

# Participants' Handbook

A guide to going south with British Antarctic Survey



**British  
Antarctic Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

**POLAR SCIENCE  
FOR PLANET EARTH**

## Director's foreword

Antarctica is the coldest, windiest, driest and highest continent on planet Earth. It is capped by an ice sheet over 4km thick in places. In winter, Antarctica is dark for many months and the sea, the world's stormiest, freezes to cover an area the size of the continent itself.

Antarctica is the remotest and most inhospitable continent of all. It also has no permanent inhabitants – the only continent on the planet of which this can be said. So, welcome to you, one of the very special people who are going to live and work there!

Whether this is your first time or one of many trips with the British Antarctic Survey (BAS), I congratulate you on being selected to work in this wild and amazing place as an important member of 'Team BAS'.

In our changing world we have important work to do. BAS science and support staff, working in partnership with collaborators in the UK and worldwide, play a pivotal role in Antarctic research. By concentrating on key global scientific problems, by being efficient and effective in managing our research stations and ships, and in the deployment of our field parties and marine cruises, we advance knowledge and achieve world-wide recognition for excellence. You have a vital role to play in our wide range of Antarctic activities planned for the forthcoming field season and beyond. Whatever your job, you are an essential part of the team.

The forthcoming field season, 2011/12, is particularly important for us because it sees the further consolidation of our science programme – Polar Science for Planet Earth.

Polar Science for Planet Earth, or PSPE in short, is an exciting programme comprising a range of challenging projects that you will be a part of. You will get to know these over time but at their heart they are about: unlocking the past, understanding the present, predicting the future and exploring the unknown.

These projects will be carried out on ice, land and sea, as well as in the air, and we are looking to increasing the work we do in the Arctic. You will be an important contributor to one or more of these scientifically and technically challenging projects. Whatever you are involved in, wherever you are deployed, in whatever capacity, I urge you to try to keep in touch with what your colleagues are doing.

BAS is a component of the Natural Environment Research Council (NERC). We share its mission to increase knowledge and understanding of the natural world. To tackle major environmental issues such as climate change, biodiversity and natural hazards, NERC has launched a new strategic approach and is changing the way it funds and carries out its research. In response to this, we have developed the new BAS science vision through Polar Science for Planet Earth. This new direction will present opportunities and influence how we organise and plan our future work. You may be involved in this dialogue and I hope that you will contribute your ideas.

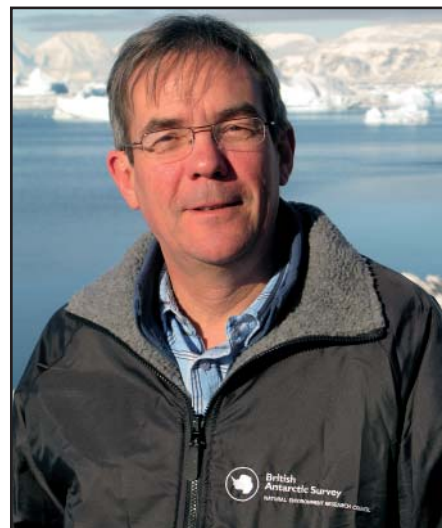
In conclusion, I turn to you, as you are about to embark on a new adventure. The strength of any organisation lies in the expertise and enthusiasm of its people. You will be carrying on a tradition of excellence in carrying out and supporting world-leading research in one of the most challenging environments on the planet. This handbook is here to help you make the most of your trip south, safely and effectively, both for BAS and you as an individual.

I wish you fair winds, smooth seas, clear skies, good snow, good company and a productive time in the Antarctic. You are about to embark on an amazing experience.

With very best wishes,



Nick Owens Director, BAS



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### Our vision

By 2020 the British Antarctic Survey will be recognised as a world-leading centre for polar research and expertise, addressing issues of global importance.

### Our mission

To deliver a world-class programme of scientific research, national capability and long-term observations, concentrating on the regional and global role of polar processes in the Earth System.

Through our science and impact, sustain for the UK an active and influential Antarctic regional presence, and a leadership role in Antarctic affairs.

### Our culture

BAS aspires to a culture that is:

- **Positive** – positive attitude, energy, realism, enjoy the work
- **Responsible** – safety conscious, environmentally friendly, accountable for one's actions, honourable, ethical, open and fair
- **Imaginative** – creative, flexible, thinking of better ways, constructively challenging, learning from experience, problem-solving, entrepreneurial and outward looking
- **Co-operative** – open, communicative, caring and loyal to one another; working in the best interests of BAS and science
- **Excellent** – professional, efficient and effective, successful and recognised, high quality, applying best practice and developing our people

## Introduction

This handbook is provided to all participants in the British Antarctic Survey (BAS) Antarctic programme. It aims to provide some background to the environment and organisation within which you will be working, outline some of the steps that you need to take before travelling and answer the most commonly asked questions about living and working in the Antarctic.

Much of the information given here is repeated or amplified at the annual Cambridge Antarctic Pre-deployment Training Course in September. During the course there will be films, lectures and discussions to introduce you to BAS and the Antarctic. It also provides an opportunity for you to meet the people with whom you will be going south and members of Cambridge staff. There are some practical matters that you need to consider before attending the training course – please make sure you read straight away the sections on Basic Preparations, Packing for the Antarctic and Health and Safety and medical issues, and that you make any necessary arrangements in good time.

Supplementary material will be provided during the Antarctic Pre-deployment Training Course giving the latest practical information, and a list of sources for further information is given at the end of the handbook.

The BAS Participants Handbook is regularly updated. We welcome any feedback on its layout, style or content.



**Images: Top:** A glaciology field camp on Berkner Island, Antarctica. **Middle:** Emperor penguins on the Brunt Ice Shelf, near Halley Research Station. **Bottom:** The new Halley VI Research Station takes shape on the Brunt Ice Shelf.

**f** For more information, please visit our website: [www.antarctica.ac.uk](http://www.antarctica.ac.uk)

# Antarctica past and present



## History

The United Kingdom has a long history of exploration and research in Antarctica. James Cook made the first circumnavigation of Antarctica in 1772-75. He sailed to 71°S and discovered the island of South Georgia. During the 18th and 19th centuries much of the early exploration of the maritime Antarctic and surrounding seas was undertaken by sealers and whalers exploiting the living resources of the area. In 1820 Edward Bransfield made the first sighting of the Antarctic continent from off the Antarctic Peninsula. James Weddell, James Clark Ross, John Biscoe and Carsten Borchgrevink led other major nineteenth century expeditions.

During the early part of the twentieth century, William Spiers Bruce, Robert Falcon Scott and Ernest Shackleton led important expeditions to Antarctica. In addition to exploring new areas of the continent, these expeditions carried out extensive scientific programmes and established the United Kingdom as the leading nation in Antarctic science. This 'Heroic Age' of exploration was followed by equally successful and scientifically significant expeditions between the wars, of which the most important were the 13 voyages of the Discovery Investigations of the Southern Ocean 1925-39, and the British Graham Land Expedition, 1934-37.

In 1943, the British Government mounted an expedition to Antarctica, code-named Operation Tabarin. Its objectives were to report on enemy activities, collect meteorological data and to re-enforce British territorial claims through the establishment of bases. A programme of mapping and science was undertaken. At the end of the war the operation was established on a permanent basis under the Colonial Office and became the Falkland Island Dependencies Survey (FIDS), the bases established during Tabarin becoming the first to be permanently occupied on the continent. The primary purpose of FIDS was to continue (through occupation, mapping and scientific research) the British presence in an area whose sovereignty was contested by other countries. FIDS grew rapidly, opening bases throughout the Antarctic Peninsula and related sub-Antarctic area, and expanding many areas of scientific investigation. The name 'Fids' is still used to describe BAS personnel.

The Commonwealth Trans-Antarctic Expedition (1955-58), led by Sir Vivian Fuchs, continued the British tradition of combining exploration and science.

In 1957-58, 67 nations took part in the International Geophysical Year (IGY), one of whose major objectives was the exploration of the Antarctic. The Royal Society established Halley Bay Base on the Bunt Ice Shelf in 1956 as a major part of the British contribution to IGY. (The base was transferred to FIDS in 1959.) IGY was a major success, and led directly to the negotiation of the Antarctic Treaty and hence to the international co-operation and protection of Antarctica that exists today.

In 1962, FIDS was renamed the British Antarctic Survey, and in 1967 it became one of the component research centres of the Natural Environment Research Council (NERC) which had been established in 1965. Funding through central government is now provided by the Office of the Chief Scientific Adviser, which is part of the Department of Business, Innovation and Skills (BIS). BAS is also responsible to the Foreign & Commonwealth Office (FCO) for administrative duties in the British Antarctic Territory and compliance with the requirements of the Antarctic Act (1994).

## The Antarctic Treaty

Following IGY, the United States invited 11 countries, including the United Kingdom, to an international conference to develop a long-term framework for peaceful coexistence in Antarctica. The Antarctic Treaty was signed by all 12 countries in December 1959, and came into force in 1961, once each nation's government had ratified it.

The major provisions of the Antarctic Treaty are that:

- Antarctica is only to be used for peaceful purposes, although military personnel may be involved
- There is freedom of scientific investigation and co-operation
- Scientific data and personnel are to be freely exchanged
- Territorial claims are 'frozen' and new ones cannot be made
- Nuclear explosions and radioactive waste disposal are banned
- All stations and equipment are open to inspection by any Treaty member

Since its inception, the number of signatories to the Treaty has increased to 46, of which 28 are full Consultative Parties engaged in substantial scientific research activity in Antarctica. These nations

**Image:** Gentoo penguin at the Historic Site of Port Lockroy. The site dates back to Operation Tabarin and the first British presence in the Antarctic.

**f** For more information, please visit our website: [www.antarctica.ac.uk](http://www.antarctica.ac.uk)

# Antarctica past and present *continued*

maintain some 37 permanent year-round scientific research stations in Antarctica, with more operating in the austral summer.

The Antarctic Treaty covers all lands and ice shelves south of 60°S, but not the sea itself. In 1980 the Treaty nations agreed on a wide-ranging measure, the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR), to conserve all Antarctic marine living resources south of the latitude of the Polar Front (the boundary between cold Antarctic seas and the warmer Atlantic waters). Other agreements aimed at protecting Antarctic wildlife include the Agreed Measures for the Conservation of Antarctic Flora and Fauna (1964, now superseded by the Environmental Protocol) and the Convention for the Conservation of Antarctic Seals (1972).

The Protocol on Environmental Protection to the Antarctic Treaty (1991) provides wider protection for the Antarctic environment, including a prohibition on commercial mining and hydrocarbon extraction. The Protocol has six annexes, which influence the way in which BAS and other Antarctic operators manage their activities. These annexes cover Environmental Impact Assessment, Conservation of Antarctic Fauna and Flora, Waste Disposal and Management, Prevention of Marine Pollution, Area Protection and Management and liability arising from environmental emergencies. The prohibition in the Environmental Protocol on importing non-native species means that there are now no sledge dogs in Antarctica.

In the United Kingdom, the Protocol was incorporated into UK law by the Antarctic Act (1994), which provides the legislation applicable to all UK nationals and operators in the Antarctic.

## Permits

BAS receives a permit for its general operations in Antarctica from the FCO as a requirement of the Antarctic Act, and separate permits for the operation of the ships and aircraft. Additional permits are required if work is to involve any of the following activities:

- Taking of, or harmful interference with, native flora or fauna
- Introduction of non-native species into Antarctica
- Entry into Antarctic Specially Protected Areas
- Mineral resource activities

BAS Project Leaders should apply to the BAS Environment Office for permits to undertake any of the above activities. Collaborative Gearing Scheme (CGS) and Antarctic Funding Initiative (AFI) Principal Investigators should apply to the BAS AFI Co-ordinator who will liaise with the Environment Office and FCO as required.

