



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



*Te Mata History*

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

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

**Emergency Call-in Frequencies: 3615khz and 670 repeater**



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## **NAPIER BRANCH 25**

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**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**

Heck, it's a year since we put on the NZART Conference!

While we have been waiting on the delivery of the new Radio for the branch Ham Shack, Stu ZL2XC has been putting together an analogue power supply, many thanks for the hours you have put into this Stu, thanks also to Morrie ZL2AO / ZL2AAA, who has contributed a chassis and a BIG electro and some other bits towards the project. I am developing a PCB for the control of this beast and hope to have the boards to hand shortly.

Last Monday was the third in Errol's ZL2IT inspired "Maker" evenings, Errol was away so I stood in and we basically reviewed what Errol had put forward in his first two sessions, the group eventually used Easy EDA to generate a schematic of a simple led flashing alarm system and we as a group practised putting the schematic to a PCB which was all entertaining, we also touched on to how an Arduino sketch is made, as well as a short discussion about mag loop antennae, altogether a good evening. These evenings are held every 2nd Monday at the Clubrooms 7pm, Everyone welcome. Errol should be back for the next one, and I think his plan is to run through other free software suitable for project design and implementation.

My own shack has been dismantled pending a move to the retirement village at Te Awa and a lot of gear sold or donated, stealth antennas have been on my reading list in the last little while hi hi. I have put some more gear on the trading table at the clubrooms so if you see something you might like, put in an offer when we meet again. Funds towards the new Rig in the shack.

Speaking of meeting again, our next general meeting is Wednesday 6th July, 7:30 at the clubrooms Latham street.

That's all for the time being, see you all at the meeting.

73 Dave ZL2MQ

## HASTINGS BRANCH 13

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<b>Club Call:</b>	<b>ZL2AS and ZL2QS</b>		

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

## From the top table

Well here we go a new month and we are now half way though the year already. We are heading to the shortest day and the longest night and will you sleep any longer than normal? No, your body clock will wake you up at your normal time if not before. This is how I feel after years of getting up at 6am every morning all my working life the body clock still wakes me up at 6am even on the weekends and it is very rare that I get to sleep after 6am. How many of you find this after you have retired?

Well I have been working lot of HF of late. Mostly Americans from all over the States, along with the Europeans, some from south America and the Caribbean with great 5/9 reports plus the pile ups. Boy once someone puts you on the cluster you get hit and it is hard, tiring work to work them all It is just as well that I have been used to this over the years.

By the way Dave ZL2OK a lot of stations, once they work out that you and I are close by, they ask me where you are and I keep telling them that you are still a hard working man. I get asked why there are not more ZIs on the bands and my only answer to them is that most are still working.

I have found that in the late afternoon is good but after 10pm is a great time to work stations over on the east coast of the USA and it is surprising how many are there at that time of night for us. One night I was still working them at 2am in the morning, pulled the plug at that time just had to get to bed but I think I could have worked them through till daybreak.

I have been working high up on the 20 meter band so that some of the new hams in the USA can work me. Some of them find it a real kick as they say it is there first contact outside of the USA. I can relate to this as I could not wait to make my first overseas contact. What a hoot that was and to top it off it was way back in 1993 while I was in the Chatham Island with the late Lee ZL2AL, Stan ZL2ST, Peter ZL2LF,



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

John ZL2QM and Ron ZL2TT plus others. there are not many of that group around now.

this month we are going to celebrate 75 years of the two Clubs, branches 13 and 25, with a dinner at Off The Track and I am hoping we get a good turn out for this. A lot of us older hams won't be around to see the 100 years. I'm hoping I might be, along with a lot of you, but we are all getting older and this brings me to say that we all need to be on the look out for new blood. The younger ones coming up will keep things going and we need to leave them a good legacy. Think about this, from way back years ago how radio was to what it is today and what will it be like in the future. The way things have

changed over the last 50 or 70 years, what will it be like in the years ahead I wonder and ponder on just what electronics will be.

Well that's it for this month.

Blue ZL3TT, President Branch 13 HBARC



### **The next Branch 13 Meeting**

Wednesday 22 June at **7pm.** Pakowhai Hall



### **Branches 13/25 Combined MID YEAR XMAS TEA and 75th ANNIVERSARY TEA** (on the same night)

6pm, 23 June, at "Off The Track", Hastings - Havelock North Rd, a menu meal.  
Booking numbers to David ZL2DW (0274 502 501).



