



Australian Antarctic Division

APS 6 – Mechanical Technician

Classification APS 6 - \$95,438 - \$108,360 pa

Division Australian Antarctic Division

Branch Science

Section Ice Core Section

Location Kingston, TAS and Antarctic/sub-Antarctic deployment

Employment Status Ongoing (permanent)

Hours Full-time (37.5 hours per week)

Security Clearance Not Required

JOB OVERVIEW

Are you a hands-on fitter and turner or mechanical engineer with a passion for solving problems and building systems that work in the most extreme environments on Earth?

Join the AAD for your chance to be part of the Million Year Ice Core (MYIC) project - a once-in-a-generation science mission: recovering the oldest continuous ice core from Antarctica to unlock secrets about our planet's climate history.

Be a part of a collaborative, multi-skilled team and take your skills to the next level—supporting an internationally significant project both in the workshop and on the ice!

WHO WE ARE – Australian Antarctic Division (AAD)

The Australian Antarctic Division (AAD) is part of the Department of Climate Change, Energy, the Environment and Water, and leads the delivery of Australia's Antarctic Program.

The AAD plays a key role in achieving the Australian Government's Antarctic objectives, which include:

- Upholding the Antarctic Treaty System and strengthening Australia's leadership within it
- Safeguarding the unique Antarctic environment
- Advancing our understanding of Antarctica's role in the global climate system
- Conducting research that delivers practical, economic, and national benefits

In addition to supporting world-leading science and policy, the AAD is also responsible for managing the Australian Antarctic Territory and the Territory of Heard Island and McDonald Islands.

The MYIC project is a multi-year effort to drill Antarctica's oldest ice at a remote inland site known as Dome Concordia North, over 1,100 km from Casey Station. This scientific effort will help us better understand long-term climate changes, the carbon cycle, and ice sheet stability. The drill site is accessible only during the summer and supported by overland traverses and air access.

THE JOB

Working with the drill system engineer and other team members, you will help maintain, improve, and operate a highly specialised deep ice drilling system.

Key duties will include, but are not limited to:

Your role will be hands-on, and you will be expected to:

- Co-ordinate and undertake servicing, repair and maintenance of mechanical components of the deep ice drill, tower, winch and associated drill-system infrastructure.
- Be part of the team operating the deep drill system in Antarctica and take the lead in resolving mechanical issues including operation of machining tools to modify, manufacture or fabricate components in the field.
- Maintain a register of drill system mechanical tasks and issues. Contribute to scheduling and planning of drilling, maintenance and cargo activities.
- Assist in the selection, design and manufacture of new components and equipment for the deep drill system in collaboration with other AAD staff and external collaborators.
- Manage and update as required the drill system mechanical engineering documentation

This position will be based at the AAD head office in Kingston, Tasmania and will report to the MYIC Drill System Engineer. Workshop facilities and bench space will be available in the AAD Instrument Workshop (IWS) and the MYIC cage area. You are expected to work collaboratively with the IWS, MYIC science team, Traverse team, Polar Technologies team and other stakeholders.

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.

WHAT WE ARE LOOKING FOR - ESSENTIAL

	When you need to provide evidence	
Required Identification/Qualification/Licence/Ticket	Provide copy with application	obtained prior to job commencement
Qualification - Relevant experience and a mechanical engineering trade qualification OR A degree or diploma in mechanical engineering from an Australian tertiary institution	√	×
Driver's licence – 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:

We welcome applications from people with diverse experiences and technical backgrounds. You will thrive in this role if you enjoy practical, solution-focused work and are excited by the challenge of remote field operations.

We are particularly interested in people who have:

- Demonstrated practical hands-on ability in the manufacture, fabrication and installation of precision mechanical components under limited supervision.
- Demonstrated ability in the operation machine tools, including manual lathes and milling machines to produce precision mechanical components.
- Demonstrated ability to deliver technical/mechanical solutions to problems and issues under limited direction and at times with limited resources.
- Ability to plan, coordinate and conduct mechanical servicing, maintenance and repairs.

WHAT WE ARE LOOKING FOR - DESIRABLE

Knowledge and experience:

- Experience with CNC machining and welding (MIG, TIG).
- Experience working in remote or isolated environments.
- Familiarity with SolidWorks or similar CAD software and managing technical documentation.

This isn't your average technician role. It's a chance to use your practical mechanical talents in a high-impact environment—helping collect one of the most important climate records on Earth.

If you're up for the challenge, and you enjoy being part of a team that builds things that matter, we would love to hear from you.

What you will gain from the experience

As the Mechanical Technician, you will apply your hands-on skills in a truly unique context, supporting the recovery of Antarctica's oldest continuous ice core—a vital record for understanding Earth's climate history.

This unique role allows you to:

- Work on cutting-edge polar science technology alongside a passionate, multi-skilled team
- Strengthen your expertise in deep ice core drilling systems and remote field operations
- Gain experience in one of the world's most remote and challenging environments
- Contribute to a nationally significant project with global environmental relevance

This role offers a rare blend of purpose, adventure, and professional growth.

ELIGIBILITY AND OTHER REQUIREMENTS

Are you ready for the Ice?

As part of this role, you will travel to Antarctica and the sub-Antarctic—some of the most remote and awe-inspiring places on Earth.

To ensure you are set up for success in these unique environments, the successful applicant will need to:

Show strong personal and interpersonal qualities that support effective teamwork in remote and isolated settings

- Demonstrate adaptability and resilience, assessed through a psychological screening suited to Antarctic conditions
- Be certified as medically fit for Antarctic service at the remote Dome C North drilling site by the AAD's Polar Medicine Unit

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.

RecruitAbility:

Under the <u>APS (Australian Public Service)</u> RecruitAbility scheme you will be invited to participate in further assessment for the vacancy if you choose to apply under the scheme; declare you have a disability; AND meet the minimum requirements for the position.

HOW TO APPLY

Information about how to apply can be found here, including further information about AAD jobs.