

SKI LAST DEGREE







# ITINERARY CHANGES 2022

The health and safety of our guests continues to be a priority, as countries around the world adjust to living with COVID-19.

Our updated protocols align with current best practices, to support the well-being of our guests and staff and minimize the risk of bringing COVID-19 into Antarctica. Below is a summary of modifications to our itineraries for the 2022-23 season.

## **Punta Arenas**

- Mandatory COVID-19 vaccination for all guests and staff.
- Arrive in Punta Arenas, Chile three nights prior to your departure.
- ALE will provide pre-departure COVID-19 tests to screen all guests and staff for infection.
- Briefings, gear checks, flight check-in and baggage drop-off will follow Chilean Ministry of Health COVID-19 precautions and guidance. We will explain current regulations upon arrival in Punta Arenas.
- Masks are strongly recommended in close contact situations.

## **Antarctica**

- Mandatory vaccination and pre-departure screening will reduce the need for onerous COVID-19 management procedures in Antarctica.
- Masks remain strongly recommended in close contact situations.
- Individuals with COVID-19 symptoms will be tested if clinically indicated.

Please visit our **FAQ** for more detailed information on ALE's COVID-19 Management Strategy

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Required Clothing & Equipment List



**Antarctic Biosecurity** 



Guidance for Visitors to the Antarctic: Antarctic Treaty Recommendation XVIII-1







# SKI LAST DEGREE

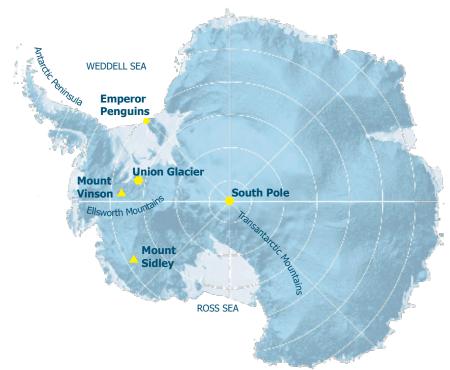
89°S TO 90°S

Ski the last 60 nautical miles (69 mi/111 km) to reach the most southerly point on Earth and experience firsthand the challenges faced by early explorers.

Ski Last Degree captures the essence of polar exploration in an incredible twelve day expedition.

You'll witness the stark beauty and silence of the high polar plateau, feel the physical demands of sled hauling, enjoy the bonds of friendship built through shared challenge, and know that you have arrived at the ultimate destination – the South Pole – through your own effort and determination.





# **ITINERARY**\*



**Arrival Day Punta Arenas, Chile** 



## **Pre-departure Days**

Gear Check. Flight Check-in and Baggage Drop-off Welcome and Safety Briefing



Day 1

Fly to Antarctica



**Day 2-3** 

**Expedition Preparations** 



Day 4

Fly to 89°S



**Day 5-9** 

Ski to the Pole



**Day 10** 

Arrive at the Pole



**Day 11** 

Return to Union Glacier



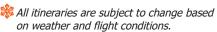
Day 12

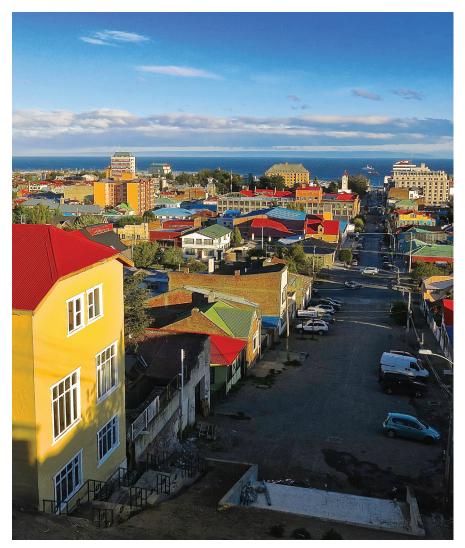
Return to Chile



**Flexible Departure Day** 

Fly Home









We ask you to arrive in Punta Arenas, Chile at least **three nights prior** to your scheduled Antarctic flight, in order to fully prepare you for your upcoming experience. This also allows a buffer for flight and luggage delays should your travels to Chile not go as scheduled. We do not hold Antarctic flights for delayed passengers or luggage.

Do not forget to collect your checked luggage in Santiago, before clearing customs! Upon arrival in Chile, you will pass through immigration, collect your checked luggage, go through customs, and then go to the 3rd floor of the terminal and re-check your bags for your domestic flight to Punta Arenas. If your luggage does not arrive, complete a missing form for lost luggage before leaving the Santiago airport.

Upon arrival at Presidente Carlos Ibáñez del Campo International Airport (PUQ), our representative, holding an ALE sign, will be waiting for you at the exit of the luggage claim area and will transport you to your hotel. Please notify our Punta Arenas team if you are delayed or your arrival time changes:

## **Guest Services Manager** guests.punta@antarctic-logistics.com

#### **Office Address**

Calle Bernardo O'Higgins 568

You will receive a Welcome Pack which includes your **Gear Check** time, your **Clothing Rental** time (if applicable), your **Check-in and Baggage Drop-off time,** and the time of the **Welcome & Safety Briefing**. These events are required and very important steps in preparing you for arrival in Antarctica.

## **Gear Check**

We will arrange a specific time to come to your hotel and review your personal clothing and equipment. Please lay out all of the items on our **Required Clothing and Equipment List** in your hotel room so we can go through each item with you. We will help sort the items to pack in your checked luggage vs. your carry-on bag and what items to leave behind in Punta Arenas.







# PRE-DEPARTURE DAY

## **Luggage Preparations**

Please notify us in advance if you plan to have more than 55 lb (25 kg) of luggage. Ski aircraft have strict cargo limits and we may not be able to accommodate excess luggage without advance notice. Keep the following requirements in mind as you prepare your luggage:

- All luggage must comply with international air transport regulations.
- For the safety of our staff, individual bags must not weigh more than 55 lb (25 kg).

On the morning before your Antarctic flight we will meet you in your hotel lobby at the **scheduled check-in and baggage drop-off time**. We will transport you and your bags to the ALE office for the check-in and baggage drop-off event.

You will need to bring the following items:

- Passport, to check-in for the flight and receive your boarding pass.
- Checked luggage, to be loaded on the aircraft.
- Carry-on luggage and any camera equipment, to be tested for size and ticketed for the flight, although not collected at this time.

We will weigh everything and use these weights to calculate cargo totals for the ski aircraft flight to to 89°S. We will only collect your checked luggage at this time.

## Checked Luggage

Checked luggage is collected the day before your Antarctic flight in order to preload the aircraft so it is ready to depart as soon as the weather is suitable. Keep in mind, you will not have access to your checked luggage until it is delivered to your tent in Antarctica, even if the flight is delayed.

Do not put anything in your checked luggage that you might need during a delay in Punta Arenas, on the flight, or for the first few hours in Antarctica. Your checked luggage allowance is 55 lb (25 kg). Any checked luggage in excess of this amount will be charged at \$35 USD per lb (\$77 USD per kg). You can pay in US cash or we can invoice you for the excess luggage. Carry-on luggage within the size limit, clothing worn aboard the aircraft, and sleeping bags rented from ALE, are not included in your checked luggage allowance.

## Carry-on Luggage

Pack all of your essential personal belongings in your carry-on. Carry-on luggage is restricted to 18" x 16" x 10" (46cm x 41cm x 26cm) so it will fit beneath the seat in front of you. We recommend a 30 liter bag without a rigid structure so it is easier to fit below the seat. Carry-on items that do not fit under the seat will be gate checked and may result in additional fees. You will need to bring your carry-on to the check-in and baggage drop-off to be tagged and tested for size.

As we depart Punta Arenas you will be wearing the boots and outer clothing for your arrival in Antarctica. The temperature on board the aircraft will be adjusted accordingly, so don't worry about getting too hot. It is simpler to wear these items than to carry them.

## Camera Equipment

If you are bringing a camera pack that is larger than the carry-on size limit or as a 2nd carry-on, it will be considered part of your checked luggage allowance, and it will need to be weighed and ticketed at the luggage pick-up. You will keep the pack with you to board the aircraft but once on board, your camera pack will be stored behind the last row of passenger seats. You will not have access to your camera pack during the flight. If you want to take pictures during the flight, keep that camera with you. Remember to retrieve your camera pack before disembarking the aircraft in Antarctica.

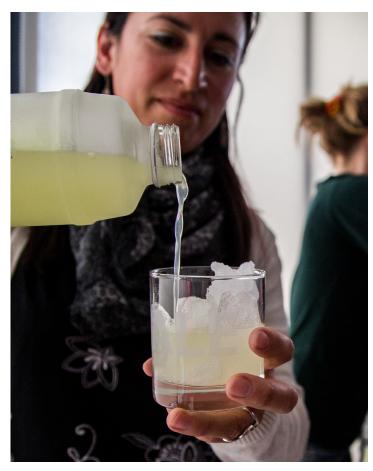


## Left Luggage

You can leave luggage in Punta Arenas if there are items you do not need in Antarctica but we do not recommend leaving valuables. We will provide **Left Luggage Tags** with a tear-off claim receipt. Please give the bottom portion of the tag to an ALE staff member as you board the bus for your Antarctic flight. In most cases ALE will pick-up your left luggage from your hotel and bring it to our office for storage while you are in Antarctica. Your left luggage will be transported by ALE to your hotel once your return flight is confirmed. In the event you stay in a different hotel upon your return, our staff will need this claim receipt to move your left luggage for you. ALE is not responsible for lost or stolen luggage.

## **Welcome and Safety Briefing**

The evening before your Antarctic flight, you are invited to our office for an important safety briefing. Here, we will describe the flight dispatch process, update you on the current weather, and prepare you for arrival at Union Glacier. Enjoy Hors d'oeuvres and pisco sours served over Antarctic ice with your fellow travelers.







