

THULE GUIDE **2018**

CH2M HILL Polar Services

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Prepared by Polar Field Services for CH2M HILL Polar Services

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Contents

Thule Guide	3
Getting Started	3
CH2M HILL Polar Services in Thule	3
Science Projects.....	4
Project Approval/Permits.....	4
Project Summaries and Season Plans.....	4
Before You Leave for Thule	5
Passports	5
Military Clearances.....	5
Money.....	5
Insurance.....	5
Search and Rescue (SAR)	6
Harassment	6
Cold Weather Gear Requirements - What to Pack	6
Transporting Cargo to Thule	7
Air National Guard.....	7
Air Mobility Command (AMC).....	7
USPS/APO	7
Travel to Thule	8
Your Arrival in Thule.....	8
Your Stay in Thule.....	8
Support Services	8
Room and Board	9
Computer/Internet/E-mail	11
Telephone	11
Recreation and Shopping.....	12
Dining	12
Weather & Safety	13
Transportation within Base Limits	13
Truck Rentals	13
Air Greenland Helicopter Charter.....	15
About This Guide.....	15

Thule Guide

The *Thule Guide* is written for researchers planning fieldwork at or based out of Thule Air Base in Greenland. Topics are arranged in chronological order: planning, travel to Greenland, fieldwork, and return home. Additional topics of interest are included at the end.

Please contact your CPS project manager (PM) for further information on any topic.

Getting Started

Established in 1951, Thule is the US Air Force's (USAF) northernmost base at almost 77° N. Through cooperative agreements between the USAF and NSF, NSF researchers are allowed access to Thule, opening many opportunities for the research community. Serving as the NSF's liaison in Thule, CPS supports science using Thule's infrastructure as well as bringing in outside elements when necessary.

Begin planning for your project by contacting your Project Manager (PM) at CPS. CPS will work closely with you to determine your needs and keep logistics within the scope of NSF funding. Depending upon the level of complexity of your project, planning will be an ongoing process that will likely be finalized just a couple of weeks before your project deploys for the field.

At Thule, you will meet many representatives from government agencies as well as private contractors. Everyone at Thule (except researchers) works to support Thule's military mission. Thule's summer population can be 700 or more.

- USAF personnel in administrative and security forces roles
- Danish Arctic Command representatives are present in the Danish Liaison Office
- The Danish Police Inspector (DPI)
- There is a Base Maintenance Contractor responsible for all base support operations, from vehicles to accounting to staffing the dining hall and gymnasium
- Air Greenland, the Greenlandic air carrier by U.S. Embassy charter
- American contractors working at the Ballistic Missile Early Warning System site and other secured facilities around Thule
- Researchers funded by international agencies and a permanent Danish Meteorological Institute presence in Qaanaaq

CH2M HILL Polar Services in Thule

CH2M HILL Polar Services (CPS) operates under a contract with the U.S. National Science Foundation (NSF) to provide logistics support for NSF-sponsored research projects, as well as projects funded by other research agencies. <http://cpspolar.com/>

CPS services in Thule include:

- ✦ Logistics support (transportation, air support, cargo movement, and facilities management)
- ✦ Military travel, base and area clearances
- ✦ Lodging arrangements
- ✦ Support coordination with appropriate agencies

CPS does not have a permanent or even seasonal personnel presence at Thule so researchers are expected to be self-sufficient. Researchers work with their CPS Project Manager on support requested and CPS will arrange for personnel to be on site as is pertinent.

While at Thule Air Base, participants are guests of the USAF, the Government of Greenland, and the Danish Arctic Command and work under the auspices of the NSF. This arrangement is facilitated by a cooperative relationship between the NSF and the pertinent agencies. In the event of issues, notify CPS for assistance to maintain clear communication with our hosts.

Science Projects

A detailed list of science projects currently supported by CPS is available at: <http://armap.org/>

Navigate to 'Text Search' to run a report based on your desired criteria.

