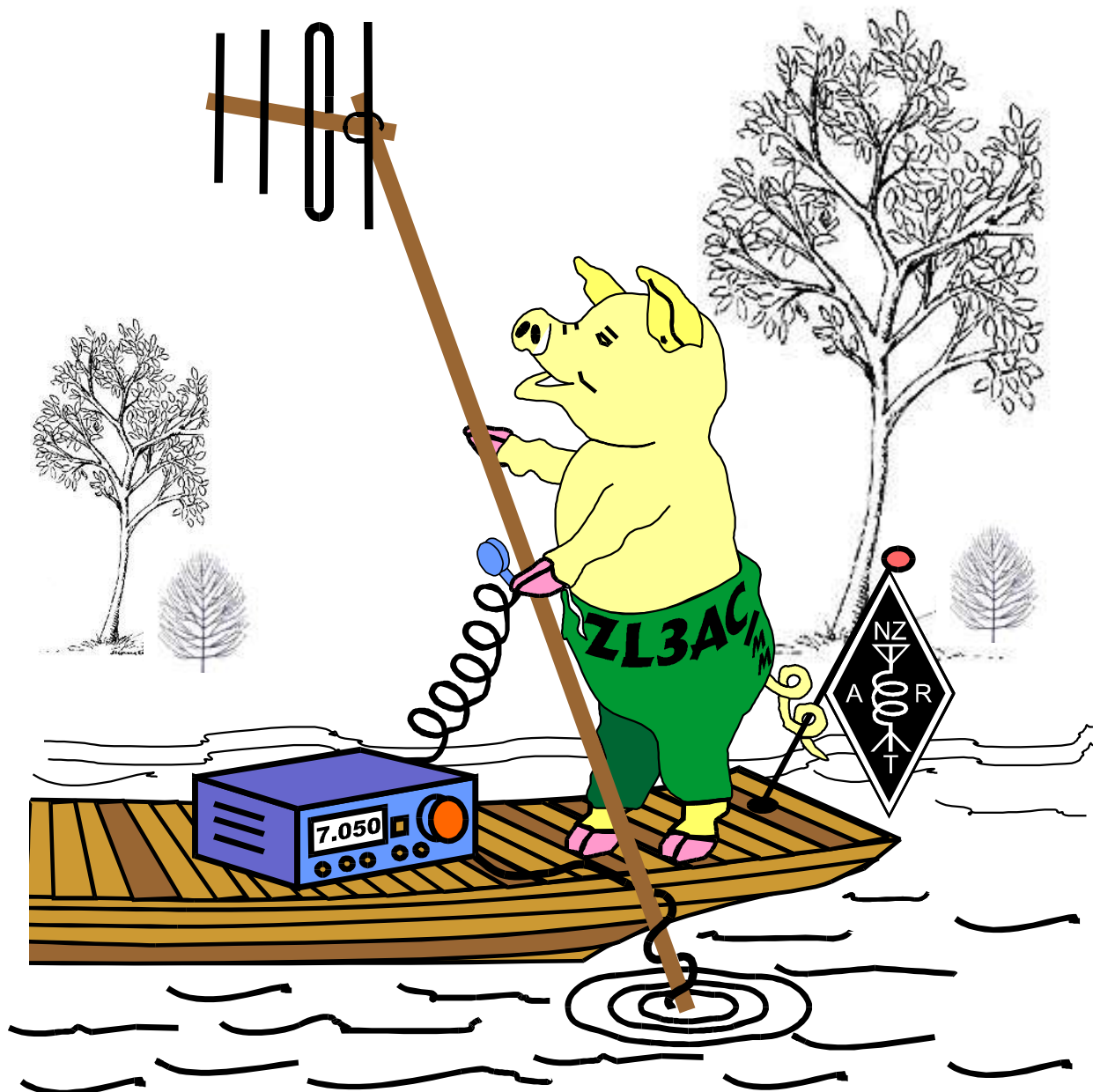


HAMLARKS

Christchurch Amateur Radio Club



October 2015

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

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

DAYTIME MEETING (Branch05)
Meet third Thursday of month, 1PM at Branch05 clubrooms.
All visitors welcome.