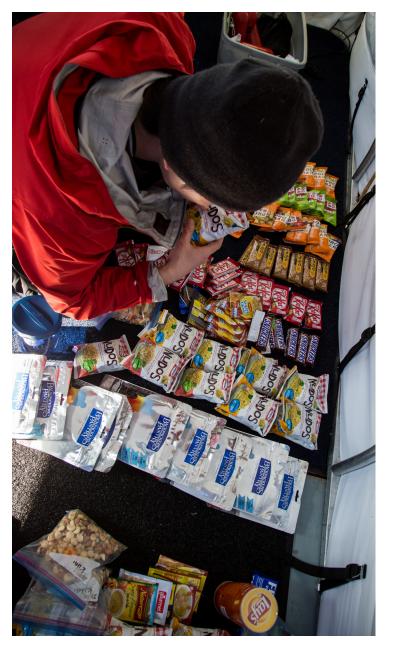




We will call you at your hotel in the morning to advise you of current conditions in Antarctica. If the weather is suitable for our flight, we will pick you up at your hotel within the hour. Please meet us in the lobby with hotel bills paid, ready to board the bus.

At the Punta Arenas airport, we will go through General Airport Security before boarding our chartered jet for the 41/4 hour flight to Antarctica. Our route crosses the Drake Passage, then follows the west side of the Antarctic Peninsula and the spine of the Ellsworth Mountains. We land on a naturally occurring blue-ice runway on Union Glacier where you will take your first steps in Antarctica.

Climb aboard one of our specially-adapted vans for the 5 mi (8 km) shuttle to our main camp. Our friendly staff will provide a welcome tour of camp and show you to your tent.









You will spend a couple of days at Union Glacier to test your clothing and equipment and practice sled hauling on a mini-expedition outside of camp with your team. Then you'll pack your sleds and ready for departure.





Fly by ski aircraft to 89° South, 60 nautical miles (69 mi/111 km) from the South Pole. As the aircraft disappears from view, you'll be struck by the stark beauty and emptiness surrounding you. There is nothing but snow and wide horizons in all directions.

Your team will pack sleds and ski a short distance before setting up camp for your first night on expedition. You have just arrived at altitude and it is important that your pace is slow during this initial ski.









# SKI TO THE POLE

Continuing your trek south, you'll ski longer periods each day to begin acclimatizing to the cold and altitude. The elevation here is 9,300 ft (2835 m) but to your body it will feel more like 10,500 ft (3200 m) due to the lower atmospheric pressure at the poles. Throughout the expedition you'll notice the altitude's impact on your breathing and your stamina.

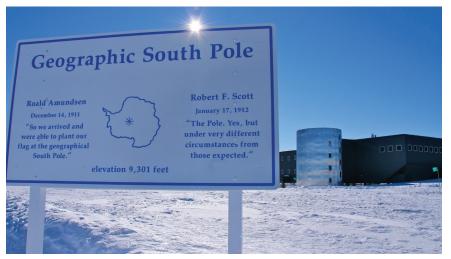
This journey is physically demanding. Your sled will weigh approximately 66 lb (30 kg) and the snow may be sculpted by the wind into steep ridges called sastrugi, adding to the challenge. Acclimatizing slowly gives your team its best chance for success.

A 'typical' day starts with breakfast at 8 am and the team packed up and skiing by 10 am. You'll make a series of 1 hour marches, stopping for 5-10 minutes each hour for a brief rest and snack break. You'll travel until about 7 pm and then stop to set up camp and enjoy dinner together. As on all expeditions, success is a team effort, with everyone helping to pitch tents and prepare meals.

The Amundsen-Scott Station may be visible from around 15 mi (24 km) away but those last miles can seem the longest and may take another 1-2 days of travel.









Finally, you'll take the last steps to your goal and reach the most southerly point on Earth – the Geographic South Pole! Here, beneath your feet, all 360 lines of longitude meet and the ice is almost 10,000 ft (3000 m) thick.

Feel the satisfaction of having arrived here under your own power and reflect on how it must have felt to stand in this place over one hundred years ago, with only the sound of the wind and an endless expanse of white stretching northward in all directions.

You may camp overnight at the South Pole until your pick-up by ski aircraft. The South Pole is an Antarctic Specially Managed Area (ASMA #5). Please respect established protocols while at the South Pole.



Our field staff will stay in close contact with Union Glacier Camp to identify the best 'weather window' for your return flight.

Depending on flights, your team's celebration dinner may take place at our South Pole camp or upon your return to Union Glacier. You'll receive a certificate to commemorate your Ski Last Degree Expedition and may have at least one day to explore more of Union Glacier before departing Antarctica.



When weather and runway conditions permit, our intercontinental aircraft will arrive at Union Glacier to transport you back to Chile. Once your flight has been confirmed we will ensure that you have a hotel reservation in Punta Arenas. If the flight returns in the early morning, we will book your reservation for a day ahead of your arrival because many hotels do not allow check-in until after 3:00pm.

If in the event of a delay we cannot adjust your reservation, ALE will find you a new hotel of comparable quality. Upon your arrival our staff will meet you at the airport and transfer you and your bags back to your hotel.



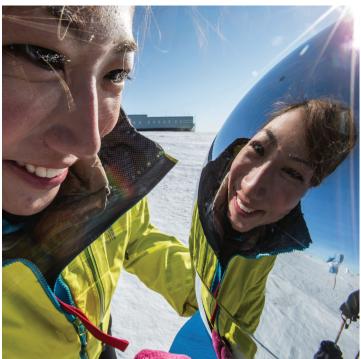
Due to the potential for weather delays, we strongly suggest booking your flight home one week after your planned return from Antarctica. If you purchase a full-fare ticket, most airlines will allow you to move your departure date. We recommend booking tickets through a travel agent, so they can change your ticket once the return flight from Antarctica is en route. Please note, ALE staff are unable to assist with airline reservations.

Should you wish to explore Chile before you return home, our team can provide a list of local tour operators and excursions. When it is time for your flight home, we will provide transportation from your hotel to the Punta Arenas airport.













## Weather

Temperatures ranging from -13°F to -40°F (-25°C to -40°C) with wind-chill down to -50°F (-50°C).



## **Activity Level**

Extremely Strenuous—skiing up to 9 hours per day while pulling a 66 lb (30 kg) sled at a physiological altitude of 11,000 ft (3350 m).



## Requirements

Skiing and cold weather camping experience as well as a high level of fitness. Participants must undertake training for several months prior to the expedition.



#### What's Included

- Airport transfers in Punta Arenas, Chile
- Round trip flight to Antarctica from Punta Arenas
- Flight to 89°S from Union Glacier
- Flight to Union Glacier from South Pole
- Meals and tented accommodation in Antarctica
- Camping and skiing equipment
- Expedition Guide
- Celebration dinner and Certificate of Achievement
- Checked luggage up to 55 lb (25 kg)



## Not Included

- Insurance coverage—personal, medical, evacuation, or otherwise
- Commercial flights to and from Punta Arenas
- Airport transfers outside of Punta Arenas
- Meals and accommodation in Punta Arenas
- Additional flights within Antarctica
- Personal equipment and clothing
- Expenses incurred due to delays
- Luggage over 55 lb (25 kg)
- Satellite phone charges

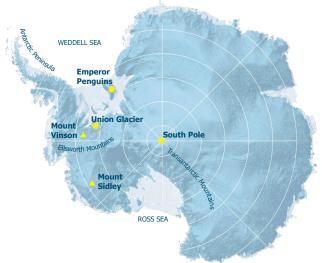


#### Weather Delay Advisory

All itineraries are subject to change based on weather and flight conditions. Every effort will be made to keep to the scheduled itinerary and flights will depart as soon as weather and runway conditions permit. Our staff will provide you with regular updates in the event of a delay.

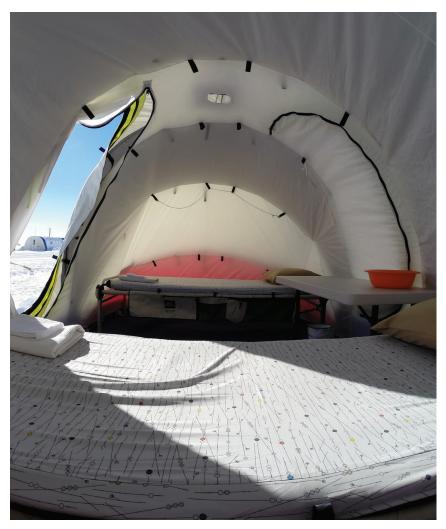
Please understand that delays are common in Antarctic travel. For this reason we advise you not to plan any important meetings, functions, or other trips for at least one week following your scheduled return from Antarctica. We strongly suggest that you purchase a full-fare, flexible airline ticket that easily permits date changes without penalty.





# 79° 46'S 82° 52'W 2297 FT (700 M)

Our main camp is only accessible by air and lies on the broad expanse of Union Glacier in the Southern Ellsworth Mountains. All of our guests take their first steps in Antarctica here, on the naturally occurring blue-ice runway. We are a short flight from Mount Vinson, the highest peak in Antarctica, and just over 600 nautical miles (1138 km) from the South Pole. Majestic peaks rise in all directions offering unlimited opportunities for scenic excursions, technical climbs, and ski tours.







# **ACCOMMODATIONS**

Union Glacier Camp is the only facility of its kind in Antarctica. Our full-service camp operates during the Antarctic summer (November through January) and is dismantled at the end of each season. We can house up to 70 guests in our dual occupancy Clam Tents.

Clam Tents are double-walled sleeping tents that are designed to withstand Antarctic conditions with a high-tech nylon covering and durable aluminum frame. They are also incredibly comfortable to live in with large doors and a tall interior that allows you to stand upright and move around easily (16 ft x 8 ft or 5 m x 2.4 m). Tents are naturally heated by the 24-hour sunlight up to 60°F (16°C) but may be colder during long periods of overcast skies. Each guest is provided with a cot, mattress, pillow, linens, and towels.

Please tell us if you have a preferred tentmate. Otherwise we will pair you with a compatible roommate of the same gender.

