

# THE WORLD BELOW 400 GHz

The Periodical Newsletter of the  
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NZART  
BRANCH 81

[www.zl1is.info](http://www.zl1is.info)

NOVEMBER 2010 ISSUE

## WAIKATO VHF GROUP EXECUTIVE

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Committee	Kevin Murphy	ZL1UJG	07 847 0041
Editor	Kevin Murphy	ZL1UJG	07 847 0041

## November General Meeting 2010

A General Meeting of the Waikato VHF Group will be held on  
Sunday, 5th December, 2010 at 1:30pm.

The venue will be at the Branch 12 Clubrooms, 88 Seddon Rd, Hamilton.

Alan Wallace, ZL1AMW, will be giving a presentation on the development of modern IP networks for power companies using UHF radio links.

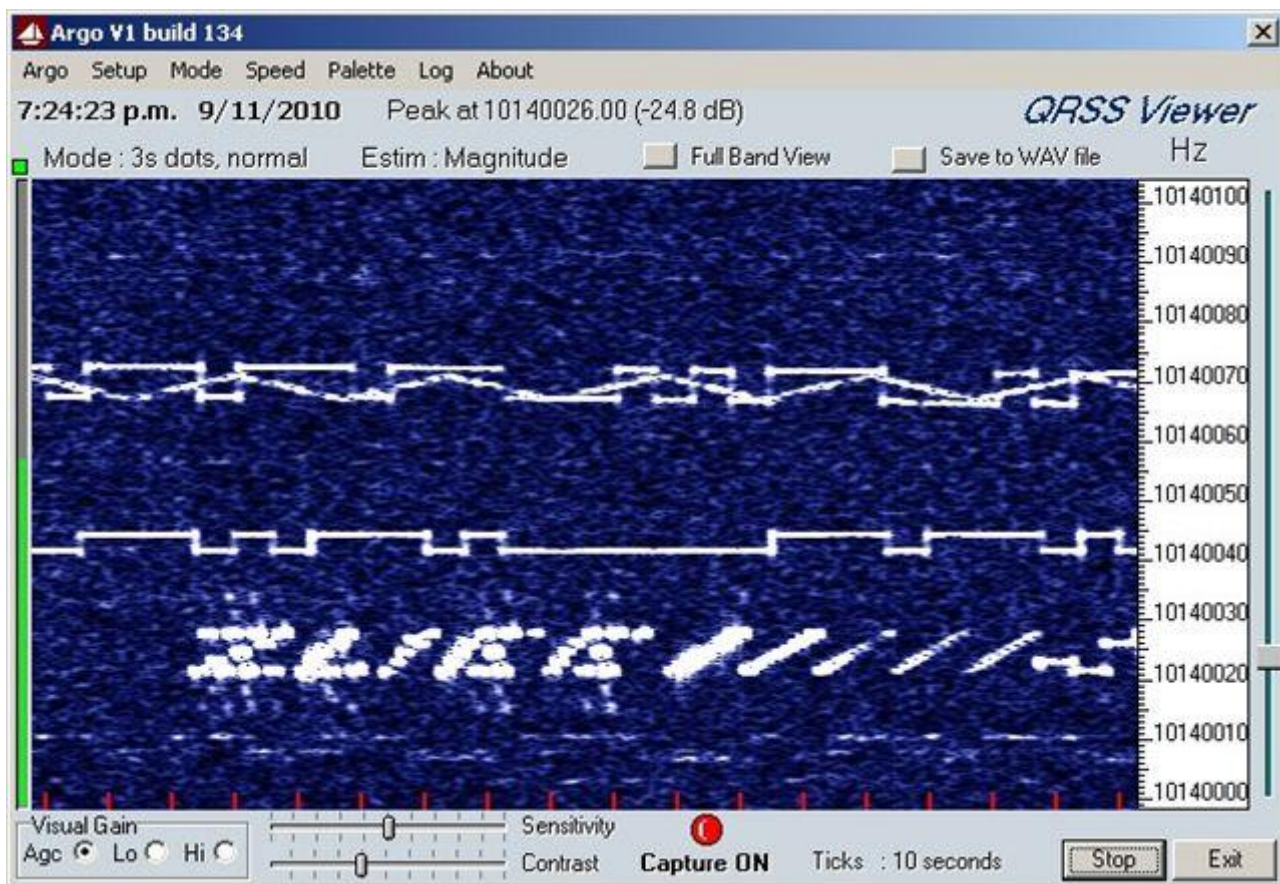
## GENERAL

The scribe, Kevin isn't in a position to do the full newsletter this month due to work commitments, however Gavin ZL1GWP has kindly stepped in to do the rest.

After my previous talk about WSPR and QRSS (slow Morse), a couple of cheap QRSS kits for 30m arrived from Hans Summers <http://www.hanssummers.com/grsskit.html> . I havent completed my unit yet but Colin ZL2CMC has completed his Tx and has had reception reports from as far away as Florida in the US. All this on 100mW (0.1 watt) output and about 5 Hz frequency shift. One light bulb in your rig probably draws that much power.

One can look at online grabbers which download a small display of the the signal over time, and then one can visually read the morse.

