

THE MUSE



-----December 2024-----

The newsletter of the MUSICK POINT RADIO GROUP (INC.) NZART BRANCH 86
Incorporating The Society for the Preservation of Amplitude Modulation (SPAM)
and **Green Radios On The Air (GROTA) News.**

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

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

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

SPAM KIWI SDR Remote Receiver- musickpoint.ddns.net:8073/

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

SPAM ZL6AM or ZL1ZLD AM Nets- Fridays 8.30PM, 3.850MHz, Wednesdays at 11.30Hrs, 7.125MHz

Museletter Editor- Martyn, ZL3CK.

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

NEXT MEETING- **Annual Christmas Barbeque AND "H" night Sunday December 8th at 11am.**

PLEASE RSVP to musickpointradio@gmail.com, or the editor if you are coming to the BBQ ASAP! so we can order food!

Don't Forget!!! BBQ and "H" NIGHT CONTEST SUNDAY Dec. 8th coming up! Details inside-



Mobile Funk- und Fernmeldestation der Nachrichtentruppe zur Nachrichtenübermittlung zwischen Flugzeug und Artilleriestellung.

POTA in the first WW? Seen in the Berlin Communications Museum.

From the Chair

So, all of a sudden, another month has flown by and I am late with this piece – *again*. Don't worry, no more kitchen nightmares: it's finished, at last. If you ever think about getting your kitchen renovated, give yourself a slap and start looking for a house to buy – it's easier.

If a man speaks in the forest and there is no woman there to hear him.....
Is he still wrong>

I also think that I will not stress you with the deck renewal project that my son-in-law and I started last weekend – and it lasted all weekend and is not finished yet. We ran out of decking screws and said: “Oh, screw it!” late on Sunday afternoon. That is another project that I will never again attempt.

Ask her if she's gained weight. That way she'll know that you're paying attention to her. Keep an eye out for more relationship advice in this column in the future.

As December is almost upon us, I am going to make sure that Sundays are my own and that I get a break away so that I can get to Musick Point. The last Sunday that I was there, I sat with Dave for most of the afternoon while we (he actually) tried to update the firmware on a wireless access point so that he could create a mesh network around the building. Long story short: it was not going as well as it could have. I wonder if he got it figured out yet

Studies now show that the most expensive vehicle to operate is a grocery store shopping trolley.

This following could only be set in the US of A:

The other day my neighbour, who is blonde, came running up to me in the driveway just jumping for joy. I didn't know why she was jumping for joy but I thought, what the heck, and I started jumping up and down along with her.

She said, “I have some really great news.”

I said, Great. Tell me why you're so happy.”

She stopped jumping and, breathing heavily from all the jumping up and down, told me that she was pregnant. I knew that she had been trying for a while and told her that I thought it was terrific and that I couldn't be happier for her.

She said, “There's more.”

I asked, “What do you mean?”

She said, “Well, we are not having just one baby. We are going to have twins.

Amazed at how fast she could know that so soon after getting pregnant, I asked how she knew.

She said. “I went to Walmart and they actually had a home pregnancy test in a twin-pack. Both tests came out positive.

After that amazing scientific deduction, I had better wind it up for this month, but not without wishing you all a very merry and joyous Christmas and a Happy New Year. If you're on the roads this season, please be safe and try not to become a part of the statistics.

I hope that Santa brings you what you have been wishing for.

Until next month:

73, and call CQ

David, ZL1DRV

Musick Point News

The station seems to be busy every Sunday and Wednesday. We have had a few visitors, including Robert Ramsey (Rob) AH6X, with his XYL. They were trying out the reserve for POTA while on tour from Boise, Idaho. They didn't know about the station but just happened to come on the right day. We now have a QSL card on the way from him via NZART HQ!

Our speaker for the November meeting was Kevin ZL2TKH who travelled up from Hamilton with Steve ZL1FS, who's now based in Whatawhata.. Kevin gave a comprehensive talk on the use of hydrogen as a 'green' energy source, and a spirited discussion took place after the talk.



Kevin ZL1TKH, Phil ZL1FTH, Graham ZL1TOF, Dave-on-the-phone ZL1DL, and Steve ZL1FS hearing all about hydrogen.

At the station, various projects are being worked on, **Harry ZL1BK** has been experimenting with a number of different portable HF aerials, and **Dave ZL1DL** is trying not to loose SMD's on the floor using a newly acquired video magnifying workstation-only \$85 from the usual place. We have acquired a collection of valves generously donated by **Merv ZL1SK**- some have gone to the GROTA group in Christchurch for their various "green radios" and the majority will go to the Vintage Radio Society for their stocks.

