

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	Alberto Behar
Institution	National Aeronautical and Space Administration, Jet Propulsion Laboratory
Project Title / Grant #	A Field Test Of The Subsurface Ice Probe (NASA-SIPR)
Program and NSF Manager	Other Agency - NASA, Mr. Simon Stephenson
VPR Project Manager	Sandra Starkweather

• Logistics Summary •

<p>For this NASA test of an ice probe designed to eventually drill into the Mars polar cap, a team of 6 will travel to Summit, Greenland, for 2 weeks in June of 2006. At a site near the station, the team will drill to 100m with the ice probe.</p> <p>VPR will provide ANG coordination, Kangerlussuaq user days, access to the Summit infrastructure, as well as power to run the probe and a sled to transport the 350lb of equipment to the test site.</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=NASA-SIPR

• Outstanding Issues •

Issue	Responsibility	Date Completed
Review support plan for accuracy and distribute to all field team members	PI	4/14/06
Obtain all necessary permits for fieldwork	PI	Pending, Sent 1/06
Visit all hyperlinks and review all documents referred to in the support plan	Field Team Members	4/20/06
Contact the GEOSummit Science Coordination Office (SCO) mailto:sc@geosummit.org regarding your project's plans for the season	PI	Will do ~5/7/06 once equipment list finalized
Medical Clearance completed 8-6 weeks before desired deployment date	Field Team Members	5/3/06
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	4/29/06
Complete Critical Success Factors	PI	4/29/06

• Allocations & Services •

Allocations from Inventory

Quant/Unit	Item
6 ea	8x8 Arctic Oven sleep tents
12 ea	Thermal sleeping pads
6 ea	Wireless network cards
1 ea	Western Shelter work tent
As needed	Plywood flooring to cover work tent floor
6 ea	Folding chairs for work tent
2 ea	Folding table 8'x3' for work tent

Other Services

Project Allocations	Comments
Work space	Western Shelter work tent will be the principle workspace for this group. No additional workspace requests.
Power supply	The work tent will be powered off of the camp grid.
Location	The work tent will be located by the West-Side pole, former location of the RAMAS container.
24-Hour Schedule	The drilling team will be doing round-the-clock shift work once they are operational. They should coordinate with the camp manager and cook to coordinate meal preparation and services.

• 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 go 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 (robin@polarfield.com).
- ✓ Customs instructions are available on our website at <http://www.vecopolar.com> (go to Greenland > Customs)
- ✓ For Customs requirements please refer to the *Greenland Guide*, also available at <http://www.vecopolar.com> under Greenland.

The following is our current understanding of your overall cargo requirements:

Cargo List

Items	Weight/Cube
fiber glass box, 100m 2-conductor cable, 100m Teflon tubing, 100m 4-conductor cable, spool with 100m wire rope, spool sheave, measuring tape, C-clamp, small tool box, water level meter	100 lbs/22"x20"x22"
fiber glass box, two ice drills with internal control box for ice drills with cables, thermocouple wire duct tape, centering springs, electric tape, multimeter, swagelok plumbing parts	52 lbs./24"x22"x14"
grey plastic box, Sorensen power supply 300V, variable power supply 30V, control box for piston pump, power cables	70 lbs/22"x18"x14"
card board cylinder, firm drill with centralizer	15 lbs/6" dia x 58" long
card board box, frame holding sheave	10 lbs/36"x26"x3"
card board box, sheave, antifreeze, duct tape, 20m 4-wire cable	14 lbs/13"x15"x11"
Pelican case, reel, 127 m tether	/26"x26"x26"
Pelican case, reel nose assembly, spare MOOG slip ring, spare fluid union, spare encoder and display with software, spare Leason motor, spare Crouzet solid state relay	/26"x26"x26"
reel stand	/54"x24"x6"

• Support Schedule •

Date	Location	Activity
06/04	Scotia	Field team members arrive in Scotia
06/05	Kangerlussuaq	Field team members travel to Greenland via ANG
06/06	Summit	Field team members arrive at Summit
06/06 to 06/15	Summit	Field team members test drill in work tent
06/15	Summit	Field team members leave Summit
06/17	Kangerlussuaq	Field team members return to the U.S. via ANG

• Field Team Information •

Name	Location	Date In	Date Out	Email
Behar, Alberto	Kangerlussuaq	06/05/06	06/17/06	Alberto.Behar@jpl.nasa.gov
Behar, Alberto	Summit	06/06/06	06/15/06	
Cardell, Greg	Kangerlussuaq	06/05/06	06/17/06	Greg.Cardell@jpl.nasa.gov
Cardell, Greg	Summit	06/06/06	06/15/06	
Englehardt, Hermann	Kangerlussuaq	06/05/06	06/17/06	hermann@skua.gps.caltech.edu
Englehardt, Hermann	Summit	06/06/06	06/15/06	
Kowalczyk, Bob	Kangerlussuaq	06/05/06	06/17/06	Robert.S.Kowalczyk@jpl.nasa.gov
Kowalczyk, Bob	Summit	06/06/06	06/15/06	
Smith, Miles	Kangerlussuaq	06/05/06	06/17/06	miles@jpl.nasa.gov
Smith, Miles	Summit	06/06/06	06/15/06	
Mogensen, Claus	Kangerlussuaq	06/05/06	06/17/06	Claus.Mogensen@jpl.nasa.gov
Mogensen, Claus	Summit	06/06/06	06/15/06	

• Project Contact Information •

Research Team

Role	Name	Email	Phone / Fax
Principal Investigator	Alberto Behar	alberto.behar@jpl.nasa.gov	818 687-8627 / 818 354-8172

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
Summit operations	Sandy Starkweather	sandy@polarfield.com	Denver: 303.518.8714
Medical & MAS	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.af.mil vprscotia@hughes.net	Scotia: 518.331.3103

VPR Offices

Denver	Kangerlussuaq	Scotia	Summit
VECO Polar Resources Western Office 8110 Shaffer Parkway Suite 150 Littleton, CO 80127 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	John Burkhardt 209.658.7142

• 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.

• Critical Success Factors •

Please list the 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
Timely access to work site once on site
Ready field equipment (tables, tents etc.)
Reliable power, access to facilities 24hours/day during drilling ops

- 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.

- Appendices •

Appendix I: Detailed cargo packing list.

Appendix I Greenland Equipment List

Primary

- Custom thermal drills (2) *carry*
- Tool box with tools (1) *ship*
- Los Gatos Water Isotope Analyzer (1) *ship*
- HPLC / LC MS liquid auto sampler (1) *ship*
- Custom deployment reel (1) *ship*
- Custom 120 m tether (1) *ship*
- Xantrex 300 V, 3.5 A power supply (2) *ship one, carry one*
- Xantrex 150 V, 7 A power supply (2) *ship one, carry one*
- Sorenson 150 V power supply (2) *ship*
- Reel motor power supply (Paolo to define) (1) *ship*
- Flow through science manifold, including a commercial conductivity probe, a commercial pH sensor, and a sample cell for isotope measurements (Claus to define) (1) *carry*
- Met One particle counter (1) *ship*
- Dell Latitude D620 notebook computers (4) *carry two, ship two*
- Software includes custom Labview code for controlling the ice probes and commercial science equipment.
- Digital cameras (Miles to define) (3), *ship*

Spares

- Spare prepump (1) *carry*
- Spare electronics cards (10) *carry*
- Spare ultrasonic sensor (1) *carry*
- Spare load cell (1) *carry*
- Spare thermofoil heaters (12) *carry*
- 12 ft teflon tubing *ship*
- 50 ft 18 AWG wire *ship*