



**Australian Government**

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

## Expeditioner Band 2.5 (APS 6) – Electronics Engineer

<b>Classification</b>	Expeditioner Band 2.5 (APS 6) - \$94,838 pa
<b>Total Remuneration</b>	\$160,179 pa (when in Antarctica/sub-Antarctic, inclusive of Antarctic Allowances)
<b>Division</b>	Australian Antarctic Division
<b>Branch</b>	Science
<b>Section</b>	Antarctic Climate
<b>Location</b>	Based in Kingston, Tasmania. Antarctic and sub-Antarctic
<b>Employment Status</b>	Non-Ongoing (temporary)
<b>Hours</b>	Full Time
<b>Security Clearance</b>	Not Required

### **Commitment to Inclusion**

AAD values diversity, in backgrounds and experience. We acknowledge the challenges associated with the work that we do and are committed to developing an inclusive culture for all people. We welcome everyone to apply, especially those individuals who are underrepresented in the industry: women and gender diverse people, LGBTQIA+ folks, culturally and linguistically diverse people and Aboriginal and/or Torres Strait Islander peoples.

### **Overview**

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

### **The Job**

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.
- The AAD is committed to providing a safe place of work, safe systems of work and a culture in which care for one another's safety and wellbeing is central to the way we do things. Having stated this, you are going to an extreme workplace. The consequences of you failing to understand your responsibilities can be catastrophic. It is therefore incumbent on all expeditioners to understand and implement the AADs Work Health Safety Commitment Statement and the AAD Safety Behaviours Framework.

As a proactive and positive member of the community you will:

- Maintain a personal and practical commitment to AAD policies and standard operating procedures (including work, health and safety and environmental policies). Training and guidance in regard to all responsibilities relevant to your position will be provided.
- Be rostered to perform duties to support the community life of the expedition, such as general kitchen duties, garbage clearance, general cleaning duties, and assisting other expedition members with official programs, to ensure an equitable contribution.
- Work in areas outside of your primary role, for example, providing assistance to other areas or science projects, or participating in general labouring tasks such as clearing snow or handling cargo.

### **What we are looking for**

## **Essential**

You can only be selected for this role if you have these essential skills and licences.:

### **Qualifications/licences** (provide copies in your application):

- 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.
- A current, unrestricted "C" class (manual) Australian driver's licence.
- Valid passport when travelling to the Antarctic or sub-antarctic. 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
- A current statement of attainment in the following units of first aid, or the ability to attain prior to commencement:
  - Provide First Aid (HLTAID0011) 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

### **Recent relevant 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).

## **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.

### **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.

Applications are assessed on the basis of skills you can demonstrate that relate to the criteria listed. Answers containing examples from your work history that demonstrate your knowledge, skills, attributes and extent of your role in relation to each criterion are required. Separate

documents can be uploaded to assist this process. Assessments against these criteria will be used to determine further progress through the job selection process.

**Personal Qualities** - The Australian Antarctic Division assesses the personal qualities required to successfully live and work in an isolated Antarctic or sub Antarctic community. Successful candidates need to demonstrate the personal qualities criteria detailed [here](#). This will be assessed during the selection process.

## **Eligibility and other requirements**

**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

**Security Clearance** - This position does not require a security clearance.

**Pre-employment Check** - Your suitability for employment will be assessed through a pre-employment screening process. This process includes a requirement to undergo and satisfy a National Police Check, referee checks, character clearance and a pre-employment medical and psychological adaptability assessment, specified mandatory qualification(s) validation and a probation period.

If required, this may include comprehensive drug screening for compliance to undertake Safety Sensitive Aviation Activities (SSAA).

## **Requirement to be vaccinated under public health orders**

It may be a condition of your employment that:

1. if you are required to be vaccinated against COVID-19 under an applicable Australian law; or
2. if the department is unable under an applicable Australian law to permit you to attend for work (ie outside of your usual place of residence) unless you are vaccinated against COVID-19,

You must be up to date with your COVID-19 vaccinations, and you must also comply with all recommendations from public health authorities regarding any additional vaccinations that ensure the effectiveness of the COVID-19 vaccine that you have received.

## **How to Apply**

***The [Application Process](#) and the [Life as an Expeditioner](#) pages contain critical information about living and working in Antarctica, and must be read in conjunction with this job description prior to applying.***

Apply for this role by submitting your application through our [Jobs in Antarctica](#) website. If you have any questions regarding this role, email the contact officer.

Your email is our primary method of contacting you; please make sure that the email and phone number you provide us is correct, current and accessible. **We recommend applicants to not use their work email on their application for accessibility.**

### **Work Health and Safety Obligations**

All workers (APS1-Secretary) have a duty to take reasonable care for their own health and safety whilst at work, to ensure their acts or omissions do not adversely affect the health and safety of other persons and to comply with any reasonable instruction given to comply with the Work Health and Safety legislation.

All supervisors and managers (APS5-EL1) play a significant role by modelling safe work behaviours and clearly setting the standard for acceptable behaviour in the workplace. Supervisors and managers play a critical role in supporting 'Officers' to exercise due diligence and in consulting with duty holders.

An Officer (EL2-Secretary) makes and participates in making decisions that affect the whole or a substantial part of the department. Employees at the SES Band 2 and above classification are considered to be Officers under the Work Health and Safety Act 2011 (Cth) with all EL 2 and above required to complete officer due diligence training. Officers have a duty to be proactive and continuously ensure that the department complies with relevant duties and obligations.

### **Contact**

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