



ZL2VH Newsletter – October 2020

President's Report

Spring has arrived and so has the extreme swings of weather, hopefully we will have longer periods of settled weather.

We have a fair bit of maintenance coming up with the repair and return to service of the 6m antenna in time for the DX season. I also intend purchasing the replacement antenna for DSTAR 860 and installing both the 860 and 5425 antenna. I would like to get all our cable runs both at Mt Climie and at the clubrooms and replaced if need be.

We will be applying for the licences and frequencies for the 6m and 10m beacons to be installed at the clubrooms. Hut work will hopefully occur as the external paint will need another coat.

Coming up maybe, possibly (who knows) will be our main fund-raising event for the year, located down on the Wainui Coast Road. We usually supply the caravan and 6 or 7 marshals. We have not yet been contacted about this years event and I cannot find any mention of it on the usual websites.

It's normally run around the second or third weekend of October so they are leaving it a bit late. (Standby for a short notice panicky email asking for volunteers.....).

Also coming up in October is JOTA. We have not been approached but you may hear activity on our repeaters so please join in and help encourage potential young hams into radio.

Next year's Jock White Field Day promises to turn into an interesting affair with the YOTA (Youth On The Air) crowd setting up at the Kaitoke Waterworks camp grounds. They will be operating using Gisborne Branch 11 members, they are expecting a large crowd there.

Mike ZL2NSA

Br 63

Branch 63 Repeater Update

Nothing to report again this month.

From Justin ZL2UGL

Re: Catherine Jemma ZL3CATH's visit to Wellington

From: Catherine Jemma <catejemma@hotmail.com>

Date: Sep 30, 2020 14:49

Subject: Fw: ZL3CATH visit to Wellington. Report and photos

To: zl2ugl@nzart.org.nz

Cc:

Cath's adventures in ZL 2 Land recently, attached are 2 photos (a separate email includes a third photo with the "view" from my hotel window, as I stood by it transmitting) . About 1,300 words.

Thank you for the hospitality on my recent visit during late July and early August.

Please feel free to circulate this among your members or use this report as you might choose within local newsletters etc.

cheerio and 73's

Catherine. ZL3CATH

(Cath's photos and written report follow: - Ed.)



Hotel View



Hat Callsign



VLF Coil

We are always looking for articles to fill the pages of newsletter. Please forward anything, no matter how large or small, to the editor - Eric ZL2SET – ericwilby@gmail.com.

NZART Branch 63 Incorporated
Council Depot
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President: Mike ZL2NSA
Secretary: Justin: ZL2UGL
Treasurer: Gavin: ZL2ACT

A Cantabrian's trek to ZL twoland. by Catherine de Croy ZL3CATH

A long time ago, before Covid-19 was a thing, I'd booked to have a few days up in Wellington. Then Covid came along and my reason for going got cancelled. This left me with non-refundable and non-changeable airfares and accommodation.

An expensive lesson. Perhaps I should just sit on the sofa at home and cry into my tissues ? Negatory ! I'm gonna go on up to Welly and have the best time I can under the circumstances. I made contact with some Amateur Radio clubs in advance.

Arriving on a Wednesday I was able to talk to some folks on the National System. Standing by the window of my budget hotel right in Central Wellington, with a blistering 4 watts of mighty Baofeng power, I had several contacts. Also, I could at times hear folks talking on a local repeater but they couldn't it seems, hear me.

Thursday rolls around and after a day of sightseeing and other adventures it became dark and ominous...well ok, it got dark because it was evening by then. I went and sat at the train station waiting to board a train on the Kapiti line. I overheard some women, locals, sitting near me talking about "Tawa".

"That's where I have to go, and I'm lost already" I said. Anyway in due course we all boarded the train and Tawa is only 15 minutes out from Wellington Central. The Porirua Branch 74, VHF Group, meet at a community centre just a few hundred metres walk from the station. The Tawa local was going right past, as we walked together.

I waited outside chatting on The Mighty Baofeng until a keyholder arrived to unlock a few minutes later. Within a few minutes about 20 folks had piled up, inside. A short formal committee style meeting took place and after that was a talk on VLF (Very Low Frequency).

VLF is somewhat of a specialist interest of John's (ZL4JY). I fear although I took notes, much of what he said was so far over my head,

that I may have some details wrong. But I'll recount some of the key points as best I can.

John said it wasn't always necessary to have giant antennas. Indeed when talking about the 2,200 metre band, a 1/4 wave whip would seem to be a physical impossibility.

