upgrades: The current off-continent bandwidth is a T1 line yielding about 1.5Mb per second (Mbps) which includes both digital and telephony. Because the space segment provider's contract is up for rebid, the bandwidth will be upgraded to 3Mbps.

Dry Valleys Data Network: RPSC is planning to replace all the Freewave 900Mhz network radios they use to get connectivity to the Dry Valleys. This will boost the bandwidth to the Valleys by a significant factor, i.e., from about 128K to 600K. There will be no changes to the infrastructure itself, i.e. no new repeater locations or antennas; the radios will be simply swapped out. This means, where there is currently good connectivity, it will get better immediately. Where connectivity is poor due to weak signals, it will remain poor. But the bulk of Dry Valleys operations will benefit from this improvement.

Telephone numbers in McMurdo will be changed to the local Denver area code.

IT security: Grantee laptops will be screened in Christchurch to make sure ad ware, spy ware, virus definitions are up-to-date. Alternatively, Cray lab IT staff will screen computers as they have in the past.

As a government requirement, IT security will conduct two vulnerability assessments per year, one in summer and one in winter. An independent vendor conducts the assessments. Grantees are notified by email in advance of the testing.

Fleet Ops

Rough sea ice conditions may necessitate the building of roads to sea ice camps and limiting sea ice travel to the roads.

New sea ice dive-hole drill: There is one Reed drill for making dive holes. New drills based on melting or rotating augurs are being reviewed by RPSC at this time.

Logistics

Shuttles: At NSF direction, RPSC has instituted an enhanced shuttle schedule to minimize wheeled traffic on the ice roads.

Samples for retrograde: All samples with different project codes will be sent on separate bills to ensure that one groups' samples do not hold up another groups'.

Samples turned over to USAP cargo for retrograde will be tracked using a comprehensive chain-of-custody procedure which will include a serial number and receipt confirmation. Michael Davis will provide more information at the inbriefs when groups arrive in McMurdo.

Hand carried samples: The Air Force will not allow scientists to carry boxes on a flight if they do not fit under a seat. If it doesn't fit under the seat, the container will be shipped as cargo on the same flight like gate-checking a bag on commercial airlines. Upon arrival in Christchurch, the grantees will retrieve it at the cargo yard in Christchurch.

Environmental, Health & Safety

Dry Valleys ASMA (Antarctic Special Management Area): The committee reviewed some of the new rules regarding field work in the Dry Valleys and their impacts on field activities. There was a concern that, in some cases, science teams' informal (non-treaty) 'rules' for maintaining the long-term value of important sites are more effective and less of an imposition to normal field ops than the official guidelines. A letter from Chris McKay was read listing some of the issues with the ASMA in Battleship Promontory. (The letter was forwarded to RPSC's environmental department).

Recommendation: A more thorough review of ASMA issues may be a topic for the next MAUC or for a subcommittee. If there is an opportunity for revising the Dry Valleys ASMA plan, that might be a topic for a subcommittee. The committee may recommend that NSF develop a process for receiving grantee input on future proposed management plans.

Staging space

Staging space is needed for assembly, testing, and re-packaging for transport of scientific equipment to the deep field. 100% of groups surveyed last year said they will require increased staging space in the future. The ANDRILL project will displace 70% of the science in Phase 2 during the 2006-07 field season.

Despite this clear and important need, no plans are in the works for improved staging space for science groups (i.e. large open areas to assemble/test equipment bound for the field). All suggestions put forward last year for temporary buildings or new arrangements of existing

space were rejected because of a lack of funds. Pre-deployment assembly and testing is an essential part of ensuring that the expense and effort of deployment into the deep field is not wasted.

Recommendation: The committee recommends allowing science groups to use a temporary structure for staging space while ANDRILL requires much of the Crary Lab space. They also recommend that a longer term solution be determined.

Planning and the upcoming season

- WAIS Divide camp construction will begin; field activity is being ramped up for the next several years.
- LC130 missions are heavily committed to finish off the bulk of ICE CUBE and the South Pole station modernization.
- There will be 3 Twin Otters providing support this season:
 - 2 for USAP support
 - 1 for the meteorite group (ANSMET). This airframe will also be available for general use when ANSMET is not using it.
- This is the final season of PHI's helicopter support contract. The helos will be retrograded at the end of the season.
- The severe sea ice conditions of the last several years may be alleviated with the recent movement of the large icebergs.
- Analytical support: This year will be a continuation of last year's model where the McMurdo LTER groups manage analytical support for their own groups and provide assistance to non LTER groups.