# WEATHER

The Antarctic climate is generally cold, dry, and windy. Even though it is summer, the temperatures remain below freezing at all times. Camp is typically less windy than other areas, such as the blue-ice runway, and temperatures range between -12° to 30°F (-24° to -1°C). Please keep in mind conditions can change rapidly and wind chill can make temperatures feel colder. Bring everything on our **Required Clothing & Equipment List** so you are prepared for all conditions.





# **MEALS**

## **BREAKFAST 8-9 AM**

Hot breakfast is served until 8:45am and selfserve continental breakfast is available until 9am.

## LUNCH 12:45-2 PM **DINNER 6:45-8 PM**

The dining tent is the heart of our camp and serves as a gathering place for all of our guests. You'll have the opportunity to meet people from all over the world embarking on everything from a Mount Vinson summit attempt to a Ski South Pole expedition. You'll get to mingle with our staff, who speak 15 different languages, and may have the chance to talk to scientists working on a variety of research projects.

Our talented chefs utilize a fully equipped kitchen to create fresh-cooked meals, baked goods, and fantastic desserts. You'll be surprised at the range of fresh fruits, vegetables, meats, and cheeses we're able to fly in regularly from Chile. We offer a variety of hot beverages, soft drinks, juices, and water. Chilean beer and wine are served in limited quantities with dinner.

Breakfast, lunch, and dinner are served at set times. In between meals, self-serve snacks and beverages are always available. All meals are served buffet style and vegetarian options are available upon request.

If you have made special dietary requests or have food allergies, you must introduce yourself to the kitchen staff when you arrive in camp, before eating.

# **SHOWERS & TOILETS**

While at Union Glacier Camp, you'll have access to communal showers and toilet facilities. In keeping with our mission to set the highest possible environmental standards, we try to minimize the amount of residue (grey) water we generate as well as the fuel we use to melt snow in Antarctica. We provide disinfectant hand gel in the dining tent and in all toilets and ask that guests limit shower use to every 2-3 days to conserve water. We also provide wash basins if you don't want to take a full shower. Many quests bring pre-moistened towelettes such as Wet Wipes to use in between showers. Towels are provided in your tent and body wash is available in all shower stalls but you should bring any other toiletries with you. We do not offer laundry service in Antarctica.

## SHOWER HOURS 7-10:30 AM 5-10 PM

All human waste is removed from Union Glacier Camp, which requires us to keep liquid and solid human waste separate for ease of transport. For men, a stand-up urinal is provided in addition to a sit down toilet. For women, two sit-down toilets are provided, one for liquid waste and another one for solid waste and toilet paper. During the night, some quests prefer to use a "pee bottle" in their tent. Our staff will show you the container where you empty pee bottles next to the toilet facility. Don't forget to bring your pee bottle with you when you leave camp. On vehicle excursions, our guides will also have a portable toilet you can use in emergencies.











# **ACTIVITIES**

You can be as active or relaxed as you like while at Union Glacier. Each morning we will meet with you to discuss options for the day and organize activities tailored to the weather and your interests. We offer a variety of group excursions (described in your detailed itinerary) and there are plenty of activities you can do on your own around camp. Take a walk, cross-country ski, or try out one of our fat tire bikes on the groomed 6 mi (10 km) loop. If you're looking for something more low-key, check out a book, movie, or game in our polar library. We also have a small merchandise shop featuring clothing, hats, patches, and other keepsakes. These items are exclusively sold at Union Glacier Camp and cannot be purchased anywhere else in the world. Items range in price from \$10-\$200 and are available for purchase with US cash.

In the evenings, our guest lecturers will host engaging talks on a variety of topics from polar history to glaciology. Many will share photos and stories of their own expeditions to remote parts of Antarctica and beyond. Please respect camp quiet hours between 10pm and 7am.

If you'd like to experience more of Antarctica, you can add a flight to one of our other destinations for an additional fee. Based on the time of your visit and weather conditions, you may be able to join a flight to the South Pole, charter a scenic flight around the Ellsworth Mountains, or visit Mount Vinson Base Camp. If you're interested in adding one of these flights to your itinerary, please ask our Guest Services team and they can provide you with rates and availability.

# **COMMUNICATION**

Satellite phone cards are available for purchase with US cash (\$40 USD for 30 minutes) from our Guest Services team. Please note that you are charged per attempted transmission, not per connection. You can make calls from our two phone booths which are equipped with satellite phones for your use. Please do not use personal satellite phones in communal areas like the dining tent.

There is no mobile coverage in Antarctica. Satellite internet access is for operations only. Please enjoy this digital detox!

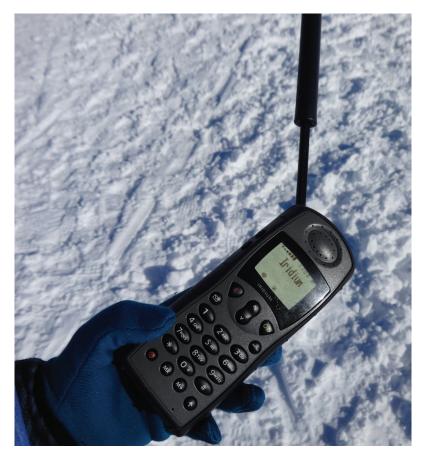
In an emergency, your family may contact our offices in Salt Lake City or Punta Arenas and we can forward a message to you while you are on the ice. However, we will only give out information about you to those individuals listed on your Personal Information Form (PIF).

#### **Punta Arenas Guest Services**

Calle Bernardo O'Higgins 568
Punta Arenas, Chile
guests.punta@antarctic-logistics.com

#### **Salt Lake Sales Office**

info@antarctic-logistics.com





# **POWER**

Limited charging facilities are available in the dining tent and feature two types of outlets: USB and 120V A/C (North American Type A or B plugs). Ensure your batteries are fully charged prior to leaving Punta Arenas, you have back-up batteries on hand, and you leave any unnecessary electronics behind. Please be courteous of your fellow guests and do not leave electronics plugged in overnight.









# **TRANSPORTATION**

ALE uses standard commercial jets such as the Boeing 757-200 for our scheduled, intercontinental passenger flights. The B757 offers passengers a fast flight time, a comfortable flight, and plenty of windows to enjoy the spectacular Antarctic views and thrilling blue-ice landing.

Each season we charter three to four ski aircraft to transport guests and cargo within the continent. We utilize De Havilland DHC-6 Twin Otters and a Basler BT-67. The Twin Otter is the workhorse of many National Antarctic Programs and is used by the British Antarctic Survey, the United States Antarctic Program, as well as the Argentine and Chilean air force. The Basler is our larger ski aircraft and is a turboprop conversion of the Douglas DC-3. We use it to transport larger groups of passengers and cargo into the field.

We maintain a fleet of specially adapted vehicles for ground transportation, snow clearing, and runway maintenance. These include two 4x4 and three 6x6 passenger vehicles, several tractors, Tucker Sno-Cats, industrial snow-blowers, skiway groomer, and a number of snowmobiles and sleds.

# **MEDICAL SERVICES**

Keeping you healthy in Antarctica is one of our key priorities. We have a basic medical clinic staffed by doctors and medics who specialize in emergency, high altitude, and remote medicine. The clinic is equipped to treat minor illnesses or can be used to stabilize more serious conditions until the patient can be evacuated. Our field guides all hold advanced first aid certification, are trained in emergency response protocols, and carry comprehensive first aid kits when away from camp. A member of our medical team accompanies all South Pole flights due to the altitude and extreme temperatures at this location.

If you take regular medication, bring enough with you for your anticipated itinerary as well as 4 weeks' extra supply. Even in Punta Arenas, compatible prescription medications can be difficult to source.

Common ailments such as dehydration, sunburn, and cold injury can easily be avoided through self-care. Make sure to drink plenty of fluids, as you can easily become dehydrated in Antarctica's cold, dry climate. Your body needs calories to keep warm, so please enjoy our hearty meals and delicious desserts. Keep your skin covered in cold and windy conditions to prevent frostbite. Wear gloves when taking photos and use a balaclava, Buff, or face mask. Wear high quality sunglasses or goggles whenever outside and liberally apply sunscreen. And don't forget to use the disinfectant hand gel!

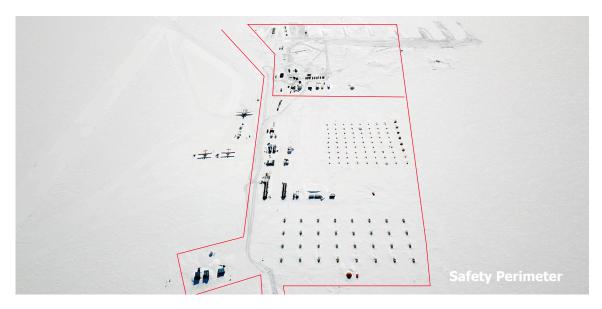
Tell our medics or your guide immediately if you feel unwell or have a problem. Many issues can be easily resolved if they are addressed early, but can become serious if ignored.

If necessary, we will call in a dedicated flight to evacuate a patient. Keep in mind Punta Arenas, Chile is 1,859 mi (2991 km) away from Union Glacier and evacuation is entirely dependent on good weather conditions. Because of this, medical evacuation may take up to several days. Evacuation flights will be at your own expense, which is why we require all guests to carry Medical Evacuation Insurance.









## TRAVEL SAFETY

Few people get to camp and travel on an active glacier and this unique environment requires everyone to be cautious and conservative. Stay within your limits, listen to safety briefings, and follow instructions. Ask if you have questions.

Union Glacier is a large expanse of actively moving snow and ice that is flowing from the Polar Plateau towards the Ronne Ice Shelf. As the glacier carves its way through the mountains and flows over uneven terrain, deep holes and cracks can form in the surface of the snow. These crevasses can be hundreds of feet deep and are often covered by a thin layer of snow, making them very dangerous. Assume all glaciated terrain contains hidden crevasses and always seek advice before traveling outside of camp.

