



Papakura Radio Club

January 2026

Newsletter

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I intend to produce a newsletter each month and is planned to be sent out prior to each monthly meeting. If you have any items you would like to see in the newsletter, please send to me at iana@kcbbs.gen.nz

Ian Ashley ZL1AOX, Secretary.

7th January 2026 at 19:30

This Wednesday's evening meeting... the first for 2026...

At the Papakura Radio Club... Wellington Park, Papakura... Opposite the GULL S/S, Takanini

This Wednesday starting at 7.30pm, the first meeting for 2026 is an informal matter... but... that said, it is going to set up 2026 for us in programs and actions etc. etc. so... let's all get our thinking caps on and plan the year to be the best year for our club so far.

Everyone is invited to participate, and visitors are welcome to join us also.

ZL1VK Kitsets available now...for immediate delivery.

The kits above are all designed by Keith Dix, ZL1BQE for the Papakura Radio Club.

- Anderson Power Pole Distribution, PC Board only... \$5.00
- 2 Radio into 1 Headphone set switching radios, incl. PTT, PC Board only... \$9.00
- Radio Interface for digital modes incl. Winlink, FT4, FT8 etc. Complete kit... \$69
- Tait Radio TM8100 Series VFO unit... 100 Memories, Complete kit... \$125

- Tait Radio VFO Escutcheon... clips over the VFO Unit... \$15

The Diplexer is a kit designed by Rob, ZL1RJS for the Papakura Radio Club.

- Diplexer... UHF/VHF unit and metal Die-cast box, supplied, complete kit... \$35

The following kit is still being finalised and will be available soon...

Voice Keyer... Record 4 messages, push button to play selection through TX radio, complete kit.

Collect from the Papakura Radio Club most Wednesdays 7.30pm to 8.30pm or email zl1dk@nzart.org.nz for postage costs etc...

Operators wanted... ZL100C... NZART Centennial

If you are an NZART Member and would like to use this special event callsign, ZL100C, contact David Karrasch, zl1dk@nzart.org.nz. David will need notification at least 24 hours prior to use, so details can be recorded in the register. You will receive a reply within 24 hours of confirmation, subject to other operator's commitments. CW operators desperately required. You will need to advise the date, times on and off, band and modes required. You will also need to supply regularly, a computer generated, adif file of your log so the details can be added to QRZ.com and later, LoTW, on a regular basis. Any queries contact David zl1dk@nzart.org.nz or phone him... 021 560 180.

100 QSO's in 24 Hours attempt...

By David Karrasch ZL1DK

The NZART 100 QSO Challenge, set up for the 1st January 2026 was to be a challenge that I was looking forward to.

