Research Support Plan
O-363-M, NCAR/Stephen Cohn

IPY: NCAR Facility Support, Scientific Contributions & Collaborative Research to Understand Environmental Change in Antarctica Through Participation in CONCORDIASI

Award Number: ANT – 0733007

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2010-2011 McMurdo Station-Based Project

Compiled By: John Rand

1 July 2010

Change Management and Tracking

This table documents and tracks major changes that develop following RSP distribution.

Date	Description
2 July 2010	RSP issued to PI for concurrence

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EXECUTIVE SUMMARY

Field Project Overview

This project will deploy Driftsonde payloads on long duration balloons to be launched from McMurdo Station during September and October 2010 by the French Concordiasi campaign. Driftsonde is a platform for deploying miniature MIST (Miniature Insitu Sounding Technology) dropsondes over oceans and remote arctic and continental regions. Participants will be housed at McMurdo Station and will utilize Crary lab and the Concordiasi sea ice facility to prepare their balloon payloads.

Outstanding Issues

None.

Participants

Deployment Schedule					
Last Name	**First Name**	**Conus-CHC**	**CHC-MCM**	**MCM-CHC**	**Self Ticket**
Martin	Charles	8/16/10	8/20/10	11/10/10	N
Potts	Nicholas	8/16/10	8/20/10	11/10/10	N

Cargo

	Weight (lbs)	ROS	Comments
Southbound	1610	13 Aug (0225)	
COMAIR Retrograde	330	18 Dec (0352)	
Vessel Retrograde	None	N/A	

Lab/Office/Staging Space

Lab/Office Space

Description	Start Date	End Date	Sh/Ded	Comments
Lab 219, North Bay	26-Aug-10	30-Oct-10	Dedicated	
Office 231	26-Aug-10	5-Nov-10	Dedicated	

On-Ice Staging

Description	Start Date	End Date	Wt	ft2	Special Needs	Assigned Space
13 Boxes (Gondolas), Miscellaneous electronic equipment Box1, Box 2, Box 3, MIST Sondes, and DD LI Batteries	26-Aug-10	5-Nov-10	1610	30	Indoor, heated	Crary Staging 237
13 Boxes (Gondolas), Miscellaneous electronic equipment Box1, Box 2, Box 3, MIST Sondes, and DD LI Batteries	26-Aug-10	5-Nov-10	1610	30	Indoor, heated	Crary Staging 241

COMPREHENSIVE RESEARCH SUPPORT INFORMATION

General Project Information

This document summarizes the resources which are allocated to the subject NSF-OPP award for the upcoming field season. Discrepancies should be presented to the Raytheon Polar Services Company (RPSC) project point of contact (POC) prior to deployment to Antarctica.

Please review this document with all field team members.

Shortly after arrival at McMurdo Station, a general orientation will be provided to the field team. Additionally, the first field team members to arrive in McMurdo will be invited to a Science In-Brief (generally the morning after arrival) to review project requirements with the support providers and the on-ice POC. Required briefings and trainings for the field team will be announced at this time. The on-ice field team leader for the project should be identified by the science group at this briefing.

Raytheon Polar Services Company is dedicated to safe operations at McMurdo and all other field locations. While deployed to Antarctica the entire research team will be expected to maintain a high awareness of safe conduct and comply with safety and health related guidance from the NSF and RPSC management. As part of the Science In-brief, each field team member will receive a copy of the Laboratory Chemical Hygiene Plan, which includes the Laboratory Code of Conduct and other information clarifying the roles and responsibilities of researchers and RPSC personnel to ensure a safe working environment in all laboratory facilities.

After arriving on station and before going into the field, each field team member must complete required laboratory and field safety training appropriate to the project's research requirements.

Note The Principal Investigator is responsible for ensuring that all applicable permits and environmental documentation have been completed prior to deployment.