We use a variety of tools to identify safe areas around Union Glacier and our field camps. These include high resolution satellite imagery, ground penetrating radar, a thorough understanding of glacier dynamics, and historical knowledge of the area. Our camp boundaries and safe travel routes are routinely maintained and clearly marked to ensure safe passage in low visibility. Our Travel Safety team gives regular briefings to guests and staff on where it is safe or not safe to travel.

All guests and staff must adhere to a strict Check-Out and Check-In Procedure when leaving camp and be cleared by our Travel Safety Manager. Guests and staff must stay on established safe routes outside of camp or employ glacier travel techniques (ropes, harness, etc.). Please check with our Communications staff before crossing the skiway to use the 6 mi (10 km) loop. Even if you see alf-of our aircraft on the ground, there may be other aircraft in the vicinity.

If you need assistance, our Guest Services team is always available as your first point of contact. The Communications and Operations Offices are open for guests between 9am and 7pm. Please be respectful of these busy workplaces and only visit them when necessary.

## "NO GO" AREAS

We have identified a safety perimeter around camp, identified by flags. Do not cross the flags or enter any of the following "No Go" areas unless you are accompanied by a member of our staff.

- The blue-ice runway or taxiway when a flight is due (You will be advised where you may stand to take photos)
- The back of the Ilyushin during unloading or loading
- Radio masts, antennas, and guy lines
- Ski aircraft parking area, skiways, air crew tents, and air crew office
- Medical Clinic unless a medic is present
- Garage and Workshop Areas
- Staff sleeping tent area, unless you are visiting the medic's tent
- · Clean snow area



# TIME

Even though you'll be living in 24-hour daylight, Union Glacier Camp time is the same as Punta Arenas, Chile, where our flights originate. Our field camps at Mount Vinson, South Pole, and Gould Bay also operate on this same time.

Union Glacier Time

- = GMT (UK time) -3 hours
- = Eastern Standard Time (NYC time) +2 hours
- = Pacific Standard Time (LA time) +5 hours.

Amundsen-Scott Station, located at the South Pole uses New Zealand Daylight Time (GMT +13 hours).

# **DISTANCE**

1 nautical mile (nm) = 1.15 statute miles = 1.852 kilometers

1 degree of latitude = 60 nm

1 minute of latitude = 1 nm

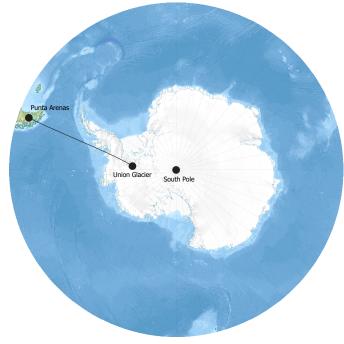
# **SMOKING**

Smoking and/or vaping are PROHIBITED inside ANY tent, structure, vehicle or aircraft due to extreme fire danger. Smoking is permitted outside only. Containers for ash and cigarette butts are located outside the dining tent. Please use your own container with a lid should you wish to smoke elsewhere.

# **GRATUITIES**

You are welcome to give gratuities/tips if you wish but should feel under no pressure to do so. Tipping rates are left entirely to your discretion based on your level of satisfaction with our service. Tips can be given to our Guest Services Manager. Like many travel companies, gratuities are pooled and shared among the entire staff because we feel each person plays an equally vital role in the safe and successful completion of your experience.





# POPULATION 125,000 LANGUAGE SPANISH

Punta Arenas lies on the western shore of the Straits of Magellan, in Chile's southernmost region of Magallanes and Chilean Antarctica. Punta Arenas means "Sandy Point." As in all of Chile, Spanish is spoken and it is essential to know some basic words as very few people speak a second language.

## **WEATHER**

The climate can be harsh, with winds averaging 19-25 mi/hr (30-40 km/hr) during the spring and summer, an annual mean temperature of 44°F (6.7°C), and an average yearly rainfall of 17 in (425 mm).



## **HISTORY**

The first European to reach the area was the Portuguese explorer, Fernão de Magalhães, who, like many navigators before him, searched for an easier route to the East in order to avoid the arduous trip around Africa. In 1520 he reached the sea passage later named after him: the Straits of Magellan. A monument to Magellan is found in the main square of Punta Arenas.

## **NAVIGATING**

The Straits of Magellan run roughly north/ south. If you are walking north, the water will be on your right; "uphill" will be on your left. Along the waterfront, you will find paved sidewalks for biking, running, or walking. The waterfront also offers many great spots to sit and enjoy views of the straits and Tierra del Fuego. Looking the other direction, towards the hills, you may notice the local ski field and Reserva Forestal. Both of these scenic destinations are only a 10 minute taxi ride from downtown.

The ALE office and the majority of hotels are located downtown, and no further than a 15 minute walk away, but taxis are also readily available. Most shops in the downtown area are closed on Sundays but the Lider (supermarket) and Zona Franca (tax free zone) are open and only a 5 minute taxi ride from downtown.

Our office is located between Mejicana and Croacia Streets. The Guest Services department is on the 2nd floor of our building.



## **OUR OFFICE**

**Address** Calle Bernardo O'Higgins 568

## **MONEY**

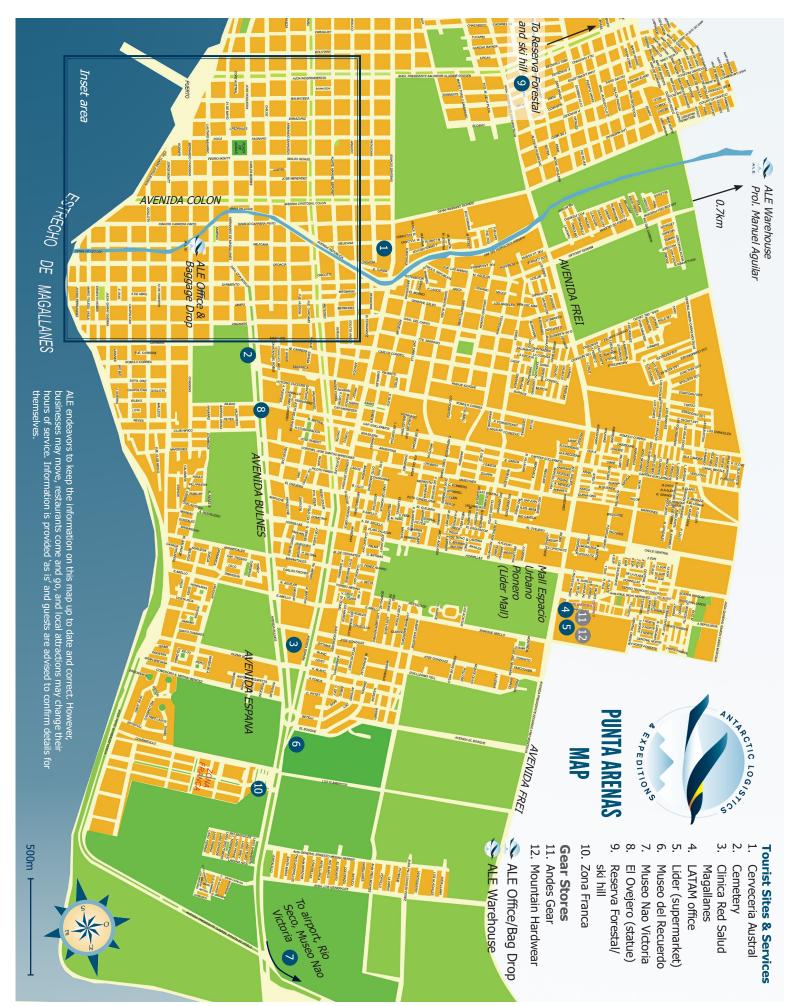
Visa, MasterCard, and American Express credit cards are accepted most places. The most convenient places to change money are the Casas de Cambios, as they keep regular business hours and offer a better exchange rate than banks. Cambios can be found on Lautaro Navarro in between Pedro Montt and Roca. Banks are located in front of the main square and all banks have ATMs that can be accessed at any hour. Look for the "Redbank" sign. ATMs are also located at the Lider and Unimac Supermarkets.

Tourist services such as hotel bills paid in US dollars are not subject to the 19% sales tax called IVA.

Don't forget to bring some US cash to Antarctica in order to purchase satellite phone cards or merchandise at Union Glacier Camp.

## **PHONES**

If you do not have international calling enabled on your mobile phone, the best way to communicate with ALE is via WhatsApp.



33. ATM Farmacia Salcobrand (pharmacy) 45. Solo Expediciones (penguin tours) (See other side for more gear stores) 31. Artelanas Merino (wool artisans) Bagage Drop: Mejicana 954 Chile Express & Western Union 41. Museo Regional de Magallanes 34. Aysen grocery (bulk foods) Casa La Porfia (souvenirs) 50. Mountain House (Marmot) 21. AlmaSur (Rey Don Felipe) Office: O'Higgins 568 Marcela Alcaino (jewelry) Money exchange/Cambio **Tourist Sites & Services** 46. Unimarc (supermarket) 32. ATM Banco Santander 48. Cercon (electronics) 52. Optica (sunglasses) Post office/Correo 15. Diego de Almagro Museo Salesiano 44. Scenic viewpoint 13. Cabo de Hornos 20. Los Navegantes 51. The North Face Comapa (tours) 30. La Yegua Loca 19. Isla Rey Jorge 22. Los Ganaderos 26. Mesita Grande 29. Shackleton Bar 27. Cafe Meraki Finis Terrae 23. Imago Cafe 25. La Marmita 49. Grado Zero 14. Kran Kréen 47. La Cumbre Restaurants 36. Cemetery **Gear Stores** 24. Lomito's 16. Dreams 28. Okusa 18. Ilaia 37. 38. 39. 46. 45. MAGGENS PASAJE 8 CARRERA GOLETA ANCUD SEÑORET SOMADNA JULIA GARAY GUERRA AVENIDA BULNES PJE. CARCAMO CAUPOLICAN MARIO TOLEDO VIOLA IOVINO FERNANDEZ AVENIDA ESPANA PJE. HUDSON **ERNESTO HOBBS** BERMUDEZ UGIAM 12 DE FEBRERO 8 GAMBOA E. RUIZ 2 DE YBBIL WEGMANN OOSOBNOO ONIO OTNBIMRAS Baggage Drop ON ALE Office CISCUTTI CROACIA SOTERICES SOMENA HERNANDO DE MAGALLANES RIO DE LAS MINAS MEJICANA MEJICANA MEJICANA 25 SAMPAIO OTNIA ARBARA IGNACIO CARRERA PINTO QUILLOTA MARIA ALLESSE 4 IBERTADOR BERNARDO O'HIGGINS AVENIDA CRISTOBAL COLON 23 8 ALMTE. MANUEL SEÑORET The state of the s CARLOS BORIES
29 44 52 JORGE MONTT **102E WENENDEZ** 532,42 ALMEYDA **AVENIDA ESPANA MALDO SEGUEL** KORNER ARMANDO SANHUEZA PLAZA DE ARMAS 800 49 53 ARAUCO LAUTARO NAVARRO **4** PAGNANO 8 J.PEDRALES 20 200 m ERRAZURIZ JOSE NOGUEIRA 21 DE MAYO CHILOE BALMACEDA (PORT) **PUERTO** COPE AUSTRAL BALMACEDA AVDA INDEPENDENCIA



