CHAPTER 3:

How and What to Pack



of the annual sea ice near
McMurdo Station.

Learning how to test ice
thickness is required
training for anyone driving
across the annual sea ice.

USAP participants use a drill to determine the depth

photo by Elaine Hood

There will be several stops on your journey to Antarctica. Various transportation providers (U.S., foreign, vessel, military) have differing baggage allowances and restrictions. Please adhere to the limitations set forth by each carrier. In New Zealand or Chile, you will pick up ECW clothing. You may require personal items for the various climates, work and activities. Planning and prioritizing are very important. Read this chapter carefully.

BAGGAGE ALLOWANCES

Commercial Carriers

You will travel from your airport of departure to Christchurch, New Zealand, or Punta Arenas, Chile, on commercial carriers. Due to recent changes within the airline industry, it is important that you review the airline's baggage limitations prior to boarding your flights. Baggage allowances on flights from Christchurch to McMurdo differ from the commercial allowance.

At the time this book went to press, the baggage allowances were:

Winfly participants: up to 2 bags, 32 kg/70 lbs each, plus your carry-on.

Summer participants: up to 2 bags, 32 kg/70 lbs each, plus your carry-on.

Winter participants: up to 3 bags, 32 kg/70 lbs each, plus your carry-on.

Personnel flying to **Punta Arenas:** up to 2 bags, 23 kg/50 lbs each, plus carry-on.

Each airline carrier has differing rules for both carry-on and checked baggage, so it is in your best interest to review the airline's Web site to ensure no surprises at check-in. If charged a fee, RPSC will reimburse RPSC and NANA employees within the baggage allowance only if receipts are provided. **Updates regarding travel are posted on the airline carrier's Web site and should be consulted before departure.**



Flights from Christchurch to McMurdo Station

All pesonnel have the same luggage weight allowances. A maximum of 68 kg/150 lbs, in addition to your carry-on, is allowed on this leg of your journey.

NOTE: Realize that the weight of the ECW gear issued to you in Christchurch will be counted as part of your baggage. The ECW clothing weighs about 10 kg/22 lb. You are required to wear (or have on your person) the following items on the flight:

Balaclava or knit hat Bunny boots or FDX boots

Mittens or gloves Snow goggles

Red parka or Carhartt Wind pants or Carhartt overalls

The rest of the issued clothing (about 3 kg/7 lb) can be packed in your checked baggage.

Excess Baggage

Participants should check the Travel and Deployment section of the U.S. Antarctic Program Web site at www.usap.gov for details on excess baggage. Excess baggage approval for both to and from Antarctica is required in advance of deployment. The program will not reimburse costs unless they are pre-approved.

Current Travel Information

www.usap.gov/usapgov/ TravelAndDeployment

Personal Baggage Insurance

Baggage insurance is provided if RPSC issues your airline tickets. If a claim needs to be processed, contact the DSG. Loss protection is limited and supplemental **personal property insurance** is recommended.

Loss protection is only provided for during commercial flight segments. Should a loss occur during transit to/from the airport, while in a hotel, during your stay in Antarctica, etc., it is the participant's responsibility to retain personal property insurance coverage.

Research Vessels and Palmer Station

There are no weight restrictions for personal baggage on the research vessels, although space is at a premium onboard.

Mailing Personal Packages

If you need to take more than the allowed weight of baggage to McMurdo or South Pole stations, you can mail boxes to yourself at the **Army and Air Force Post Office (APO)** address in Antarctica. The APO addresses are listed in Chapter 6. You should be aware, however, that NSF priorities dictate that all science cargo and flat mail take priority over any personal packages. Your personal packages may be substantially delayed.

Once you are in Antarctica, you can have mail sent to you. However, the APO in Christchurch will not accept packages for shipment unless they are received via the Postal Service. This means you cannot order items via the Internet from Antarctica for courier delivery (e.g., FedEx) to the APO. Neither the Post Office, nor USAP offices in Christchurch, will accept such deliveries.

The APO cannot be used to support any type of commercial activity.

Near the end of the season, many program participants realize that they've accumulated more than they will be allowed to have with them on their flight north. This excess must be sent in the mail. It is important to pay attention to announcements about mailing deadlines and procedures for mailing personal packages from Antarctica. The timelines and options differ according to the station and the time of year.

