

**YOUR STAY AT
PALMER STATION
ANTARCTICA**



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**NATIONAL SCIENCE FOUNDATION
DIVISION OF POLAR PROGRAMS
UNITED STATES ANTARCTIC PROGRAM**

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ANTARCTICA**

ANTARCTIC SERVICES, INC.

FORWARD

This booklet will assist you during your stay at Palmer Station. It briefly covers facilities, procedures, services and safety hints that will help you while at Palmer. Keep this guide handy as a reference on station operations and procedures. No booklet can address all that you need to know, so please consult the ITT/Antarctic Services, Inc. (ANS) Resident Manager, NSF Representative or Senior Science Leader for additional information.

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Although the United States has had long historical ties to the Antarctic Peninsula, little work was done there until 1965 when Palmer Station, then a small biological research facility, was established. It is named after Nathaniel B. Palmer, the American sealer who pioneered exploration of the Peninsula area in 1820. In 1968 the new and current station was completed on Anvers Island, at 64°46'S, 64°03'W. It has a pier and facilities for POLAR DUKE, a 219-ft ice-strengthened research ship that operates in conjunction with the station. The ship provides mobility and supports research in the marine sciences. Shore facilities, including a biological laboratory, complement the ship. ANS operates the station, and Carino Company Limited the ship.

Living conditions at Palmer are quite comfortable, with facilities similar to a small hotel, including a cafeteria-style dining room. Everyone at the station participates in household duties. Sinks, showers, a washer and dryer, and flush toilets are provided at the station. Water comes from a reverse osmosis desalination unit which is augmented by glacier melt water during the austral summer.

Palmer's climate is milder than that of the other U.S. Antarctic Stations primarily because it comes under the influence of a polar-maritime air mass. The mean annual temperature is minus 3°C. Average temperatures range between 2°C in the summer and minus 10°C in the winter. The annual average wind is about 6 knots. The station does experience periods of high winds, up to 50 knots, and significant precipitation, both rain and snowfall.

Palmer is not regularly serviced by aircraft, and no permanent landing field is maintained there. Ship access is normally from November through April, but POLAR DUKE occasionally calls Palmer during the winter. Foreign and tour ships visit frequently.

Marine biology and ornithology are the primary research projects conducted at this site. Field geology, meteorology and upper atmosphere studies are also part of the science program.

FACILITY

Palmer Station consists of two major buildings and several ancillary structures. The main building, the BIOLAB houses the biological laboratories, a dining area, kitchen, communications facilities, offices and storage areas for food and biological supplies. The upper floor provides berthing spaces for twenty-two people. A BIOLAB floor plan is shown on page 14.

To the rear of the BIOLAB is the Garage/Warehouse/ Recreation Building (GWR) which contains the power plant, garage, storage rooms, library and recreational facilities. GWR has berthing for twenty-one people. A GWR floor plan is shown on page 15.

Ancillary structures consist of an aquarium, storage huts, workshops, and several shipping containers which are used for the storage. Two fuel tanks with a combined capacity of 240,000 gallons store the station fuel supply. Additional outdoor storage space for drummed fuels and other supplies is provided.

A station site plan is shown on page 13.

GENERAL STATION OPERATIONS

The Resident Manager coordinates overall station activities including facility operation and maintenance, science support and construction tasks. Operations are coordinated with the NSF Representative or Senior Science Leader. The various ANS and U.S. Navy section heads (Facility Engineer, Laboratory Manager, Medical Corpsman, etc.) are responsible for their specific areas of operation.

Announcements are posted on the blackboard in the dining room or, if critical, are relayed verbally via the intercomm/all-call system. General station information is located on the bulletin board in the food serving area in the galley.

BERTHING

Berthing is located both in the BIOLAB (22 persons, coed, double rooms) and in GWR (21 persons, male, 2-4 person rooms). Rooms are assigned by the Resident Manager. When working on RV POLAR DUKE you may be required to vacate your room, and during periods of peak station population you may be assigned to a temporary berthing space.

