

Expeditioner Handbook Australia's Antarctic Program

Current as of June 2012

Contents

Introduction	4
Australia and Antarctica.....	4
Personal considerations before you leave.....	5
Preparing and packing to go South.....	7
Working at the AAD at Kingston	12
Shipping and air transport	13
Living and working in Antarctica.....	14
Land and sea travel in Antarctica.....	19
Liaison and support.....	19
Health in Antarctica	20
Protecting the environment	22
Antarctic service conditions.....	23
Returning to Australia (RTA)	24
Policies and legislative responsibilities	24
Australia and Antarctica — past and present.....	26
Finally	27
Glossary.....	29
Appendix 1 Legislative responsibilities	30
Appendix 2 The Antarctic Service Code of Personal Behaviour.....	32

Director's welcome

Congratulations! You have been selected to travel south as part of the Australian Antarctic Program (AAP), an opportunity to participate in a great experience. The success of every expedition depends on each one of you.

The remote location to which you are going is a hostile environment and will be both a workplace and a home for you. As in any small and isolated community, respect and tolerance for each other is particularly important.

We expect you to look after your environment and put workplace health and safety first. Report any incidents, improvements and hazards. Bring health and safety concerns and issues to the attention of someone who has the authority to deal with the problem. Remember your families, friends and fellow expeditioners are depending on you to return safe and well.

Please read all the content of this handbook and any material to which it refers so that you understand all your responsibilities. Work hard and participate in as many activities as you can, keep your sense of humour and stay safe!

Tony Fleming

Director, Australian Antarctic Division

Introduction

Visiting Antarctica or the subantarctic is a wonderful opportunity to experience living and working in a unique environment. You are one of the lucky few who visit this region and you will be the envy of many.

This *Expeditioner Handbook* provides some background to the Australian Antarctic Program and what you can expect when you go to Antarctica. In particular, it contains specific information that will be useful to you during your preparations prior to leaving home, as well as after you arrive at Kingston for your pre-departure training. It outlines some of the steps that you need to take before travelling and answers some of the most commonly asked questions about living and working in Antarctica. As the time for your departure draws closer, you will receive additional information specific to your voyage or flight and particular circumstances. In addition to reading this handbook, you are encouraged to regularly review the AAD website to ensure that you are current and up-to-date with the requirements of your expedition.

Australia and Antarctica

The Australian Antarctic Territory (AAT) covers nearly 5.9 million square kilometres, about 42% of the Antarctic continent. Australia's claim is based on discovery and a long historical association with this region of the continent. Australia has been active in Antarctic research and exploration for over a century and from the beginning, has made significant contributions to the world's understanding of Antarctica and the global system of which it is a part.

For background information on our Antarctic history, our participation in the Antarctic Treaty System including the Madrid Protocol, and our science program see page 27.

Our stations

Australia maintains four stations year-round: Casey, Davis and Mawson on the Antarctic continent, and Macquarie Island in the subantarctic region, as well as several summer-only facilities.

Casey

Casey is the closest of Australia's permanent Antarctic stations and is situated on Bailey Peninsula. The low, rocky Windmill Island group lies offshore. Depending on weather conditions, ships take between 7 and 10 days to reach Casey; the intercontinental aircraft takes about 4 1/2 hours.

The Windmill Islands are home to tens of thousands of birds, including Adelie penguins, giant petrels, skuas and snow petrels. Casey is also the site of large moss beds, one of the most significant vegetated areas on the continent. An Antarctic Meteorological Centre at Casey, run by the Australian Bureau of Meteorology, is a focus for weather and climate research in this vital part of the global weather system. About 150-160 expeditioners visit Casey during the summer while around 16-20 remain on station over winter.

Davis

Davis is located in the Vestfold Hills about 20 km from the edge of the continental ice sheet. Given good weather and ice conditions, ships take about 10 to 12 days to reach Davis from Hobart.

The Vestfold Hills is the largest coastal ice-free area in Antarctica. It covers about 400 square kilometres of low-lying hilly country, deeply indented by sea inlets and studded with lakes and tarns

of varying salinity. One area in the region that merits special protection is Marine Plain, designated as an Antarctic Specially Protected Area. Several of the early station buildings which predate the 1980s rebuilding program are of cultural heritage significance. Davis is home to about 120 expeditioners over summer and about 18 over winter.

Mawson

Mawson is the most westerly of the three continental stations and is situated on an isolated outcrop of rock on the coast in Mac.Robertson Land, at the edge of the Antarctic plateau. It is Australia's first continental station and the longest continuously operating station south of the Antarctic Circle. Depending on weather and sea-ice conditions, it takes about 10 to 12 days to reach Mawson by ship from Hobart.

Mawson is in a particularly favourable location with a deep harbour sheltered from ocean swells and excellent access to the hinterland and surrounding coastal waters. Mawson has a summer population of approximately 24, with about 16 remaining over winter.

Macquarie Island

Subantarctic Macquarie Island is located in the Southern Ocean, approximately half way between Australia and Antarctica. The Australian research station is situated at the northern end of the island. In good weather, it takes about three days to reach Macquarie Island from Hobart.

Macquarie Island, or "Macca" as it is generally referred to, is a Tasmanian State Reserve managed by the Tasmanian Parks and Wildlife Service. It was inscribed on the World Heritage List in 1997 as it is an island of unique natural diversity, a site of major geoconservation significance and one of the truly remarkable places on earth. The island is a breeding place for millions of seabirds and seals. Macquarie Island is home to about 40 expeditioners over summer with about 26 remaining over winter.

Personal considerations before you leave

It is important that you carefully consider all personal issues relevant to you before you leave.

- You should read and take into consideration the information contained in the *Antarctic Separation* guide, which is available at: antarctica.gov.au/expeditioner. A hard copy of this brochure will also be sent to the person whom you nominate as your primary contact. You may find it useful to review and discuss this together to ensure that both you and those you leave behind are fully prepared for your departure and the ensuing separation.
- Ensure that you have a current passport with an expiry date at least six months in excess of your intended stay and that your credit card is valid for the whole period that you are away.
- While you are in the Antarctic, it is likely that you will be away for significant events such as birthdays and anniversaries. Make sure that you note down the dates of these events so that you remember to acknowledge them while you're away. While some expeditioners may prefer to pre-purchase cards and gifts, many will access online shopping and delivery services to make purchases while they are away.

Financial

If you are an AAD employee, your salary is paid into a nominated Australian financial institution account (including banks and credit unions). Electronic banking is also available and you should check with your bank or institution for details of services offered.

- If there is a possibility that you may need to have funds drawn from bank accounts during your absence, we recommend that you seek advice from your financial institution about establishing a joint account or providing a third-party with access to your account(s).
- Ensure that you have access to electronic funds transfer through your financial institution.
- Carry a small amount of cash (e.g. \$50 - \$100) to purchase miscellaneous small items, for example postage, t-shirts etc.

Health and medical

You must advise the Polar Medical Unit immediately of any illness, injury or significant change in your medical condition, health or wellbeing prior to departure.

- You should be immunised against polio, diphtheria, tetanus, whooping cough (pertussis), hepatitis A & B and seasonal influenza prior to arrival in Hobart.
- International expeditioners from the northern hemisphere should obtain evidence of annual influenza vaccination.
- If you require further vaccination while you are attending pre-departure training at the AAD, you can arrange this through your station doctor. If you are still in your home location, you should continue to consult with your local GP.
- Additional vaccinations or public health measures may be offered to specific groups when health risk assessments of proposed activities and roles indicate that they are necessary.
- If you have concerns about any health-related issues prior to departure, contact the Polar Medicine Unit (PMU) doctors by phone 03 6232 3302 or Int +61 3 6232 3302 or for urgent matters, 24 hours a day 7 days a week via PMU Hotline 03 6232 3293.

Dental

You should have a thorough dental examination and any necessary treatment prior to departure.

- Wintering expeditioners must be certified as dentally fit according to AAD guidelines within three (3) months of departure.
- Individuals must meet costs of any dental treatment but sponsors or employing organisations usually reimburse costs associated with dental examination of their participants with the provision of a certificate and you should contact them to discuss this.

Private health insurance

You should carefully consider your individual situation before suspending private health or accident cover while in Antarctica. Do not assume that every injury or illness sustained in Antarctica will be covered by compensation on return to Australia.

Clarify worker's compensation issues with your employer.

NOTE: Medicare restricts cover exclusively to Australian residents under the *Health Insurance Act 1973*. However this may be extended to certain temporary residents, for example visitors holding

Temporary Entry Permits (educational) class 418. If you believe that you fall into this category, contact a Medicare office with your passport to arrange cover. Medical support on station and ships is provided by the AAD and Medicare is not applicable.

Private insurance

If you are not an AAD employee, we strongly advise you to obtain adequate private insurance to cover loss or damage to clothing, personal effects and valuables transported to Antarctica. As few insurance companies offer this service, you should start making enquiries as soon as possible.

Voting responsibilities

You may have the opportunity to cast a vote in national or state elections if you are an Australian, but please note that not all states have provision for Antarctic voters. You should contact your local electoral office to discuss your personal circumstances and the arrangements that are required for voting while you are in the Antarctic.

Will and Power of Attorney

You may wish to have a Will prepared before departure. If the need arises, this ensures that personal estates will be distributed in accordance with your wishes and not as the law demands where no Will exists.

