McMurdo Area User Committee *(MAUC)*

Recommendations and NSF responses from the annual meeting
16 July 2007

Recommendations

Staging Space

Lack of appropriate staging space remains an area of top concern for MAUC. A study group was formed last year on MAUC's recommendations and communicated findings to RPS. Jim Scott communicated to the committee that he thought some of the most promising areas for space were in buildings 183, 157, or 159. John (Woody) Haywood suggested an immediate solution for staging space during select periods of the upcoming season could be found by utilizing a Jamesway on the ice runway.

Recommendation #1
Additional staging space should be made available to grantees through a combination of: a) immediate solutions (e.g. the ice runway jamesway, b) intermediate solutions (e.g. through reallocating space in buildings 183, 157 or 159) and c) through long range planning (e.g. by providing dedicated staging space in the design of new buildings such as Science Support Center Phase II). MAUC recommends that Jim Scott continue to work with staging space committee (Tom Neumann and Sridhar Anandakrishnan) to identify possible medium- and long-term solutions.

Following consultation with NSF, RPSC's response to the recommendation:
RPSC and NSF recognize the issues noted and will work to identify additional staging space on an as-needed basis for research use. It may not be space in direct proximity to the lab, but RPSC is working with NSF to reduce the storage footprint at McMurdo and hopes to gain additional indoor space in the process. RPSC will advise the MAUC members when the space is identified.

Wireless in Building 155

MAUC was pleased with the response to last year's recommendation to add wireless to dorms where grantees reside. The wireless in buildings 208 and 209, in addition to that in 203, should help reduce space issues in CSEC. However, many grantees are also housed in Building 155 and they are left out of the current wireless configuration. In addition, the dining facility is an ideal place to have group meetings or find quiet office space outside of meal hours. We understand that kitchen staff need to have the dining area clear of people during times immediately before and after meals (or perhaps just after?), but is there a reason hours could not be posted where the galley is available for grantees to set up a notebook and get some work done?

Recommendation #2
Wireless in building 155 should be revisited. At the very least having grantee access to wireless in the 155 lounge and dining facility would provide ideal places for grantees to meet and work and relieve congestion in CSEC.

Following consultation with NSF, RPSC's response to the recommendation:
The long-range plan is to expand wireless access to the entire community, which will give grantees greater choice in ad hoc meeting and workspaces thereby increasing productivity. RPSC does make portions of the dining facility available for scheduled meeting space between meals, but with varying shift and work schedules there is decreasing time between meals. Although this availability will continue, over the longer-term RPSC will consider options such as reconfiguring or dedicating other, better suited spaces (e.g. lounges) as multi-user workspaces than increasing demand on the dining facility. RPSC will advise the MAUC members when changes are made.

USGS Mirror Site in McMurdo

A recommendation from last year's MAUC meeting is still largely not addressed. That is to have a mirror site of the USGS Atlas reside in McMurdo. We understand one of the problems is in communicating with the appropriate people at USGS

Recommendation #3
A mirror site of the USGS Alas site should be maintained at the Crary Lab

Following consultation with NSF, RPSC's response to the recommendation:
RPSC has discussed the possibility of a mirror site with USGS. Implementation of a mirror site is not a trivial undertaking, requiring considerable configuration and customization of the software and server. It is not an option under the current staffing constraints at USGS. The NSF concurs with this recommendation and will discuss the feasibility of implementing the mirror site with USGS in the future. NSF will then ask RPSC to investigate IT resources that may be required.

Impact of "Just in Time" on science

MAUC was briefed about the proposed new operational strategy in McMurdo to operate in much the same way large companies like Boeing and Ford operate, by having minimal supplies on the continent, and instead have them delivered when needed (e.g. "just in time"). Although MAUC is sympathetic to the need to streamline and save money, MAUC is very worried about the impact of this new strategy on Science. One of the reasons that the U.S. generates cutting edge science is because of the flexibility the logistics hub of McMurdo provides. Carrying out science in the inhospitable environment of the Antarctic generates unexpected needs to improvise in order to get the job done. We are very worried that by reducing the inventory on the Ice, the ability to quickly adapt to unexpected challenges will be lost, and so will our scientific edge.

Recommendation #4

The economic benefits of the "Just in Time" operational strategy should be carefully weighed against its impact on the adaptability of science. Through annual meetings, MAUC should be kept apprised of how this strategy may impact science on the continent.

Following consultation with NSF, RPSC's response to the recommendation:

The concepts of "just in time" (JIT) and centralized inventory management are targeted primarily at station operations functions, where RPSC and NSF believe there is considerable room for improvement. RPSC is certainly aware of the need to balance flexibility in research support and will work to ensure that planned research activities are not adversely affected by supply chain improvements. RPSC's Science Support Division will coordinate with the supply chain managers to ensure that adequate supplies of equipment issued to science projects are identified and maintained, per the lean USAP and JIT guidelines.