### **The World Famous Branch 13 "Donated Junk Auction"**

27 July, after the 7pm Br 13 General Meeting. Bring your donations and money for a fun night to help with Branch funds.



### **FOR SALE Yaesu HF Transceiver FTDX101D**

with matching SP101 External Speaker, and M-100 dual element Desk microphone.

This is yaesu's latest SDR radio, twin receivers, large colour spectrum display, etc. etc . Read the ARRL review, the best noise reduction feature ever tested.

Purchased September 2021, as new condition, factory warranty 3 years. Landed cost, (ex Australia), including gst, \$6164

SELLING FOR \$4995.00

Phone Rob Shepherd ZL2AN 0274 548 567 06 844 0109

## Te Mata History (870/665/MM)

Thanks to a recent prompt by Ray Barlow ZL2RB and the fact that I was at Te Mata Peak (DF ing) a few weeks ago (in May 2022), I took these pix of the aerials on the roof of Peak House. (Used in their day for UHF repeater '870 and it's "Metal Mickey" 2m interconnect equipment). They were installed in 1984 and were then a UHF GP on the side of the roof and at the top of the roof a VHF 5/8.



*Building roof  
mounted  
aerials  
(1984)*

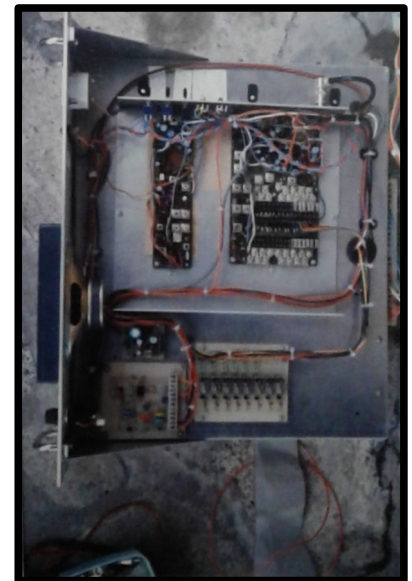


*870 repeater equipment  
in the basement rack*



*AFTER pix  
(2022)*

*870/Metal  
Mickey  
repeater  
equipment*



They both still seem to be intact except for a couple of missing GP ground radials. The upper VHF mast has been changed by ??? and is a bit more substantial now. But now the aerials are surrounded by Wi Fi and point-to-point link aerials mounted on the same mast(s).

The cellphone aerials/mast (Bell South at the time) are separate but nearby. They turned up in 1997.

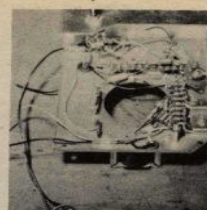
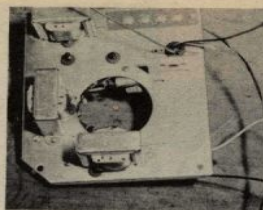
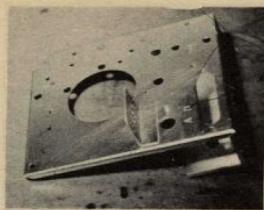
I don't know what is still in the basement (it was locked), it could be that our old equipment rack is still in there ????. We left the site about 2005 ish.

We local hams (HB VHF Group) had thoughts of going back one day but it never happened.

Ah the days of "Metal Mickey" huh.

David ZL2DW

Re: Peter Le Quesne, Napier, died 14 May 2022, age almost 88, ZL4TCC  
 After school (Napier Boys HS), Peter studied in Auckland then went to work for Deco in the UK. After that he did a stint at Scott Base in the Antarctic before setting up Le Quesne Electronics at Napier. He serviced ship's radios when they came into port and also supported some Land Mobile R/T equipment.....establishing a 100mhz LMR repeater at Ridgemount, north of Napier, near the coast. He also had an NZ Post Office contract to assemble and service their radio equipment (see attached article). Thereafter he went down to work at Lincoln University (about 1969) before he took up an NZED Com's Engineers job at Dunedin. In the mid/late 1980's he was made redundant and returned to Napier and worked at the EIT for a few years before retiring to become an Electrical exam's supervisor and marker.  
 Simon Le Quesne (son)