New charter / defining roles and responsibilities for MAUC

A new charter (draft) for USAP user committees was reviewed by RPSC and MAUC members. This charter incorporates many of the objectives of the earlier charter, but re-emphasizes the role of the committees as a forum for issues specific to each station's support provided to science teams. A new emphasis on small sub-groups to address specific issues (e.g., Dry Valley communications, or new BFC equipment) is implied. These groups should include RPSC and in some cases NSF personnel so that the discussion can proceed with all facts and policies represented.

The charter discussion included several suggestions for changes to the draft. The changes were incorporated and the revised draft was distributed to the Palmer and South Pole user committees. The charter revision is currently an ongoing project.

The significant changes represented by the new charter are:

- One charter for all on-continent user committees (the vessels have a separate charter)
- By-laws can be different for each station, if necessary.
- The results of the committee meetings are not "action items" but "recommendations."
- RPSC will report the recommendations to NSF and NSF agrees to respond to the recommendations.
- Subcommittees can be formed to address specific issues

The charter discussion broadened to a discussion on communications and participation by the larger community - two topics came up specifically: The usefulness of the 'ad hoc' meetings that occur at McMurdo during the austral summer season and the usefulness of the exit interviews ("outbriefs") as a source for MAUC action committees.

Recommendation: During outbrief meetings with individual science teams, request permission to flag issues that can be made available to MAUC and other station user committees. This will provide one possible source for topics for the committees to address.

Committee membership

POSSIBLE NEW MEMBERS to replace outgoing committee members:

Ted Scambos : Tom Neuman
Dave Marchant : Brenda Hall
Sam Bowser : Stacy Kim or Dave Petzel
Dave Morse : Ken Taylor, Mark Twickler, Gregg Lamorey
Bob Lowenstein : Gonzalo Hernandez

Joe Mastroiani will formally replace Tony Hanson

Suggested subcommittee topics for the coming year

1. Dry Valley/McMurdo IT and digital comms. Suggested specialist members: John Priscu, Joe Mastroianni
2. New Drill for Dive Hole/Sea Ice research. Suggested specialist member: SamBowser
3. Staging Space for field groups. Suggested specialist member: Don Voight

Other possibilities:

- ASMA discussion group
- Crary Lab Analytical Equipment

Appendix A: Attendees

Committee Members:

Ted Scambos, Chair
Sam Bowser
Bob Loewenstein
Dave Marchant
David Morse
Peter Doran

McMurdo Grantees:

Jeff Blair
Joe Mastriaonni

NSF via telecon:

George Blaisdell
Scott Borg
Marie Bundy
Erick Chiang
Vladimir Papitshvilli
Brian Stone
Tom Wagner

RPSC:

Steve Alexander
Jessie Crain
Steve Dunbar
Joni English
Cara Ferrier
Patricia Jackson
Charlie Kaminski
Dave Leger
Mike McClanahan
Dave Nelson
Karen Pavich
Melissa Rider
Andy Young

Appendix B: Agenda

8:00	Continental Breakfast	
8:30	Welcome & introductions Overview of agenda	Ted Scambos
9:00	NSF Briefings Icebreakers update IPY preparations Alternate power for South Pole? (to save fuel and HerCs for MCM-based field parties)	
10:00	Break	
10:20	Special Topic New charter, reporting, and response system for USAP User Committees	Patricia Jackson
12:00	Lunch	
	RPSC Briefings	
1:00	Communications/internet (security testing, criteria for getting computers/instruments on the network, bandwidth expansion, Dry Valley connectivity, wireless)	IT staff (details on back)
2:30	Break	
2:45	Fleet Ops: Rough fast ice in McM sound - how will impacts be addressed? New sea ice dive hole drill?	Ron Nugent
3:00	Logistics: Packing samples for retrograde. Shuttles	Michael Davis
3:30	Dry Valleys ASMA	Cassandra Shenk
3:45	Lab: "Staging space" for field teams in McMurdo?	Steve Alexander
4:00	Wrap up & general discussion	
4:30	Meeting adjourns	