

**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 •

<b>Lead Principal Investigator</b>	Jeffrey Welker
<b>Institute</b>	University of Alaska, Anchorage, Environment and Natural Resources Institute
<b>Project Title / Grant #</b>	BE/CBC: Coupling of Carbon and Water Cycles in a Cold, Dry Ecosystem: Integrative Physical, Chemical and Biological Processes and Their Controls on CO <sub>2</sub> Exchange (0221606)
<b>NSF Program and Manager</b>	NSF/OPP ARCSS, Dr. Neil Swanberg
<b>VPR Project Manager</b>	Susan Zager

• Logistics Summary •

For this project field team members will conduct weekly experiments on carbon and water cycles in the Arctic environment from Thule Air Base in Greenland.

Field teams ranging in size from three to 25 will travel to Thule each summer throughout the life of the grant (2002-2007), though the project expects a continuous presence between May and late August each year. In 2004 and 2005, two team members will conduct comparative studies between their ITEX snow fence experiment at Toolik Lake and at Thule. In 2005, three team members will conduct comparative studies at lakes around the Kangerlussuaq area.

In July of 2005 the project will host a three-week High Arctic field course at Thule. Project researchers will instruct the group of 12 (mostly) undergraduate students in basic skills in arctic research. Participants will then complete small group projects. Fieldwork will base at the project's experimental sites at Thule Air Base, but will also include 8-10 days of camping at several locations approximately 20 minutes away from Thule via helicopter. Also participating in the field course will be a participant from the TREC program.

For 2006, the team plans a field season similar to that of 2004 at Toolik Lake. At Thule, they anticipate a spring trip for one week (2 people) and one with 6-8 people during the summer. The team plans to complete trench work and continue the ecological and soil studies along with the hydrological and microclimate monitoring. They wish to visit Green Valley for several days once or twice during the field season to collect data and various samples, and monitor their experiments. They also wish to receive UNAVCO assistance to re-measure the 20 GPS monuments installed in 2005 to determine the annual downslope movement. They plan to further their analysis of microbial-plant interactions (especially N cycling) and work to articulate the temporal linkages of major physical-chemical and biological processes. In addition, they will be further examining plant-animal interactions in the Green Valley for comparative studies.

In Alaska and Greenland, VPR will provide user days and truck use. In addition, for Thule visits, VPR will provide AMC clearances/ticketing for personnel and cargo, helicopter support, field gear, construction support, power, and lab/work space at the Peregrine Fund research center.

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=0221606](http://www.vecopolar.com/arlss_reports/arlss_projectsdetail.asp?cbPropNum=0221606)

## • 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, including the Greenland Guide.	Field Team Members	
Purchase order to Peregrine Fund for lab space	VPR	15 May
Purchase order to North Star for billeting	VPR	15 May
Reservations to North Star for all researchers		15 May
Secure trucks for researcher use from USAF	VPR	30 May
Subcontract with Air Greenland for Bell212 in Thule, March and July	VPR	05 Jun
Ongoing power to North Mountain	VPR	Ongoing
Ongoing highspeed internet to Bldg. 452 offices	VPR	Ongoing
Maintain account at Base Supply for researchers	VPR	Ongoing
Provide labels and track researcher cargo shipped through McGuire AFB to Thule	VPR	Ongoing
Purchase & ship 5 cans of bear spray	VPR	Pending
Subcontract with GC to backfill trench	VPR	Pending
Make AMC reservations for all researchers	VPR	30 May
Secure and distribute all clearances from NSF, Danish MFA, and USAF for each researcher	VPR	Ongoing
<i>Please note this important information for your field team: Bring 2 different forms of picture ID. Passports are mandatory for entry into Greenland. Be sure to pack them!</i>	Field Team Members	
Complete Critical Success Factors	PI	completed
For AK work, make truck and Toolik Field Station reservations	Naomi Whitty	

## • Allocations & Services •

### Allocations from Inventory - Greenland

Quant/Unit	Item
2	Iridium phones (one given to Ron in April, the other from Kanger)
4	REI Dome 3 tents
1	Coleman stove
8	Ground pads for sleeping

For more information on satellite phones, radios, manuals and other field communications support, please visit the VPR communications website at <http://vpr.sri.com>.