- If you need advice on the preparation of your Will, we suggest that you consult a solicitor or public trust office.
- We suggest that you seek advice from a legal professional about appointing a Power of Attorney and that you do so within your own state or territory as conditions and restrictions can vary from state to state.

Preparing and packing to go South

Antarctic Applications Online (AAO)

We require a range of personal information from all expeditioners before they can 'head south' to the Antarctic or subantarctic.

- Please enter your details into 'Antarctic Applications Online' (AAO) and ensure that this is **completed** at least 6 weeks **before** your intended departure date. Log in from www.antarctica.gov.au/expeditioner.
- Keep your login details safe; they are for your personal use only, so please do NOT share them with anyone else.

What to take

Issued clothing and equipment

You will be issued with clothing and equipment specific to the duration of your time down south and your occupation, including trade-specific PPE. Most of this equipment remains the property of the AAD and must be returned at the completion of the expedition. You will be charged for any items which have not been returned.

- Ensure that you complete your clothing details within the AAO to allow the AAD to prepare your kit.
- The AAD Clothing Store is located at Head Office in Kingston. Arrange appointments by contacting the Clothing Store on (03) 6232 3263 or email kitting@aad.gov.au.
- Do not use AAD-issued clothing prior to departure due to quarantine requirements, unless it is required for training purposes. In this case, ensure that it is clean before you depart Australia.

For further information please consult AAD Supply Services Group staff at kitting@aad.gov.au or phone (03) 6232 3263.

Prescription safety and sun-glasses

If you are employed by the AAD for a minimum of one summer season and wear prescription glasses, you are entitled to one pair of prescription glacier sun-glasses and one pair of prescription safety glasses if required for your occupation. You will need to provide your own prescription. Contact whs@aad.gov.au if you require these.

Toiletries

Basic toiletries such as toothpaste and toothbrushes, talcum powder, soap, shampoo and conditioner, shaving cream, razor blades, boot polish and brushes and waterproofing compound are all available on station from the 'Woolies' store.

- If you prefer to have your own particular brands of toiletry items, you should purchase your own supplies. Try to purchase low phosphate, biodegradable products and do not take any aerosol products.
- Women should check with the Station Support Officer in the Operations Section for a voucher to purchase their own preferred sanitary items.

Personal items

Outdoor recreational clothing and equipment

Specialised recreational clothing is not provided. You should consider bringing some of your own such as a lightweight windproof jacket, daypack and walking boots and make sure it is all cleaned before packing.

Indoor clothing

Buildings in Antarctica are well heated and you only need to take casual clothing (such as jeans, shorts, T-shirts and lightweight tops) for wearing inside. Light indoor shoes such as runners or fleecy lined ('ugg') boots are recommended and you may like to pack some clothing for fancy dress and special occasions. Experience has shown that new expeditioners often take too much so take some time to think about what you really need when you're packing.

Towels

While bath towels are provided on the *Aurora Australis*, they are not provided on station. You are required to take your own towels. Bedding is provided.

Cleaning your gear

Caring for the environment begins before you leave. Cleaning your gear thoroughly to prevent accidental import of alien species and disease is essential.

- Thoroughly clean personal items of clothing and equipment before departure and ensure it is free from food scraps, soil, insects, seeds and similar.
- Pay particular attention to Velcro fastenings, boot linings, clothing seams and pockets which are likely to harbour seeds and other material of quarantine concern.
- Vacuum all pockets and warm wash and dry all clothing.
- Vacuum inside your boots and scrub them well on the outside, ensuring that they contain no traces of soil.
- Items that have been in contact with the ground, e.g. footwear, camera bags, rucksacks and tripods must be thoroughly washed with a bleach solution.

Computers — network and internet facilities

BEFORE departing you will need to complete an *IT Systems Access Change Request Form* before you can connect to the network. Details of this and other forms will be sent to you in your pre-departure pack. Personal computers may be connected to the network but details of the PC **MUST be logged with the Information Communications Technology (ICT) Section**. Personal computers will have **restricted** access to the internet and station services.

- All computers must have up-to-date antivirus software. The AAD can provide Sophos free of charge.
- All internet activity must go via the AAD's proxy server which controls the limited bandwidth available and also meets the requirements of the *Commonwealth Government Information and Communications Technology Security Manual*.
 - File sharing sites such as DropBox will be blocked. Contact ICT Section if you have any concerns regarding sites to which you need access.
 - Peer-to-peer file sharing applications or internet video and voice applications, including Skype, are **NOT** permitted.
- AAD's email can be collected via webmail or using Microsoft Outlook.
- Direct email connections to external mail servers (POP3, IMAP, SMTP) are not permitted, however webmail access is available.
- Activate new software that requires the internet for activation before you depart.
- No internet access is available while travelling to station, however some **restricted** email services may be provided (depending on transport).

You may choose to take your own computer with you. When deciding what sort of computer to take to Antarctica, you should consider your travel arrangements. There are weight restrictions on personal gear if you are going to a station on a fly-off voyage. If you need immediate access to your computer, it would be best to take a laptop. A desktop or tower may not arrive at the station until some time after your arrival.

- On arrival at Kingston, your computer's details will need to be logged before access to the network is granted—call ICT Section to arrange this.

- Access to the station LAN is available via an Ethernet (network) cable or wireless. Wireless facilities are only available in some areas on station.
- **Take all system, application and driver software, manuals and documentation with your equipment**—if the computer crashes, it is quite possible that nobody else will have the software to allow restoration. NOTE: The Communications person on station can only provide limited support.
- Ensure that you know the administrative passwords to your computer and any applications you have installed such as personal firewalls. NOTE: If your computer was provided by an external organisation such as UTAS, it may need some configuration changes; check with your Helpdesk to ensure you have full administrator access.

Hobby materials

You can involve yourself in a wide range of hobbies while you are away but you must pre-plan them and ensure that you take your own materials with you. You can take musical instruments, art materials, needlework etc. A limited quantity of timber for hobbies is allowable but it must be cleaned and dressed and will be subject to inspection by Quarantine Services. It is possible that it will undergo additional treatment before it is approved to go South.

Batteries

Cold temperatures tend to deplete battery power. Take a sufficient number of batteries for all electrical appliances including cameras and laptop computers. Rechargeable batteries will be of no use to you out in the field unless your project has a generator or solar panels.

Alcohol and drugs

We do not tolerate excessive consumption of alcohol to the detriment of the individual and community as a whole. Nor do we tolerate the use of recreational drugs.

The *AAD Drug and Alcohol Policy* (available at www.antarctica.gov.au/expeditioner) outlines the requirements for use, purchase and consumption of alcohol. We expect you to abide by these guidelines. A limited supply of alcohol is provided by the AAD for special occasions such as Christmas, however most expeditioners will purchase alcohol prior to departure. Guidelines for purchase are set out in the *AAD Drug and Alcohol Policy*. The AAD prescribed limits will be strictly enforced. If you are a short term expeditioner who cannot transport alcohol with you to a station, you may be able to purchase limited quantities on station.

When you arrive at Kingston for your pre-departure training, your station leader will provide further advice on limits and guidelines for the purchase and consignment of alcohol.

Prohibited items —what not to take

- Alien species. When we talk about aliens, we are not talking about ET or men from the moon; rather we are talking about plant and animal materials or soil not naturally occurring in Antarctica, all of which could hitch a ride on your clothing, personal gear and equipment. It is an offence to take these into the Antarctic.
- Polystyrene beads, chips or similar packaging as wildlife mistake these items for food. Wrap fragile items in clothing, foam or paper instead.
- No personal supplies of food unless commercially packaged and sealed.

- All excess packaging. Dispose of excess paper, plastic, cardboard and other materials that your goods may be packed in before you leave home.
- Illicit drugs.
- Firearms.
- PCBs (polychlorinated biphenyls) and pesticides. They are banned under the Madrid Protocol as they may persist in the Antarctic environment and damage local wildlife.

Cargo

Space on stations is very limited so do not pack more equipment than is necessary. Details about specific cargo allowances, packaging, labelling and consignment will be sent to you once your place on the expedition has been secured.

- If you are a wintering expeditioner, you are entitled to one cubic metre/250 kg of personal effects that will be shipped to station on designated resupply voyages. This cargo will not be available until the ship reaches your station, which may be some time after your own arrival.
- Deliver items intended for shipment or flights to the Supply Services Group by the advertised 'cargo required-by' dates.
- Cargo must also be electronically lodged in the electronic consignment system (eCon) which is available to any user—AAD staff, external organisations and expeditioners' families and friends. eCon is available from www.antarctica.gov.au/expeditioner.
- Cargo requiring special handling (e.g. fragile, overweight, dangerous goods, or those of critical nature etc.) must be brought to the attention of Supply Services Group staff.
- If you are an expeditioner travelling to Heard Island or Macquarie Island, you must prepare your cabin luggage prior to sailing so that it will be at least spray-proof if transferred ashore by small watercraft.
- All cargo must be absolutely clean and free of soil, insects, plant and animal matter.

For further information please consult AAD Supply Services Group staff at cargo@aad.gov.au or phone (03) 6232 3190/(03) 6232 3191.

Sales and tax free purchases

The Australian Customs Service requires that sales and tax free purchases using the Tourist Refund Scheme (TRS) fit within the sizing guidelines presently used by airlines for cabin baggage. All duty free and TRS purchases must be included within personal cabin baggage limits.

If you are travelling to Macquarie Island or Heard Island from an Australian port, TRS refunds or duty free purchases are not available.

