

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) and your group, documenting the logistics support you will receive.

PROJECT INFORMATION

Lead Principal Investigator	Winfried Hanka
Institute	GeoForschungsZentrum Potsdam, GEOFON Program
Project Title / Grant #	GEOFON (GEOForschungsNetz - Geo Research Network) (DESeismic)
NSF Program and Manager	Intl - GFZ Potsdam, Ms. Renee Crain
PFS Project Manager	Sandra Starkweather

LOGISTICS SUMMARY

This project makes broadband seismological recordings of global earthquakes at Summit, Greenland. Formerly a part of the temporary GLATIS network, project responsibility has been turned over to GFZ Potsdam. Summit instruments have been included in that institute's GEOFON network.

The PI will visit Summit Station annually to service and maintain the project's seismological station. Over the years, in addition to the scheduled maintenance, project personnel have visited Summit for various other project needs: In 2002, they installed an upgraded datalogger for the seismological station and a "Seiscomp" box that connected the station to the Summit LAN for Internet real-time data transmission; in 2004, another major station upgrade overcame technical problems and minimized required local support; finally, in 2007, two technicians raised and relocated the seismometer bunker, routing power and communications connections out of the Temporary Atmospheric Watch Observatory.

In 2009, a technician will return to Summit in May to conduct minor maintenance on the seismometer. Station staff will assist the technician as needed with excavation of the bunker and maintenance activities. Year-round, science technical staff will re-level the instrument and provide as-needed assistance.

CPS will provide Kangerlussuaq user days, travel to/from Summit, and access to infrastructure and science technician support at Summit Station for the year-round experiment. The PI will pay CPS directly for costs associated with this support. All other logistics will be provided by the PI.

For the complete CPS online project record for this grant, including science objectives, go to:
http://www.polar.ch2m.com/arlss_reports/arlss_projectsdetail.asp?cbPropNum=DESeismic

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

OUTSTANDING ACTIONS AND NOTES

Issue	Responsibility	Date Completed
Review support plan for accuracy and distribute to all field team members	PI	03/31/09
Obtain all necessary permits for fieldwork	PI	Included with Summit Permit
Visit all hyperlinks and review all documents referred to in the support plan	Entire field team	
Contact the GEOSummit Science Coordination Office (SCO) sco at summitcamp.org regarding your project's plans for the season	PI	04/14/09

Complete medical clearance process 6-8 weeks before desired deployment date	None	Short stay obviates need for PQ
Provide cost estimate for billable support	CPS	3/20/2009
Develop a purchase order with CPS prior to field work	PI	
Provide bill for actual support	CPS	After season
Note: Passports are required for Air National Guard and international travel. It is a good idea to bring two IDs and to pack a copy of your passport in case the original is lost.	Entire field team	Only need one ID if travelling from Europe
Complete Critical Success Factors	PI	04/14/09

ALLOCATIONS AND SERVICES

Allocations from Inventory

Quant/Unit	Item
1/ea	Arctic Oven Sleep Tent
2/ea	Sleeping Pads
2/ea	Shovels for excavation

Other Services

Project Allocations	Comments
Kangerlussuaq user days	~ 4 days in KISS
Air Travel SFJ><SUM	
Summit user days	~3 days
Excavation of the Seismo-bunker	Prior to the team's arrival on site (or shortly after their arrival), the camp staff will excavate the seismo-bunker
Periodic re-leveling of seismometer	As requested by the PI
Working Location	The technician will be given space to spread out and work on the workbench in TAWO during his time on station. He should coordinate with the science techs to avoid conflicts with other science activities.

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

If you need **technical support** with the Cargo Tracking System, contact [Mike Dover](#).

Customs instructions are available on our Web site at <http://www.polar.ch2m.com/> (go to Greenland > Customs). More information is available via the *Greenland Guide*, under Greenland on the CPS site.

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

Cargo List

Items	Weight/Cube
None	

SUPPORT SCHEDULE

Approx Date	Location	Activity
05/11/09	Kangerlussuaq	Researcher arrives in Kangerlussuaq via GL 781 Air Greenland
05/12/09	Summit	Researcher arrives at Summit
05/12/09 - 05/14/09	CAZ (Clear Air Zone)	Camp staff helps the field team to excavate the seismometer bunker; one field assistant available as-needed.
05/14/09	Summit	Field team leaves Summit
05/18/09	Kangerlussuaq	Field team leaves Kangerlussuaq via GL 782 Air Greenland

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

FIELD TEAM INFORMATION

Name	Location	Date In	Date Out	Email
Juergen Schuette	Kangerlussuaq Summit	05/11/09 05/12/09	05/18/09 05/14/09	schue at gfz-potsdam.de

PROJECT CONTACT INFORMATION
Research Team

Role	Name	Email	Phone / Fax
Co-PI	Trine Dahl-Jensen	tdj at geus.dk	(45) 814.2519 / (45) 814.2050
Principal Investigator	Winfried Hanka	hanka at gfz-potsdam.de	(49) 331.288.1213 /

CPS Team Members

Contact for	Name	Email	Primary Phone(s)
Summit operations	Sandy Starkweather	Sandy at polarfield.com	Denver: 303.518.8714
Greenland on-island support	Mark Begnaud	Mark at polarfield.com	Denver: 720.320.6160 Greenland: 011.299.524218
Scotia operations & customs	Earl Vaughn	Earl Vaughn at gmail.com	Scotia: 518.331.3103
Sat phones & comms	Roy Stehle	Roy Stehle at sri.com	Menlo Park: 650.859.2552
RMI	Kyli Olson	Kyli at polarfield.com	Denver: 303.489.2151
Denver operations	Jill Ferris	Jill at polarfield.com	Denver: 720.320.6155
Purchase orders	Steve Heiman	Steve Heiman at ch2m.com	Tel: 720.286.2277 Fax: 720.286.9287

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: 518.344.2635 Cell: 518.331.3103 Fax: 518.344.2537

Summit Station

Winter	Summer
CH2M HILL Polar Services Western Office Attn: Name of Employee/Researcher 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 - Summit Station C/O Earl Vaughn 109 th Aerial Port Bldg. 20 Stratton Air Base Scotia, NY 12302-9752 Tel: 518.344.2635 Fax: 518.344.2537

Other

Organization	Internet	Phone
Summit Science Coordination Office (SCO)	http://www.geosummit.org sco at summitcamp.org	John Burkhart +47 96 82 5011

SAFETY, ENVIRONMENT, HEALTH and 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 at dpcc.dk](mailto:phs@dpcc.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
Preparation of the bunker excavation or assistance during excavation.
Consistent power & comms throughout year.
Regular re-leveling of seismometer by science techs.

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.