QST63
WWW.ZL2VH.ORG.NZ
Branch 63 Clubrooms
Park Street, Upper Hutt
204 Plateau Road
Te Marua
Upper Hutt 5018
Newsletter of The New Zealand Association of Radio Transmitters, Upper Hutt Branch 63, Inc.

ZL2VH Newsletter – March 2018

President's Report

February passed rather quickly and now Autumn is upon us.

The Club entered the Jock White Field Day this year from a new location at the Kaitoke Glider Club. This proved to be a great success with over 120 contacts on 80 metres and over 30 on 40 meters. Thanks to Brian ZL2CHV for finding and getting us access to the site, Brian intends holding more weekends there doing HF and some astronomy with his telescope. This year saw ZL2CHV,ZL2BRG, ZL2UGL, ZL2DRM, ZL2NSA, ZL4BP, ZL2UP, ZL2ACT and ZL2UDF join in for all or part of the weekend.

Apart from getting as many contacts as we could, the aim of the weekend was to prove that all our deployable equipment could work to a good standard. The Solar installation installed in the caravan by Justin ZL2UGL worked very well, so we didn't need to use the generator for the caravan. We ran the generator during the night to power the gilder club house, which gave the generator a good 4 hour run. The ICOM 7100 worked well and we had no problems with the mast and 80m dipole. We had the STSP repeater rigged and this provided good local coverage and also down the valley as far as Silverstream Bridge.

Gavin ZL2ACT represented the club at the AREC supported Tararua Crossing Race held on the same day as the JWFD. Early start 0600, early finished then up to the club site to provide moral support to the team.

John ZL2TWS has provided a detailed summary in the repeater report that is worth reading.

The AGM will be held on a date to be decided mid to late April.

73 and Good DX

Mike ZL2NSA
Br63 President.

Repeater Update (from Simon ZL2BRG)

Status Updates

3cm Beacon: Off Air.

The Beacon controller and GPS antenna was re-installed in January. Unfortunately a fault has developed with the beacon r.f. head unit – All indications were ok – apart from one - the unit is not generating any r.f. output (see photo).

The unit will be taken down off the pole and repaired over the next month. The opportunity will also be taken to get the r.f. head box sand blasted and repainted.

1292 23cm: On Air

DSTAR 860,5425: On Air

730

The reason for 730's four dipole stack failure has been discovered to be static/lightning strikes. Close inspection revealed the telltale burn marks on the dipole elements. This could also explain the arcing that was seen when the duplexer was refurbished. The question is what to do next.

A proposal will be made at the AGM that the club's mission statement be amended to remove the 'dx' repeater tag from 730. This would allow the club to run smaller antenna arrays for 730 reducing costs, complexity and improving reliability.

Quotes are being obtained for single and double dipole arrays as a permanent replacement. A separate special meeting will be held to decide the final antenna selection for 730.

Tests will be done to check the earthing of 730's pole.
In light of this information 5425 and 860's antenna array's will be inspected for indication of lightning strikes.

395 6M: On Air

Further Comments (from Mike ZL2NSA and John ZL2TWS)

730:

Problems with crackle and noise have finally been traced to a damaged antenna.

This is the second SkyMasts SM4 antenna to fail on the north Climie pole.

Lightning strike from storm clouds is clearly evident on the dipoles. InTelcom Lower Hutt has verified the damage is due to static from cloud and mini strikes.

This has brought into question the effective earthing of the north Climie pole. The dipole stack seems to be discharging clouds instead of via the mounting pole.

InTelcom also advise that even though a mounting pole is well earthed lighting behaviour is unpredictable causing antenna to be damaged at any high altitude site.

Trustees are examining the South antenna pole for similar damage before deciding if the North pole requires an earth upgrade.

730 underground cable has a low sheath test on it indicating lighting puncture holes or sheath damage while installing 25 years ago that has allowed moisture to ingress.

The possible solution will be discussed at the AGM and most probably to down grade the performance of 730 to the current operations condition using a single dipole.

Moving 730 single dipole to the 395 pole may be a good solution.

No complaints have been received about the current performance of 730 with some stating that signal has improved in the lower valley areas. This happens when a single dipole is used in stead of a gain horizontal beam stack of dipoles.

860 DV:

R2D2 Bit Error Rate (BER) has increased over the last few months. Trustees will investigate any antenna loss as above.

5425 DV:

Reasonable performance with some R2D2 BER at times that corresponds to static begin heard on both 730 and 395 from time to time.