Foreign visitors should seek advice from the BAS Environment Office on the need to apply to their own governments for permits.

DEFRA licenses are also required for the import of biological samples to the UK, and also the on-site storage of the imported samples, either at BAS or at the establishment (e.g. University) the biological samples are transferred to after import. The legislation requires licenses for soils, plants, animal pathogens, animal products (including remains or preserved samples) and live fish. Whale and seal products also require import licenses under CITES (Convention on International Trade in Endangered Species of Wild Flora and Fauna) legislation. This includes items such as whalebone and seal skins and teeth. Your Base Commander will provide further information on import Licenses and the Standard Operating Procedure.

If licensed material is to be transferred to another establishment, a BAS license holder is responsible for providing the information to DEFRA and producing the necessary documentation (e.g. transfer permit) required. BAS, as an organisation, is responsible for ensuring that the receiving establishment is properly licensed before releasing the material.

DEFRA licenses are co-ordinated by staff in the Ecosystems science programme.



**Images: Top:** Skidoo travel has replaced the use of dogs in the Antarctic since dogs were banned in 1994 under the Antarctic Treaty.  
**Bottom:** Operation Tabarin members on the deck of the Royal Navy ship HMS Eagle, at Deception Island in 1944.

# The organisation and structure of BAS

BAS's operational structure has two science groups (Science Delivery and Science Strategy) and three support divisions (Operations & Engineering, Corporate Services and Safety, Health & Environment). The leaders of these groups, the Director, Deputy Director and two independent members form the BAS Board. Supported by the Science Board, the BAS Board is the senior management body for the Survey, responsible for overall strategic direction and policy.

The Science Board consists of the Director, the two BAS Board members for Science Strategy and Delivery, the six Science Leaders and one of the independent Non-Executive BAS Board Members. Science Board meetings are co-ordinated with the BAS Board meetings, which are held monthly.

For further information about the structure and function of each BAS group please refer to: [http://www.antarctica.ac.uk/about\\_bas/our\\_organisation](http://www.antarctica.ac.uk/about_bas/our_organisation)

**Polar Science for Planet Earth (PSPE)** is BAS's strategic science framework. It started on 1st April 2009 and consists of six key science programmes:

**Chemistry and Past Climate:** Quaternary climate including ice cores, lake sediments, marine sediments and tropospheric chemistry.

**Climate:** Atmospheric science and processes, including climate modelling.

**Ecosystems:** Dynamics of polar ecosystems in response to the impacts of climate and fisheries.

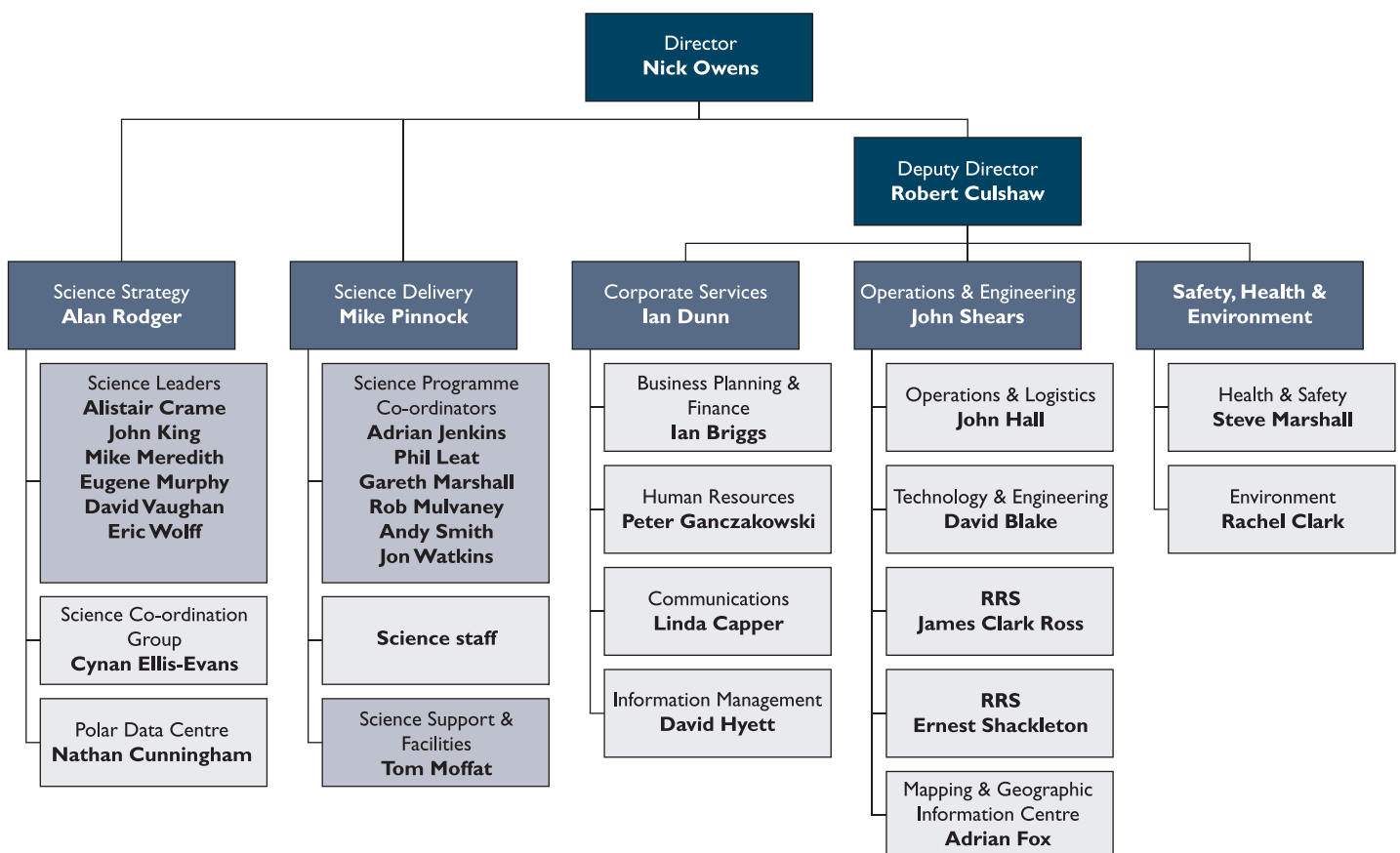
**IceSheets:** Ice sheet evolution and flow, ice-sheet changes and sea-level rise.

**Polar Oceans:** Role of the polar oceans in controlling and influencing the Earth System.

**Environmental Change and Evolution:** The Earth System: geological to upper atmosphere, complexities and scales of interactions, controls on biological evolution.

The Head of Science Strategy also manages the Polar Data Centre (PDC) and Programme Office. For further information on PSPE, see [http://www.antarctica.ac.uk/bas\\_research/our\\_research/current/overview.php](http://www.antarctica.ac.uk/bas_research/our_research/current/overview.php)

## BAS Organisation Structure



## BAS infrastructure

Station:	<b>Rothera</b>
Location:	68°S 68°W
Summer complement:	80-120
Winter complement:	21
Minimum temp.	-30°C
Maximum temp.	+5°C

Station:	<b>Halley</b>
Location:	75°S 26°W
Summer complement:	52-130
Winter complement:	14-16
Minimum temp.	-50°C
Maximum temp.	+1°C

Station:	<b>Bird Island</b>
Location:	54°S 38°W
Summer complement:	10
Winter complement:	4
Minimum temp.	-10°C
Maximum temp.	+10°C

Station:	<b>KEP</b>
Location:	54°S 36°W
Summer complement:	18
Winter complement:	8
Minimum temp.	-10°C
Maximum temp.	+10°C

Station:	<b>Signy</b>
Location:	61°S 45°W
Summer complement:	8
Winter complement:	0
Minimum temp.	-30°C
Maximum temp.	+10°C

In 1975, BAS moved to new buildings in Cambridge, which were extended to their present size in 1988. It is from here that all the Survey's complex activities are organised.

BAS operates three research stations in the Antarctic, and two stations on South Georgia. In addition to the official name, each station has an identifying letter. These letters are used extensively in cargo and communications procedures.

**Rothera** (Base R) is situated on Adelaide Island to the west of the Antarctic Peninsula. The site includes a crushed rock runway, hanger and wharf. Rothera is the centre of BAS field and air operations. It is the largest BAS Antarctic facility and supports activities across all BAS science programmes.

**Halley** (Base Z) is built on the Brunt Ice Shelf south-east of the Weddell Sea, some 200km from the nearest exposed rock. The ice shelf is 200m thick, and flows towards the sea where, at irregular intervals, it calves off as icebergs. Scientific research concentrates on atmospheric sciences, meteorology and chemistry. Halley has a snow runway and supports a number of summer field science activities. From 2012 Halley VI will become operational and Halley V will be decommissioned and removed.

**Bird Island** (BI) is a small island at the western end of South Georgia. It is covered in tussock grass with no permanent snow or ice. The research concentrates on the biology of birds and seals, huge numbers of which live on the island.

**King Edward Point** (Base M or KEP) is situated close to Grytviken on the main island of South Georgia. It is surrounded by glaciers and mountains, but low-lying areas support abundant grasses and wildlife. The station focuses on applied fisheries research and supports the GSGSSI Marine Officer.

**Signy** (Base H) is a summer-only station situated on one of the South Orkney Islands. It is a small island, a large part of which is covered by a permanent ice cap. There are extensive areas of mosses and lichens and many lakes and pools on the island. Signy supports terrestrial and freshwater sciences, especially biology, and a CCAMLR monitoring programme.

BAS operates two ocean-going research ships: RRS *James Clark Ross* (JCR) and RRS *Ernest Shackleton* (ES). Both ships are ice-strengthened with bow and stern thrusters and dynamic positioning systems. BAS ships are flagged in the Falkland Islands and their home port is Stanley.

**RRS James Clark Ross** (JCR), launched in 1990, is primarily a marine research vessel for biological, oceanographic and geophysical cruises. It is equipped with a suite of laboratories and a winch system that allows scientific equipment to be deployed astern or amidships. The ship has an extremely low noise signature, allowing the deployment of sensitive acoustic equipment. A swath bathymetry system was fitted in 2000. The JCR also carries out cargo and logistical work. During the northern summer the JCR supports NERC scientific work in the Northern Hemisphere, often in the Arctic.

**RRS Ernest Shackleton** (ES), launched in 1995 and under charter to BAS since 1999, is primarily a logistics vessel, used to transport cargo, fuel and personnel. The ship also has basic scientific capability and undertakes some research work. During the northern summer, the ES is commercially chartered and usually works in the North Sea, but still with BAS management and crew.

BAS operates five aircraft in the Antarctic during the austral summer. The largest is the four-engined De Havilland Canada Dash-7, the primary role of which is as a link between the Falkland Islands, Punta Arenas and Rothera for both passengers and cargo. It also undertakes fuel depot-laying trips to blue-ice runways and some scientific survey work.

The other four aircraft are twin-engined De Havilland Canada Twin Otters. Their primary role is to deploy field parties and establish remote fuel depots. Particular aircraft are also configured to undertake aerial photography, radio-echo ice-depth sounding, meteorological studies and geophysical survey work. Whilst usually based at Rothera, the Twin Otters also operate out of Halley.