APO Privileges

Upon your arrival in Christchurch, the RPSC representative will give you a card that entitles you to use the APO facility. This benefit provides a tremendous cost savings if you need to mail boxes to the United States from New Zealand. The card is good for only 10 days from your arrival in Christchurch. Any mail received by the APO after the valid 10-day period will be returned to sender.

APO service is **not available for Palmer Station** participants. See Chapter 6 for instructions on mailing boxes and flat mail to Palmer Station and the research vessels.

PERSONAL PRESCRIPTION MEDICATIONS

It is the responsibility of all participants to obtain a supply of their regular prescription medications to cover the time that they will be deployed. The station medical facility **cannot** refill prescription medication. Participants will not be allowed to winter-over unless they have enough of their regular medications to last through the winter season.

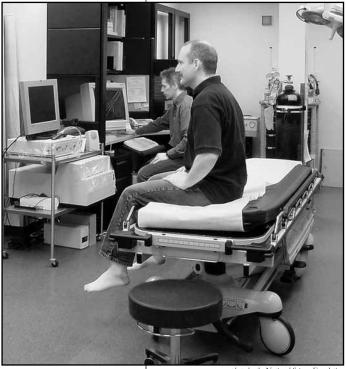


photo by the National Science Foundation

The South Pole medical clinic.

Participants working at McMurdo Station, South Pole Station or area field camps. The New Zealand custom laws only allow for three months of prescription medications and one month of controlled prescription medications to be hand carried through New Zealand. Therefore, if you will be deployed for a longer period of time, you must make arrangements for additional medication to be mailed to the station medical clinic through the APO mail system.

The medications will need to be in properly labeled pharmacy containers to be passed through the APO system. It is important that you hand carry the initial three months of medication (one month for controlled medications) in order to provide enough time for the mail to reach you in Antarctica. When you get your prescription medications filled, ask the pharmacist to put three months of medication (or one month of controlled medications) in one labeled container and the remainder in a separately labeled container. If you are not sure if your medication is controlled (Class II or III), ask the pharmacist when you get the prescription filled.

Mail the containers with the remainder of the medication to the medical clinic at the station where you will be deployed. Most health plans only allow one month of medication to be dispensed at a time. If you have difficulty in getting the

amount that you need for your deployment, contact Medical at RPSC for assistance: 1-800-688-8606. They can coordinate with your health plan to help you obtain the sufficient quantity of your prescription to last your entire deployment.

Mail the medication to the APO address listed below. Packages destined for summer participants should be mailed after Labor Day or they will be returned. You can receive your medication at the medical clinic.

McMurdo Station:

Medical Clinic McMurdo Station PSC 469 Box 700 APO AP 96599-1035 **South Pole Station:**

Medical Clinic South Pole Station PSC 468 Box 400 APO AP 96598-1035

Remember that you will have to clear Customs in New Zealand to re-enter the country on redeployment, and the same restrictions on the quantity of medications will apply. If you have an excess amount on redeployment, mail the excess amount to yourself at home before leaving Antarctica.

Participants working at Palmer Station. Chilean customs laws do not restrict the amount of personal medications hand-carried through Chile and participants that are deploying through Chile can hand-carry the amount of medication that they need for the deployment.

If you have any questions about the procedure described above for transporting your prescription medications to Antarctica, contact the RPSC Medical Department at 1-800-688-8606, option 3 on the menu. Carry a copy of each prescription provided by your personal physician.

HOW TO PACK

Personal comfort in Antarctica is important. So is environmental protection. When choosing items to make your stay more comfortable, buy and take with you items that are as environmen-

Don't Pack a Pest

Non-native species, such as seeds and fungi, now occur in Antarctica, carried in by people who have not cleaned their clothing/shoes before arrival. Inspect and clean all items that may have soil, plant material or other organic material on them. Such items include backpacks, boots, pant cuffs, Velcro®, polar fleece and other gear.

Please read the *Don't Pack a Pest* online brochure at www.usap.gov/TravelAndDeployment/documents/packapest_brochure_final.pdf.

tally friendly as possible. Try to use biodegradable soaps and shampoos, which will have less impact on the local environment. You need not do without little luxuries in Antarctica as long as you take the time to select items with the least environmental impact and package them frugally.

Eliminate the use of aerosols. The propellants in some aerosols can deplete the ozone layer, and aerosol cans create a disposal problem. Find substitutes for aerosols such as roll-on deodorants, shaving creams in a tube, and other nonaerosol products.

