



Hastings  
Br 13  
Club Calls  
**ZL2AS**  
**ZL2QS**

Napier Br  
25  
Club Calls  
**ZL2GT**  
**ZL2G**

**IRLP**  
Node  
6793  
147.250

**Branch  
Nets**  
9.00 AM  
Sunday  
Morning  
3615 kHz  
439.175  
MHz

**Editor**  
John  
Newson  
ZL2VAF



*Errol Lilley (ZL2IT) beside the '670 repeater. "His" aerial filter(s) can be seen at the bottom of the rack – more in the "Living History" Article inside*

<http://www.zl2gt.nz/>

<http://groups.yahoo.com/group/zl2as/>



### Inside This Issue

Hastings Branch 13 Report	Page 2
Napier Branch 25 Report	Page 3
Living History (nostalgia trip)	Page 4
RAF Field Day	Page 6
Software Defined Radio	Page 7
For Sale	Page 7
Last Visitor	Page 7
DC Award for AREC	Page 8
Another side to Emilia-Ramagna	Page 8

## HASTINGS BRANCH 13

**President:** Rob Leicester ZL2US Ph 8786381  
**Secretary:** David Walker ZL2DW Ph 8760518, email david@apexradiocoms.co.nz  
**Treasurer:** Peter Keong ZL2PW Ph 8774529 email: pkeong@xtra.co.nz  
**AREC/CD:** John Newson ZL2VAF Ph 876 0370 email: zl2vaf@gmail.com  
**AREC Deputy:** Robert Wallace ZL2SG Ph 878 4993 email ffonzrjw@xnet.co.nz

**Committee:**

- Jan Suldovsky ZL2CZE Ph 021 833 487 email jan.s@eastek.co.nz
- Rob Shepherd ZL2AN Ph 8440109 email robert.shepherd@vodafone.co.nz
- Bert Cunningham ZL2OC Ph 8448549 email bertcunningham@xtra.co.nz
- David Sullivan ZL2OK Ph 06 8578853 wk email: bfr@xtra.co.nz

**Hastings QSL Distribution:** Wally Shuker ZL2MO Ph 8435497 email ssplat@xtra.co.nz  
**Magazine Editor:** John Newson ZL2VAF Ph. 027 230 3642 email john@thecomputerman.co.nz  
**NZART License Examiners:** Peter - ZL2LF  
**Club Call:** ZL2AS and ZL2QS

**Club Nights:** Fourth Wednesday each month at 7.30 pm Pakowhai Hall, Pakowhai Road, Pakowhai

## From THE COMMANDER (retired)

Yes I've sold my business hence the "retired" addition above hi hi. I have been lending the new owner a hand on and off and of course that involvement with decrease as time goes on.....leaving me more time to get the sheds cleaned out at home ready to fill up with.....nothing.

The end of a 16 year involvement...the end of another activity in my life. So for me now every day is a Friday hi hi.

So has this translated to more time on amateur radio.....no I haven't settled into that action yet, in fact I haven't been active on the radio for a while now.....obviously I've been pre occupied elsewhere.....maybe letting my brain drift away regarding some travel plans for Sue and I some time in the future.

Last weekend I water blasted my boat and that is now spic and span and ready for sale.....anyone want to buy a boat ?

Ah, life and contents are changing.

I enjoyed the Ham Fest provided by Br 25 on 9 April, thanks guys. It certainly showed that the hobby has some "bright people" out there.

I was also pleased to see a young lady (a ham) in attendance, that was particularly pleasing.

At our next Br 13 meeting at Pakowhai Hall on 27 April, Ross ZL2WRW will give us a talk on "Software Defined Radio", this should get our "grey matter" working. (Ross started out with us a High School boy ham and has gone on to get an Electrical Degree.....always nice to see, well done Ross), I look forward to seeing you all there.

73, Rob (ZL2US) (Br 13/HBARC, Hastings, President).