## Basic preparations



### Health matters

**Medical examination** – Everyone who travels with BAS to the Antarctic must pass a strict medical examination. For BAS staff this is carried out by a BAS doctor at BAS's expense. Visitors' medicals are carried out by their own General Practitioners (GPs) to BAS guidelines (BAS will not reimburse the costs incurred). The purpose of the medical is to determine whether you are fit for the arduous nature of Antarctic service. The standard varies depending upon what you are likely to do whilst in the Antarctic. There are only a few conditions that completely preclude Antarctic service, because those suffering from them would be a danger to themselves or others whilst south. However, whenever practicable the BAS Medical Unit (BASMU) tries to make special medical arrangements to enable staff and visitors to work in Antarctica. As the medicals are often completed many months before travelling south, it is vital that you report any subsequent medical problems to the BAS Medical Unit as soon as possible, as this may affect your fitness to go south or require special medical arrangements to be made.

Please do not take your GP's word that you are fit to go to the Antarctic. The final decision rests with the Senior Medical Officer at BASMU. Some GPs do not have a full understanding of the hazards involved, and there have been instances when people who would have serious medical problems when south have been initially 'passed fit' by a GP. Please refer to the BASMU document 'Medical aspects of living and working in Antarctica' for more information ([www.antarctica.ac.uk/staff/antarctic\\_visitors/medical.php](http://www.antarctica.ac.uk/staff/antarctic_visitors/medical.php)).

**Dental check** – You must ensure that you have a thorough dental check before leaving the UK and that a letter from your dentist confirming your dental fitness is supplied to BAS. Your own dentist should carry out this check (BAS will not reimburse any costs incurred). Some personnel, such as winterers and those going into deep-field locations, will be required to visit the BAS dentist. You will be informed if you fall into one of these categories. A dental problem can have a disproportionately significant impact. Minor toothache can ruin your trip south, so it is in your own interests to ensure that you are dentally fit before travelling. BASMU requires that you have a dental check within six months of travelling to Antarctica. As some NHS dentists only provide annual checkups it is sensible to plan ahead to avoid additional costs where possible.

**Blood testing** – There is no blood bank in Antarctica, so individuals on ship or station are needed to act as donors for any transfusion. To protect those receiving blood, we must check on the blood-borne disease status of all potential donors. All personnel must provide a pre-tour blood sample and written consent for testing – failure to do so will preclude Antarctic service. Samples will be tested for blood group, hepatitis B and C, syphilis and HIV. You will only be contacted in the event of a positive test. This is the same policy as applied for blood donors in the UK, the only difference is that it is compulsory.

We do not provide counselling prior to HIV testing as the test is only for safety in blood transfusion. If you have any concerns

## Basic preparations *continued*

about HIV testing you should discuss the subject with your GP, a BAS doctor or a specialist clinic. Some insurance companies require notice of HIV testing and may attempt to exclude tested individuals. If asked this question you should reply "blood donor testing only" (unless, of course, you have had other tests). This should not alter your life insurance risk status, but if any difficulties should arise BASMU will, on request, pass grounds for the test to insurance companies.

If you already know that you carry one of the conditions for which we are testing, e.g. hepatitis B, you should inform BASMU as soon as possible. This will not necessarily preclude Antarctic service but further information will need to be requested and special arrangements made.

**Confidentiality** – Medical records are retained by BASMU and are an important part of ensuring good medical care in the Antarctic. BAS does its utmost to maintain the confidentiality of medical information. However, as there may be safety, welfare or operational implications, personnel additional to the medical staff may sometimes be involved. The special circumstances under which BAS operates and the measures taken have been recognised by the General Medical Council.

**Immunisation** – Prior to departure from the UK, you must be well in date with the following immunisations, which are freely available from your GP.

- Diphtheria, Tetanus, Pertussis (DTP or Revaxis Polio)
- Meningitis ACWY
- Measles, Mumps, Rubella (MMR)
- Yellow Fever (YF) vaccination is recommended by the RAF for flights to the Falklands via Ascension Island, but is no longer considered mandatory. The need for this varies from time to time depending on the yellow fever situation in diversion areas. The requirement can be brought in to being with no notice if there is a sudden outbreak. YF vaccination is only available at recognised travel clinics and a fee is payable. Your GP can advise on local availability. YF vaccination is also required for travel in certain rural areas in South America

For certain people (as advised by BASMU) other vaccinations are needed:

- Tuberculosis
- Hepatitis A
- Hepatitis B

Please refer to BASMU document 'Immunisation Policy' for more information: [www.antarctica.ac.uk/staff/antarctic\\_visitors/immunisation\\_list.pdf](http://www.antarctica.ac.uk/staff/antarctic_visitors/immunisation_list.pdf)

Other immunisations may be required if you intend to travel privately around South America after your trip south. BAS can provide further advice, but it is the individual's responsibility to ensure that they are properly vaccinated. No additional immunisations are required if you are just visiting a South American city whilst in transit, unless health warnings are in place at the time.

Ensure that you have a record of your immunisations with you when you leave for the Antarctic. A BASMU doctor may wish to see this.

### Passports and visas

Ensure that your passport will be in date throughout your stay in Antarctica, for any subsequent travel, for example around South America, and for six months after your planned date of return. You cannot renew your passport once you have left the UK.

Those travelling through South Africa will need to ensure that they have at least two adjoining pages clear of all immigration stamps for use by South African authorities.

The person travelling is responsible for obtaining any necessary visas. UK citizens do not require visas for travel to Chile, Uruguay or the Falkland Islands, but **citizens of other countries, and UK citizens travelling elsewhere, should check their visa requirements well in advance of travel.**

**Financial affairs** (supplementary material will be given at Pre-deployment Training)

We cannot provide financial advice. To prevent problems and minimise worries for yourself and your family, you should take every step to ensure that your financial arrangements are as well organised as possible. Further details on the tax and NI situation can be obtained from the BAS Personal Accounts Manager.

You should consider giving someone you trust Power of Attorney to enable them to act on your behalf and deal with all matters concerned with your affairs. You need to arrange this via a solicitor. You should inform your bank that you are going to be away. You may also have to inform insurance companies, particularly with regard to life, health and home insurance policies. This is particularly important for those who will be wintering.

### Voting

There are no arrangements for you to vote in general or local elections whilst you are in Antarctica. If you wish to retain your entitlement to a vote whilst you are away, the only way to do so is by arranging a 'proxy' vote before you leave the UK. This cannot be done once you are abroad. Please contact your District Council for more information.

### Making a will

It is always prudent in terms of personal affairs to have a will in place. You are strongly advised to make a will if you haven't already done so.

### Bad news whilst you are away

You should also take the opportunity to discuss with your friends and family the possibility that there may be bad news from home whilst you are in the Antarctic. Experience has shown that openness and honesty is the best policy under difficult circumstances. Leaving bad news until the individual gets home has often made matters worse. Your next-of-kin should understand and be aware of your wishes. **We recommend that news be passed in 'real time', via the Family and Friends Liaison Officer, the Base Commander or Ship's Master.**

# Packing for the Antarctic



## What NOT to take to Antarctica

- Importation of PCBs (polychlorinated biphenyls) and pesticides is banned under the Antarctic Treaty. These materials may persist in the Antarctic environment and damage local wildlife
- Do not use polystyrene chips or similar packing for your equipment. Wrap fragile items in clothing, foam or newspaper (not shredded)

## Do not import alien species into Antarctica!

Alien species means plants and animals that are not normally found in Antarctica. These include biological materials such as plants, seeds, bulbs, insects, brine shrimp and non-sterile soil. Importation of these materials is strictly banned under the Antarctic Treaty. If you require some of these items specifically for your scientific research you will need to obtain a permit through the Environment Office.

Alien species can also be carried into Antarctica on people's clothing. For example, seeds and spores can get trapped in Velcro® on coats or trapped in mud on boots. Before leaving for Antarctica, please remove any visible biological material from clothing and clean mud off boots. Better still, wash clothing thoroughly before departing. In addition, if moving between BAS stations please check clothing and personal belongings to prevent transport of biological material between sites. If in doubt, please ask!

## What to take to Antarctica

If you buy anything new to take south, such as a camera or outdoor equipment, you should carry the receipt with you. When you re-import the goods to the UK, the receipt will provide clear evidence that duty has been paid on the goods. There should be no problems re-importing equipment that is clearly well aged. Please note that thefts from baggage can occur on commercial

flights between the UK and South America/South Africa. You should therefore ensure that any valuable or particularly precious personal items are carried as hand luggage and not placed in the hold. Laptop computers should always be hand-carried.

## Antarctic clothing

Temperatures in the Antarctic can vary rapidly and widely. The best way to manage these changes is to use a number of layers of clothing, rather than one bulky layer. This allows you to add or remove layers in response to changing temperatures and also traps layers of air, providing better thermal insulation.

BAS issues all outdoor and work clothing required, except where there is prior agreement between BAS and another institution that we will not do so. In those cases, the clothing used must be of an equivalent standard to that issued by BAS.

Clothing is issued from the Clothing Store in Cambridge. You should make every effort to contact the Clothing Store Manager to arrange a fitting session well before you go south.

For most personnel, your Antarctic clothing will be transported south by ship. Your kitbag will then be issued to you either when you join a ship or, if flying, on arrival in the Falkland Islands, Punta Arenas or Cape Town. You may have some time in the Falkland Islands or Punta Arenas before you can gain access to your kitbag, so you should carry some of your own outdoor clothing such as outdoor shoes or boots, trousers, top and waterproof jacket for immediate use.

All BAS issue clothing remains the property of BAS and must be returned at the end of your Antarctic tour. Kitbag and contents are tracked via the Bill Of Landing (BOL) system and you are accountable for it. All items should be replaced in the kitbag and stored on board ship or station for return to the clothing store. The clothing is vital for your own safety and comfort. You must

Image: The Clothing Store at BAS Cambridge.

For more information, please visit our website: [www.antarctica.ac.uk](http://www.antarctica.ac.uk)

## Packing for the Antarctic *continued*

look after it properly, keep it clean and make repairs as necessary.

BAS does not supply indoor clothing, so take your own. All ships and stations are warm inside. You will require items such as jeans, tracksuit bottoms, shorts, T-shirts, sweatshirts or similar, as well as nightwear, underwear, indoor socks and indoor shoes or slippers.

Most stations have semi-formal meals or other events on Saturday nights and RRS *James Clark Ross* runs a formal messing system, so you will need at least one set of reasonably smart clothes.

### Glasses

If you wear glasses, ensure that you take at least one spare pair with you. Leave a copy of your prescription with Human Resources so that replacements could be obtained in an emergency. Contact lenses have the advantage that they do not get steamed up or frozen.

As part of the clothing issue, BAS will pay an amount towards the purchase of prescription sunglasses if required. These may be obtained by you to a maximum cost of £180.00. Please speak to the Clothing Store Manager if you require any further information.

Provision of contact lenses and supplies for them is your own responsibility.

### Toiletries

We will supply all items necessary for your safety in the Antarctic. High factor suncream and lipsalve are freely available on ships and stations (although you will have to provide your own when you first arrive in the Falkland Islands/Chile/Cape Town).

General toiletries are supplied on station – these include soap, shampoo, toothpaste, toothbrushes, floss, razors and shaving foam (but not deodorant or shower gel). On the ships, these items have to be purchased from the ship's bond. There is not a great deal of choice and you may wish to take your own favourite brands and your own cosmetics.

For women, wintering personnel should purchase their requirement of sanitary towels or tampons and reclaim the cost via the expenses system. Summer-only personnel must take their own supplies. Bins for disposal of sanitary waste are provided on ships and at stations. When in the field, sanitary/medical waste should be placed in yellow bags (provided in field boxes) for return to station and appropriate disposal.

### Medication

All ships and stations carry stocks of medicines, covering requirements from first aid to emergency treatment. The ships carry various anti-seasickness remedies although it is worth starting such a course just prior to the voyage if you are so disposed. The field rations are nutritionally balanced but many people take vitamin supplements when in the field for longer periods.