Eliminate as many plastic and throwaway containers as possible. This will help reduce the volume of solid waste disposal in Antarctica. Repackage products that come in throwaway containers into containers you are more apt to take home with you.

Do not use packing peanuts as they blow away easily.

If possible, use the backpacker's rule – pack it in, pack it out. Please cooperate with the established recycling program.

WHAT TO PACK

Below is a brief narrative and list of some items you may be considering for your personal list of what to pack. The items listed are meant as a guide only, and should be adjusted to individual

Unwanted in Antarctica!

PROHIBITED

Polystyrene packing. These beads, chips and peanuts are dispersable and pose a threat to wildlife.

House plants and soil.

Introduction of nonindigenous species is prohibited.

Hazardous and toxic substances. Many common consumer products are on this list.

DISCOURAGED

Aerosols. Pressurized containers of deodorant, hair spray and shaving cream. These items become hazardous waste because of their ingredients or because they are pressurized.

Disposable batteries such as mercury, alkaline and lithium cells. Consider buying rechargeables and a recharger. Try to select devices that use a common battery size.

Magazines, catalogs, newspapers and junk mail. The library has reading material, and news and sports are available on TV (McMurdo only) and the Internet. Do not forward your mail to Antarctica.

Non-reusable plastic containers, such as shampoo and lotion bottles. Take extras back home with you.

OTHER RECOMMENDATIONS Buy biodegradable soaps and shampoos.

Buy pump sprays, sticks (deodorant) and tubes (shaving cream), not aerosol containers.

Repack your personal products. Camping outfitters sell various containers. Ziplock bags are good for aspirin, vitamins and prescription drugs (keep the labels).

Cushion items with clothing. Reuse boxes and packing materials you receive in the mail.

Donate clean and reusable personal items to the stations' recycling centers known as the "Skua" area.

needs and preferences. Wintering personnel, for example, should increase the quantities, while official visitors and others who are scheduled for only a few days in Antarctica will require less. Your POC can give you specific advice about what you might need depending on your length of stay and the antarctic facility at which you will reside.

There may be some special or brand name products, such as vitamins, your favorite cold remedy, aspirin, and/or toiletries that you may require during your deployment. The station store at each facility carries a limited supply of toiletries, gift items, film, batteries, snacks, soda, etc. Your supervisor or team leader can give you a good idea of what items are stocked in the store at the station where you will be working. Planning on purchasing items from the station store during your stay will help reduce the amount you have to pack in to Antarctica.

Toilet articles. Antarctica is very dry and it is recommended that you use hand lotion and lip balm. The station store carries a limited selection of these items along with other toiletries, so it is recommended participants bring their own lotions and soaps. There is no store aboard the research ships.

Pain relievers such as aspirin and cold capsules (nonprescription) are usually available for purchase at station stores. Quantities and brand names are unpredictable, however, and it is suggested that you bring your preferred pain relievers to Antarctica. Also, if you re-pack them to conserve space, retain their original labels.

Personal Items to Consider Taking

CLOTHING ITEMS:

Boots or shoes; work, climbing, hiking, insulated as needed for your work Glasses; eye and sun, extra pair, record of prescription Gym clothes and shoes for athletics Holiday attire Jacket; pile and windbreaker Neck gaiter Pajamas/robe Pants/jeans Shirts; light wool or cotton flannel, long-sleeve (machine washable) Slippers for indoor wear Sock liners; polypropylene or Thermax Socks; heavy Sweaters; heavy and light Swimsuit (for sauna) Towel and washcloth Underwear, thermal top/bottom

Underwear, regular

Flip flops for shower

MISCELLANEOUS:

Alarm clock Batteries, rechargeable/charger Camera/camera batteries Coffee mug (nonbreakable) Day pack Hair dryer Hobby, craft items (small) Laundry bag Lock, combination or key MP3 player/extra headphones/ AC adaptor Musical instrument/spare parts **Prescription medications** Sewing kit Skis; skate/cross country Plastic food containers with lids Toiletry articles; toothpaste, dental floss, comb, razor, shave cream, deodorant, soap and skin lotion for dry skin, tampons, a carrying case Vitamins Water bottle "Ziplock®" bags

Indoor clothing choices are up to you. You bring your own regular indoor clothing, including underwear, socks, shirts, pants and shoes. No dry cleaning services are available. The use of polyester double knit fabric is not recommended as it is not sufficiently warm. Base the quantity of clothing you bring on recommendations from your POC, the length of stay in Antarctica and the type of work you will be doing.

