

Expedition Antarctica



Expedition



RAF briefing

- Temperatures down to -89°C at its coldest. The expedition will take place in the summer so the average temperature will be -25°C .
- Expedition is 4 weeks or 30 days and will cover 2500 miles.
- Not allowed to bring any animals that may endanger the natural wild life.
- The Antarctic is very remote, which means there is limited access to resources such as radio towers or WI-FI.
- It might sound obvious but there are no shops so you must be able to carry everything you will need for the expedition.
- The Antarctic is a desert, the snow is not wet so waterproofing is of little importance.
- The Antarctic looks the same wherever you are, and has few natural features to help with navigation - tracking systems are of the utmost importance.
- The Antarctic is an ever-changing environment, the snow moves every year.
- Food (and its variety) is important for morale as well as for energy.

**ROYAL
AIR FORCE**

Team requirements

TRANSPORT:

1. Be able to cover 2500 miles of rough icy terrain.
2. Space for 6 People and 200kg of supplies and equipment per person.
3. Can travel at speed between 15 – 30 mph.
4. Work in -28°c .

COMMUNICATIONS:

1. Work in -28°c and the hazardous conditions of the Antarctic.
2. Low power consumption and re-chargeable battery.
3. Small enough to be carried easily, must be light-weight.

SHELTER:

1. Must be able to protect crew from high winds and extreme cold.
2. Needs to take a maximum of 1 hour to set up and the same to pack down each day.
3. Must be easily transportable and weigh a maximum of 30kg.
4. Should have enough room for 6 people plus equipment.



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Team requirements

CLOTHING:

- Must keep the crew member warm in -28°C and be breathable.
- Should be hard-wearing and protect the crew member from high winds.
- Must be easy to move around in, allowing the crew member to undertake both physical and intricate tasks.

MAPS:

1. Needs to be accurate, as getting lost in the Antarctic can lead to real danger as the continent is 14,000,000 square miles.
2. Tracking systems are of great importance; even if you move away from your chosen route you will still need to know your exact location.
3. Reliability is key - if your navigation equipment goes wrong you will have little hope of finding your way.
4. Must work in at least -28°C conditions.
5. The navigation equipment should be quick to set up and easy to use.

FOOD:

1. Must be able to carry food for 4 weeks plus extra in case of emergencies.
2. Must provide 6000 calories per day, which is approximately 3 x the normal recommended amount for an adult (these are 2000 calories for women and 2500 for men). During expeditions calories are often vitally provided by drinks.
3. Must weigh a maximum of 25kg per person - that's 150kg in total.
4. Needs to be quick and easy to prepare.