Amateur Radio | Ngā runaruna o te ao irirangi

Overview

Amateur radio is a personal recreational and technical activity that encourages experimentation in radio technology and personal communications worldwide. While most communication today is via cellular network, amateur radio operators can play an important role in facilitating communications at the time of emergencies and/or when the cellular network is not available.

Amateur radio operators do not fit within the definition of network utility operators under the RMA, however their activities involve radio communications and their radio configurations involve masts, aerials and supporting structures.

Amateur radio structures are most commonly located in residential or rural areas, in the backyard of an operator's property, but may also occur in commercial areas. Both the location and scale of some configurations means that they may cause adverse amenity effects or may impact the character of surrounding neighbourhoods or the values of scheduled sites and features.

Objective

Refer also to the relevant objectives in Part 2 District - Wide Matters

AR-O1. To recognise the benefits of amateur radio while managing the actual and potential adverse effects.

Policies

Refer also to the relevant policies in Part 2 District - Wide Matters

- **AR-P1.** Provide for experimentation in radio communications by enabling different amateur radio configurations.
- AR-P2. Manage the effects on adjacent properties from amateur radio configurations, whilst acknowledging that some amateur radio configurations will be of a different scale than other structures in the surrounding environment.
- **AR-P3.** Protect the values of the precincts, overlays, scheduled sites and features from the adverse effects of amateur radio configurations.
- **AR-P4.** Control the location of amateur radio configurations in proximity to Te Kūiti Aerodrome to ensure its safe operation.

Rules

The rules that apply to amateur radio are contained in the tables listed below. To undertake any activity, it must comply with the rules listed in:

- AR Table 1 Activities Rules; and
- AR Table 2 Performance Standards; and
- Any relevant provision in Part 2 District-Wide Matters; and
- Unless specifically stated in a rule, the provisions in Part 3 Area Specific Matters do not apply.

Where an activity breaches more than one rule, the most restrictive status shall apply to the activity.

Refer to Part 1 - How the Plan Works for an explanation of how to use this plan, including activity status abbreviations.

Note: See the Hapori whānui chapter for provisions associated with domestic television aerials and satellite dishes.

AR - Table 1 - Activities Rules

AR-R1.	Amateur radio configuration	
General rural, residential, rural lifestyle, settlement & Māori purpose zones (excluding all precincts)	Where: 1. All of the performance standards in AR - Table 2 are complied with; and 2. There is no more than one primary mast and one pedestal dish mounted antenna per site, provided that in the residential, rural lifestyle and settlement zones, dish mounted antennae are only permitted on sites greater than 750 m²; and 3. No part of any amateur radio configuration overhangs a legal boundary, road reserve, service lane or accessway; and 4. The amateur radio configuration adjoins a site which contains a scheduled heritage building or structure (SCHED1), sites and areas of significance to Māori (SCHED3, SCHED4), a significant archaeological site (SCHED2) or an outstanding natural feature (SCHED8), it must be located at least 20 m from the common boundary.	Activity status where compliance is not achieved: RDIS Matters over which discretion is restricted: (a) The matters of discretion associated with any performance standard which cannot be complied with in AR - Table 2; and (b) The cumulative effect of the number of structures on the site; and (c) Effects on the values of any scheduled heritage building or structure, sites and areas of significance to Māori, significant archaeological site or outstanding natural feature; and (d) The extent to which the structure obstructs access to any site; and (e) The location, size and scale of the structure in relation to the size of the site; and (f) The effect on the amenity values and character of the surrounding area and properties.

All other zones, all precincts Significant natural areas, coastal environment, karst overlay, landscapes of high amenity value,	Activity Status: DIS	Activity status where compliance is not achieved: N/A
high/very high natural character		
Outstanding natural landscapes, outstanding natural features, outstanding natural character, heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites.	Activity Status: NC	Activity status where compliance is not achieved: N/A
AR-R2.	Amateur radio activities not otherwise listed in AR - Table 1	
All zones, all precincts, all overlays, scheduled sites and features	Activity status: NC	Activity status where compliance is not achieved: N/A

AR-R3.	Te Kūiti Aerodrome Flightpath height restrictions shown on the Planning Maps	
All zones, all	Activity status: PR	Activity status where compliance is not
precincts, all	Where	achieved: N/A
overlays,	Where	
scheduled	1. The amateur radio configuration cannot	
sites and	comply with the Te Kūiti Aerodrome	
features	Flightpath height restrictions shown on	
	the Planning Maps.	

AR - Table 2 - Performance Standards

The rules in this table apply to the general rural, residential, rural lifestyle, settlement & Māori purpose zones only

AR-S1. Height in relation to boundary and minimum setback from boundaries

 The primary mast and the pedestal dish mounted antennae must comply with the minimum setback from road boundaries, minimum setback from internal boundaries and height in relation to boundary standards for the relevant zone.