There is also work going on for one of the commercial users at the station upgrading their equipment. This has resulted in more work for "Sadie" Dave ZL1DL on the vacuum cleaner! It's nice to have clean and tidy clubrooms so a big thank you Dave for your efforts in this regard.

Christmas BBQ and "H" night Sunday December 8th – starting at 11 AM-

If you are coming, **PLEASE RSVP ASAP** via the website, on a net, phone, smoke signals etc. So we can order an appropriate amount of food. It will be the usual superb BBQ by Chef **Mark ZL2MOH**, but you are very welcome to bring something else along too. We do have "H" night later that day so if you plan on staying for that, we may order the traditional Pizza, or again, you may bring your own food if you want to have your evening meal there.

New Year's Day 2025

We will have the day in the reserve with the gazebo chairs and tables set up, as in previous years. Feel free to come along any time and stay as long or as short as you wish. There will be SOTA activity particularly around 12-2PM. The Musick Point Reserve is also a POTA site, so come and set up your portable station, and get some practice for an emergency too.



ZL1ZLDTUI- our new Mascot at ZL1ZLD ?

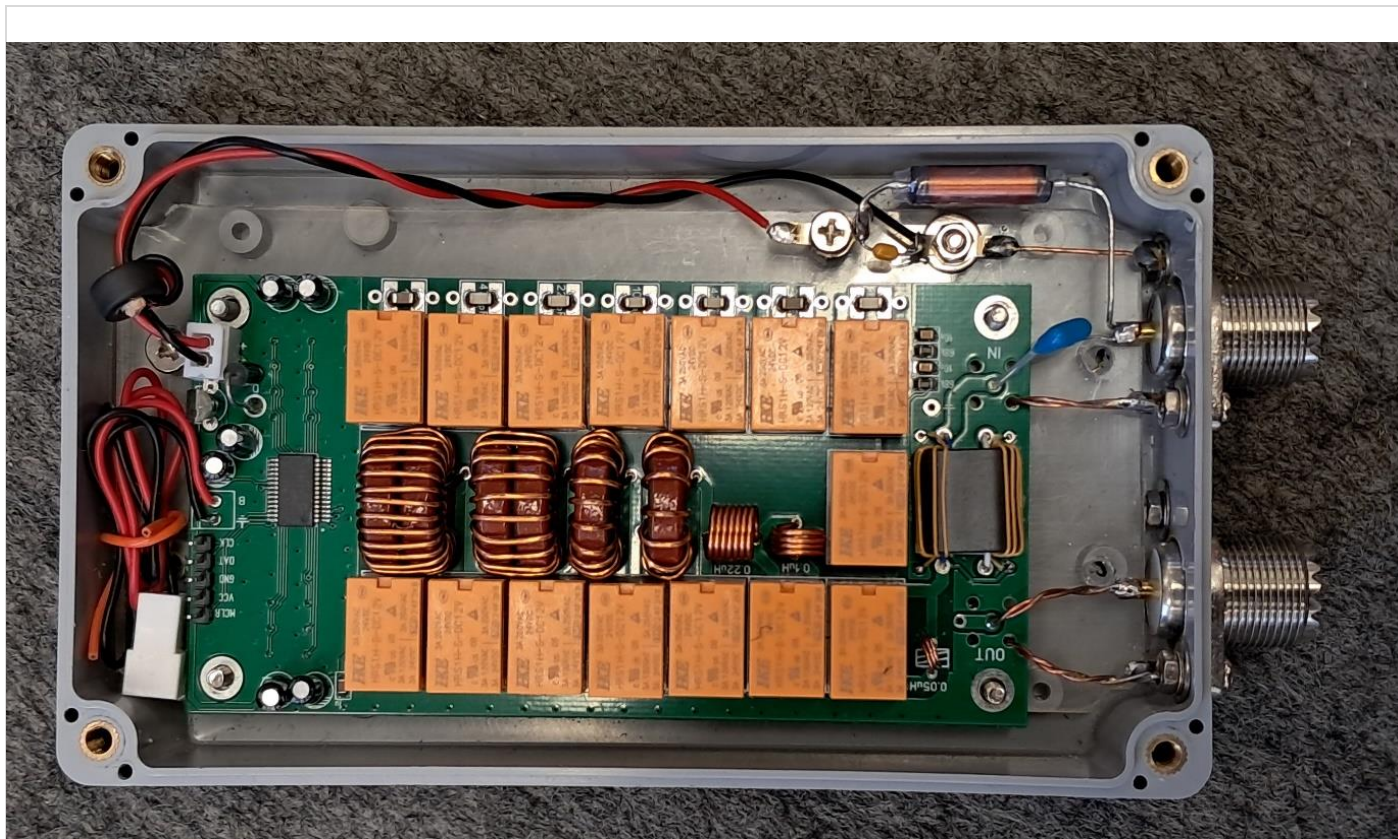
Society for the Preservation of AM (SPAM) net news