Special clothing (climbing boots, cold-weather gear, etc.). If you are experienced in cold weather conditions, you may add your own cold weather gear for field use. Be sure these items are clean and free of soil or plant material before packing them (check the Velcro[®]). Some research grants include funding for additional clothing that is not part of the standard ECW clothing issue.

Sheets. The U.S. Antarctic Program supplies linens, pillows and blankets for the beds.

Laundry. Washing machines and dryers are conveniently located and are free to use. Laundry detergent is also provided free in the laundry room in each dorm and is also sold in the station store.

Layering. The temperature both inside buildings and outside can vary dramatically. The best way to manage these changes is by layering your clothing. This will allow you to shed or add layers quickly and easily. Several thin layers are more effective than one bulky layer.

Electric power. As in the United States, the U.S. antarctic stations use 110-volt power supply systems. No converters or adaptors are needed.

Power in Argentina, Chile and New Zealand uses 230-volt, 50 hertz, power supply systems. In order to use U.S.-purchased appliances, such as hair dryers and razors, you will need to bring your own power converter and plug adapter (laptops and iPods have a built-in converter, but you will still need a plug adaptor for the wall socket).

The research vessels have both 220- and 110-volt power.

Semi-formal attire such as a jacket/tie or a skirt/dress is suggested for special occasions. Thanksgiving and Christmas are celebrated with a more formal and special meal than the daily routine. Many participants choose to dress up a bit more for these events.

Feminine hygiene supplies are available at the station store. Brand selection is limited, but necessary supplies are normally available. Women may wish to bring items and brands they prefer.

Towels and washcloths. The U.S. Antarctic Program does **not** provide towels and washcloths in Antarctica, although it does provide towels on the R/V *Laurence M. Gould* and R/V *Nathaniel B. Palmer.* Also, many hotels in New Zealand and South America do not provide washcloths. It is recommended that a small towel and washcloth be part of your hand carry.

Sunscreen. Carry and use a sunscreen with an SPF number of 15 or greater. Ensure that it provides both UVA and UVB coverage, and that the product expiration date does not occur during your stay. In summer, the sun is up 24 hours a day, and its reflection off snow and ice multiplies the potential for sunburn.

Sunglasses. Sunglasses or goggles are critical. Your ECW clothing issue will include ski-type UV protective goggles. Participants should bring two pairs of 100% UV protective sunglasses in case one pair is lost or damaged. Frames should be plastic rather than metal to avoid freezing to the skin. Consider wrap-around temples, side shields, nose guards or other features to protect from harsh sunlight and reflections off the snow. If you wear prescription glasses, you should

Wintering?

Consult your hiring POC in Denver to get packing suggestions related to your specific job.

also bring prescription sunglasses with the above recommended features. Eye protection is your responsibility.



RPSC Employees will be reimbursed up to \$175 for prescription sunglasses every other year. **Prescription eyeglasses and contact lenses.** If you wear glasses, carry a record of your prescription to Antarctica. You should take a spare pair with you. The cost of eyewear replacement is your responsibility, and the means to obtain replacements is limited. It is also suggested that you carry contact lenses on your person to avoid possible damage from freezing.

Contact lenses have been found to work fine in the Antarctic. Lens cleaning supplies are available at the station store at McMurdo in limited quantities and brands. Regular saline and sensitive saline solutions for soft contact lenses are available. Heat-type solution is not available. You may wish to bring enough personally desired items to last your entire stay.

Recreation gear (e.g., skis, musical instruments). The variety and availability is different at each facility. You may wish to send your own recreational gear depending on the facility and your length of stay. Your POC can give you specific information. Be sure all recreational gear is clean prior to packing.

MP3/CD player. Participants are expected to bring their own players, music and extra headphones. Avoid battery use by bringing an AC adaptor to plug it into the wall.

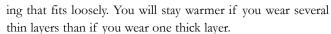
Attire en route. While dress may be informal en route to and in both New Zealand and South America, you are requested to remember that you are representing the United States and the NSF and that your appearance (and conduct) will be noted. Avoid inappropriate conduct during travel.

New Zealand. Weather conditions change rapidly. Cold temperatures and rain can be expected even during the spring and summer months. Lightweight rain gear, as well as a warm sweater or jacket, are recommended.

