

Please review all of the following information, including the gear allocations and field team members, to ensure accuracy. This plan is an agreement between VPR and your group, documenting the logistics support you will receive.

• Project Information •

Lead Principal Investigator	Michael Bergin
Institute	Georgia Institute of Technology, School of Earth and Atmospheric Sciences
Project Title / Grant #	Collaborative Research: Particulate Organic Carbon in the Air and Snow at Summit, Greenland (0425471)
NSF Program and Manager	NSF/OPP ANS, Dr. Jane Dionne
VPR Project Manager	Robin Abbott

• Logistics Summary •

<p>This collaborative 0425471 (Bergin, GATech Lead), 0425399 (Schauer, U of WI, Madison) and 0425406 (Dibb, UNH) aims to achieve a better understanding of the link between concentrations of carbonaceous aerosols in the air and the snow as well as of the how carbonaceous aerosols are modified once they are deposited in the snow. This study of interactions and deposition processes knowledge will allow for a better historical analysis of ice cores for clues to the role of carbonaceous aerosols in past climate change.</p> <p>A team of three will travel to Summit Greenland in July, 2005 to conduct preliminary air and snow measurements A team of six will return for a full season during the summer of 2006. At a study site south of the station near the science tower or the sat camp, the team will conduct a suite of measurements of the air, the snow surface and in snow pits.</p> <p>VPR will support the team via ANG arrangements, user days in Greenland, and access to the Summit infrastructure.</p>

For the complete VPR online project record for this grant, including science objectives, go to:
http://www.vecopolar.com/arlss_reports/arlss_projectsdetail.asp?cbPropNum=0425471

• Outstanding Issues •

Issue	Responsibility	Date Completed
Review support plan for accuracy and distribute to all field team members	PI	
Obtain all necessary permits for fieldwork	PI	
Visit all hyperlinks and review all documents referred to in the support plan	Field Team Members	
Contact the GEOSummit Science Coordination Office (SCO) mailto:sco@geosummit.org regarding your project's plans for the season	PI	Per SCO, "confirmed" as of 4.12.05
Medical Clearance completed 8-6 weeks before desired deployment date	Field Team Members	All "PQd" as of 6.21.05
Please note this important information for your field team: Bring 2 different forms of picture ID. Passports are now mandatory for entry into Greenland. Be sure to pack them!	Field Team Members	
Complete Critical Success Factors	PI	

• Allocations & Services •

Allocations from VPR Inventory

Quant/Unit	Item
3 ea	Sleeping Tents (see note)
1 ea	Enclosure in clean air sector for sampling equipment with access to sampling outdoors (need ~ 25 ft ² of table space) – see below under Other Services
1 ea	Relatively clean Lab area for sample prep and analysis (~ 25 ft ²) – shared access -- see below under Other Services”
100 ea	Johnny Blue Ice supplied from Kangerlussuaq
1 ea	MilliQ system – shared access
1 ea	Drying hood – shared access
Qty	DI water
Var	Snowmachines – shared access / intermittent use of Summit pool
Var	Nansen-type sleds – shared access / intermittent use of Summit pool

-Due to the high population at Summit during this time, people may be required to share a tent.

Non-VPR Allocations

3 ea	Ice core boxes shipped to GA Tech from ICDS in Madison
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Other Services

Project Allocations	Comments
~ 1-2 kW of power for samplers	Used for running air monitoring instruments outdoors as well as processing in the clean room area.
10x10 Arctic Oven for sampling	Will be located as close to UC Davis weatherport as possible for quality of power (drawn from weatherport) and to minimize area of snow trampling by the groups. Final location of tent will be determined upon group’s arrival at Summit & tent will be erected at that time
Access to Greenhouse clean room and science trench.	Three science projects (GA Tech, Swiss ETH, and BSI) and the Station science techs will share the small Greenhouse clean room during GA Tech’s deployment. Upon the teams’ arrival on station a facilities use schedule will be worked out. We need everyone’s cooperation to ensure that all projects can meet their projected goals. Room is available in the science trench and VPR is encouraging teams to work there if possible. The average trench temperature is ~40F.
Frozen sample shipment	Approximately 3 boxes of frozen samples will be shipped from Summit to Kangerlussuaq and on to New York during the week of 8 Aug. Between flights, VPR will store samples in local Kangerlussuaq and New York freezers. VPR will then ship the samples via Fed Ex to your institute. It is the responsibility of the science project to pay for the shipment.

• Location Information •

Please visit <http://www.vecopolar.com> and navigate to the Greenland menu for en route and location-specific Greenland information. Prior to deployment, your entire field team should be familiar with the content of the *Greenland Guide* and, if traveling to Summit, with the guidelines provided in the *Summit Users’ Guide*. Both are available electronically via our web site’s Greenland menu.

• Cargo and Customs •

All cargo required for your project should arrive in Scotia, NY no later than 2 weeks prior to the desired northbound Air National Guard (ANG) flight, must be entered into our online Cargo Tracking System, and must be properly registered with customs.

- For the most current ANG flight schedule got to <http://www.vecopolar.com> and navigate to Greenland > Calendars/Schedules.
- If you are a new user requiring access to the Cargo Tracking System, contact Robin Abbott (<mailto:robin@polarfield.com>).
- For Customs requirements refer to the *Greenland Guide*, available at <http://www.vecopolar.com> under Greenland.

