

Palmer Area User Committee  
*(PAUC)*  
Annual Meeting  
2 September 2009  
Raytheon Polar Services Company  
Centennial, Colorado

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**Palmer Area User Committee (PAUC) Meeting  
2 September 2009  
Committee Recommendations**

***Publish Antarctic Geospatial Information Center Documents***

- AGIC documents will be passed on to all Principal Investigators and grantee work groups by Planning Support Managers. Documents will also be posted Palmer Area User Committee webpage:  
<http://www.usap.gov/conferencesCommitteesAndWorkshops/userCommittees/sctnPAUC.cfm>

***SCUBA dive accident training provided incoming medical doctors***

- Douglas Freer (RPSC) will review dive accident training provided to all incoming Palmer Station Doctors and work with Rob Robbins (RPSC) to provide standardized training requirements.

***ECW gear request***

- Ken Navarro (RPSC) inventory “Big Red” parkas available at clothing issue to assure sufficient stock for winter groups.

***Publish facility pending project list***

- Steven Wickins (RPSC) will post facility pending project list to Palmer Area User Committee webpage:  
<http://www.usap.gov/conferencesCommitteesAndWorkshops/userCommittees/sctnPAUC.cfm>

***Form sub-committee for buying Science Instrument and Equipment***

- Lifecycle priority of lab equipment needs to be determined. Some equipment has no replacement parts. Input has been given during previous PAUC meetings.
- A subcommittee will be formed to provide further input.

***Moving weather system: Palmos***

- Mike Cormody and Tracey Baldwin will follow up by providing recommendations.

***Improve communications between PAUC members***

- RPSC: An email forum is a solution, or a teleconference between PAUC members only can also be set up.

**Palmer Area User Committee (PAUC) Meeting  
2 September 2009  
McMurdo Auditorium/Teleconference**

**Committee Members** **Bill Baker, Chair; Maria Vernet,** Dave Denlinger (absent), Debbie Steinberg (absent), **Bill Fraser,** Rick Lee, **Hugh Ducklow,** Kristen O'Brien, **Alison Murray, Germar Bernhard,** Members.

<b>Time</b>	<b>Item</b>	<b>Owner/ Subject Matter Experts</b>
8:15	Phone line open	Tracey Baldwin is phone administrator
8:30	Welcome <ul style="list-style-type: none"> <li>A. PAUC</li> <li>B. Raytheon Polar Services- PAUC goals</li> </ul>	Tracey Baldwin <ul style="list-style-type: none"> <li>A. Bill Baker</li> <li>B. Sam Feola</li> </ul>
9:00	NSF Welcome and General Science Outlook USAP	Scott Borg
9:30	Peninsula Operations <ul style="list-style-type: none"> <li>A. Peninsula vessel support/ schedule update if possible</li> <li>B. Pier status update</li> </ul>	Rebecca Shoop <ul style="list-style-type: none"> <li>A. Alex Isern/ Bob Farrell</li> <li>B. Rebecca Shoop</li> </ul>
9:45	USAP Medical <ul style="list-style-type: none"> <li>A. Flu and Community health</li> </ul>	Douglas Freer/ Rebecca Shoop
9:55	Logistics Update <ul style="list-style-type: none"> <li>A. Sample shipment</li> <li>B. Extreme Cold Weather Gear</li> </ul>	Ken Navarro and Bob DeValentino
10:05	Facilities Update <ul style="list-style-type: none"> <li>A. Existing projects 2009</li> <li>B. Proposed project 2010</li> <li>C. Committee recommendations/Wish list</li> </ul>	Steven Wickins
10:20	IT updates <ul style="list-style-type: none"> <li>A. Webcam</li> <li>B. Armed Forces Radio Television Service</li> </ul>	Lora Folger
10:30	BREAK	
10:45	Antarctic Geospatial Information Center (AGIC)- PPT	Michelle LaRue
11:00	Field Support <ul style="list-style-type: none"> <li>A. ASMA management</li> </ul>	Tracey Baldwin/ Rebecca Shoop A. Nadene Kennedy
11:15	Lab Services <ul style="list-style-type: none"> <li>A. PolarIce- who buys what</li> <li>B. Science Instruments and Equipment- recommendations on LCR priority</li> <li>C. Scientific Journal and Library materials</li> </ul>	Tracey Baldwin
11:30	Palmer Data <ul style="list-style-type: none"> <li>A. UV Monitoring System</li> <li>B. Pamos/ Weather System at Palmer</li> <li>C. AWS updates (Hugo and Bonaparte)-PPT</li> </ul>	Tracey Baldwin <ul style="list-style-type: none"> <li>A. Tracey Baldwin and Germar Bernhard</li> <li>B. Mike Carmody</li> <li>C. Matthew Lazarra</li> </ul>
12:00	New Topic Recommendations and open discussions	Bill Baker
12:30	Closing remarks and PAUC committee business	Bill Baker