Rooms are provided with a set of linen and blankets (NOTE: Towels are NOT provided, but can be purchased from the Station Store). You are responsible for laundering your linen. Please keep your room clean. When moving out strip your bed, fold blankets, pile dirty linen on your bed, empty trash and clean the room.

Head facilities are located adjacent to bedrooms. The bathrooms are often crowded during periods of peak population so please do not linger when using them.

WATER USAGE

The water production system normally provides sufficient fresh water for station operations. Please, though, be cautious with water usage. Do not leave faucets running. Take short showers and limit laundry to once per week. You will be advised by the Resident Manager if water restrictions are to be put into effect.

FOOD SERVICE

Meals are served cafeteria style. Meal hours are:

Breakfast:	Mon - Sat	0700 - 0800 LT
Brunch	: Sun	0930 - 1100 LT
Lunch	: Mon - Sat	1200 - 1300 LT
Dinner	: Sun - Fri	1800 - 1900 LT
	Sat	1830 - 1930 LT

Please bus your dishes, rinse them and place them in the appropriate dishwasher tray.

Snacks are available in the food serving area and in the pantry refrigerator. If you need lunches or provisions for field work please coordinate your requirements with the Cook. If you have any special dietary requirements advise the Cook on arrival.

Volunteers are requested to assist with evening kitchen/dining room clean up. The sign-up sheet is on the bulletin board. The Cook will outline clean up tasks. Volunteer Cooks are also welcome for Sunday dinner. See the Cook.

NO smoking in the dining area during meals. In between meals smoking is limited to the outer dining area.

WASTE DISPOSAL

In order to efficiently dispose of Station garbage, it is separated into four categories

- Paper, burnables
- Metal
- Glass
- Organic waste (NOTE: if organic waste can be ground please run it through the garbage disposal in the kitchen.)

Containers for separating garbage are located in key areas through-out the station. Please separate garbage from your room, the lounge and head.

Sewage and grindable organic wastes are piped directly into HERO Inlet. Although station wastes cause minimal impact to the environment be careful not to dispose of any caustic, poisonous or similar material via this method. Please consult the Facility Engineer or Laboratory Manager when disposing of any hazardous materials.

HOUSEKEEPING

Everyone on station is requested to assist in keeping the station clean. Please help by keeping both your living and working areas neat and clean. Station clean-up, "House Mouse", is held weekly on Saturday, 1500 LT. Personnel will be assigned tasks by the Resident Manager. The House Mouse List will be posted on the bulletin board in the dining room Saturday morning.

MEDICAL SERVICE

If medical problems arise, please see the Medical Corpsman. The dispensary is on the BIOLAB ground floor near the entryway. There are no formal hours, but the Medical Corpsman is normally available in the dispensary daily at 0900 LT.

In an emergency please contact the Resident Manager or communications watch stander if the Medical Corpsman cannot be located.

If required, the Resident Manager and Medical Corpsman can provide the appropriate documentation for reporting injury or illness.

STATION STORE

The Station Store is located on the top floor of GWR. Items for sale include toiletries, souvenirs, hard and soft beverages, and tobacco. The Medical Corpsman is the storekeeper. Hours are: Mon - Sat, 1700 - 1800 LT. Closed Sunday. Special hours are held during ship calls, etc. The Store accepts cash (U.S. dollars) and travellers/personal checks. You may also run a charge account and pay prior to your redeployment.

LOUNGE POLICIES

The lounge is located on the top floor of GWR. The lounge includes the bar, pool/ping pong table, video area and paperback library. Movies are shown Sun - Fri at 2000 LT. NO Smoking during the movie. Music and pool/ping pong are not allowed during the movie. The bar is BYOB. Beer and soda left in the refrigerator and liquor behind the bar are shared. The lounge observes quiet hours after 2200 LT Sun - Fri and 2400 LT on Saturday. Special occasions are excepted.

You are responsible for cleaning the bar or lounge after use.

GYMNASIUM

The gym is located on the top floor of the GWR. The gym contains an exercise bicycle, rowing machine, free weights, exercise videos, etc. Please return equipment to its proper place when finished. The gym is small and often crowded late in the afternoon. If your schedule permits, please use the gym at times other than 1730-1900LT.

