

# HAMLARKS

Christchurch Amateur Radio Club



September 2017

## Branch 05 Club re-occurring events

**MAIN BRANCH MEETING** First Wednesday of the month 7.30pm, except January. ***All visitors welcome.*** At 5 Idris Road, Fendalton.

Branch 05 Website [www.chchhamradio.org.nz](http://www.chchhamradio.org.nz)

**ACTIVITIES and STUDY NIGHT** Every Tuesday 7:30 pm at 5 Idris Road, Fendalton.  
***All visitors welcome.***

**DAYTIME MEETING** (Branch05)

Meet third Thursday of month, 1 pm at Branch05 clubrooms.

***All visitors welcome.***

**COMMITTEE MEETING** 1st Monday after branch meeting 7.30 pm  
At 5 Idris Road, Fendalton

**AREC MEETINGS** Normally the 2<sup>nd</sup> Wednesday of the month 7.30 pm. At 5 Idris Road, Fendalton

**DEADLINE FOR HAMLARKS COPY** 11 days before the main branch meeting.

**WEEKLY CLUB VHF NET** Every Sunday 8:00 pm on 145.625 MHz repeater if available, otherwise 147.050 MHz repeater.

**OFFICIAL NZART BROADCAST** Last Sunday of the month 8:00 pm on 147.050 MHz repeater.

### **CW PRACTICE**

Boyd ZL3LE every Tuesday at 8 pm. 3550 kHz. Listen in your shack or come along to Branch 05 clubrooms.

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## Programme for next branch meeting

The speaker for September will be Roger Corbett ZL3RC on;  
"My accidental 23 cm EME world record and the road to its surprising success"

Come and hear how this came about and see most of the equipment used.

**Secretary Rory's Ramblings - ZL3HB**

I think I have said it before. It amazes me where all these new Hams come from!! HamCram a week ago got 12 new Hams passed. A great result from the hard working and committed team of teachers. And the study done beforehand by the candidates obviously worked. Well done all.

And the next one is 14/15th October and we have 11 booked for that already. Amazing!! despite my initial scepticism this weekend course sure seems to be working doesn't it. And one of those who passed came through RadioTek originally so that is all good as well.

We are always looking for more teachers as it would be good to try and get a second stream available so we can maybe run smaller courses more often. Or give teachers a spell. A whole weekend is a large commitment. Something to work on so if you think you might be an aspiring lecturer please let us know. Mike ZL3MWD is the teaching team organiser so talk to him. He is at the club most Tuesday nights.

`` Speaking of Tuesday nights - they're going strong too, with up to 35 members and guests turning up to pore over the junk ( I mean high quality gear - junk really !! ) and lots of \$\$ going into club coffers from latest estate offerings so we are doing OK.

On the \$\$\$ front we need to start talking about how we handle our financial reserves to get the most out of them as one day we might want to expand to larger premises!!! And I hear you say - oh no - not after all that hard work getting established here. Maybe not, but time will tell.

The aim now is to get the paving and fencing done so we can landscape and create a place we can all be proud of. And it would be nice if that darn cabbage tree didn't drop so many leaves!! And the PC greenies say we can't cut it down!! Don't start me on that!

You will see a note elsewhere in Hamlarks about a night we are organising for those who want more info on getting onto the airwaves. Aimed at the new HamCram passers but could well be of interest to others so anyone welcome to come along. One past HamCrammer who is full of enthusiasm suggested it and we reckon it is a good idea as we have discussed it in the past but never got around to it.

Marleys 705 antennas are here and the coax has been cut and terminated so we just need to organise a day to head up and finish the job. But not in this weather!! 60 mm of rain here in last couple of days

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and they had 125 mm up at the farm so the country is a bit soggy. Mind you would be easy to dig the trenches if we could keep on our feet on the slope!! You will note the pipe in the clubrooms awaiting the coax!

So plenty to do - anyone with any 'round tuits' ??

Cheers

Rory ZL3HB

## President's Notes

### . President's report Sept 2017

The Newtech held last month was very successful. There were plenty of questions from the "new" hams.

There have also been 2 very successful working bees at Marleys over the last month. We seem to have achieved the same coverage even though we have reduced the transmitter power back to 50 W. This has reduced the desensing and so has allowed the lower power signals better access. Thanks to all those that helped

. We now have some new solar panels for Herbert. Once the access is possible there will be a trip up there .

Cheers, Ian

## Hamcram\_at Branch05

The next HamCram will be 14/15th October. Places are filling fast; we have 11 booked for already !

### From the Acting Editor

Hamlarks editor Kelvin ZL3KB will be overseas until the end of the year. If you have copy, hamads, etc for Hamlarks please send it directly to me at [john.zl3ib@ihug.co.nz](mailto:john.zl3ib@ihug.co.nz) or phone 03-3489 084.

Thanks & 73

John Walker ZL3IB

## ZL3 Summits on the Air

## Marleys Hill Repeater Update

The last two Friday's have seen a substantial amount of work at the Marleys Hill site. All the old chain clamps are now long gone on the upper pole.