Project Approval/Permits

Science teams planning to work in Greenland must comply with all permitting requirements of the Government of Greenland. An overview can be found on the Ministry of Nature, Environment and Justice website: <http://naalakkersuisut.gl/en/About-government-of-greenland/Travel-activities-in-remote-parts-of-Greenland>

Project Summaries and Season Plans

When CPS is notified that a scientist has been funded and will require assistance for Greenland research, a project record is created in our database of arctic research information. CPS sends a project summary to the principal investigator (PI) and assigns a Science PM to the project.

As the planning season begins, the PM will work closely with the PI (or designee) to develop a support plan for the field season. This is documented in a season plan provided to the NSF for review prior to Greenland deployment.

Before You Leave for Thule

Essential items to consider and/or accomplish before you leave for Thule:

Passports

Participants traveling to Greenland must carry a valid passport. Passports are available through the U.S. Post Office and take approximately six weeks to process. A valid passport is required prior to initiating the travel-clearance process with CPS. ***All participants must carry passport, two passport copies, and one other form of picture identification for travel to Greenland.***

Military Clearances

As you work with CPS, you will be asked to provide personal information on each member of your field party. This information will be used to obtain military and country clearances for your party from the USAF and the Royal Danish Ministry of Foreign Affairs at least 30 days prior to travel. CPS will also use this information to prepare a Letter of Introduction (LOI) from the NSF. The LOI states that you are an NSF researcher and allows access to the AMC flights to and from Greenland.

Tip: Military personnel will refer to your LOI as “travel orders”.

Personal information required for each member of field team:

- Name
- Date of birth
- Place of birth
- Country of citizenship
- Passport number
- Passport expiration date
- Emergency contact name, phone and email

Money

US dollars, credit cards, debit cards, and personal checks are accepted on the base. The Base Exchange accepts credit cards, and debit cards with a pin, and can give you small amounts of cash back on your check/cash card when you make a purchase. If you find yourself in need of Danish Kroner for travel away from Thule, you can exchange money at Thule’s Greenlandic post office.

Insurance

Researchers must confirm with their home institution that they have appropriate insurance coverage for the Greenland deployment. For personal travel in or outside of Greenland, additional traveler's insurance coverage is recommended.

Search and Rescue (SAR)

Research parties intending to work in the remote field must carry the following insurance coverage (in addition to the remote travel permit):

Type:	Coverage in DKK	Coverage Unit:
Search and Rescue (SAR)	DKK 1,000,000	Per project
Evacuation (ambulance) transport for expeditions traveling south of latitude 78°	DKK 280,000	Per person
Evacuation (ambulance) transport for expeditions traveling north of latitude 78°	DKK 600,000	Per person

Check conversion rates at <http://www.xe.com/>

NSF will cover SAR costs through U.S. Government self-insurance for NSF-funded scientists who do not have this coverage available through their institution or other policies. NSF submits a list of projects to which this coverage applies to the Government of Greenland.

Researchers are responsible for their own evacuation (ambulance) insurance, which covers transport from the field location to the nearest hospital within Greenland (or possibly Iceland.) Many universities and institutes carry evacuation insurance for their employees. It is the researchers' responsibility to determine with their institution's Risk Management office if their group has appropriate coverage. Researchers should pursue an evacuation insurance policy for their project team, an allowable cost in their NSF grant.

Harassment

NSF-supported Arctic Research field sites, camps and stations are managed by CPS using the following guidelines. Professional conduct and acceptable behavior is mandatory for participants during work and non-work hours. Participants are expected and required to work cooperatively, treat others with dignity and respect, follow the site-specific policies and procedures, and contribute to a safe work and living space at all times.

The CPS site manager has the responsibility and authority to address behavior issues and may remove any participant from a field location who is exhibiting unacceptable behavior. This includes but is not limited to harassment, alcohol mis-use, unsafe work behavior and not following the site-specific policies and procedures.

Cold Weather Gear Requirements - What to Pack

Researchers provide their own cold weather clothing, boots, and sleeping bags. Weather conditions vary widely with location and latitude in Greenland. Select suitable cold weather clothing based on the location where research is conducted.

The most important rule for arctic work is to stay dry and warm. See our recommendations here: <http://cspolar.com/for-researchers/risk-management/clothing-lists/>

Transporting Cargo to Thule

Air National Guard

The preferred mode of cargo movement to Thule is opportunity flights via the New York Air National Guard 109th in Scotia, NY. Researchers will be asked to conform to the 109th's schedule for both inbound and outbound cargo.