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

AREC MEETINGS Normally the 2nd Wednesday of the month
7.30pm. At 5 Idris Road, Fendalton

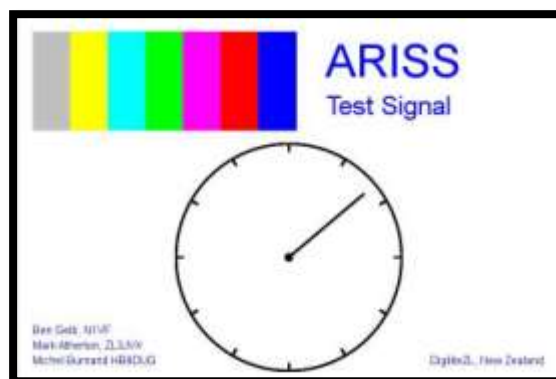
DEADLINE FOR HAMLARKS COPY 11 days before the main branch meeting.

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

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

Programme for next branch meeting

“Urged on by a request for help with the Digital Amateur TV downlink aboard the ISS, the 'DigiliteZL' project has progressed quite some way. Talk, discussion and demonstration”.
Presented by Mark Atherton, ZL3JVX.



Day time Meeting Group report - ZL3TAO

In September, Paul ZL3VY gave a very interesting demonstration of his Vector Network Analyser to 15 members. Duncan ZL3JT will give a presentation on DXCC at the next meeting to be held at 1pm on Thursday 15th October.

From the President – ZL3TAO

September has been a busy month. We got the resource consent for the garage – I will leave it up to Rory to explain the next steps. We had a working bee early in the month and got some of the “Spring” jobs done. There are still some more jobs to be completed so we will have another session on Saturday 10th October. There is now a planner on the wall of the clubrooms – the clubrooms have 35 events “booked” in the remainder of the year.

Ian ZL3TAO

Secretary Rory's Ramblings - ZL3HB

Whoopie!! We have the Resource Consent for the AREC garage. Non notified at that, which is good.

Your committee's hard work has paid off with obviously the correct i's & t's dotted/crossed. And some wanted us to hire professionals! You just don't know what you can do until you try!

So we are now awaiting ground tests so we can talk to builders about some designs & prices. Might be a bit of an issue fitting a nice square garage to an unsquare building.

That'll test their mettle!!

The museum shelving is coming along nicely & looks really good. As we put stuff in there we hope to have explanation cards, A lot of stuff we will need some history on so if you have any comments please let us know.

As Ian has mentioned a computer desk is going in the corner by the workshop for those who wish to dabble in that field. Now that we have fibre on to the clubrooms you can have a play to your hearts content. Brian ZL2BAT has found us a nice metal cabinet for the PA gear so we hope to get all that installed & setup soon so we can play CD's DVD's etc

& feed into the projector etc. Also power up the hearing loop for those that it may help. But you need to sit on the left hand side for that.

Ian & Gareth have visited neighbours to let them know what is going on as they have had flyer saying we are putting up a tin shed which we definitely are not! Will be nicely designed & all landscaped after a few working bees.

Remember the AGM is coming up in December so have a think about who you want to have as club officers & give some thought to joining the committee if you would like to help & add some ideas.

Club books are done & gone to the Reviewer so the change of 'end of year' has worked well so far. As you can imagine we are in a healthy financial position. A point of interest is that the property next door is up for sale as a demolish & rebuild. But the house is quite usable & rentable as is. If we had a few more \$\$\$ would have been interesting to add it as a club investment?? They are looking at \$400K or so as is but my guess is it will be snapped up at auction for a lot more?

See you next week.

Cheers

Rory ZL3HB

AREC report ZL4FZ/ZK9EA

AREC were turned out for a search at Bottle Lake Plantation last Saturday (19th September) to assist in the search for a missing 48 year old male. The team consisting of Geoff (3PX), Ken (4KD), Rob (3RX), Andrew (3CC) Jim (3ND), and Daniel (1DFA) established communications with the Civilian at the search HQ (Ranger station) along with a repeater on private property on Mt Pleasant on ES57. The team were responsible for communications for some 100 searchers, and we're required to also record the radio traffic as well as log it. The repeater worked well for the area, although careful use of the input frequency was also needed for communications with some teams at times. The Police have indicated that they were very pleased with the result from AREC. I wish to express my thanks to the team for a job well done.

The Pink Star walk coming up will now not require AREC involvement. The organizers have opted for a commercial security team because of recent changes to Health & Safety legislation, and this team will also provide the communications element.

Our next events will be the Harris Trophy (November) followed by the Classic Kayak Race on the Waimakariri River in early December. This event is like a mini Coast to Coast and we will be looking for assistance for some stations from other than AREC operators. This is a good day out with opportunities for a range of skill sets.