Participant Information

It is the PI's responsibility to ensure that all dental, medical and travel processing requirements are addressed in a timely manner. **Participants' medical and dental exam results should already be submitted to RPSC to ensure that physically qualified (PQ) status is obtained in time for ticketing.** Please submit your Grantee Travel Request Worksheet (http://www.usap.gov/USAPgov/travelAndDeployment/documents/DS-A-100b.pdf) as early as possible. In order for reservations to be made and tickets to be issued, PQ status must be granted, and by NSF requirement, RPSC cannot initiate ticketing less than two weeks prior to a scheduled departure. In such situations, the alternatives are to 1) contact the program manager and request a waiver, 2) change the travel dates, or 3) purchase one's own ticket with no reimbursement from the USAP.

Each participant who purchases his/her airline tickets without the assistance of RPSC must provide their itinerary to deploy@usap.gov or via secured fax at 303-705-0742. This information ensures the participant will have hotel accommodations and an appointment to obtain cold weather clothing (ECW).

The status of the field team's PQ processing (as of the date of this report) is available in the POLAR ICE application. Weekly updates are provided to the PI or Co-PI via e-mail. If you are not receiving these status reports and would like to, please contact your RPSC POC.

The table below shows the approved deployment plan for your group. The PI, RPSC, and the NSF have set these dates. Changes must be coordinated with your RPSC POC no later than four weeks before scheduled deployment.

Note RPSC is not authorized to ticket participants for any other dates than indicated in the table below without approval from the RPSC Science Support Point of Contact (POC).

The NSF no longer authorizes RPSC to issue excess baggage coupons or to reimburse excess baggage costs on commercial carriers. The only exception is for winter-over staff.

Excess baggage for Ice flights may be allowed (ie: carrying excess baggage on flights to/from McMurdo and South Pole Stations); however, NSF approval is required. Submit the Excess Baggage Form in the link to request approval: (http://www.usap.gov/USAPgov/travelAndDeployment/documents/DSG-DT-100AU.pdf).

Deployment Schedule					
Last Name	**First Name**	**Conus-CHC**	**CHC-MCM**	**MCM-CHC**	**Self Ticket**
Martin	Charles	8/16/10	8/20/10	11/10/10	N
Potts	Nicholas	8/16/10	8/20/10	11/10/10	N

(Dates are current as of 06/30/10)

All dates are subject to change. The table below explains each column.

Column	Description
Conus-CHC	Dates participant is scheduled to leave the U.S (four days before Ice flight, allows two nights in Christchurch).
CHC-McM	Date participant is scheduled to depart Christchurch for McMurdo Station.
McM-CHC	Date participant is scheduled to redeploy from McMurdo Station to Christchurch.
Self-Ticket	"Y" indicates the participant will purchase airline tickets without the assistance of RPSC. Self-ticketers must provide their itinerary (deploy@usap.gov or fax 303-705-0742). RPSC will arrange self-ticketers' hotel accommodations in Christchurch, schedule a date and time to obtain cold weather clothing, and make sure they get a seat on the flight to Antarctica.

McMurdo Station Housing

NSF housing guidelines and a housing request worksheet was sent to each participant in the deployment packet. If not already completed, please submit the housing request worksheet as soon as possible. The worksheet is also available at http://www.usap.gov/USAPgov/travelAndDeployment/documents/DSG-DT-100AX.pdf

Permits

Note It is the responsibility of the Principal Investigator to obtain any required permits **before** deployment.

Ministry of Agriculture and Forestry (MAF) permits are required to transship and import samples through and into New Zealand. Due to the large volume of permit requests and

processing limitations, MAF permits should be in place prior to deployment. **All permits must be presented to MAF upon transit through New Zealand with samples.** On-ice applications will be limited to emergency situations. For MAF application procedures and forms, please contact Hope Rogers at Raytheon Polar Services (NZ) Limited, CHC-MAFPermits@usap.gov.