*Branch13/HBARC Officers  
(left to right)  
David Walker (ZL2DW, Secretary),  
Rob Leicester (ZL2US, President),  
Peter Keong (ZL2PW, Treasurer)*

## **NAPIER BRANCH 25**

**President: Wally Shuker ZL2MO**      843 5497      email [ssplat@xtra.co.nz](mailto:ssplat@xtra.co.nz)  
**Secretary: Karl Matthys ZL1TJ**      8454372      email [karl@waspnet.co.nz](mailto:karl@waspnet.co.nz)  
**Treasurer: Stan White ZL2ST**      845 2422      email [stan.white@clear.net.nz](mailto:stan.white@clear.net.nz)  
**AREC: Mike Bull ZL2VM**      843 6052      email [rlb.mbb@xtra.co.nz](mailto:rlb.mbb@xtra.co.nz)

### **Committee:**

**Michael Mullins ZL2MY**      843 4210      email [michaelmullins@xtra.co.nz](mailto:michaelmullins@xtra.co.nz)  
**Dave ZL2MQ,**      0212428959      email [dave.crook@maisonblanche.nz](mailto:dave.crook@maisonblanche.nz)  
**Revell Troy ZL2SS**      0210742837      email [revelltroy@hotmail.com](mailto:revelltroy@hotmail.com)  
**Peter Breen ZL2CD**      0274721527      email [peterbreen@clear.net.nz](mailto:peterbreen@clear.net.nz)

**Committee Meetings:** 7:30 pm, 3rd Tuesday of January, March, May, July, September, November

**Club Calls:** **ZL2GT, ZL2G**

**Club Web Site:** <http://www.zl2gt.nz/>

**Club Nights:** First Wednesday each month (except January) 7.30pm at the Club Rooms: 123 Latham Street Napier

## **Branch 25**

Well that's another month gone.

Sitting here on a lovely Autumn morning trying to think what to write.

April was a great month, we had our HAM FEST which was a great success.

I would like to thank all those who attended, hope you all had a good day and got to learn something.

A special thanks to Laurie ZL2TC for getting it off the ground and the others that helped with the event.

Also a special thanks to all the speakers who contributed on the day.

Thanks to HB Cricket Club and to Rose for keeping us well fed and watered.

On a different note nothing but a rumour at the moment but there is a group of 10 Europeans, and Americans ops who believe they can activate a full scale DX pedition inside DPRK (North Korean) in the month of May.

It seems that ARRL has approved Dom 3Z9DX's trip to P5.

If you hear CY9SPI its a pirate station.

IA5J Giglio Island activation from 25th April 2016, all HF bands 6m CW.SSB.DIGI MODES ON.

JT6M

JT9A

ISCAT

JTMSK

JT65A

QSL via IU3BXI

OQRS

plus 6m EME activation

Cheers that's all for this month ZL2MO Branch 25

## LIVING HISTORY (nostalgia trip)

November 1961 saw two young fellows site testing for a future Post Office radio link to supply a multi channel telephone service. One at Kahuranaki HB (Errol Liley) and the other at Mahanga, just inland from the Mahia Peninsula (Peter Mulhare, also celebrating his 21st birthday while on site). In those days Kahuranaki was a "green field" with the new building and "48 channel" telephone link equipment coming to the site in 1962. This same year saw VHF Land Mobile Radio repeaters established on site also. In latter years Michael Bull was involved with site equipment installation at Kahuranaki.

(Kahuranaki is 17km's south of Hastings at 2224 ft asl, with a very panoramic view of Hawkes Bay and beyond).

Eventually all three went on to become Ham Radio operators, Errol ZL2IT, Peter ZL2IK and Michael ZL2VM, all are still "practicing hams" today.

It took fifty five years but Peter finally got to see the "other end" of the link that he was testing.....on 7 April 2016. A nostalgia trip was made by the above three technicians, accompanied by David Walker ZL2DW, to Kahuranaki HB. It was great to hear the guys talking about their Post Office days and the tribulations they went through to establish part of New Zealands telecommunications infrastructure.

Naturally some "hi-jinx" were part of events of the time.....but we won't talk about them.

The "48 Channel" equipment installed at Kahuranaki and made operative was, for the record, part of a network between North Range Road (above the Manawatu Gorge), Awatoto (near Napier town), Mahanga (near Mahia) and Kaiti Hill (Gisborne), using frequencies of 70.6, 80.5, 171.2 and 166.7 mhz and apparently some at UHF as well.