MAIL

Incoming mail is delivered via POLAR DUKE or USCG Icebreakers. Mail is sorted in the dining area and should be ready approximately one hour after ship arrival. Outgoing letter mail is carried to the U.S. whenever possible. U.S. postage stamps are available from the Station Store. Outgoing mail for shipboard personnel may be left with the Resident Manager.

Cachets for philatelic mail are available in the Resident Manager's office. Philatelic mail may be left with the Resident Manager. Outgoing package mail may be mailed via USCGC Icebreaker during scheduled port calls.

RADIO/SATELLITE COMMUNICATIONS

The communications room is located on the main floor of BIOLAB. The Ham Shack is on the top floor of GWR.

Operational communications include:

VHF/FM: Local travel, boat/ship operations.

HF/SSB: Long range voice and teletype.

ATS3: Satellite voice communications including message and data capability via OMNET.

INMARSAT: Commercial satellite voice, telex and telefax.

Please contact the Resident Manager or Communications Coordinator to arrange voice communications. All teletype/telex messages must be approved by the NSF Representative, Senior Science Leader or Resident Manager.

Recreational Communications include:

MARS (Military Affiliate Radio Service, call sign NNNØKMR): Voice and teletype. Operated from the Communications Center. Personal business is allowed.

HAM (Amature Radio, call sign KC4AAC): Operated from the HAM Shack. Voice communication for social contacts. No business allowed. A sign-up sheet is posted outside the HAM Shack.

ATS3 SATCOM: The satellite link is available on weekends and holidays during the station's scheduled time slot for personal phone patches when routine business permits. A sign-up sheet is in the Comms Center.

Please see the Communication Coordinator or HAM operators to arrange a contact.

ADMINISTRATION

If you require administrative assistance see the Resident Manager. The Administrative Assistant will assist you as time is available. If you need office supplies see the Administrative Assistant.

If you need to operate the station personal computers see the Administrative Assistant who will review computer use and available programs, and arrange scheduling.

CLOTHING/FIELD EQUIPMENT

Cold weather clothing and field equipment are stored in the USAP Supply room. If you require clothing or equipment see the Administrative Assistant. All items will be signed out and must be returned prior to your redeployment.

LOCAL TRAVEL

When travelling away from the immediate station vicinity please sign out on the blackboard in the BIOLAB main floor hallway.

Areas of travel are outlined on the map on the Communication Center door. They include:

Glacier: Solo travel OK, radio not required.
Remain within flagged markers.

Bonaparte Point: Solo travel OK, radio and float coat required. Check trolley before use.

Local Islands, Palmer I, Norsal Point: Travel via inflatable boat. Travel in groups of two or more, radio and float coat required, check with Resident Manager or Boating Coordinator prior to boating.

Sea Ice: Sea ice travel is by permission from the Resident Manager. Consult the Resident Manager for restrictions.

Remember to check weather, sign out, and verbally check out with the communications watch stander and Resident Manager prior to travelling away from the station. Always be aware of weather and safety hazards.

BOAT OPERATIONS

Prior to operating inflatable boats all personnel will be given a boat orientation and operational check-out by the Boating Coordinator. Requests for inflatable boats should be given to the Boating Coordinator the day prior to use in order to ensure boats are available and readied.

LABORATORY OPERATIONS

The Laboratory Manager will provide a laboratory orientation and allocate laboratories, equipment and aquaria in coordination with the NSF Representative or Senior Science Leader. On arrival at Palmer a meeting will be held with each science group to outline research goals and support requirements. Science groups are responsible for the clean, safe and efficient use of the laboratory facility. No modification to the laboratories or equipment may be made without prior approval from the Resident Manager. All laboratory and research support requests should be initially directed to the Laboratory Manager.

DARKROOM

The darkroom is part of the laboratory facility. Equipment and supplies are available for processing black and white prints and color slides (E6). The darkroom may be used for recreational purposes if it does not interfere with science operations. Consult the Laboratory Manager prior to using the darkroom.

FACILITIES, O&M

The Facilities Engineer is in charge of all station facilities. If you require assistance in operating equipment or you identify problems, please see the Facilities Engineer.