Antarctic Conservation Act (ACA) permits are required to enter Antarctic Specially Protected Areas (ASPA). For ACA application procedures and forms, please contact Nadene Kennedy at NSF, nkennedy@nsf.gov. ACA permits require three months processing time.

The United States Department of Agriculture (USDA) http://www.aphis.usda.gov/ regulates importation of samples into the US. It is the responsibility of the PI to determine if a USDA permit is required. Permits can take up to 16 weeks for clearance.

Environmental Documentation

Note It is the responsibility of the Principal Investigator to ensure any required environmental documentation has been completed before deployment. Contact RPSC's Environmental Manager, Nate Biletnikoff (telephone 1-800-688-8606 ext. 32225, e-mail nathan.biletnikoff.contractor@usap.gov) for more information.

To comply with the Antarctic Conservation Act the PI or designee is required to track and report disturbances to the environment as a result of the research, planned or accidental. An environmental end of season report template will be provided to each team upon arrival in Antarctica. Please become familiar with the document so the form can be completed at the end of the field work and submited at the Outbrief meeting before leaving Antarctica.

If the field team will go to the McMurdo Dry Valleys, each team member will be required to comply with the Dry Valley Antarctic Specially Managed Area plan. Please be prepared to track and report geographic locations of the following disturbances in the Dry Valleys that result from the project's field work: tent camps, helo landing sites, sampling sites. This information must be submitted electronically to RPSC's Environmental Department before the Outbrief meeting. An electronic template will be provided by RPSC staff.

Fuel and Liquid Waste Containment

No support requested.

Cargo

Science Cargo will provide the following support:

	Weight (lbs)	ROS	Comments
Southbound	1610	13 Aug (0225)	
COMAIR Retrograde	330	18 Dec (0352)	
Vessel Retrograde	None	N/A	

Keep in mind the following cargo-related information:

- Baggage and hand-carried items are not "cargo" and are not listed.
- Items purchased and shipped by RPSC for grantees are also not listed here.

- ROS (Required On Site) is the Saturday at the end of the week that cargo will be delivered at the research station (McMurdo or South Pole Stations).
- Unplanned northbound COMAIR cargo will require approval from the NSF representative on station.

Science Construction

No support requested.

Computers

Crary Lab IT will provide the following support:

- LAN connections and monitors for your grantee-supplied laptops

Locally-generated (McMurdo Station) e-mail messages will be sent to the e-mail address indicated on your SIP for all team members. If your group has team members who were not identified on the SIP (i.e., "TBDs"), the Help Desk in the Crary Lab will add them to the McMurdo Station grantee list upon their arrival.

If any member of your group would like to have a McMurdo Station local account, or your group would like a group account to facilitate the sharing of data and information while on station, these can be created upon your arrival either by informing the Help Desk or the Crary Lab computer coordinator.

Please reference the list of IT security guidelines at the end of this document for IT security questions.

Communications

Field Party Communications will provide the following support:

Category	Requested Item	Qty Requested	Qty Provided	Notes
VHF Radios	Motorola HT750 (without battery)	2	2	
	VHF battery	2	2	
	AC Charger (Single Unit)	2	2	
Spectrum Management	NAL research Iridium	1	1	Iridium frequencies do not require registration
	MIST Sonde communication with Gondola	1	1	

Crary Science and Engineering Center

Because of the dynamic nature of incoming science and the continued need for research space, we allocate Crary resources to accommodate science groups as best possible. Please note that due to limited space availability, the dates listed ***may not be the exact dates you entered in your SIP***. Please review this carefully as space will not be available before or after these dates, ***regardless of arrival and departure dates***. The Crary resources listed below should be considered a "not to exceed' level. Due to space limitations and time constraints, all groups must remain flexible and understand that sharing resources may be required. Laboratory and

office space is limited, so you should be prepared to make allocated space useable to other groups during all field deployments.