## WIDESPREAD INTER-COM CONTRACT FOR LOCAL COMPANY

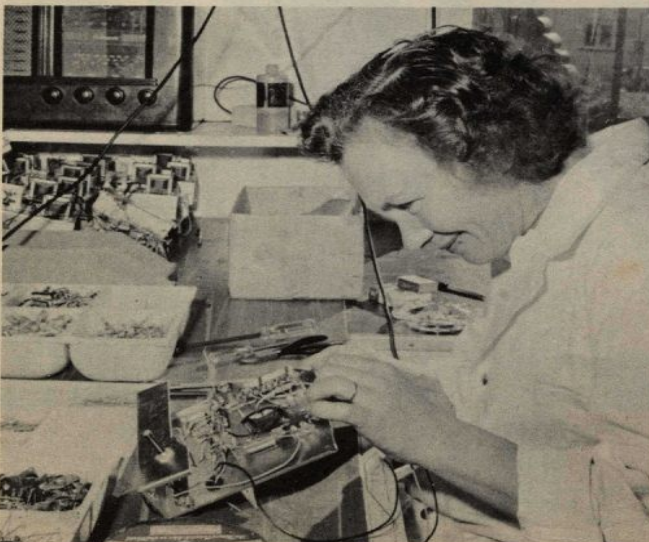
For the first time in the history of the N.Z. Post Office, a local company has been given the contract to assemble electronic equipment for them. Le Quesne Electronics of Napier is the company assigned to this large contract. They are to assemble 1200 "Inter-com" systems for the Post Office. The deadline for these Inter-coms is March '67 - quite a massive undertaking to fulfil for a local business firm.

Above: Shows the four stages of the "Inter-coms" assembly, from the shell of the construction, or as it is technically known, the "Bare Chassis", through the wiring-up stage to the last picture which shows the completed article.

Below: Mrs Clarke, formerly of Newcastle-on-Tyne, England, is seen here welding one of the 50 components into the chassis of one of the Inter-coms. Before coming to N.Z. Mrs. Clark did electrical work on light bulbs.

Right: Miss Anne Reid of Napier is another young lady assembling the articles. She is seen here cutting a "Potentiometer", a metal rod which connects to the sound knobs on the Inter-com.

Lower right: Close view of the intricate work which goes into the wiring. (Bottom) An array of components used in the making of "Inter-coms".



## ZC1 power supply repair

Now last month I said that I was using a ZC1 to record some sound files of the noise that is in my little workshop from switch mode power supplies. But the ZC1 had died on me. This is normal with old gear. I started to record these files on a broadcast radio, thinking that the noise should be down in the AM band as well. The noise dies off at 40 m so FM was never going to work.

So I tried two different radio's but the noise was not there.

I thought about it afterwards and decided that transistor radios have a magnetic aerial, a ferrite rod aerial that does not pick up electrical noise.

So we had to get the ZC1 working.

I put it on the bench upside down and looked at it with a blank face.

What was I going to do ?

Now I have a circuit, but that's for a vibrator power supply, this one has been modified and has a mains transformer power supply. I have no circuit, looked on the internet and found nothing .

I pulled the rectifier valve out and found a type 80 valve (tube to some people) (see fig 1).

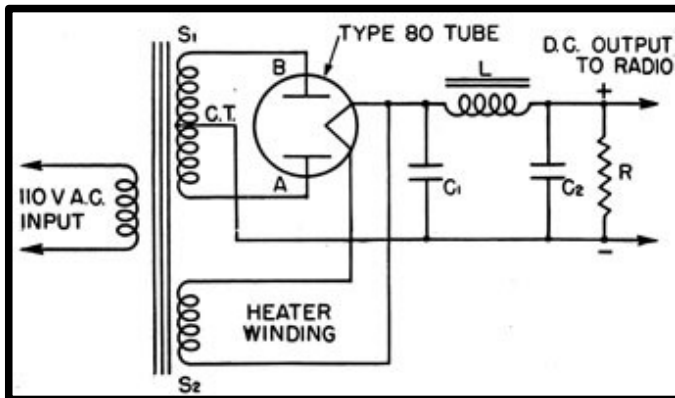


Fig 2

This green thing was open circuit. It had some writing on it, maybe this is a military part number? But I can't find it in the manual .

Reaching in with the side cutters I cut it out and put it on the bench. Turning it over there was 1K ohms on it. Some times you have to ride your luck in the repair game. That's the advantage of old stuff .

A ZC1 is more ancient than I am but you can work your way around it, rather than gear you have no idea what's going on. Something that has a 100 legs on a IC, all digital signals jumping backwards and forwards.

Just tick the box and get onto the next problem.

If you go to "[www.worldphaco.com](http://www.worldphaco.com)" or ask for "ZC1 MK2 power supplies" you will come across this web site. There is a list of upgrades to a ZC1. If you ever want to build a new vibrator to run it, and keep something standard there is a list of 4 circuits for FET vibrators.