The Station maintains a night facilities watch. If there is something you wish the watchstander to check, or avoid, please inform the Facilities Engineer.

CONSTRUCTION

The construction crew is dedicated to assigned projects. If you have a construction support request, please see the Laboratory Manager who will coordinate your request with the Resident Manager, NSF Representative and Construction Coordinator. Prior to using the various shops on station please see the Construction Coordinator or Facilities Engineer for orientation to that particular shop.

LOGISTICS

If you require material to support your project, please see the Laboratory Manager. The Laboratory Manager will arrange to get the material for you or direct you to the Materials Person. If you require commercial air resupply of material it must be coordinated through the Resident Manager and NSF Representative. The Materials person and the Resident Manager will review retrograde operations with you early during your season.

FIRE PREVENTION

All personnel will receive an orientation on fire prevention, use of the Station alarm system and fire extinguisher use. In event of an alarm, please muster at the Boat Shop (unless you are part of the fire fighting team). If the Boat Shop is the fire scene, muster at the GWR Garage. Alert your neighbors and co-workers. Dress warmly. If you don't have a jacket, take a float coat from the BIOLAB vestibule. Unannounced drills will be held monthly. All drills are to be treated as an actual fire.

SAFETY

The basic rule of safety is "THINK BEFORE YOU ACT". This should eliminate the vast majority of the unsafe situations. Please observe the following rules:

Know emergency exit routes from all buildings.

Always sign out and verbally check-out when leaving the immediate station vicinity.

When travelling outside, check the weather.

Check the ground surface and watch out for icy or muddy areas.

When working outside dress appropriately.

When travelling away from the station take cold weather clothing and all required safety equipment.

Watch out for moving vehicles. Do NOT operate heavy equipment.

Be aware of non-smoking areas which include the laboratory and all workspaces. Be cautious of smoking in your room. Do not smoke in bed.

When working in the shops or laboratory use the proper safety equipment.

Clean up after yourself and put tools and materials away.

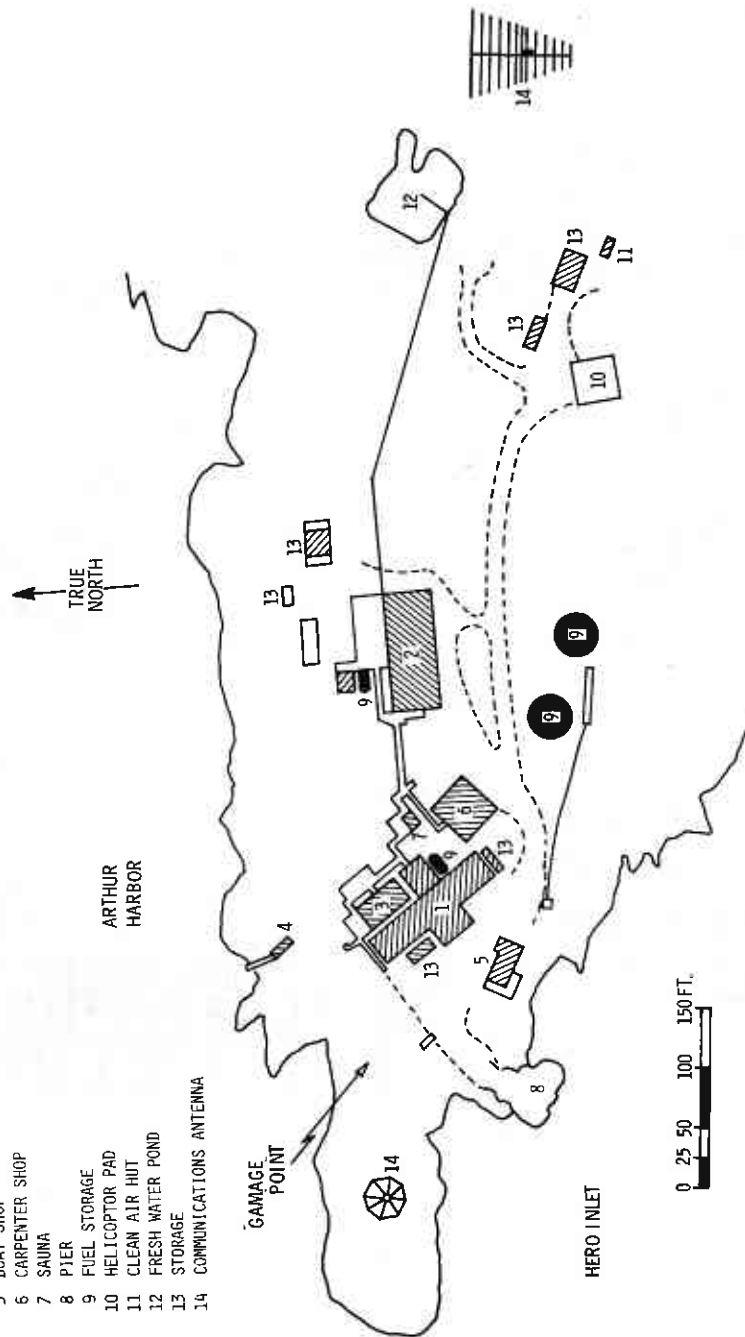
Proper safety practices will prevent injury to yourself, as well as delays to your project, and harm to the station personnel and facilities. Remember, Palmer is comfortable, but isolated, and an accident effects the whole community.