THE DMR repeater is still at the temporary location (Geoff 3PX QTH) while we await final approval from the site owner to relocate. The repeater is on 439.700 MHz (with -5MHz split) and has surprisingly good coverage of the city despite the comparatively low transmit/ receive height.

The AREC AGM will be held on November 11th.

Richard Smart ZL4FZ/ZK9EA

Hamarks editor on the mic

My home shack does not see much ham radio work nowadays; it is mainly used for developing new projects for TechnoClub and other school groups. These projects are mostly microprocessor based, but they do allow the opportunity to add a radio module to enable remote control, and all kids want that! Interestingly, if the project involves motors, the radio interference problems are sometime insurmountable (within the constraints of the project) and we sometimes have to swallow our radio pride, and revert to infrared remotes!

To re-establish my radio self respect, I think I will have to get back into the old CW again; it gives one a warm glow to see the log entries build up!

73s Kelvin ZL3KB

Computers at Clubrooms

We are very lucky that Mark ZL3JVX has acquired 4 computers for the clubrooms. A cabinet for the network patch panel and switches was installed upstairs last weekend. Rory and his crew are busy constructing some benches at the front of the main hall. We will post some rules for acceptable use on the wall beside them. Mark has made some disk images so that we can easily re-image these machines if necessary – if you leave files on the computer it may not be there next time.

Tin Whiskers

From Amateurradio.com news and opinion



Tin whiskers are hair like crystalline structures that can grow from tin surfaces and have the potential to wreak havoc on modern electronics.

Picture courtesy:

<https://en.m.wikipedia.org/>

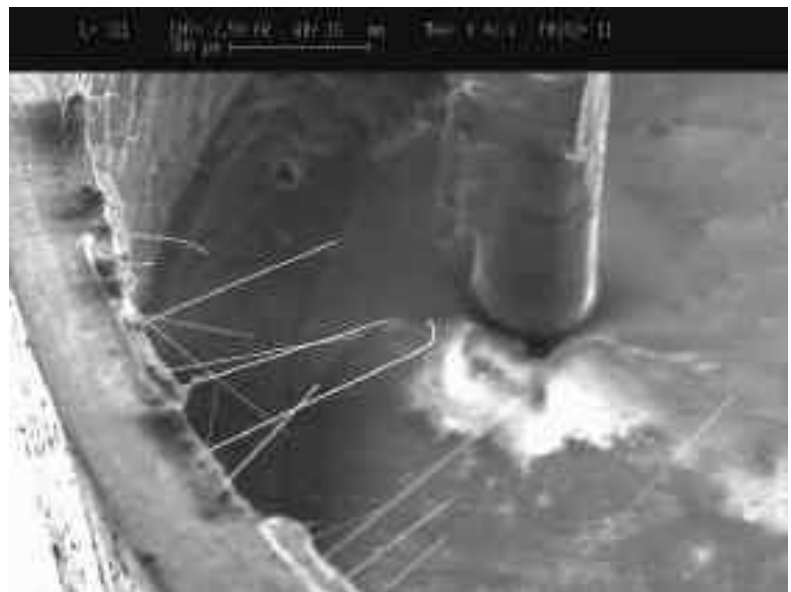
Ever since the European RoHS (Restriction of Hazardous Materials) implementation,

most manufacturers have been forced to switch to lead-free solder. It seems that lead, when combined with tin, inhibits the growth of tin crystals. Although tin whiskers have been around for many years, it is just since the switch to lead-free solder that their impact on circuit boards (particularly with SMD sizes) has been garnering a lot of attention. Even the military, which has always demanded a higher standard for its

components and circuit fabrication, is worried. With almost everything, from alarm clocks to aircraft, reliant on electronic circuit boards, are we awash in a sea of electronic ticking time-bombs? Some experts believe that we are.

The whiskers themselves

can grow from a few millimetres to over 10mm in length. Growth rates as much as 9mm per year have been observed. One might think that these tiny hair like structures would not be capable of carrying sufficient current to cause damage and would act more like a fuse when shorting with a nearby pc trace or component lead but such is not always the case. Tin whiskers have been known to carry as much as 30mA of current



... more than enough to cause catastrophic failure in delicate circuitry ... not a pleasant scenario if you are cruising along at 36,000' in a 10-year old aircraft.