## **FUERTE BULNES & MAGELLAN STRAIT PARK**





This reconstructed Chilean fort is located 39 miles (62 km) south of Punta Arenas. Originally founded in 1843, the fort is now a National Historic Monument. Visit replicas of the original buildings while reading about the history of the first settlers. The park includes several easy trails and stairs down to the Magellan Strait. There is also a small cafeteria, a visitor center, and a gift shop. To get there, consider renting a car or hiring a minivan.

## **WALK WITH MAGELLANIC PENGUINS ON ISLA MAGDALENA**



Follow a small path that winds among the burrows of an estimated 120,000 nesting Magellanic penguins on Isla Magdalena. Half-day tours depart early morning or late afternoon and are weather dependent. Tickets should be booked a day in advance. Tour companies offering this excursion include *Turismo Comapa and Solo Expediciones*.

ALE guests should plan an extra day after their Antarctic experience to visit Isla Magdalena. Guests should avoid visiting the island while on standby for a flight.

## **MUSEO NAO VICTORIA**



Take a step back in time and explore historic sailing vessels from the 16th – 20th centuries. The Museo Nao Victoria offers full-size replicas of Magellan's Nao Victoria, Shackleton's lifeboat the James Caird, Darwin's HMS Beagle, and the schooner Ancud. Located just 5 miles (8 km) from the city center along the waterfront, you can either walk or take a taxi.

Website: www.naovictoria.cl

## **HIKE IN THE RESERVA NACIONAL MAGALLANES**



Explore hiking trails that meander through southern beech forest and open up to viewpoints overlooking the city. Trails are marked and rated as moderately difficult. The park is open every day except for public holidays and is only a short taxi ride from the city center. Trails may be closed in the event of strong winds or bad weather conditions.

Website: www.conaf.cl

## **VISIT THE AUSTRAL BREWERY**

Learn some of the secrets of Chile's oldest brewery, established in 1896 by German Master Brewer, José Fischer. Visitors can follow the process of making the legendary Austral beer step by step, from selection of the malted barley to bottling. Tours must be arranged in advance.

Website: www.cervezaaustral.cl

## **PUNTA ARENAS CEMETERY**





Just a short walk from the ALE office, this historic cemetery is a must see! The cemetery covers 10 acres (4 hectares) of land and is rated by CNN as one of the most beautiful cemeteries in the world. In 2012, it was designated a National Monument of Chile. Website: www.puntaarenas.cl

## EXPLORE TORRES DEL PAINE NATIONAL PARK



Just 152 miles (244 km) northwest of Punta Arenas lies one of the jewels of Chilean Patagonia. This National Park is known for its soaring granite peaks, turguoise lakes, and golden pampas (grasslands) that shelter wildlife such as llama-like guanacos and ostrich-like rheas.

## 3 Ways to Explore:

- 1. Day trips to the park can be purchased through agencies in Punta Arenas. Tours depart at 6:00 am and return in the late evening. Most of the day is spent aboard the bus, stopping along the way only to take photos.
- 2. Rent a car in Punta Arenas and take at least 2 days to visit the park. Stay in either Puerto Natales (3 hour drive from Punta Arenas) or within Torres del Paine National Park (5 hour drive from Punta Arenas). You will need to purchase a permit to enter the park.
- 3. Purchase an excursion with a pre-set itinerary from your hotel in Puerto Natales or with Turismo Comapa, the main agency in Puerto Natales, offering full day trips to the park.

#### **Recommended Accomodation:**

Puerto Natales: Singular Hotel, Kau Lodge, Costa Australis, Hotel Natalino, Weskar Lodge, Hotel Remota, Hotel Altiplanico Inside the Park: Hotel Lago Grey, Hotel Rio Serrano, Cabañas Tyndall, Hotel Tierra Patagonia, Hotel Awasi

## SKI CLUB ANDINO AND CERRO MIRADOR



Hike to the top of Cerro Mirado (2133 ft/650 m) or if the chairlift is running, hitch a ride for beautiful views of the city. Other attractions include mountain bike tours, bike rentals, canopy walks, and a small cafeteria at the base of the ski hill.

Website: www.clubandino.cl

## DRINK PISCO SOURS AT THE SHACKLETON BAR





The Shackleton is a bar with history, named after Anglo-Irish explorer Ernest Henry Shackleton, and located in the luxurious dining room of pre-eminent pioneer Sara Braun. Here you can enjoy your favorite cocktail or sample the local specialty, Pisco Sours.

Website: www.hotelnogueira.com

## **FARO SAN ISIDRO**



A 1-2 hour drive along the scenic coast takes you down the Brunswick Peninsula to the southernmost lighthouse on mainland Chile. Venture along rocky beaches for 3 miles (5 km) and watch for bird and marine life as you make your way to the lighthouse. Originally lit in 1904, the restored lighthouse features a museum and walking paths that pass a whaling camp.

Be prepared for a few kilometres of narrow dirt road and at the end of the drive, a rugged walk to reach the lighthouse.

## MAGGIORINO BORGATELLO SALESIAN MUSEUM



Located in downtown Punta Arenas, this museum covers four levels and displays pieces related to local indigenous cultures, native flora and fauna, European explorers, and missionaries. The museum was established by Salesian missionaries in 1893 to showcase the rich culture and ecology of the region. It serves as a record of the way of life of indigenous peoples and the impacts of colonization.

## **REGIONAL MUSEUM OF MAGELLANES**

Marvel at the artwork and period furniture inside the original mansion of wealthy pioneer Sara Braun. The museum is located in the center of Punta Arenas and often holds art exhibits and cultural activities.

## TAKE A WALKING TOUR OF THE CITY





Walk among the artisan booths at the **Plaza Muños Gamero (Main Square)** and admire the bronze statue of Fernando de Magallanes, inaugurated in 1920. Five minutes from the city square, you can climb the stairs to Cerro de la Cruz **Lookout** for views of the center of Punta Arenas and the Magellan Strait.

Walk from one end of town to the other along the paved, waterfront prominade known as La Costanera. Enjoy numerous species of birds and views of distant Tierra del Fuego, as you pass by historic piers, public art, and old warehouses decorated with murals.

## SKI LAST DEGREE REQUIRED CLOTHING AND EQUIPMENT LIST



Conditions in Antarctica change drastically throughout our season and vary depending on your location. Temperatures can reach as low as -40°F (-40°C) and as high as 23°F (-5°C) and can feel colder due to the prevailing headwind and altitude.

To be prepared for all conditions, it is important to have a selection of items you can mix and match. Skiing while towing a sled generates heat and it is important to regulate your body temperature by selecting appropriate layers each day based on the conditions.

Some days you will need more insulation than others, but in general a windproof outer layer and complete face protection are always necessary. On a typical day, most people will wear a thin and thick pair of leggings and a thin base layer top and a mid-layer top, and their windproof jacket and windproof pants. Some guides suggest wearing your sledging harness underneath your windproof jacket as it can make it easier to get into pockets and to vent. During breaks you will put on the down parka. It is crucial to prevent sweating, as your sweat will freeze and render your high tech clothing useless. The layering system described below will keep you safe and comfortable in all conditions – it is also the same system utilized by our Antarctic field staff.

Face, hands, feet, and thighs are especially vulnerable to cold injury. Pay particular attention when gloves, mitts and face/head coverings.

This list is broken up into two sections with photos and descriptions of the more technical items up front and the complete clothing and equipment checklist with required quantities at the back. The suggested items are examples of products that meet the recommended criteria. Use them to compare specifications with your existing equipment or to find equivalent products from manufacturers available where you live. It is essential that you have suitable equipment for this challenging expedition. If in doubt, please contact us for further advice.

## **Base Layers**



## **Materials**

Merino Wool or Polyester, NO COTTON

#### **Examples**

Patagonia, Icebreaker, Brynje, Aclima

#### **Description**

Your first layer consists of a long-sleeved top and bottom. We recommend merino wool, merino-polyester mix, or wool net. If you cannot wear wool, polyester is an alternate option. Do not bring cotton as it traps moisture and can cause you to chill more rapidly. **Make sure these items are loose fitting and not too tight.** 

Bring undergarments, sports bras, and/or camisoles in a similar wicking material. It will not be practicable to change underwear as often as you would at home so it is a good idea to test fabric options before your expedition. Try different options for a few days and pick the most comfortable.

### **Optional Bottom: Silk Leggings or Shorts**

Silk leggings or shorts are an alternative option for your bottom base layer as they may reduce the likelihood of having chilblains and cold inury to the thighs.