The stations are well supplied, but do not have the range of medication available in the UK, and are equipped to deal with emergencies, not ongoing problems. If you are taking regular medication of any kind (including contraceptive pills) you will as far as possible, need to take sufficient quantities for your tour. GPs will usually give prescriptions for up to a year. If your tour is longer; or there are any problems with this, contact BASMU as soon as possible, and well in advance of your departure date. If you have any concerns at all, please discuss your medication with BASMU well in advance, who will advise or assist in ensuring you have what is needed. To avoid potential problems at Customs, ensure that all medicines are carried in their original containers with labels intact. If you are taking any prescription medicines, or are carrying any controlled drugs, this must be declared on your medical questionnaire and at your medical and should also be advised to the doctor or ship's Master/Base Commander when you join a BAS ship or station.



## Packing for the Antarctic *continued*



### Photography

Photography is a major recreational activity in Antarctica. You will be given further advice and information at the Antarctic Pre-deployment Training Course, but a few general points follow. All modern cameras work perfectly well in the Antarctic. Low temperatures can reduce battery performance, so ensure that you have spares. Wildlife is generally approachable; you will not require very long lenses (200mm is quite sufficient), but please do not disturb animals when taking photographs or videos. A compact camera is useful to carry in your pocket. Good camera bags are a sound investment. Ask your Base Commander for the availability of darkroom facilities if you are interested in developing films whilst you are on station.

With the use of digital cameras, more people are downloading photographs for return to the UK. It is recommended that you take suitable storage capacity (blank DVDs or an external hard drive). The BAS image collection relies heavily on photos taken by everyone who goes south, so please email [photo@bas.ac.uk](mailto:photo@bas.ac.uk), or drop into the Photographic Office on your return, to find out more about submitting your best pictures, or stop in before you go if you're after some general help and advice.

### Music and videos

All stations hold large collections of books, CDs and DVDs. A personal CD/MP3 player with headphones is useful and wintering personnel may wish to take a portable CD player or mini hi-fi system. Remember to take rechargeable batteries (with a charger) for portable equipment and headphones so that you can listen to your own music/DVDs without disturbing others. Musical instruments are popular and concert nights are sometimes organised. Ask for packing advice if you wish to take musical instruments.

### Skis and snowboards

There is a selection of skis available on the larger stations, but you may wish to take your own skis or snowboard. Recommendations vary between stations – you should consult your Base Commander as to local preferences before purchasing new equipment. Wrists-guards, releasable bindings and other appropriate protective equipment should always be used when skiing or snowboarding. Please consult Operations and Logistics (OPAL) if you intend to travel with skis.

### Other items

The Antarctic is hard on watches. You should take at least two watches – inexpensive digital watches are quite adequate. Spare straps and batteries are also useful. A watch with an alarm is recommended. You may consider taking items such as binoculars, a hair dryer, alarm clock, etc. but avoid power hungry items as generator capacity on the stations is limited. The latest bestsellers and newspapers and magazines are always welcome on the stations.

### Non-accompanied personal belongings

(applies to wintering staff only)

Winterers may consign personal belongings as manifested cargo (that is, cargo officially declared to Customs) on a BAS ship, for delivery to their wintering station. This cargo will not be available until the ship arrives at your station, which may be some time after your own arrival. It is not accessible whilst onboard ship.

It is not intended that you should 'move house' to the Antarctic. Space on stations is extremely limited – you should therefore give careful thought to your requirements and not pack more equipment than is necessary.

## Packing for the Antarctic *continued*

Your pre-packed personal possessions should fit into a cargo container, dimensions 90x58x70cm which BAS will provide at Cambridge. In addition you may consign a bag containing skis and/or a snowboard. Halley wintering personnel will be issued with a box in which to pack breakable items and a soft kitbag for clothing.

Boxes must not contain any perishables, liquids, fireworks, aerosols or hazardous substances. As a guide, any material that has an orange warning label on the original packaging is hazardous and may not be transported. As the cargo is shipped through the tropics, heat-sensitive material should not be shipped, but rather hand carried south.

Cargo packing dates are usually around the end of July for RRS *James Clark Ross* and the end of August for RRS *Ernest Shackleton* (Contact OPAL Shipping Services for routings and precise dates). If you are employed before the packing dates you should deliver your personal belongings to the BAS Logistics Store by those deadlines. Winterers joining BAS at the Cambridge Antarctic Pre-deployment Training Course may bring their boxes to the course. All boxes must be accompanied by a full list of contents and be clearly labelled with your name and station. An electronic copy of the contents should also be supplied. **Unmanifested cargo will not be accepted onboard ships.**

### Scientific cargo

All scientific cargo must be delivered to the BAS Logistics Store by the published packing date unless specific arrangements have been made in advance with OPAL Shipping Services.

All cargo must be accompanied by a cargo packing note giving a full description of cargo including hazard data information and stowage conditions if appropriate. Cargo will not be accessible onboard ship unless it has been exceptionally designated as 'Wanted on Voyage' and approved as such by OPAL in advance.

Scientific cargo is only transported by air to Rothera or Halley on an exceptional basis, and must first be approved by OPAL. You should contact the Operations Manager by the middle of July for authority if you think you might have an exceptional justification to ship cargo by air.

Further details concerning cargo movements are included in the OPAL Shipping Guide and individual station Visitors' Guides.

### Northbound cargo

Your Base Commander will supply you with more information regarding northbound cargo for return from Antarctica. Essentially the same procedures apply as for southbound cargo. Your possessions should fit into one of the supplied cargo containers as described above.

You may hand carry non-hazardous items up to the baggage allowance for your route home. Be aware that this may not be the same allowance as for your journey south.

You may send personal belongings north as manifested ship's cargo. Your Base Commander, Station Support Manager or Chief Officer will provide you with case numbers, advice on packing and a C3 customs form. After clearing UK Customs and being discharged from the vessel, all cargo will be transported to Cambridge – this is likely to be in the second half of May. Personal cargo may then be collected from Cambridge or delivered to your nominated address. Transport costs for delivery from Cambridge will be charged to individuals, as will any import charges levied on dutiable goods included in your personal belongings.

*Note:* It is not possible for individuals to collect cargo from the dockside. Your cargo will therefore not be available until the ship has returned to the UK, and cargo has been discharged and transported to Cambridge.



# Travelling to and from Antarctica

## How do I get there?

Most people travelling to Antarctica will go through the Falkland Islands, Punta Arenas or Cape Town. For those travelling on other routes, separate instructions will be issued but the principles shown below will apply.

BAS organises transport from BAS Cambridge to the departure airport. If you do not wish to use this transport you will need to make your own arrangements to get to the airport, but may then reclaim reasonable expenses incurred.

BAS will arrange all your travel from the UK airport onwards, as well as any accommodation and transfers required during your journey.

## What information can I expect to receive from BAS?

There will be a travel briefing during your induction – this normally happens well ahead of your travelling date. At this briefing you will be told the dates that you are likely to travel and advised of any action you will need to take before you leave the UK.

Approximately two weeks before your planned departure date you will receive your travel confirmation details from OPAL who will request that you confirm receipt of your travel documents, raise any queries and finalise any UK travel arrangements.

Travel dates can be changed at short notice for operational reasons. Be sure to allow a couple of days leeway in any plans you may have prior to leaving for Antarctica.

## MOD flights to the Falkland Islands

Many BAS staff will travel to the Falkland Islands on the MOD flight operated from RAF Brize Norton in Oxfordshire.

The flight time is 18 hours, including a short refuelling stop at Ascension Island. You will have to leave the aircraft but will not be allowed out of the transit compound.

Occasionally flights are delayed at Ascension Island. If this happens you will be provided with basic overnight accommodation but you will not have access to the baggage in the hold so you should carry a small towel and toiletries in your hand luggage.

On arrival in the Falkland Islands you will be transferred to your accommodation prior to the next leg of your journey.

## Commercial flights to South America and the Falkland Islands

BAS routes a large number of people on commercial flights from the UK, normally from London Heathrow, to Chile. You may travel to Antarctica either from Punta Arenas or travel on to the Falkland Islands and then into Antarctica – whichever is operationally appropriate.

If you are travelling to Punta Arenas you will transit through Santiago and will be accommodated for a minimum of one night in Punta Arenas prior to the next leg of your journey.

For those travelling to the Falkland Islands, this is a 30-hour route with a number of stops. You will have an overnight stop in Chile prior to proceeding to the Falkland Islands. A hotel room and airport transfers will be provided at BAS expense for your stop in Chile.

## Punta Arenas

If you are travelling directly to Antarctica from Punta Arenas, you will be met by the agent appointed by BAS and transferred to your accommodation, normally one of the large hotels.

Computer and telephone facilities are available at the hotels and in local internet cafes at your own expense.

The local currency is Chilean dollars and in some establishments US dollars are also accepted. ATMs are available in the town.

You will be given a more detailed briefing about Punta Arenas during your induction.

## The Falkland Islands

From the airport, you will be transported to your accommodation. This will normally be Bed & Breakfast accommodation in Stanley.

BAS maintains an office in Stanley managed by the BAS Logistics Co-ordinator for the Falkland Islands. This busy office arranges your accommodation, deals with cargo and looks after the arrangements for all BAS ship and aircraft movements into and out of the Falkland Islands. You are welcome to visit the office.

The office has limited computer facilities that may be used for sending and receiving e-mails by those personnel accommodated by BAS in Stanley. Those accommodated on a BAS ship whilst in the Falkland Islands should make use of the computer facilities on the ship.

The Falkland Islands has its own currency (pounds and pence). On the Islands this is interchangeable with UK currency. However, you will not be able to use Falkland Islands currency on return to the UK.

There is no ATM on the Falkland Islands but UK cheques are generally acceptable in the main shops and credit and debit cards are accepted in most stores.

You will be given a more detailed briefing about the Falkland Islands during your induction.

## Travel to Halley

Most people travelling to Halley will fly to Cape Town. Travel between Cape Town and Halley will be either by air or BAS ship.

You will be given a more detailed briefing about travel to Halley during your induction.

## BAS ships and aircraft

With few exceptions, BAS staff will travel onwards from the Falkland Islands or from South America (Punta Arenas) to Antarctica using BAS transport.

Those travelling to Rothera will be routed either by air (BAS Dash-7) or by sea. All other BAS personnel will travel to their Antarctic destination by sea.

**Dash-7:** Flights from Stanley/Punta Arenas to Rothera are generally arranged for departure on the day after arrival from the UK and take approximately 4-5 hours.

You will normally have at least one night's accommodation in Stanley/Punta Arenas before departing for Rothera. However,

# Travelling to and from Antarctica *continued*



due to the unpredictability of the weather in Antarctica, delays can occur to your departure, particularly during the early part of the Antarctic season. You should be prepared to spend several days waiting!

**BAS ships:** BAS has two ships: RRS *James Clark Ross* and RRS *Ernest Shackleton*. If you are not travelling into Antarctica by air, then you will almost certainly travel to your destination on one of these ships. There are exceptions and if you are one of these, you will be notified as early as possible.

If you are travelling onwards on a BAS ship, you will normally be accommodated onboard the ship from the time you arrive in the Falkland Islands/Punta Arenas/Cape Town until the ship departs. You will normally have the opportunity to have some time ashore to explore the local area.

## Travelling home from Antarctica

Travel from Antarctica will be by ship or BAS aircraft, normally to the Falkland Islands or Punta Arenas.

We aim to get you back to the UK as soon as practicable after your arrival from Antarctica, either by MOD flight to RAF Brize Norton (from Falkland Islands only) or by commercial airline into London Heathrow.

Approximately two weeks before the start of your return journey you will receive your travel details from OPAL or via your Base Commander or Ship's Master.

