



Australian Government

Department of Climate Change, Energy, the Environment and Water
Australian Antarctic Division



AUSTRALIAN
ANTARCTIC
PROGRAM

Expeditioner Band 2.5 (APS 6) – Electronics Engineer

Classification	Expeditioner Band 2.5 (APS 6) - \$105,861 pa
Total Remuneration	\$178,797 pa (When in Antarctica/sub Antarctic, inclusive of Antarctic Allowances)
Division	Australian Antarctic Division
Branch	Science
Section	Antarctic Climate
Location	Kingston, Tasmania and Antarctic/sub-Antarctic deployment
Employment Status	Non-Ongoing (temporary)
Hours	Full-time (37.5 hours per week)
Security Clearance	Not Required

WHO WE ARE – Australian Antarctic Division (AAD)

The AAD is part of the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW). As primary agency for Australia's Antarctic Program (AAP), the AAD is responsible for achieving the Australian Government's Antarctic goals to:

- maintain the Antarctic Treaty System and enhance Australia's influence within it
- protect the Antarctic environment
- understand the role of Antarctica in the global climate system
- undertake scientific work of practical, economic and national significance.

THE JOB

As an Electronics Engineer you will install, commission, maintain, calibrate and modify electronic instruments and systems for the collection, reduction and analysis of data. You will have good hardware and software skills. You will be technically resourceful and be able to operate with minimal supervision. You will also produce regular, comprehensive reports on the status of observatory equipment.

The role is largely supportive in that you will apply professional engineering knowledge and skills to the investigation and monitoring aspects of the research program. It principally supports the atmospheric and glaciological science activities of the Antarctic Climate Program but also assists the activities of the broader science program at Davis. The role will involve working closely with scientists at the station and in Australia.

A training period of approximately two months precedes your deployment to Davis station. You may also be required to assist with replacement orders from the station, preparation of technical equipment and documentation in support of research projects and general duties (including packing of equipment, inventory maintenance and general clerical assistance). During your training at

Kingston, you will attend courses specific to your duties in Antarctica. Training commitments are such that you must be available to start on the advertised commencement date and will be expected to take only one week of pre-departure leave before travelling to Antarctica. The period away from Australia will generally be around 12-15 months depending upon transport schedules and work programs. This spans the winter period, where you will be the sole electronics engineer, and the 'summer' seasons before and after, used for on-site training, maintenance activities and handover of expertise.

On returning to Australia, you will participate in a comprehensive debrief at the AAD lasting approximately one week.

The Electronics Engineer is a winter job only at Davis station.

Listed below is some of the equipment that is operated at and around Davis station. Specific and transferrable skills are valued:

- Atmospheric radars operating at various frequencies (MFSA 2MHz middle atmosphere wind radar; MST 55MHz wind profiling radar; 33MHz meteor detection and wind profiling radar)
- Optical instruments for temperature and wave measurements (Scanning OH Spectrometer; Fourier Transform Spectrometer)
- Space weather monitors (Digital Ionosonde; Imaging Riometer)
- Cloud, precipitation and aerosol monitors
- Tide Gauge

You should apply for this role if you have the appropriate knowledge, skills and experience and an interest in the challenge of living and working in a small community in a remote environment. Applicants will be assessed and if successful placed in a role for training and deployment, or a merit pool that will be used for future seasons.

Key duties will include, but are not limited to:

As an Electronics Engineer you will be required to undertake some or all of the following:

- Install, commission, maintain, calibrate and modify electronic instruments and systems for the collection, reduction and analysis of data.
- Maintain accurate records relating to the maintenance and operation of technical equipment.

WHAT WE ARE LOOKING FOR - ESSENTIAL

Required Identification/Qualification/License/Ticket	When you need to provide evidence	
	Provide copy with application	obtained prior to job commencement
Engineering Degree - An Engineering degree majoring in electronics from an Australian University, or qualification of equivalent standard from an Australian or overseas university that is consistent with eligibility for graduate membership to the Institution of Engineers Australia.	✓	
Driver's Licence – A current, unrestricted "C" class (manual) Australian driver's licence.	✓	

Citizenship - In accordance with the PS Act 1999, APS employees are required to be Australian citizens. Persons who are not Australian citizens will generally only be considered where there are no suitable Australian applicants, with next considerations being Australian residents with work rights and New Zealand citizens.	✓	
Valid Passport - The expiry date of the passport (and any relevant visa) must be at least 6 months beyond the planned end date of your intended stay in the Antarctic or sub-Antarctic		✓
Provide First Aid (HLTAID011) must be valid for at least 18 months beyond the date of AAD commencement.		✓
Provide basic emergency life support (HLTAID010) must be valid for at least 18 months beyond the date of AAD commencement.		✓
Provide CPR (HLTAID009) must be valid for at least 6 months beyond the date of AAD commencement		✓

Knowledge and experience:

- Detailed design, implementation and testing of analogue and digital electronic circuits and systems (including microcontroller-based systems).
- Ability to be resourceful and innovative in technical aspects of the work including the ability to fault find and calibrate modern electronic instrumentation. Have the ability to repair electronic equipment at a component level (demonstrated experience of such when operating with limited resources is desirable).

WHAT WE ARE LOOKING FOR – DESIRABLE

These are not essential to the role, however, to be suitable you will need to have at least some of these. We encourage you to apply even if you do not fit 100% of the requirements.

Knowledge and experience:

Recent relevant experience (within the last 5 years):

- Have a demonstrated commitment to producing and maintaining high quality technical documentation including a demonstrated understanding of, and commitment to the use of formal documentation management systems.
- Have a demonstrated ability to manage time and other resources while working with limited supervision and the ability to provide timely, accurate and complete reports.
- Have recent knowledge of, and experience in, the use of computers in technical applications. This should include the use of languages such as "C++" and "Python", experience with formal software development tools and experience in using and administering modern Linux and Windows operating environments.
- Possess skills of particular relevance to the range of equipment listed.

ELIGIBILITY AND OTHER REQUIREMENTS

Personal Qualities:

During the recruitment selection process, the AAD assesses individual personal qualities required to successfully live and work in an isolated Antarctic/sub-Antarctic community. Successful candidates need to demonstrate the personal qualities detailed [here](#).

Pre-employment check:

Your suitability for employment will be assessed through pre-employment screening including National Police Check, referee checks, pre-employment medical assessment, specified mandatory qualification(s) validation and completion of required probation period.

Work Health and Safety Obligations:

All employees have a duty to take reasonable care of their own health and safety while at work, to ensure their acts or omissions do not adversely affect the health and safety of other persons in line with any reasonable instruction given to comply with the Work Health and Safety legislation.

HOW TO APPLY

Information about how to apply can be found [here](#), including further information about AAD jobs.