

Transmission Specialist

Job Description

Date	May 2025
Location / Business Unit	Flexible Location / Transmission
Reporting to	Transmission Manager
Direct Reports / Functional Relationships	Functional relationships with Head of Radio, Head of News, RNZ Pacific Manager and the Technology team.
Position Type	Permanent, Full-time

Te Tūranga - About the Role

RNZ delivers several radio brands – RNZ National, RNZ Concert and RNZ Pacific across AM, FM and Shortwave radio. AM and FM delivery are critical to RNZ's lifeline utility role, and we extend this to the Pacific across Shortwave during Cyclones and natural disasters.

RNZ owns and operates 15 AM radio and 5 FM radio transmission sites across New Zealand, along with a Shortwave transmitter site in the central North Island which has two 100kW transmitters and four antenna curtains. RNZ uses third party sites for the delivery of the majority of its FM radio services. RNZ also carries out AM Radio antenna engineering work for other operators across New Zealand.

This role includes:

- Frequency management for the RNZ Pacific Shortwave service, and an overview of the operation and maintenance of the Shortwave transmitter site.
- Involvement in annual maintenance and audit work on our AM and FM transmission sites, as well as planning, managing and carrying out capital works on the sites and providing fault restoration support to our maintenance contractor.

Te Mahi - About the job

RNZ Pacific Shortwave Service Frequency Management

- Develop frequency schedules up to 10 months in advance and ensure the required frequencies are registered.
- Monitor and report on reception quality for Shortwave coverage and adjust as appropriate for weather events, natural disasters, propagation changes or interference from other broadcasters.
- Manage RNZ Shortwave frequency databases, registration of frequencies with the ITU and RSM and testing new frequencies before they are put into use.
- Prepare and upload Shortwave Transmission Schedules and keep the RNZ website updated with RNZ Pacific operational transmission schedules.
- Help Pacific broadcasters relay RNZ Pacific via satellite (wherever possible) or DRM.

AM, Shortwave and FM Transmission

- Provide support to manage and minimise the likelihood and impact of Transmission Faults – AM, Shortwave and FM.
- Support the maintenance and contribute to the auditing of RNZ Transmission Networks (AM, Shortwave and FM).
- AM and Shortwave antenna engineering, including RF (Radio Frequency) design of masts and guying systems, mast removals and installations, design and build of ACU's and the prediction and measurement of coverage and EMR.

This role involves occasional night shift work, and travel throughout New Zealand for periods of 1 to 2 weeks at a time. It would suit someone who has experience in AM, Shortwave and FM radio transmission systems who is interested in learning AM and Shortwave radio antenna engineering along with involvement in maintaining RNZ's radio transmission networks across New Zealand

RNZ understands that this is a unique role and will provide the extensive training and mentoring over 1 to 2 years.

Ōu Pūkenga - About You

Qualifications	<ul style="list-style-type: none">• You will ideally have a tertiary qualification in electronics or telecommunications (e.g. RTC, NZCE or a Degree).• Current full drivers' licence is essential.
Knowledge & Experience	<ul style="list-style-type: none">• EWRB EST or Electrician registration is essential.• Proven extensive experience in radio transmission equipment installation and maintenance work or similar would be an advantage.

	<ul style="list-style-type: none"> • Being qualified to climb structures would be an advantage. • A knowledge of rigging work would be an advantage. • HF propagation modelling experience would be an advantage.
Skills	<ul style="list-style-type: none"> • Ability to work without direction. • Strong interpersonal and communication skills. • Exercise sound judgement and act decisively. • Analytical and problem-solving skills.
Personal Attributes	<ul style="list-style-type: none"> • Be willing to learn new skills involving both theoretical and practical training. • Have a genuine interest in AM and Shortwave antenna engineering. • Quickly adapts to need for change and is flexible in approach. • Is willing to travel when needed for the role for periods of 1-2 weeks at a time. • Willing to work occasional night shifts. • Recognises the value of cultural and community diversity

Te Ahurea - Our Culture

RNZ Attitudes

RNZ Attitudes are all about how we work. These attitudes are how we demonstrate our culture through our everyday actions, behaviour and decisions. They drive how we do things, what we value and what's expected of us. They exist so that RNZ is a culture for everyone to enjoy and flourish in.



We're bold and think big. We find a way to make things happen. We learn best by doing. We believe that trying and failing is better than not trying at all.



We deal with problems or new tasks with energy and creativity. We try new things, we evolve and we move fast.



We encourage people to flourish. we extend love and compassion to others and nurture relationships. We have collective strength and cherish individuality.