Changes to the "Meet and Greet" in Christchurch

MAUC was informed of plans to eliminate the meeting of participants in Christchurch and instead provide hotel and clothing issue instructions prior to participants leaving CONUS. MAUC agrees that this is an appropriate way to scale back operations and should for the most part work fine. One concern though is that there is no way to communicate any change in plans to grantees from the time the leave their homes to the time they arrive at their hotel in CHC. Such a changes may include the need to have gone to the CDC before going to the hotel, or a hotel change.

Community views collected by Stacy Kim after the MAUC meeting: Nearly all science parties require the CDC truck to transport their equipment from the Christchurch airport. This should be standard procedure, rather than requiring special requests.

Recommendation #5

A method of getting messages to participants arriving at the Christchurch airport should be established so that any critical changes (hotel reassignment, clothing issue changes, etc.) can be communicated to the participant as soon as they arrive and before they leave the airport area. Suggestions for doing this include a bulletin board in a locked glass case or computer screen in place of the RPS booth that is currently at the airport.

Following consultation with NSF, RPSC's response to the recommendation:

In general, last-minute changes to hotels or clothing issue times will not occur. However, RPSC recognizes that there may be exceptional situations and offers several options: In the rare circumstance that a hotel became unavailable, RPSC would send a messenger to meet the arriving grantee. In the rare circumstance that clothing issue times changed, RPSC would call the grantees at their hotel. Grantees have options to communicate changes to RPSC: Reply to the email message from CHC travel that outlines arrival arrangements or call the CDC upon arrival. For delays enroute, call the RPSC emergency number (available 24/7) provided in travel documents. RPSC will monitor the outcomes of the new procedure and will seek NSF approval to remedy the situation if it results in difficulties for grantees.

Radioisotopes in CSEC

Over many years of radioisotope use in CSEC as a metabolic tracer, it is inevitable that contamination has occurred. This contamination is not at levels that can be detected by scintillation counters, and not at levels to be of any health concern. It is, however, at levels that have provided a situation of "incompatible science". Grantees who analyze small samples for natural radiocarbon abundance as a geochronometer have found exceptionally high levels of ^{14}C in samples which have rendered them useless for the purpose they were collected. This was previously not a serious issue, but advances in Accelerator Mass Spectrometry (AMS) allow for very small samples to be analyzed and exceedingly small amounts of radiocarbon (and hence contamination) to be detected.

Recommendation #6

MAUC recommends a four-phased approach to reduce the impact of the radiocarbon contamination in the Crary Lab:

a) Phase II labs should be thoroughly cleaned in a way that reduces radioisotope contamination. Testing areas of the lab for low-level contamination should be considered (i.e. using AMS techniques)
b) A general isolation policy should be adopted whereby any grantees who have access to the Radiation Lab should not be assigned space in Phase II, and grantees who use 14C as a geochronometer should not be assigned space in Phase I.
c) Equipment used by grantees who have access to the rad lab should be tracked and identified (e.g. with a permanent red label) so that grantees concerned about potential contamination can be confident in equipment cleanliness
d) Samples of grantees who use the Radiation Lab should not be stored in Phase II freezers.

Following consultation with NSF, RPSC's response to the recommendation:

The recommendations have merit and RPSC will determine the feasibility of implementing them.

The contractor's role in proposal reviews

The science community has expressed concern that the role of RPS in making decisions on proposal funding was not clear, and feedback on ORW's not given. MAUC was informed of the role of RPS in the proposal review process.

Recommendation #7
As well as the mail-in reviews and panel summaries provided to proposal writers, a summary of the review carried out by RPS, as well as any role it may have played in the funding decision should also be provided so that proposal writers can make the necessary adjustments to future proposals

Following consultation with NSF, RPSC's response to the recommendation:
A recent OPP Committee of Visitors reviewed the proposal process and recommended that, rather than performing operations reviews on every proposal, OPP should only request operations reviews for a subset of proposals that Program Managers felt had a likelihood of funding. For this subset of proposals, RPSC gives NSF an indication of operational feasibility, sometimes involves tradeoffs, which NSF must consider. NSF weighs potential options along with scientific merit and from this makes funding a decision on the proposal. RPSC is not involved in the decision process. Therefore, since operational issues are only part of the many considerations that go into proposal decisions, it would be misleading to provide a summary of the operational feasibility discussions that take place between NSF and RPSC.

SuperDARN and EMI issues

MAUC was informed of the Super Dual Auroral Network (SuperDARN) site to be established in the McMurdo area.

Recommendation #8
MAUC should be kept informed of developments with regards to SuperDARN and MAUC member Steve Barwick has volunteered to act as a conduit between NSF and the science community to ensure that EMI issues are thoroughly addressed.

Following consultation with NSF, RPSC's response to the recommendation:
RPSC plans to keep MAUC informed of developments related to SuperDARN.