Please refer to the Greenland Guide and/or CPS website for details on how to prepare cargo for transport on the New York Air National Guard 109th flights.

Air Mobility Command (AMC)

Alternative arrangements can be made via the AMC cargo flights to Thule for a freight and handling charge. AMC cargo is typically much more expensive than Air National Guard so researchers must work with their project manager in advance to determine the most cost effective and efficient way to move cargo.

USPS/APO

The USPS/APO can be used for the movement of cargo and personal items. The following guidelines must be observed:

- The Packages may not exceed 70 lbs.
- Packages may not exceed 108 inches in combined length and girth. (This means if you have a package that is 60" L + 10" W + 40"H when you measure it, you cannot send the item.)
- The post office requires companies or individuals to hand deliver packages being sent to APO/FPO addresses. (This is one reason why many merchants won't ship to APO/FPO addresses.)
- Other local, state, and country restrictions may apply.
- Please allow at least 3 weeks for delivery depending on size and cube of your package.
- Thule APO address:

**CH2MHILL/NSF
Addressee Name**

**PSC 1501
Unit 82501
APO, AE 09704**

Travel to Thule

Travel to/from Thule can be coordinated with your CPS project manager by utilizing AMC (Air Mobility Command) flights, NSF-chartered Air National Guard flights, or limited international and inter-Greenland flights. To get the most up-to-date schedule and decide please contact your CPS project manager or Kyli Cospers at Kyli@Polarfield.com

Your Arrival in Thule

Upon your arrival at Thule, and depending on the season, you could be greeted at the Terminal by a CPS representative, the USAF TSgt. Logistics Technician, or a USAF representative. You will be given a short briefing and will be required to wait for a temporary visitor credential before leaving the airport. You will need to have your passport and clearance information handy. If no one is there to take you to your pre-arranged lodging, a free taxi service is available – directions on how to use the taxi service are posted in most all buildings in Thule and will be covered upon arrival.

If you arrive during Storm Season (15 September until midnight 15 May), and are not greeted by CPS staff, you must contact the Housing Department once you arrive at B345. Please provide them with the names, length of stay, and room numbers of the persons in your party.

The following are names and contact numbers you may need during your stay in Thule;

- USAF Logistics Technician/Support Agreement, x2389
- Air Greenland Office, x3440
- VECTRUS Housing Dept. (mandatory during Storm Season), x2873

Your Stay in Thule

CPS does not always have a personnel presence in Thule and researchers are expected to be self-sufficient. Your CPS Project Manager will provide direction to supplement the basics in this guide.

Support Services

The following is a short list of services and opportunities available, which CPS can arrange for you through your Project Plan:

- Thule Station for Arctic Research (TSAR/B345) – berthing and office space
- North Star Hotel
- Truck rentals
- Airfield support
- Air Greenland's Bell212 helicopter (via CPS contracting)
- Base Supply (for safety gear, tools, parts, small field items, office needs, housing supplies, bug nets, etc.)
- Base Exchange (small grocery store with access to fresh/frozen food, dry food, sundries, alcohol, and
- Emergency facilities (hospital, 24 hr. radio monitor)
- Limited Warehouse space (contact your PM to communicate requirements)
- Lab space in Hanger 4 (H4) Lab
- Cargo movement via APO/USPS, Air Mobility Command (AMC) to/from BWI (space available basis), Embassy flights to/from Kangerlussuaq (space available basis), and flights of opportunity with the NYANG 109th

CPS can also provide items like camping gear, survival bags, satellite phones, etc. Because we don't keep an inventory of these items at Thule, be sure to identify these needs well in advance of your visit so CPS can coordinate a timely delivery.

Room and Board

Thule Station for Arctic Research (TSAR) – Bldg. 345

The TSAR (Bldg. 345) has been offered by the USAF to support and promote Arctic research. As such, it is not an NSF owned facility; the TSAR is used by a variety of international science agencies, with scheduling coordinated by CPS.

