

Please review all of the following information, including the gear allocations and field team information, to ensure accuracy. This plan is an agreement between CH2M HILL Polar Services (CPS), formerly VECO Polar Resources, and your group, documenting the logistics support you will receive.

SECTION ONE: PROJECT INFORMATION

Principal Investigator	Jeff Welker
Institute	University of Alaska, Anchorage - Environment and Natural Resources Institute
Project Title / Grant #	IPY: Collaborative Research: Study of arctic ecosystem changes in the IPY using the International Tundra Experiment (0632184)
NSF Program / Manager	US\Federal\NSF\OD\OPP\ARC\ARCSS\AON, Dr. Martin Jeffries
CPS Project Manager	Susan Zager

Note: This season plan covers 2008 work in Greenland only. CPS will distribute another plan that covers Alaska-based work for the collaborative ITEX experiment (0632277, Oberbauer, Lead) as well as for the Welker IPY tundra expansion project (0612534).

Logistics Summary

This collaborative project is composed of the following: 0632277 (Oberbauer, Florida International University, LEAD), 0632184 (Welker, UAA), 0632144 (Klein, CSU) and 0632263 (Hollister, GVSU). The research represents the US contribution to an international effort to remeasure sites in the International Tundra Experiment (ITEX) during IPY. This season plan focuses on the ITEX work conducted by Jeffrey Welker.

For the Welker component, teams will visit sites established at Thule, Greenland, twice annually during 2007 and 2008, and then remain on-site from late May to late September in 2009.

For 2008, in addition to the work at Thule, the PI will field a team based from Kangerlussuaq for collaborative studies with Eric Post related to ITEX. At the end of May, a team of 3 will arrive in Kangerlussuaq and establish the experiment there. The PI will travel to Thule about a week later to visit the ITEX sites there, before returning briefly to Kangerlussuaq and departing the island mid-June. Meanwhile the other two researchers will remain in Kangerlussuaq collecting data until late August. At that time, one will depart Greenland via the ANG.

The other will travel to Thule to complete the season's ITEX work. At the same time, he will reestablish a warming experiment funded under the PI's former BE grant, 0221606. As the two tasks are complete about a week later, the researcher will depart Greenland as well.

For the Welker ITEX experiment at Thule, CPS will arrange and pay for airfare (AMC or other available flights if AMC is booked), lodging, lab space, communications gear and truck rentals. The PI will arrange/pay for the researchers' transportation to Thule from Kangerlussuaq. For the Kangerlussuaq-based work, CPS will provide tents, and arrange for lodging/lab space in KISS. The PI will pay for the latter two items himself, and make/pay for the remaining arrangements from his grant.

Though ITEX team members will reestablish the warming experiments for the PI's BE grant (0221606), the PI is responsible for payment of any costs related to powering the experiments.

For the complete CPS online project record for this grant, including science objectives, go to: http://services.denver.veco.com/VPRedirect/arlss_reports/arlss_projectsdetail.aspx?cbpropnum=0632184

SECTION TWO: SEASON FIELD PLANS

Outstanding Actions and Notes

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	
Establish process for PI to pay for costs related to powering the BE experiment.	CPS, PI	CPS is working with USAF to coordinate direct billing of UAA by USAF, eliminating CPS as "middleman"
Passports are required for ANG and international travel. It's a good idea to bring two IDs and to pack a copy of your passport in case the original is lost.	Field Team Members	
Complete Critical Success Factors	PI	

Allocations and Services

Allocations from Inventory

Location	Allocations from Inventory	Comment
SFJ*	2 tents	ITEX
THU	Satellite phone	ITEX/BE

*SFJ = Kangerlussuaq; THU = Thule

Other Services

Location	Other Services	Comments
SFJ	Truck Rental	Arranged & paid by researcher directly or share with Post (0713994)
SFJ	Youth Hostel	Arranged & paid by researcher directly
SFJ	KISS room for Welker	Arranged by CPS, paid by researcher directly
SFJ	KISS lab	Arranged by CPS, no charge, per KISS Manager
SFJ	Ticketing, Dash 7 SFJ>THU	Arranged & paid by researcher directly
THU	Lodging at TSAR	Arranged/paid by CPS
THU	Truck rental	Arranged/paid by CPS
THU	Internet, TSAR	Arranged/paid by CPS
THU	Work/office space, TSAR	Arranged/paid by CPS
THU	Meals, dining hall	Arranged/paid by CPS