For further information on the TRS please consult the Customs website at www.customs.gov.au.

Training

In addition to mandatory pre-departure briefings, you may be required to attend a range of other activities such as community and professional training courses or field training. You will be notified separately of any training requirements, briefings and dates if they apply to you.

- Attendance at ship and air pre-departure briefings is compulsory – if you don't attend, you don't go!

- Attendance at required training is compulsory unless recognition of prior learning is granted.
- You should provide the Expeditioner Training Unit with copies of all relevant certificates and licences on the first day you arrive at the AAD.
- Your participation in the Australian Antarctic Program is dependent on your successful completion of training.

NOTE: Some of these programs are often held several weeks prior to the scheduled departure and you may need to travel to Hobart to attend a specific training course. If there is a period between completion of training and deployment to Antarctica, you may have to return home in the interim. Non-AAD expeditioners will be required to attend training at their own cost (flights and accommodation).

Working at the AAD at Kingston

When you arrive at Kingston, you will need to arrange site access with the Property and Services Group.

If you are an expeditioner at Kingston and not engaged on training courses or preparatory work, you will be expected to attend work at the AAD and to assist with general tasks in support of expedition activities such as preparing equipment and supplies. You will be responsible to either your station leader or supervisor and if you are absent, you should report to either of them by 9.30 am on each day of absence.

Health issues while at Kingston

Antarctic medical practitioners in training at Kingston for their Antarctic deployment are available to provide some medical advice on incidental complaints to their expeditioners if circumstances permit. If you do not have access to your usual general practitioner, the PMU can refer you to local Hobart medical facilities if requested. It is critical that you do not delay advising PMU doctors of any change in your medical conditions, health or well-being prior to departure so that we can arrange appropriate care or medical support on expedition.

Travel costs

During the pre-departure training period, transport (or the reasonable cost of transport) will be provided for travel to and from accommodation to the AAD each week day. This is normally in the form of travel by bus. Please ensure that you are at the appointed pick-up areas on time.

Bike and shower facilities

There are excellent facilities at Kingston for those who wish to bring their bikes with them and ride to work. There is a purpose-built facility for the secure storage of bicycles as well as showers and change rooms.

Gym membership

Membership to the Kingston Sports Centre is available to expeditioners who are employed by the AAD for three months or longer.

Cafeteria

The AAD cafeteria serves light meals and snacks and is open from 8.30 am to 3.30 pm on weekdays only. It is also open to the general public.

Shipping and air transport

The AAD operates both shipping and air transport to Antarctica. Seasonal shipping and air schedules are published on the home page of the AAD website at www.antarctica.gov.au. Be aware that schedules and timing of flights and voyages do change so you must allow for flexibility in transport arrangements.

The AAD's flagship is the icebreaker *Aurora Australis* but other ships may be used from time to time. Light aircraft and helicopters fly between stations at certain times of the year.

- Check out the transport schedules from the home page on the AAD website.
- You must carry a current passport with an expiry date at least six months in excess of your intended stay.
- If you are a non-Australian expeditioner, you must have appropriate visas.
- Baggage restrictions apply on ships and planes. Excess cargo will not be accepted.
- You will be notified of cargo arrangements, including quantities, "required by" dates and labelling protocols, prior to departure.
- Strict drug and alcohol policies apply to all ship and aircraft travel. No alcohol for personal consumption may be taken on board. Alcohol may be provided by voyage management on special occasions nominated by the AAD Director.
- As part of their border protection mandate, the Australian Customs Service and the Australian Quarantine Inspection Service regularly inspect cargo and baggage both coming into and out of Australia and may use specially trained detector dogs and x-ray equipment.
- AAD security staff may also conduct inspections. These checks may be conducted on accompanied baggage, in cabins, on carry-on-board (COB) material, internal mail, cargo or unaccompanied baggage.
- Do not carry any fresh fruit or vegetables.
- Ensure that you have relevant permits to import any scientific specimens into Australia.

NOTE: All who perform safety-sensitive activities associated with an aerodrome will be subject to drug and alcohol testing. No-one can travel in any AAD aircraft if they have consumed any alcohol or illicit drugs within the previous 12 hours.

<p>General enquiries: <i>Operations</i> e-mail: operationsenquiries @aad.gov.au</p> <p>AAD Transport Information Service (free call): 1800 030 744 or international +61 3 6232 3269</p>	<p>Warehousing and distribution enquiries: e-mail: warehouse@aad.gov.au Phone: (03) 6232 3263 Web: www.antarctica.gov.au/cargo</p> <p>Cargo enquiries e-mail: cargo@aad.gov.au Phone: (03) 6232 3193</p>
---	---

Shipboard life

Sheets, doonas, towels and soap are supplied on the *Aurora Australis*. Shipboard amenities include clothes washing facilities, communal computers with e-mail facilities, videos, books, magazines and board games and a slide and/or power point projector. The *Aurora Australis* also has a small gymnasium and sauna. Cash is needed for purchases from the ship's shop.

Other facilities vary from ship to ship. Smoking is permitted only in designated deck areas and vegetarian meals are available. Please ensure that you fill in your dietary requirements on the AAO which is available from www.antarctica.gov.au/expeditioner.

Living and working in Antarctica

When you arrive on station, you will receive an induction. It is the responsibility of the outgoing expeditioners to maintain the work of the station during changeovers. All on station may be required to assist with unloading and back-loading operations.

Voluntary roles

Everybody going to Antarctica has either a scientific or operational job and all have an important role to play in the successful running of the station or field camp. In addition to recruited positions, there are also voluntary jobs which are secondary to your main role but contribute to community well-being. These positions include station waste management officers, environment officers, librarians, hydroponics officers, medical support team, search and rescue and fire team members. For some of these positions, specialised training is provided prior to departure from Australia.

Community duties

You will be required to perform common duties to assist in the running of the station community. This includes chef's assistant (slushy), day care, station duties, water production and garbage collection/disposal.

A 'kitchen slushy' is a general kitchen hand and duties include assisting in the preparation of meals, cleaning up the kitchen and mess and other duties as requested by the chef. Day care involves the daily cleaning of the communal areas such as the bar, lounge areas, public toilets and the removal of kitchen rubbish.

Station duties may include any kind of periodic cleaning, maintenance or tidying up. It's an opportunity for you to pitch in and help keep the station in clean, safe and comfortable repair. These duties are normally done on Saturday afternoons, but this may be varied by agreement. Other general station duties include bulk re-fuelling, monitoring radio schedules, transferring stores and clearing snow from exits.

Station facilities and amenities

The layouts of the permanent stations vary but each station has scientific laboratories, power generators, workshops, a small medical facility, stores, communications facilities and living quarters including kitchen, mess, recreation rooms, library and expeditioner accommodation rooms. All station buildings are connected to site services providing hot and cold water, electricity and sewage.

Living accommodation

Expeditioners generally live in modern air-conditioned single-room 'dongas' (Antarctic slang for bedrooms). When the number of expeditioners at Casey and Davis is high, expeditioners may need to share rooms.

Every attempt will be made to accommodate those expeditioners whose jobs require shift work, or who have mandated periods of rest required by law (such as pilots), to be placed in rooms where

they can expect minimal interruptions during the day. Please be mindful of noise when moving around these areas.

Medical facilities

All stations are equipped with small, comprehensive medical facilities which are necessarily limited in capability. Medical facilities include a consulting and examination room, a small operating theatre and dental room, a stocked pharmacy and a small diagnostic laboratory. The station doctor is assisted in emergencies by expeditioners, who have trained in Hobart to act as lay surgical assistants. AAD Polar Medicine staff and a network of medical specialists around Australia are available to provide tele-medical advice and support if needed.

Laundry facilities

Each station is also equipped with a laundry fitted out with washing machines and dryers, a drying room and ironing facilities. Environmentally sensitive washing detergents are provided.

Clothing store

A clothing store at each station has a limited range of items to replace lost or damaged articles. The clothing is expensive and it is your primary defence against the cold, so take care of it. Wear trade-specific clothing for rough work to protect more fragile garments. Sewing machines, zip-fasteners etc. are available at the stations and everyone is expected to carry out elementary repairs to their clothing. Clothing represents one of the greatest items of expenditure for the AAD.

Laboratories and observatories

Each station has scientific observatories and/or laboratories. Working space inside these buildings is allocated by the AAD Laboratory Manager in consultation with appropriate program managers. This allocation MUST be granted BEFORE travelling to Antarctica and preferably at the project planning stage. Do not simply set up equipment inside a building without obtaining specific permission beforehand. When in Antarctica, any request to change the initial allocation must be submitted through the AAD Laboratory Manager and only acted on after approval has been given.

There are scientific observatories at each station which contain automatic monitoring equipment for the Space and Atmospheric Sciences (SAS) program. Some equipment is potentially hazardous (i.e. high powered lasers, or extremely high voltages) so take seriously any safety notices present.

Smokers hut

Smoking is prohibited in all Commonwealth buildings, vehicles, plant and equipment. An outside van is designated as the 'smokers' hut' at each station and its cleanliness is the responsibility of those who use it. Smoking in cold porches is not allowed as the smoke is drawn back into the building's air conditioning system. NOTE: There is no smoking inside field huts and tents.

Recreational facilities

Each station has a library as well as DVD players and a range of movies and general DVDs which are updated each year by the AAD. Stations have a small spa and sauna, a gymnasium as well as pool tables, table tennis, volley ball, board games, darts and some communal band and stage equipment (drum kit, bass, electric guitars and keyboard etc.).