Labs and offices are for research purposes only; field equipment should be stored in BFC or designated field party cages at all times. Personal gear storage will be available through Science Cargo via a secured, unheated milvan. Please take advantage of this location to store your gear as other groups may be using the lab and office space while you are in the field.

Laboratory Space

Description	Start Date	End Date	Sh/Ded	Comments
Lab 219, North Bay	26-Aug-10	30-Oct-10	Dedicated	
Office 231	26-Aug-10	5-Nov-10	Dedicated	

At the end of your deployment, you will be required to complete a laboratory check-out with the Crary staff. Please include time for this in your plans. Over-winter storage is contingent upon funding for the following season or NSF approval. If you have questions, please refer to the USAP On-Ice Storage Policy # AIL-07-01 and the USAP Field Laboratory Over-Winter Storage Policy #AIL-09-01. These can be found at: http://www.usap.gov/USAPgov/proposalInformation/#Policies

Laboratory Instruments and Equipment

No support requested.

Laboratory Chemicals, Gases, Cryogens, Dry Ice, Blue Ice

No support requested.

Laboratory Materials and Supplies

No support requested.

Radioactive Materials

No support requested.

Staging and Storage Space

Staging and Storage Space requests and Laboratory Space in the RSP are listed separately. Please contact your POC with concerns that the space allocated to the group will not be sufficient. Lab space is very limited, and **if it is not listed in the RSP, there is no guarantee additional space can be found** once you are in McMurdo.

Personal gear storage will be available through Science Cargo via a secured, unheated milvan. Please take advantage of this location to store your gear as other groups may be using the lab and office space while you are in the field.

On-Ice Staging

Description	Start Date	End Date	Wt	ft2	Special Needs	Assigned Space
13 Boxes (Gondolas), Miscellaneous electronic equipment Box1, Box 2, Box 3, MIST Sondes, and DD LI Batteries	26-Aug-10	5-Nov-10	1610	30	Indoor, heated	Crary Staging 237
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Temporary On-Ice Storage

No support requested.

Winter Over On-Ice Storage

No support requested.

Over-winter storage is contingent upon funding for the following season or NSF approval. If you have questions, please refer to the USAP On-Ice Storage Policy # AIL-07-01 and the USAP Field Laboratory Over-Winter Storage Policy #AIL-09-01. These can be found at: http://www.usap.gov/USAPgov/proposalInformation/#Policies

Diving

No support requested.

Research Associate Services

No support requested.

Spatial Analysis, Remote Sensing, and GIS Support

No support requested.

Geodetic Support

No support requested.

Ultraviolet Data Services

UVSIMN data is unavailable for the 2010-2011 season.

Ice Core Drilling Support

No support requested.

National Ice Core Laboratory (NICL) Ice Core Support Service

No support requested.

Berg Field Center (BFC) Field Equipment

No support requested.

Field Safety and Training

All new USAP personnel who may travel away from McMurdo Station (or any of the Airfield areas) will be required to complete the Snowcraft 1 course prior to going to the field. This is a two-day overnight course. All participants traveling via helicopter will be required to complete the helicopter safety portion on the Snowcraft 1 course. Personnel embarking on trips via the sea ice will be required to complete a full day sea ice course.

All returning USAP personnel going into the field and with prior completion of a Snowcraft 1 and a sea ice course may attend a refresher course. This course is approximately 4-5 hours and includes the sea ice refresher and helicopter safety. Personnel returning to the Antarctic after a break of five or more years do not qualify for refresher training and must attend the full two-day Snowcraft 1 course again. For parties traveling in crevassed areas, Snowcraft 2 or a demonstration of crevasse rescue skills will be required.

The FSTP training schedule is not available at this time. Please contact the FSTP training coordinator in the Science Support Center upon arrival in McMurdo.

Air Support

Fixed-Wing Aircraft

No support requested.

Helicopter

No support requested.

Icebreaker Support

No support requested.