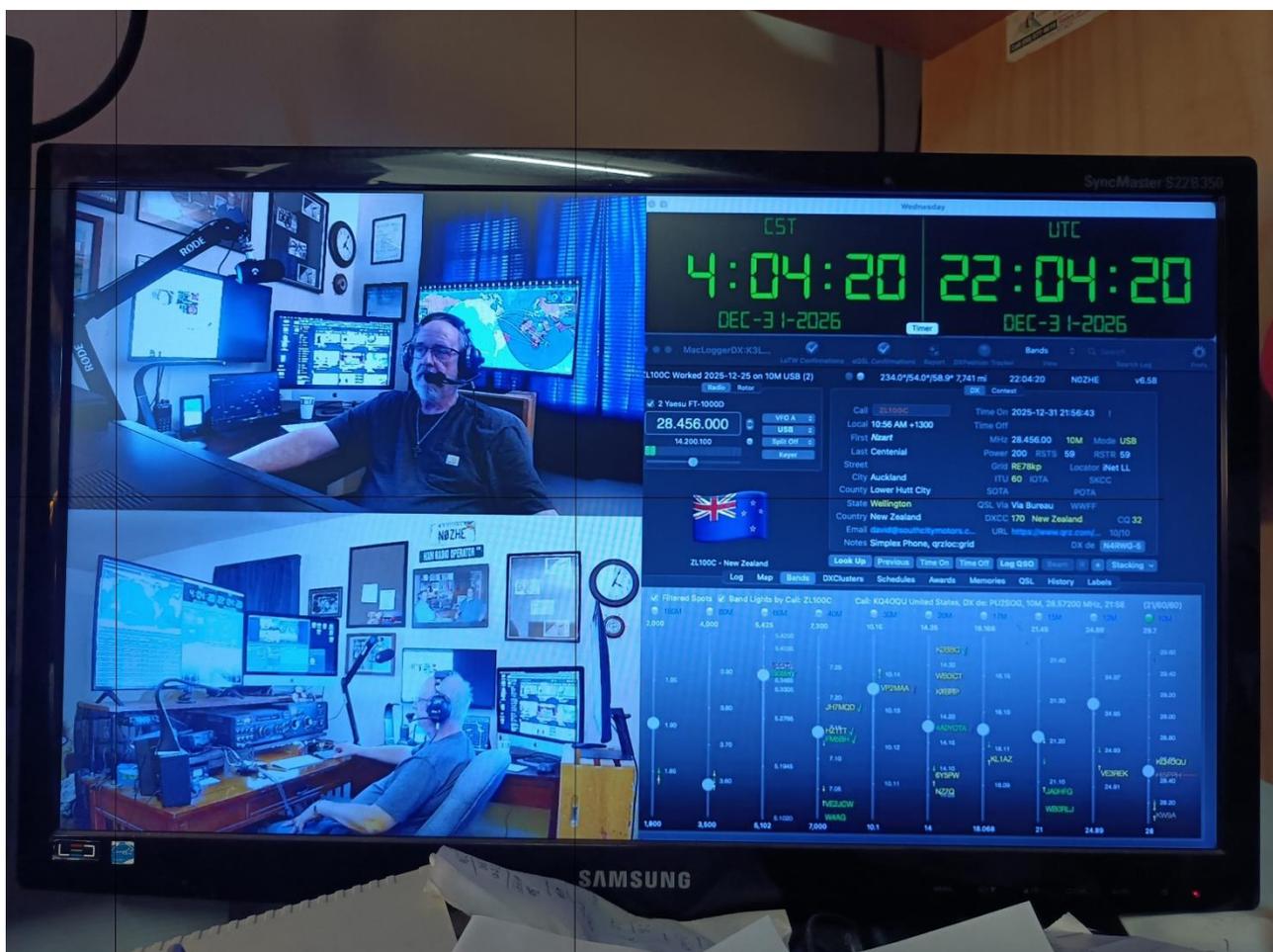
I was going to be at the clubrooms at the start of the 1st January 2026 UTC but on re-reading the rules for the challenge, I found that there was no need to be the first to get a log in for this challenge. I decided to go to the clubrooms at around 8.30am local time. I started off using the 20-meter settings but found that the signals were slowly dying away so looking around the bands, I found that 10-meters over Australia was getting back into the USA via all of Europe and Asia. Skip however had its rights also but I decided to start calling... pushing buttons... and away I went. The calls came in fairly slowly at first but soon picked up. Unfortunately, they died as quick and so there I was, searching the bands again for a signal that would indicate I may get some good results in that direction. Finally, I settled on the tried and tested setting... 45 degrees... Northeast... over the Pacific into the USA and beyond. Well, the beyond was not very far as I only received calls from the New Zealand, USA, Canada, Panama, Japan, Revillagigedo (see below) and of course... off the back of the beam... Australia. But that was all good, I was underway.

Pushing buttons certainly saved my voice from going on me, it's far, far easier to push a button and have the voice keyer send out the CQ than having to say it time and time again. I'm really looking forward for Richard's effort of the voice keyer... one snag to go I think and it'll be all go. Keith's voice keyer... the one I'm using at present has a problem... unknown... that causes the keyer to shut down every now and again and I haven't been able to determine the action just prior to that shutdown.

A quick disconnect of the power cable and reinsertion usually get me going again but, on some occasions, the keyer also loses the memory so I have to set that up again. I can assure you that I'm getting pretty good at quickly pushing the record button... saying the message and pushing the send button so I don't lose too much time.