Some outdoor sports equipment such as cross country skis and boots is also available. Station equipment is clearly marked and you will be expected to take care of it as if it were your own.

Station operations

Maintenance of station facilities

A multi-disciplinary team of trades people maintains the facilities on station and undertakes scheduled new construction work. No alterations or additions, including fastening nails to walls, are to be made to buildings or equipment without prior AAD approval and then only by qualified trade personnel.

Food and hydroponics

Food at the stations is prepared by a qualified chef. If required, we cater for special dietary requirements (e.g. vegetarian, vegan, gluten intolerant etc.). Eggs and fresh vegetables are available for the first few months after resupply. Limited hydroponics produce is also grown on each station and training for those maintaining these facilities is provided. We also supply soft drinks (post-mix), sweets, chocolates and nuts.

Water

Water is obtained at the continental stations either directly from under-snow melt lakes, or by melting ice from the plateau or snow drifts. Although the supply is limited, sufficient water is available for washing, cooking and laundering. However, water is precious and conservation is an essential feature of daily life. On Macquarie Island, water is piped from a small dam near the station. The supply is plentiful although in winter the pipes feeding the station do freeze for short periods, leading to water restrictions

Waste management

Waste management is a major issue on station and indoor and outdoor station cleanups are conducted regularly. Field trips generate human wastes as well as general rubbish, all of which must be sorted and returned to station. You will be expected to sort your waste properly into various recyclable and non-recyclable categories. Rubbish collection around the station (known as the 'gash run') is done on a weekly basis and you will probably be rostered to this duty at some stage during your stay. A limited amount of waste, such as putrescible food, medical and solid human waste from the field, is incinerated on station. You will be informed of these protocols during your pre-departure training and again when you get to station.

Station living

In Antarctica you will be a member of a new team—an Australian multi-disciplinary team undertaking a complex and very important program of work in the national and international interest. Each of you will bring particular skills and knowledge that no one else in the team may possess and you will all be dependent upon each other's skills and experience.

Couples on station

Relationships existing prior to, or commencing after, the start of an expedition, are not an uncommon feature of life in an Antarctic community. Couples should be sensitive to the potential impact of indiscrete behaviour on others who are separated from their loved ones.

Communication

The opportunity for you to maintain contact with family and friends is one of the most important aids to maintaining morale. The same communications services allow scientists to remain in contact with their research institutions to transfer data or to engage in peer discussions or review.

Communication options will depend on your location, but they may include:

- Australia Post mail during the summer shipping season
- Email
- Telephone.

Each station has two public computers, photocopiers, facsimiles and telephones. For most people, the usual form of communication is via e-mail. An AAD-owned satellite network, known as ANARESAT, provides telephone access between the stations and the rest of the world. Telephones are located at the stations in all workplaces and most bedrooms. Mobile phones do not work at the stations.

Prior to arrival at station, you will be issued with a six digit personal identification number (PIN) that must be entered when making a call into the public telephone network. The cost of this telephone call is debited against the PIN. Costs are debited each month against your pay if you are an AAD or Bureau of Meteorology employee. Other expeditioners will be required to provide credit card details prior to departure to cover call costs.

Call costs from stations

Telephone calls from stations to:

- Australian fixed lines are charged at a rate of 28 cents per minute.
- There is limited access to 13, 1300 and 1800 numbers and calls are charged at 28 cents per minute.
- Australian mobiles and most international destinations are charged at a rate of 38 cents per minute.
- Satellite terminals, e.g. Iridium or Inmarsat, are charged at a higher rate.
Telecommunication personnel will advise the charge to a particular terminal on request.
NOTE: This includes all calls while transiting to station.

A separate handout called *Communicating with Antarctica* will be sent to your family which will provide more information on e-mail, Australia Post and telephone protocols. You will receive a hard copy of this handout at your induction. It is also available on the website at www.antarctica.gov.au/expeditioner.

Fire

Fire is a serious hazard in Antarctica and fire-fighting is greatly complicated by the environment. Limited supplies of water, strong winds and an exceptionally dry climate compound the serious fire risk, as does the presence of many flammable liquids and gasses and the fact that some station buildings are not occupied 24 hours a day. Please remain highly fire conscious and abide by all the rules designed for fire protection.

Recreational activities

Outdoor recreational activities

We recognise that participation in outdoor recreational activities promotes health, fitness and a positive outlook necessary for a productive and balanced lifestyle during your Antarctic service and we encourage responsible participation.

You should not expect to engage in the full range of outdoor recreational opportunities normally available in Australia. This applies in particular to adventure or 'extreme' activities where the consequences of mishap are potentially serious. Prior to departure from Australia, all expeditioners should familiarise themselves with the *Outdoor Recreation Policy* on the AAD website at www.antarctica.gov.au/expeditioner.

Hobbies on station

Small tools (powered and unpowered) are available for general use in pursuit of a hobby, however large workshop machine tools such as lathes, welding machines and thicknessers are limited to use by trades people only. The use of small tools is subject to permission from the workshop supervisors who will need to ensure that your safety is not compromised and that the maintenance of the equipment is monitored.

We have embarked on a program of establishing hobby huts on station. Where a station has an established hobby hut, only the tools residing in those huts may be used for hobbies and they must both be used in, and remain in, the hobby hut. No additional tools from the trades workshops will be provided nor are they allowed to be used. Be aware that wood taken south in personal effects and craftwork returned to Australia will be subject to quarantine inspection and treatment if necessary. This is done by the AAD after cargo is consigned.

Amateur radio

If you wish to operate amateur radio in Antarctica, you will need to obtain permission in writing from the AAD Telecommunications Manager. You cannot operate without an Amateur Radio Licence, which must be obtained before leaving Australia. You will need to supply all your own equipment and spares. No station radio equipment is available for amateur radio communication purposes.

Photography

You will want to take advantage of the spectacular photographic opportunities presented by Antarctica. When photographing birds and animals, be sure to maintain the appropriate wildlife approach distances as outlined in the *Environmental Code for Participants in the Australian Antarctic Program*. This handout will be distributed to you at your pre-departure training at the AAD and it is also available from www.antarctica.gov.au/expeditioner.

The AAD Multimedia Unit (MMU) has produced a helpful handout called *Photography and Filming in Antarctica*, available from www.antarctica.gov.au/expeditioner.

ImageAntarctica (Online Photo Library)

The AAD's digital photo library, ImageAntarctica, contains over 200,000 images covering all phases of Antarctic expedition history from 1911 to the current day. Accessible through the AAD intranet, the images are available for both viewing and/or ordering via the intranet.

We would like ImageAntarctica to be as complete as possible with no major events, field trips or discoveries left unrecorded. Therefore we encourage you to submit your images and video footage to the collection. Images can be submitted directly through Image Antarctica. Material supplied is only used for AAD non-commercial, educational, promotional and media purposes with full copyright © and credit remaining with you as the photographer.

The Multimedia Unit (MMU) runs photo/video information sessions as part of the pre-departure activities. These sessions will provide you with tips, tricks and everything else you need to know.

We are happy to provide further information, advice and tips and encourage you visit the MMU before you leave. You can contact us on (03) 6232 3313 or email multimedia@aad.gov.au.

Land and sea travel in Antarctica

Antarctic travel is hazardous with few roads or signposts and many dangers such as crevasses, tide cracks, ice cliffs and blizzards. With a little co-operation and common sense, you will get to spend plenty of time out in the field and do so safely. In order to undertake field trips, you will have to fulfil the requirements of the field training system which may involve additional training.

Plant and vehicle use

Hagglunds, quads, skidoos and utes are used on the continental stations. All vehicles should be used in accordance with requirements and always ridden with caution. Speed limits and strict travel protocols apply. All vehicles and equipment are station resources managed by the station leader with day-to-day management delegated to the Senior Mechanical Supervisor. Although some vehicles are available at times for recreational use, work commitments will always take precedence. All drivers will need to hold a current Australian manual driver's licence and demonstrate the need to use a vehicle. They will also need to satisfy the licensing/training/experience requirements specified within the Antarctic Vehicle Matrix pertaining to each type of vehicle. All drivers are to be signed off as competent by the Station Mechanical Supervisor on station prior to the use of any vehicle.

Travel on Macquarie Island is by foot, skis or small boat. A tractor and four-wheel Polaris vehicle are available for use within the station precinct for work purposes only.

Small boats

Each station has a number of inflatable rubber boats (IRBs) and rigid inflatable boats (RIBs) with outboard motors. Only qualified expeditioners who hold a current Restricted Coxswain's certificate or greater, as well as having completed AAD-approved watercraft courses, are permitted to operate the boats.

Liaison and support

The Expeditioner Liaison and Training Unit is the main point of contact at the AAD for family members and friends of expeditioners, providing them with assistance and appropriate resources in preparation for Antarctic separation, including communication and supportive contact.

The Expeditioner Liaison and Training Coordinator (ELTC) maintains a contact list of one primary contact and up to two other secondary contacts for each expeditioner. The most up-to-date

transport schedules, mail and cargo closing dates are all available on the website. If your primary contact has no access to the internet, information can be sent by mail. In the event of an emergency in Antarctica, your primary contact(s) will be notified and kept informed.

For more information contact ELTC on free call 1800 030 680 or international +61 3 6232 3283.

