

BREAKOUT

The Newsletter of the Hastings and Napier Amateur Radio Clubs

Hastings Branch 13 NZART – Napier Branch 25 NZART

Volume 24, Issue 5, May 2024



Hastings Br
13
Club Calls
ZL2AS
ZL2QS

Napier Br 25
Club Calls
ZL2GT
ZL2G

IRLP
Node
6793
147.250

Branch's
13/25
Net
9.00 AM
Sunday
Morning
670
Repeater

Editor
John Newson
ZL2VAF



This should be in every Ham shack!

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

<http://www.zl2as.org.nz/>

Emergency Call-in Frequencies: 3615khz and 670 repeater



<https://arec.nz/join-arec/>

Inside This Issue

Napier Branch 25 Report	Page 2
Hastings Branch 13 Report	Page 3
Answers from last meeting	Page 4
Branch 13 General Meeting	Page 4
Branch 13/25 Mid Year Xmas Tea	Page 4
Helpers Wanted	Page 4
Jock White Field day results	Page 5
Metal working on projects Chassis	Page 6
ZL2KO Junk Sale	Page 7

NAPIER BRANCH 25

President: Dave Crook ZL2MQ, 021 029 69006 email davey.crook@gmail.com
Secretary: Bryce Gilbert ZL1BCG 027 236 6166 email zl1bcg@gmail.com
Treasurer: Stuart McLeod ZL2XC 06 844 3706 email ZL2XC@slingshot.co.nz
AREC: Mike Bull ZL2VM 06 843 6052 email rlb.mbb@xtra.co.nz

Committee:

Revell Troy ZL2SS 0210742837 email revelltroy@hotmail.com
Michael Mullins ZL2MY 8434210 email michaelmullins@xtra.co.nz
Peter Breen ZL2CD 0274721527 email peterwbreen@gmail.com
Karl Matthys ZL1TJ 845 4372 email karlmatthys@gmail.com

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

Napier Amateur Radio Club Branch 25 NZART

Woah! The cold snap of last week reminded us that Winter is on its way, and on top of that the Sun decided to squirt the biggest solar storm our way for 20 years. Apart from the magnificent auroral displays and hundreds of photographs taken and displayed on social media, the HF bands obviously suffered and yesterday I thought that they had recovered but today they are down again (unless there was a new solar event that I haven't heard of yet),

I finally successfully made my remote radio work just as the bands declined, so still not sure how well it all goes, Progress on the 10ghz eme progress is steady, but not spectacular hi hi. Latest set back was discovering that the oscillator board I got from ali express had incorrectly labelled I/O pins, this does not make life easy!!

I read with interest in the latest NZART info line under the title Let's move it up a notch, David Karrasch talking about the ability of clubs to connect with the outside world for various purposes, and I realised we at Branch 25 are just a small step away from achieving that goal.. we need to talk about this at the next meeting.

At this stage we do not have a formal speaker for the next meeting but we can perhaps run a you tube video on a ham subject, and /or have an open forum of questions and answers from our newer hams.

Our next meeting is Wednesday the 5th of June, and Errol's Makers nights continue on 2nd and 4th Mondays at 7pm all welcome, See you there.

Don't forget the upcoming Ham Cram for any of your friends and acquaintances that may be interested.