395:

Good working condition with occasional static heard as above.

1292:

Good working condition.

3cm 10GHz beacon: Off air due to repairs.

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.

From John ZL2TWS

Subject: British American news!

COPPER WIRE

After having dug to a depth of 10 feet last year, British scientists found traces of copper wire dating back 200 years and came to the conclusion that their ancestors already had a telephone network more than 150 years ago.

Not to be outdone by the Brits, in the weeks that followed, an American archaeologist dug to a depth of 20 feet, and shortly after, a story published in the New York Times: "American archaeologists, finding traces of 250-year-old copper wire, have concluded that their ancestors already had an advanced high-tech communications network 50 years earlier than the British".

One week later, the Irish Dept of Minerals and Energy in Dublin , reported the following:

"After digging as deep as 30 feet in Kerry's Dingle Peninsula near Dún Chaoin, Seamus O'Connor, a self-taught archaeologist, reported that he found absolutely fuck all. Seamus has therefore concluded that 250 years ago, Ireland had already gone wireless."

Tararua Mountain Race

Last Saturday, the 24th was the Tararua Mountain Race. This annual race was held a little earlier than usual, which unfortunately clashed with Jock White Field Day.

My brief was to be on site at Marchant Rd. In time for an 0600 start. Because the comms plan involved a number of non-amateur operators, Wellington AREC supplied a number of Icom type approved base sets and handhelds. I was very impressed with the range of DoC, CD and Maritime frequencies available on these things. After arriving on site at 05:45, I was still on air in time for a an 0600 start.

As well as me being on a CD Climie Repeater, several DoC Repeaters were linked to provide a path from the Lower Hutt Police Station, to Otaki. Unfortunately, I was not aware of the overall position as I could not monitor the Otaki traffic. So although I had good copy to the SAR Base at the Lower Hutt Police Station, I didn't really didn't have much idea of the overall picture.

The race itself from Kaitoke to Otaki Forks is a real gut buster, and the organisers reserved to turn away anyone they didn't consider fit enough.

I passed very little official traffic, and had nothing to say after the last competitor left my site at about 0800. For the rest of the time I pretty much did my thing and caught up with some Branch 63 Financial stuff and monitored some of the traffic being passed on a Police P25 digital radio that had automatic routing and so forth, but we were only allowed to use the police radio in cases of genuine emergency So in all a pretty boring day

Gavin ZL2ACT

Upcoming Dxpeditions

From RSGB 23 February:

An international amateur radio team that postponed a December 2017 DXpedition to the disputed Spratly Islands now plans to be on the air in early March from Layang Layang Island, also known as Swallow Reef, under Malaysian call sign 9M0W. The IOTA reference is AS-051. The operation will be on the air on 160 to 6m using CW, SSB and digital modes. While the Royal Malaysian Navy maintains a presence on the reef, ownership of the Spratlys has also been asserted by the People's Republic of China, Taiwan, Vietnam, and the Philippines in addition to Malaysia. The Spratlys are Number 56 on Club Log's DXCC Most-Wanted List.

From RSGB 04 March:

Plans appear to be on track for the 3B7A DXpedition to Saint Brandon Island, expected to start in early to mid-April 2018. The 3B7A team said that 700 kilograms of gear is now on its way to Mauritius, where it will join the generators and stock of fuel on the boat to Saint Brandon Island on 3 April 2018 with two team members. A second vessel departing on the fifth will transport the other operators. 3B7A will not be active on 60m nor on 6m EME. The DXCC entity of Agalega and Saint Brandon Islands is the 28th most wanted.

Digital Mode Update

A second beta version of WSJT-X version 1.9.0 has been released. This is to allow further field testing of the new FT8 DXpedition mode, designed to enable DXpeditions to make FT8 contacts at very high rates. The team is inviting the amateur radio community to participate in a public test run of FT8 DXpedition mode. Test times and frequencies are Tuesday, 6 March 2018 at 2300UTC on 14.080MHz; on the 7th at 0000UTC on 10.141MHz, at 0100UTC on 7.080MHz, and 0200UTC on 3.585MHz. Frequencies are not the conventional FT8 operating frequencies and are subject to change, subject to conditions. Last-minute changes will be posted on the internet.

NZART Branch 63 Incorporated
Council Depot
Park Street
Upper Hutt

President: Mike ZL2NSA
Secretary: Justin: ZL2UGL
Treasurer: Gavin: ZL2ACT