

## MUSICK POINT RADIO GROUP (INC.) NEWSLETTER

--NZART BRANCH 86--

-----For MARCH 2023-----

-Incorporating The Society for the Preservation of Amplitude Modulation News-

Musick Point Memorial Radio Station, Bucklands Beach, Auckland. Call Sign-ZL1ZLD.

BRANCH 86 NET- TUESDAYS, 7.30PM, 145.775 MHz, Musick Point Repeater. All welcome!

SPAM Remote Receiver - <http://spamnz.zapto.org:8901/>

Website- <https://musickpointradio.org> Webmaster-Neil ZL1NZ.

SPAM A.M. (ZL6AM) Nets- Mondays 11.30 AM, **(NOTE: CHANGED!)** Fridays 8.30PM , 3.850MHz.

A.M. Calling frequencies- 3.850MHZ, 7.125 MHz

Editor- Martyn, ZL3CK.

Meeting- Second Sunday of the Month (Except May-Third Sunday, to avoid Mothers Day)

NEXT MEETING- **Sunday, March 12th at 1PM.**



The original Auckland Radio VLD, c1912. The spark-gap radiotelegraph station was located in a small cabin on the roof of the Chief Post Office, Queen Street, Auckland.

Photo and information sent in by Neil ZL1NZ

See more at [musickpointradio.org](https://musickpointradio.org)

## **From the Chair**

Another month has flown by but it has not been a forgettable one. For many, there is a lifetime of work and memories gone in a flash, and my thoughts and prayers are with them all.

The station has held up well throughout the storms, as did our various antennas. There was the usual large 'puddle' in front of the building during the first storm, which Dave and I started to work on, but had to dash for cover when the next downpour started. We were not dressed for the occasion. Leaves collect in the 'gutters' at the sides of the driveway and then when it rains, they are washed to the drains at the bottom, which they cover, preventing the masses of water draining away effectively. I am not sure how to overcome this problem.

Later that same afternoon, I went out onto the East wing roof during a quiet spell, where it was quite calm with just a gentle breeze blowing. That area seems to be fairly well protected from the wind, but over at the cliff edge, on the side facing Beachlands, the trees were absolutely roaring in the wind; it was almost deafening.

We had two weekends affected by the cyclones, the second being the Sunday that should have been our Monthly General Meeting. Only four of us braved the weather and, again, the station was unaffected by the onslaught.

Preparations are finally being made to get the network rack fitted out and connected up in the repeater room. The large battery box, which housed two small batteries used as a UPS for the VHF repeater, has been removed and replaced by a more 'fitting' box. This allowed us to position the network rack in the desired place, ready to connect up. Once that is done, we will be able to install more security cameras to monitor activities (tagging, vandalism, etc.) outside the building. We will not have to position them close to power outlets because we will be powering them from a POE (Power Over Ethernet) switch which was procured by Dave some time ago for the purpose.

I was unable to go to the station this last weekend so I am not sure what news there is. I attended my nieces wedding on Saturday and my youngest granddaughter's 2<sup>nd</sup> birthday party on Sunday – in Whangaparaoa, a long trying drive at the best of times.

Dave and I have been trying to think of ways that will encourage members to participate more in the club. Obviously, this is not an easy thing to do, so I invite anyone with an idea for a suitable activity of some sort to come forward with the idea.

I would like very much to have a 'fox hunt' but the issue is getting the equipment needed. Perhaps the most difficult thing is the 'fox'. In case you don't know what I am talking about, here is a brief overview. A fox is a low power transmitter with some sort of controlling hardware which causes the transmitter to send a brief message (usually CW and the club callsign) at regular intervals. This is hidden somewhere within range of where the hunt will start. The 'hunters' use lightweight, handheld, directional (yagi- type) antennas to try to track down the fox with the aim, obviously, of finding it before the other hunters do. If anybody has any idea where we could borrow this type of equipment, please let me know. This is a fun activity which we could run around Musick Point quite easily as there are lots of good places to hide a fox within the area.

Keep safe.

