

	Clubrooms: UHCC Park Street UPPER HUTT P.O. Box 40 525 UPPER HUTT 6415	
	www.qsl.net/zl2vh/ NEWSLETTER of <i>The New Zealand Association</i> <i>of Radio Transmitters UPPER HUTT Branch 63 Inc.</i>	

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President's Report

As we near the summer period we are back into the all the outdoors types of jobs, I'm sure you all be happy about this, like the lawn mowing, house maintenance and the like. So as a club we need to turn our attention to our maintenance program.

This year (2006) and next year (2007) we need to do additional maintenance at Mt Climie. Over Labour Weekend we hope to make a start by scoping out what is required so can tick off all the tasks listed on the whiteboard at the clubrooms. If you are able to assist over the coming months it would be very much appreciated, watch your Inboxes for emails or attend the weekly Friday night meetings to stay in touch with what is going on.

The second meeting for the Wellington Radio Expo 07 was held recently at Branch 63 Clubrooms - the date and venue have now been confirmed - as Saturday 31 March 2007 (the week before Easter), and Naenae College Hall (same venue as the last two years - this will be the third event to be run - its amazing). The next meeting of the organising committee is in November at Titahi Bay clubrooms. I have again "volunteered" Branch 63 to do the Talk-in Station on 730, and the car parking in front of the college hall - can you place the date in your calendar and assist if you can to make this event a success.

It still appears that the Big Coast 2007 is on for next year - Morrie ZL2ADP is looking for volunteers for this event. You should all know the format by now. If there is particular role you wish to play, or wish to change your location can you advise Morrie early so that he can factor this into his planning. Of course you are more than welcome to request your position from previous years, but in order to cover off everything please remember that this is not always possible. (continued on Page 3)

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Club HF Net 3.630 MHz every Tuesday at 2100 NZST
listen for ZL2VH and join in.

A listening watch is also held on the first Friday of each month on the **438.600MHz** and **439.625MHz** Repeaters between 5pm and 7pm. Short QSO's are welcome. Branch 63 announcements may be made at these times.

Some more interesting websites

From Tom, ZL2HGR:

- Talk about a wide and varied bunch of hams....some of these lads have a serious amount of money tied up in kit!! http://www.k8nd.com/Radio/SO2R/K8ND_SO2R.htm
- If anyone is interested (especially the newcomers to the HF/DX world of Hamdom) and would like a personalized Beam Heading list with Prefixes etc (free), go to the following site....
www.njdx.org The North Jersey DX Association.
Once on the homepage scroll down to "Sub Sites" and click on "DX Tools" then click on "Beam Heading". Once there, follow the instructions and enter your details such as Name and Call plus the Lon/Lat details and Bingo you will receive a nice colour Beam Heading List with your name and call on it. It only takes a couple of minutes to generate.

From Morrie, ZL2ADP:

Do you suffer from undesirable email? To save changing your email address have a look at www.spamfighter.com This has a free download for the standard version which is very effective.

AREC Report

The Big Coast 2007

Branch 63 have once again been asked to assist with the communications for the Big Coast event to be held on 10/11 February 2007.

The Climie 730 repeater will be used to cover the major part of the route and the IRLP function will be turned off for the duration of the event.

This will be an AREC combined exercise and E calls will be issued.

Any members who wish to take part in the radio operations are asked to contact Morrie Ph 976 9022 or by email to mdvile@paradise.net.nz as soon as possible as the printing of the manual is underway.

ZL2VH Net

Stations on the Tuesday evening net have been increasing. Those heard over the past month include ZL2UX, ZL2JDB, ZL2SET, VK2BMS, ZL2SC, ZL2ACT, ZL2PDJ, VK3DBD, ZL2ADP, and the net controller ZL2TNG. Feel free to call in and get a signal report.

Playing with APRS

During the last few months I have been playing with APRS, which is a part of amateur radio involving packet radio techniques, computers, and GPS. As well as personally finding it interesting and fun, I believe it has the potential to attract newcomers to our hobby. I have met several people who are interested in computers and GPS, who don't have access to a suitable way of carrying data from mobile devices back to a base location. When I've told them about amateur radio together with internet they have suddenly taken an interest.