Chile. The climate in Chile is changeable and can be quite cold, especially in Punta Arenas. Lightweight rain gear plus a warm sweater or jacket are recommended.

Antarctic clothing. You will be issued ECW clothing as you pass through New Zealand or Punta Arenas. Special arrangements will be made if you are taking other routes to Antarctica. This clothing will include outer garments necessary for warmth and dryness, pile jackets and pants, gloves, thermal boots, and other items. Depending on your work, you may also be issued special safety gear (e.g., hard hats, goggles) upon arrival at your work site.

Proper clothing fit and functionality are important to achieve maximum protection. You should check each individual item to ensure that it fits correctly, that the zippers work, and quantities are correct. If you expect to gain weight while in Antarctica, which is common, select cloth-



The clothing issued to you is U.S. government property. You are required to return it in New Zealand or South America during redeployment, even if you think it may be of no further use. You are responsible for maintenance of issued clothing in your possession. Some issued clothing, especially parkas, is subject to theft, and you should take care to prevent loss. Abnormal damages or unreported loss of clothing will result in your being billed for repair or replacement costs. Report immediately the theft of any U.S. government property to the NSF representative or the station manager. It is illegal for you to mail government property from Antarctica. It is illegal for individuals to buy or sell government property, including clothing.

Strict regulations regarding required ECW attire on flights and cruises to and from Antarctica will be explained during clothing issue in Christchurch or Punta Arenas.

NOTE: Understand that while the U.S. Antarctic Program will provide you with what you need for outdoor clothing, par-





Each of the three stations' stores carries a limited supply of souvenirs and personal items. The McMurdo store, shown above, is the largest.

ticipants should bring their own long underwear, heavy socks, etc., to wear. Ask your POC for more information.

What Not To Pack

Plants, seeds and animals. The Antarctic Treaty, which all participants must adhere to, prohibits the importation of any seeds, plants (except food plants under controlled conditions for use in the greenhouse), or animals to Antarctica. Be sure to clean your clothing prior to packing it so you can prevent inadvertently importing organic material. For example, be sure there are no seeds on Velcro, mud on boots or grass inside cuffs. It is prohibited to remove any materials such as wood, bone, eggshells, feathers, and plant or animal parts, unless specifically authorized by permit issued from the NSF.

Commercial or other business activities. You may not market or sell clothing or finished articles printed, manufactured, or assembled outside Antarctica. You may not import materials to finish and market such items locally. Federal law forbids the use of an APO address for the shipment of articles or materials

used in private resale operations. The U.S. Antarctic Program also prohibits use of government transportation for shipment of goods and materials for unauthorized personal business activities.

Hazardous materials. Explosive gases, flammables, oxidizers, poisons, radioactive material, corrosives and other hazardous materials may not be shipped as baggage, mail or hand-carry. See Chapter 4: Science Cargo.

Electric blankets and heaters are not allowed for safety and power reasons.

Baggage Organization and Labeling

Your personal belongings and ECW clothing will normally be carried from Christchurch to McMurdo in two orange bags issued to you as part of your ECW gear in Christchurch. You can also take your own suitcases or bags as long as the total weight of all bags combined does not exceed the established limits, or you have authorization in advance for excess baggage (see the beginning of this chapter). One of your orange bags, plus your additional suitcases/bags, will be placed in the hold cargo area of the airplane and will not be available during the flight.

Your second orange bag will be a carry-on bag, and should consist of some ECW clothing (see Chapter 5), and any items that you may want to use on your flight south, such as a camera, book, MP3 player or laptop. Another small bag of your choice (e.g., day pack) should be identified as your 'boomerang bag' containing a change of street shoes/clothes, personal items, medicines and toiletries. In the event of a flight turn-around or cancellation after check-in, this bag will be returned to you for your next night's stay in Christchurch.

The size of your carry-on bag, which must not exceed 61x38x23 centimeters (24x15x9 inches), will be screened as you check in at the Antarctic Passenger Terminal.

Laptops are accepted as hand-carry, but it must fit into the hand-carry dimensions along with the rest of your hand-carry. You may not bring sharp objects aboard planes: if you are bringing a pocket knife, scissors, or other sharp objects, stow them in your checked baggage. As on commercial airlines, liquids, aerosols and gels are restricted to 3 oz. containers in carry-on luggage. To see current standards, visit www.tsa.gov. Your baggage will be screened using various detection sensors, including a drug detection dog. The contents of your baggage may also be subject to additional visual inspection.

