



Role Description

Title	Base Mechanic	Incumbent	
Manager's Title	Engineering Supervisor	Date of Last Review	January 2023
Team	Engineering	Location	Scott Base
Work Environment	This role will require the incumbent to travel to Antarctica for an extended period which requires a medical clearance.		

Organisational Context

Antarctica New Zealand is a Crown Entity established on 1 July 1996 under the New Zealand Antarctic Institute Act to develop, manage and execute New Zealand's activities in respect of Antarctica and the Southern Ocean.

Our key activities include facilitating scientific research in Antarctica, protection of the environment and raising public awareness of the global significance of the continent and surrounding Southern Ocean.

Antarctica New Zealand operates in a hazardous environment. The management of safety and risk are critical to achieving the New Zealand Antarctic programme objectives. The highest standards of environmental care and responsibility are required in all tasks.

This role is responsible for ensuring that the vehicles and generators at Scott Base are well maintained and operated to contribute to ongoing availability of a base for New Zealand's activities in Antarctica.

Our Goal for New Zealanders

New Zealand continues to play an influential role in the kaitiakitanga (guardianship) of Antarctica and the Southern Ocean as a natural resource devoted to peace and science.

Role Purpose

To maintain the vehicles, plant and equipment at Scott Base and ensure their safe operation including providing inductions and training to staff and visiting personnel

Work of Role

- Fulfil accountabilities as documented in the Health, Safety and Environmental Management Systems including proactive management of risks and resources to prevent harm.
- Fulfil accountabilities as described in the Information and Records Management Policy for creating and centrally storing accurate and complete records.
- Use our asset management software (Smart Asset) to plan, execute and record all routine and non-routine maintenance or improvement work undertaken.
- Complete routine inspections, servicing on plant/vehicles and diagnosis and repair of faults. This includes petrol and diesel powered assets including:
 - A fleet of Toyota Landcruisers (70 Series)
 - Heavy plant (including Caterpillar D4 and D6, excavator, wheel loader)
 - Utility vehicles (Merlo compact telehandler, quad bikes)



- Specialist tracked snow vehicles (Hagglunds, Pisten Bullys, Skidoos)
- Assist with maintenance of 3 x diesel generators (Cat 3406)
- Maintenance of diesel and petrol powered portable equipment (e.g. Honda generators; petrol powered drills)
- Provide vehicle training and inductions for visiting personnel including assessing competency and providing ongoing coaching in safe and efficient vehicle use.
- Provide visiting personal support to set up and operate their own mechanical equipment.
- Provide assistance to field parties (either in person or via radio) with vehicle and equipment diagnostics and repair.
- Maintain a clean and safe work environment and ensure yard and storage areas are kept organised.
- Handle fuel, waste oil and other fluids safely and in accordance with Antarctica New Zealand procedures and relevant legislation.
- Update and maintain records of spares and materials used/held and assist with procurement of replacement items.
- Identify opportunities for process or system improvement and communicate these to the Engineering Supervisor.
- Provide assistance to other engineering team members as required.
- Proactively contribute to the overall base community.
- Rostered duties on the Scott Base Fire Crew and other base tasks as required.
- Any other tasks assigned by the Engineering Supervisor or SBLT.

Key Challenges

- Maintenance of a diverse range of unique plant and vehicles which operate in a harsh environment.
- Operating in a two-person team during the summer months to prioritise and complete work in a shared workshop with no hierarchy, utilising individual strengths.
- Working in challenging climatic conditions while continually considering environmental impacts.
- Ability to maintain a positive outlook while under pressure and responding to rapidly changing priorities.
- Maintaining a customer service focus while managing the demands of visiting events requiring support.
- Maintaining motivation and work quality (including repetitive tasks) 6 days a week for up to 13 months. This may include proactively seeking work during quieter periods.
- Resilience to living in a small communal environment for up to 13 months (e.g. shared bunk rooms, communal bathrooms etc).
- The location and role may place pressure on the physical and mental well-being of the incumbent (e.g. at time long work hours, 24-hour daylight/darkness); the incumbent's family and other close relationships.

Key Functional Relationships

Internal	<ul style="list-style-type: none"> • Engineering Supervisor • Scott Base Leadership Team • Engineering Maintenance Manager • Asset Management Engineers • Operations Solutions Manager • Planning and Delivery Manager
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External	<ul style="list-style-type: none"> • United States Antarctic Programme personnel
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Minimum Capability Necessary to Work to Role

Capability Area	Description
Qualifications, Certificates and Memberships	<ul style="list-style-type: none"> • A New Zealand Trade Certificate (or recognised equivalent) in Automotive Engineering. • Hold a current First Aid qualification (Unit Standard 6401, 6402). • Hold a current full Class 1 and 2 New Zealand Driver Licence with F, W and T endorsements (Unit Standards 16701, 16703, 16702), and experienced in operation of vehicles with manual gearbox. • Hold a current Forklift operator's certificate (Unit Standard 10851). • Hold a current Rigging/Slings certification (Unit Standard 30072) • Be certified as 'medically fit' by Antarctica New Zealand's Medical Assessor. <p>Preferably:</p> <ul style="list-style-type: none"> • Hold Truck Loader Crane / HIAB Unit Standard 16617 or 3795. • Hold a current Telehandler operator's certificate (Unit Standard 23637).
Knowledge, Skills and Experience	<ul style="list-style-type: none"> • At least 5 years post-qualification experience. • Proficiency in computer use, particularly for record keeping. • Preferably experienced in: <ul style="list-style-type: none"> • Heavy plant operation and maintenance • Automotive electronics and hydraulics • Specialist snow vehicles (e.g. Skidoos, Pisten Bullys) • Training and inducting personnel to vehicle operation • Understanding of and commitment to tikanga and the Treaty of Waitangi principles.
Judgement, Temperament and Influence	<ul style="list-style-type: none"> • Demonstrates the personal qualities required to fit in socially and professionally with a diverse range of people in a potentially stressful environment. • Able to work without direct supervision. • Able to work closely in a shared workshop and divide/prioritise tasks as required. • Excellent communication skills • Ability to accept/provide feedback

Antarctica New Zealand Values

To honour our obligation to Antarctica:

- **Ka ngākau whiwhita tātou ki ā tātou mahi katoa**
We are passionate about what we do
- **Ka tiaki tātou i a tātou anō, ka tiaki hoki i te taiao**
We care for each other and the environment
- **Ka mahi tahi tātou**
We work together



- **He ngākau pono ō tātou**
We act with integrity
- **Ka whai tātou i ngā taumata tiketike**
We aspire to the highest standards

Role Authorisations

I confirm that this Role Description accurately describes the work of the Base Mechanic:

GM Antarctic Operations

Date

I accept this Role Description accurately describes the work of the role for which I am accountable:

Base Mechanic

Date

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