There were a lot of... again again again... that I called when the signals were just too weak for me to capture but in all... most were happy with the result and so was I. I did use the callsign ZL100C and achieved the 100 Challenge all on 10-Meters in just 2hours, 2 minutes and 20 seconds. A little slower than the week earlier when I achieved 100 contacts in just over 1 and a half hours, but that was earlier and conditions were not the same.

If you are interested in a video clip... take a look at the following clip... <https://www.youtube.com/watch?vnz4H6iYVUa0> from N0ZHE who patiently waited for a chance to call or do a search for ZL100C Videos. (Note from ZL1AOX – I found I had to search for zll100c on the YouTube channel which gave about 4 or 5 results.)



N0ZHE operating his station

Revillagigedo Islands

The Revillagigedo Islands area group of four volcanic islands in the Pacific Ocean, located approximately 386 to 540 kilometres southwest of the Baja California Peninsula, and about 400 kilometres south of Cabo San Lucas. The archipelago consists of Socorro, San Benedicto, Roca Partida, and Clarión, and is part of a submarine mountain range with the islands representing the

peaks of submerged volcanoes. The islands are uninhabited except for small naval bases on Socorro and Clarión, with a total population of 54 people.

Grumpy operators...

By David Karrasch ZL1DK

The other evening, while trying to work an Italian chap on 20M the QSO all fell apart.

Conditions were quite poor and maybe I should have given up earlier that evening but no... I carried on trying to work stations in the USA and Europe.

Calling CQ should be the introduction to a fun time, or that's what I think and should never deteriorate into a one sided shouting match... but that's what happened on this occasion. An Italian station... I've conveniently forgotten part of his callsign... was trying to make the QSO with me as a reply to my CQ etc... I got the XX first and asked for the XX to give his callsign again. I only got the XX again, so I asked again for his callsign. That time I heard an I and an 8 so I went back with I8XX again, again. Back came a somewhat enraged reply... shouting into his microphone... his callsign. Again, as conditions seemed to be only one way, I asked for a repeat of his callsign. Well that really sent him off... his voice was raised to what must have woken half his neighbourhood... and all I heard was a distorted load of rubbish... so... I said that conditions seemed to be one way and were not good enuf to complete the QSO and maybe he should try again tomorrow evening... pushing the keyer button and sending out the... CQ... Zulu Lima One Zero Zero Charlie...

ZL100C. David z1dk

Alpine Fault Network

The Alpine Fault Network (AFN) is a team of New Zealand volunteer amateur radio operators passionate about disaster relief communication using high frequency (HF) radio.

AFN is coordinated by amateur radio operator Peter Mott, callsign ZL3PWM.

We prepare for all types of disaster, including earthquakes, tsunamis, tropical cyclones, storms, floods, wildfires, and nationwide electricity outages.

Because disasters can happen anywhere, amateur radio operators located in all regions of New Zealand are invited to [join](#) AFN.

Our training nets enable you to test your equipment and practice voice reporting using standardised [scripts](#).

Next Training Net

Sunday, 1st February 2026

08:30 NZT | 5.360 MHz USB

09:30 NZT | 7.115 MHz LSB

12:30 NZT | 7.115 MHz LSB

20:30 NZT | 3.605 MHz LSB

Diamond Vertical Antenna CP6

By Rob Stokes ZL1RJS



My diamond CP6 antenna must be about 10 years old now and has been performing very well. The antenna covers the 6, 10, 15, 20, 40 and 80-meter bands. It's a great vertical antenna if you are pushed for tight spaces. Of late I was experiencing some strange behaviour from this antenna, and it seemed it was happening only when it rained. I had a high SWR, which went up and down then came right again. This has been going on for months and it seemed every time we had a storm it affected the performance. We had some very high winds one night and the next morning I went into the shack and my antenna would not load up on any of the bands. Upon further investigation I took out my VNA and did a sweep across the antenna which revealed something was definitely wrong.

I tilted the antenna over and removed the whole antenna off the mast. I suspected the problem was in the first vertical trap from the base, being faulty as this trap is common to all bands. Logic to me says to suspect this trap as it was not loading up anymore on any of the bands. If it had been just one band or a couple of bands, then I would have looked at another trap.

Dismantle of the Antenna

If you have installed these antennas before, you will know that the vertical section is made up of 3 sections.