Best 73 Dave ZL2MQ

HASTINGS BRANCH 13

President:	Blue Smith ZL3TT	Ph 027 220 3724	email: kgsmithblue@nowmail.co.nz
Vice President	Robert Wallace ZL2SG	Ph 878 4993	email ffonzrjw@gmail.com
Secretary:	David Walker ZL2DW	Ph 876 0518	email david@apexradiocoms.co.nz
Treasurer:	Peter Moore ZL2HM	Ph 06 8577340	email: pikam@xtra.co.nz
AREC/CD	John Newson ZL2VAF	Ph 027 230 3642	email: zl2vaf@gmail.com
AREC Deputy:	Robert Wallace ZL2SG	Ph 878 4993	email ffonzrjw@gmail.com
Committee:	Ray Barlow ZL2RB	Ph 06 878 6068	email: r.w.barlow@xtra.co.nz
	Rob Leicester ZL2US	Ph 022 690 3867	
	Peter Keong ZL2PW	Ph 027 217 1315	email: pkeong@xtra.co.nz
	Stephen Simpson ZL2SPF	Ph 022 630 4183	email: simpson.s1917@gmail.com
	Phil Garside ZL2RO	Ph 021 042 3129	email: zl2ro@xtra.co.nz
Hastings QSL Distribution:	Wally Shuker ZL2MO	Ph 843 5497	email zl2mo@hotmail.co.nz
Magazine Editor:	John Newson ZL2VAF	Ph. 027 230 3642	email zl2vaf@gmail.com
NZART License Examiners:	Peter – ZL2HM, Dave – ZL2MQ, Ray – ZL2RB		
Club Call:	ZL2AS and ZL2QS		
Net Controllers (Sunday '670 repeater, 9am) ZL3TT/ZL2DW			
Club Nights:	Fourth Wednesday each month (except December) at 7.30 pm Pakowhai Hall, Pakowhai Road		
Club Fees	\$20 per year payable to Branch 13 a/c # 03 0642 0733310 00 (use your call sign as a reference).		

From the top table

Hi to one and all. Here we are once again near the end of the month and almost half way though the year and winter is close by so now we can work on getting those inside jobs done. At the time of writing this we are still no closer to getting back into Pakowhai hall but it should not be to far away and I'm hoping that it will be some time this year. That all depends on the guys doing the fixing and painting. We are keeping a close eye on what is happening there so as soon as we know we will be able to let you all know.

How many of you saw the results of the sun spots and the Aurora's and found that they had little numbers of contacts on the HF bands for a couple of days. I saw the lights of the Aurora and found it very interesting as they were not like the aurora's that I saw many years ago when I was down in Invercargill way back in 1977 when I was hitch hiking around down there, something that you want do today as it is just too dangerous.

Well not much more from here but we are still looking for people to give us a talk on our club nights so if you think you can help please let David ZL2DW know and we can give you a date to work towards. don't forget the combined mid year Xmas tea is coming so give your numbers to David ZL2DW as we always get a good meal at the Napier RSA and it is not that dear either. You guys that think you are poor you still don't have an excuse and it is a good couple of hours. Remember you don't have to cook it's done for you and the choice is quite wide in the way of the food they have. If folks can come from far away then you guys that live close by don't have an excuse either. Don't like the cold night air that is no excuse either, they have heating in the RSA so make an effort and come join us and have some fun.

Foot note: we don't sit and talk about radios and the like you can talk about anything, but most of all you will enjoy yourself.

Well that's it for this month next meeting for Branch 13 is on Wednesday night 7.30pm at the orphans Hall in Hastings.

Blue ZL3TT President Branch 13 HBARC



*Branch 13/HBARC, Hastings,
office bearers
David Walker ZL2DW (Secretary),
Blue Smith ZL3TT (President),
Peter ZL2HM (Treasurer).*

Answers from last meeting

Some questions that were raised on the branch trip to Red Phase Technologies Ltd, the following videos may be of interest;

Breaking down old lithium batteries (including an EV battery) so that the materials inside can be recycled:

<https://www.youtube.com/watch?v=s2xrarUWVRQ>

Extinguishing a burning EV battery by flooding the battery pack with water:

<https://ctif.org/news/new-revolutionary-method-extinguishes-lithium-ion-ev-fires-ten-min>

<https://www.youtube.com/watch?v=zbzfUok4Ujo>

<https://www.youtube.com/watch?v=4xjDdmv8urk>

On the subject of car fires, this study by an insurance company in the United States is interesting:

<https://www.autoinsuranceez.com/gas-vs-electric-car-fires/>

Hybrid vehicles: 3,474 fires per 100K sales

Gas vehicles: 1,529 fires per 100K sales

Electric vehicles: 25 fires per 100K sales

Ross Whenmouth ZL2WRW <ross@topwire.co.nz>



Branch 13 General Meeting

Branch 13 General Meeting, 22 May , 7-30pm, at the "Hastings Orphans Club" Hall, Hastings.

- Remits and
- "radio question and answers" time forum.