Anyone returning from Antarctica and wishing to use the transport from the airport of arrival to BAS Cambridge may do so. If you do not use the transport, you will need to make your own arrangements for travel from the airport to your home, but may retrospectively reclaim any reasonable expenses incurred.

BAS strongly recommends that you do not drive a vehicle immediately after travelling on a long-haul flight.



**Images: Top:** The BAS De Havilland Canada Dash-7 aircraft lands at the blue-ice runway at Sky-Blu Field Station. **Bottom:** Routes taken by BAS ships and aircraft to get to Antarctica.

# Living in Antarctica

## Living on ships

You may travel on BAS ships either in transit to or from a station, or as part of a science cruise. Shortly after joining the ship, you will be given a briefing on the ship's layout, safety, security and emergency procedures and the plans for the coming work period.

**Please read the booklet that is in your cabin as soon as you join the ship.** This will tell you everything you need to know about safety and the ship's routine. This booklet is available on the internet for RRS *Ernest Shackleton* at: [www.antarctica.ac.uk/living\\_and\\_working/research\\_ships/rrs\\_ernest\\_shackleton/es\\_cabin\\_info.pdf](http://www.antarctica.ac.uk/living_and_working/research_ships/rrs_ernest_shackleton/es_cabin_info.pdf) and for RRS *James Clark Ross* at: [www.antarctica.ac.uk/living\\_and\\_working/research\\_ships/documents/JCR\\_cabin\\_book\\_C.pdf](http://www.antarctica.ac.uk/living_and_working/research_ships/documents/JCR_cabin_book_C.pdf)

The Master has overall authority onboard. Any of the ship's crew will be pleased to explain the operation of the ship and the routines. It is possible to visit the Bridge and Engine Room in small groups after first obtaining permission. Otherwise, you must not enter restricted areas.

BAS nominates one person from the supernumerary personnel onboard to act as 'King/Queen Fid'. This person acts as the liaison between the Master and supernumeraries. King/Queen Fid will assist with any questions you may have. Job rotas and social events are also co-ordinated through him/her. For science cruises the Principal Scientist acts as liaison with the ship staff.

Staff should expect to share cabins. You will be expected to keep your own cabin, working and living areas clean and tidy. There is a weekly inspection of the ship by the Master. The ship's crew operate a round-the-clock watch system, and at any time there will be people sleeping. Whilst social events are held, care must be taken to limit disturbance and noise levels and you should consider the impact of your actions on other people.

All ships pitch and roll. You must take care when moving about the vessel and make sure that everything is properly secured before leaving port, and that portholes are securely closed. Seasickness remedies are available from the ship's doctor. Ask whether any have side effects e.g. drowsiness in which case you may be limited in what you do while taking them. During rough weather deck areas may be placed out of bounds and restrictions must be adhered to strictly.

BAS should be advised of any special dietary requirements as early as possible. Vegetarian and special dietary food can be made available. Whilst in transit, (unless you are currently working on scientific data collection/support – see *Science Cruises*) you may be required to provide galley and general assistance, particularly if the ship is full.

Both ships have a gym and sauna for general use and carry a limited selection of books, videos and games to pass the time. If you are travelling for more than a few days, you are advised to take some leisure items with you. Binoculars are particularly useful.

Many people get dehydrated on ships; you should drink plenty of water and may wish to take a skin moisturising cream. Soft and alcoholic drinks are available from the ship's bars, which are run on a 'tick sheet' system. The ship's Bond (shop) sells toiletries and souvenirs as well as drinks and cigarettes using a chitty system. Any expenditure will be taken directly from your personal account.

You will not require money whilst on board. A cash advance can be obtained from the Master prior to arrival at a port as long as your credit or debit card details have previously been left with the Personal Accounts Manager.

Smoking on ships is restricted to certain areas. These will be described during your familiarisation briefing.

If you are travelling on a Royal Fleet Auxiliary (RFA) or other non-BAS ship, you will come under either Royal Navy or other operating regulations. These differ from those on BAS ships. You will be informed separately about the rules and requirements that will be imposed on you whilst onboard such ships.

## Science cruises

Science cruises typically last 2-6 weeks. Scientific work on ship during the cruise frequently continues 24 hours a day, 7 days a week, with personnel working 12-hour shifts. A Principal Scientist (PS) for the cruise will assume responsibility for cruise personnel. He or she will nominate watch leaders for each shift who will co-ordinate requests between the science and ship operations. Guidelines for Cruise Participants are available at: [www.antarctica.ac.uk/living\\_and\\_working/research\\_ships/documents/cruise\\_participants\\_handbook.pdf](http://www.antarctica.ac.uk/living_and_working/research_ships/documents/cruise_participants_handbook.pdf)

Science personnel must have completed an STCW 1995 Personal Survival Techniques course and are required to send a copy of the certificate to BAS before joining a science cruise. **The original certificate must be taken with you** to the ship. BAS will organise courses for its own personnel, but visiting scientists (including AFI & CGS projects) must organise and fund their own training. Safety shoes and a helmet must always be worn whilst working on deck. Additional personal protective equipment (PPE) must be worn as appropriate.

Ship's laboratories are small and usually shared by different projects. It is important for everyone to be considerate of other users and work in a tidy manner. All laboratory regulations and guidelines apply as they do in the UK. However there are extra risks in ship laboratories and the ship-specific Laboratory Code of Practice and Cruise Risk Assessments should be thoroughly read before undertaking any laboratory work onboard. The Code of Practice and the Risk Assessments for the cruise are available in the ships' laboratories.

## Ship Safety System

There is a Ship Safety Management System in place in line with BAS policies. While you are onboard you are part of this system and should report anything you think is unsafe, as well as accidents, incidents and near misses. Reporting near misses is particularly important as this helps us plan for safer operations and may prevent serious accidents in the future – 'Big or small report them all'. It cannot be over-emphasised that ships can be dangerous places and all rules and instructions from the crew must be followed. Any suggestions for improving safety onboard are welcomed and should be passed via the King/Queen Fid to the Safety Officer.

## Living in Antarctica *continued*



### Ship support work

There will be times when the ship's crew need assistance with cleaning/catering duties, cargo work, boat work, painting, maybe even carpentry and engineering. It is part of the condition of carriage on BAS ships that supernumeraries will give reasonable assistance, subject to their own work on board, their ability and competence. Training for work will be given and no-one should undertake duties which they feel they are not competent to do safely. If you feel unable to do work safely please inform the King/Queen Fid. Side benefits to assisting the ship's staff are that it helps pass the time on a long passage and engenders a positive bond with your colleagues in the marine crew.

### Living on stations

Each station has a Base Commander (BC) who is present each summer and has overall authority on the station. A Winter Base Commander (WBC) is appointed as the deputy and will act as the BC's representative during the winter.

Accommodation and work routines vary between the BAS stations. When you first arrive on station you will be given an introduction and tour of the facilities. Incoming personnel are provided with training before they are allowed to undertake field activities or use boats or vehicles. This training builds on that received at the Antarctic Pre-deployment Training Course, Derbyshire Field Course or over the preceding summer.

Technical and support staff generally work a structured five or six-day week, whereas science and operational staff may work different hours as projects or workloads require. There are times, for example when discharging cargo, when personnel may be required to work shifts to ensure efficient operations. However, it is intended that there should be adequate time in each week for personnel to undertake recreational and social activities. It is important that everyone is aware that their leisure hours may not coincide with those of personnel working on other projects. Do not get upset if others are playing whilst you are working.

Staff should expect to share accommodation on stations. At Rothera and Halley meals are normally provided by professional chefs, but at other stations all personnel take turns to cook. Vegetarian food is available on all stations. There are communal tasks to be undertaken at all BAS stations. The tasks differ from station to station, however you will be expected to take part in domestic duties on a rota basis. These tasks include washing up, dealing with waste and general cleaning (especially at the weekly 'scrubout'). You may also be required to assist in other duties such as station maintenance, cargo handling, staffing of field huts, acting as night watch and assisting with flying operations. BAS has always believed that everybody who lives on a station should take equal responsibility for its daily maintenance.

In addition, staff will probably be co-opted into some science support work at some point in their tour. This could include depot work, field flying support, boating/field work support, as well as direct science support tasks.

Each station runs its own bar facilities with a limited supply of alcoholic drinks. The particular system will be explained to you on arrival, but all operate on some variation of either the 'tick sheet' or pre-supply systems, with payment deducted from your personal account. You should not take personal supplies of alcohol onto the station. Please read and observe the Staff Notice giving BAS policy on alcohol and drugs.

Other purchases may be made by account transfer or cheque. You will not require money on station.

All stations operate a policy of no smoking within station buildings.

All ships and stations supply UK-standard 230V 50Hz AC power through standard British 3-pin sockets and are equipped with ample computers for personal or work-related use. All stations operate an energy conservation plan to reduce fuel use.



## Living in Antarctica *continued*

All your electrical equipment must be PAT tested before you use it on station. This can be done on arrival but it will save you time if you get it tested beforehand. The electrician will endeavour to get your equipment back to you as soon as possible but please don't expect an immediate turnaround. If you need to use anything straight away, get it tested before you arrive.

As on ships, there are washing machines and dryers at the stations. Washing powder is provided.

### Morale and behaviour of staff

Maintaining morale depends on all team members being considerate, friendly and productive. It is recognised that stations and ships will not always be completely harmonious. When this does happen work can suffer and grievances may lead to unpleasant confrontations and uncomfortable environments. Collectively we aim to prevent morale breaking down.

Relationships, both pre-existing or those that develop during service south, are not uncommon within our communities. Couples have a responsibility to their community to avoid indiscrete behaviour.

Staff in supervisory positions are required to exercise the highest level of integrity and confidentiality when dealing with information learnt about others during the course of their duties.

### Recreation

There are many opportunities to learn and take part in recreational activities in Antarctica, particularly for those people staying on BAS stations. However, it is important that you understand that BAS has a 24-hours-a-day duty of care towards you whilst you are living in Antarctica. This applies whether you are a member of the BAS staff, a contractor or a visitor from another research centre. Therefore, it is necessary for BAS to take the same approach to recreational activities as it does to the work programme. You will not have the same freedom to go and do whatever you like in your 'time off' as you would in the UK.

We have established sets of regulations and undertaken risk assessments for recreational activities and those wishing to take part must follow these. Most of these are common sense and are no different to the precautions that you would take in the UK. If in any doubt, you should consult your Base Commander who will ensure that you have the advice, information and safety equipment that you require.

### Living in the field

Field accommodation varies widely between small field huts or cabooses to two-person tents deep in the Antarctic. If you are to stay in the field for periods of a few days, you need undertake no extra preparations. The arrangements will be explained and training given at the controlling station. This section is primarily aimed at those personnel who will be working in the field for longer periods, and may pass through stations only en route in and out, if at all.

Operational constraints may result in you being asked to share a tent or field hut with a member of the opposite sex. However, you will not be forced into this situation against your wishes.

The majority of field activity is from tented accommodation. BAS employs a Field Assistant for each party, who has extensive mountaineering and fieldcraft experience. The Field Assistant will ensure that all living, travelling and safety equipment is suitable for its intended use and will also arrange training in field techniques for all members of the party. It is the responsibility of the field scientist or technician to ensure that all their scientific equipment is working and properly packed before moving into the field.

Food is supplied in the form of 20 person/day ration boxes. These compact rations are designed to provide around 3,500 kilocalories per person, per day. Most field parties also put together a 'goodie box' of extra food items from station stores. The station chef will give advice on what is available and suitable. Vegetarian options are available for field parties. You may also wish to bring a few small items from the UK to vary meals. Other comfort items are a matter of personal preference, but a pillow, washing up bowl, hot water bottle and extra personal clothes have all been recommended. Prior to input, the field assistant may have made some modifications to the tent, including sewing in extra hanging lines and pockets. Construction of a decent toilet shelter can make life much more pleasant. Do not be lured into the macho approach to field life; make yourself as comfortable as possible.