I decided to dismantle the whole antenna to check it all over. You could just remove the top two sections to get to the first trap, without removing any of the trap radials.

I did not take any photos at this point but now the antenna has been completely dismantled almost as if it was just unboxed for the first time.

I did find that some of the screws were already loose and a couple of them were almost about to fall out where the antenna joins each section, so when you come to reassemble check and re-tighten.

Seeing this I may put some electrical tape over the screws to prevent it happening. I will only use the brand "Nitto" as I recommend this tape to use for everything. This electrical tape is the only tape that will not undo and sticks to itself. As with most other electrical brand tapes they are not as good and will undo over a short time.

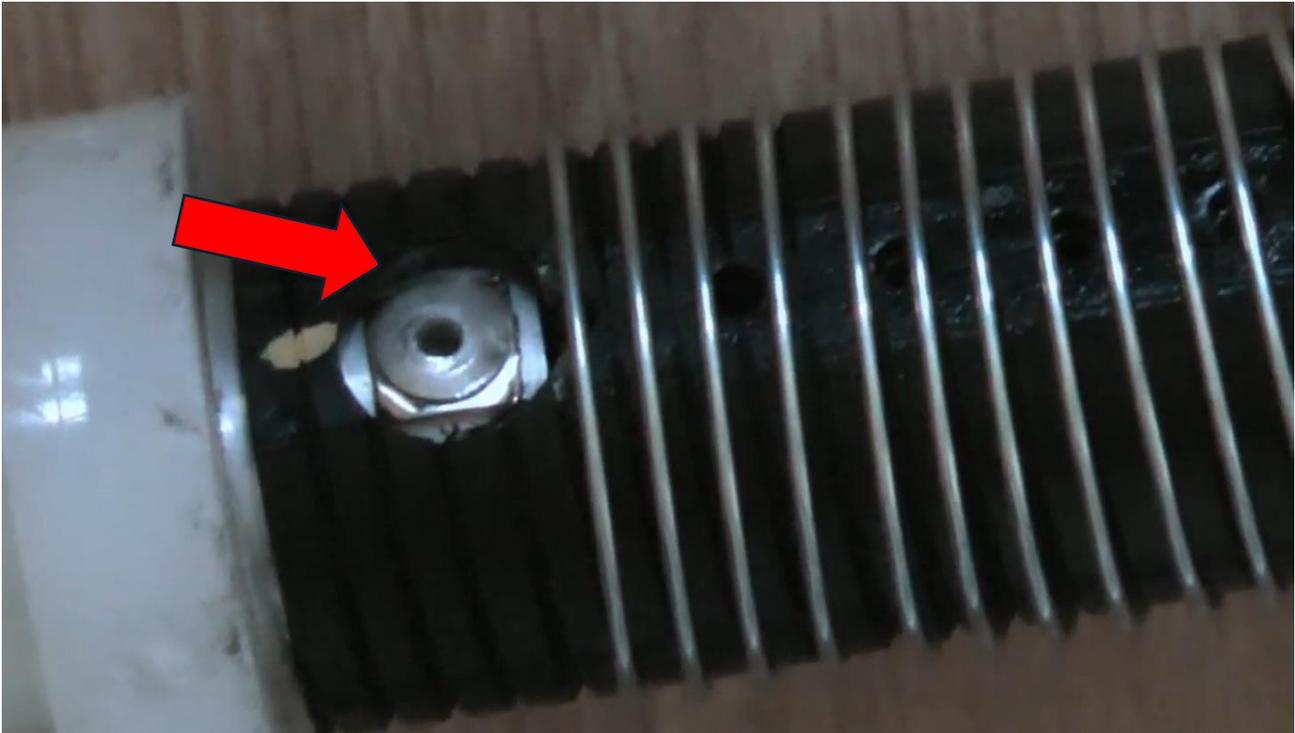
1st Vertical Trap

Upon inspection, all of these traps have been centre punched 16 times for each of the traps. You have no way of opening these traps up unless you drill each of these punched dots. I first used a 2.5mm drill as I tried not to create a burr once you drilled a hole as I was a bit worried by drilling the hole would create a burr and stop the casing to come off. I then used a 3mm drill and drilled through each of the 2.5mm holes. This worked out very well. I was also worried by drilling too big

a hole of the 16 punched dots, I would not get a screw to fit. After drilling, this of course now made the outer casing almost ready to come off, but with a bit of very careful persuasion it came off.