**Palmer Area User Committee (PAUC) Meeting  
2 September 2009  
Attendees**

- **Bill Baker**, PAUC 2009 Chair
- **Maria Vernet**, PAUC 2009 Member
- **Bill Fraser**, PAUC 2009 Member
- **Rick Lee**, PAUC 2009 Member
- **Hugh Ducklow**, PAUC 2009 Member
- **Kristen O'Brien**, PAUC 2009 Member
- **Alison Murray**, PAUC 2009 Member
- **Germar Bernhard**, PAUC 2009 Member
- **Scott Borg**, Director, Division of Antarctic Science, NSF
- **Alex Isern**, Oceans Project Manager, Antarctic Infrastructure and Logistics, NSF
- **Jessie Crain**, NSF
- **Nadene Kennedy**, Polar Coordination Specialist, NSF
- **Tracey Baldwin**, Supervisor Lab Ops, RPSC
- **Sam Feola**, Program Director, RPSC
- **Rebecca Shoop**, Palmer Area Manager
- **Bob Farrell**, Palmer and Marine Area Director, RPSC
- **Douglas Freer**, Senior Medical Supervisor, RPSC
- **Ken Navarro**, Peninsula Logistics Supervisor, RPSC
- **Bob DeValentino**, Peninsula Logistics Coordinator, RPSC
- **Steven Wickins**, Facilities Engineer, RPSC
- **Lora Folger**, Information Technology Manager, RPSC
- **Rob Edwards**, Lead Planning Support Manager – Cruise and Special Projects, RPSC
- **Kelly Jacques**, Environmental Engineer, RPSC
- **Mike Carmody**, Meteorological Coordinator, RPSC
- **Michelle LaRue**, Geospatial Analyst, Antarctic Geospatial Information Center
- **Matthew Lazzara**, Principal Investigator of the Antarctic Automatic Weather Station Program, Antarctic Meteorological Research Center

**Palmer Area User Committee (PAUC) Meeting  
2 September 2009  
Meeting Minutes**

**WELCOME AND INTRODUCTIONS**

Tracey Baldwin and Bill Baker welcome the group.

RPSC overview: Sam Feola

- RPSC appreciates PAUC member participation.
- NSF announcement regarding contract delay allows RPSC another 19 months.
- LMG negotiation status: RPSC is in active negotiation with ECO, and have agreed on pricing with exception of indemnity clause. Two 5-year terms are being negotiated. A maritime lawfirm is assisting with negotiations.
- RPSC is being proactive regarding flu viruses and H1N1. Incident management team meets weekly in Denver. Dr. Freer will lead discussion later in meeting.

NSF overview: Scott Borg

- Budget rollercoaster this year has resulted in curtailing of some projects, but did not impact Palmer science directly
- LMG charter expiration shouldn't have curtailed project solicitation as the NSF requested science community to assume capability would continue
- Stimulus package has allowed investments in new projects across the program
- LARISSA is a recently funded peninsula project, and is first project funded under integrated systems science program
- Commitment to support science on the peninsula remains strong

**SHIP SCHEDULE**

PAUC ship schedule concern: Ship service to Palmer is sparse. Inquiry re: possible additional cruises

- RPSC: No additional cruises are planned for the coming year as no further operational or scientific requirements have been identified. Current cruises are tied to science and are full.
- NSF: Option of occasional air link to Palmer is being explored as method to move people and small amounts of cargo. Goal is to fully meet science requirements while optimizing ship operation efficiency. Ship and fuel costs are high.

**PENINSULA OPERATIONS**

Palmer Pier: Rebecca Shoop

- Survey done last year by RPSC. Report available.
- Issues: corrosion, holes, flaking, mooring out of plumb, and increased sink holes.
- January 2009: Two divers completed joint repair, attached anodes, and repaired larger holes. Smaller fill leakage has mostly ceased.
- ECO no longer tying to bollards on pier. More bollards have been installed on shoreline.
- September/October 2009: another bollard to be installed on shoreline
- January 2010: Three divers will complete more repairs
- Yearly observations and repairs will continue
- Funds for repairs have been included in FY10 APP

NSF comments:

- Consultant has been hired to study Palmer Station operations and resupply.