Our two weekly AM nets continue, with a change that the regular weekly 80-meter net controller is going to 'rotate' as most other nets do.

Starting with last Friday 22nd November the **ZL6 AM net** (3.850mHz) was ably run by Rob ZL4ROB. Thank you Rob for stepping up! This week will be run by ZL3CK as usual, unless of course someone else volunteers on the night. **ZL3CK will continue to run alternate weeks**, so will be on as usual at 8.30pm Friday 29th November.

The other weeks are up for grabs, so if you would like to take a turn here's your chance, You will probably need an SDR receiver operating in order to hear some of the stations, always an issue in the city environment. It isn't hard once you do it once! But remember- it's only a hobby!

The 40 meter nets (7.125 mHz) starting at 11.30 from ZL1ZLD Musick Point will continue weekly on Wednesdays as usual.



ATU-100 with DC supply over coax

There are many reasons an antenna tuner is better placed at the antenna end of a feedline. We won't delve into such now; suffice it to say some experimentation beckoned.

The ATU-100 developed by N7DDC and available at very competitive prices on Ali "do you really know what you are getting?" Express, is a nominal 100W, "L" network automatic tuner with relay switched L's and C's (7 of each). It is available in various offerings from a board + components through to a fully assembled and cased unit. There have also been various other power level versions, from QRP (with latching relays for power saving) through to QRO. But I digress.

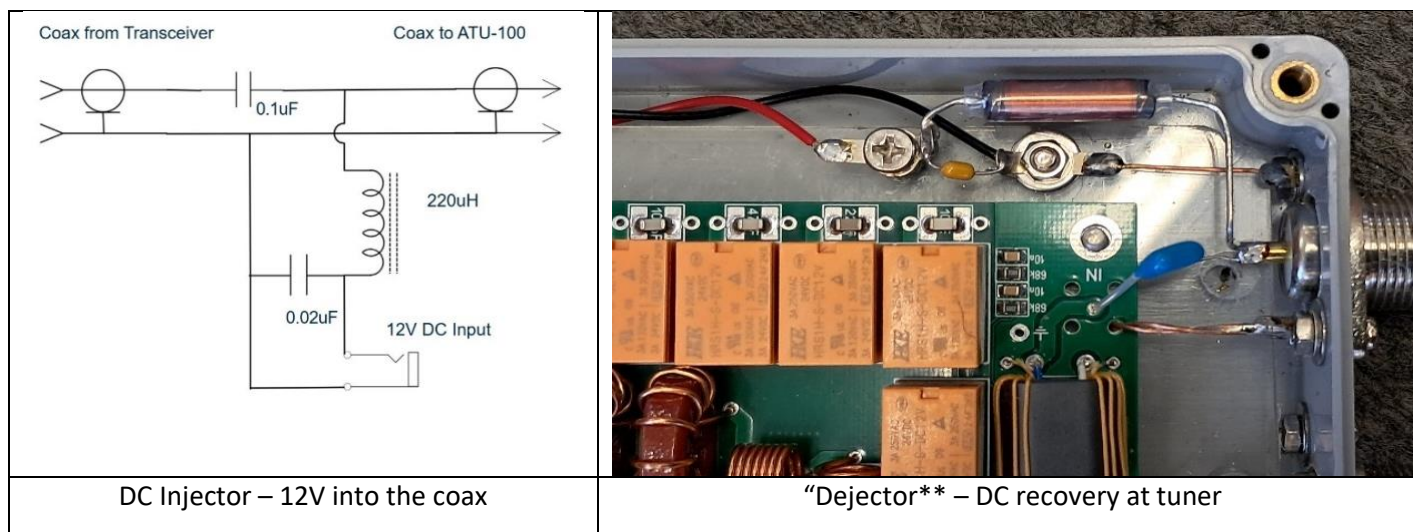
The ATU-100, while intended for use in the shack, (it has an information display and one or more optional control buttons) will operate without operator interaction by automatically going into tune mode when it detects a high SWR. This "hands off" mode potentially allows the tuner to be placed away from the operator. How convenient.