Mechanical Equipment Center (MEC)

Please coordinate your vehicle requirements with the Concordiasi science team lead and contact your On-Ice POC or the MEC staff regarding any other MEC equipment needs.

Heavy Equipment and Explosives

No support requested.

Closeout Procedures

Principal Investigator or field team leader responsibilities:

- **At least two weeks before departure:**

- Ensure that the field team has submitted redeployment forms to the Chalet staff. The preferred approach is to submit the forms upon arrival and update it later.
- Confirm with the Crary Lab staff that all individuals hand carrying and shipping samples via New Zealand have the appropriate MAF permits. This does not pertain to samples traveling on the vessel.

- **At least a week before departure:**
  - Schedule an Outbrief Meeting with the Crary Lab Administrative Coordinator (required for each field at the end of the field season).
  - Appoint a field team member to complete a final checkout for the group. RPSC will provide a checklist that ensures all procedures are understood and followed, including equipment cleanup and return to the Berg Field Center, the Mechanical Equipment Center and the Crary Laboratory.
  - Organize any over-winter storage with Crary Lab Staff. Storage space is contingent upon funding for the following season or NSF approval. (Reference: USAP On-Ice Storage Policy # AIL-07-01 and the USAP Field Laboratory Over-Winter Storage Policy #AIL-09-01. Location: http://www.usap.gov/USAPgov/proposalInformation/#Policies .)
  - Radioisotope users must schedule a checkout with the Crary Laboratory Manager.
- Ensure that all wastes are packaged and labeled according to USAP procedures.
- Ensure that all original customs forms authorizing hand carry of technical equipment through New Zealand are returned to RPSC's travel supervisor after returning to the United States.