Lavidson C.

Station Store

Each station store normally carries the following items, with slight variations due to the remoteness and fluctuating supply and demand. Snacks, drinks, souvenirs and other items are also sold.

Baby Oil **Body Soap** Combs **Dental Floss** Deodorants Eye Care Solution, Multi-Purpose **Eyeglass Repair Kits** Facial Tissue Feminine Hygiene Pads Hair Brushes **Hair Conditioners** Lip Balms Lotions Mouth Wash **Nail Clippers** Sewing Kits Shampoo Shaving Cream (non-aerosol) Sunscreen SPF 30 **Tampons**

Toothbrushes

Toothpaste Tweezers If you are traveling to Antarctica on a research vessel, the amount of baggage you will have access to can be very limited. You should pack the items you'll need for the five-day ocean journey in a small piece of luggage. Any baggage you store in the cargo area will be inaccessible during the journey.

Mark all your bags, including those you carry aboard, clearly with tags. Also place identification inside each bag. Do not lock your luggage, as airline security may need access to it. Mark boxes with a stencilled or painted address. Include your assigned antarctic station, the initials "USAP," "RPSC" or event number, and return address. If you are using boxes previously shipped to Antarctica, please take special care to eliminate any old cargo markings or placards.

Any **Do Not Freeze (DNF)** equipment should not be included in your checked or hand-carry baggage. Use the U.S. Antarctic Program cargo system to protect it from freezing (see Chapter 4: Cargo).

Other personal equipment. Personal baggage may also include delicate scientific instruments that must be hand-carried. You are responsible for handling personal baggage throughout the trip to and from Antarctica, unless it is checked as air cargo. If delicate instruments are to be moved as air cargo, clearly mark any handling requirements on the container. Handling personal baggage includes customs clearances in New Zealand, Chile, and the United States when returning from Antarctica. Pack baggage securely in easily handled containers.

STORAGE AVAILABILITY

In New Zealand

There is a limited amount of storage space available at the U.S. Antarctic Program Clothing Distribution Center (CDC) in Christchurch to leave items not needed in Antarctica. Some examples of items you might leave behind are summer clothing, business suits, street shoes, backpacking equipment, books that you have finished reading, and souvenirs acquired on the trip south to New Zealand.

This service is not provided solely for your personal benefit. It reduces the amount of materials airlifted to and from Antarctica, freeing capacity for timely movement of needed U.S. Antarctic Program materials, possibly including yours.

There will not be much time to spend sorting through your baggage before checking in for your flight to McMurdo Station. Plan ahead and organize your baggage and any items for storage in advance.

U.S. Antarctic Program participants who wish to use their personal dive equipment, bicycles, or camping gear while in New Zealand, may mail the items to themselves in care of the CDC. These items should not be mailed more than 60 days prior to your arrival in Christchurch. Items received after your departure to Antarctica will be held in the CDC warehouse secured baggage storage room until you redeploy from Antarctica. If you are no longer an active participant, the article(s) will be returned or forwarded, if a forwarding address is available. The address is as follows:

[Participant's Name]
[Specify the Antarctic Station]
c/o Private Bag 4747
Christchurch Airport
Christchurch 8140
New Zealand
HOLD IN CHRISTCHURCH

The New Zealand Ministry of Agriculture and Forestry (MAF) is now assessing a fee (average \$7NZ) to clean/fumigate items (e.g., dirty hiking boots, tent poles) left in Christchurch while you are in Antarctica. These items will remain in MAF custody at the U.S. Post Office in Christchurch until arrangement has been made to pay the fee.



photo by Calee Allen

This dorm room inside the new Elevated Station at Amundsen-Scott South Pole Station has been personalized with simple and lightweight items such as cloth wall-hangings. Linens, pillows and blankets are provided for you.

In Chile

Limited secure storage space is available in Punta Arenas for participants to store items they do not want to take to Antarctica, such as clothing to be used after leaving Antarctica and science equipment used in multi-year projects. Contact the Peninsula Logistics Supervisor if you have questions regarding the storage of any personal items in Punta Arenas. Coordinate with Agencias Universales S.A. (AGUNSA) officials upon arrival in Punta Arenas to have items stored.