### Other Services

Project Allocations - Greenland	Comments
44 one-way AMC tickets	
120 days office & lab space Peregrine Fund	With internet access
Qty Greenland Contractors Support	Extension & backfill of trench
Qty miscellaneous supplies, up to \$2000	Via account at Base Supply
12 months power	North Mountain experiment sites
Storage	26 May to 30 Sept Bldg 628; year-round bldg 561
Workspace	26 Mat to 30 Sept Bldg 551

Project Allocations - Alaska	Comments
None, other than user and truck days	See below

**Accommodations:**

Qty./Unit	Item	Notes
~675 days	North Star Inn, Thule	
~41 days	Toolik Field Station	Short deployments in May, Sept, Nov, 2006

**Air Support**

Type	Location	Date	Comment
Helicopter, Bell 212 from Air Greenland	Thule		1 hour March, 1 hour June, 2 hours July

VPR will develop a flight plan for you and your pilot, with more details on your air support.

**Truck Support**

You are responsible for your own fuel. Like all rental agencies, the vehicle we provide you needs to be returned clean, with a full tank of gas. Let us know if your vehicle will be dropped off late, or at a location other than where you picked it up. For more information regarding your vehicle in Alaska, contact: Naomi Whitty

Desc	Dates	# Days	Comment
<b>Greenland</b>			
1 ea 4wd – seats 6	26 May to 15 Sept	112	from USAF
1 ea 2wd pickup	26 May to 15 Sept	112	from USAF
1 ea 2wd pickup	30 Jun to 01 Sept	64	from USAF or Peregrine Fund
<b>Alaska</b>			
1 ea pickup	Early Sept, Nov 6-10	~8	

For the duration of your VPR-provided truck rental in Alaska, you are covered by VPR automobile insurance. Please carry a copy of the following information with you. **If you are involved in an accident, please take photos and contact the Alaska Logistics Manager.**

**Name Insured:**

VECO Corporation  
9000 E. Nichols Ave  
Centennial, CO 80112  
303.792.2211

**Producer:**

Marsh USA Inc.  
1031 West 4<sup>th</sup> Street  
Anchorage, AK 99501  
907.276.5617  
Policy - #BAP534531801

*This statement is issued for information purposes only and subject to terms, exclusions, and conditions of such policy.*

• 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 •

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

**Cargo List**

Items	Weight/Cube
One pallet from Uni. Of Washington	400/30

## • Support Schedule •

Date	Location	Activity
06-14 Apr	Thule	Pre-season trip, Arens & Sletten
22-29 May	Toolik	Spring trip, Welker and Heitz
25 May	Thule	First wave of researchers in field for season
03 Jun	Thule	Bell212 for Green Valley data retrieval
15 Aug	Thule	Bell212 for Green Valley data retrieval
15 Sep	Thule	Last researchers depart Thule, end of field season
1 – 6 Sep	Toolik	Welker, Welker, Sveinbjornsson
6-10 Nov	Toolik	Welker, Sullivan, Arens

## • Field Team Information •

### Thule Field Station, GL

NAME	DATE IN	DATE OUT	TOTAL DAYS
Sletten, Ron	6-Apr-06	14-Apr-06	8
Arens, Seth	6-Apr-06	14-Apr-06	8
Arens, Seth	25-May-06	25-Aug-06	92
Persson, Kitrina	25-May-06	25-Aug-06	92
Rogers, Matthew	25-May-06	25-Aug-06	92
Holland, Keri	1-Jun-06	16-Jun-06	15
Logar, Nathaniel	1-Jun-06	16-Jun-06	15
Garnas, Derek	8-Jun-06	1-Sep-06	85
Hagedorn, Birgit	8-Jun-06	14-Jul-06	36
McDorman, Ross	8-Jun-06	1-Sep-06	85
Sletten, Ron	8-Jun-06	14-Jul-06	36
White, Seth	29-Jun-06	7-Jul-06	8
Hallet, Bernard	6-Jul-06	14-Jul-06	8
Holland, Keri	6-Jul-06	14-Jul-06	8
Schimel, Josh	6-Jul-06	14-Jul-06	8
Simpson, Rod	6-Jul-06	14-Jul-06	8
Welker, Jeff	6-Jul-06	14-Jul-06	8
Spitz, Hilary	13-Jul-06	28-Jul-06	15
Holland, Keri	17-Aug-06	25-Aug-06	8
Wallenstein, Matthew	17-Aug-06	25-Aug-06	8
Hagedorn, Birgit	31-Aug-06	15-Sep-06	15
Sletten, Ron	31-Aug-06	15-Sep-06	15