Branch 13/25 MID YEAR XMAS TEA

Napier RSA, 28 June, 6pm, bookings to David ZL2DW, 0274 502501



HELPERS WANTED

Early on Sunday afternoon, 16 June at the EIT (Taradale)to assist the Examiners after the HamCram weekend (ie clerical duties).

If you can come along then please let David Crook ZL2MQ know ph 021 02969006 so he can tell you what's required and where to go.

Thank you.

2024 JOCK WHITE MEMORIAL FIELD DAY CONTEST RESULTS

Montgomery Cup - Northern Region

CALL	80 metres				40 metres				Tot Mult	Total Score	Pwr Out	BRANCH
	QSOs		Branches		QSOs		Branches					
	Ph	CW	Ph	CW	Ph	CW	Ph	CW				
1 ZL1AM	209	83	28	6	325	119	29	7	70	182840	100	28 Whangarei
2 ZL1REG	273		29		449		28		57	123462	100	89 REG
3 ZL1WIS	238		29		340		26		55	95370	100	90 Waiheke Island
4 ZL1IB	180		25		246		29		54	69012	100	53 Te Puke

Patea Trophy - Central Region

1 ZL2AB	191		28		214	55	26	7	61	90890	100	27 New Plymouth
2 ZL2AS	90		26		351		29		55	72765	100	13 Hawkes Bay
3 ZL2AA	121		26		192		29		55	51645	100	11 Gisborne
4 ZL2VH	53		19			27		7	26	7644	100	63 Upper Hutt

ZL3/4 Trophy - Midland Region

1 ZL3RR	236	108	26	6	380	135	28	6	66	202158	100	68 North Canterbury
2 ZL2KS	208	110	29	6	265	122	29	7	71	183109	100	22 Marlborough
3 ZL3ARC					379	110	29	6	35	59045	100	01 Ashburton

"4" Trophy - Southern Region

1 ZL4AA	165	62	28	5	262	103	26	7	66	138996	100	30 Otago
2 ZL4GQ	135		29		163		27		56	50064	100	37 Southland

Single Station: 80 and 40 metres

1 ZL2DS	65		22		354		29		51	64107	100	16 Horowhenua
2 ZL1ROD	67		25		63		24		49	19110	100	71 Rodney

W M Hall Memorial - QRP

1 ZL2MLQ					300		24		24	21600	5	14 Hawera
2 ZL1LC	54		16		105		23		39	18603	5	58 Helensville

Single Operator

1 ZL4AL	163		28		178		28		56	57288	100	08 Eastern Southland
2 ZL3BRC	98		24		229		29		53	51993	80	62 Reefton Buller
3 ZL1UTH	124		23		199		26		49	47481	100	38 Taumarunui
4 ZL2AMS					145		26		26	11310	70	23 Marton

80 Metres Only

1 ZL2ARG	262	41	29	6					35	34685	100	26 Nelson
2 ZL2KB	192	95	27	6					33	34683	100	69 Kapiti
3 ZL2QF	50	51	11	6					17	6885	100	87 South Taranaki

Hastings Trophy - Phone Only

1 ZL1VK	234		29		559		29		58	137982	100	65 Papakura
2 ZL2KO	309		28		460		29		57	131499	100	20 Manawatu
3 ZL1SA	316		29		396		28		57	121752	100	10 Franklin
4 ZL2AFV	251		28		342		28		56	99624	100	42 Titahi Bay
5 ZL1IZ	174		27		385		29		56	93912	100	55 Waitomo
6 ZL6YOTA	139		28		245		28		56	64512	100	73 Northern Wairoa
7 ZL3AF	45		12		160		29		41	25215	100	01 Ashburton
8 ZL1AA					248		29		29	21576	100	02 Auckland

Home Stations

1 ZL1ECG	120		30		197		26		56	53256	100	
2 ZL2ALW	49		20		209		27		47	36378	100	
3 ZL4W	26		15		194		30		45	29700	100	
4 ZL4MDX	71		18		143		24		42	26964	50	
5 ZL3YB					154	21	27	4	31	17577	90	
6 ZL2AGY		71		7		100		8	15	12825	90	
7 ZL1HOG					102		22		22	6732	100	
8 ZL4SA	54	1	15	1					16	2672	50	
9 ZL1JV	47		16						16	2256	100	

ZL2AS second place in the Patea Trophy – Great effort by those involved.

