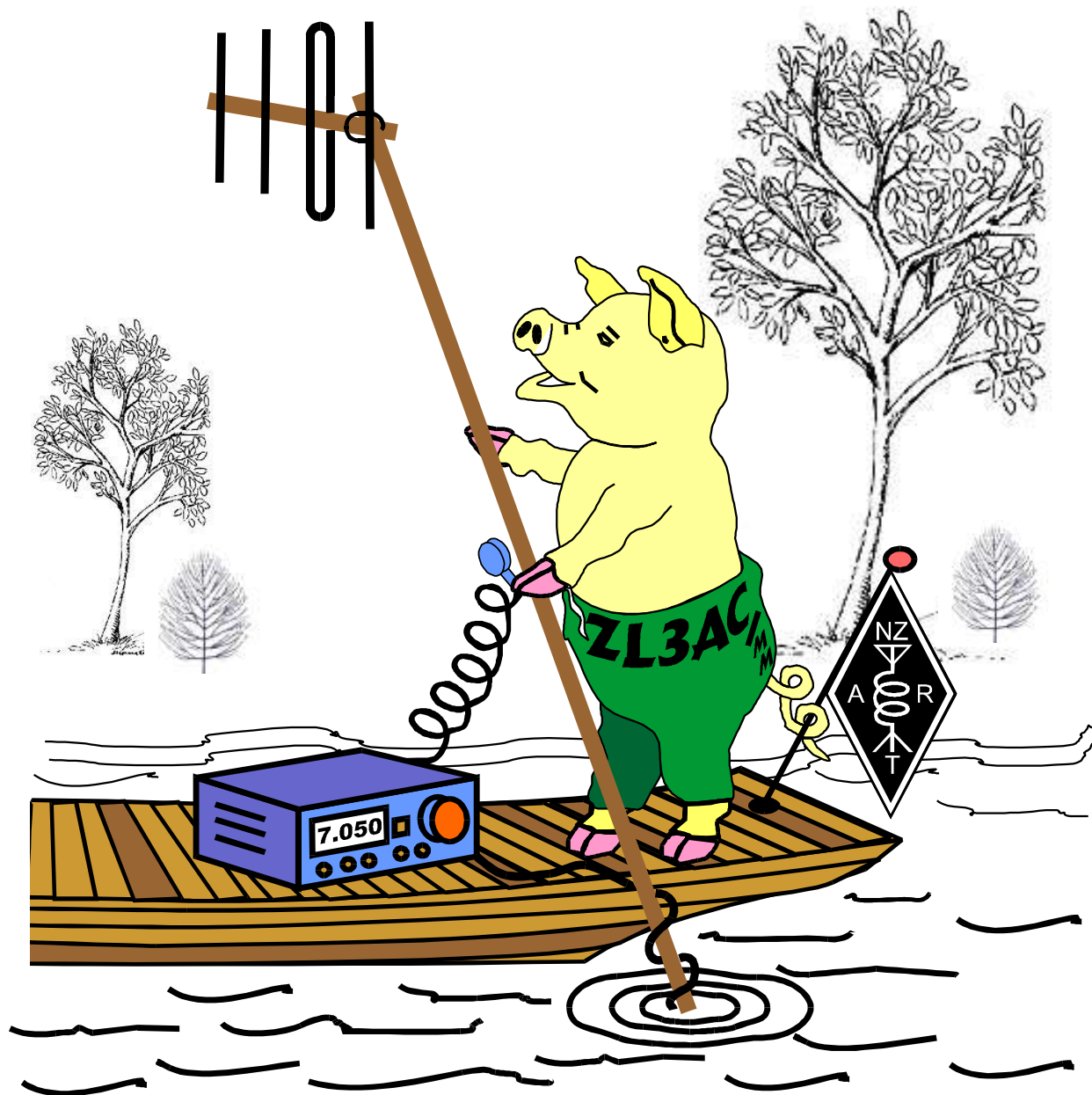


HAMLARKS

Christchurch Amateur Radio Club



November 2013

Branch 05 Club re-occurring events

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

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

COMMITTEE MEETING 1st Monday after branch meeting 7.30pm
Currently at 5 Idris Road.