Employee Assistance Program (EAP)

Independent counselling and support through the Employee Assistance Program (EAP) is available to all expeditioners and their immediate families during the period of their deployment and for up to six months after return to Australia. Further information on this service is available in the EAP brochure, available on the AAD website at www.antarctica.gov.au/expeditioner.

For families and friends

The Antarctic Family & Friends Association is a valuable support and social group for families and friends of expeditioners. There are branches in all states and members meet regularly. Further information, including details on applying for membership, is available from www.antarctica.gov.au/expeditioner.

This Week at each station is a weekly news item which provides a diverse perspective on station life, trade activities or scientific work being undertaken. It is also available as news feeds (RSS) at: www.antarctica.gov.au/rss/news and on our 'Twitter' at <http://twitter.com/AusAntarctic>.

The ANARE Club

The ANARE Club provides a means for past expeditioners to keep in touch with each other. Membership forms are available at the AAD or by writing to The Secretary, ANARE Club, PO Box 2534W, Melbourne Vic, 3001. The website is: www.anareclub.org.au.

Health in Antarctica

Medical care on station and on the ship is generally provided by one AMP (Antarctic Medical Practitioner), known generally as the station or ship's doctor. Medical facilities and medical care are necessarily limited and evacuations are not first line management. Winter evacuation is generally not possible. Doctors receive basic training in emergency dental care but there are no dentists available on ships or stations.

If you are a wintering expeditioner, you will be required to see the station doctor once a month for a simple health check and certain basic measurements and wellbeing. There is also a mid-winter medical check-up to ensure continued good health. You will have blood samples taken at the end of summer for repeat blood donor screening tests and your general fitness for the ensuing winter will be confirmed by the station doctor. Other tests may be included depending on clinical and occupational need (e.g. Vitamin D).

As an expeditioner, you will form part of the Antarctic emergency blood donor pool and require repeat blood sampling to ensure a viable, screened, emergency blood supply for our isolated Antarctic communities. Certain at-risk behaviours, including recent tattooing and body piercing, can impact eligibility to donate blood in an emergency.

Medical research may be carried out by doctors on station. If you agree to participate, you may be asked to give blood, saliva or urine samples, participate in special diets, questionnaires or interviews, or be subject to other measurements. All human research is monitored and approved by the AAP Human Research Ethics Committee.

The station doctor also arranges ongoing training exercises for those lay surgeon's assistants who have received training in anaesthetic and operating theatre assistance prior to departure.

Your health responsibilities

Carefully consider the health risks of activities undertaken during planning, preparation and conduct of all activities. Contact PMU for advice.

Pregnancy is difficult to manage in the austere Antarctic medical environment and requires transfer to appropriate medical and obstetric care at the earliest opportunity. If you have concerns about contraception and pregnancy matters, it is important that you discuss them with your local medical advisers, Antarctic medical practitioner or the PMU.

An additional medical examination will be required for those travelling or working at altitudes i.e. deep field sites above altitudes of 3000 m. Please consult PMU for advice on AAD-recommended preventative measures, education and potential treatment modalities.

Medical records

Information on all medical consultations that occur on expeditions (including voyages) is stored in a computerised database and access to this is restricted to medically qualified investigators and research associates responsible to them. Research based on information in the above database will not be published in any form that permits identification of individual subjects. This research has been approved by the AAP Human Research Ethics Committee, complies with the *National Health and Medical Research Council Guidelines for Epidemiological Research* and has been declared to the Privacy Commissioner.

Certain occupational health measures conducted in pre-employment screening and as part of ongoing occupational medicine surveillance (e.g. the results of hearing tests and specific occupational exposure measures) may be accessed by the AAD Work Health and Safety Manager or delegate. Drug and alcohol screening results for aviation safety sensitive workers will be communicated as required by the current AAD Drug and Alcohol Management Plan.

Sun exposure

There is significant potential for sunburn and snow blindness due to excess sun exposure. Some workplaces have additional sources of occupational UV exposure (e.g. some scientific equipment and welding). Be vigilant and apply appropriate personal protective measures.

On expedition and especially over winter, the lack of UV radiation exposure can lead to vitamin D deficiency in some people. If you are at increased risk of Vitamin D insufficiency, you should supplement with Vitamin D which is available on station in monthly doses.

Body cycles

The 24 hour summer daylight and 24 hour winter darkness may disrupt body cycles and normal sleep routines. This can be exacerbated by heavy workloads and impact fatigue management.

Discuss your optimal sleep hygiene with your supervisors and doctors to ensure sufficient rest and fatigue management.

Well-being

Just like your physical health, it is important that you look after your psychological health and general well-being while in the Antarctica. Living and working in isolated and remote environments, being separated from family and friends and not having the same level of access to normal support networks can cause some additional demands for expeditioners. In addition to being able to discuss these issues with the EAP, you can access a range of 'self care' resources at www.antarctica.gov.au/expeditioner.

Wildlife and human health

Wildlife carries a number of parasites and infectious diseases which can infect humans including ticks, fleas, mites, lice, worms, viruses and bacteria. Be aware of the occurrence of diseases and parasites in the fauna, undertake the required risk assessments, perform routine hygiene practices and take personal protective measures when working with fauna. Wildlife disease in Antarctic animals is a very unusual occurrence. It is important for human health that you report any outbreak, or suspicion of outbreak, of wildlife disease as soon as you observe it.

Protecting the environment

Environmental protection is everyone's responsibility and is prescribed under the Antarctic Treaty and Australian law. Macquarie Island (and surrounding waters to three nautical miles) is a World Heritage Area and a Tasmanian Nature Reserve administered by the Tasmanian Government. The Parks and Wildlife rangers on the island will advise expeditioners of special management areas; permits to conduct scientific or other activities may be issued by the Tasmanian Government.

Heard Island and McDonald Islands (HIMI) are also World Heritage listed and comprise an Australian territory administered by the AAD. You must have a permit to enter.

All AAD activities are governed by the *AAD Environmental Policy* and the *Environmental Code for Participants in the Australian Antarctic Program*. The station leader is responsible for environmental management on stations, assisted by the station environment officer and the station waste management officer, who all liaise with the Environmental Manager at Head Office at Kingston.

Authorisations and permits

Some activities are regulated to protect the environment and require authorisations and/or permits which must be obtained in advance of undertaking the activity and can only be given under certain circumstances¹. The need for an authorisation and/or permit will be determined at the project proposal stage for both scientific and nonscientific activities. If your project has been issued with an authorisation and/or permit, please ensure that you have copies with you and that you understand their provisions.

¹ Australia implements our environmental responsibilities under the Madrid Protocol through the *Antarctic Treaty (Environment Protection) Act 1980*. Before any activity can commence in the Antarctic, an environmental impact assessment must be undertaken. Once the impacts are assessed, the activity may be authorised to go ahead under that Act. Further, some specific activities are not allowed unless certain requirements are met and a permit is issued. The permit must be obtained in advance of undertaking the activity and can only be given under certain circumstances.

Your responsibilities

Environmental protection begins before you leave home. Whether based on continental Antarctica, in the subantarctic at Macquarie or Heard Island, or sailing in the Southern Ocean, you will be working and living in a place akin to a national park where every plant, animal and feature is protected by law.

Familiarise yourself with the *Environmental Code for Participants in the Australian Antarctic Program* when you receive it. The following list highlights some of the points.

- Ensure you have appropriate environmental authorisations and/or permits to undertake activities and that you understand all conditions of your authorisation and/or permit.
- Souveniring of any plant or animal material, rock or artefacts from Antarctica or the subantarctic requires a permit.
- Familiarise yourself with animal approach guidelines.
- Familiarise yourself with any protected areas in the vicinity of your destination. You cannot enter these without a permit.
- Raise any environmental issue with your station leader or voyage leader, no matter how trivial it might seem. Take an active part in your station's environment committee meetings.

Heritage and Antarctic materials

The AAD is legally obliged to identify, assess, monitor and protect all Antarctic heritage which can include buildings, objects and artefacts. Always seek advice before disturbing or removing any potentially historical artefact or any biological or geological specimen i.e. do not collect or remove material either as 'rubbish' or to preserve it.

Antarctic service conditions

Information on specific conditions, salaries and entitlements should be directed to the relevant area in your employing organization. If you are an Australian Public Service (APS) employee, you must uphold the APS Values and Code of Conduct and ALL expeditioners must comply with the provisions of the *Antarctic Service Code of Personal Behaviour* (see Appendix 2). You will be required to sign a document accepting these provisions prior to your departure.

- The AAD reserves the right to withdraw an expeditioner from participation at any time if an expeditioner's unsuitability becomes evident or where an expedition is changed.
- On station, hours of duty are normally a minimum of eight hours per day from Monday to Friday and four hours on Saturday morning in your primary role.
- Saturday afternoon requires all to take on community duties. Additional tasks may need to be performed at any hour of the day or night.
- You will be required to participate in extra duties as required by the station leader.
- Due to local operating requirements, it is not always possible to observe public holidays in Antarctica.
- If you are on a marine science voyage, you may be rostered for extended hours of duty on a shift basis.

Discipline and responsibility

After leaving Australia, you will be responsible to the voyage leader (VL) on board the ship, to the flight representative (FR) on the plane, to the station leader (SL) at stations, or to the field leader (FL) at field camps.