An article in Aviation Today reports:

It's rational to ask, after a few years of RoHS policy in force, does this effect ever really cause any problems? As it happens, yes, and some examples are so spectacular that it's amazing they have not reversed the policy for RoHS. In Europe, the most impressive example was \$1 billion recall of Swatch watches from Switzerland, as the use of lead-free solder caused a roughly 5 percent watch failure rate in 2006. The "solution" to this problem was yet another rule exemption, and lead was again used in Swatch construction. A real RoHS policy triumph there.

Silent Key Brian Hutton ZL3RJ

It is with regret that we have to announce Brian Hutton ZL3RJ passed away on 27th August 2015. Brian passed away in Christchurch hospital, aged 71.

CW Practice

Boyd ZL3LE has offered to run on air CW practice. He will work ZL3AC at 8pm every Tuesday on 3530 kHz commencing 29th September. You can either listen in your shack or come along to 5 Idris Road and join others in the club shack.

\$\$ Hamads \$\$

For sale FT101's x3, Kenwood t&r 599s matching tx and rx, Dentron GLA1000 amp, FL2000B amp, TS700s 2mtr multi mode rig, FT480R 2mtr multi mode rig, FT1802 2mtr FM only radio.

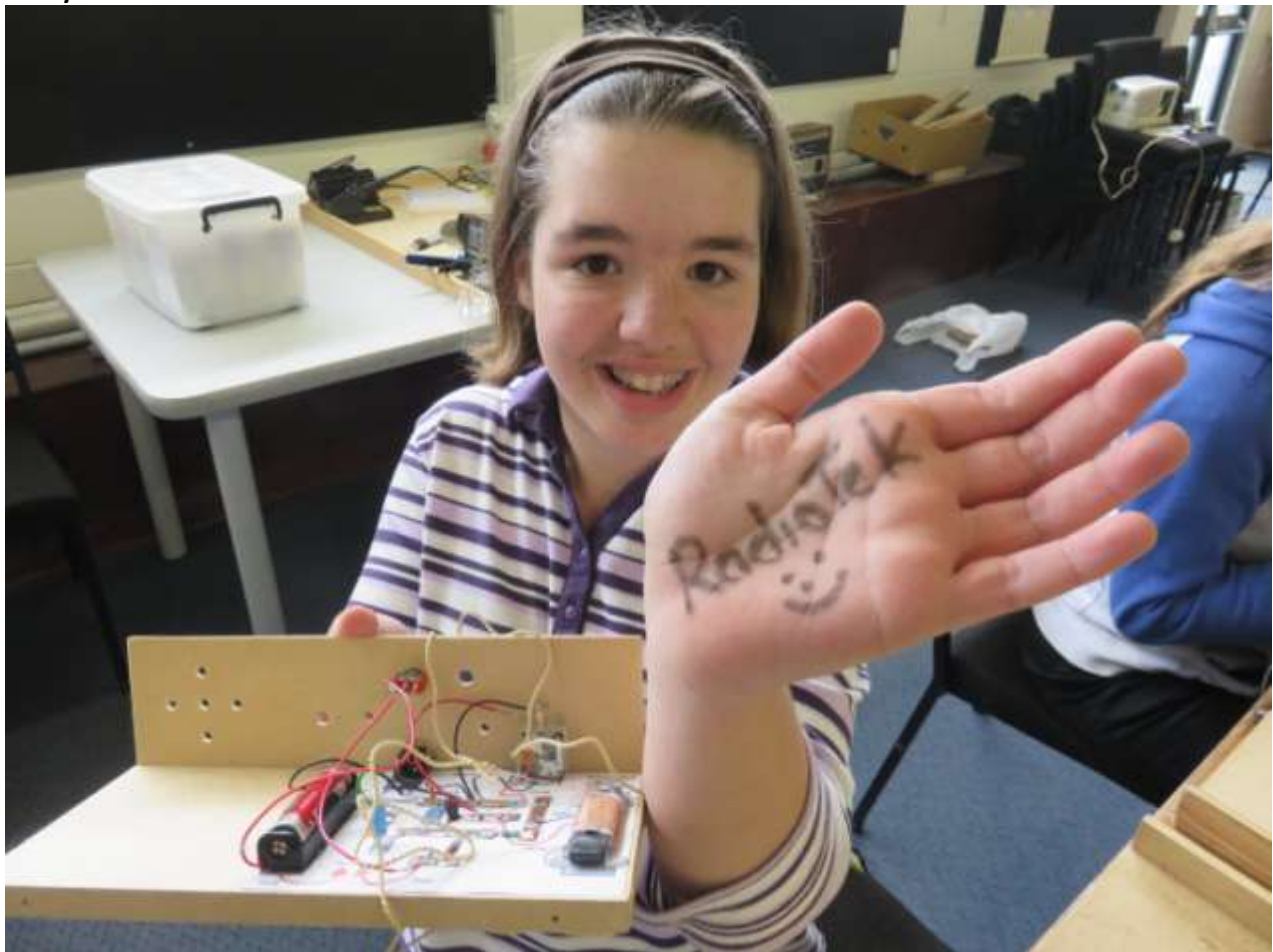
Prices on application and I appreciate PICK UP.

