



## OVERVIEW OF THE ROLE

As an Expedition Mechanic you will maintain and operate a range of mechanical plant and equipment. You will also maintain and operate the station power generation facilities (mechanical side). You will support station and field operations as required.

Expedition Mechanics work in either summer or winter jobs. Shorter winter opportunities may also arise. Expedition Mechanics are only employed at Casey, Davis and Mawson stations.

A Senior Expedition Mechanic (Macquarie Island) and a Wilkins Aerodrome Diesel Mechanic will be selected from suitable Expedition Mechanic and/or Station Mechanical Supervisor applicants. Overland Traverse Mechanics will be selected from suitable Expedition Mechanic applicants.

## WHAT YOU WILL DO ON THE JOB

As an Expedition Mechanic you will be required to undertake some or all of the following:

- Operate and maintain (mechanical component) station power generation facilities;
- Maintain a wide range of mechanical plant and equipment including portable generators/pumps, 4x4 and specialised over snow vehicles, earth moving machinery, trailers etc.;
- Operate plant and equipment as required (loaders, forklifts, tractors etc.);
- Provide mechanical support to various user groups as required;
- Maintain fuel, lubricant and gas cylinder storage, spare parts and material storage; and
- Support station operations and field operations and assist science programs as required.

The Expedition Mechanic reports directly to the Station Mechanical Supervisor.

### Senior Expedition Mechanic (Macquarie Island)

The Senior Expedition Mechanic is the only mechanic at Macquarie Island and in addition to the mechanical duties above, is required to undertake some of the duties undertaken by the Station Mechanical Supervisor at other stations.

The Senior Expedition Mechanic reports directly to the Station Leader during the summer period.

### Wilkins Aerodrome Diesel Mechanic

In addition to mechanical duties above, the incumbent will be required to undertake other duties relating to Aviation Ground Support including but not limited to baggage handling, emergency response, passenger liaison and transfer

and cargo unloading/loading. These additional roles require interface with jet aircraft and all required training for this will be delivered prior to deployment.

The Wilkins Aerodrome Diesel Mechanic also contributes to daily camp duties which may include (but are not limited to) fresh water replenishment, grey water disposal, cleaning of ablutions, kitchen and other areas, as well as assistance to the Aerodrome Camp Support Officer at Wilkins with food preparation and stock replenishment.

The Aerodrome Mechanic reports directly to the Wilkins Aerodrome Manager during the summer period, with technical support in Antarctica given by the Senior Mechanical Supervisor (SMS) at Casey Station.

### **Overland Traverse Mechanics**

Traverse Mechanics provide mechanical support to a fleet of tractors towing sleds transporting infrastructure, cargo and fuel on an overland traverse route prepared by snow groomers.

Traverse mechanics will be required to undertake field mechanical repairs as well as other duties relating to the traverse including but not limited to connecting traverse trains, daily traverse start up and shut down procedures, emergency response, transfer and cargo unloading/loading and supporting the establishment of the mobile inland station. The traverse mechanic will also contribute to daily traverse activities including (but not limited to) cleaning and food preparation.

Traverse Mechanics report directly to the Traverse Leader while on traverse, with technical support in Antarctica provided by the Station Mechanical Supervisor (SMS) at Casey station.

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.
- 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.
- 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.

The [General Information for Applicants](#) document contains critical information about living and working in Antarctica, and must be read in conjunction with this job description prior to applying.

# Expedition Mechanic- Technical Criteria

These technical criteria are used to assess your application for Expedition Mechanic.

## 1. Essential

To apply for this role you must have the skills and licences listed below:

1. **Qualifications/licences** (provide copies in your application):
  - A suitable mechanical trade, certificate III MEM or AUR qualification or recognised equivalent such as motor mechanic, diesel mechanic, plant mechanic, fitter and turner, or auto electrician.
  - A current, unrestricted "C" class (manual) Australian driver's licence.
2. **Recent hands-on experience** (within the last 5 years):
  - Diesel engine maintenance, diagnostics, repair, and overhaul (such as Caterpillar, Cummins, electronic and non-electronic).
  - Maintenance and repair of heavy plant, including tracked, wheeled and stationary equipment (such as Cat loaders, tractors and excavators, Grove cranes, Komatsu crushers).

## 2. Desirable

These are not essential to the role. To be suitable you do not need any of these, but they may make you more competitive against other applicants.