REDEPLOYMENT

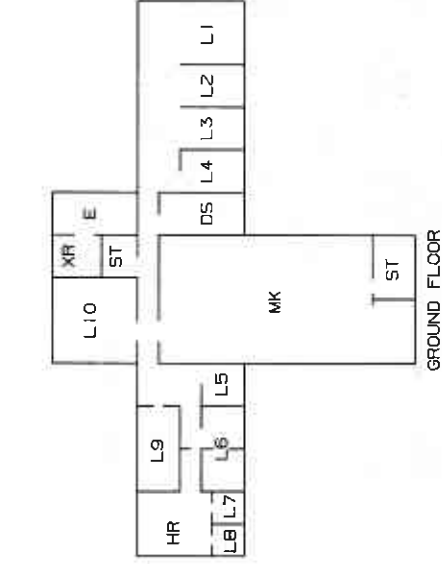
Early during your stay at Palmer the Administrative Assistant will contact you concerning your return travel to the United States. Please inform the Administrative Assistant of your ticketed route, requested travel dates and any special requirements such as excess baggage, dry ice, etc. Travel information is required a minimum of 10 days prior to departing Palmer. Your travel request will be forwarded to the appropriate husbanding agent in South America to confirm your redeployment. The husbanding agent will confirm requested flights by return message.

The Administrative Assistant is not a travel agent and is responsible only for direct redeployment to your point of origin. If you wish to travel enroute to the United States the husbanding agent will arrange for you to see a local travel agent on arrival in South America. Any requests for deviations to scheduled travel must be coordinated with the NSF Representative. Additional costs for deviations to approved travel will be borne by the traveller. Remember ship schedules can be delayed so please remain flexible with your requested travel.

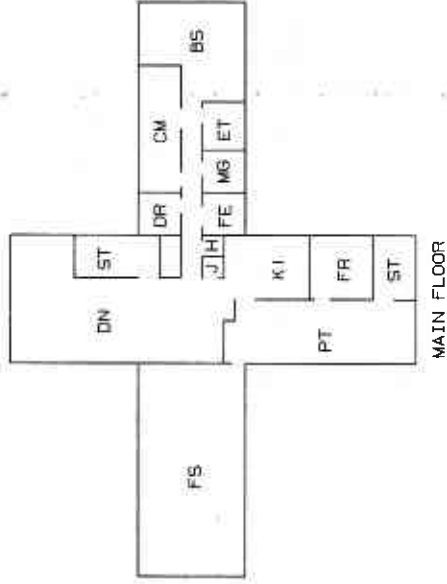
- 1 BIOLAB BUILDING
- 2 GNR BUILDING
- 3 AQUARIUM
- 4 SEA WATER PUMPHOUSE
- 5 BOAT SHOP
- 6 CARPENTER SHOP
- 7 SAUNA
- 8 PIER
- 9 FUEL STORAGE
- 10 HELICOPTOR PAD
- 11 CLEAN AIR HUT
- 12 FRESH WATER POND
- 13 STORAGE
- 14 COMMUNICATIONS ANTENNA