Much roaming of the site was had and memories put into top gear to locate old VHF Rhombic aerial mast positions etc. The piles for the old original TV translator site were visible and Errol was able to give a description of that gear (and it's Rhombic aerial).

A tour of the two buildings on site was again a historical revelation and they noted much change of equipment and the much smaller size of the new equipment. Of particular note was that the original cavity filter(s) module (built in 1976 by Errol ZL2IT) for the amateur 2m repeater, '670, was still in place and doing an excellent job.

I might add that these guys are not the only ones amongst us that are "Living History" related to local electronics/communications technology.

<https://onedrive.live.com/?authkey=%21ABuZIVYKcCp5BNU&cid=F4CFDF51FA6C699>

(video clip of/from Kahuranaki HB, video and narration by Michael Bull ZL2VM)

(Written by David Walker ZL2DW)



*Mike Bull (ZL2VM), Peter Mulhare (ZL2IK) and Errol Lilley (ZL2IT) standing amongst the old "48 channel" aerial mounts.*



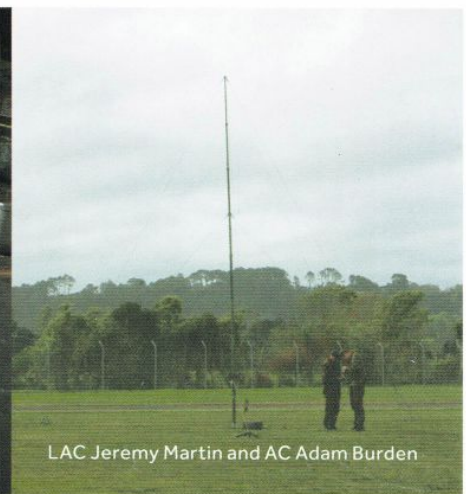
*Michael Bull (ZL2VM), Peter Mulhare (ZL2IK) and Errol Lilley (ZL2IT) standing in front of the modern VHF LMR radio rack*

# The RNZAF has it's own HF Field Day..... with a few differences

***Ex Noble Skywave***



AC Brian Jamieson



LAC Jeremy Martin and AC Adam Burden

## Exercise Noble Skywave

By CPL Vanisha Patel

Exercise Noble Skywave is an international High Frequency radio communications competition conducted annually, sponsored by the Communication and Electronics (C&E) Branch and hosted by 21 Electronic Warfare Regiment, Canadian Armed Forces. The competition encourages friendly competition between Canadian Armed Forces units and Allied partners. This year invitations were extended to Australia and New Zealand, and Communication Information Systems Flight (CISF) jumped at the chance.

All regular and reserve units, bases, wings and ships with High Frequency (HF) capability were invited to the party... and boy did we. Participants came from all over the world including Australia, Canada, New Zealand, UK and the US. New Zealand participants included two teams from RNZAF CISF. The exercise covered a 36 hour period starting at 9pm on October 21 and finishing at 9am on October 23. CISF teams were made up of three person dets on rotating shifts, including the Air Operations Communications Centre (AOCC). Our teams got to experience night time HF in the comfort of two 14 x 14 tents located on the far side of the Whenuapai Airfield and the AOCC.

Our deployed antenna base was made up mainly of our common operational antennas, including such classics as the Half-Wave Dipole, Delta, 32ft Whip and Sloping Vee. Each antenna has its own list of attributes that we needed to consider at different times of the day, as well as for each different distant station. However, we got a bit more adventurous and tried a couple of more long-distance antennas, such as a two-wavelength Long Wire and a mighty Rhombic that covered almost 100 metres in length. These bad boys are needed to

operate up to 15,000km! All in all, you're looking at over 570m of radiating elements operating on a 400watt radio system. The AOCC operated on a powerful 1000watt radio system and directional hard standing antenna, the Linear Periodic Array.

