

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

<b>Lead Principal Investigator</b>	Konrad Steffen
<b>Institute</b>	University of Colorado, Boulder, Cooperative Institute for Research in Environmental Sciences
<b>Project Title / Grant #</b>	BSRN-compatible irradiance measurements and the stable boundary layer (CHAntennaKS)
<b>NSF Program and Manager</b>	CH\Federal\NSF, Ms. Renee Crain
<b>PFS Project Manager</b>	Sandra Starkweather

### Logistics Summary

This work involves ongoing studies of the Earth's boundary layer at Summit, Greenland, and continues work begun under grant "CHAntenna" (Ohmura). See that grant in this database for a historical record of this project.

After Ohmura, the PI on CH Antenna, retired, Konrad Steffen (University of Colorado) agreed to take over operation of the experiment through 2008. This record is for the work continued under Steffen.

In 2008, three personnel will visit Summit Station in late July to conduct maintenance on the experiment. In addition, they will install an all-sky camera on the TAWO roof, add additional instruments to the Swiss Tower, and test a radiometer for potential future use. Two personnel will spend about a week on station, while the PI will join them several days later for the remainder of the week.

CPS (formerly VPR) will coordinate the team's travel to Summit, and provide accommodations at Kangerlussuaq and Summit. CPS will also provide a dedicated weatherport for the team, provide assistance to the researchers as needed while they are on-station, and science technical staff will monitor the experiment year-round.

For the complete CPS online project record for this grant, including science objectives, go to: [http://www.vecopolar.com/arlss\\_reports/arlss\\_projectsdetail.asp?cbPropNum=CHAntennaKS](http://www.vecopolar.com/arlss_reports/arlss_projectsdetail.asp?cbPropNum=CHAntennaKS)

For up-to-date information on the project's schedule, please view the online [Greenland calendar](http://www.polar.ch2m.com) (<http://www.polar.ch2m.com> > Greenland > Calendars/Schedules).

## 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	24 March 2008
Obtain all necessary permits for fieldwork	PI	included with Summit Station permit
Visit all hyperlinks and review all documents referred to in the support plan	Field Team Members	24 March 2008
Contact the GEOSummit Science Coordination Office (SCO) <a href="mailto:sco@summitcamp.org">mailto:sco@summitcamp.org</a> regarding your project's plans for the season	PI	GeoSummit meeting, 2/1/2008

Medical Clearance completed 6-8 weeks before desired deployment date	Steffen Schroff Frei	Completed
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	24 March 2008
Complete Critical Success Factors	PI	24 March 2008

## Allocations and Services

### Allocations from Inventory

Quant/Unit	Item
1 ea	Swiss weatherport
3 ea	Tables in Swiss weatherport
3 ea	Chairs in Swiss weatherport
5 linear feet bench	Green House space
2 ea	Beds set up in Swiss weatherport

### Other Services

Project Allocations	Comments
Install Sky Camera	CPS will make a space available on the TAWO roof with a mostly unobstructed view of the sky (adjacent tower will obscure view). Inside TAWO, PI will have space to accommodate a laptop computer. Summit science techs will download/upload images to PI on regular basis. CPS will provide power, safe access, an Ethernet port, a static IP, and (outstanding issue) incorporation into Summit Web site. The PI will provide instrument, laptop computer and all required cabling.
Additional radiometer	A Reagan Sun Photometer with Aerosol wavelengths, $\mu\text{m}$ : 0.37, 0.40, 0.44, 0.52, 0.67, 0.78, 0.87, 1.03, will be tested at Summit for future autonomous installation on TAWO roof. Initial test can be done on a tripod close to BSRN radiometers.
Additional instruments on ETH tower	Meteorological instruments (wind speed, and direction, temperature and humidity) will be installed at 1, 2, 5, 10, 20, and 50 m levels. Wind instruments will have no moving parts (sonic, heated) and do not need maintenance.

## 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* and 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.polar.ch2m.com> and navigate to Greenland > Calendars/Schedules.