- Discussions re: a less expensive solution to a new pier/usable pier are occurring with ECO and others

#### Palmer Fuel: Rebecca Shoop

- Waxy fuel in tank #1; 25,000 gal currently of unusable fuel
- Plan to reconstitute 19,000 gal will incorporate adding 50% Jet A fuel. Will then take 7 months to burn fuel.
- Waste fuel will either be
  - 1) Sent out on Haz run in 2 years; or
  - 2) Sent out on NBP Nov 2010. Attempting to get funding and supplies to start burn in Feb 2010; team in Oct 2010 to clean up and package waste. Five extra folks would need to be on station for clean up and packaging. Next Haz run would be differed until 2013.

### MEDICAL

#### Flu Plan: Doug Freer

- Seasonal flu: season has peaked in southern hemisphere. Vaccine is required for deployment.
- H1N1: Seasonal flu vaccine does not help with this virus. Vaccine trials in progress. RPSC/USAP might be priority to receive vaccine when it comes out.
- Stockpiling supplies at Palmer and on vessels. ECO plan is to isolate individuals with H1N1 symptoms to their stateroom. EMT on board will identify individuals based on clinical diagnosis only; lab analysis to confirm diagnosis is not available on ships or at Palmer
- Consider flu virus prevention a public health issue
- Education, awareness, hygiene, antiviral meds are all important for prevention

#### Other Medical notes:

- Doctor on station this year teaches hyperbaric medicine, has worked on cruise ships and in remote settings
- Future agenda includes continuing to improve medical dive support at Palmer

### LOGISTICS

#### Permits: Bob DeValentino

- No longer *required* to have SAAG letter, but will continue to include
- Now only need single copy of SAAG, ACA, and USDA permits; can email to AGUNSA
- Signatures in ink still required due to issues with US customs in LA

#### Sample Shipping Process Overview: Bob DeValentino

- Goal is still 14 days for shipping temperature sensitive samples north
- PA to Santiago situation:
  - Only 3 flights per day available out of PA to Santiago
  - First 2/3 of cargo space per plane is for other cargo
  - Only 400kg dry ice per plane
  - If animal is in cargo hold, then no dry ice allowed on plane
- Data collection re: # of sample boxes used per group was initiated recently; this info will be summarized each season and sent out to each group to assist PI with SIP planning. Assists RPSC in budget planning and prep.

#### ECW Update: Ken Navarro

- Website creation has been resurrected; content and photos have been submitted to a web designer and thus should be online approximately 3<sup>rd</sup> week of September
- Additional funds have allowed replacement of some boots and in increase in overall inventory
- Increased inventory should assist with increased science support in peninsula area
- Specially manufactured bib coveralls may be procured
- Goretex coverall supply increased

- Field trousers should be available
- Red parka inventory can be increased by requesting some from Christchurch

## **FACILITIES**

Overview: Steve Wickens

- 2009: Main tasking involved science projects, improvements to Palmer appearances, and pier work. Chem locker was completed.
- 2010 Planned Tasking:
  - New bollards on the pier
  - NOC cooling project (to keep IT equipment at cool temps)
  - Bat cave upgrade to meet electrical codes
  - Boat house deck expansion (slanted ramp will be removed; 2 working spaces will be available)
  - Earth Station cooling project
  - Fire extinguisher send-outs (back to US for inspection)
  - Carp shop ventilation upgrades
  - Haz van lighting and exhaust improvements
  - Pier repair (4 people)
  - GWR bathroom exhaust fan replacement
  - GWR exhaust stack project (relocation of exhaust muffler farther from building)
  - Seismic hut power relocation
  - Rec hut rebuild
- T5 will remain as it is useful for storage
- Terra lab modifications may occur with installation of new project; recent consolidation of equipment has opened up more space
- Long-term proposals include connecting waste heat system together to capture waste heat, installing station hydrants for fire control, and removing existing day tanks (replace with tanks inside GWR and Biolab) which would help prevent fuel spills

PAUC facilities concerns:

- Boat access is treacherous on pier. Suggestions include adding railing or posts to loading areas to hang on to.
  - RPSC: Suggestion noted. Also looking into options re: rock star area as stability has decreased
- Temperature control in labs during the winter
  - RPSC: Issues in glycol loop system have caused problems; FEMC has been working on this. Filter system was installed to remove particulates. GWR boiler will also be replaced soon.
- Water leakage in Biolab
  - RPSC: Some water is still coming in, but dripping areas have been addressed and overall it is greatly improved
- Long-term plans for power plant/generators
  - RPSC: Ideally relocate generators to new place outside of GWR and capture waste heat from exhaust stacks. Smaller generators would increase efficiency; might be possible to obtain generators from elsewhere in the program.
- Long-term plans for waste water treatment
  - RPSC: May 2010: Environmental staff will deploy to Palmer to take samples and work with plumbing system. Feasibility studies re: a self-contained system that would require no extra maintenance or labor except for once or twice per year are underway.

## **INFORMATION TECHNOLOGY**

Security Update: Lora Folger



- Federal requirements are to bring all IT equipment up to date, including grantee-owned systems (any instrumentation attached to infrastructure)
- Annual awareness training is online every year
- Laptop screening occurs every year at beginning of season
- Security screening occurs constantly; if vulnerability is identified, grantees will be given notice. Must respond in 7 days, and remediate in 30 days.
- Let RPSC know about systems you will be using in the SIP or ORW; this assists in planning

Skype: Lora Folger

- Skype is a valuable tool but difficulty lies in providing it as a securely managed service
- RPSC continues to conduct testing and will deploy in 2010-11 if security concerns are alleviated
- Exceptions can be made currently for educational outreach purposes

Webcam: Lora Folger

- Online for 5-6 years through Woods Hole.
- Pole and McMurdo webcams have recently been added to USAP website; Palmer webcam may soon be added

AFRTS: Lora Folger and Bob Farrell

- Military has offered free receiver and antenna to Palmer so would receive approximately 10 channels
- IT is looking into requirements for installation
- Implementation would occur in the lounge only, not individual rooms, and would be used for special occasions only (major sporting events, elections, etc.)

## **ANTARCTIC GEOSPATIAL INFORMATION CENTER (AGIC)**

Overview: Michelle LaRue

- Funded 2007-2010
- Serves geospatial needs of science and operations within the ANT
- Tasks: collect existing geospatial data, provide cartographic services, archive and serve geospatial data, develop specialized software
- Programs: Balloon tracker, Fuel cache manager, Geo-wiki for Antarctica
- Highlights:
  - Access to commercial satellite imagery (very high resolution)
  - Plans are to incorporate bathymetry into geospatial database
  - Sea ice imagery available
  - New website recently released
  - PIs can contact AGIC directly with geospatial/mapping requests

Additional AGIC info:

- Palmer boating map can include local bathymetry
- Fuel cache management program will soon include sample collection and site manipulation points for the Palmer area to assist with future proposals
- PAUC would like to see imagery from Charcot and Wilkins ice shelf area

## **ASMA MANAGEMENT**

ACA overview: Nadene Kennedy

- ACA created in 1978, amended 1996. Cannot take data, mammals, birds, plants or any species in specially designated areas or introduce any species. Takes approximately 60 days from time ACA permit application received to act on and award. Requires 30 day public comment period, during which an internal OPP review is conducted. Outside comments from other organizations as well as reviews from researchers are obtained.

Need Marine Mammal Protection Act permit before award ACA permit. Note that a modification to the permit once in the field requires 30 days and notice in the federal register. Adding agents is a quick turn around, however; only need 3-4 days. Only permit holder can submit request. Agents should be qualified and trained, and mention of qualifications should be submitted with request.

Note: Pre-existing or historical structures (old towers for navigational aids, for example) should be listed within an ASMA management plan, but it seems as if the Palmer ASMA does not list these structures; Nadene will seek input from Polly Penhale regarding this issue, and how changes to or removal of those structures might be addressed.

## **LAB SERVICES**

Project supplies overview: Tracey Baldwin

- Project supplies are purchased according to the grant structure and proposal solicitation
- General guidelines for Polar Ice:
  - Stocked Lab Materials section = RPSC supports “to a threshold”. For the most part grants fall within this threshold.
  - Vendor Supplies section = Grant supports these items. Enter vendors for items that are specific to a project and not normally kept in stock on station.