Inspection

It revealed the trap was definitely broken. The coil in the photo below should be joined to the rivet. I did some homework to find out if others have had also had the same problem or similar. Diamond did not think it through when they designed this antenna and the quality control was certainly lacking, in fact, I would say a very poor design.



I watched a YouTube video and thanks to Stan PA8C, but it was all in a Dutch language, but I got the idea on what he had done. After the repair of the coil, I also improved on the mechanical construction and modified the trap by adding 2 more rivets on each end of the trap to strengthen it and make it stronger. The specifications say that this antenna can withstand gusts of 80km, so maybe adding the extra rivets has this increased the wind factor?



It appears that by only having one rivet on each side had caused the issue that once the wind blows it was rocking back and forth until finally, it snapped the connection. The photo shows extra rivets added. After reinforcing with these extra rivets, it has indeed made it very strong and shows no movement once the trap has its cover

back on. I also reinforced by soldering up each side of the screw that connects to the centre of the coils, which acts as a capacitor. I saw that in the video that his had broken off completely and although mine had not broken yet, I soldered it up on each side to reinforce it and to be safe. I drilled out the broken lug and fitted a new lug and pop riveted it in place. I used a 4mm drill for the lug. After the connections were soldered, it is now better than before. The photo below shows it all repaired and ready to be put back together.



Reassembly of the Trap

As I have now drilled out those pressed centre punched dimples to gain access to the trap to repair, I found some self-tapping screws just the right size making sure not to go all the way through and short out the trap. The outer casing of the trap can only go on one way as the screw on the trap makes sure it aligns up exactly the same. Once I fitted the case back over the trap, I fitted the screw back into the trap and then used a 2.5mm drill just to pre drill the plastic former on each hole to allow for the new 16 self-tapping screws to fit.

I would recommend that you use stainless steel screws as not to rust.



Reassembly of the Antenna

Before assembling the antenna, I sprayed all the joints with an anti-corrosion spray and then assembled the antenna as per the instructions.

I did actually end up using cable-ties, over the screw heads on each joined section and not electrical

tape. I will see in time if it has worked. The cable ties will go brittle over time and may break off, but as this is not taking any stress, it should not break and still be good to stop the screw head from coming out. I guess time will tell with that.

Coax Connection

This was something I was not aware of on this antenna. The coax connector has a little PCB board, with a few capacitors and coils. On one side, it has one 240pf capacitor and a coil with 5 turns. The other side has two wound coils round a ferrite core. The coils have 16 turns and 21 turns. It has a large capacitor of 60pf and a smaller capacitor of 33pf.



Conclusion

As the first vertical trap was found to be the problem, I did not open the other traps but measured for continuity on all the traps. It is easy to lower or tilt over my antenna to service, if necessary, but all the rest of the traps will be built in the same way so if you want to reinforce the rest, then make sure you have enough screws.

My motto is "If It Ain't Broke, Then Don't Fix It."

I added this coax assembly PCB in as I saw this online and did not know it had this inside. Again, I did not open that, but to show it exists.

73 de Rob ZL1RJS

NZART Contest Calendar

January, 2026

- 1st [NZART Portable Activity Day](#)
- Lots happening on the 1ST of January... see Infoline on the NZART Website... click on News and then Infoline for more details...
- 26th [WIA Australia Day Contest](#)

February, 2026

- 14th and 15th [DX \(VHF\) Weekend Contest](#)
- Sat 28th Feb and Sun 1st March [NZART Jock White Memorial Field Day](#)

March, 2026

- 7th/8th [Commonwealth Contest](#)

April, 2026

- Each Tuesday in April – [Autumn Sprints](#)
- 11th and 12th [Low Band \(VHF\) Contest](#)

May, 2026

- 2nd [WIA Harry Angel Memorial 80m Sprint](#)
- 16th and 17th [NZART Sangster Shield](#)

June, 2026

- 6th and 7th [WIA VK Shires Contest](#)
- 14th [Straight Key Night – Winter](#)

Starlink

I have had Starlink installed for 3 years now and have good results with the installation.