> 4741 South Commerce Drive Murray, UT 84107 USA +1 801-266-4876 www.antarctic-logistics.com

## **Mid Layers**







Merino Wool or Fleece

### **Examples**

Patagonia R1-R2, Rab Power Stretch, Mountain Equipment Eclipse Pant

### **Description**

Your second layer consists of a long-sleeved heavyweight (expedition weight) base layer top and bottom or lightweight stretch fleece top and bottom. Power Stretch fleece tights are the perfect mid layer. They should not be so tight that they produce chafing or constriction, if they do, they are too small. Tops with hoods are great as they seal the neck to keep you warmer. Chest pockets are useful for keeping batteries warm and they don't interfere with the sledging harness.



Your next item is a midweight fleece jacket . It should be a full-zip jacket but a hood is not essential. Multiple pockets are useful. This can be worn instead of your mid layer hoodie on colder days and as a cosy dry layer inside the tent in the evening.

#### **Alternate Bottom: Hiking/Trekking Pants**

Also known as guide pants, a pair of lightweight pants with some stretch can be layered over your base layers when at Union Glacier Camp. But these are not essential for the Ski Last Degree expedition itself.

## **Windproof Layers**





#### **Materials**

Windproof Shell with optional Fur Ruff

#### **Examples**

Mountain Equipment Polar Expedition Jacket and Salopette, Bergans Antarctic Expedition Jacket and Antarctic Expedition Salopette

### **Description**

Next you will need a windproof jacket and pants. We recommend windproof softshells as they tend to be more breathable and more comfortable than waterproof hardshells. However, if you already own windproof hardshells (Gore-tex), or are bringing them for Vinson, these will also be suitable. Wind protection is the most important factor for this layer.

Your jacket should be long enough to keep your lower back warm, but it does not need to cover your thighs. It must have a generous hood but a fur ruff is optional. If you purchase a jacket without a ruff, you can buy and sew one to the inside edge of the hood or sew in a zipper attachment so the ruff can be easily removed. Wolverine is optimum but wolf, coyote, husky, or fox fur ruffs will also work. These are available from <a href="Apocalypse Design">Apocalypse Design</a>, <a href="Brenig">Brenig</a>, and <a href="Wintergreen">Wintergreen</a>
<a href="Wintergreen">Northern Wear</a>.

Your pants should have easy pull zippers for venting and full side zips. A drop seat pant design is vital for using the toilet if the pants have suspenders/braces or a salopette (bibs) design. The thighs are an area which is vulnerable to cold injury so avoid a tight fit and allow plenty of room for insulating layers underneath.

**Special Note:** Clothing that combines 'pile and pertex' insulation and windproofing in one garment is often marketed as being ideal for polar expeditions. However, the combination of the windproof outer layer and built-in insulation can be too hot at times and does not allow the user to regulate layers in varying conditions. It is therefore not recommended for Ski Last Degree expeditions.

## **Insulation Layers**

You will need several insulated options to provide protection against the coldest and windiest Antarctic conditions. These items should all be sized to fit over your windproof layers.

#### **Down Parka with Hood**



### **Examples**

Mountain Equipment Annapurna Jacket, Rab Neutrino Pro Jacket

#### **Description**

Your parka does not need to be the warmest model available but should be expedition quality, rated -15°F (-26°C) and have a generous hood. Check to make sure the zippers are easy to use as they can get very stiff in cold temperatures.

#### **Down Vest**



#### **Examples**

Patagonia Down Sweater Vest, Rab Microlight Down Vest

#### **Description**

Your vest should be sized to fit over your windproof jacket.

#### **Insulated Pants, Skirts, or Shorts**





### **Examples**

Klattermusen, Bergans, Salewa, Skhoop, Mountain Equipment Compressor 3/4 pant, Dynafit Primloft skirt

#### **Description**

Your choice of 3/4 length insulated pants, skirt or shorts are essential for both men and women to protect against "polar thigh" injury. Make sure that they come down to your knees. The advantage the down skirts have is that they are quick and easy to put on with only one zip.

# Head

The face is especially vulnerable to cold injury on a Ski Last Degree expedition due to frequent headwinds. Complete face protection is essential. This means skiing in goggles, not sunglasses. The objective is to have your face and head completely protected from the elements while also being able to breathe freely and allow the moisture from your breath to escape (so that goggles do not fog).

You will need several options to cover your head, neck, and face, including your nose, depending on the temperature, wind conditions, and sun exposure. It is important to try different combinations at home to ensure that there are no gaps - often a crescent shape between the edge of goggle and a face mask or balaclava is hard to cover. Bring a variety of facemasks and head gear.



Item 1: Hat or Beanie that Covers Ears

# **Materials:**

Wool or Fleece

## **Description:**

Your beanie can be worn on its own around camp or added on top of your Buff or balaclava for extra warmth while skiing.



Item 3: Balaclava

# **Materials:**

Power Stretch Fleece or Windstopper

### **Description:**

On colder days you will need to replace your Buff with a balaclava.



Item 2: Buff

## **Materials:**

Polyester Microfiber, Fleece, or Merino Wool

# **Description:**

The thinnest option is to wear a Buff as a balaclava with goggles on top. Combined with your jacket hood and a fur ruff, this may be enough coverage on some days.



Item 4: Face Mask

# Materials:

Neoprene or Windproof Fleece

# **Description:**

While most face masks have both nose and mouth openings, face masks that completely cover the nose are best. If conditions are bad enough to require wearing a facemask, you need to have the nose completely covered and protected. If you purchase a face mask with a nose opening, it is best to modify it at home and sew over the nose opening. The brand Airhole usa.airholefacemasks.com has some good offerings.

# **Eves**

Quality eyewear is essential to prevent snow blindness. Sunglasses or goggles must be worn at all times outside.

# **Sunglasses and Hard Case**



# **Materials**

Non-metal frames with 100% UV protection

# **Examples**

Julbo, Smith, Oakley

# **Description**

Your sunglasses should have dark colored lenses and full side coverage. Look for sunglasses with side-flaps (mountaineering or glacier glasses) or sport sunglasses with big lenses, wide sides, and a contoured shape that prevents light from entering at the sides. Non wraparound sunglasses provide little or no protection from peripherally focused UV radiation.

Avoid metal frames as they can freeze to your skin and bring a hard case to protect your sunglasses in your luggage.

# Goggles



### **Materials**

100% UV Protection

# **Examples**

Julbo, Oakley, Smith, Abom

# **Description**

Ouality goggles are vital while skiing to protect your eyes and face against wind and cold injury. You will need at least two pairs of goggles that you are comfortable wearing for long periods. Make sure each pair of goggles has a different lens tint or bring two identical goggle frames that use the same interchangeable lenses. Dark orange or rose colored lenses are recommended as they work in all light conditions. Goggles also need to have excellent venting as lens fogging is a common problem. Julbo makes several examples with lenses that pop away from the frame for venting. If you wear prescription glasses, check to make sure your goggles fit over them comfortably and won't fog up inside the goggles.

On at least one pair of goggles sew a piece of windproof fleece or neoprene underneath the nose to form a mask of material, covering your nose but not your mouth, that will provide additional protection in bad weather.

# Hands

You will need a selection of gloves and mitts to protect your hands while performing a range of tasks from setting up tents and taking photos which require dexterity, to skiing and standing still which require insulation.

We recommend you bring gloves with wrist loops attached as many people take a glove or mitten off and lose it in the strong wind. Look for gloves that come with wrist loops or bring some elastic shock cord and your guide will show you how to make your own.

### **Thin Liner Gloves**



# **Materials**

Polyester or Merino Wool

# **Examples**

Seirus, Outdoor Research, Icebreaker

# **Description**

Liner gloves can be layered under other gloves or mittens for additional warmth. They also protect you if you need to take off an outer glove or mitten in cold temperatures. Having two pairs allows you to switch out liners as they become damp. Note that merino gloves are less durable than polyester ones.

### Thinsulate Fleece Gloves



### **Materials**

Fleece and Thinsulate or Wool

# **Examples**

Thinsulate, Rossignol, Ortovox, Norrona

# **Description**

These are the main gloves that you will ski in. You have the option of wearing them with or without the liner gloves. We recommend gloves that use a mix of fleece and Thinsulate for insulation.



# **Alternative Option: Wool Mittens**

Your other option is to use wool mitts, usually called Dachstein Mitts.

# **Midweight Insulated Gloves**





# **Materials**

Waterproof Breathable or Leather with Built-in Insulation

# **Examples**

Black Diamond Pursuit Gloves, Hestra Fält Guide Gloves

# **Description**

It's useful to have a pair of midweight insulated alpine or work gloves that can be worn when setting up camp. Hestra Fält Guide Gloves have proven to be versatile and useful on ski expeditions. The removable liner means they can be dried as needed.

# Thick Insulated Mittens



# **Materials**

Synthetic or Down Insulation

# **Examples**

Mountain Equipment Redline Mitt, Mountain Equipment Citadel Mitt, Black Diamond Super Light Mitts, Marmot **Expedition Mitts** 

# **Description**

You will need one pair of mittens with a high level of insulation. Fully waterproof mountaineering mittens are not necessary as they tend to be stiffer and more bulky than what is needed for an Antarctic ski expedition. We recommend synthetic (Primaloft) insulated mittens.

# **Feet**

# **Thin Liner Socks**



# **Materials**

Wool, Polyester, or Silk-NO COTTON

# **Examples**

Smartwool, Bridgedale, Thorlo, Darn Tough, Injinji

# **Description**

Toe socks are a good option to reduce blisters on and in between toes.

# **Midweight Socks**



### **Materials**

Wool or Wool Blend Socks

# **Examples**

Smartwool, Bridgedale

# **Description**

These will be your primary ski socks.

# **Heavyweight Socks**



# **Materials**

Wool or Wool Blend Socks

# **Examples**

Smartwool, Bridgedale, Thorlo, Darn Tough

# **Description**

Warm socks are great to wear inside your tent.