We have replaced the old Diamond X50 antenna with 4 dipoles, run all new feeders to the hut, tweaked the duplexer tuning, labelled all the feeders so we will know what's where in 10 years time.

Having completed the work on Friday 18<sup>th</sup> August, Richard ZL4FZ measured the performance of the repeater. The results are consistent with the changes we have noted over the last few visits so I thought a summary of the total effect (from temporary dipole to final configuration) would be of help.

In summary; January 2016 (using the X50 antenna)

- The signal received from 705 using a fixed antenna at my QTH was -53 dBm (with the transmitter running at 100W).
- To trigger 705 (with CTCSS tone), I needed - 11 dBm from a signal gen to open the mute, but needed 5 dB more (-6 dBm) to hold the repeater on and hear the test tone (because of 5dB de-sensing of the repeater receiver by it's Tx and site noise).

18th August 2017 (using new antennas).

- The signal received from 705 on the same antenna at my QTH is - 47.5dBm (with the transmitter running at 58 W).
- To trigger 705 (with CTCSS tone), I need -17 dBm from the sig gen to open the mute, and 2dB to hold the repeater on and hear the test tone (i.e. 2dB de-sense).

Performance change

- The effective increase in receive performance (including the effects of de-sense) is a 9dB improvement in usable sensitivity.



- Ignoring the de-sense improvement, the receive performance is 6 dB better than before (i.e. antenna changes only).
- The effective increase in transmit performance is **5.5 dB** (signal level) plus a 2.4 dB reduction in Tx power required to stay legal = 7.9 dB .
- The repeater receiver improvement is equivalent to a 5 W hand-held being able to transmit using 40 W !
- On the receive side (mobile or hand-held), to get the same the 5dB increase in transmitted signal level in Christchurch, we would have had to run the repeater transmitter at 316 W instead of 100 W. Instead we have had to reduce the Tx power to 58 W to stay within our 200 W EIRP license.

Of course this is not all due to the antenna changes. Touching up the duplexer tuning has made a 3 dB improvement in de-sense, complimenting the increased antenna receive gain.

Please continue to test so we can assess the real-world impact, although early indications are consistent with the results above (Jim - 3ND was able to use HH at Methven from kitchen window, HH's in ChCh with much better repeater signals etc)

The VHF repeaters have been measured (off air from Richard ZL4FZ's QTH) with the following results

705 Rx (with CTCSS -17 dBm/-15 dBm = 2 dB de-sense), Tx Signal -47 dBm

725 Rx (with CTCSS -14/-12.7 = 1.3 dB de-sense), Tx signal = -62 dBm (Improved by 17 dB Tx and 15 dB more sensitive Rx c.f. results from about 2 years ago - another good antenna job).

675 Unable to measure Rx sensitivity today - Tx signal -71 dBm - within normal fading tolerance for this path (last was -75dBm)

6975 Unable to measure Rx sensitivity today - Tx signal -85 dBm - within normal fading tolerance for this path (last was -88dBm)

5625 Unable to measure Rx sensitivity today - Tx signal -68 dBm - within normal fading tolerance for this path (last was -72 dBm)

Repeaters I could not measure require more than 0dBm to trigger - test set can only do 0dBm max (When I fix HP Test set it will do +20 dBm).

Regards

Richard S ZL4FZ

**Eastfest 2017****Saturday 9<sup>th</sup> and Sunday 10<sup>th</sup> September  
at Ashburton Masonic Hall.**

Saturday 9th,

0930 Morning tea and registration.

1000: Richard ZL4FZ, Radio mobile

1100: Steve ZL2UCX, DMR Radio for AREC.

1200: Lunch.

1300: APRS Forum.

1400: Dave ZL3TRX, Horse endurance comms, web page, tracking etc.

1500: Afternoon tea.

1530: Duncan ZL3JT QSL cards, Logbook of the world, DXCC.

1630: Chris ZL3LF, Drones in ham Radio.

Sunday 10<sup>th</sup>.

0900: Gareth ZL3VP, Radioactive Motor-homing.

1000: Morning tea.

1030: Methven SAR early days.

1130: Andrew ZL3CC, SOTA.

***Attn Br05 members***

Hi all, Local arrangements for Eastfest ,

Saturday 9<sup>th</sup> September,

Morning tea from 0930, finger food , tea and coffee provided.

Lunch, self-catering, a short walk into Ashburton town centre,  
tearooms, Subway, Macdonalds etc

Afternoon tea same as morning tea.

Evening meal: suggest Ashburton MSA restaurant . We will ask for those  
who would like eat there and advise the restaurant by lunchtime.

Sunday morning; tea same as Saturday.

There will be a Windows 10 laptop , a data projector and a sound  
system available for the presenters to use live.

Regards, Jim ZL3ND

**HAMADS; For Sale or Wanted**

**For sale:** Icom IC-703 QRP ( $\leq 10\text{W}$ ) HF+50 MHz transceiver. General coverage: Rx 30 kHz-60 MHz, Tx 1.8 MHz-54 MHz (at least), ready for 5 MHz band. Internal auto ATU. Later model with improved PA device biasing. All modes: SSB, CW, RTTY, AM, FM including CTCSS/split for repeaters etc. Very good condition, comes with power cable, stock microphone, plug to mate with rear data socket for digimodes, original manual and box (note: accessory cable & spare plugs/fuses etc. not included). Extras: Fitted Icom FL-52A 500 Hz CW filter option, Internal MW attenuator removed, now has good Rx sensitivity on MW and 472 kHz band, Rear keyer socket has the grounding mod to cure RF feedback issues (common problem on stock IC-703s). \$703 *ovno*.