I've included a link to their report which is quite interesting reading, but be warned, the PDF file is over 91 MB size.

Ian ZL1AOX

Starlink exists for our customers. We are constantly inspired by how you use Starlink to work, learn, explore, and stay connected, often in places where reliable internet was never possible before.

In 2025, the Starlink network grew to more than **9.25 million active customers across 155+ countries, markets, and territories**. That scale continues to push us to improve reliability, expand coverage, and further enhance our hardware, software, services, and support.

Today, we're sharing our 2025 Progress Report, which highlights how Starlink has evolved over the past year. The future has never been more exciting.

Thank you for trusting us with something as essential as your connectivity and for helping shape what we build next.

[View Report](#)

Musick Point Newsletter link

A Happy new year to all. Please find the latest MUSEletter at-

<https://museletters.zlham.net.nz/>

If you do not want to receive the newsletter please advise via this email.

Best 73, ZL3CK

New Zealand & Australian Amateur Radio Magazine

<https://thehamshack.us3.list-manage.com/track/click?u=fcf22f553297b6cd6262f884e&id=6df7ca687b&e=effe0514bb>

ZL1RJS Website

Rob ZL1RJS/ZL3RS has created a website at <https://zl1rjs.co.nz/> which has information on projects run and supported by the Papakura Radio Club Inc. He also has links to manuals for various radios and other interesting items. Thanks, Rob.

Papakura Radio Club Inc.

Branch 65 NZART Club Directory
Wellington Park, 1 Great South Road.
Westpac 03-0399-0019896-00

Club website: <http://www.qsl.net/zl1vk> Club email: zl1vk.club@gmail.com

Acting President	ZL1BNQ	Richard Gamble	021 729 270
Secretary	ZL1AOX	Ian Ashley	021 198 1810
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Committee	ZL1DK	David Karrasch	021 560 180
	ZL1IRC	Ian Clifford	021 082 48400
	ZL1RJS	Rob Stokes	021 307 005
	ZL1RIC	Ricky Hodge	027 533 8155
	ZL1KIM	Kimi Nooroa	021 024 66004
	ZL3TI	Tristan Ilich	027 889 3309

AREC Section Leader	ZL1BNQ	Richard Gamble	021 729 270
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Newsletter Editor	ZL1AOX	021 198 1810	
Hall Custodian	ZL1AOX	Ian Ashley	021 198 1810
Newsletter. Contact:	Ian Ashley	iana@kcbbs.gen.nz	

Our newsletter is published monthly and normally distributed just before the club meeting.
Please forward articles etc to the editor Wednesday 1 week before the general meeting.
Please notify any change of address including E-Mail Address to the secretary.

Meetings

General Meetings are held at the Clubrooms on the 1st Wednesday of each month, starting at 7.30 pm. Look at your calendar and mark these nights. The speaker follows the General Meeting.

Activity Nights are held on the 2nd Wednesday starting at 7.30 pm.

Committee Meetings are held on the 3rd Wednesday of each month at 7.30 pm unless advised.

Project Evenings are on the 4th Wednesday of each month.

AREC Meetings are on the 5th Wednesday night, also starting at 7.30 pm

AGM: Held in November

Subscription: Full membership and newsletter \$30.00 Family Membership and newsletter \$45.00

Bank Account number: 03-0399-0019896-00

Working Bees: As required.

Branch 65 21 Award: For contacts with ZL1VK (5 Points) and 8 Papakura Radio Club Members (2 Points each). Total 21 Points. Cost \$5-00. Certified list and \$5-00 to Secretary, Papakura Radio Club. Address above.

ZL1VK Club Nets

146.625 MHz Sunday at 8.00 am. Controller ZL1RJS, Rob Stokes and any others available. If the repeater is not available, listen 146.475MHz FM simplex.

3.755 MHz LSB, Sunday at 9.00 am. Controller Richard.ZL1BNQ

(Linked to 146.675 & 438.775 FM Tone 141.3Hz) (link is off until repairs made to HF transceiver)