- Questions of a technical or scientific nature concerning projects are referred to the supervising authorities in Australia through the station leader or field leader.
- Other key contact people include the Operations Manager, the Environmental Manager, the Work Health and Safety Manager and the Human Resources Manager.
- In all matters of program administration, allocation of duties, control of equipment at stations and general personal conduct, you will be responsible to, and will be required to comply with, all lawful and reasonable directions from the relevant supervisor.
- Station leaders, voyage leaders and some others are empowered to enforce the law including the powers to stop, search and arrest in certain circumstances.²
- At Macquarie Island, the station leader is a sworn Justice of the Peace for the State of Tasmania. The ranger-in-charge is directly responsible for day-to-day management of the reserve. The station leader and the ranger-in-charge work co-operatively to manage human activities in the reserve.

Performance appraisal

If you are on station (including field bases), or participating in marine science voyages for a period of six weeks or more, you will be subject to regular performance appraisals in line with the Expeditioner Performance Appraisal Scheme (EPAS).

- The EPAS uses the *Antarctic Service Code of Personal Behaviour* as the basis for assessment.
- If you apply for participation in future expeditions, your performance reports will be used in selection processes.
- Expeditioner performance reports are retained at Head Office for seven years.

Returning to Australia (RTA)

- If you are a wintering expeditioner, you will be required to attend a psychological debrief at or near the end of your period of deployment. This independent and confidential session is conducted by registered psychologists.
- You will need to present your computer to the IT Helpdesk to have required configuration changes made **before** connecting to the AAD Kingston LAN on your return.
- Before you leave the AAD, you must present your computer to the IT Helpdesk once again to have all AAD configurations removed; otherwise you may not be able to use your computer away from the network.

Policies and legislative responsibilities

² Station leaders, voyage leaders and some others are appointed as Inspectors under the *Antarctic Marine Living Resources Conservation Act 1981* and the *Antarctic Treaty (Environment Protection) Act 1980* and as Special Constables under the *Criminal Procedures Ordinance 1993*. This provides them with powers to enforce the laws in the Territory including powers to stop, search and arrest in certain circumstances.

As an expeditioner, you will be subject to and must comply with a range of government legislation and AAD policies. The laws of the Australian Antarctic Territory (AAT) are:

- Commonwealth laws expressly applying to the Territory
- Ordinances made specifically for the AAT
- Australian Capital Territory laws other than criminal laws in so far as they are applicable to the AAT
- Criminal laws of the Jervis Bay Territory in so far as they are applicable to the AAT.

At Macquarie Island, the laws of Tasmania apply. Standards and laws that apply in Australia such as the Work, Health and Safety (WHS) and the privacy legislation, also apply in Antarctica. See Appendix 1 for a range, but not an exhaustive list, of more specific legislation that will apply to you down South.

- The WHS legislation and internal policies place a responsibility on you to adopt safe work practices for your own safety and the safety of others. Detailed policy statements and procedures are available on the AAD *Work, health & safety* intranet site.
- All expeditioners have a legal right to work in an environment that is free from harassment and discrimination.
- All information, data, records etc. collected or generated on behalf of the AAD is deemed to be "official information" belonging to the AAD and the Australian Government and you must not use or disclose it without official approval.
- All media comment and interview must be cleared beforehand with the AAD Corporate Communications Section.
- If you are taking your own tools, laptop, recreation clothing or other materials that could be confused with Antarctic issue, sign and return the *Equipment Declaration* form.
- Report all environmental and safety incidents on the online reporting system.
- You must respect AAD security arrangements and restrictions wherever you work and obey any lawful instructions outlined by your supervisor or other authorised member of staff. Please read the document *AAD Security* available on the AAD website at www.antarctica.gov.au/expeditioner.
- You will need to undergo a police check.
- Any suspected indications of fraud will be investigated by the AAD's Agency Security Advisor in conjunction with other agencies as appropriate and could lead to administrative or disciplinary action. Prosecution may ensue if the matter is serious.
- All relevant government and AAD policies, guidelines and standard operating procedures will apply to all personnel, for example *the Antarctic Service Code of Personal Behaviour*, AAD IT policies and procedures, AAD Operations Manual and the Protective Security Policy Framework.
- You will be required to maintain records in accordance with the *AAD Records Management Policy*.
- If you are employed by the AAD and the Bureau of Meteorology and accrue debts, such as telephone calls, you must repay these from your salary. You may receive a tax invoice if we receive debt details after your final pay. Expeditioners from other agencies and organisations must repay debts within 30 days of receipt of a tax invoice from the AAD.

Australia and Antarctica — past and present

Australia's associations with Antarctica go back to James Cook's voyage of 1772–75, the first of many pioneering Southern Ocean journeys. During Shackleton's 1907–09 expedition, Australians Douglas Mawson and Edgeworth David together with Scotsman Forbes Mackay were the first to reach the South Magnetic Pole.

Mawson's 1911-1914 Australasian Antarctic Expedition was the first Australian-led Antarctic expedition and first large-scale Australian scientific program after Federation. Mawson returned to Antarctica as leader of the 1929-1931 British, Australian and New Zealand Antarctic Research Expedition. Antarctic scientists today still refer to the diverse and detailed scientific research that was conducted during these expeditions.

Mawson was a passionate advocate for the Antarctic region and its environment. He played a key role in the Tasmanian Government's declaration of Macquarie Island as a wildlife sanctuary and also in having the Australian Government recognise the scientific value of Antarctica and acknowledge its need for protection.

In 1947, the Australian Government established the Australian National Antarctic Research Expeditions (ANARE) to set up and maintain permanent scientific stations in the Antarctic and on subantarctic Heard Island and Macquarie Island.

In 1954 Mawson was established, the first permanent Australian station in the AAT. Davis followed in 1957 and two years later Australia took over the operation of Wilkes (formerly run by the United States of America). The station on Heard Island was closed in 1955 and in 1969, Casey was built to replace Wilkes.

The Antarctic Treaty

In 1959 Australia was one of 12 original Parties to the Antarctic Treaty, which came into force in 1961. Australia also played a key role in the development of the Protocol on Environmental Protection to the Antarctic Treaty which was adopted in 1991 and entered into force in 1998. The Treaty and its environmental protocol, known as the Madrid Protocol, designate Antarctica as 'a natural reserve, devoted to peace and science'. There are now 50 parties to the Antarctic Treaty and 35 parties to the Madrid Protocol.

The Antarctic Treaty is an agreement designed to prevent the continent from becoming the scene or object of international discord; it sets aside territorial claims neither enhancing nor diminishing them. The Treaty guarantees freedom of scientific research and promotes international scientific cooperation. It provides for exchange of detailed information about activities in Antarctica and allows official inspectors from any Treaty Party complete freedom to access all areas of Antarctica to ensure that the provisions of the Treaty and its environmental protocol are respected.

The Madrid Protocol also establishes environmental principles for the conduct of all activities; subjects all activities to prior assessment of their environmental impacts; requires the development of contingency plans to respond to environmental emergencies and prohibits mining. The Madrid Protocol is also accompanied by Annexes that detail specific measures and procedures relating to environmental impact assessment; conservation of Antarctic fauna and flora; waste disposal and

waste management; prevention of marine pollution; management of protected areas and liability for environmental emergencies.

As part of the Antarctic Treaty System, Australia:

- Participates in international meetings that govern activities in Antarctica, i.e. in the Antarctic Treaty Consultative Meeting (ATCM), the Committee for Environmental Protection (CEP) and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR).
- Consults with other Parties on the management and governance of the Antarctic region.
- Advances Australia's Antarctic policy interests.

Australia's Antarctic science program

For over 100 years Australia has been conducting high quality scientific research in Antarctica and the Southern Ocean. The scientific interest arises from the fact that Antarctica and the Southern Ocean are dynamic and critical elements of our earth system. Antarctica contains 90% of the ice on earth and 60-70% of its fresh water. The seasonal growth of sea ice each year is one of the earth's most significant seasonal cycles covering an area of 19 million square kilometres at its maximum, one and a half times the area of the Antarctic continent! The Southern Ocean is a major sink for global carbon dioxide emissions and the unique ecosystems and wildlife of the region are sentinels for the rest of the world on the impacts of ocean acidification and global warming. Regional weather and global climate are heavily influenced by the Antarctic atmosphere, ice and the water masses of the Southern Ocean.

The science program today combines the scientific expertise from more than 150 Australian and international institutions to undertake projects that are focused on key scientific and policy questions. Of central importance is the need to better understand how Antarctica and the Southern Ocean influence the earth system, and how it will react to future changes. The *Australian Antarctic Science Strategic Plan 2011-12 to 2020-21* responds to this need by focusing our science program on meeting the challenges of global change, natural resource suitability, biodiversity and managing human impacts on the Antarctic continent within four thematic areas:

- Theme 1 Climate processes and change
- Theme 2 Terrestrial and nearshore ecosystems: environmental change and conservation
- Theme 3 Southern Ocean ecosystems: environmental change and conservation
- Theme 4 Frontier science.

The first three themes address the priority science needs articulated by government policy and resource management agencies. The *Frontier Science* theme provides opportunity for high quality science projects that address Australia's national science priorities. The delivery of a scientific program of high international standing is possible through the combined effort of the entire Antarctic program.

Finally

This handbook contains quite a bit of information and we do not expect you to absorb it all at once. As your departure draws closer, you will receive more information specific to your expedition and will be asked to sign various forms to guarantee your participation. A checklist that will be

particularly useful to you in the last weeks and days before you leave is available from www.antarctica.gov.au/expeditioner.