The TSAR is configured with nine bedrooms, two offices (with multiple desks), one "field office", one short-term cargo/dry storage room, a common room with dining area, a separate TV room,

two bathrooms, two showers, and laundry facilities. Beds are two to a room; **guests are expected to double up on rooms whenever necessary.**

A wireless internet connection is available for researchers, but bandwidth is limited. This is a connection that is provided by satellite and delivered through a phone line so there can be many factors in the speed of the internet. It is an expensive and shared resource – so no streaming is allowed.

The TSAR does not receive janitorial services, so the upkeep and cleaning falls to the researchers using the facility. A list of suggested housekeeping tasks is posted at various locations in the TSAR. **Researchers are responsible for the upkeep of the offices, the kitchen and bathroom facilities! Please launder your linens before you leave and empty the trash in your room.**

If you find appliances requiring service or equipment needing repair (including maintenance on the wireless network), have any needs such as cleaning supplies, new linens, or utensils, please bring them to the attention of your CPS Project Manager.

The TSAR was built many decades ago using asbestos products and lead based paints. Avoid making dust or debris and make no physical alterations to the building or structure. Both materials are safe in their current form unless disturbed. Water that has been standing in pipes may contain lead so please run the cold-water faucet until the temperature of the water has gone consistently cold. Water from the hot water faucet should not be used for cooking, drinking, or brewing teas and coffee. We do employ a filter.

Researchers are also responsible for developing day to day working agreements with other researchers who will be sharing the facility. Please be considerate of those who will use the facility after you! Do not leave materials/equipment for 'next season' in the TSAR. The facility is not meant for storage, and accumulation of equipment will mean less room for researchers to work and sleep.

During Storm Season (15 September until midnight 15 May) all guests must be made known to the Housing Department. If PFS Staff, is not on site during your visit, please contact Housing at x2256 with the following information; name, room number, arrival and departure date of all residents.

North Star Inn

The North Star Inn is a full-service hotel. Rooms are private with shared bathrooms and common areas for cooking and lounging. One hour of Internet is provided per night through a "Hot Spot" connection. It can be used through a wireless access point or in the hotel business center. A wireless connection can be set up for CPS/NSF personnel staying at the hotel. Please be mindful of your use and ask your CPS project manager for advance set-up, the SSID and Password/key.

North Star Desk Hours

Monday/Wednesday/Thursday: 0700-1000, 1300-1700

Tuesday/Friday: 0600–1000, 1300-1600

Computer/Internet/E-mail

Office technology (printer/scan/fax) is basic at the TSAR. We currently recommend that the Community Center be used for large or elaborate print jobs. The hotel has a small business center and CPS can install a wireless access point in the second-floor lounge (inquire with you project manager to arrange set-up). There is no real IT support from a consumer standpoint. If you require specific printing capabilities (color printing for example), a dedicated printer or scanner, or extended use of office equipment arrangements should be made in advance.

A shared DSL connection is available in the TSAR (Bldg. 345). This is a low bandwidth and expensive connection. **While staying at the TSAR or North Star and using the wireless connection all users should disable auto updates and Apple users should disable iCloud on their devices. The use of chat applications that run video feed is not allowed i.e. – no video Skype or video g-chatting. The downloading of recreational or entertainment video such as TV shows or movies is also not allowed.** (Although these accounts are monitored we ask for good faith efforts on the “no video” rule at both Summit and Kanger as well). The router now has an administrative password – your CPS Project Manager for the current password. Tele Greenland, provider of the DSL line in the TSAR, is the only ISP and therefore costs are well above those in the U.S. **Back-up storage devices should be brought to Thule to avoid the need for transferring large amounts of data and files while in Greenland. Large downloads should be avoided unless critical.**

At the North Star Inn, a wireless connection can be set up for CPS/NSF personnel staying at the hotel. Please be mindful of your use and ask your CPS project manager for advance set-up, the SSID and Password/key. The North Star Inn also has a basic office center which provides basic access to a computer and printer.

