



## Role Description

<b>Title</b>	Traverse Mechanic	<b>Incumbent</b>	
<b>Manager's Title</b>	Operations Solutions Manager	<b>Date of Last Review</b>	10 December 2021
<b>Team</b>	Traverse Operations	<b>Location</b>	Scott Base & Ross Ice Shelf, Antarctica
<b>Work Environment</b>	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 where leadership and the management of safety and risk are critical to successfully achieving the New Zealand Antarctic programme objectives. The highest standards of environmental care and responsibility are required in all tasks.

Antarctica New Zealand has deep field traverse capability (vehicles and sleds) to transport cargo to and from a deep field camp location on the Siple Coast. This involves travelling 1100kms from Scott Base across the Ross Ice Shelf over approximately 15 days one-way. Traverse personnel will be transporting cargo to site, re-positioning equipment that has been cached over the winter, assisting with camp establishment and disestablishment, and undertaking some science activities on site and along the route.

This role is responsible for the preparation, maintenance and operational oversight of traverse capability equipment (e.g. Piston Bully machines) to deliver safe and efficient traverse operations.

### 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 safely plan, prepare and operate on-ice traverse equipment to transport event infrastructure and fuel to and from remote field locations in support of science events.

Ensure traverse equipment is maintained to a high standard to support reliable and safe operations.

Train and mentor traverse personnel to ensure they are competent to operate traverse equipment.



## 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.
- Preparation, maintenance and operation of vehicles and equipment to support deep field traverse operations.
- Ensure all mechanical equipment is safe, fit for purpose, maintained and operated within operational parameters and to the environmental conditions at all times.
- Support planning and delivery of vehicle maintenance training to traverse team. Ensure all traverse and event personnel demonstrate the required competencies to operate and maintain traverse equipment safely in remote field locations.
- On-ice coordination and preparation of traverse loads including camp, science and fuel infrastructure for deployment to the field.
- Work with Traverse team to establish bermed caches.
- Support data collection and maintenance of equipment for science research projects.
- Prepare, organise, store and use fuel in a safe manner following Antarctica New Zealand policies, procedures and permits.
- Conduct operations in accordance with the Antarctica New Zealand traverse operational procedures and undertake only the activities outlined and permitted in the traverse operations environmental impact assessment.
- Maintain a clean and safe work environment.
- Ensure all traverse demobilisation activities are complete; any vehicles and equipment are serviced and stored appropriately and records updated.
- Assist with event reporting and traverse record keeping to support ongoing development of traverse capability knowledge, skills and procedures and data capture for environmental impact reporting.
- Contribute to creating high performing functional and cross-functional teams by way of "Team Process" model.
- Proactively contribute to the traverse team and Scott Base community.
- Fulfil responsibilities as documented in the Information and Records Management Policy, by creating and keeping accurate and complete records of all business activities.
- Any other tasks as assigned by the Operations Solution Manager or Traverse Leader.

## Key Challenges

- Ensuring equipment is fit for purpose, maintained and operated to a high standard to ensure reliability and safety in remote locations.
- Maintaining flexibility to ensure completion of event objectives while working around weather delays and allowing for rest periods in the field. Living and working as a small, remote team for an extended period with limited connection and support from outside world while conducting monotonous operations.
- Operating and maintaining equipment in remote field locations with limited support, challenging weather and logistical and environmental constraints.
- Pressure on family and other close relationships due to limited means of communication.
- Maintaining a 'can do' approach and good problem-solving skills during an extended period operating in remote, challenging field conditions.
- Preparing and demobilising machinery and equipment at Scott Base in a shared vehicle workshop.
- Maintaining professionalism and high standards while delivering quality support that meets the demands of the science and Antarctica New Zealand's purpose and values under operational pressure.



### Key Functional Relationships

<b>Internal</b>	<ul style="list-style-type: none"><li>• Operations Solutions Manager</li><li>• Scott Base Leadership Team</li><li>• Traverse Field Leader</li><li>• Scott Base Support Staff</li></ul>
<b>External</b>	<ul style="list-style-type: none"><li>• Event Personnel</li><li>• United States Antarctic Program Logistics &amp; Operations staff</li></ul>

### Minimum Capability Necessary to Work to Role

Capability Area	Description
<b>Qualifications, Certificates and Memberships</b>	<ul style="list-style-type: none"><li>• Have a NZ Trade Certificate or recognized equivalent in Automotive Engineering</li><li>• Hold a current Class 1 and 2 New Zealand driver's licence with W,T,R endorsements (Unit Standards 16701, 16703, 16702).</li><li>• Hold unit standards for Truck Loader Crane / HIAB (16617 or 3795) and slinging regular loads safely (30072) for Hiab operations</li><li>• Current first aid certificate (US 6401/6402) or preferably Pre-Hospital Emergency Care First Aid certificate.</li><li>• Be certified as 'fit' for Antarctic employment by Antarctica New Zealand's medical assessor.</li></ul>
<b>Knowledge, Skills and Experience</b>	<ul style="list-style-type: none"><li>• Competency operating and maintaining Pisten Bully machines and attachments such as – tillers, Hiab cranes.</li><li>• Knowledge and competency of bulk fuelling equipment, operations and spill prevention and response.</li><li>• Proven operational field engineering experience in Antarctica or similar.</li><li>• Have strong diagnostic and repair skills, including automotive electrical and hydraulic systems.</li><li>• Understanding of and commitment to tikanga and Treaty of Waitangi principles.</li><li>• Competent user of Microsoft tools to maintain accurate records.</li></ul>
<b>Judgement, Temperament and Influence</b>	<ul style="list-style-type: none"><li>• Strong culture of safety at all times.</li><li>• Effective communicator.</li><li>• Highly motivated.</li><li>• Attention to detail.</li><li>• Work effectively without direct supervision.</li></ul>



## Antarctica New Zealand Values

To honour our obligation to Antarctica:

- We are passionate about what we do
- We care for each other and the environment
- We work together
- We act with integrity
- We aspire to the highest standards

## Role Authorisations

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

\_\_\_\_\_  
GM Antarctic Operations

\_\_\_\_\_  
Date

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

\_\_\_\_\_  
Traverse Mechanic

\_\_\_\_\_  
Date

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