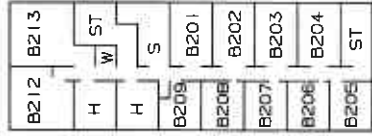
BIOLAB BUILDING



GROUND FLOOR



MAIN FLOOR

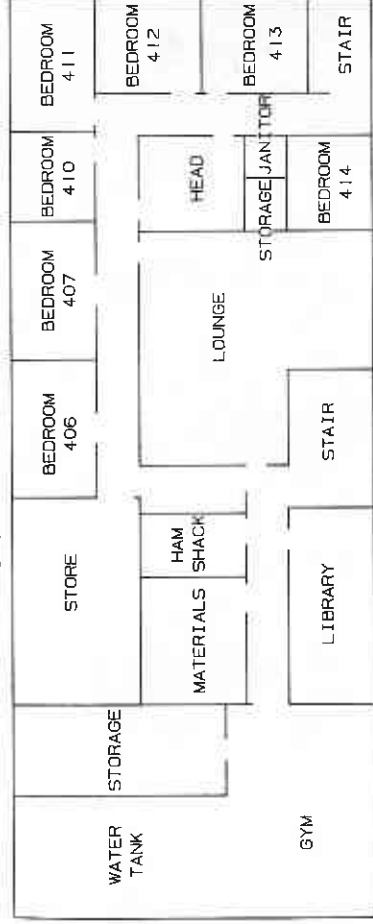


TOP FLOOR

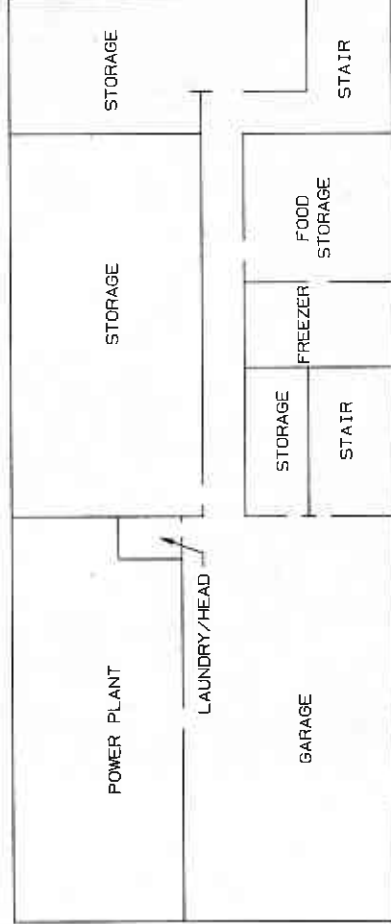
- E - ENTRY
- DS - DISPENSARY
- XR - XRAY ROOM
- MK - MECHANICAL ROOM
- L - LABORATORY
- HR - HOIST ROOM
- DN - DINING ROOM
- KI - KITCHEN
- PT - PANTRY
- FR - FREEZER
- FE - ENGINEER OFFICE
- MG - MANAGER OFFICE
- DR - DARK ROOM
- CM - COMMUNICATIONS CENTER
- ET - ELECTRONICS SHOP
- BS - BIO STORES
- B - BEDROOM
- H - HEAD
- J - JANITOR
- W - LAUNDRY
- S - STORAGE
- ST - STAIRWELL

BBF1

GWR BUILDING



GROUND FLOOR



TOP FLOOR

BBF2

KEY PERSONNEL

Resident Manager	Robert Robbins
Administrative Assistant	Martha Isbister
Medical Corpsman	HMCS Hans Schmidt
Laboratory Manager	Sandra Ackley
Facilities Engineer	Tom Brutscher
Construction Coordinator	Richard Skane
Boating Coordinator	Monte Snyder
Communications Coordinator	Sheldon Blackman
Materials Person	John Myers
Cook	Robert Taylor