APRS stands for automatic packet reporting system, and it uses 1200 baud FSK modulation to send RF packets of data in "unconnected" mode i.e. the sender has not established a connection with the receiver and the packets are simply addressed and sent.

APRS is most commonly used for sending short messages containing latitude and longitude information from a GPS tracker device. This is what I have primarily been working on.

APRS is also used to send back short strings of data from amateur weather stations. This is the next area I will be playing with, and I have recently ordered a weather station to connect to it.

This mode of data communication is not limited to carrying weather and location information. Short text messages or telemetry data can also be carried via APRS packets. I can send a "text message" on my Kenwood handheld to another APRS station, which may be another similar handheld, or a (continued on page 3)

Playing with APRS (cont.)

computer somewhere in the world with an APRS callsign. One of these computers is an email gateway, and by routing my message here and including an email address I can actually send an email to anyone from my Kenwood handheld. I tried this last week to Sean ZL2SC and it worked very successfully.

APRS works by addressing your message either to an individual callsign, or to a general callsign where your location, weather conditions, or text bulletin is made visible to many other amateurs. Your packet is typically received and re-transmitted over several hops through the network in a process called digipeating. Some digipeater receivers are arranged as gateways to a server on the internet, so that data can be made available over large distances or to people who are not using radios. I can sit at my computer and look at a web site to see where my GPS tracker is currently located.

Since I am a licensed amateur, I can also send data to the internet server using my validated callsign, and it will be transmitted back to RF by various gateway transmitters.

I can also connect my computer to the NZ APRS server and receive a live feed to APRS packets, which I display on my computer using a special mapping program called UI-View (there are a few other ones, but that's the one I use). It shows the locations of all the stations that I am tracking. When I place my cursor over the icon for any of these stations it shows me the time the station was last heard from with the latitude and longitude, or in the case of a weather station its windspeed, direction temperature, rainfall etc.

If you want to look at what APRS can do, have a look at this web site :

<http://zl1amw.wallace.net.nz/live.html> This will provide a recent snapshot of the data from ZL1AMW's computer. With my computer running UI-View, I can zoom in on an area in much more detail. My computer can receive APRS packets via RF using a TNC (terminal node controller) as well as connecting to the real-time internet feed of APRS packets from the NZ APRS server. I can therefore see stations that are outside the receiving range of my RF port.

Also have a look at ZL1CVD Chris Day's web site : www.zares.co.nz Chris sells inexpensive GPS tracking equipment as well as a small weather station that is compatible with it. He plans to sell a GPS tracker with digipeating capability very soon. I think I need a few of these.

My current interest in APRS is primarily for logistics support at outdoor events we provide amateur communications to, such as The Big Coast. As well as voice communications, I think it is desirable to track the locations of some key personnel and vehicles. These would be displayed graphically on a computer with a map program, so that the organisers can follow progress and know where their key assets are located. We could also deploy one or two weather stations around the course, so that good decisions can be made using objective weather data.

The Big Coast poses an interesting challenge to reliably carry our data packets around the course, with its hilly terrain and sometimes poor line-of-sight to the 145.455MHZ data repeater on Climie. I have been building some GPS trackers, getting the computer software configured and working, and now I'll start playing with weather stations and digipeaters. I find it very stimulating to learn about all this stuff, and to get it working.

I am also motivated by the fact that we can use our amateur radio hobby to enhance safety in outdoor events, and the time I am spending playing with APRS therefore seems much more rewarding. Most of all, it is fun!!

Pete, ZL2PDJ

President's Report (cont.)

JOTA Weekend - no approaches made so the club is not doing this event, instead we are doing maintenance at Mt Climie.

Also planning has commenced to celebrate the clubs 60th Anniversary, on the 3 December 2006 - this will be combined into the Christmas dinner as well. Venue and pricing will be available soon - again please consider attending this event.

Well that's it from the top... 73's and good DX'ing...

Mark, ZL2UFI
President