PAUC supply purchasing concerns:

- There is confusion as to what should be included in the Vendor Supply section of Polar Ice vs. what should be supplied directly from grants
  - NSF: The goal is to transfer the full cost of the project into the grant. If a grant is older, money was likely not allocated to purchase some of these vendor items and thus would need to be included in the Vendor Supply section of Polar Ice. Newer grants had info in the solicitation that explained the PIs must purchase everything (other than the Basic Stocked Materials), thus money for those items should have been included in the award.
- It is difficult to ship hazardous materials and temperature sensitive items, particularly if the grantee is from a smaller institution. Logistically it might be easier to include all items into the Vendor Supply section and somehow transfer funds from the grant.
  - NSF: Vendors should ship all items directly to Pt Hueneme.
  - RPSC: Efforts are being made to make the current system more straightforward. Lab staff has been working with groups to track and expedite items through Pt Hueneme.

Scientific Instruments and Equipment: Tracey Baldwin

- Lifecycle priority of lab equipment needs to be determined. Some equipment has no replacement parts. Input has been given during previous PAUC meetings.
- ACTION ITEM: Further input from a PAUC subcommittee will be provided
- Note: PAUC should have input on what equipment Abercrombie and Kent Cruise passengers will supplement each year.

Scientific Journals and Library Materials: Tracey Baldwin

- Budgeting for journals is currently occurring, input is requested from PAUC
- Note: The NSF library is investigating whether their IP address can include all USAP addresses, thus making it available at all stations and on the ships

## **PALMER DATA**

UV Monitoring System update: Tracey Baldwin

- Currently the UV monitoring system is in between funding; Biospherical no longer has the program. The Research Associate is continuing to keep it up and running, trying to keep the data as clean as possible until the NSF determines how to proceed.
  - NSF: NOAA is interested in taking this over. NSF may continue to support this as no additional staffing is required to do so.

PAUC concern regarding Research Associate-provided ice images:

- Access to ice images has been a problematic process, particularly with regard to images needed during the LTER cruise
  - RPSC: This process will be more smooth this year; currently access should be available at anytime

Palmos/Weather System: Mike Carmody

- Current system is of concern due to lifecycle issues; sensors are getting old, some sensors are malfunctioning and some parts are no longer supported. Location on Gamage Point has not been ideal.
- Relocation to Terra Lab would be ideal, in part due to the Terra Lab being further from the ocean (salt water is damaging)
- The Visla system is under evaluation as the replacement for Palmos.
  - FAA approved, complete weather system
  - Includes RF transmitter, capable of transmitting to a 25mi radius and up to 10,000ft
  - Data can be easily maintained for climatology and research purposes in addition to the reference for local boating operations
  - Relocation effects on data collection will exist but should be minimal, particularly given the current system sensors are taking on water and suffering from corrosion. Similar considerations were made when the Palmos system was first installed in a different location from where the data was originally collected.
  - RPSC has submitted this as a new project proposal to the NSF. The basic Visla system is approximately \$68,000. The original Palmos system was over \$100,000.

PAUC Weather system input:

- Relocation seems appropriate. Bill Fraser volunteers to assist with the transition as this project proceeds.

AWS Updates: Matthew Lazarra

- Summary:
  - Bonaparte has been serviced
  - Hugo Island needs service
  - Kirkwood and Dismal Islands are only partially working; BAS may access Dismal and may take over servicing that system
  - A few other AWS systems have been recently turned over to BAS
  - Fleming Glacier is a BAS-Chile collaboration
  - LARISSA includes installation on Larsen ice shelf
- Proposal and collaboration policy:
  - If there is an interest in having an AWS outside of a normal AWS project, then collaboration is encouraged
  - Long-term climatology research is the intent, with a goal of installing a broader network of stations throughout the continent
  - Opportunities for additional research exist with some AWS as they have high-end pressure sensors for modeling currently not utilized

PAUC AWS input:

- The LTER has great interest in Charcot and the area near Alexander Island. Perhaps a collaboration will be sought if interests overlap.

## **OTHER PAUC BUSINESS/CONCERNS:**

### Communication:

- PAUC members should be able to discuss issues readily outside of this meeting
  - RPSC: An email forum is a solution, or a teleconference between PAUC members only can also be set up
- Better communication between PAUC members and all others involved with Palmer is desired
  - RPSC: A listserv or other means of email solicitation can be looked into (ACTION ITEM)

### Washington DC meeting:

- PAUC would like to have an annual physical meeting instead of a teleconference
  - RPSC: Next year's budget only includes a teleconference, not a meeting. In some years it may be ideal to push for an in-person meeting when discussing major plans such as remodeling, etc.
  - NSF: A physical meeting option can be discussed; however, the last few years have exhibited higher participation in teleconferences