<http://digilander.libero.it/i2ndt/grabber/grabber-compendium.htm>



This is an image of QRSS transmission by ZL1UJG interleaved with a triangular wave from another station, plus other transmissions from ZL2CMC and ZL1EE (ZL1BPU)

Mark at Minikits has some new LNA's out for the 6M, 2M and 70cm bands and these are useful for pepping up an older FM or Multimode rig. With some of the older RF devices becoming unavailable, he has replaced the MGF1302 FET on the 23cm LNA with a newer NEC PHEMT NE3210S01. The device has both a little extra gain and lower Noise Figure. The device is "hotter" so needs a little more stabilisation. I have done some small tricks and optimised the performance and it's certainly very sensitive. More information should appear on Minikits website [www.minikits.com.au](http://www.minikits.com.au)

With the DX season fast approaching, its time to check ones antennas and coax's (to make sure they aren't full of water or bugs) so that one can work the VK's. There is another VK DXpedition to Norfolk Island in January <http://vk9na.com/contactus.html>  
Last time signals were heard on 13cm between NZ and Norfolk Island!

At my last talk, there was some discussion on connectors. For average quality RF connectors of many different types and adapters at amateur prices I have sourced them from China with [www.rfsupplier.com](http://www.rfsupplier.com) The p&p is reasonable.

### **EDGECUMBE NATIONAL SYSTEM NODE**

Kawerau, Branch 67, has advised that the link equipment has been removed from Mt. Edgcumbe due to damage to the shelf back plane PCB. The equipment is now in Hamilton for repair. The '9975 node is still operational, but does not link into the rest of the National System. It could be a while before it is back in service.

### **ITEMS FROM NOVEMBER COMMITTEE MEETING**

**Te Weraiti:** Planning is progressing for the moving of '695 to this site around March/April 2011. As new equipment is being installed, the equipment on Te Aroha will be turned off just prior to Te Weraiti going live.

**Licences:** All licences are up to date, with the final 3 due shortly.

**Te Aroha '840:** This equipment will be removed from Te Aroha when the equipment for '695 is removed.

**OTO Digipeater:** Still waiting on a visit to Rangitoto.

**Funding for New Equipment:** Applications are to be made to various funding organisations to cover cost of new equipment that is required.

**Sponsorship Of Licence Fees:** We still have many licences available for sponsorship. Further details below.

**Beacons:** The Hamilton beacons still need to be changed to their new frequency.

### **RADIO LICENCE FEES AND SPONSORSHIP OF REPEATERS, BEACONS AND LINKS**

Radio licence fees consume 85% of the Waikato VHF Group's present subscription revenue. By the time our project to replace Te Aroha 695's coverage reaches the end of Stage III, licence fees will exceed 100% of the group's subscription revenue (without more subs rolling in). Over \$10,000 of capital has also been committed by the VHF Group towards Stage 1 of that project.

Through sponsoring the annual licence fee for one (or more) transmitters, individuals can assist the VHF Group offset some of that expenditure, and keep those beacons and repeaters on the air. Licence sponsors for 2010 are ZL1UJG (2424.260MHz Kaimai beacon), ZL3GR/ZL1FW ('540 Kaimai data repeater) and for 2011, ZL1GWP for ('695). NZART subsidise licence fees for national system stations considered to be of a strategic nature, and that includes our Kaimai and Hamilton national system repeaters. Eight of our licences remain available for sponsorship in 2010, and from 2011, we'll have two more for the new link between '5675 and '695 after it relocates from Te Aroha to Te Weraiti. How about becoming a licence sponsor? Your contribution (of just \$50 p.a.) will be recognised against each station sponsored

(ownership and operation of that station remains with the VHF Group). Remember, an annual licence fee is no longer payable for your individual amateur station, so how about contributing an equivalent amount to sponsor one of the VHF Group's licences?

If you would like to support the Waikato VHF Group by sponsoring the licence fee for one of our Repeaters, Beacons or links, please contact the secretary at:- [branch.81@nzart.org.nz](mailto:branch.81@nzart.org.nz)

### SOME WEBSITE LINKS:-

[Live Real Time Satellite and Space Shuttle Tracking and Prediction](#)

[Real Time Satellite Tracking](#)

[findU is a database](#), archiving - weather, position, telemetry, and message data.

[Ham Radio software downloads](#) - a comprehensive list of ham radio software to download

[The Ham Radio Video and Audio Sharing Site](#)

[Links to homebrew Antennas and Antenna Theory](#)

[VHF antennas projects and plans](#) - mainly for *amateur radio* usage

[CQ VHF](#) - Ham Radio above 50 MHz



**Do you recognize any of these people?**

They are the organizing committee of the 1973 VHF Convention.

**DON'T FORGET THE 'NEWS & NET' ON '695 AT 8.45PM, EVERY SUNDAY EVENING**

Also check out the club website at - [www.zl1is.info](http://www.zl1is.info) - you never know what you may find.

Items for the website or newsletter are always welcome.

Please forward to - [branch.81@nzart.org.nz](mailto:branch.81@nzart.org.nz)