

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	Michael Bevis
Institute	Ohio State University, Byrd Polar Research Center, Department of Geological Sciences
Project Title / Grant #	Collaborative Research: IPY: POLENET/Greenland: Using Bedrock Geodesy to Constrain Past and Present Day Changes in Greenland's Ice Mass (0632320)
NSF Program and Manager	NSFOD\OPPARCVANS, Dr. William Wiseman
PFS Project Manager	Robin Abbott

LOGISTICS SUMMARY

This project is a collaboration between Bevis, OSU (0632320, LEAD) and Csatho, SUNY-Buffalo (0632310). International collaborators are Danish Technical University (DTU) and the University of Luxembourg.

The GNET project has constructed a network (GNET) of over 38 continuous GPS stations ringing the perimeter of Greenland as part of the U.S. contribution to the International Polar Year (IPY) and the international POLENET consortium. The researchers installed the stations during 2007, 2008 and 2009.

For the 2010 season, the field effort will be led by the Danish Technical Institute (DTU), which plans to field teams around the island in several phases for GNET maintenance and absolute gravity measurements. At the end of May, a team will work on the central west coast of Greenland between Ilulissat and Upernavik. A team of two people from DTU will charter an Air Greenland helicopter from Ilulissat and do absolute gravity measurements along the coast at six GNET sites where maintenance will be done. This work will take approximately 1 week. US participation will include cargo shipment from NY via the 109th Air Guard as well as Air GL air freight shipments to Ilulissat, Upernavik and Narsarsuaq.

DTU personnel will return to Greenland in mid August, 2010. Having chartered an AirGL helicopter based out of Narsarsuaq, two Danish collaborators will fly up the SE coast of Greenland doing absolute gravity measurements at each of the GNET sites that have been installed in that area. Maintenance can be performed on the sites while gravity measurements are taken.

The third GNET phase for 2010 led by DTU will take place in September based at Thule. A helicopter will be chartered by DTU to visit three GNET sites where again absolute gravity measurements will be performed. One US team member from UNAVCO will join the team during this phase.

US participation in 2010 will include paying for cargo shipments, travel/accommodation for the UNAVCO electronics engineer at Thule, communications/safety gear, as well as UNAVCO providing repair kits for the GNET stations. NSI/DTU will cover all other expenses.

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=0632320

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

ALLOCATIONS AND SERVICES

Allocations from Inventory

Quant/Unit	Item
1 ea	Iridium Phone

For more information on satellite phones, radios, manuals and other field communications support, please visit the CPS communications Web site at <http://www.polar.ch2m.com/>.

Other Services

Service	Comments
Cargo arrangements made on 109 th Air Guard	10 May and 21 June flight
Cargo shipped to Upernavik, Ilulissat, and Narsarsuaq via Air GL cargo system	
Container storage in Ilulissat for misc spares	
AMC tickets	For UNAVCO technician to/from Thule
Lodging in TSAR	For UNAVCO technician

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 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
UNAVCO spares and cargo for Ilulissat, Upernavik sites	5 pieces, 40cube, 480 lbs
UNAVCO spares and cargo for Narsarsuaq sites	~440 lbs
UNAVCO spares and cargo for Thule sites	1 piece, 8cube, 80 lbs

SUPPORT SCHEDULE

Approx Date	Location	Activity
20 May	CPH > Kanger > Ilulissat	DTU personnel arrive in Kangerlussuaq (Finn Bo Madsen, TBA).
22-27 May	Helicopter charter	Visit sites: KAGA, Quaarsut, RINK, Upernavik, Kullorsuaq, ASKY, SRMP
28 May	Ilulissat > Kanger > CPH	DTU personnel arrive back in Kangerlussuaq
Mid - August	Narsarsuaq	DTU personnel arrive in Narsarsuaq (Finn Bo Madsen, TBA)
Mid - August	Helicopter charter	Visit sites from Narsarsuaq up the SE coast to Kulusuk
Mid- Sept	Thule	DTU and UNAVCO personnel arrive in Thule for 1 week
Mid- Sept	Helicopter charter	Visit sites based out of Thule

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
Madsen, Finn Bo	Kanger	05/20/10	5/28/10	bm at space.dtu.dk
	Ilulissat > Upernavik sites	05/22/10	05/28/10	
	Narsarsuaq	TBD	TBD	
	Thule	TBD	TBD	

DTU personnel	Kanger	05/20/10	5/28/10	
	Ilulissat > Upernavik sites	05/22/10	05/28/10	
	Narsarsuaq	TBD	TBD	
	Thule	TBD	TBD	
White, Seth	Thule	TBD	TBD	white at unavco.org

PROJECT CONTACT INFORMATION

Research Team

Role	Name	Email	Phone / Fax
Principal Investigator	Michael Bevis	mbevis at osu.edu	614 499.5966 /
Collaborator	Beata Csatho	bcatho at buffalo.edu	716 645.6800 /716 645.3999
Co-PI	Cornelis van der Veen	vanderveen.1 at osu.edu	614 292.6704 /
Co-PI	Terry Wilson	twilson at mps.ohio-state.edu	614 292.0723 /

CPS Team Members

Contact for	Name	Email	Primary Phone
Greenland science planning & support	Robin Abbott	Robin at polarfield.com	Denver: 303.748.8507
Thule science planning & support	Kim Derry	Kim at polarfield.com	Denver: 303.349.6382
Kangerlussuaq base operations	Kathy Young	Kathy at polarfield.com	Denver: 720.320.6160 Greenland: 011.299.524218
Scotia (Stratton Air Base) operations & customs	Earl Vaughn	Earl Vaughn at gmail.com	Scotia cell: 518.605.0979

CPS Offices

Denver	Kangerlussuaq	Scotia
Polar Field Services 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: 518.605.0979 Fax: 518.344.2537