# THE WORLD BELOW 400 GHz

The Periodical Newsletter of the WAIKATO VHF GROUP Inc., ZL1IS, PO BOX 606, Waikato Mail Centre Hamilton 3240.



NZART BRANCH 81

www.zl1is.info

## OCTOBER 2022 ISSUE

#### WAIKATO VHF GROUP EXECUTIVE

President	David King	ZL1DGK	07 884 9590
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Committee	Morris Beale	ZL1ANF	07 884 8416
Committee	David McMillan	ZL1TLQ	027 477 0854
Editor	David King	ZL1DGK	07 884 9590

## **General Meeting October 2022**

The General Meeting of the Waikato VHF Group will be held on

Sunday, 16th October 2022, 1:30pm

at the Silver Fern Farms Event Centre, (aka Te Aroha Events Centre), 44 Stanley Ave, Te Aroha

Our guest will be

Ian ZL1TAT - State Highway 94 between Te Anau and Milford Sound / Piopiotahi is one of New Zealand's most important tourist routes. Since the mid-1980s, a network of high-level automatic weather stations together with avalanche forecasting developed in New Zealand has played an important role in keeping this road open. Join us for a rare opportunity to see this world-leading infrastructure and some of the sites on which it operates.

The "WaiPlenty" 2m network on 146.950 will be monitored for anyone requiring directions.

### A sub renewal/joining form can be found <u>HERE</u>.

#### Meeting suggestions

- Please don't attend the meeting if you have cold, flu or COVID-19 symptoms, you should get a test. You must stay home until you get a negative result.
- Face masks are encouraged for those attending unless you carry an exemption.

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#### **Repeaters/Beacons**

The Waikato VHF Group owns and maintains a number of repeaters and beacons in the greater Waikato and Bay of Plenty area. These are available for sponsorship for a period of 1 year. Please see <a href="http://zllis.info/sites.html">http://zllis.info/sites.html</a> for a list of repeaters, beacons & links that are currently available for sponsorship. If you are interested in sponsoring one of them, please contact our Secretary (ZL1GWP) or Treasurer (ZL1TAT).

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#### WaiPlenty Repeater Network - News

Te Weraiti '695 made it back on the air around midday on Thursday 11 August thanks to a contractor visiting the site for other work, however failed again about a week later. Its battery charger had failed, and our battery run down to only a few volts. The '695 repeater and associated link to Te Uku are on emergency antennas following failures and damage discovered at the beginning of May. Complete re-rigging of the mast is planned to hopefully occur over the coming summer, restoring '695 and its links to original performance we enjoyed. While that takes place, the whole installation there will operate on temporary antennas, resulting less overall coverage. A replacement battery has been donated, to be installed along with a new higher specification battery charger (capable of working with multiple battery technologies as well as having conformal coated printed circuit boards to protect against moisture ingress) and a Low Voltage Disconnect. Materials to get '695 and its associated links back on the air is costing the VHF Group about \$900 (equivalent to 1.5 times the number of subscriptions paid in 2022).

The faulty battery charger ex Te Weraiti has been repaired and refurbished by the manufacturer's service department, and will be retained by the VHF Group as a spare for Te Uku (where two of that model are used) and Maungakawa (where one is used).

Maungakawa has a long standing interference issue impacting '5575, caused by intermodulation between multiple transmitters there. Calculations (involving 1000's of

potential products) identified ten of the 47 VHF and UHF transmitter frequencies on site as possible suspects. Those have been monitored in an effort to identify which are transmitting simultaneously while '5575 is being interfered with. That interference has occurred intermittently, and infrequently while monitoring for it, (a watched pot scenario!). At the time of writing this newsletter note, the particular combination of transmitters involved as the source has been potentially narrowed down to three. How to deal with that is now being worked on, and will eventually involve making a 4WD 120km round trip to the site to implement.

Rather than noise up the other repeaters in our WaiPlenty network each time this interference at Maungakawa impacts, '5575 has been isolated from the rest of the network for the time being. Once the interference issue is proven and resolved, '5575 will be joined up to the WaiPlenty network again.

Our Te Uku '5675 repeater may be used by operators for the Rally of New Zealand running from 29 September through to 2 October. The main day for activity on '5575 will be Friday 30 September while they're in the Te Akau to Raglan area. For that day, '5675 will be made stand-alone (isolated from the rest of the WaiPlenty network and IRLP).



ZL1TAT, Repeater Trustee

Maungakawa

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#### Who funds our repeaters?

The WaiPlenty 2-metre repeater network along with National System repeaters at Kaimai and Hamilton are funded and operated by the Waikato VHF Group Inc. These facilities don't run on fresh air, but rely on funds derived from membership subscriptions and donations to keep them on the air. Annual expenditure includes 14 radio licence fees, electricity and site access payments plus maintenance costs, which last year exceeded \$2000.

For less than fifty cents a week, members of our VHF Group support these facilities thereby helping keep them on the air. If your subscription has lapsed (you won't have been emailed a subscription receipt for 2022), or you know someone using our repeaters who's not currently a member (ask them), how about contributing a subscription payment. Simply complete the membership form included with this newsletter (below), scan or photograph it, and email to branch.81@nzart.org.nz to advise your details required to register your membership and reconcile with your payment.

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3.

Family members = two or more members residing permanently at the same address, please give all names & callsigns. For delivery of electronic version of VHF Group quarterly newsletter (in colour). B/W version posted if no email provided. Rules at <u>https://is-register.companiesoffice.govt.nz/</u> Organisation No 212737, or by request to Waikato VHF Group Inc. 4

This form is also downloadable from our web site at https://www.zl1is.info/img/MEMBERSHIP\_FORM-A5\_V22-1.pdf