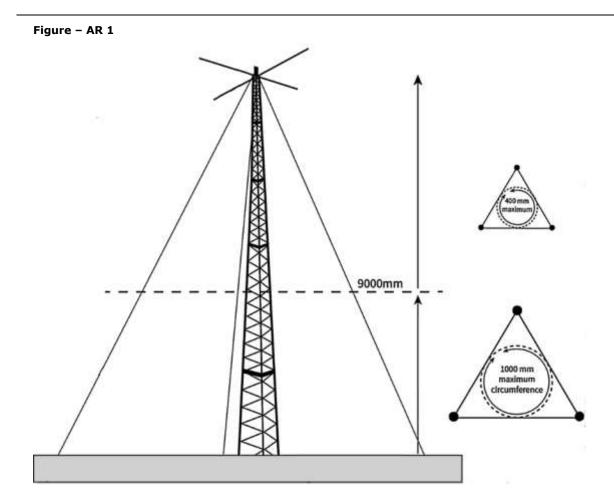
- (a) The location of the structures and any alternative options; and
- (b) Effects on the amenity values and character of the surrounding area; and
- (c) The finish of the materials; and
- (d) Whether the scale, intensity and character of the structure is appropriate in the context of the site and receiving environment; and
- (e) The extent and effect of non-compliance with any relevant rule in the zone and any relevant matter of discretion in the rule.

AR-S2.	Height of the primary mast	
Rural lifestyle, settlement, Māori purpose & residential zones	 The maximum height as measured from ground level, of a ground mounted primary mast must be no more than 20 m, except for a simple whip antenna or discone antenna which may extend no more than 3.2 m above this height; and A primary mast attached to a building must not exceed the permitted height for the relevant zone by more than 5 m, except for a simple whip antenna or discone antenna which may 	 (a) The location of the structures and any alternative options; and (b) Effects on the amenity values and character of the surrounding area; and (c) The finish of the materials; and (d) Whether the scale, intensity and character of the structure is appropriate in the context of the site and receiving environment; and (e) The extent and effect of non-compliance with any relevant rule in the zone and any relevant matter of discretion in the rule.

- A primary mast must have a maximum inscribed circle of no more than 1 m below 9 m in height as measured from ground level; and
- 2. Above 9 m as measured from ground level:
 - (i) A primary guyed lattice mast must have a maximum inscribed circle of no more than 0.4 m; and
 - (ii) A primary self-supporting lattice mast must fit into a tapering envelope with a maximum inscribed circle of 660 mm above 9 m and 420 mm at 20 m; and
 - (iii) A primary self-supporting tubular mast must fit into a tapering envelope with a maximum inscribed circle of 230 mm at 9 m and 115 mm at 20 m.

Note: See Figure - AR 1

- (a) The location of the structures and any alternative options; and
- (b) Effects on the amenity values and character of the surrounding area; and
- (c) The finish of the materials; and
- (d) Whether the scale, intensity and character of the structure is appropriate in the context of the site and receiving environment.



AR-S4. Support structures

- A primary mast must have no more than 7 subsidiary poles which are no more than 12 m in height as measured from ground level, with a maximum diameter of 115 mm; and
- One subsidiary pole may be an HF vertical antenna; and
- Any guy wires must be no more than 12 mm in diameter.

Matters over which discretion is restricted:

- (a) The location of the structures and any alternative options; and
- (b) Effects on the amenity values and character of the surrounding area; and
- (c) The finish of the materials; and
- (d) Whether the scale, intensity and character of the structure is appropriate in the context of the site and receiving environment; and
- (e) Cumulative effects associated with multiple devices and structures.

AR-S5. Antenna

 Except in the general rural zone, a groundmounted dish must be located behind the rear building line of a residential unit or building as viewed from a road, and be pivoted less than 3

- (a) The location of the structures and any alternative options; and
- (b) Effects on the amenity values and character of the surrounding area; and

m above the ground, with the diameter of the
dish being no more than 2.5 m; or

- 2. In the general rural zone, a ground-mounted dish must be located behind the rear building line of a residential unit or building as viewed from a road, and be pivoted less than 4 m above the ground, with the diameter of the dish being no more than 5 m.
- The finish of the materials; and (c)
- (d) Whether the scale, intensity and character of the structure is appropriate in the context of the site and receiving environment; and
- (e) Cumulative effects associated with multiple devices and structures; and
- (f) The extent and effect of non-compliance with any relevant rule in the zone and any relevant matter of discretion in the rule.

AR-S6. Number, type and dimensions of aerials

- There must be no more than four aerials attached to ground mounted support structures per site; and
- 2. There must be no more than four aerials attached to buildings per site; and
- Any element making up an aerial must not exceed 80 mm in diameter; and
- For horizontal HF yagi aerials, the maximum 4. element length must not exceed 14.9 m, and the maximum boom length must not exceed 13 m;
- 5. For whip aerials, the maximum length must not exceed 3.5 m in height above the maximum height for the support structure.

Matters over which discretion is restricted:

- (a) The location of the structures and any alternative options; and
- (b) Effects on the amenity values and character of the surrounding area; and
- (c) The finish of the materials; and
- (d) Whether the scale, intensity and character of the structure is appropriate in the context of the site and receiving environment; and
- (e) Cumulative effects associated with multiple devices and structures.

AR-S7. Radiofrequency

1. The Amateur Radio Configuration must comply with NZS 2772.1:1999 Radiofrequency Fields Part 1: Maximum exposure levels - 3kHz to 300 GHz.

- (a) The effects of non-compliance with the standards in NZS 2772.1-1999 on the health and safety of surrounding areas from any unsafe levels of radiofrequency or unsafe structures;
- (b) The location of the structures in respect of neighbouring sites and the sensitivity of the receiving environment.