### Toolik Field Station, AK

NAME	DATE IN	DATE OUT	DAYS
Welker, Jeff	25-May-06	29-May-06	4
Heitz, Brian	22-May-06	29-May-06	7
Welker, Jeff	1-Sep-06	6-Sep-06	5
Welker, Molly	1-Sep-06	6-Sep-06	5
Sveinbjornsson, Bjartmar	1-Sep-06	6-Sep-06	5
Welker, Jeff	6-Nov-06	10-Nov-06	5
Sullivan, Paddy	6-Nov-06	10-Nov-06	5
Arens, Seth	6-Nov-06	10-Nov-06	5

• Project Contact Information •

**Research Team**

Role	Name	Email	Phone / Fax
Co-PI	Jace Fahnestock	<a href="mailto:Jace@nrel.colostate.edu">Jace@nrel.colostate.edu</a>	970 491-5262 /
Co-PI	Bernard Hallet	<a href="mailto:hallet@u.washington.edu">hallet@u.washington.edu</a>	206 543-8653 / 206 543-3836
Co-PI	Joshua Schimel	<a href="mailto:schimel@lifesci.lscf.ucsb.edu">schimel@lifesci.lscf.ucsb.edu</a>	805 893-7688 / 805 893-4724
Co-PI	Ronald Sletten	<a href="mailto:sletten@u.washington.edu">sletten@u.washington.edu</a>	206 543-0571 / 206 543-3836
Principal Investigator	Jeffrey Welker	<a href="mailto:afjmw1@uaa.alaska.edu">afjmw1@uaa.alaska.edu</a>	907 257-2701 / 907 257-2707

**VPR Team Members**

Contact for	Name	Email	Primary Phone(s)
Greenland operations	Robin Abbott	<a href="mailto:robin@polarfield.com">robin@polarfield.com</a>	Denver: 303.748.8507 Greenland: 011.299.524218
Greenland operations	Mark Begnaud	<a href="mailto:mark@polarfield.com">mark@polarfield.com</a>	Denver: 720.320.6160 Greenland: 011.299.524281
Thule operations	Susan Zager	<a href="mailto:susan@polarfield.com">susan@polarfield.com</a>	Denver: 720.320.6159
Alaska operations	Naomi Whitty	<a href="mailto:naomi@polarfield.com">naomi@polarfield.com</a>	Fairbanks: 907.590.3954
Denver operations	Jill Ferris	<a href="mailto:jill@polarfield.com">jill@polarfield.com</a>	Denver: 720.320.6155

**VPR Offices**

<b>Kangerlussuaq</b>
VECO Polar Resources Postboks 1015 DK-3910 Kangerlussuaq, Greenland Tel: 011.299.841598 Fax: 011.299.841599

**Other**

Organization	Internet	Phone
Airport Equipment Rentals/National Car Rentals 4960 Dale Rd Fairbanks, AK 99709	None	907.451.7368

• 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.

<b>Factors</b>
Securing office and lab space at Thule
Securing trucks for use at Thule
Securing travel to and from Thule for scientists and students participating in field course
Providing camp manager for field course
Transporting supplies and samples to and from Thule
Arranging transportation to and from Kanger
Arranging truck use in AK and lodging at Toolik
Arranging lodging at Thule
Securing power at N. Mtn-Thule

• 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.