ATTACHED INFORMATION AND TABLES

Grantee Arrival Checklist
Terms and Acronyms
IT Security Guidelines

Grantee Arrival Checklist

TEAM REQUIREMENTS	PLANNING SUBJECT	ACTIVITY DESCRIPTION	ESTIMATED TIME	DEPARTMENT CONTACT	EXT	COMPLETED
✓	On-Ice POC	Meet with On-Ice POC to discuss their taking over the primary responsibility of facilitating any issues regarding project support from your POC in Denver.	15 min - 1 hour			
✓	Accept Cargo	Locate and unpack the cargo that your team sent to McMurdo Station from your home institution. Grantee cargo and lab allocated equipment can be retrieved through the Crary Lab Stockroom.	Variable as to cargo requirements.	Sally Moore *Crary Lab Materials Senior*	4192	
	Science Construction Materials	Meet with Science Construction Coordinator to discuss construction needs.	15 min - 1 hour	*Science Construction Coordinator*	2236	
✓	Computer Equipment	Finalize computer support needs. Check laptops for current virus signatures.	15 min to 1 hour	Karen Joyce *Computer Services Crary Laboratory*	4177	
✓	Pre-Field Communications Briefing	Before receiving communications equipment (radios and/or Iridium units) meet with Mac Ops Coordinator to receive communications briefing, establish check-in schedule, and review radio protocol.	30 –45 min—MacOps	Mary Rubarsky *MacOps Coordinator*	2821	
✓	Communications Equipment Issue	After meeting with Mac Ops Coordinator (see above) make an appointment for the issue of communications equipment for the IT Communications Shop.	30 min – 1 hour	Bill Nesbit *IT Communications Supervisor*	2796	
✓	Lab Space Allocation & Permits	Meet with the Crary Lab Staff to locate your allocated lab and office space and lab orientation. Confirm with Crary Lab Staff that MAF permits are on file for every individual transporting samples through or into New Zealand. Check permit accuracy and inclusion of all sample types.	25 min	Cara Sucher *Crary Lab Manager*	4169	
	Meet with Diving Supervisor	Meet to discuss procedures and emergency response. Conduct check-out dive.	1/2 day	Rob Robbins/Steve Rupp Scientific Diving Supervisor, Dive Services	2354	
	Accept Field Equipment	Visit the BFC and locate cage space. Look over equipment to ensure it will be functional for field needs.	1/2 - 2 days	Jessy Jenkins *Supervisor, Berg Field Center*	2348	
	Organize Field Food	Make an appointment at the BFC Food Room to discuss the process of menu planning, become familiar with the inventory and the barcode scanner, and make arrangements to pull and pack food for your stay in the field.	Pre food pull: 15 min. Food Pull: 1/2 -1 day	Peggy Malloy *Assistant Supervisor, Food Room*	2461	
✓	Collect Mechanical Equipment	Pick up and get basic instruction on mechanical equipment required. This will not include snowmachines.	1 hour	Tony Buchanan *Supervisor, Mechanical Equipment Center*	2352	
	Prepare Equipment for Transport	Any cargo that will be transported into the field via aircraft will need to be prepared for travel. The alternate transportation styles will have different requirements. Seek the assistance of the Department Contacts. REMEMBER: ALL HAZARDOUS CARGO NEEDS TO BE SPECIALLY PACKAGED AND CERTIFIED 2-3 DAYS BEFORE TRAVEL.	1/2-2 days to pack 3 days prior to travel 1/2-2 days to pack 2 days prior to travel	Liz Kauffman *Supervisor, Fixed Wing* Brian Connell USAP Cargo Supervisor Julie Grundberg *Supervisor, Helicopter Ops*	2529 2546 2277	
	Visit with Fixed Wing Coordinator	Meet with Coordinator to finalize and verify field plans.	30 minutes	Liz Kauffman *Supervisor Fixed Wing*	2529	
	Visit with Helicopter Coordinator	Meet with Coordinator to finalize and verify field plans.	30 minutes	Julie Grundberg *Supervisor, Helicopter Ops*	2277	
✓	Training Course Depending upon prior experience and study area, some of the following courses must be taken. Refer to RSP for assignments.	Field Safety Training Courses:				
		Snowcraft I:	2 days, 1 overnight	Pam Hill *Field Support Coordinator*	2356	
		Snowcraft Refresher:	1/2 day			
		Sea Ice:	1 day			
		Sea Ice Refresher:	1/2 day			
		GPS:	3 hours			
		Altitude Training:	1 hour			
		Helicopter Training:	1 hour			
		Mechanical Equipment Courses:				
		Antarctic Driver's License	30 minutes	Sally Lyon *Asst. Supervisor, MEC*	2352	
		Mattrack Driving	1 hour			
		Pisten Bully Driving	1-2 hours			
		Snowmobile Driving and Repair	3 hours			
		Other MEC equipment (hole melters, generators, chainsaws, drills, etc.)	varies			

Outbrief Notification Letter

Dear Researcher,

At the end of your deployment to Antarctica, the PI or designee will be asked to attend a meeting called an Outbrief hosted by Raytheon. An Outbrief is an informal way for the USAP to solicit comments on the overall productivity of the science team's work in Antarctica with a primary focus on the topics listed below. Please be prepared to discuss/provide information related to these meeting goals:

- determine whether the scientific goals of the science project were achieved
- obtain explicit statements on the direct logistical support for the current field season and how that support positively or negatively impacted the field team's ability to conduct science
- solicit suggestions for improving the quality of USAP support
- gather information for planning the next field season
- provide information related to the Government Performance and Results Act (GPRA) -- an online survey which aims to assist NSF fulfill its requirement to report on the effectiveness of USAP facilities http://www.usap.gov/surveys
- submit the Customer Satisfaction Survey

In McMurdo, the Crary Laboratory Administrative Coordinator will work with the PI or designee to schedule a convenient meeting time a few days before redeployment. At the other Stations and Vessels, the lead Raytheon staff member will schedule this meeting with the science team.

