

Role Description

Title	Technical Support	Incumbent	
Manager's Title	Operations Solutions Manager	Date of Last Review	11 February 2022
Team	Traverse Operations	Location	Scott Base & Ross Ice Shelf, Antarctica
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 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, operating ground penetrating radar (GPR), GIS, GPS and traverse route navigation to deliver safe, efficient movements to and from remote field locations. The role will lead any traverse science support objectives.

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 ensure traverse field operations and route finding are planned, prepared and carried out safely to and from remote field locations and science event objectives are completed.

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

Ensure other traverse field personnel are trained and competent to conduct GPR operations safely if required.



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.
- Establishment and operation of the GPR/GPS/GIS systems to support safe route finding and traverse operations.
- Ensure all technical equipment and resources are maintained to a high standard to support safe field operations.
- Ensure any traverse science support objectives are met to the required standard.
- Delivery and oversite of on the job training and support to traverse team members on GPS, GPR, GIS and data management systems as required and processes to build capability within the team.
- Support the Traverse team with routine tasking, preparing and managing traverse loads
- 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 reporting processes to document work activities and update relevant operational procedures.
- Use Discovery (our document management system) to create and maintain accurate and complete electronic records of all traverse activities.
- Maintain attention to detail to ensure risk mitigation measures occur in all activities.
- Collect/manage data and maintain equipment for science research projects.
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- 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.
- Any other tasks as designated by the Operations Solutions Manager or Traverse Leader.

Key Challenges

- Ensuring all traverse team members are competent to operate traverse safe route proving systems and equipment as required.
- Ensuring relevant traverse procedures are updated for the future.
- 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 the outside world.
- Conducting monotonous sustained operations critical to safety.
- Remote field locations with limited support posing logistical and environmental constraints, requiring can do approach with good problem solving.
- Pressure on family and other close relationships due to limited means of communication.
- Maintaining professionalism and high standards while delivering quality support that meets the demands of the science and Antarctica New Zealand's purpose and values while under operational pressure.

Key Functional Relationships

Internal	•	Operations Solutions Manager
	•	Scott Base Leadership Team



	Traverse Field LeaderScott Base Support Staff
External	 Science event Personnel United States Antarctic Program Logistics & Operations staff

Minimum Capability Necessary to Work to Role

Capability Area	Description	
Qualifications, Certificates and Memberships	 Holds current first aid qualification (US 6401/6402) or preferably an advanced level certification (Pre-Hospital Emergency Care or equivalent). Hold a current full New Zealand Class 1 driver licence and is an experienced user of manual vehicles. Be certified as fit for Antarctic employment by Antarctica New Zealand's medical assessor. 	
Knowledge, Skills and Experience	 Proven remote field experience or similar supporting the operation of technical equipment set up and operation. Competent in the use of GPS and GIS systems for safe route travel and mapping. Competent in the use of Ground Penetrating Radar (GPR) for crevasse detection. Proven experience in outdoor environments Ability to adapt to rapidly changing work priorities. Possess effective time management, planning and computer literacy skills (MS Outlook, Word and Excel). Experience deploying and maintaining science instrumentation and collecting and managing data sets. Experience operating tracked snow vehicles preferred. Understanding of and commitment to learning about tikanga and Treaty of Waitangi principles. 	
Judgement, Temperament and Influence	 Strong culture of safety at all times. Effective communicator. Highly motivated. Attention to detail. Work effectively without direct supervision. 	

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 Technical Support:

Date

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

Traverse Technical Support

Date

File Name: 2022 Traverse Technical Support RD.docx