Telephone

To make outside phone calls, bring a phone card or purchase one at the Base Exchange (BX). You will call the base operator (dial 0) and ask to have the toll-free number dialed. If you have purchased the BX phone card you need to only ask for “speed dial 4”. Some researchers report that mobile phone service works in Thule periodically but is extremely expensive. If you want to give a number to your office or family, they can contact you at 719.474.3840 x7345 (B345). This number is the Thule operator; they will connect phone calls to the appropriate extensions around the station. The TSAR/B345 is x7345. The North Star is x3276 but you should have your off-station caller ready with your room *extension* – not your room number – if they would like to be connected directly to your room and for after hotel desk hours.

Recreation and Shopping

Life at Thule is far from roughing it. Look forward to comfortable living spaces, a wide selection of foods, friendly people to answer your questions, and a variety of social and recreational opportunities whenever you need a break. The gymnasium and sports facility are as nice as you will find in the U.S. and the Community Center is an amazing resource with a theater, craft room, and a café.

Tip: Bring separate pairs of shoes for indoor and outdoor use (ex. SNEAKERS for the gym) as you will not be allowed entry with outdoor uncovered shoes.

Base Exchange

The Base Exchange (BX) is a store selling a little bit of everything. Here you can buy groceries and toiletries, an iPod and an ironing board, tobacco and souvenirs, or most anything you forget to bring along. Within the BX there is also a Barber Shop. An appointment is required.

Tip: Be aware that some souvenirs made from certain animal products cannot be taken into the US; consult the US Customs and Border Protection's website at <http://www.cbp.gov/> for more information.

Base Exchange Hours

Monday - Friday: 0800-2000

Saturday: 1000-1900

Sunday: closed

Base Supply

With prior arrangements made by CPS, you can get basic supplies for fieldwork like nails, duct tape, small hand tools, safety gear, etc.

Dining

Dundas Buffet Dining Hall

If you're staying at the TSAR during the summer season, you can obtain a meal card at the North Star Hotel (Bldg. 100). If you stay at the North Star, a meal card is issued at check-in. This card can be "charged" with cash or credit/debit cards (with pin) at the Dining Hall, in the Base Exchange, the North Star hotel. Different dollar amounts are allowed so that the correct amount of funds may be added in relation to your stay. The meal card works as a declining balance card and is the only payment method that the Dining Hall (Dundas Buffet) accepts for daily meals.

Dundas Buffet Hours

Monday – Friday: Breakfast 0500-0800, Lunch 1100-1300, Dinner 1700-1900

Saturday: Breakfast 0700-1000, Brunch 1000-1300, Dinner 1700-1900

Sunday: Breakfast 0700-1000, Brunch 1000-1300, Dinner 1700-1900

Communal Kitchens – TSAR & North Star Inn

Both the North Star Inn and TSAR are equipped with basic communal kitchens. Limited food can be procured at the Base Exchange or a small Danish deli located adjacent to the Dundas Buffet. Please be respectful of other users and clean up after yourself.

Weather & Safety

As with any high Arctic location, weather at Thule can be unpredictable. Thule's temps can range from 50F in the summer to -50F in the winter. Longer nights start in autumn; long days and mosquitoes arrive in June. And while Thule is famous for its winds, the summer weather feature that affects research operations more than any other is fog and rain (mud can be an annoyance). Fog can ground flight operations for days, preventing the helicopter from making field picks ups/drop offs and interrupting AMC service. As with field work anywhere in the Arctic, come prepared and be flexible!

When traveling off base during the winter months, you will need to contact Hilltop. Using a Tetra radio issued from the Comms shop (after you've rented your truck), or the Ops Coordinator, simply inform the Hilltop operator when you depart the main base and upon your return. There is a protocol that can be shared prior to your trip. You should also take a satellite telephone provided by CPS whenever traveling out of the defense area for emergency use. Hilltop is in Bldg. 287 and serves as a command post for Thule. Hilltop's phone extension is 2719.

Tip: Once you have picked up a radio from HILLTOP or B345 make sure that you understand all its features completely. A practice call to team member and a land line is recommended.

For off-base recreational travel during storm season (15 September–15 May) an "Off-Base Recreational Travel" form must be filled out and presented to HILLTOP immediately before leaving the base. The blank form is available at HILLTOP.

Transportation within Base Limits

Walking is a great mode of local transportation in Thule and there are CPS bicycles available at TSAR (Bldg. 345) for your use. A free taxi service is also available at Thule for movement within the main base. Directions on use of the taxi will be distributed upon your arrival – information is also posted near the phones at entry/exit points on commonly visited buildings. See below for more information on dedicated vehicles.