Input to the field is usually by Twin Otter aircraft, but may be by helicopter from an RFA or directly from a ship.

It is important to achieve an equitable split of camp duties. You should not underestimate the amount of time that will be taken up with camp duties, maintenance and kitting-up for each day's work. Moving camp will take up even more time. 30-40% of field time may be lost in 'lie-ups' due to bad weather. This will often come in chunks of days at a time, during which you may be confined to your tent. It is important that you have outline plans for a few days ahead and fallback options should time be lost. A few books and games and a personal CD/MP3 player pass the time. Remember to take sufficient batteries for all electrical appliances (including laptop computers); rechargeable batteries will require a generator or solar panels with your project.

### Fieldwork advice

- Be prepared to use any time of day to get the project completed. Don't waste good weather
- Plans can change at short notice due to weather or operational constraints. The more flexible your approach, the more you will achieve
- Your Field Assistant may rule that travel or work is unsafe at any time. The safety of personnel will take precedence over project completion
- Both radio and email communications are imperfect. Beware of misinterpreting messages or reading between the lines
- You may not get on with your tent mate all the time. Patience and tolerance are vital

### Field party communications

Due to the isolated nature of Antarctic fieldwork, communications for field parties are somewhat different to those for personnel working on ship or station.

For most field parties, communications must be passed by voice

## Living in Antarctica *continued*

over HF radio to or from the controlling station. This has two major effects on field communications.

- It is necessary to keep messages relatively short and simple. The worse the communication reception, the shorter messages need to be. On occasions, it may only be possible to pass a few words on each sched. Technical terms and foreign languages make life very difficult for radio operators and should be avoided
- All messages may be heard by anyone listening on the same frequency (i.e. everyone in the field who is waiting for their sched). It is important that your personal contacts are aware of this and realise that personal messages to field parties are not at all private. There is no confidentiality

All field parties have a satellite phone, in addition to the HF radio. This may be data enabled (for email) depending on the scientific requirements of the project. It is available for personal use (text only, no attachments). This will require arrangement on station prior to deployment into the field.

### Time differences

During the Antarctic summer, Rothera, Halley and Signy are three hours behind GMT (as are the Falklands), KEP is two hours behind, Bird Island is on GMT. Other conventions apply in winter months.

**Computing** (Supplementary material will be given at Pre-deployment Training)

Each station and ship has PCs and printers for general use. Many people take personal laptops and associated peripherals. All personal computing devices must be checked by IT staff before being connected to the BAS network. Computing support for personal laptops is secondary to BAS science and business. Little or no support will be available for operating systems other than Windows XP Professional.

The Internet will be available to any device connected to the network. The connection is very limited, much like old dial-up services, and shared by everyone on the station and ship. Efficient websites such as Gmail work acceptably, whereas YouTube does not. There is not enough bandwidth for web devices such as webcams or Skype phones.

### Communications

**Email, web access and telephone communication** (supplementary material will be given at Pre-deployment Training)

For most people, the usual form of communication is via email between the Antarctic facility and the rest of the world.

Whilst the various satellite connections provide the potential for a 24/7 service, it should be noted that weather conditions can and do affect its operation. This may mean that the service is interrupted or unavailable at times.

All ships and stations have telephones and fax machines. It is not possible to use normal mobile telephones in the Antarctic or South Georgia, but some mobile phones work in Stanley and others will work if you buy a local SIM card. The only 'mobile' satellite phones that work in Antarctica are Iridium phones.

Ships and stations receive a daily newspaper by email. This consists of about four A4 pages of news headlines and summaries.

### Airletters

We recognise that not all your contacts have access to computers and email. Therefore, there is a facility to send and receive messages by post. These may either be faxed from station or emailed to Cambridge; in either case the message will be posted on to your contact, whose address must be included at the top of the page. Your contacts should post their message (clearly marked 'Personal Message' on the envelope) to Cambridge from where it will be faxed to you.

### Post

Each station is able to receive and send normal post during the southern summer. Please note that the opportunities for doing so are infrequent and if you are going to Antarctica for a short time you may get home before the post arrives. Ships' personnel may send post when the ship is in port.

Stations use either British Antarctic Territory or South Georgia and South Sandwich Islands stamps, which are available on station. Post is taken out on the first available ship or aircraft and dispatched, normally through the Falkland Islands. Postal rates for letters, postcards and parcels are available on station.

Anyone with an interest in stamp collecting will have the opportunity to buy the wide selection of stamps and first day covers available at the stations and from the places through which you transit.

Your contacts will be sent ships' itineraries and contact addresses to enable them to send mail for personnel on board or for transfer to stations. All letters and small packages should be sent via airmail. However, the route may be tortuous and post may be delivered out of sequence. Parcels will normally be treated as surface mail and may take many weeks to arrive. If you are deploying to Halley, your post should be sent to BAS Cambridge to be forwarded under BAS arrangements.

### Family and Friends Liaison

BAS has a 24-hour responsibility for personnel in the Antarctic. Your contacts can call Human Resources at any time. Outside office hours there is always a member of Human Resources on call. Both personnel in the Antarctic and their contacts will be dealt with sympathetically and confidentially at all times.

Your contacts' details are taken from your personal details form. Please ensure that you complete all the information that is requested on this form and remember to tell Human Resources if any details change.

**Personal accounts** (supplementary material will be given at Pre-deployment Training)

There are no banking facilities on the ships or stations. Instead, Personal Accounts are provided for all personnel to cover any expenditure incurred whilst south. It is therefore important that you make sure that you have completed a Personal Account Undertaking form before leaving.

# Health and safety and medical issues



## Health and safety policies

The following is an excerpt from the BAS Health and Safety Policy statement:

*The polar regions present many health and safety hazards not normally encountered in the everyday workplace. For this reason the key to our continued safe operation and success is our highly skilled and experienced staff. The BAS senior management places the highest priority on the health and safety of staff, and as a consequence is dedicated to strong and active health and safety leadership.*

*BAS are committed to:*

- *Developing and maintaining a pragmatic, positive and open culture where health and safety are recognised by all staff to be fundamental in all we do*
- *Complying with, and where possible exceeding, all our legal obligations for health and safety, both in the UK and overseas*

As demonstrated in our policy statement the safety and health of all our staff and visitors is of utmost importance to BAS. To safeguard staff working in Antarctica, BAS uses a 'Health and Safety Management System' which puts into practice a number of proactive procedures that when used together significantly reduces the risks of working in an environment such as Antarctica.

## Controlling our key hazards

### Risk management

To minimise the health and safety risks associated with working in Antarctica, BAS requires all activities (with significant risk) to be subject to a risk assessment. These assessments can be categorised into two distinct groups.

1. **Routine Risk Assessment** covers those activities which take place on a routine basis, activities such as unloading the ship through to recreational skiing come under this heading. These risk assessments are already completed and all staff and visitors will be required to follow the safety controls identified.

2. **Project Risk Assessment** covers the none-routine activities taking place on each station. These activities are generally a single science or non-science project which has only one or two seasons to run. Each project manager is required to conduct and record a risk assessment of the specific hazards particular to their project. Complimenting risk assessments are our BAS Safety Procedures.

These are the 'how to do it safely' documents which explain in straightforward language how to implement risk controls and complete an activity professionally and safely. Generally all safety critical activities will have a BAS Safety Procedure, Method Statement or Code of Practice of some form. You must be familiar with the relevant information to your activities and therefore know how to correctly implement the required risk controls. Your Line Manager or Base Commander will ensure you are introduced to the information relevant to you through induction training.

### Hazardous substances

The Control of Substances Hazardous to Health (COSHH) regulations apply to all activities and all personnel must be aware of the dangers of the substances with which they are working and the control measures that need to be followed. All staff working in laboratories will be provided with induction training which will cover COSHH control measures relevant to your work.

### Fire

Fire presents one of the greatest hazards to the Antarctic stations. All BAS stations are predominantly built from wood and other highly combustible materials. The BAS policy on fighting fires is "the preservation of life and not to put staff at risk. To this end BAS does not expect its staff to fight a fire unless it is small enough to deal with without putting them at risk, or unless it is necessary to aid their evacuation/escape." All stations have a policy of no smoking within station buildings.

### Accident incident and near miss reporting

BAS operates an Accident, Incident, Near Miss and Environmental reporting system (AINME). The system is available through the BAS intranet and all station computers generally have a quick link on their desktop. Additionally, hard copies of the accident report are available for staff if they are not able to access or use the online form. The principles of the reporting system are to learn from events or our mistakes but importantly not to apportion blame. BAS wants to ensure we have an open culture where staff feel able to report all injuries or unsafe events.

*Note:* Environmental incidents such as fuel spills are also reported (through the AINME system) to the Environment Office.

It is everyone's responsibility to ensure that all incidents are reported, whether they occur at work or in leisure time.

# Health and safety *continued*

## Staff involvement

BAS aims to foster a safety culture that involves all personnel, allowing everyone to contribute to their health and safety. If any staff member has a safety issue they can be assured of a positive response when talking to their Line Manger, Base Commander or even the Director of BAS.

All ships and stations have SHE committees which meet regularly to discuss problems and review progress. The minutes of these committees are made public, including posting on the BAS intranet. You may make comments to, or ask questions of, any member of your local committee. Alternatively, items may be brought to the notice of the local Safety Officer (the Base Commander or the Ship's Master).

## Health and safety advice

BAS has a full time Health and Safety Adviser based at BAS Cambridge. The Safety Adviser ([smar@bas.ac.uk](mailto:smar@bas.ac.uk)) is always available to all staff to provide advice and guidance on any matters relating to health and safety.

## Training

All personnel travelling south require training in order to work safely. You **MUST** attend the appropriate Antarctic Pre-deployment Training Course and first-aid training. Job-specific training may also be required, and further training takes place on ships and stations.

Training is an ongoing process. We recognise that even people with extensive polar experience can refine their techniques through revision and refreshment. Hence, you may be required either to repeat courses at regular intervals or to undertake more advanced training.

## Medical Cover

In order to provide a high standard of medical care for personnel in the Antarctic, there are doctors and small surgeries on board both BAS ships and at Rothera, Halley and KEP. Each doctor is supported through a telemedicine link and 24-hour medical cover with the BAS Medical Unit (BASMU). Signy and Bird Island have advanced first aid support.

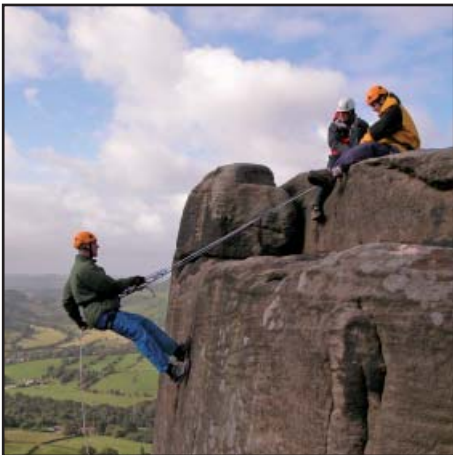
The medical service in the Antarctic is limited by the availability of staff and facilities. The doctors undergo extensive special training before deployment, but there are no specialist hospital facilities or Intensive Care Units, and only limited surgical facilities. Circumstances may arise where conditions cannot be treated on station. Evacuation will be undertaken where possible, but this will be dependent upon the time of year, weather and logistic capability.

## Personal health

Antarctica is, in general, a clean, healthy environment. However, the prevailing conditions do expose personnel to a number of hazards with which they may not be familiar. These can lead to medical problems, but are avoidable if proper precautions are taken. They include:

- Hypothermia
- Cold injury
- Sunburn and snow blindness
- Dehydration
- Carbon monoxide poisoning

Further information on all the above, and other conditions, is given in KURAFID, the BASMU first aid manual.