A board level "kit" (around \$40) was obtained via AliE. The "kit" is supplied with the SMD componentry pre-assembled; one only has to add the larger parts. Actually, there is some SMD rework recommended: It has been found that some diodes used in the SWR detector have caused incorrect SWR readings (resulting in incorrect tuner compensations) at higher HF freqs. The problem is the relatively high capacitance across the diodes. As the diodes are too small to have any part number identification on them, one could either conduct proving tests on the SWR detector performance, or change the diodes. I changed the diodes. (This SMD replacement event may be worth an article on its own-see above--Ed.)

12V is required to power the tuner. This could be provided by a multi-core cable that could also handle the display and control signals. The display data is transmitted via I2C and so conversion to a different transport would have to be provided for the longer distance. As the display is not required for operation,

stage 2 of the remoting project might look at providing transport of the control display signals. At the moment, all we need to do is provide 12V to the tuner; so to avoid the nuisance of extra wiring, we piggyback on the coax.

To get the 12V onto the coax we use an injector. Some people may call it a "Bias Tee". Yes, it is a "T" and I may be biased, but I'm calling it an injector. The essence of the injector is to put 12V DC onto the coax to the tuner, while blocking the DC from going back into the transceiver. (There are certain similarities to the steam injector on a locomotive to prevent it exploding-Ed) Also, the 12V source needs to be isolated from the RF, so as not to provide an alternative RF path (with potential problems for the 12V source), nor significantly alter the impedance of the feedline. This is somewhat simply achieved using a blocking capacitor for the DC and blocking choke for the RF. A similar circuit at the tuner end, allows for the retrieval of the 12V to power the tuner while blocking the 12V from entering the RF input to the tuner.



Well that's the theory. The stage 1 version is built and ready for testing on the next MPRG antennas in the park day!

** "Dejector" – New antonym to Injector. No rights reserved; may be freely used in discussions, to impress!

With thanks to Dave for helping the editor sort out his Mac- yet again...

GROTA REPORT for November From Kelvin ZL3KB-

Ever since we have conquered the 150km sea path between Christchurch and Kaikoura on WS48 sets, we have been wanting to try the 200km southern sea path route from Banks Peninsular to Oamaru. The opportunity arose this month when Noel ZL4OW happened to be in Oamaru with his WS48 and two ZC1s. The rest of the GROTA team setup at the northern end, Ray ZL3RAM with WS48 and ZC1, Des ZL3AK and Bryan ZL3BHS with a C12, PRC320 and WS38 (yes really!), Mike ZL3MWD and Peter ZL3IA at Birdlings flat with ZC1, Aidan ZL3APB with WS62 at Tumbledown Bay and me up on the southern summit road with a WS48 and A13HP. The weather was blue sky perfect albeit a little windy.

Noel was plagued with Oamaru QRM in so had little chance in hearing us, and there were gremlins reported in his ZC1s too. However, at the end of the day he heard some of our high power stations like the A13HP and C12 (5 Watts) so that was something, at least. Aidan thinks he heard Noel's WS48 set hence there is hope for a repeat trial in the future. With eighty-year-old sets we always expect some breakdowns, and so we lost a few ZC1s, a WS38, a PRC320 and Mike needing a \$50 tow out of the shingle!

The estimated receive signal on a WS48 from a WS48 200km away, using Free Space Path Loss, would be approx. 2.7uV, which is only just above the normal 10dB S/N sensitivity for a WS48, so this experiment cannot tolerate ANY local noise. Of course we are expecting a surface wave over sea path here, but the recent active ionosphere could be giving us some NVI skywave as well. So many questions to answer, so little time. Thanks to the team, the usual debrief at the pub showed the happy bunch of GROTarians had a great day out. We (and most of the radios) live to fight another day.
Kelvin Barnsdale ZL3KB



Kelvin ZL3KB with the new headset for the A13HP radio all set up on Banks Peninsular



View from Kelvin's spot- A13HP and W.S. No. 48 enjoying the beautiful weather.,,



Aidán's W.S. No. 62 on the beach at Tumbledown Bay.



Mike and Peter's ZC1 hiding in the van on the Kaitorete Spit, with Rocket Lab's launch site close by...