Until next month:

73, and call CQ

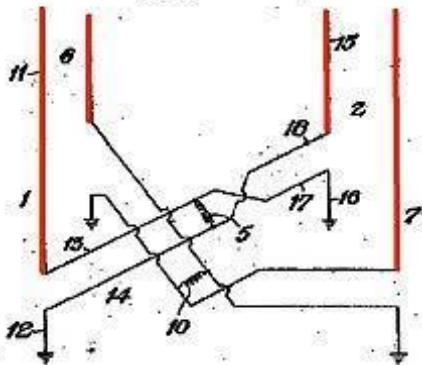
David, ZL1DRV

## Adcock Direction Finding

Recent correspondence on the ARC-5 qth net 'blog' revived interest in the Adcock direction finding system installed at Musik Point in the 1940s. This system of four vertical aerials placed in a square pattern was located on the rough grassy area on the right as you drive towards the station. The dimensions are uncertain but it's noted they were 425 feet apart. The DF aerials are in the circular area almost in the centre of this old photo of Musik Point-



*Fig. 3.*



Early diagram of the Adcock system, first designed in 1919.

Some recent scrubbing in the long grass has failed to find the concrete footings, however they are probably in there somewhere and should be on a North-South and East-West axis. Perhaps some future archaeological exploration one Sunday-anyone interested?

There is a lot of information on the web on the similar, but different "A-N radio range". This transmitted two figure-of-eight pattern signals from four similar aerials. Demonstration of this system may be found on the following YouTube link- (It's 10 minutes)

<https://youtu.be/p-VqtNY8vpw>

## GROTA News from Kelvin ZL3KB

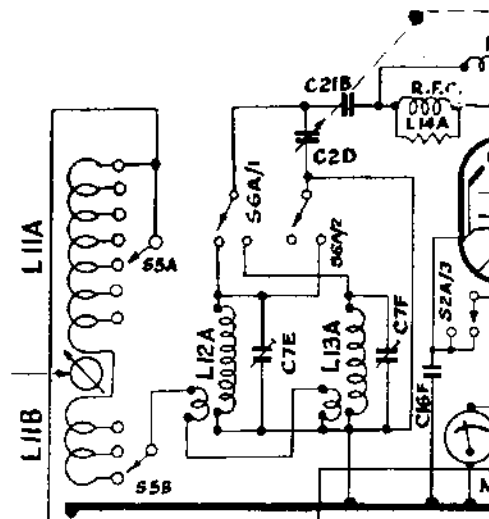
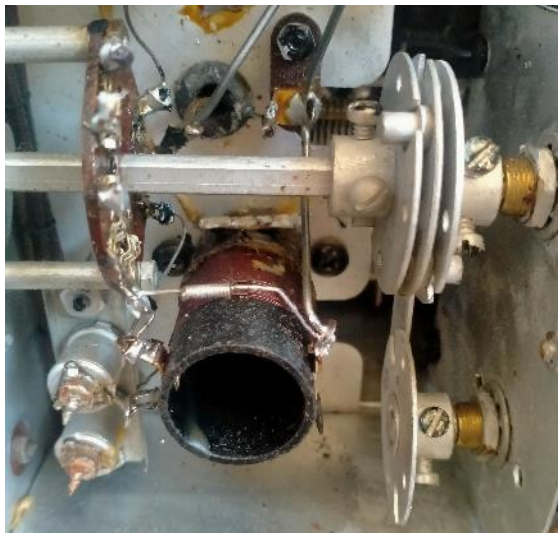
### Fun with ZC1 tank coils

Having been gifted an ex AREC ZC1 Mk2 for GROTA, I set about restoring back to original performance. Looking underneath I saw it had had what maybe described as “standard AREC modifications”, so they had to be removed. This involved finding a new aerial tuner assembly, but that happened to be easy.

The area around the PA tank coils was more of an issue. Once I had rewired the output circuits as per standard, I noticed the HF band produced higher than normal power (3.5W) whereas the LF band was very weak (700mW), all into 50pF+50R. From this I concluded the PA valve was OK at least.

The PA drive seemed OK too, a little low but detuning the buffer output didn't show any change in PA output, indication it probably had sufficient drive. So what was wrong with the output circuits on LF band? Was there a modification I hadn't found?

The tank coil inductance was as per the book figures, and the aerial tuner measured OK too. So reaching for my Nano VNA, I measured the insertion loss of the LF tank coil and link winding L12A, and comparing it with the HF band coil L13A the LF coil had 4dB higher loss!



An ‘Ahh Hah’ moment - visually comparing the LF coil with another set, the link winding seemed to be placed further from the tank coil, but being at the bottom of the former it is very inaccessible. The coil is held in with two screws and nuts, with the screw heads totally inaccessible! The only thing to do was unscrew it all, let the screws drop out somehow.

Inspecting the LF tank when removed, the windings had not been touched since it was made, so it had been like this for ever. After rewinding the link turns over the bottom of the tank coil, I refitted the coil back in with “self-taps” :(, yeah I know. Final testing showed the LF power output back to the nominal 2.8W.