Support Schedule

Date	Activity
15 Jan 08	DPC application deadline for researcher.
21 May 08	All cargo arrives at 109 th for Welker project.
28 May 08	Welker, Cahoon, Frazer fly Albany > SFJ via 109 th
06 Jun 08	Welker flies SFJ > THU via Dash-7 (researcher pays)
11 Jun 08	Welker flies THE > SFJ via Dash-7 as no AMC seats available (CPS)
12 Jun 08	Welker flies SFJ > CPH (CPS)

13 Jun 08	Welker flies CPH > BWI (CPS)
14 Jun 08	Welker flies BWI > ANC (researcher pays)
27 Aug 08	Frazer flies SFJ > Albany via 109th
05 Sep 08	Cahoon SFJ > THU via Dash-7 (researcher pays)
12 Sep 08	Cahoon home on AMC (CPS)

Field Team Information

Name	Location	Date In	Date Out	Comment
Welker, Jeff	Kanger	28 May 08	06 Jun 08	
Welker, Jeff	Thule	06 Jun 08	11 Jun 08	
Welker, Jeff	Kanger	11 Jun 08	12 Jun 08	
Cahoon, Sean	Kanger	28 May 08	05 Sep 08	
Cahoon, Sean	Thule	05 Sep 08	12 Sep 08	
Frazer, Brett	Kanger	28 May 08	27 Aug 08	

Location Information

Please visit <http://www.polar.ch2m.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*, 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.polar.ch2m.com/> and navigate to Greenland > Calendars/Schedules. If you are a new user requiring access to the Cargo Tracking System, contact Jason Buenning (jason@polarfield.com). Customs instructions are available on our website at <http://www.polar.ch2m.com/> (go to Greenland > Customs). For Customs requirements please refer to the Greenland Guide, also available at <http://www.polar.ch2m.com/> under Greenland.

Project Contact Information

Research Team

Role	Name	Email	Phone / Fax
Co-PI	Keith Boggs	ankwb@uaa.alaska.edu	
Collaborator	Robert Hollister	hollistr@gvsu.edu	616.331.8582 /
Collaborator	Julia Klein	jklein@nrel.colostate.edu	970.491.7715 /
Co-PI	Bjartmar Sveinbjornsson	afbs@uaa.alaska.edu	
Co-PI	Paddy Sullivan	paddy@uaa.alaska.edu	
Collaborator	Steven Oberbauer	oberbaue@fiu.edu	305.348.2580 / 305.348.1986
Principal Investigator	Jeffrey Welker	afjmw1@uaa.alaska.edu	907.257.2701 / 907.257.2707

SECTION THREE: CPS CONTACT INFORMATION

CPS Team Members

Contact for	Name	Email	Primary Phone(s)
Thule operations	Susan Zager	susan@polarfield.com	Denver: 720.320.6159
Greenland operations (project support)	Jason Buenning	jason@polarfield.com	Denver: 303.638.6669 Greenland: 011.299.524218
Greenland operations (On-island support)	Mark Begnaud	mark@polarfield.com	Denver: 720.320.6160 Greenland: 011.299.524281
Greenland operations (project support)	Robin Abbott	robin@polarfield.com	Denver: 303.748.8507
Sat phones & comms	Roy Stehle	roy.stehle@sri.com	Menlo Park: 650.859.2552
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
Purchase orders	Mike McKibben	Mike.McKibben@CH2M.com	720.286.0410 (303.885.4644 cell)

CPS Offices

Denver	Kangerlussuaq	Scotia
CH2M HILL Polar Services Western Office 8110 Shaffer Parkway Suite 150 Littleton, CO 80127 Tel: 303.984.1450/1439 Fax: 303.984.1445	CH2M HILL Polar Services 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

SECTION FOUR: SAFETY, ENVIRONMENT, HEALTH and PERMITS

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. For assistance with the application process, contact:

Poul Henrik Sorensen

E-mail: phs@dpc.dk

Telephone: +45 3288 0100

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 CPS' support. Examples might be the availability of the helicopter or camp gear.

Factors
--PI did not provide--

Government and Performance 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 CPS' performance is a "facility-performance metric" which counts the number of productive days your project has in the field while relying on CPS facilities or support. Please keep track of any "lost days" and report these to us at the end of the season.