AREC MEETINGS Normally the 2nd Wednesday of the month 7.30pm. Currently at 5 Idris Road.

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.

NEW ZEALAND YOUNG AMATEURS CLUB NET (Branch05)
Meet every Tuesday night wherever Branch05 is that night.

Branch 05 Website www.chchhamradio.org.nz

Presentation for next branch meeting

Next meeting at 5 Idris Road.

Speaker - Malcolm Campbell

Subject – Fibre broadband rollout.

See “Details of November Presentation” below

Christchurch Radio Club AGM 2013

The Annual General Meeting of the Christchurch Radio Club will be held at the temporary clubrooms, 5 Idris Rd at 7.30pm on Wednesday the 4th December 2013.

All members are asked to attend and have input to THEIR club. If you have any concerns or ideas for the future of the club, or remits to go forward to Conference please come along and discuss. A Xmas supper will be served.

Agenda will be

- Election of club officers
- Consideration of accounts if available
- Nominations for awards
- Remits for conference

Rory's ramblings - ZL3HB

Another month in our temporary space! No definite news re staying but have been in touch with local community board with tentative blessing so hopefully they will be on our side if needs be. Awaiting a call from council to see what they say, either direct or through Scouts.

There will be a Working Bee at Idris Rd next Saturday 2nd to make place presentable & show we care about our surroundings. Please bring a rake & shovel for a tidy up. Anyone with a tall step ladder to get at gutters? Last weekend's JOTI (with the Scouts/Guides) went off well. Made 68 wiggly wire games & all happy. Absolutely flat out Saturday through middle of the day but tapered off Sunday.

SCAPE progressing according to plan. No Astronauts about but have had APRS beacons through ISS.

Have been back to old clubrooms to get some stuff out we didn't have container space for. The garage has gone so they could get at wells to cap them & main clubrooms might have gone by now. All rather sad and a derelict wasteland around there now.

Idris Rd is proving to be a good central spot with easy access. Did a survey and 75% of our members live west of the square which was a bit of a surprise!

See you there on the 6th.

Cheers Rory

Barry Waters ZL3BMW – Silent Key

It is with great sadness we have to announce the passing of Barry Waters ZL3BMW, one of our most engaged members of Branch05. Barry had a wealth of experience in practical skills, and the club was always benefiting from his “can do” attitude. He was one of the team that took on the major work to get our clubrooms back to a usable state after the earthquakes.

As editor of Hamlarks, when I heard of his passing away I looked for a photo of Barry, and found I had none! In a way that summed up Barry, he was never in the limelight, but always in the background performing the most essential support functions to any event, and expecting no credit. Every Tuesday he would bring the supplies for the social evening, even milk for the tea which he never himself used. He was also a stalwart member of our RadioTek team, only missing events when he was away on his foreign travels.

A memorial service was held in Barry’s honour on 9th October, where friends and family recounted many of Barry’s escapades in the Antarctic, his work helping people with computers and his adventures with the family batch. Barry used his Master Builder skills to help the church, and he had also attained a pilot’s license in the past.

I am sure I can speak for all Branch 05 members when I say we will miss you Barry, thanks for everything, not just for the jobs and supplies, but being a great friend.



Details of November Presentation

Enable is almost two years into building a fibre broadband network that will deliver services to 180,000 homes, commercial premises and schools in Christchurch, Rangiora, Kaiapoi, Woodend, Lincoln, Prebbleton, Templeton and Rolleston.

During this time, Enable has undergone a transformation from a small commercial fibre provider into a large-scale infrastructure company that will become the primary telecommunications network provider in its region.

Today fibre broadband services are available to over 31,000 potential customers over Enable network.

This is a major fibre rollout and in this presentation Malcolm Campbell from Enable will discuss:

- Enable's role within the nationwide UFB scheme.

- How the fibre is being rolled out.

- Progress on the network to date.

- Challenges encountered.

- Some examples of the impact fibre broadband is having on businesses and lives.

About The Speaker

Malcolm Campbell has over 30 years' experience in the IT and Telecommunications sector covering the full spectrum of technical, engineering, sale, marketing and management roles. In 2007 he was instrumental in launching Enable Networks which became a very successful niche fibre provider in the business market.