# Environmental protection

Most activities undertaken in Antarctica, even scientific research, will cause some environmental impact. We take all practicable steps to minimise our environmental 'footprint.' All of our activities are assessed for their potential impact before they are allowed to proceed. BAS considers that the limited and local environmental impact of our activities in the Antarctic is far outweighed by the important scientific investigations of global relevance that we undertake.

## Rats and other vertebrate pests

Rats are commonly found at King Edward Point (South Georgia) and other ports used by BAS vessels. We have implemented comprehensive control measures to ensure that we do not spread rats to rat-free areas. This is particularly important at Bird Island, where the introduction of rats would be a major ecological disaster for globally important populations of some bird species, including the wandering albatross. If you see any signs of rats or mice (e.g. droppings or gnawing of cargo boxes) on BAS stations or ships, report it immediately to the Base Commander or Master of the vessel.

## Waste management

See Waste Management Handbook ([basweb.nerc-bas.ac.uk/information/manuals/docs/waste\\_management\\_handbook.pdf](http://basweb.nerc-bas.ac.uk/information/manuals/docs/waste_management_handbook.pdf))

Everybody is responsible for minimising the quantity of waste they produce, and for the proper disposal of their own waste.

Before departing for Antarctica, remove as much packaging as possible (e.g. cardboard or plastic packaging from batteries, toiletries etc.) BAS already makes extensive use of reusable packaging materials. Where practicable, use rechargeable batteries.

Do not drop litter, including tea-bags and cigarette ends, on land or over the side of ships.

All BAS waste, except for untreated sewage or wet food waste, is removed from Antarctica. Open burning or burying of waste is prohibited. Waste is separated at source into different categories for reuse, recycling or disposal. It is reduced in volume as far as practicable, securely packed and correctly labelled for safe transport. Particular attention must be paid to the correct packaging and labelling of hazardous waste. Many types of waste, including steel and aluminium cans, paper, cardboard, some plastics, photographic chemicals, batteries, printer cartridges, empty fuel drums, and large scrap metal, are sent to the UK or Falkland Islands for re-use or recycling.

Soon after arriving on ship or station you will be given a tour of the facility and the waste management system will be explained in more detail. Details of waste disposal procedures are given in the BAS Waste Management Handbook and should be followed closely.

In addition to the proper disposal of waste, there are a number of measures that all personnel can take to minimise their own impact on the environment of Antarctica and South Georgia.

## Protect Antarctic wildlife

- Do not feed, handle or disturb birds or seals, or approach too closely for photographs. Walk slowly around them and remain quiet
- Do not use vehicles, boats, or aircraft in a way that will disturb wildlife
- Do not walk or drive over extensive areas of moss or lichen
- Do not bring non-native animals, plants or seeds to Antarctica

## Respect protected areas

- Know the location of protected areas and any restrictions on entry to them
- If you are permitted to enter a protected area, carry the permit and management plan with you, and pay particular attention to the conditions of the permit
- Do not remove, destroy or damage Historic Sites or Monuments or the artefacts within them

## Keep Antarctica pristine

- If involved in refuelling activities, follow the established procedures. Never leave refuelling unattended. Report any spills immediately to the Base Commander
- Do not pollute lakes or water courses (this includes urinating!)
- Do not paint or engrave names or graffiti on rocks or buildings
- Do not collect souvenirs of biological (e.g. plants), geological (e.g. fossils) or human origin

## Reduce energy use

BAS is committed to reducing the amount of fossil fuels it uses to power ships, aircraft, vehicles, and station electricity and heating systems. BAS has a Carbon Reduction Strategy that includes the target of reducing CO<sub>2</sub> emissions from energy use at research stations by at least 20%.

The primary fuels used on the stations are marine gas oil (diesel) and aviation fuel which are used for both heating and electricity generation. This means that the stations produce more CO<sub>2</sub> per unit of heat/electricity than the equivalent energy used in the UK. We are working hard to reduce the carbon emissions from energy generation on our stations through a combination of solar hot-water heating, new high-efficiency generators, photovoltaics and wind turbines. However, the best way to manage and reduce energy use, and the associated carbon emissions, is by staff working in harmony with these technologies and being as energy efficient as possible.

Everybody on station can assist in minimising the quantity of fuel used and the related carbon emissions produced.

- Switch off all lights, computers and other equipment when not in use
- Unplug chargers when not in use and use USB chargers linked to computers wherever possible
- Unplug laptop power packs when not in use

## Environmental protection *continued*



- Do not bring non-essential energy-using equipment to stations
- Do not overheat rooms, 19°C should be a comfortable temperature
- Use the radiators to control room temperatures; don't just open the window to cool the room down
- Check fridge and freezer temperatures for overcooling
- Only take brief showers (3-4 minutes) – don't leave taps running, only wash full loads of clothing and report any leaks you see, no matter how small

Fresh water production, hot water generation and waste water treatment are a significant use of energy on stations.

These may seem like small measures, but with everyone working together these steps can soon add up to significantly large energy, carbon and cost savings.

## Communications and media

Excellence in communication is an integral part of BAS's science strategy. Through its Science in Society programme, BAS is committed to explaining our science and operations to as wide an audience as possible. The programme includes media relations, education, public engagement and publishing. The Corporate Communications team works closely with members of staff and their collaborators to help them be effective communicators.

Recognising the crucial role that media play in shaping public attitudes to science, BAS runs a well-established media relations programme that includes visits to Antarctica. All media relations are co-ordinated through the Communications team. If journalists contact you directly please refer them to the BAS Press Office in the first instance. The Press Office will brief you and help you prepare for interviews. Your contacts are Linda Capper ([lmca@bas.ac.uk](mailto:lmca@bas.ac.uk)) and Athena Dinar ([amdi@bas.ac.uk](mailto:amdi@bas.ac.uk)).

BAS has an educational programme which is co-ordinated through the Communications team. We would encourage any support for schools or educational activities during your time with BAS and ask that you contact us with any details so we can offer our experience and support and keep an accurate record of BAS staff involvement. Contact: Audrey Stevens ([aeuv@bas.ac.uk](mailto:aeuv@bas.ac.uk)).

### Web diaries, blogs and social networking websites

The availability of 24-hour internet access has given Antarctic staff the opportunity to keep in touch with families and friends and to reach out to the global cyber-community. Whilst this is a great way to communicate what BAS does through the personal experiences of our staff there can be pitfalls for 'authors'. Please seek advice from your Base Commander or the Press Office.

### Sponsorship and endorsement

It is important to be aware that sponsorship and product endorsement is a potentially sensitive area. There are government guidelines that must be strictly followed. Sponsorship comes in many forms – from the support of media or educational campaigns (either financial or 'in kind') to practical help from partnerships. For example, companies often offer free supplies or equipment in exchange for publicity. Suppliers of goods or equipment purchased by BAS often seek to publicise their products in the trade press. The Press Office must approve all text written by these companies to ensure propriety and avoid direct endorsement of products. Individual members of staff must not seek sponsorship, product endorsement or offer public relations opportunities without first consulting their Line Manager and the BAS Press Office.



**Images:** Top: Solar panels on Bransfield House at Rothera Research Station, Antarctica.  
Bottom: A BBC News crew interview BAS staff at Rothera Research Station.

## Human Resources policies

BAS and NERC have a series of policies that apply to the conduct of its staff. Whilst they are aimed directly at NERC employees, they may also be taken to apply in spirit to contractors and visitors. Any person in serious breach of regulations will be removed from the Antarctic at the first opportunity, regardless of their affiliation, and the particulars handed on to their own employers for consideration.

These policies are detailed in NERC Policy Notices on the NERC Intranet and are available on all ships and stations or from Human Resources in Cambridge. Before leaving, you should make sure you familiarise yourself with policies on:

- Alcohol and drugs
- Disciplinary procedures
- Grievance procedures
- Dignity at work

Base Commanders and Masters are sworn in as magistrates for the British Antarctic Territory (BAT). They also have ultimate responsibility and authority for all activities within their facility and associated areas. All personnel should be aware that whilst they are territorially outside the UK, UK law applies unless a specific alternative BAT statute is in force. Personnel may be prosecuted for any breach of the law as if they were in the UK and either extradited or referred to a higher court for trial.

## Final considerations

This handbook contains a great deal of information, and you cannot be expected to absorb it all immediately. Please carry it with you when you go south as a source of reference. Do not leave it at home.

At the back of this handbook is a checklist of the most important things that you should remember before you leave home. If you can tick all the items in the checklist, then you will get your tour off to a successful start.

A visit to the Antarctic is a great opportunity to experience a unique environment, try new activities and make new friendships that will last a lifetime. BAS and its staff in the Antarctic and the UK will do everything they can to ensure that you achieve your professional and personal objectives whilst in the frozen continent.

Please make the most of your time in Antarctica. You are very lucky to be joining the small number of people who visit the continent each year. Approach everything with a positive, optimistic and cheerful attitude and you will have an experience to remember!

## Further information

The BAS public website offers a wide range of information on BAS activities and science – regular diaries from stations and ships are particularly popular. BAS staff both at Cambridge and on ships and stations have access to the internal intranet, which holds much practical guidance and links to the websites of BAS groups, services and resources.

**Public site:** [www.antarctica.ac.uk](http://www.antarctica.ac.uk)

**Intranet:** <http://basweb.nerc-bas.ac.uk>

Details of BAS science can be found in the publication 'Polar Science for Planet Earth' and BAS Annual Reports. The BAS Business Plan sets out the annual objectives and funding allocations. Copies of these publications are available on all ships and stations and on the BAS website and intranet.

**BAS online Publications:** [www.antarctica.ac.uk/about\\_bas/publications](http://www.antarctica.ac.uk/about_bas/publications)

The BAS Library provides access to the resources of the NERC Library Service and can provide access to online journals and web services. The BAS Library is a scientific library but also holds public interest items. Holdings are at Cambridge and on the ships and bases. Library staff are also responsible for records management at BAS. Enquiries can be sent to: [baslib@bas.ac.uk](mailto:baslib@bas.ac.uk)

The BAS Archive Service manages scientific, logistical and administrative records of all aspects of BAS's activities from the 1940s to the present day. These can be invaluable in helping staff prepare for fieldwork by finding out what has been done in the past and can also provide recreational material. The archives database is available online via the BAS intranet from stations and ships. Enquiries can be sent to: [basarchives@bas.ac.uk](mailto:basarchives@bas.ac.uk)

**Archives online database:** <http://basweb.nerc-bas.ac.uk/departments/archives/onlinedb.html>

The Polar Data Centre provides data management support for NERC funded polar scientists, this includes data and information services for operational support, science delivery and long term data management. It reports to Nick Owen and received its mandate for its work through the BAS Science Board. BAS holds collections of rocks, fossils, zoological specimens and a herbarium. Enquiries can be sent to: [polardatacentre@bas.ac.uk](mailto:polardatacentre@bas.ac.uk)

**Data and Collections:** [www.antarctica.ac.uk/bas\\_research/data](http://www.antarctica.ac.uk/bas_research/data)

The Mapping and Geographic Information Centre (MAGIC) provides maps and other geographic information to workers at BAS, a map catalogue is available online. MAGIC also hosts the Antarctic Place-names Secretary (of the Antarctic Place-Names Committee – APC); who maintains a gazetteer and place-names maps for all UK approved names within the British Antarctic Territory (BAT).