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

- Dogging (DG) licence

**Recent hands-on experience** (within the last 5 years):

- Petrol engine maintenance, repair and overhaul.
- Maintenance and repair of medium vehicles and plant, including over-snow vehicles, trucks and forklifts.
- Maintenance and repair of light vehicles, including Toyota 4x4 vehicles and Honda all-terrain vehicles.
- Maintenance and repair of small plant, including pumps, generator sets, heaters, ice drills and outboard motors.
- Servicing and maintenance of single and three phase power generation equipment.
- Hydraulic systems.
- Automotive electrics.
- Workshop practices, including an understanding of current work health and safety policies.
- Maintenance of stock inventories including stocktaking, reordering spares and consumables.
- Fitting and machining
- Welding and metal fabrication
- Preparation of monthly and annual reports



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### 3. Additional

Should your application be successful, it is useful to have some understanding of any additional licences you have.

- Current Heavy Rigid (HR) driver's licence valid in Australia
- Confined space
- Dozer
- Elevated Work Platform
- Excavator
- Loader
- Operation of a crane
- Rigging
- Skidder
- Skid steer loader (Bobcat)
- Telescopic materials handler
- Working Safely at Heights



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# Personal Qualities Criteria

The Australian Antarctic Division assesses individual personal qualities in terms of the attributes required to successfully live and work in an isolated Antarctic or subantarctic community. Successful candidates will meet the personal qualities criteria detailed below. Personal qualities are assessed at a later stage in the assessment process.

## 1. Demonstrate a strong work ethic

Evidenced by a proven history of efficient, effective, responsive and productive work performance.

Applicants for supervisory positions will be expected to demonstrate supervisory capabilities, including a good knowledge of workplace diversity, workplace relations, work, health and safety and environmental management practices and principles.

## 2. Demonstrate that they can make a positive contribution to community and team

Evidenced by:

- demonstrating the capacity to cope with physical and emotional isolation and the resilience to overcome hardship;
- demonstrating the capacity to work productively, contribute to the success of small isolated work groups and the overall community including recognising the effect their behaviour has on others;
- demonstrating a capacity to address and resolve issues of conflict;
- demonstrating the capacity to exercise sound judgement;
- demonstrating flexibility, tolerance and acceptance of changing circumstances;
- demonstrating qualities of robustness, motivation and confidence whilst displaying sensitivity, situational awareness and support and respect to fellow workers;
- demonstrating good social skills and taking pride in their appearance and maintaining socially accepted standards of hygiene;
- responsible use of alcohol; and
- not exhibiting behaviour that could endanger others' safety or be seen as being abusive, threatening or offensive to others.

## 3. Demonstrate that they can respond to authority and are compliant with the law, legislative requirements and AAD policies and procedures

Evidenced by:

- a history of complying with authority and supporting lawful instructions;
- demonstrating a commitment to and compliance with appropriate environmental management policies and practices;
- demonstrating a knowledge and history of compliance with work health and safety practices and principles; and
- recognition of harassment and discrimination issues and demonstrated compliance with associated legislative requirements.

## 4. Demonstrate a commitment to AAP specific requirements

Evidenced by:

- demonstrating commitment to supporting the Australian Antarctic Science Program;
- demonstrating willingness to participate in "common duties" and activities in support of the community generally; and

- demonstrating commitment to fully participate in all required training and associated activities.

## Other Criteria

If you progress through the technical criteria and personal qualities stage of the process, the next stage will require you to undergo medical, psychological and character screening. Meeting and maintaining suitability in relation to these requirements is mandatory.

### Medical

The AAD's Polar Medicine Unit will determine your medical fitness for duty in Antarctica or the subantarctic following tests conducted on our behalf by a nominated medical practitioner.

As this role will require you to be involved in a Safety Sensitive Aviation Activities, a condition of employment is that you will be required to participate in drug and alcohol screening of urine and/or saliva samples.

Candidates considered for a role at Macquarie Island may be required to complete a fitness assessment.

### Psychological

You may be required to undertake an adaptability assessment.

### Character

You will be subject to a police records check.

### Training

You must undertake all training requirements as outlined by the AAD.

You will be required to attain the following qualifications/licences prior to commencement with the AAD:

1. A current statement of attainment in the following units of first aid:
  - Provide First Aid (HLTAID003) valid for at least 12 months beyond the date of commencement; and
  - Provide CPR (HLTAID001).
2. A valid Forklift (High Risk) Licence.



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