Truck Rentals

If you have reserved a vehicle with Vectrus, you will need to go to the Vectrus' Administrative building to sign a contract for your rental truck and radio (the radio is free with the truck rental). The truck will be waiting for you at the Vehicle Maintenance building and then you must pick up your radio from HILLTOP (B1411).

If your plan has indicated a NSF vehicle requirement, CPS will communicate directions on how to obtain via your Project Manager. They will most likely be parked outside of Bldg. 345 with directions/keys within. Details should also be published in your Season Plan.

Vehicles can be fueled at the station near the hangar 10. You are responsible for returning the vehicle in the same condition as when the vehicle was first checked out, and thus you and your field team members should abide by these rules:

For all vehicles:

- It is the user's responsibility to stay informed of road and weather conditions always. Driving is only allowed on marked and open roads and off-road driving is not authorized. Seatbelts are mandatory for driver and passengers.
- It is the user's responsibility to keep the vehicle clean and tidy, as well as taking the vehicle through the wash bay at Bldg. 580, Vehicle Maintenance. For long term rentals a preventative maintenance plan can be established for your vehicle.

For NSF owned vehicles:

- Any damage to the vehicle must immediately be reported to your CPS Project Manager and any on-site CPS or NSF representative. If the damage is caused by abuse of the vehicle, the individual who signed the leasing agreement will be responsible to pay for the repair of the damage, upon return of the vehicle.
- Ensure you always carry a form of communication while operating on the roads – whether it be a tetra or an iridium phone.
- Fill out the daily check sheets that are provided in the truck.

For Vectrus rented vehicles:

- Any damage to the vehicle during the lease period must immediately be reported to Vehicle Management (ext. 2401). The Vehicle Maintenance Shop Supervisor will estimate repair of the damage. If the damage is caused by abuse of the vehicle, the individual who signed the leasing agreement will be responsible to pay for the repair of the damage, upon return of the vehicle. Also notify your CPS Project Manager and any on-site CPS/NSF representative.
- It is the user's responsibility to keep the vehicle clean and tidy, as well as taking the vehicle through the wash bay at Bldg. 580, Vehicle Maintenance.

For long term rentals a preventative maintenance plan can be established for your vehicle.

- This leasing agreement includes all lubricants and one tank of diesel in the contract, whereas payment for future fuel is dependent upon the agreement between the lessee's organization, the USAF, and CPS.
- It is the user's responsibility to stay informed of road and weather conditions always. Driving is only allowed on marked and open roads and off-road driving is not authorized. Seatbelts are mandatory for driver and passengers.
- Liability insurance (damage to the vehicle or to other vehicles or persons) is included; however, personal insurance for the driver is not included in this leasing agreement.
- Tetra radios do not automatically come in a vehicle but you can sign one out from HILLTOP at no charge if renting a truck.

Air Greenland Helicopter Charter

If CPS has arranged a helicopter charter for you, it will be up to you (with the help of your Project Manager) and the Air Greenland office to work out times for your flights. Air Greenland has a regular schedule ferrying people, mail and supplies to Greenlandic communities surrounding Thule, so they will work your charter in with their existing tasking. Weather will be a big factor in scheduling, necessitating the on-the-ground coordination between researcher and Air Greenland.

Please be prepared with cargo and weights prior to your flight date. In summer months, your Project Manager Air Greenland should be made aware of any oversized or hazardous cargo. If you are not sure if your cargo is hazardous then bring it to the attention of your Project Manager or Air Greenland.

About This Guide

This guide is meant to give you a taste of what to expect in Thule and to help you plan for your trip; it isn't a substitute for a CPS-developed Project Plan. This guide is updated frequently and suggestions and comments are most welcome. Please email the Greenland Science Support Manager Jessy Jenkins at Jessy@Polarfield.com or Greenland Senior Science Project Manager Kyli Cosper at Kyli@Polarfield.com

The *Thule Guide* is edited annually. Please note any inaccuracies, omissions, or invalid links, and send them to cpscontacts@ch2m.com.