# **Insulated Booties**

### **Materials**

Down or Synthetic Insulation



# **Examples**

The North Face Thermoball Bootie, Rab Hut Boots

# **Description**

Insulated down or synthetic booties can be used around camp, inside the tent, or as extra insulation in your sleeping bag. Choose ones with a non-slip sole for trips outside the tent.

# **Light Winter Boot or Heavy Hiking Boot**

### **Materials**

Waterproof Outer and Insulation

# **Examples**

The North Face, Scarpa, Salomon

# **Description**

On warmer days, you can often wear lighter weight winter boots or heavyweight hiking boots for many excursions around Union Glacier.

# **Optional Footwear: Trail Running Shoes**

# **Materials**

Down

# **Examples**

Feathered Friends Snow Goose Ex -40, Mountain Equipment Redline, Marmot CWM

# **Description**

There are two options for sleeping bags. The first option is to purchase a top quality down sleeping bag rated to -40°F (-40°C). The other option, is to use a combination of a down sleeping bag rated to 13°F to -22°F (-25°C to -30°C) and an overbag. The two bag option weighs a little more but provides comfort across a wider temperature range and is generally a less expensive option for people that already own a -30°C bag and do not wish to purchase a -40° bag. If you sleep cold, choose a bag rated on the lower end of the temperature range. We recommend down as it is much lighter and will pack smaller than synthetic bags. Get a full body-length mummy bag with a generous hood and full length zip. A little spare space inside is useful to store water bottles, batteries, and other items you don't want to freeze.

# **Insulated Overbag**

A synthetic or down insulated outer bag can be used on top of your sleeping bag on the coldest nights. An overbag is required if you bring a -13°F (-25°C) sleeping bag.

### **Examples**

Helsport Spitsbergen is both bags in one package, PHD Thinsulate Overbag, Halite Overbag

# Sleeping

# **Sleeping Bag**





# **Foam Mat**



# **Materials**

Closed Cell Foam

# **Examples**

Therm-a-Rest RidgeRest Solar or Classic

# **Description**

Full-length, closed cell foam mat with textured surface.

# **Inflatable Mattress**



### **Materials**

Nylon, Polyester, Down

# **Examples**

Exped DownMat, Therm-a-Rest NeoAir All Season SV

# **Description**

You'll need a full-length inflatable mattress. Look for the warmest model available and don't forget a repair kit!

# Pee Bottle(s)



# **Examples**

Nalgene 32 oz or 48 oz Wide Mouth Water Bottle(s)

# **Description**

You will need your own container to urinate in. We recommend a wide mouth water bottle that is marked for urine or 'pee' and can be used at night in your tent or while en-route on expedition.

We recomend practicing with your pee bottle at home so you can be comfortable using it while on expedition. Females may also find a pee funnel (Freshette, SheWee, Go-Girl) helpful.

When in Union Glacier, our staff will show you where to empty pee bottles behind the toilet facility. Once inside 89°S, use your pee bottle to collect urine while en-route and only empty it at communal pee holes at camp sites. At the South Pole and at ALE's South Pole Camp, all human waste MUST be collected and removed from the NGO camp.

# **Equipment Provided by ALE**

The following items are included in ALE's Ski Last Degree Experience. Your boot fitting will be in Punta Arenas and the rest of your equipment will be issued in Union Glacier.

### Ski Boots



# **Boot Option 1:**

Baffin 3-pin Guide Pro Boots with 3-pin Bindings

# **Description:**

This boot combines the comfort, insulation, and easy to break-in features of a non-technical mukluk boot with the skiing efficiency of a 75 mm 3-pin Nordic 'duckbill' ski binding. It has a durable molded sole unit that cannot de-laminate. The removable liners are soft, flexible, super warm, light, and heat moldable.



# **Boot Option 2:**

Baffin Impact Boots with Ice Trek Flexi Bindings

# **Description:**

If your boot size is smaller than a Men's US 8, you will need to use Baffin Impact Boots. This boot is compatible with Ice Trek Flexi Bindings and has removable liners.

**Skiing & Sledging** 

Fischer or Asnes cross-country skis, Black Diamond ski poles, pogies, Paris sleds, sledging harnesses, kit bags, and zipped covers for polar bedding.

**Camping** 

Tents, insulated tent floors, snow shovels, snow saw, tent brushes, and repair kit.

Meals

Food, packing bags, stuff sacks, stoves, stove boards, fuel, fuel bottles, plastic jerry cans, pans, kettle, kitchen cutlery, cooking equipment, lighters, and matches.

Communication

Iridium satellite phones, solar panel, and battery pack. Phones are for safety first but if you would like to make personal phone calls during the expedition, you will need to purchase a phone card at Union Glacier Camp and coordinate calls with your guide in advance. Calling cards require a specific SIM card which your guide can request from Union Glacier Comms before departing.

Medical

Comprehensive first aid kit.

**Navigation** 

GPS, compasses, chest compass harness, and batteries.

Toilet

Toilet paper and toilet bags.

# **SKI LAST DEGREE CHECKLIST**

You must bring ALL of the items on this list unless they are listed as optional. We will look for each item on this list at your Gear Check in Punta Arenas. These items may not be available for purchase in Punta Arenas and we will not let you board the aircraft to Antarctica without them.

X	#	Item				
Bas	Base Layers					
	3+ pairs	Underwear, sports bras, etc.				
	2	Light or midweight tops				
	2 pairs	Light or midweight bottoms				
Mic	l Layers					
	1	Lightweight fleece top or expedition-weight base layer top				
	1 pair	Lightweight fleece pants or expedition-weight base layer bottoms				
	1	Midweight fleece jacket				
	1 pair	Hiking/trekking pants				
Windproof Layers						
	1	Windproof shell jacket with optional fur ruff attached to the hood				
	1 pair	Windproof shell pants				
Ins	sulation La	yers				
	1	Down parka with hood				
	1	Down vest				
	1 pair	Down or synthetic insulated pants with full side-zips				
	Optional	Down skirt or shorts				
He	adwear					
	1	Wool or fleece hat that cover the ears				
	2	Buffs				
	1	Balaclava				
	1	Face mask				
	1	Wide brim or baseball hat for sunny weather				
Eye	ewear					
	1 pair	Sunglasses with side coverage				
	1	Sunglass case				
	2 pairs	Goggles				
	Optional	Spare contact lenses or prescription glasses, if required				
Glo	ves					
	2 pairs	Thin liner gloves				
	2 pairs	Thinsulate fleece gloves or wool mittens				
	1 pair	Midweight insulated gloves				
	1 pair	Thick insulated mittens				
	1 pair	Wool mittens				
	10	Chemical hand warmers				
	Optional	Elastic shock cord to make wrist loops for gloves				

X	#	Item		
Footwear				
	3 pairs	Thin liner socks		
	3 pairs	Midweight socks		
	2 pairs	Heavyweight socks		
	1 pair	Insulated booties with no-slip sole		
	1 pair	Lightweight winter boots or heavyweight hiking boots		
	Optional	Vapor barrier socks		
	Optional	Running shoes		
	Optional	Insoles/footbeds		
	Optional	Intuition Mukluk Liner		
Sleeping Equipment				
	1	Sleeping bag		
	1	Full-length, closed cell foam mat		
	1	Full-length inflatable mattress and repair kit		
	1	Eyeshade or eye mask for sleeping in 24-hour daylight		
	1 pair	Ear plugs		
Luç	ggage			
	1+	Extra large duffel bag(s)		
	1	Carry-on backpack 18" x 16" x 10" (46cm x 41cm x 26cm)		
	4-6	Stuff sacks of different colors to organize items in the sled and tent		
Oth	ner Equipn	nent		
	1	32 oz Thermos flask		
	2	32 oz Nalgene wide-mouth water bottles (for drinking)		
	2	32 oz Nalgene wide-mouth water bottles (marked for pee). Option to substitute for one 48 oz Nalgene wide-mouth water bottle.		
	1-2	Insulated covers for 32 oz Nalgene water bottles (Outdoor Research or Forty Below)		
	1	Plastic insulated mug with lid with wide bottom		
	1	Large lightweight non-breakable Lexan bowl or Fairshare Mug with lid		
	2	Lexan spoons		
	1	Lip balm with minimum SPF 50		
	2	1.75 fl oz packs of sunscreen with minimum SPF 50		
	1	Watch with an alarm, new batteries, and a long wrist strap		
	1	Sewing and repair kit with duct tape		
	1	Personal toilet bag with pack towel, Wet Wipes, toothbrush, toothpaste, anti-bacterial gel, Band-Aids, blister kit, foot powder, lotion, contact lens solution, feminine products, etc.		
	As needed	Personal medication. Bring enough for your expedition plus an additional 4 weeks' supply.		
Oth	ner Option	al Items		
	Optional	<b>For Antarctica:</b> USB or 120V A/C (North American Type A or B plugs) <b>For Chile:</b> Plug adapters and 220V transformers		
	Optional	US cash to purchase satellite phone cards or merchandise at Union Glacier Camp		
	Optional	GPS		
	Optional	Compass with global needle or weighted for the southern hemisphere		
	Optional	Camera, memory cards, accessories, and case		
	Optional	Phone, iPod, or digital music player with two sets of headphones		

X	#	Item
	Optional	Batteries, chargers, adapters, and solar panels to support all of the devices you bring
	Optional	Cotton t-shirts to wear at Union Glacier Camp
	Optional	Lightweight journal, sketchbook, pencils, pen, e-reader
	Optional	Christmas and birthday treats and gifts
	Optional	Personal treats like candy bars, photos, favorite poem
	Optional	Handkerchiefs/bandanas
	Optional	Pee funnel for women

# **Luggage Preparations**

# **Checked Luggage**

How many bags can I check?



You can check more than one bag, but for the safety of our staff, individual bags must not weight more than 55lb (25kg).

25kg

# Is there anything I shouldn't put in my checked luggage?



\*\*Passport, medications, spare lithium batteries, perishable food, clothing for Antarctic arrival

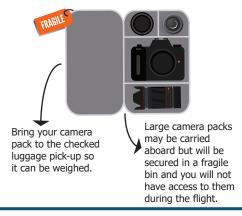
hours in Antarctica.