The meeting is generally led by the Raytheon Science Support Staff and, if present, the on-site NSF Representative or NSF Science Representative. A report summarizing the statements made at the Outbrief will be distributed after the meeting.

The information that is provided at the Outbrief is particularly useful to RPSC and NSF to fine tune future support, both specific to each project and for overall improvements. If a grant is continuing for the next field season, it is an opportunity to express thoughts about changes or adjustments to the level of support that may improve research success in future seasons.

Regards,

The Raytheon Polar Services Science Planning Group

Terms and Acronyms

Term	Definition
ACA	Antarctic Conservation Act.
BFC	Berg Field Center. The facility at McMurdo Station that houses and distributes field party equipment such as camping gear, waste disposal supplies and sleds.
CHC	Christchurch, New Zealand. The departure point for groups deploying to the Antarctic continental research stations.
CONUS	Continental United States.
DSG	Deployment Specialist Group. The organization within RPSC that makes participant travel arrangements.
ECW	Extreme Cold Weather. The clothing and personal gear loaned to participants during their Antarctic deployments.
MAF	New Zealand Ministry of Agriculture & Forestry.
MCM	McMurdo Station.
MEC	Mechanical Equipment Center. The facility at McMurdo Station that houses and distributes mechanical equipment, such as generators, vehicles and solar power units.
PI	Principal Investigator.
POC	Point of Contact. The person assigned to your project for planning the logistical support that will be provided to you by RPSC during your fieldwork. Your on-ice POC may be different from the one assigned during the planning phase of your logistical support.
PQ	Physical qualification.
PSM	Planning Support Manager.
PSS	Planning Support Specialist.
PSC	Planning Support Coordinator.
RPSC	Raytheon Polar Services Company. The support contractor providing logistical support to grantees in Antarctica.
RSP	Research Support Plan. This document which describes the support to be provided to field parties.
SIP	Support Information Package. An online form that describes support logistics, equipment and supplies requested by science groups.
ASPA	Antarctic Specially Protected Area.
TRW	Travel Request Worksheet.
USAP	United States Antarctic Program.

IT Security Guidelines

Computer Security

The U.S. federal government requires security and operational practices for computing systems in all government funded programs. The United States Antarctic Program's (USAP) compliance with this federal requirement entails the screening of all computers prior to connecting to the USAP network (wired or wireless). The following requirements are aligned with the NSF Computer Security Policy and apply to all personal, science, and business equipment that will connect to the USAP network. Please direct inquiries to the USAP Help Desk at (720) 568-2001 or helpdesk@usap.gov.

General System Requirements

Administrator Access

Obtain the Administrator password for personal computers prior to deployment. Technicians must have the authority to log on to personal computers at an Administrator level. This enables the screener to accurately review the system configuration and run screening software. If an Administrator password is not available, the screening process, as well as the ability to connect to the USAP network and its resources, will be delayed.

Media

Participants should consider bringing their laptop's original OS installation disks and software registration numbers to assist the computer staff in repairing them, in the unlikely event that they experience hardware or software failures either in transit or while on the Ice.

Connectivity

Participants must provide all the equipment necessary to connect the computer system to a network, including the NIC (network interface card), cables, external adapters, device drivers, etc. All equipment must be in working order.

Antivirus

For computers running McAfee antivirus software, the Admin ID and password are needed to configure the software to update automatically from a local USAP server. Raytheon Polar Services Company (RPSC) can provide current DAT files for McAfee and Norton users. All other antivirus software users must ensure proper updates are installed and the computer is virus free prior to deployment.

Patches

All computing devices should be updated to the current levels for the operating system and security patches. Applications should also be updated, as provided by the manufacturer to include the latest security patches.

Client and Server Software

- Client software used for the purposes of email and web browsing, and other client software, such as SSH and SFTP are permitted.