Cargo List for shipment to Greenland

Items	Weight/Cube
~7 ea boxes (36 x 22 x 20 in); Each box will be ~ 80 lb and ~ 9.2 ft ³ (one box containing very delicate instrument, DNF)	~ 600 lb / 64 ft ³
1 ea box	(1.5' by 2')
5 ea boxes with LDPE bottles in them for snow sampling (for Univ of Wisc, Environmental Chemistry and Technology Program)	5 ea / 13" x 22" x 12"
10 ea boxes with glass sampling jars for snow sampling (for Univ of Wisc, Environmental Chemistry and Technology Program)	10 ea / 11" x 15" x 7"

• Support Schedule •

Date	Location	Activity
7-11-05	Kangerlussuaq	Arrival for team members (Mike Bergin, Gayle Hagler, Roby Greenwald)
7-12-05	Summit	Arrival for team members
7-27-05	Kangerlussuaq	Departure from Summit
7-30-05	NY	Departure from Kangerlussuaq (no flight on the 28 July)

• Field Team Information •

Name	Location	Date In	Date Out	Email
Bergin, Michael	Summit	7-12-05	7-27-05	mike.bergin@ce.gatech.edu
Bergin, Michael	Kangerlussuaq	7-11-05	7-30-05	
Hagler, Gayle	Summit	7-12-05	7-27-05	gayle.hagler@ce.gatech.edu
Hagler, Gayle	Kangerlussuaq	7-11-05	7-30-05	
Greenwald, Roby	Summit	7-12-05	7-27-05	robgreenwald@hotmail.com
Greenwald, Roby	Kangerlussuaq	7-11-05	7-30-05	

• Project Contact Information •

Research Team

Role	Name	Email	Phone / Fax
Principal Investigator	Michael Bergin	mike.bergin@ce.gatech.edu	Ph: 404 894-9723 Fax: 404 894-8266
Collaborator	Jack Dibb	jack.dibb@unh.edu	Ph: 603 862-3063 Fax: 603 862-2124
Collaborator	James Schauer	jschauer@wisc.edu	Ph: 608 262-4495 Fax: 608 262-0454

VPR Team Members

Contact for	Name	Email	Primary Phone(s)
Greenland operations	Robin Abbott	robin@polarfield.com	Denver: 303.748.8507 Greenland: 011.299.524218
Greenland operations	Mark Begnaud	mark@polarfield.com	Denver: 720.320.6160 Greenland: 011.299.524281
Medical	Jason Buenning	jason@polarfield.com	Denver: 303.638.6669
Denver operations	Jill Ferris	jill@polarfield.com	Denver: 720.320.6155
Scotia Operations & Customs	Earl Vaughn	earl.vaughn@nyscot.ang.af.mil vprscotia@direcway.com	Scotia: 518.331.3103

VPR Offices

Denver	Kangerlussuaq	Scotia	Summit
VECO Polar Resources 8392 S. Continental Divide Rd. #104 Littleton, CO 80127-4268 Tel: 303.984.1450/1439 Fax: 303.984.1445	VECO Polar Resources Attn: Name of Employee/Researcher Postboks 1015 DK-3910 Kangerlussuaq, Greenland Tel: 011.299.841598 Fax: 011.299.841599	Earl Vaughn C/O 109 th Aerial Port Bldg. 20 Stratton Air Base Scotia, NY 12302-9752 Fax: 518.884.2904	VECO Polar Resources Attn: Name of Employee/Researcher Postboks 1015 DK-3910 Tel: 321.953.9650 Fax: 321.953.9651

Other

Organization	Internet	Phone
Summit Science Coordination Office	http://www.geosummit.org sco@geosummit.org	N/A

• Safety, Environment, Health, and Permitting •

Permits

Please refer to VPR’s *Greenland Guide*, available at <http://www.vecopolar.com> under Greenland, for information about permits required to conduct fieldwork in Greenland.

Medical Clearance

Arctic Program participants traveling into the Greenland field are generally required to pass a National Science Foundation (NSF) mandated physical exam. All field team members should plan to complete their medical clearance process 8-6 weeks prior to their travel to Greenland. For more information refer to VPR’s *Greenland Guide*, available at <http://www.vecopolar.com> under Greenland.

• Critical Success Factors •

Please list the support factors that are most important for the success of your science. We track these factors in order to measure the success of VPR’s support. Examples might be the availability of the helicopter or camp gear.

Factors
Sampling of uncontaminated surface snow, snow pits and ambient air
Access to enclosure for air sampling equipment, a clean lab space with a flow hood, and general lab space for sample preparation and analysis
Logistical support by Summit staff while on the ice sheet as well as support in transporting frozen samples from the ice sheet to our labs

• Government Performance and Reporting Act of 1993 (GPRA) •

NSF/OPP requires your help in complying with the Government Performance and Reporting Act of 1993 (GPRA). One measure of VPR’s performance is a “facility-performance metric” which counts the number of productive days your project has in the field while relying on VPR facilities or support. Please keep track of any “lost days” and report these to us at the end of the season.