**For sale:** Tait TMAA13 13.8V switchmode mains power supply, 23A continuous output rating. This unit is the same as a Samlex SEC1223 but with additional RFI/EMI noise suppression. Suitable for powering 100 W HF transceivers etc. Compact low-profile design (black metal enclosure, approx 190 x 200 x 60 mm *wdh*), front panel illuminated rocker power switch, screw-type power sockets on rear panel. Very good condition, with mains power cable. Manual not supplied but available online. \$95 *ovno*.

Please contact Kevin ZL3KE, (03) 337 0238,  
gerbiltronics@gmail.com.

**For Sale.** TYT TH9000 2m Base/Mobile 55 W adj; can program for you if required. \$120.00. Ph or txt John ZL3ADF, 021 1865 667

**Wanted** Photos wanted of local amateur radio activities, people, places, equipment, antennas etc. to build up a repository of images related to the history of amateur radio in the Canterbury area.

Particularly wanted are 'historical' photos from the early days in amateur radio here in Christchurch but keep in mind that even current activities etc will be historical some day.

Amateur radio related photos etc from elsewhere in ZL are wanted as well. Original prints or negatives are fine, as are good scans of photos. All can be copied or scanned either at the clubrooms or I can visit you at home and copy/scan them there.

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Please contact Dave, ZL3FJ. Email - zl3fj@ihug.co.nz Mobile - 021 717 005 or Home - 03 3527 666 Plus I'm at Branch 05 most Tuesday nights.

**Wanted.** A newly-licenced HamCram candidate is looking for an HF rig. Something in the middle of the range with general coverage and that has been opened!! He's going sailing!

Please reply to Pete Corbett <pete.corbett@landsar.org.nz>

**Freebies.** Two blue NZART neckties, new. No charge but a donation to club funds please. Contact John ZL3IB, ph 3489 084, email <john.zl3ib@ihug.co.nz>

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**Branch 27, New Plymouth Amateur Radio Club** is celebrating its 90<sup>th</sup> birthday on September 23rd 2017. We extend an invitation to your members to join us in celebrating, this event, all relevant information is on the program and registration form.

We would especially like to see anyone who has been involved or associated with Branch 27 over the years at this event.

The program and more registration forms can be seen at <<http://www.zl2ab.com/90th-celebration/>>. Please contact me if you have any questions; Daniel Vandenberg ZL2DRV, Secretary ZL2AB Branch 27, Phone 027 4611 932.

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### **Internet Sites of Radio Interest.**

**SOTABeams** have published an interesting article. It says: Portable operators pick which antenna to use for a wide variety of reasons. Performance is often high on the list but it's by no means the only factor. This experiment compares the performance of two popular portable antennas: an inverted vee dipole and a small transmitting loop. The experiment was carried out in carefully controlled conditions

Read the full article at:

<http://www.sotabeams.co.uk/blog/comparing-the-performance-of-an-inverted-vee-dipole-with-a-small-transmitting-loop-on-40m/>

**Minutes of the Branch 05 meeting****Christchurch Amateur radio club meeting 3<sup>rd</sup> August 2017****Apologies** ZL3OY, ZL3NW, ZL3TFK. Moved to accept by Ian ZL3TAO.

Carried.

**Visitors** Dave ZL3UDH, Kevin ZL3ADY, Gerard Morris.**Minutes** of July meeting moved to accept by Rory ZL3HB, seconded Keith ZL3AHL. Carried.**Correspondence** Q-bit, Ragchew, Amsat Journal**Reports** **AREC** All quiet

AREC meeting last week was cancelled.

**Repeaters** All OK

Greymouth has had a lightening strike on their gear.

Rob ZL3RX asked what has happened to the Philipines reeater as may be spare gear.

**QSL Bureau** 2 lots of cards in & a parcel for Nth Canty.**Tuesday night** Going strong with up to 35 attending. New hams turning up too.**Band report** Rob ZL3RX says 160m has been good.

40m OK around 3 PM

Andrew ZL3CC busy on SOTA

New digital mode FT 8 operating.

**General Business** Dinner – Saturday 5<sup>th</sup>. 6 PM at Papanui Club. A few may attend.Marleys aerials – aim for Friday 11<sup>th</sup>

Logbooks – club has them available at \$10

Council computers – heard nothing.

Eastfest – will be on 8/9<sup>th</sup> September in AshburtonNewtek on Thursday 10<sup>th</sup> at clubrooms.Meeting closed **at** 7.58 pm

Gerard Morris then have an interesting talk on ‘The unification of NZ time’

He has done a thesis and is writing a book on the subject.

**Christchurch Amateur Radio Club**Committee for 2017 email: [rory1@xtra.co.nz](mailto:rory1@xtra.co.nz)

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