# When is my checked luggage collected?



# **Carry-on Luggage**

# What about my camera pack?



# What should I pack in my carry-on?



# What size should my carry-on be?



# What do I wear to the airport?



# Left Luggage





- 1. Fill out ALE's left luggage tag and attach it to any bags you leave behind.
- 2. Give the bottom portion of the tag to an ALE staff member as you board the bus for your flight.
- 3. In the event you stay in a different hotel upon your return, our staff will move your left luggage for you.



# **ANTARCTIC BIOSECURITY**Equipment, Boot and Clothing Cleaning



# Introduction

Visitors could accidentally bring alien seeds, pests or diseases (as a group, called non-native species) into Antarctica or transfer them between different Antarctic ecosystems. There is no conclusive evidence that tourists have introduced non-native species or transmitted diseases to Antarctic wildlife but there is indirect and circumstantial evidence that raises concern.

To minimize the chances of bringing non-native species into Antarctica, the International Association of Antarctica Tour Operators (IAATO) recommends decontamination practices similar to those used by quarantine authorities in many countries to prevent the introduction of alien pests and diseases.

At the end of this note is a Biosecurity Self-Audit Check List to help you check whether your clothing and equipment is thoroughly clean.

# 1. Before Leaving Home

- 1.1 Antarctica is an isolated region and is relatively free of introduced diseases. We can each help to keep it so by good preparation before we leave home.
- 1.2 All equipment, boots and clothing must be clean before you depart for Antarctica.
- 1.3 Take special care if you go trekking, hiking, backpacking or visit a farm before your Antarctic expedition. You must clean your equipment, boots and clothing thoroughly to remove all soil and organic material.
- 1.4 Equipment such as ice axes, camera tripods, sleds or vehicles can harbor soil or seeds and should also be cleaned.

# 2. In Punta Arenas

- 2.1 Your equipment, boots and clothing will be checked by our staff before your flight and, if necessary, you will be asked to clean them again before departure.
- 2.2 Industrial pressure washers and steam cleaners will be available for those needing to clean equipment and vehicles.
- 2.3 Certain food products, such as uncertified poultry, must not be taken to Antarctica to reduce the chances of introducing diseases.

# 3. Visits to Wildlife Areas in Antarctica

- 3.1 As far as possible, avoid walking in organic material such as guano, seal placenta or seal feces, in order to avoid moving this material between sites.
- 3.2 Before moving from one site to another, scrub the sole of your boot in the snow to remove as much material as possible. If there is a simple brush scrubber, use this to clean the welts in the sole. Check that other equipment, such as camera tripods and backpacks, are clean.
- 3.3 Do not feed wildlife.
- 3.4 Do not eat near bird or seal colonies and watch out for scavengers such as South Polar Skuas.
- 3.5 Protect camp food caches and garbage so that scavengers cannot get at them.

# BIOSECURITY SELF-AUDIT CHECKLIST

Complete this check list before you leave for Antarctica

Have you inspected all of your clothing for soil, seeds and insects? Especially cuffs, Velcro strips, pockets, seams, headwear and jacket hoods.
Have you emptied, vacuumed, and inspected the inside of any bags that you plan to take to Antarctica to check that you are not carrying any soil, seeds or insects?
Is all your equipment and luggage clean and free of soil and seeds? This includes walking sticks, ski poles, skis and camera tripods or other equipment.
Have you scrubbed your footwear to remove all soil and organic material, especially if you have been walking on farmland?
Do you understand that you need to repeat the Biosecurity Self-Audit Check List procedure before each new site you visit in Antarctica?
Share this information with others and if you see anything which causes you concern please speak to one of our team in Punta Arenas or Antarctica.

# **ANTARCTIC TREATY RECOMMENDATION XVIII-1**



# GUIDANCE FOR VISITORS TO THE ANTARCTIC

Activities in the Antarctic are governed by the Antarctic Treaty and associated agreements, referred to collectively as the Antarctic Treaty System. In 1959 the Treaty established Antarctica as a zone of peace and science.

In 1991 the Consultative Parties to the Antarctic Treaty adopted the Protocol on Environmental Protection to the Antarctic Treaty. The Protocol sets out environmental principles, procedures and obligations for the comprehensive protection of the Antarctic environment and its dependent and associated ecosystems. The Consultative Parties have agreed that, in accordance with their legal systems, the provisions of the Protocol should be applied as appropriate. Organizers and operators will continue adherence to existing regulations and provide leadership in new and improved efforts.

The Environmental Protocol applies to tourism and non-governmental activities, as well as governmental activities in the Antarctic Treaty area. It is intended to ensure that these activities do not have adverse impacts on the Antarctic environment, or on its scientific and aesthetic values.

This Guidance for Visitors to the Antarctic is intended to ensure that all visitors are aware of, and therefore able to comply with, the Treaty and the Protocol. Visitors are, of course, bound by their own national laws and regulations applicable to activities in the Antarctic.

# PROTECT ANTARCTIC WILDLIFE

Taking of, or harmful interference with Antarctic wildlife is prohibited except in accordance with a permit issued by a national authority.

- Do not use aircraft, vessels, small boats, or other means of transport in ways that disturb wildlife, either at sea or on
- Do not feed, touch, or handle birds or seals, or approach or photograph them in ways that cause them to alter their behavior. Special care is needed when animals are breeding or molting.
- Do not damage plants by walking, driving, or landing on extensive moss beds or lichen-covered scree slopes.
- Do not use guns or explosives. Keep noise to the minimum to avoid frightening wildlife.
- Do not bring non-native plants or animals into the antarctic, such as live poultry, pet dogs and cats, or house plants.

# RESPECT PROTECTED AREAS

A variety of areas in the Antarctic have been afforded special protection because of their particular ecological, scientific, historic, or other values. Entry into certain areas may be prohibited except in accordance with a permit issued by an appropriate national authority. Activities in and near designated Historic Sites and Monuments and certain other areas may be subject to special restrictions.

- Know the location of areas that have been granted special protection and any restrictions regarding entry and activities that can be carried out in and near them.
- Observe applicable restrictions.

Do not damage, remove, or destroy Historic Sites or Monuments or any artifacts associated with them.

# RESPECT SCIENTIFIC RESEARCH

Do not interfere with scientific research, facilities, or equipment.

- Obtain permission before visiting Antarctic science and support facilities, reconfirm arrangements 24-72 hours before arrival, and comply with the rules regarding such visits.
- Do not interfere with or remove scientific equipment or marker posts, and do not disturb experimental study sites, field camps, or supplies.

# BE SAFE

Be prepared for severe and changeable weather and ensure that your equipment and clothing meet Antarctic standards. Remember that the Antarctic environment is inhospitable, unpredictable, and potentially dangerous.

- Know your capabilities, the dangers posed by the Antarctic environment, and act accordingly. Plan activities with safety in mind at all times.
- Keep a safe distance from all wildlife, both on land and at sea.
- Take note of, and act on, the advice and instructions from your leaders; do not stray from your group.
- Do not walk onto glaciers or large snow fields without the proper equipment and experience; there is a real danger of falling into hidden crevasses.
- Do not expect a rescue service. Self-sufficiency is increased and risks reduced by sound planning, quality equipment, and trained personnel.
- Do not enter emergency refuges (except in emergencies). If you use equipment or food from a refuge, inform the nearest research station or national authority once the emergency is over.
- Respect any smoking restrictions, particularly around buildings, and take great care to safeguard against the danger of fire. This is a real hazard in the dry environment of Antarctica.

# KEEP ANTARCTICA PRISTINE

Antarctica remains relatively pristine, the largest wilderness area on earth. It has not yet been subjected to large scale human perturbations. Please keep it that way.

- Do not dispose of litter or garbage on land. Open burning is prohibited.
- Do not disturb or pollute lakes or streams. Any materials discarded at sea must be disposed of properly.
- Do not paint or engrave names or graffiti on rocks or buildings.
- Do not collect or take away biological or geological specimens or man-made artifacts as souvenirs, including rocks, bones, eggs, fossils, and parts or contents of buildings.
- Do not deface or vandalize buildings, whether occupied, abandoned, or unoccupied, or emergency refuges.

These internationally agreed guidelines apply to all visitors to Antarctica, including scientists and support staff working for governmental research programs, as well as participants on organized cruises and other expeditions, and individual visitors. The essential provisions are reflected in national laws, so violations may be subject to legal sanctions including fines or even imprisonment.

The leaders and staff on this expedition are familiar with these quidelines and will explain the reasons behind them. They will help you to adhere to them. But you, too, have a part to play. By encouraging your fellow visitors to follow your own environmentally-conscious behaviour, you will help us to ensure that Antarctica will remain pristine for the enjoyment of future generations. We appreciate your cooperation.

# NOTES

Thanks to all of the talented photographers who have provided images for this guide. The copyright is reserved in their name and the images cannot be used for any other purpose.

> Vaya Adventures **B & C Alexander** Visita Punta Arenas Wilson Cheung Ben Cockwell **Uwe Dedering** Tre-C Dumais Jessica Flandro Sue Flood GO Tierra del Fuego **Eddie Grey David Hamilton** Russ Hepburn InterPatagonia **Steve Jones** Mike King Eric Larsen Michael Martin Christopher Michel Chris Nance Hotel Nogueria **Ediciones Orplan** Lily Pinchoff Adam Rheborg Iain Rudkin Olivia Seifried Glenn Singleman **Rob Smith** Christian Iversen Styve **Dylan Taylor** Stephanie Taylor Rachel Tullet Adam Ungar Santiago Urrutia Leslie Wicks Belén Zanino



Antarctic Logistics & Expeditions is a Member of the International Association of Antarctic Tour Operators and fully subscribes to the principle of safe and environmentally responsible travel to the Antarctic.

www.iaato.org



4741 South Commerce Drive • Murray, UT 84107 USA

info@antarctic-logistics.com • www.antarctic-logistics.com