Glossary

AAD	Australian Antarctic Division		Conservation of Antarctic Marine Living Resources	ICT	Information Communications Technology
AAO	Antarctic Applications On-line	COB	Carry on Board	IRB	Inflatable Rubber Boat
AAP	Australian Antarctic Program	EAP	Employee Assistance Program	MMU	Multimedia Unit
AAT	Australian Antarctic Territory	ELTC	Expeditioner Liaison and Training Coordinator	PPE	Personal Protective Equipment
AMP	Antarctic Medical Practitioner	EPAS	Expeditioner Performance Appraisal Scheme	PMU	Polar Medicine Unit
AMLR	Antarctic Marine Living Resources Act	EPBC	Environment Protection and Biodiversity Conservation Act	RTA	Return to Australia
ANARE	Australian National Antarctic Research Expeditions			SEWPAC	Department of Sustainability, Environment, Water, Populations and Communities
AQIS	Australian Quarantine Inspection Service	EPR	Expeditioner Performance Report	SL	Station Leader
AT(EP)	Antarctic Treaty (Environment Protection) Act	FL	Field Leader	VL	Voyage Leader
		FTO	Field Training Officer	WHS	Work, Health & Safety
CCAMLR	Commission for the	HIMI	Heard Island and McDonald Islands		

Appendix 1 Legislative responsibilities

The legislative responsibilities outlined below is a range, but not an exhaustive list, of laws and instructions and relevant issues that arise from them that apply to all expeditioners. Please ensure that you read through these as you must comply with them all.

- *Antarctic Treaty (Environment Protection) Act 1980*: regulates activities anywhere in the Antarctic. This includes laws governing the killing, taking, removing or otherwise interfering with Antarctic wildlife and plants as well as the removal of Antarctic materials (e.g. birds, seals, eggshells or parts of eggshells, plants, rocks and meteorites) as well as offences in relation to prohibited items. Regulations under this Act are:
 - *Antarctic Treaty (Environment Protection) (Waste Management) Regulations 1994*
 - *Antarctic Treaty (Environment Protection) (Environmental Impact Assessment) Regulations 1993*.
- *Australian Antarctic Territory Act 1954; (Commonwealth)* and Ordinances made under that Act, including:
 - *Weapons Ordinance 2001*: prohibits the possession and use of firearms in the AAT other than in very limited circumstances
 - *Criminal Procedure Ordinance 1993 (AAT)*: allows the voyage leaders and station leaders to take action against offenders.
- *Australian Antarctic Territory Acceptance Act 1933*.
- *Quarantine Act 1908*: authorises Quarantine officers to search cargo and personal baggage and seize items and material being imported into Australia without a permit.
- *Heard Island and McDonald Islands Act 1953 (Commonwealth)* and Ordinances made under that Act including:
 - *Weapons Ordinance 2001 (HIMI)*
 - *Criminal Procedure Ordinance 1993 (HIMI)*
 - *Environment Protection and Management Ordinance 1987 (HIMI)*: regulates access to the Territory including requirements for entry permits.
- *Antarctic Marine Living Resources Conservation Act 1981*: regulates harvesting and research with respect to living marine resources south of the Antarctic Convergence. This includes the killing, taking, removing or other interference with species covered by the Act.
- *Environment Protection and Biodiversity Conservation Act 1999*: regulates activities in Commonwealth land by Commonwealth agencies likely to affect matters of national environmental significance, areas or items of heritage or listed species (including killing, taking, removing or otherwise interfering with members of those species). The HIMI Marine

Reserve is also declared and protected under the Act.

- *National Parks and Reserves Management Act 2002 (Tasmania)*: regulates activities in a Nature Reserve—such as Macquarie Island. This extends to the removal from Macquarie Island of any materials or artefacts.
- *Customs Act 1901*: regulates the movement of items—including personal baggage—to and from the Antarctic. Authorises Australian Customs to search and seize items and material improperly removed from the Antarctic or non-disclosed return of materials to Australia on which duty is payable—and to prosecute those who seek to import or export items without the required approval.
- *Australian Postal Corporation Act 1989*: prevention of the submission of personal mail as official mail in an attempt to defraud the Commonwealth and utilising of the postal service for the removal of Commonwealth property from the stations without authority.
- *Crimes Act 1914*: range of offences concerning behaviour by or against Commonwealth employees, including the unauthorised disclosure of information and the misuse or loss of Commonwealth property and equipment.
- *Copyright Act 1968*: unauthorised copying of software in contravention of copyright laws. This includes both public and private software.
- Work, Health and Safety legislation including:
 - *Work, Health and Safety Act 2011*
 - *Safety, Rehabilitation and Compensation Act 1988*.
- Legislation dealing with the elimination of harassment, discrimination and bullying including:
 - *Racial Discrimination Act 1975*
 - *Sex Discrimination Act 1984*
 - *Age Discrimination Act 2004*
 - *Disability Discrimination Act 1992*
 - *Workplace Relations Act 1996*.
- *Privacy Act 1988*: all AAP participants are bound by the information privacy principles set out in the *Privacy Act 1988* including the disclosure of official information without authority.

Appendix 2 The Antarctic Service Code of Personal Behaviour

Expeditioners are judged by other expeditioners on their work, behaviour and attitudes. Our stations reflect the diversity found within any community. People of all ages, backgrounds and gender are linked by a common purpose. Expeditioners have been selected because of their skill, talent and their personal qualities. They are expected to contribute to all aspects of station life unselfishly.

Expeditioners should respect the opinions of others and be tolerant of other people's peculiarities. We expect that all expeditioners will adhere to the *Antarctic Service Code of Personal Behaviour* (the Code).

We recognise that the moderate social consumption of alcohol has benefits for individuals and the community as a whole. Unfortunately, the excessive consumption of alcohol has resulted in behaviour that has caused social disruption. Expeditioners must be aware of their responsibilities in this regard and must discipline themselves to ensure that such events do not occur. Administrative systems are in place to assist voyage leaders and station leaders to deal effectively with such occurrences.

Do not be provoked into violent speech or actions and avoid inciting it in others. Violence of any kind will never solve a problem and will result in formal action being taken by the AAD.

Be aware of how your behaviour can affect and annoy others. Making noise at night, banging doors, replaying the same music, monopolising conversation, contradicting or correcting others, personal hygiene issues and a basic disregard for accepted manners may cause annoyance or offence.

Introduction

All people who travel to Antarctica or the subantarctic as part of the AAP are required to accept that their participation is conditional on their continued compliance with the *Antarctic Service Code of Personal Behaviour*. This section provides the full text of the Code and some background and explanatory information about it.

The Code is a vital link in the chain that includes the criteria against which expeditioners are selected and the expeditioner performance report that provides feedback during participation and at the conclusion of an expeditioner's participation.

Purpose and policy

The Code establishes standards of personal behaviour that contribute to morale, team-work and cooperation and ultimately, successful expeditions. The Code also aims to promote and enhance the image of AAP.

Stations, voyages and field bases are self-contained communities, largely isolated from mainstream society. In these special circumstances, individual and community behaviours are of legitimate concern to those managing those operations. This is particularly so where such behaviours may be detrimental to the overall interests of the community.

Standards and obligations

AAP policy is that every expeditioner participating with AAP must comply with the general standard of behaviour that is recognised as reasonable by the wider Australian community. Expeditioners are also required to meet the additional and specific standards of behaviour outlined in this Code.

The Code is not intended to be exhaustive on matters of personal behaviour. The Code outlines broad standards of behaviour that serve as a guide to acceptable and unacceptable behaviour.

Expeditioners may be under additional obligations to their employers or other parties in matters such as ethics, professional or technical standards and behaviour. Expeditioners are reminded that they are subject to relevant Australian and Tasmanian laws. Tasmanian laws are particularly relevant in the case of Macquarie Island.

Coverage and essential information

The Code applies to all expeditioners irrespective of their employment or affiliation. Its provisions apply particularly from the time of departure from Australia to the time of return to Australia, but it also includes the time before embarkation for Antarctica or the subantarctic.

All expeditioners are provided with a copy of the Code and should understand that participation in an expedition is conditional on their continued compliance with its provisions. It is the responsibility of expeditioners to familiarise themselves with the contents of the Code and relevant sections of the *Expeditioner Handbook*, *AAD Field Manual* and *Antarctic Expeditioner First Aid Manual*. The *Expeditioner Handbook* contains important background information on the Code and related matters.

(1) Work

I will meet my work responsibilities by applying relevant trade, technical or professional skills and giving consistent effort.

You have been selected as an expeditioner largely because of your skills, experience, knowledge and personal qualities. You are expected to be efficient, effective, diligent, responsive, productive and timely in meeting your individual responsibilities. Your performance should clearly show that you meet these expectations with minimal supervision.

As a supervisor, I will work with others in the most effective manner to meet the objectives of the expedition while also meeting my responsibilities to maintain a safe and harmonious workplace.

As a supervisor, you are expected to show leadership, consult, coordinate, delegate, negotiate and counsel as appropriate with other individuals, especially those under your control.

As a supervisor, you are expected to comply with and ensure your team understands and complies with workplace diversity, workplace relations and occupational health and safety principles and practices.

(2) Individual contribution to community and team

I will adopt positive measures to cope with the various stresses associated with expeditioner life to maintain my personal effectiveness and personal standards.

Your capacity to deal with the demands of expedition life will be influenced by various factors, including your prior experience and personal situation. The stresses that can arise as a consequence of separation, isolation, personal pressure, community living, climatic factors and changing circumstances may test your individual resourcefulness.