He thought he'd give the 630 metre band a go first. He fluffed around a bit with 130-190 khz and 472-479 khz. Amateurs have some shared band space there, although there's a limit of 5 watts on air.

One trick is that the antenna MUST be vertically polarised. He uses what he refers to as a "probe" of just 2 inches, or 50mm in height although the impedance will be very high. With a signal of only -120dbm, he needs to put the antenna 400 metres from his house because of normal household QRM.

A computer is essential as any signals received are inaudible to the human ear, buried within the noise level. Daytime is best, with peak reception just as the Sun dips below the horizon.

John says his system runs on a FET running at 400 Volts at 30 Amps. However he warns that the slightest bit of mis-tuning of the coil leads to a dead FET. Unsurprisingly, during the initial experimentation phase, he accumulated quite a pile of dead FETs.

"Here's a coil I prepared earlier" and out came the prime exhibit, a coil about one metre long and 250mm diameter. (I snapped a photo of it being examined afterwards, by Ray ZL2RAY).

Apparently strictly speaking "true" VLF (Very Low Frequency) would be 10 to 30 khz, but the loading coils needed would be two to three stories high, so impractical for most amateurs.

There was lots of reference to "capacitance hat" and some coil had just 600 microHenries but by then my brain was well into overload. Clearly this is a highly specialised area. Apparently the data transfer rate is

about 1 bit per second and it takes about 2 full minutes just to send/receive a callsign.

I noted down that Russians use 77 khz and Americans 88 khz for communication with submarines, but the broadcasting “antenna” needs to be underground, several kilometres long and fed with monstrous amounts of power.

After that main talk, two other club members had a brief segment each. One man who shall remain nameless (as, sorry I don't know his name), showed off a mystery folded dipole, apparently made of stainless steel. It was found along with MANY others the same while clearing out a container stashed full of old air conditioning and refrigeration parts. That was followed by Ray ZL2RAY who showed that modern hearing aid batteries bounce more if they are flat. New fully charged hearing aid batteries do not bounce as much.

Congratulations go to Daniel ZL4KYH who passed his licence examination in the back room that evening. After that was a supper and then train back to my hotel room.

After various other sightseeing adventures around Central Wellington, come Friday evening I was ridin' the rails ag'in. This time it was a 45 minute train ride to Upper Hutt and the Branch 63 club meeting.

Thankfully Justin ZL2UGL picked me up from the railway station carpark and we went to the clubrooms, in part of the Fire Station compound.

I regret I failed to photograph their old AREC caravan or their mini-trailer mounted telescopic mast, which were located in the adjoining garage.

A smaller club meeting than at Tawa, some homebrew works in progress were shown, as some of the others present used the onsite rigs. It was great to catch up with Mike ZL2NSA, Ben ZL4BDG and Peter ZL2AUB.

It was here that I first heard that one of the Wellington repeaters is naughty and does NOT follow the normal rules for offsets. This is why the split pre-programmed into my Baofeng before I left home, was wrong, and why I could hear on the repeater, but they could not hear me.

So learning that, I manually entered 147,000 as the listening frequency and 146.400 to transmit and I made many contacts on the Fitzherbert or "700" repeater over the following days. I also learned of another repeater that had escaped my radio's earlier programming. Being 147,300 on the RX and 147,900 on the TX.

After a great evening chatting with the guys, Gavin ZL2ACT kindly dropped me right by the station for the train ride back to my hotel.

Saturday morning I climbed (just barely !) the public walking track to Wellington's Mount Victoria lookout and made a few contacts before bussing back into the city (I didn't see the bus stop at the almost top of the hill, until I'd already walked all the way up LOL).

Monday morning I had many contacts (direct frequency entry, yes !) while I was up on the hill at the Cable Car entrance to the Botanic Gardens. Later in the afternoon as my last day in Wellington wound down, and I sat on a bench near Cuba Mall, I spoke to some of the same folk again, and a couple of new ones, as I waited for my Shuttle Van to take me to the airport for the flight back home. (Bonus, on the way back to ZL3Land, I got a plane with propellers, my favourite. Yippee !).

Note that over the course of five nights and six days there wasn't any rain to speak of. The winds were gentle and the temperatures pleasantly mild, by day and by night. I left feeling a little guilty. I think I may have used up all of Wellington's nice weather for the whole month.

Thanks to Porirua Branch 74 VHF Group and the Upper Hutt Branch 63 clubs, and their members for welcoming me and making my Covid cancellation trip a pleasant experience.

Catherine ZL3CATH
Christchurch NZ