

Please review all of the following information, including the gear allocations and field team information, 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	Charles Booth
Institute	Biospherical Instruments Inc.
Project Title / Grant #	NSF Office of Polar Programs UV Spectral Irradiance Monitoring Network (UVSIMN)
NSF Program and Manager	NSF/OPP ABM, Roberta Marinelli
VPR Project Manager	Sandra Starkweather

• Logistics Summary •

<p>Biospherical Instruments Inc. (BSI) operates the NSF OPP's Ultraviolet Spectral Irradiance Monitoring Network (UVSIMN). One of the UVSIMN's systems is located at Summit, Greenland.</p> <p>In July 2007 one technical staff member from BSI will visit Summit to perform system characterizations, and any necessary system engineering updates and/or service. The plan is to accomplish these objectives within the flight period of July 9th. If needed, this visit may be extended to the next flight period.</p> <p>While the BSI staff is on station, they may need up to 16 hours of additional support from the Science Technician to achieve their site visit objectives.</p> <p>VPR will assist BSI with transportation to/from Summit (via Scotia, NY); in the performance of the Site Visit's objectives at Summit Camp; and provide the UVSIMN with science technician support for year-round operation (approximately 5 hours/week).</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=UVSIMN

• Outstanding Issues •

Issue	Responsibility	Date Completed
Review support plan for accuracy and distribute to all field team members	PI	06/13/07
Obtain all necessary permits for fieldwork	PI	Not applicable.
Visit all hyperlinks and review all documents referred to in the support plan	Field Team Members	06/13/07
Contact the GEOSummit Science Coordination Office (SCO) mailto:sco@summitcamp.org regarding your project's plans for the season	PI	06/13/07
Medical Clearance completed 8-6 weeks before desired deployment date	Field Team Members	06/19/07
<i>Please note this important information for your field team: Bring 2 different forms of picture ID. Passports are mandatory for entry into Greenland.</i>	Field Team Members	06/13/07 (and will be available at Scotia NYANG base).
Complete Critical Success Factors	PI	6/19/07

• Allocations & Services •

Allocations from Inventory

Quant/Unit	Item
1	Arctic Oven tent 8'x'8' for each team member (Qty. 1)
1	Thermarest and mattress pads for sleeping in the tents set up on insulation board over the snow.
1	Warm/Dry Storage Area: During the visit, warm and dry storage in the Greenhouse – near the system's location - will be necessary to conduct the required activities. Much of the material is "stackable". All items are DNF, Keep Dry, Fragile, and are Electronics. Applies to all cargo listed below.

Other Services

Project Allocations	Comments
Science Technician	Approximately 5 hours/week + 4 days training at institution (at BSI in San Diego, CA: two sessions).
Periodic Site surveys (collector Field-of-View and global positioning system (GPS))	To be performed as-needed due to ever-changing FOV environment.

• 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.
- ✓ 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
NTE 3 Cases (Lewis, gray with red lids) for site visit test equipment, calibration standards, spares/consumables, tools, and cold-weather gear. All are DNF, Keep Dry, Fragile, and Electronic.	Qty. 1, 25" x 21" x 14" each, NTE 70 Lbs. each (70 Lbs Total)
NTE 2 Cases (Hardigg or Pelican, Gray or Black) for site visit test equipment, calibration standards, spares/consumables, tools, and cold-weather gear. All are DNF, Keep Dry, Fragile, and Electronic.	Qty. 2, 32" x 21" x 16" each, NTE 70 Lbs. each (140 Lbs Total)

• Field Team Information •

Name	Location	Date In	Date Out	Email
Dr. Germar Bernhard	Kangerlussuaq	07/09/07	07/13/07 (optionally 07/24/07)	bernhard@biospherical.com

• Project Contact Information •

Research Team

Role	Name	Email	Phone / Fax
Principal Investigator	Charles Booth		619 686-1888 / 619 686-1887
Field Coordinator	James Ebrahimian	jime@biospherical.com	619 686-1888 / 619 686-1887

VPR Team Members

Contact for	Name	Email	Primary Phone(s)
Greenland operations	Jason Buenning	jason@polarfield.com	Denver: 303.638.6669 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	Kyli Olson	kyli@polarfield.com	Denver: 303.489.2151
Denver operations	Jill Ferris	jill@polarfield.com	Denver: 720.320.6155
Scotia Operations & Customs	Earl Vaughn	earl.vaughn@gmail.com vprscotia@hughes.net	Scotia: 518.331.3103

VPR Offices

Denver	Kangerlussuaq	Scotia
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 Tel: 518.331.3103 Fax: 518.334.2537

Summit Station

Summer
VECO Polar Resources Attn: Name of Employee/Researcher - Summit Station C/O Earl Vaughn 109 th Aerial Port Bldg. 20 Stratton Air Base Scotia, NY 12302-9752 Tel: 518.331.3103 Fax: 518.334.2537

Other

Organization	Internet	Phone
Medical Advisory Services	http://www.mas1.com	410.257.9504 / 410.257.9505 / 410.257.9506
Summit Science Coordination Office	http://www.geosummit.org sco@summitcamp.org	John Burkhart 011.479.6825011 (Norway) 1.209.658.7142 (USA, messages checked weekly)

• Safety, Environment, Health, and Permitting •

Permits

All science teams planning to conduct research in Greenland must complete an **annual application** in order to obtain approval from the Danish Polar Center (DPC). The application forms are available from the DPC at <http://www.dpc.dk>. Applications are submitted directly through the DPC, rather than through the U.S. State Department. For assistance with the application process, contact:

Poul Henrik Sorensen
E-mail: phs@dpc.dk
Telephone: +45 3288 0100

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 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
The principal factor for the UVSIMN is data yield – not just how much data is obtained, but how much of it is of research quality. This is determined statistically – following annual final-data QA/QC - by taking the ratio of “useable” solar data scans obtained, to the maximum possible (a finite number). Many factors play a role in our success from system “up” time, to how systematically the Science Technicians perform their tasks. Science tech tasks include: monitoring activity around collector, daily, weekly instrument checks, calibrating instrument, alerting PI to irregular operations, coordinating resupply shipments.
Manpower and logistics are also a key factor: whether or not objectives/visits are completed in timely manner. This is inclusive of VPR support personnel; e.g. did personnel and cargo arrive/depart on-station as-planned; did the Science Technician perform duties and respond to issues in a timely manner; did VPR IT Support/Power/Carpentry/Electrical respond to repair issues in manner that didn't result in either data loss and/or hardware casualty.
Timely notification of proposed or planned alterations to the instrument field of view (FOV). VPR project management should involve BSI POC in changes in this environment and give BSI an opportunity to review changes for minimal impact.

• 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.