I can find the circuit for that. But nothing looked like it should be, when I looked at the set. The circuit shows the standard pi filter, a cap, choke, cap. But instead of the earth on the mains filter electro going to earth, it went to something that looked like a resistor (green thing) (see fig 2). That went to another resistor that went to earth .

Thinking back on it, and checking the circuit, I think this is how they get some cathode bias to grid or something in old valve radios.



Fig 2

But at the end of the list was a couple of mods to increase the RF power, change the impedance of the RF out to the Aerial from 12.5 ohms to 50 ohms and the last one, is to put in a speaker to replace the headphones. That was the first mod to be done. Refer to (figure 3) . In the book you get from the local electronics shop there is a speaker transformer for 100 volt line delivery to 8 ohm speakers that we used to have in pubs all over the place.

Now I went round and round the shop looking for it.

It wasn't in transformers area, or in the speaker area, and it wasn't behind the counter in those little trays having audio Transformers and it took a while to find it, but find it we did. The computer said that they had 4 in stock.

My father was a carpenter and his rule was "tools were meant to be used and if so, they had to be sharp".

I'm going to step on a few toes here , because I'm going to modify the ZC1. It's already got a mains power supply in it. I did the speaker mod, sorry.

I fitted the transformer in to the speaker case. As I had it open. See (fig 4) So this mod does not change the ZC1 from standard but from now on I intend to change the circuit on the inside.

Let's Push it to the Limit see what a pair of 6V6GT valves can do !

Off inside for a bickie and a coffee.

Eric ZL2TSU

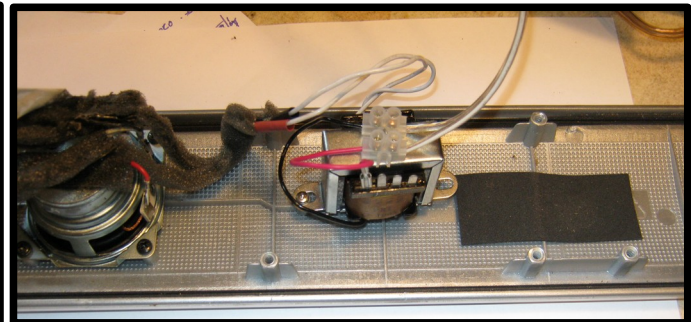
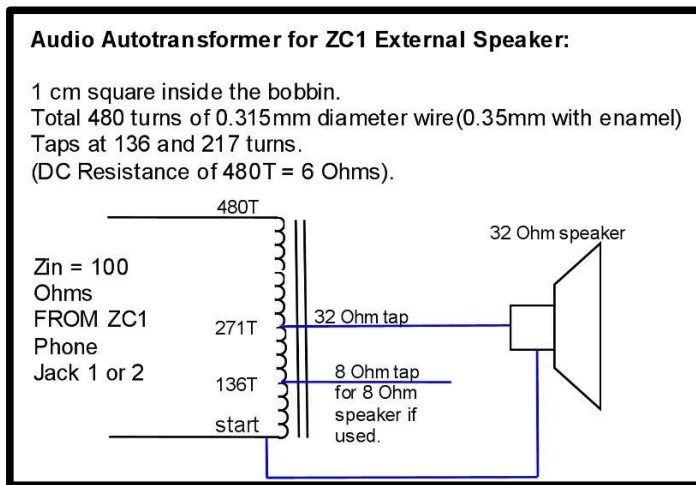


Fig 4

Fig 3



## Ham Radio Home Brew Design Workshop

I am co-ordinating a Workshop for those interested in making any electronic project using modern free design software to enable members to produce and assemble their own projects, or build a common project (2 tone oscillator for SSB tuning and alignment).

We meet at the Napier club rooms every second Monday starting at 7pm.

This workshop is open to any interested electronic enthusiast.

The following is the proposed objectives

- Installation and explanation of the free design software (Easy EDA)
- Methods and layout of schematics,
- Converting schematics to a printed circuit board layout
- Making and etching the project printed circuit board
- Soldering techniques for SMD components etc
- Using other free design software to design Filters, Active circuits, Antennas etc.
- Any other related subject that arise from the above

The above is envisaged to take at least some weeks and it is not intended to be pressure cooker type sessions. However you would be encouraged to experiment at home to gain experience etc.

If the above workshop is successful, I hope it will continue as a forum for Home Brew electronic education and a meeting place for enthusiasts.

Remember: Every second Monday, Napier Amateur Radio Club room's, Latham St, 7 pm. All welcome. It is preferable that you bring a Laptop with you with windows 10 installed. However if this is not possible, then come anyway.

Errol Lilley, ZL2IT