Today Malcolm is the General Manager Marketing and Sales for Enable. He manages the relationship with the 35 retail service providers delivering or preparing to deliver services over Enable's network. He is also responsible for driving residential and business uptake through Enable's own marketing effort and by supporting the efforts of its retailers.

Hammarks editor on the mic - ZL3KB

I have just got back from Hong Kong this afternoon and still feeling woozy! Surprisingly, I noticed very little had changed since I was there in 2008, maybe a few more high rise apartment skyscrapers have grown up. Apparently they are accepting 150 mainland Chinese moving in every day, so they will need even more tower blocks. The mainland Chinese people are also visiting HK in droves to buy – tins of baby formula, buying so much that Chinese customs have had to limit the number of tins they can take back. The reason appears to be they do not trust the milk powder they buy in China. Unfortunately, from what I could see, the milk was not made in NZ, but in Holland. They are also snapping up toothpaste, tea, coffee, shampoo and contact lens solution. Consequently, the shop keepers in HK are putting the prices up, “Safe” products are going to be big business in the future!

How to find the next club meeting

Directions to the scout hall at 5 Idris Road can be found on our website See <http://www.chchhamradio.org.nz/>

\$\$\$\$\$\$\$\$\$\$\$\$ Hamads \$\$\$\$\$\$\$\$\$\$\$\$

Wanted Any Denco coils for transistor radios, these are the brightly coloured coils on B9A plug bases, mostly Blue, Yellow or Red, with a slug adjuster at the top. Call Kelvin ZL3KB 323 8377 kb.ew@xtra.co.nz

For Sale

Yaesu FRG7 receiver	\$100.--
Yaesu FT480R multi moded 2mtr rig	\$100.--
Kenwood TS700 multi moded 2mtr rig	\$100.--
Kenwood twins T599s R599s HF	\$400 Both.

Appreciate if buyers pay freight or pick up. Anybody interested, to email me please.

Roly [roly_zl4au@hotmail.com] ZL4au

Report on practical deployment of PoLSAR radios - ZL4FZ



Abstract

On 30th September members of the Christchurch AREC team conducted a series of trials with NZ Police PoLSAR III radios to verify some aspects of propagation and operation.

Tests

The two PoLSAR radios were deployed to a park adjacent to Pioneer Park and to Spencer Park on opposite sides of Christchurch. The path distance was approximately 17kms. The tests were conducted using the dipole antenna on the SAR day frequency (5680 kHz).

Orientation Tests

Site 1	Site 2	(Antennas as Horizontals @ 1.5m agl)
Broadside On	Broadside On	Good signals
Broadside On	End On	Good signals, no apparent change
End On	End On	Good signals, no apparent change

Configuration Tests

Site 1	Site 2	Different antenna topologies
Horizontal (1.5m)	Inverted Vee	Good signal
Horizontal (1.5m)	Horizontal	Good signal, slightly improved on Vee
Horizontal (1.5m)	Horizontal at Ground Level	Signal decreased as antenna lowered

In Foliage Tests

Site 1	Site 2	Different antenna topologies
In close spaced trees	Open	Good signals (no different to open space)
With centre supported on short branch	Open	Audibly reduced signal

With transceivers with RSSI indications

Site 1	Site 2	Different antenna topologies
FT817 + Z817H Ant tuner, SAR dipole	FT897 (Po 5W), LDG897 tuner, 5.3 MHz dipole	No change in signal at Site 2 c.f. with PoSAR Audibly improved Signal at Site 1 c.f. with PoSAR (PoSAR signal not measured @ Site 1) Measured Signals S8-S9 both sites
Site1 and Site 2 as above	AREC Timaru	Reports both Site 1 & Site 2 same signal in Timaru

Discussion of Results

The orientation tests appear to confirm the theoretical results of NVIS propagation theory that orientation with respect of sites has little or no bearing. The observed differences in signal levels were too small to be of any consequence.

The antenna configuration tests did suggest that there was a very small improvement between the horizontal antenna and inverted vee. The audible difference was not great, and would probably be considered inconsequential for practical operation.