Customs instructions are available on our website at <http://www.polar.ch2m.com> (go to Greenland > Customs)

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

#### Cargo List

Items	Weight/Cube
Spare parts, Tools, Instruments	200 lbs app./ 70 ft3 max

#### Field Team Information

Institute	Name	Location	Date In	Date Out	Email
ETH	Frei, Hansjoerg	Kanger (via CPH)	7/21/2008	8/2/2008	<a href="mailto:hansjoerg.frei@env.ethz.ch">hansjoerg.frei@env.ethz.ch</a>
ETH	Frei, Hansjoerg	Summit	7/22/2008	7/31/2008	<a href="mailto:hansjoerg.frei@env.ethz.ch">hansjoerg.frei@env.ethz.ch</a>
ETH	Schroff, Karl	Kanger (via CPH)	7/21/2008	8/2/2008	<a href="mailto:karl.schroff@env.ethz.ch">karl.schroff@env.ethz.ch</a>
ETH	Schroff, Karl	Summit	7/22/2008	7/31/2008	<a href="mailto:karl.schroff@env.ethz.ch">karl.schroff@env.ethz.ch</a>
CU	Steffen, Koni	Kanger (via CPH)	7/23/2008	8/2/2008	<a href="mailto:Konrad.Steffen@colorado.edu">Konrad.Steffen@colorado.edu</a>
CU	Steffen, Koni	Summit	7/24/2008	7/31/2008	<a href="mailto:Konrad.Steffen@colorado.edu">Konrad.Steffen@colorado.edu</a>

#### Project Contact Information

##### Research Team

Role	Name	Email	Phone / Fax
Field Coordinator	Karl Schroff	<a href="mailto:karl.schroff@env.ethz.ch">karl.schroff@env.ethz.ch</a>	635-5225 /
Principal Investigator	Konrad Steffen	<a href="mailto:konrad.steffen@colorado.edu">konrad.steffen@colorado.edu</a>	303.492.4524 /303.492.1149

### SECTION THREE: CPS CONTACT INFORMATION

#### CPS Team Members

Contact for	Name	Email	Primary Phone(s)
Summit operations	Sandy Starkweather	<a href="mailto:sandy@polarfield.com">sandy@polarfield.com</a>	Denver: 303.518.8714
Greenland operations (project support)	Jason Buenning	<a href="mailto:jason@polarfield.com">jason@polarfield.com</a>	Denver: 303.638.6669 Greenland: 011.299.524218
Greenland operations (On-island support)	Mark Begnaud	<a href="mailto:mark@polarfield.com">mark@polarfield.com</a>	Denver: 720.320.6160 Greenland: 011.299.524281
Greenland operations (project support)	Robin Abbott	<a href="mailto:robin@polarfield.com">robin@polarfield.com</a>	Denver: 303.748.8507
Medical	Kyli Olson	<a href="mailto:kyli@polarfield.com">kyli@polarfield.com</a>	Denver: 303.489.2151
Denver operations	Jill Ferris	<a href="mailto:jill@polarfield.com">jill@polarfield.com</a>	Denver: 720.320.6155
Scotia operations & customs	Earl Vaughn	<a href="mailto:earl.vaughn@gmail.com">earl.vaughn@gmail.com</a> <a href="mailto:vprscotia@hughes.net">vprscotia@hughes.net</a>	Scotia: 518.331.3103

**CPS Offices**

<b>Denver</b>	<b>Kangerlussuaq</b>	<b>Scotia</b>
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 <sup>th</sup> Aerial Port Bldg. 20 Stratton Air Base Scotia, NY 12302-9752 Tel: 518.331.3103 Fax: 518.334.2537

**Summit Station**

<b>Summer</b>
CH2M HILL Polar Services Attn: Name of Employee/Researcher - Summit Station C/O Earl Vaughn 109 <sup>th</sup> Aerial Port Bldg. 20 Stratton Air Base Scotia, NY 12302-9752 Tel: 518.331.3103 Fax: 518.334.2537

**Other**

<b>Organization</b>	<b>Internet</b>	<b>Phone</b>
Summit Science Coordination Office	<a href="http://www.geosummit.org">http://www.geosummit.org</a> <a href="mailto:sco@summitcamp.org">sco@summitcamp.org</a>	John Burkhart 209.658.7142

## SECTION FOUR: SAFETY, ENVIRONMENT, HEALTH and PERMITS

### 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 6-8 weeks prior to their travel to Greenland. For more information refer to CPS' Greenland Guide, available at <http://www.polar.ch2m.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 CPS' support. Examples might be the availability of the helicopter or camp gear.

<b>Factors</b>
Logistics support in Kangerlussuaq prior to Summit deployment
Logistics support in Summit during field maintenance trip
Support of daily instrument maintenance throughout the year at Summit
Office support at KISS (email, fax, phone)

### 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.