- Web cameras for training, meetings, educational outreach programs, official business, or personal use is permitted according to NSF policy and with the approval of NSF
- Peer-to-peer (P2P) software, e.g., Kazaa and BitTorrent, are not allowed.
- Email server software that provides SMTP/POP port services should not be used without prior permission.
- Web server software that provides HTTP/HTTPS/FTP services should not be utilized without prior permission.
- Use of non-USAP supported Voice-over Internet Protocol (VoIP) software (Skype™, etc.) is prohibited.
- Network management services, like DNS and SNMP, should not be running.

Personal Use of the Internet: Some limited personal use of Internet services is permitted, provided it does not interfere with the participant's work or the work of others. Extreme care must be taken regarding content matter. Typical authorized limited personal Internet use includes:

- Accessing travel information, forms or information on the intranet or Internet.
- Accessing parent organization information and online resources.
- Accessing state and local government agencies on personal matters.
- Work-related events, such as technical symposiums, classes, and presentations.
- Activities sponsored by the program, such as station recreational activities.
- Events and activities specific to a particular USAP station or organization.
- Program-sanctioned activities, such as blood drives, sanctioned clubs, and organizations.
- Communications of reasonable duration using instant messaging applications.
- Recreational web-browsing of a reasonable duration, during off-duty hours, that does not violate other elements of this policy and does not conflict with mission activities.

Operating System Specifications

Operating systems (OS) have certain criteria that must be met in order to pass the computer screening process. All operating systems should be currently supported by the operating system vendor.

If a user's OS is not in one of the below categories, their connection to the network must be evaluated at a USAP location by an IT technician prior to connecting to the USAP network.

Apple

Mac OS systems running current antivirus software are permitted to connect to the USAP infrastructure at any station.

Linux

Linux systems/partitions running current antivirus software are permitted to connect to the USAP infrastructure at any station. If the computer is configured to dual boot with Microsoft, the Windows partition must comply with the criteria stated below for Microsoft systems.

Microsoft

Ensure the following conditions are met:

- Windows XP Service Pack 2 (SP2) or Windows Vista with all hot fixes.
- Current antivirus software with latest virus definition files (DAT files).
- Complete/full system virus scan within the previous two weeks.

Computer Screening Process

Screening technicians will gather computer information and make it available to all technicians performing screenings on station. Users found using the USAP network without a screening rating of PASS may be limited in their network access until updates can be made or additional security can be applied. Computers will be screened for supported operating systems, current antivirus software, and preferably automatic updates for both. If possible, applications should have the latest updates as well.

Continuous Monitoring

All users' devices (including governmental, commercial, grantee, and personal) connected to the USAP information infrastructure are subject to continuous monitoring for quality of service (QoS), security vulnerabilities, attacks, threats, risks, and violations of the Enterprise Rules of Behavior. Users are required to work with their IT point of contact (POC) to remediate weaknesses in their systems in a timely manner to reduce the risks to the USAP environment. NSF Management may rate limit, segregate, block, or disconnect without notice any user or device that poses an unacceptable threat or risk to the USAP. Should your system be identified as having security vulnerabilities which pose a risk to USAP resources or other science projects, you will be expected to remediate those vulnerabilities within a reasonable time frame.

Wireless Encryption

Use of USAP provided wireless access points at USAP locations must be approved via local IT personnel before access is provided. Since a greater level of insecurity exists on a wireless network, data transmitted over the wireless network may not be secure, and appropriate precautions should be taken. Effective August 1, 2009, WiFi Protected Access (WPA) is the minimum requirement.

USAP Firewall

Due to changes in the USAP information security posture directed by NSF OPP, our approach to firewall management has changed. If you require connectivity other than e-mail, outgoing file transfers, or web-based applications between your workstations and other systems at your home institution or another collaborating location, you will need to contact us for approvals and to set up the connection through the firewall.

Note If you have already supplied information and have received approval for this through the SIP/RSP process, there is no need to re-contact us.