The competition had multiple stages: establishing communications using Automatic Link Establish technology, and a free play use everything available phase. With such vast distances, engineering the multiple circuits in real time could have been a serious issue. We covered this by using KU satellite communications to maintain a deployable internet network, which allowed us to have a constant connection with the other teams through an online chat forum. Changing frequency and trying to establish communications has never been easier, except when it didn't work!

Overall the exercise was a great success, in the competition we came in 30th out of 82 participants. Both the AOCC and the deployed team were able to reach distances to our allies of up to 15,000km to Canada and 19,000km to the UK along with talking to stations from all locations. We were even heard by a listening station in Italy. We are looking forward to next year's competition. 🍷

## SOFTWARE DEFINED RADIO

My presentation (at the Branch 13 27 April meeting) is an introduction to the extreme flexibility of the software aspect of Software Defined Radio - much of the complexity of a radio is moved out of the hardware and into software, where it is very easy to make changes. I am assuming the the audience has prior knowledge of the basics of oscillators, mixers, filters etc.

Attached is a screen shot of "GNU Radio Companion", showing part of a "flow graph" and a couple of frequency spectra. The receive hardware is a "HackRF one", and the flow graph which is executing is a crude FM stereo receiver. The lower spectrum plot is of the entire FM broadcast band, which is sampled in real time! The upper spectrum is the baseband of the station that is currently tuned - if you look closely at the baseband spectrum, you can see the mono audio (L+R) from 0 to 15 kHz, the stereo MPX pilot tone at 19 kHz, and the double side band suppressed carrier stereo difference signal (L-R) centred around 38 kHz.

<http://www.rtl-sdr.com/hackrf-initial-review/>

<http://gnuradio.org/redmine/projects/gnuradio/wiki/GNURadioCompanion>

<http://gnuradio.org/redmine/projects/gnuradio/wiki/GNURadioCompanion>

Ross Whenmouth (ZL2WRW) <[ross@topwire.co.nz](mailto:ross@topwire.co.nz)>



### FOR SALE

Mosley 3 element tri-band yagi, 20/15/10 metres.  
Contact ZL2TC for further details. 06 843-8519, or  
[lauriejw@xtra.co.nz](mailto:lauriejw@xtra.co.nz)



### LAST VISITOR

At the last Branch 13 meeting, in March, Ivan Horn ZL2ATU gave us a presentation wearing three hats.

1 - telling us about the "Old Timers Club" and what the history and membership requirements were.

2 - regarding the Wanganui Award and what was required to achieve one

3 - giving us a back ground to the QSL activity he deals with

and then an impromptu "Money or the Bag" by Ivan and xyl Pat was given.....using Farads or Ohms in lieu of money in the "offering".

Coming from Germany and being a comparative youngster I think Holger (ZL2IO) was a bit lost by the proceedings however he went away with "The Bag" and seemed pretty happy about it all. Certainly a bit of nostalgia for us older ones though, Selwyn Toogood would have been impressed hi hi.

Many thanks for your contribution to our meeting Ivan and Pat, it went down well.

## Hastings City Council CD award for AREC

AREC received this award last week from the council for services to CD. Five AREC personnel attend the CD HQ each Wednesday morning and do radio checks to the CD posts around the District. We are open to more people being involved in these checks if available.

The Emergency Management Officer, Alan Daly, has requested the names, phone numbers and address of those hams willing to be involved in supplying communications when there is an emergency event. At this time the intention would be to get a report from the ham's QTH on the event. It would also probably be appropriate for us to supply information of those of us with 4 wheel drive vehicles who wish to provide mobile communications as required.

If anyone is interested please contact John ZL2VAF 027 230 3642 or [john@thecomputerman.co.nz](mailto:john@thecomputerman.co.nz)



## Discovering Another Side To Emilia-Romagna

Italy is a country full of history wherever you go. Even places little known to the masses have been witness to important historical events and now proudly guard that history. Case in point: driving approximately 20 minutes south-west of Bologna, the main town in Emilia-Romagna, will take you to Villa Griffone, in Pontecchio Marconi. Few people would know where that is, yet the building, now a museum, was for many years the home of radio pioneer and Nobel prize winner Guglielmo Marconi.

<http://www.italymagazine.com/featured-story/discovering-another-side-emilia-romagna>