Metal working on projects Chassis

While the weather is still fine somewhat I've been busy making the metal chassis for three of my future projects.

On the RHS one of them is the WS-48 radio and, there's a story about why there's two of them.

Next one in the middle is my double sideband 80 meter valve transceiver that I'm building. I have the circuit for that (fig1) and the one on the LHS is the universal valve power supply that will power this and any valve projects that I may make in the future.

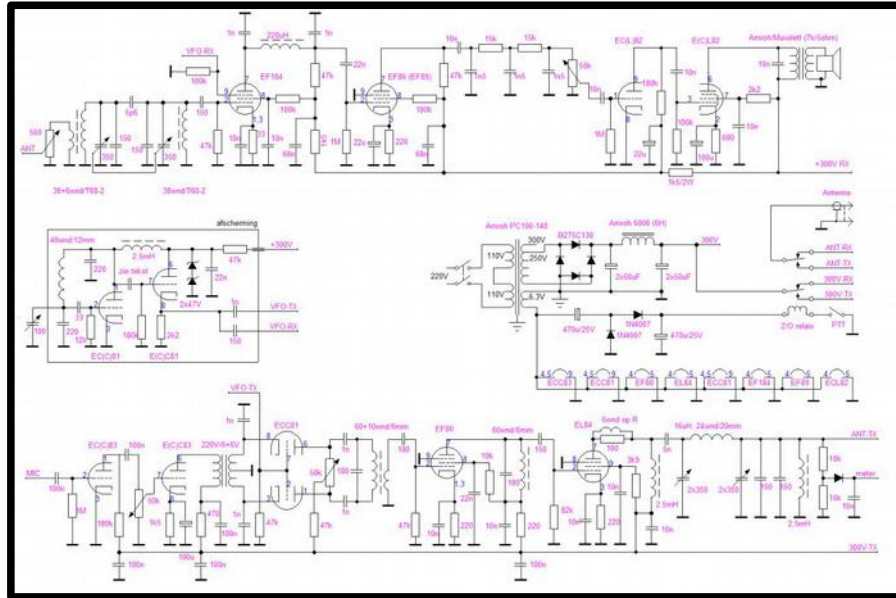


Fig.1

Having built myself a sheet metal bender from bulldozer blade tips that came into the scrapyard one day, and having some sheets of steel that came off the back of Phillips plasma televisions that I saved from a past life, I set to work.

Using some published data on the shape of the size of the case for the WS-48 I measured up and cut the steel.

For some reason I ended up cutting twice as much as I needed. I put it down to fat fingers on the calculator. So I decided I'd make two cases. I will think of a reason to build up the second one. It may be a morse code unit, if another project that I am working on works in real life.

Now the front panels of the WS-48 as you can see has a bit of a curved lip (fig2).