Conclusion – just because the set had been heavily modified, doesn't mean to say it wasn't wrong in the first place. I also noticed an error in the ZC1 schematic, where in reality the link windings are series coupled in the opposite order. Its probably too late to complain to the manufacturer.

## SPAM News- Shack Visit to Shanon ZL4SH

During a recent trip to Invercargill your Editor was delighted to visit SPAM member Shanon ZL4SH, his wife Megan and their new baby. Shanon is an expert restorer of vintage BC radios and a lot else besides. A pleasant evening was enjoyed over a lovely meal with local Rex ZL2BGF as well. Thank you very much Shanon and Megan for your hospitality.



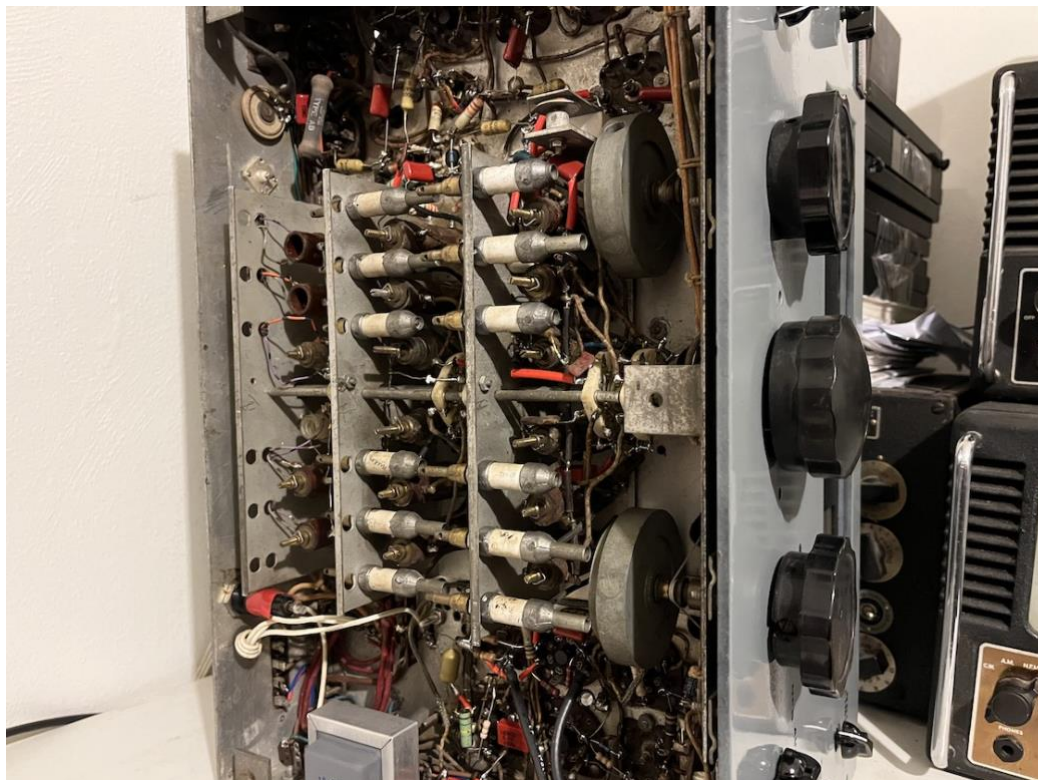
Shanon ZL4SH with Rex ZL2BGF



ZL4SH AM desk



One of Shanon's recent restorations, a Type 1043 Receiver.



Underside view- note those ceramic tubular preset capacitors



A corner of ZL4SH's projects shed...

**Wanted by Steven ZL2UV** (New Plymouth)

I am still wanting to buy a high power modulation transformer, with a view to making Big Bertha (T1509 converted to a 1KW linear by the late Eric Duffy) a dual mode amplifier, Class C as well as a linear amp. The power transformer in it looks to have plenty of current available. I think it may be a pole transformer.

Email- [steven.prout@gmail.com](mailto:steven.prout@gmail.com)

**Wanted-**

No. 38 set Mk 1 or Mk 2 Headphones.

By Editor, ZL3CK. [martyn.seay@gmail.com](mailto:martyn.seay@gmail.com)

**Next Month-**

Conference '23 in Palmerston North. SPAM Meeting and AGM. Ideas welcome!

All contributions to the newsletter are welcome.

Best 73 to all,

Martyn ZL3CK