Noel ZL4OW's ZC1 and W.S. No. 48 in their natural environment, Cape Wanbrow, Oamaru.

From Shanon, ZL4SH (Invercargill) with some useful information and links-

All has been good down here and busy at the same time there has been a lot of work getting in the way...

I went to use my Apache transmitter but couldn't get it to load up correctly on the antenna.

I've since replaced the antenna with a travelling wave antenna. They are an extremely odd antenna design. Basically it's around 450ohm resistive impedance with a 9:1 balun to drop it to ~50ohms. No tuner required on any of the HF bands up to 6 meters. The higher the frequency the more gain and directional it becomes. Mine is 40m long and has a 470 ohm 20W thick film resistor, this setup is good for over 100W. I have some high power carbon resistors but I would need to make an open air balun to handle the power...

<https://vu3dxr.in/diy-terminated-end-fed-vee-antenna-tefv/>
<http://on5au.be/content/a10/wire/lw2.html>

I have managed to finish restoring a Eddystone 840C and a Collins 75A-2 plus a heap of domestic radios too since last time you were down.

I have built a coil / transformer winding machine (its very agricultural looking) as well.

I have found a solution to solving the issue of weak valves in these older receivers and the top ends being rather deaf. It's a 20dB broad band amplifier from China.

https://www.ebay.com/itm/156287233206?chn=ps&mkevt=1&mkcid=28&google_free_listing_actio_n=view_item&srsltid=AfmBOoo3fOFkb62kwseBICJrow-xal4RMSc81GiprCrgjm4OCi20jt4Jqz4

Good to hear from you,
Shanon

Saturday March 8th 2025, Te Puke Amateur Radio Club Market Day branch 53 NZART

At Paengaroa Community Hall, 4 Old Coach Rd., Paengaroa.

Venue opens for vendors 6.30 AM. Table (1.8 Mt) prices- presale \$20. On day of sale \$25 .
Half table \$12.00 or \$15 son day of sale.

Sale time 9:30 AM. Door charge \$2.00 per person.

Breakfast available from 7:30 AM to 11:00 AM at reasonable prices.

For further information contact **Syd Rowe ZL1LWR** (07) 533-1029 or 0272488664

E-mail – sydrowe@extra.co.nz

Free Amateur Radio Buy, Sell and Wanted website-

See "ZL Ham Ads" on "The Machine" the **MPRG Blog-** <https://MPRG.zlham.net.nz-->

"H" NIGHT CONTEST, DECEMBER 8.

Band- 80 METERS

Mode- Amplitude Modulation Phone only, that is a carrier and sidebands.

Time- 7.30 to 10PM, 5 half-hour periods

Work individual stations once in each period, unless they are able to change radios and operate in another category, Eg. use a ZC1 for 15 minutes then change to a modern radio for 15 minutes. There will be a special event station ZL6H.

Transmitting Categories-

Vintage- radios of all valve, WW2 or earlier.

Hybrid- Radios with valves, at least in the finals stage.

Modern- solid state, DSP etc.

SDR- Radios that are fully software defined, Flex, K3 etc.

Home Brew- where Tx , Rx or both have been fabricated in the home workshop

QRP- less than 5 watts carrier power.

Exchange a signal report and type of equipment you use, Eg. '59 ZC1' (An unlikely combination!).

Suggest you use the following extensions when calling, and claim the points for each station worked-

/V = vintage 3 points

/H =Hybrid 2 points

/M= Modern 1 point

/S= SDR 2 points

/w=Homebrew 2 points

/Q=QRP 3 points

Working ZL6H 5 points

Points will be awarded for each station contacted, based on the equipment THE STATION YOU CONTACT uses.

Suggested calling frequencies-

QRP 3750 and QRO 3850, giving older receivers a chance to hear weak signals.

Short Wave Listeners (SWL) section-

Points awarded will be the same as for transmitting stations, i.e. determined by the type of transmitter the station you hear is using. Use the appropriate multiplier for your style of receiver. Remote receivers please use 'Modern' category.

SWL Categories-

Vintage: All tube line up in receive path. Multiplier 2.0

Modern: Any solid state receiver. Multiplier 1.0

SDR: software defined receivers e.g. Soft Rock, SDR play etc. Multiplier 1.5

Please send logs to Rob Carter, ZL2IW at rob.zl2iw@gmail.com with a summary of your equipment used, and category you wish to be in. A photo of your log will suffice. There will be a certificate for the winner in each category.

Good luck on the night, and most of all-have fun!