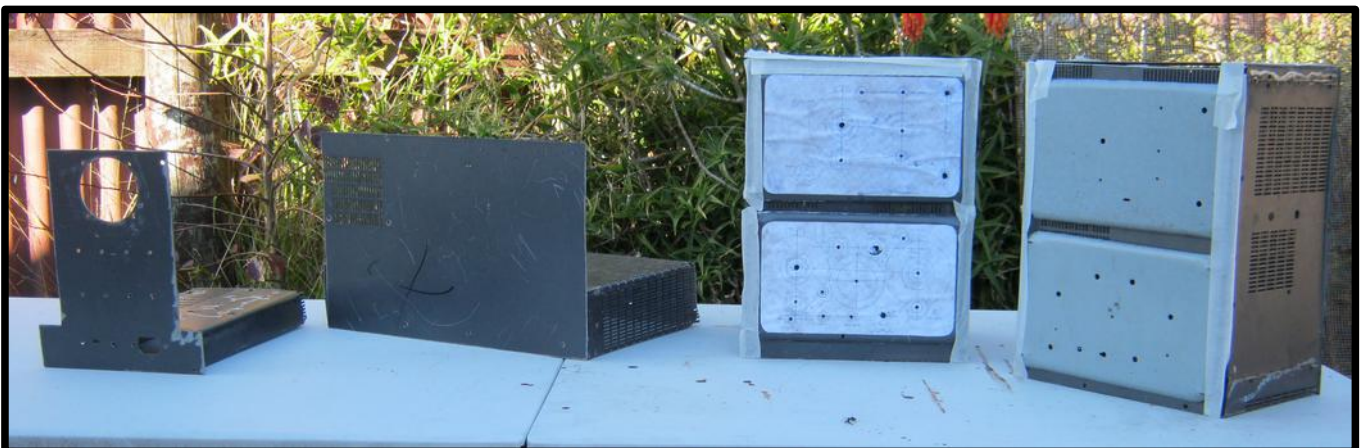


Fig.2

So back to the scrap yard where I came across a length of 10 millimetre rod that was a bit bent and twisted. But with a bit of careful cutting and pounding with a large hammer, and then welding, and grinding, I was able to make a mould for the curved lip.

Then in the centre of the steel mould I put some 5 plywood sheeting. Drilling holes in the metal front plate and through the plywood of the mould, bolting down the front steel plate onto my mould and then with a large hammer I was able to make the curved lip.

A bit of cutting and some magic from a Mig welder, I'll be able to cover up all the joints and with a lick of paint. We will have something that look's like the real thing. I have ordered all the parts and I needed. Switches (on off switches) and jack plug sockets (I needed them to be all the same and not plastic).

The tuning switches I have from scrapped sets. The metal discs for the tuning I will have to cut them from metal sheet and mark the edge some how.

Cut a hole for the meter and then honestly, fake it from there. It's not going to be an exact copy, but I make projects with the things I have around. They will look something like the real thing but will do much the same job. I get the fun by making it myself.

The 80 meter DSB (in the middle), I had to take measurements (guess) for this chassis from the photographs published on the website.

I made sure to get all components spaced out. The first thing to mount is the dial and tuning gang (from a scrapped set) for the VFO and then space every thing out from there.

The only things I have had to buy is the tuning gangs, two for the PI filter on the RF power amp anode circuit and one for a tuned RF input for the receiver input circuit, and the valve sockets. All the rest are parts are from scrapped sets and what I have picked up in my travels.

I'm going to add in a speaker as well which is where that bit of grille just happens to be.

Once I've done all the drilling that is needed, I will then just weld the front panel down to the rest of the chassis. It is best to get all the holes drilled first, while it is a flat sheet, because it's a bit hard to drill once you've got a three dimensional chassis.

And on the LHS is the chassis for the universal power supply which will allow me to power up (the 80m DSB set) and any valve radios or whatever that I'm playing with at the time. I have a box of second hand valves, of unknown working and I will use a substitute as needed.

Now the power supply is only going to be about three hundred volts on the B+ (anode supply). This is an old saying from the days of battery radio's that we had the A battery to power the filaments voltage and high currents needed, (most often a lead acid rechargeable battery). The B+ battery ran the high voltage for the anodes of the valves. The things that you remember that you'll never almost need to use again, with today's world of transistors.

The only parts I ordered are the four on off switchers as all the rest are from parts I have lying around and scavenged.

So once the cold weather arrives, I will be able to spend time in my little workshop with the door shut and the heater on and hopefully we will have productive year.

So I'm off back inside for a coffee and a bicky.

Eric ZL2TSU



ZL2KO

New Zealand Association of
Radio Transmitters Inc.

Branch 20 - Manawatū

Mini Junk and Car Boot Sale

Saturday 15th June 2024 at 10.00hrs

In the middle of June, we will hold our usual Mini Junk and Car Boot Sale, along with a BBQ at the club rooms. The last few years were very successful, and the funds contributed to the ongoing upgrade of our facilities.

Donations

If you have donations for the sale to be sold for club funds, please ensure you put them down at the club by Sunday 9th June for sorting if possible.

Car Boot Sale

If you want to sell your own equipment, we are offering a car boot sale option. It will cost you \$10 per "car boot" payable on the day to the Treasurer. The sales area will be in the car park beside the club room.

BBQ

We will have a BBQ running – don't eat breakfast – buy a sausage! Tea, coffee, and drinks will also be available for sale.

Cash Only

This is a cash only event, please bring small change if possible.

Location

See next page for a map.

Manawatu Amateur Radio Society Club Rooms

65 Totara Road

Palmerston North