**MAGIC:** [www.antarctica.ac.uk/about\\_bas/our\\_organisation/eid/magic.php](http://www.antarctica.ac.uk/about_bas/our_organisation/eid/magic.php)

**APC:** [www.antarctica.ac.uk/about\\_antarctica/geopolitical/antarctic\\_place\\_names](http://www.antarctica.ac.uk/about_antarctica/geopolitical/antarctic_place_names)

The Information, Communications and Technology group provides the computing and communications infrastructure for BAS, their wiki site provides essential information for new starters.

**ICT wiki:** <http://basweb/its>

# Checklist

1. Have you delivered any cargo for shipping to Cambridge in time for packing dates?
2. Are your financial and administrative affairs in the UK properly arranged?
3. Have you been fitted for your BAS-issue clothing?
4. Have you completed medical and dental checks?
5. Have you had the necessary immunisations, and do you have the vaccination certificates?
6. Have you obtained any permits needed for your work?
7. Does your family understand the communications system?
8. Do you have your contacts' email addresses?
9. Do you have receipts for goods to be re-imported?
10. Do you have your passport (in date to six months after end of tour) and any visas you may need?
11. Do you have your tickets or flight details letter?
12. Have you confirmed flight details with OPAL?
13. Have you arranged travel to the airport?
14. Do you have sufficient money for use en route?
15. Do you have an overnight bag packed as hand luggage?

# Glossary

<b>AEP</b>	Antarctic Employment Pool	<b>IAATO</b>	International Association of Antarctic Tour Operators
<b>AFI</b>	Antarctic Funding Initiative	<b>ICT</b>	Information and Communications Technology Section
<b>AINME</b>	Accident, Incident, Near Miss and Environmental (Reporting System)	<b>IGBP</b>	International Geosphere-Biosphere Programme
<b>AME</b>	Antarctic and Marine Engineering Section	<b>IGY</b>	International Geophysical Year
<b>AST</b>	Airborne and Survey Technology Section	<b>IIP</b>	Investors in People
<b>AWI</b>	Alfred Wegener Institut	<b>INMARSAT</b>	a satellite communications system
<b>AWS</b>	Automatic Weather Stations	<b>IPY</b>	International Polar Year
<b>BASCam</b>	BAS Cambridge	<b>ISM</b>	International Safety Management
<b>BASMU</b>	BAS Medical Unit	<b>JCR</b>	RRS <i>James Clark Ross</i>
<b>BASnet</b>	BAS Corporate Communications Network	<b>KEP</b>	King Edward Point (South Georgia)
<b>BAT</b>	British Antarctic Territory	<b>King Fid</b>	the BAS liaison representative onboard ship
<b>BC</b>	Base Commander	<b>Klatch</b>	(personal) belongings
<b>Bergy Bit</b>	Floating ice between 1m and 5m above sea level	<b>LHR</b>	London Heathrow Airport
<b>BGS</b>	British Geological Survey	<b>LMIC</b>	Line Management in Confidence
<b>BI</b>	Bird Island	<b>MAGIC</b>	Mapping and Geographic Information Centre
<b>Bondu</b>	shelf ice	<b>Mank, Manky</b>	wet and dark weather
<b>Brash</b>	strips of broken sea ice	<b>MOD</b>	Ministry of Defence
<b>Brize</b>	RAF Brize Norton	<b>MOMU</b>	Meteorological and Ozone Monitoring Unit
<b>BSS</b>	Buildings Services Section	<b>MOU</b>	Memorandum of Understanding
<b>BZ</b>	RAF Brize Norton	<b>MPA</b>	Mount Pleasant Airport, Falkland Islands
<b>CASLAB</b>	Clean Air Sector Laboratory	<b>NERC</b>	Natural Environment Research Council
<b>Cat</b>	sno-cat, snow tractor	<b>NOC</b>	National Oceanography Centre
<b>CCAMLR</b>	Commission for the Conservation of Antarctic Marine Living Resources	<b>NOK</b>	next of kin
<b>CEH</b>	Centre for Ecology and Hydrology	<b>North</b>	home country, normally UK
<b>CGS</b>	Collaborative Gearing Scheme	<b>NSF</b>	National Science Foundation
<b>Comms</b>	Communications	<b>OEA</b>	Open Ended Appointment
<b>COMNAP</b>	Council of Managers of National Antarctic Programmes	<b>OPAL</b>	Operations and Logistics
<b>COSHH</b>	Control of Substances Hazardous to Health	<b>Pack</b>	sea ice
<b>D7</b>	Dash-7 aircraft	<b>Pax</b>	Passenger(s)
<b>Dingle</b>	good weather; blue skies	<b>PI</b>	Principal Investigator
<b>DO</b>	Diving Officer	<b>PL</b>	Project Leader
<b>Doo</b>	skidoo, snow bike	<b>PNR</b>	Point of no return (aircraft)
<b>DROMLAN</b>	Dronning Maud Land Air Network	<b>PPE</b>	Personal Protective Equipment
<b>Drum line</b>	a marked route on the ice shelf	<b>PSPE</b>	Polar Science for Planet Earth
<b>ERMS</b>	Electronic Record Management System	<b>R</b>	Rothera
<b>ES</b>	RRS <i>Ernest Shackleton</i>	<b>RA</b>	Risk Assessment
<b>FCO</b>	Foreign and Commonwealth Office	<b>Relief</b>	resupply of a station
<b>FI</b>	Falkland Islands	<b>RFA</b>	Royal Fleet Auxiliary (ship)
<b>Fid</b>	a BAS employee down south	<b>SCAR</b>	Scientific Committee on Antarctic Research
<b>FIDS</b>	Falkland Islands Dependencies Survey	<b>Sched</b>	a programmed radio contact, fax or email transfer
<b>FIG</b>	Falkland Islands Government	<b>SISB</b>	Science and Innovation Strategy Board
<b>Floes</b>	stretches of thick sea ice	<b>Smoko</b>	tea break
<b>FOM</b>	Field Operations Manager	<b>South</b>	the Antarctic
<b>FOWG</b>	Field Operations Working Group	<b>SPA</b>	Specially Protected Area
<b>FTA</b>	Fixed Term Appointments	<b>SPRI</b>	Scott Polar Research Institute
<b>Gash</b>	waste/cleaning duties	<b>SSM</b>	Station Support Manager
<b>GIS</b>	Geographic Information Systems	<b>SSSI</b>	Site of Special Scientific Interest
<b>Growlers</b>	mostly sub-surface ice less than 1m above water	<b>T&amp;S</b>	Travel and Subsistence
<b>GSGSSI</b>	Government of South Georgia and the South Sandwich Islands	<b>TOR</b>	Terms of Reference
<b>H</b>	Signy	<b>UEA</b>	University of East Anglia
<b>H&amp;S</b>	Health & Safety	<b>UKAHT</b>	United Kingdom Antarctic Heritage Trust
<b>Hinge</b>	point at which the Continental Ice floats to become shelf ice	<b>WBC</b>	Winter Base Commander
		<b>WMO</b>	World Meteorological Organisation
		<b>X</b>	Stanley
		<b>Z</b>	Halley. Can also used in time as reference to GMT

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#### **Head of Operations and Logistics**

British Antarctic Survey  
High Cross, Madingley Road  
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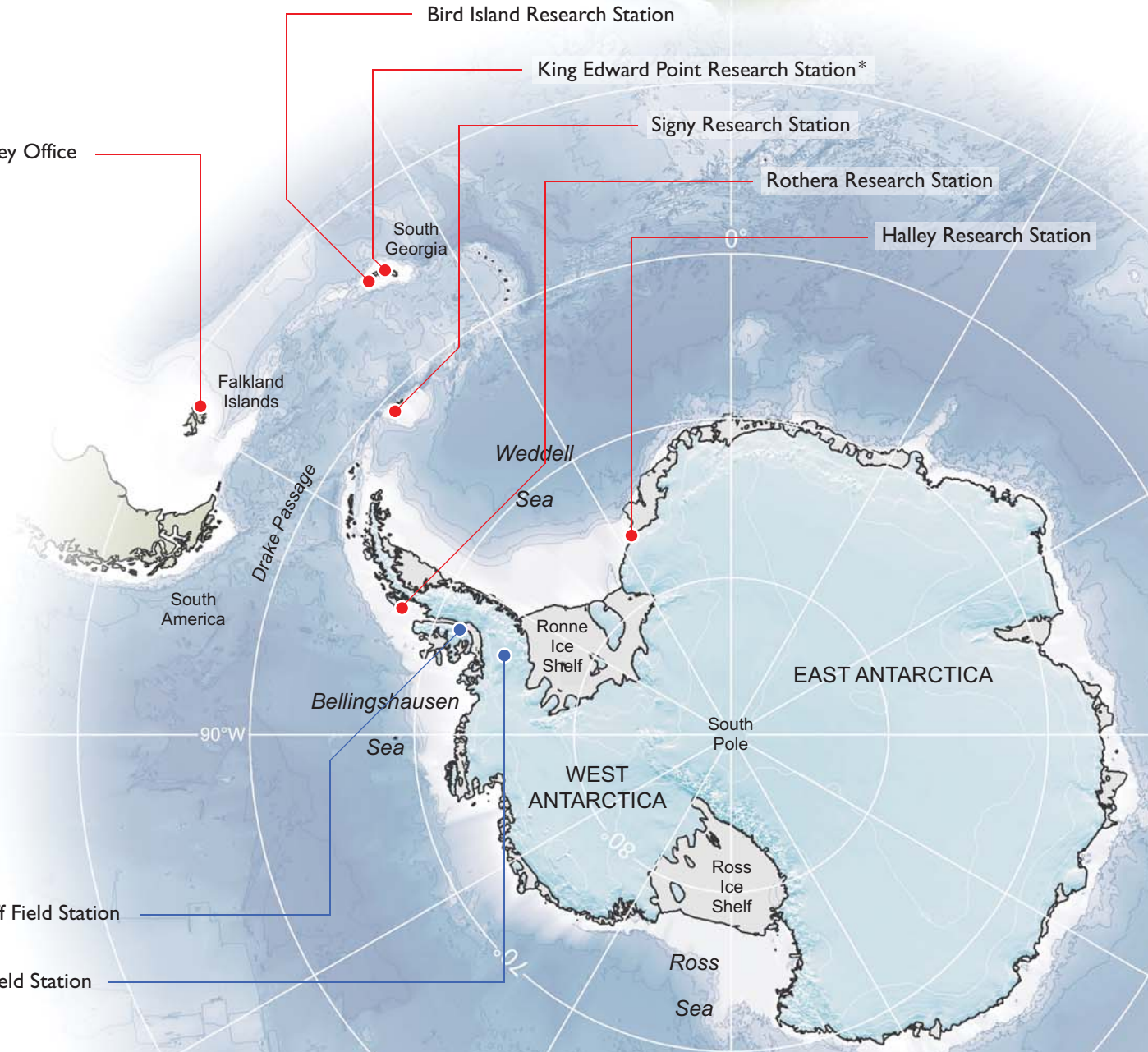
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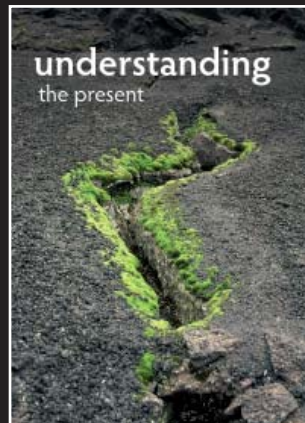
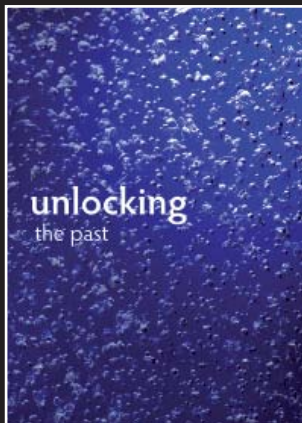
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