The test using the lowered antenna did show a marked reduction in signal as the antenna height was reduced. This clearly indicates that some (moderate) height is of real value to minimise ground absorption. As the antenna reached ground level the signals had reduced to being almost in audible.

Placing the antenna amongst close spaced trees (1m spacing) made little difference. However, hanging the antenna centre on a small twig very close to the trunk of the tree caused a noticeable reduction in signal level.

There was no reported difference in received signal between the PolSAR and the FT817 with antenna tuner using the PolSAR antenna. This suggests that the PolSAR output circuit is reasonably well configured to efficiently feed the low dipole configuration.

Measured signal strengths were S8 to S9 (with some atmospheric variation) and this was also the reported receive level in Timaru.

Conclusions

The results support NVIS theory in terms of antenna orientation and expected signal levels. The similarity of signal level between the near station and that received at Timaru also supports the theoretical expectation that signals reflected vertically off the ionosphere will show little difference in path loss over a wide range of radius as the path length remains very nearly constant.

Practical Application

From these tests, it would seem reasonable to suggest to NZ LandSAR that when deploying HF radios in the field:-

Teams should not worry about attempting to orient the antenna broadside to the base

The dipole antenna can be simply supported by two people holding the ends at head height as horizontally as reasonably possible, with a third person holding the radio at right angles to the antenna so that the feeder (connecting wires) is at full extent and clear of the ground. There is no significant gain in attempting to climb trees or to gain greater antenna heights (unless the antenna is to be left erected for a period of time)

The antenna should NOT be draped over branches close to the trunk of a tree – if there are no other supports try suspending a nylon line between two trees with clear space between them and drape the antenna over the line instead.

The antenna only needs to be about 1.5 m above ground (ideally with clear sky view above) to be effective. Do not drape the antenna on the ground as this will reduce the signal

Speak clearly and directly into the speaker – louder is better (more noise = better signal)

Additional Tests

During these tests no attempt was made to compare the dipole antenna with the end fed antenna. A similar series of tests should be completed with the end fed antenna.

Richard Smart On behalf Christchurch AREC (Br05)

Minutes of previous club meeting**Christchurch Amateur Radio club meeting 2nd Oct 2013 – 1st meeting 5 Idris Rd**

Apologies ZL2IC, ZL3MJS, ZL3ACU, ZL2BAT, Moved to accept by Keith ZL3AHL, seconded David ZL3DO. Carried

Visitors Daniel ZL1DFA

A minutes silence was held for the passing of Les Himing ZL3BG

Minutes of September meeting moved to accept by Rory ZL3HB, seconded Gareth ZL3VP. Carried.

Corrspodence Q-bit, emails.

Reports **AREC** No formal activites

Aerial test with Polsar done – good info collected.

Harris Trophy on 20th Oct at Glentui Domain

Classic Kayak December

Jet boating 9th Nov.

Repeaters National System quieter.

705 OK

725 OK

Beacons – cavities tuned.

QSL Bureau 5 lots of cards in.

Tuesday Night All up & running at new clubrooms

JOTI wire stripping.

Band report Don ZL3SZ reckons rather dead.

Greg ZL3IX says some first of season long path on 160m

Geoff ZL3PX using WSPR on 5w to Continent on 10m

More analogue TV turned off.

6m beacon off air due to power failure.

General Business Mike ZL3TMB says filters around 502mHz wanted for ATV.

John ZL3ADF has some broken 70mm irrigation pipe to take away.

John ZL3OY reports issues if you put your internet on hold for any reason. You go back in the queue for reconnection – particularly affects rural customers.

Br 56 Equipment sale on 5th Oct at 376 Yaldhurst Rd.

New banner shown. Looks good. General approval. Decided to order another set.

SCAPE up & running. Suggested we note it on VK logger.

A rundown on various clubrooms approaches was discussed. Would be a good idea to summarise it all & put out on HamIarks list.

Meeting closed at 8.35PM

Richard ZL4FZ then gave a demonstration of the new piece of test equipment the club has purchased from Kordia.

Christchurch Amateur Radio Club**Committee for 2013**email: rory1@xtra.co.nz

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