You are expected to work positively to maintain your motivation, confidence and self-esteem and to show sensitivity, acceptance and support towards fellow expeditioners.

Your personal standards in appearance, dress and hygiene should not restrict your work performance or give offence to others generally.

I will manage my interpersonal relationships in such a way as to promote and maintain group harmony and well-being.

You are expected to treat others with consideration, courtesy, respect, fairness and tolerance, without patronage or favouritism or regard to sex, race, nationality or other similar factors. The general standard expected is one where your conduct would not cause dissension or discord amongst expeditioners or disrupt programs or other responsibilities. You are expected to respect others' rights, opinions, duties, aspirations and privacy.

Difficulties may occur between you and other expeditioners and it is your responsibility to ensure that such difficulties are resolved quickly and effectively.

You are expected to be flexible in adapting to changed circumstances.

My use of alcohol and drugs will not compromise my wider responsibilities.

Drug and alcohol use, including prescription drugs, have clear implications for occupational health and safety and the maintenance of harmonious relations and you are expected to moderate your alcohol consumption so that you are capable of performing your duties and other responsibilities at all times in a safe and effective manner.

The availability and regulation of alcohol on station, voyages and in other circumstances will be consistent with arrangements determined by the AAD and ships' operators, as appropriate.

You are reminded of your legal obligations as they relate to the possession and use of prohibited or restricted drugs.

I will not behave in a manner that may be classified as "extreme" or encourage others to behave in this manner.

Examples of extreme behaviour include:

- consuming alcohol in excess
- causing threat to personal safety
- disorderly behaviour, including being violent, threatening, insulting or abusive
- indecent exposure and other gross, obscene or offensive acts
- wilfully or negligently causing loss or damage to property
- causing annoyance through use of offensive language, excessive noise or in other ways.

(3) Response to authority and compliance with the law, legislative requirements and AAD policies and procedures

I will comply with lawful directions and reasonable instructions.

Lawful directions, instructions and standards of performance are normally issued or determined by the various leaders or persons in charge of any vehicle, vessel or aircraft, station, field party or work group.

I will maintain a practical commitment to Australia's environmental management responsibilities in the Antarctic and subantarctic.

You are expected to minimise your impact on the natural environment. Aspects of particular importance include environmental impact assessment and permit requirements, the protection of native fauna and flora, waste removal and disposal and activities in places designated as Antarctic Specially Protected or Specially Managed Areas.

You should be aware that collection or removal of biological or geological specimens, or human artefacts is not permitted without specific authorisation.

I will comply with relevant codes of occupational health and safety and ensure that my actions do not threaten my safety, health and welfare or that of others.

The excitement of living, working and exploring as part of the AAP are real attractions to many individuals. You should be aware of the risks associated with physical and environmental conditions in Antarctica and the subantarctic, and that these are great and cannot be ignored.

Maintaining a safe working environment is a shared responsibility. You should familiarise yourself with specific policies on environmental safety and occupational safety and health issues generally. Supervisors have a leadership role to play in ensuring safety and health issues are addressed.

I will be sensitive to harassment issues and will not engage in any harassing behaviour.

Harassment can take many forms and you should be aware that the AAD regards harassment as a serious matter.

Workplace harassment may consist of offensive, abusive, belittling or threatening behaviour directed at another individual or group. It is often based on some real or perceived attribute or difference.

Sexual harassment is any unwanted, unsolicited and unreciprocated behaviour of a sexual nature that is objectionable to another individual. Any behaviour or series of behaviours, despite the intention of the individual performing the behaviours, will be considered as sexually harassing if they are experienced that way by the recipient.

I will not make any public comment that could damage the integrity and professionalism of the AAP. I will use official information for official purposes only.

You are generally free to comment on factual matters relating the AAP; however you should avoid comments or actions that may damage public confidence. Public comment, even if made in a private capacity, may be regarded as official comment by the AAD or affiliated agency.

You may come into possession of documents or official information that you could use for private pecuniary or other advantage. Taking, or seeking to take improper advantage or use of, official information for other than official purposes is prohibited.

(4) AAP-specific requirements

I will meet my AAP responsibilities.

This commitment covers a range of responsibilities associated with expeditions which apply equally, regardless of affiliation.

You are required to complete all training requirements and use all reasonably available means to meet your responsibilities.

Your expedition responsibilities include individual programs, “common duties” essential to maintaining a self-reliant community and other activities associated with the AAP. For those expeditioners not directly involved in science activities, these requirements extend to providing support to science activities to assist their successful completion.

Your expedition responsibilities may need to be performed at any time of the day or night.

I will be responsible and efficient in my use of financial and physical resources associated with the AAP.

You are expected to be careful and restrained in using property and equipment, particularly on station and in the field.

Waste, extravagance or inappropriate use may have serious implications for the safety and well-being of isolated communities as well as being an unacceptable use of Commonwealth resources.

You are required to return all relevant personal issue items at the conclusion of your expedition.

Breaches of the Code

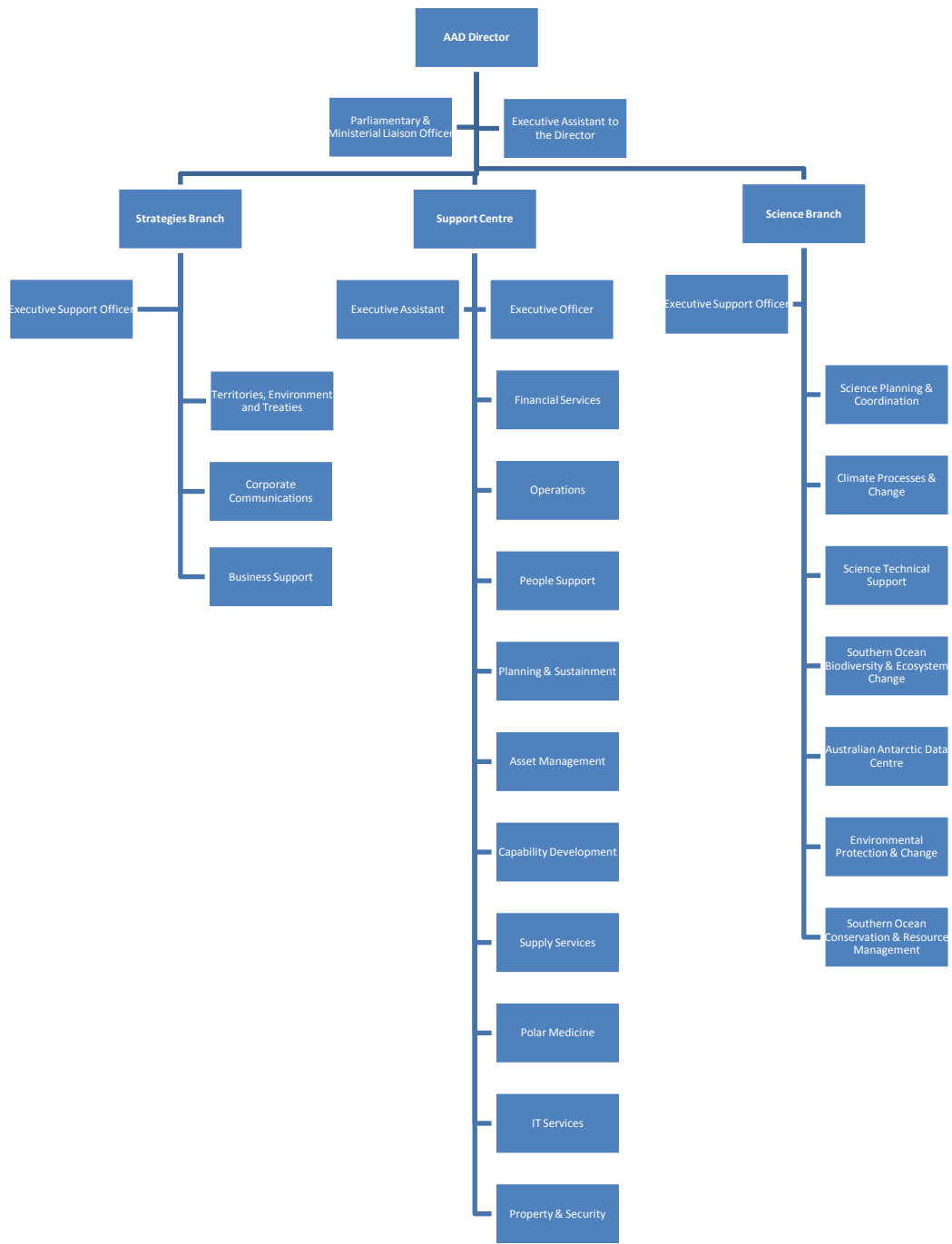
Management responses to breaches of the Code may include any of the following:

- counselling, suspension or removal of privileges
- oral or written reprimands or both
- referral to the expeditioner’s employer for actions within the employer’s power
- written reports, including reports made under the Expeditioner Performance Appraisal Scheme (EPAS), where those reports will be considered if the expeditioner seeks further expeditionary participation
- financial recovery for loss or damage to private or personal property or property of the Commonwealth of Australia
- early return to Australia, subject to the availability of transport, or
- referral to the appropriate authorities of any matter that may appropriately be handled under relevant law.

Issued by the Director, Australian Antarctic Division

Lead Agency for Australia’s Antarctic Program October 2002

INSIDE BACK COVER AAD organisational chart



INSIDE FRONT COVER Map of Antarctica showing routes and logistics