Roly ZL4AU <roly_zl4au@hotmail.com>

RadioTek for Scouts 20th September 2015 - ZL3KB

After more than five years of RadioTek for the masses, we decided to hold a special event tailored for the scouts "radio and electronics badge". Thirteen scouts arrived bright and early on a cold, wet spring day in Christchurch.

We started with a short (it was Sunday after all!) tutorial on electricity, measurements and components, and then got stuck into the first project build, a steady game. Once this was finished, we used it as a test bed for the scouts to learn how to use a meter. With some use of simple maths they could work out the current in the circuit.



Moving on, we built the second project, an AM radio, and the scouts used this to learn about the different parts needed for a receiver. Having covered most of the work by early afternoon, we then found other things to keep them all busy. Thinking fast, we used a piece of wire and copper tape to convert the steady hand game into a Morse code buzzer, and taught some Morse characters to the very enthusiastic scouts. Lastly we setup the test bench oscilloscope, oscillator and speaker, and investigated what different waveforms sound like. It is

always interesting to see how high a frequency the youngsters can hear, and amusing to create some high pitch noises that annoy them, but not us old people!



All participants went home very happy, with working projects and a scouts "electronics and radio badge" campaign medal.

Thanks again to the Branch05's RadioTek super team, namely, Rory ZL3HB, Brian ZL2BAT, Graeme ZL3GSL, Rod ZL3NW, Aidan ZL3APB , John ZL3ADF , Graeme ZL3NK and Kelvin ZL3KB.

As the November event is full, we are now recruiting new "first timers" for next year's RadioTek, which is scheduled in February 2016. If you want to help us spread the word, the booking contact details are Rory Deans 03 344 6292 or rory1@xtra.co.nz with our website at <http://www.radiotek.org.nz/>

Minutes of the Branch 05 meeting

Christchurch Amateur Radio club meeting 2nd Sept 2015

Apologies ZL2IC, ZL3HAM, ZL3SZ, ZL4FZ, ZL3MEM, ZL3APB. Ian ZL3TAO moved to accept.

Carried.

Visitors ZL3QR, ZL3DEN, ZL3QH, ZL2BCF, ZL3TUI, ZL3IA, ZL3ND, ZL3TJW, ZL3MWD

Minutes of August meeting moved to accept by Rory ZL3HB, seconded David ZL3DO.

Carried.

Correspondence Garage resource consent application.

Reports **AREC** Geoff ZL3PX asked that all T9300's be brought to AREC meeting.
All quiet with no activities
DMR repeater still at ZL3PX's – to go to Gondola site. Aerial installation there needs commercial riggers!

Repeaters All OK apart for usual 705 interference.

QSL Bureau 1 lot of cards in

Tuesday nights – going strong with up to 20 attending

Band report Crap! - According to Ken ZL4KD! Geoff ZL3PX still on 2m meteor scatter

and aircraft enhancement.

Andrew ZL3CC reports 80m to Europe recovering.

Some FSQ on 7.105MHz USB. New mode so try it.

General Business Ross ZL3TFK has loaned a PA mixer for trials.

Conference 2016 likely to be held at Riccarton Racecourse
Insurance – awaiting renewal with AREC splits.

Meeting closed at 8.07PM

Terry ZL3QL then gave a presentation on the present situation with Kiwisat. All engineering etc complete and now looking at launch possibilities.

Christchurch Amateur Radio Club

Committee for 2015

email: ror1@xtra.co.nz

| | | <u>Ph home</u> | <u>Ph work</u> | <u>Cell phone</u> |
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| Trustees: | Rob ZL3RX 348 3815 | Gareth ZL3VP 332 2406 | Mike Barnes 03 3133321 | |
| Auditor: | Community auditors/reviewers | | | |
| Hamlarks: | Kelvin Barnsdale ZL3KB | 3538377 | | 021 02904020 |
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| Clubrooms | 5 Idris Rd, PO Box 1733 Christchurch | | | |

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