# The Official Newsletter of the Auckland VHF Group Inc. Spectrum



LF HF VHF UHF Antenna Design for Amateur Radio Have a look at this Facebook page for more information.

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**SPECTRUM http://aucklandvhf.org** 



# Auckland VHF Group Inc. Branch 66 NZART

**PO Box 10138, Dominion Rd, Auckland 1446** Clubrooms: 30 Hazel Ave, Mt Roskill

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#### **Club News and Net:**

The combined Auckland VHF Group and Auckland Regional Branch News and Net are held on 146.625 MHz and 439.875 MHz at 8.15 pm each Sunday or after the ZL6A National Broadcast on the last Sunday of the month.

Club meetings are held at the Clubrooms at Hazel Avenue, on the second Monday of each month at 7.30 pm. For other details, listen to the News and Net each Sunday evening.

**SPECTRUM** is the official journal of the Auckland VHF Group Inc. Opinions expressed are those of the authors and do not necessarily reflect club points of view. The closing date for SPECTRUM articles is by the 1st of each month. Articles to be submitted to the editor Vaughan ZL1VH should be sent to: **spectrum@aucklandvhf.org** 

# Auckland VHF Group (Inc) Branch 66 General Meeting Notice

#### Monday 9<sup>th</sup> December 2024 7.00pm

At the Hazel Avenue Clubrooms (Located on the left at the end of Hazel Avenue)

Topic: End of Year Xmas Social

# Come along and enjoy an evening chatting to your other club members. A contribution to the supper would be welcome.

**BYO** refreshments

#### **Coming Events:**

 7 — 8 December VHF Field Day Contest. All bands 6 m and up. Operating 1 hour periods are Saturday 5pm (1700) to 11pm (2300) and Sunday 7am (0700) to 1pm (1300). For the full set of rules, etc., please go to:

https://www.nzart.org.nz/activities/contests/vhf-and-above-contests

#### **TE PUKE AMATEUR RADIO CLUB MARKET DAY 2025**

Saturday March 8<sup>th</sup>, 2025 Paengaroa Community Hall, 4 Old Coach Road, Paengaroa. Venue opens for Vendors at 6.30am Sale begins at 9.30am Door Charge \$2.00 per person. Breakfast available from 7.30am to 11.00am at reasonable prices. For further information contact: ZL1LWR Syd Rowe (07) 533 1029 or 027 248 8664 Email: sydrowe@xtra.co.nz

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#### Auckland VHF Group Presidents Report December 2024

Our committee meetings are running well, dealing with the usual invoices and repeater things.

We need to attract a Secretary to that hot seat, and we are still looking for anyone who would like to coach new licence holders through some basic electronics or new technology things. Either one off on a specific subject, or a series of instructions on general RF stuff, or construction of simple RF components like oscillators or aerials. If we don't attract new people we will all just fade away into the F layer!

I went on the AREC leadership course a couple of weeks ago. It wasn't so much about how to do AREC specifically, but as how to lead a team of volunteers. It was fascinating. Recruiting, induction, motivation, training, reviewing, promoting, dealing with difficult people, and, rarely, letting people go. There's quite a bit to it, so it's lucky I don't have a real job!

Our AREC group will soon be checking out progress with the On Line LMS training modules. See if we can all commit to doing, say, two hours a week on them. Then when we have mostly knocked them all off, we'll have a celebratory outing. I was struggling a bit with some of them, so as I read them I wrote out what questions I *expected* to be asked, and at the end I got them pretty much right!

Klondyke fundraising is still our big pig in a China Shop. The leads I followed have gone quiet, so I will have to get back on to them.

On Sunday I was airborne in the Coastguard SAR Cessna. We arranged for a life ring to be dropped near Browns Island and set off to do a flower petal (not its real name) search for it. Turn 60 degrees after each run, and head back over the center point. Half way through the first run we were tasked Best Speed to Raglan where a vessel had flipped on the bar. Three POB in the water. They were all retrieved shortly before we arrived, which is a relief. We had to go there via Ardmore to avoid Auckland Airport. Auckland is not too keen on flicking us overhead between the big planes. We only ask if it's really urgent. Anyway, we went and practiced the search off Port Waikato.

My thanks to the VHF Group Committee for their on-going support and I would like to take this opportunity to wish you all the very best for the coming festive season and hope to catch up with you in the new year.

Matthew King ZL1YOT President



#### Results of the 2024 Microwave Contest - 5/6 October

VHF-UHF-SHF-EHF Contests, as administered by the Auckland VHF Group Inc; on behalf of all VHF groups, including all New Zealand radio amateurs and supported by NZART.

Overall Winner	Station	Points
overall winner	ZL4ES	1368
	ZL1GSG	784
	ZLISWW	658
	ZL2YW	656
	222100	050
Band winner	Station	Points
32 cm (925MHz)	ZL1SWW	55
52 611 (52511112)	ZL1GSG	55
Band winner	Station	Points
23 cm (1296MHz)	ZL4ES	1368
	ZL2YW	656
	ZL1GSG	126
	ZL1SWW	24
Band winner	Station	Points
12 cm (2400MHz)	ZL1GSG	85
	ZL1SWW	60
Band winner	Station	Points
9 cm (3400MHz)	ZLISWW	173
9 cm (5400MHz)	ZLISWW	173
	201030	1/5
Band winner	Station	Points
6 cm (5760MHz)	ZL1GSG	115
	ZL1SWW	115
Band winner	Station	Points
3 cm (10368MHz)	ZL1SWW	115
	ZL1GSG	115
Band winner	Station	Points
1.2 cm (24048MHz)	ZL1GSG	115
	ZL1SWW	115

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Greatest DX	Stations	Distance
32cm	ZL1SWW – ZL1GSG	32 km
23cm	ZL2YW – ZL4ES	531 km
12cm	ZL1GSG – ZL1SWW	32 km
9cm	ZL1SWW – ZL1GSG	32 km
6cm	ZL1GSG – ZL1SWW	32 km
3cm	ZL1SWW – ZL1GSG	32 km
1.2cm	ZL1SWW – ZL1GSG	32 km

Active Stations (14 in total) ZL1AKW, ZL1AVZ, ZL1BK, ZL1GSG, ZL1SKL, ZL1SWW, ZL1TGS, ZL2YW ZL3AIC, ZL3JJ, ZL3LM, ZL3RC, ZL3TKI, ZL4ES

#### **Operator Comments**

Tropo conditions were decidedly "average", and no local (Wellington) activity was heard on 1296 MHz. Only three stations were worked: but these were all 300 km or more distant (near or south of ChCh). However, a new pre-amp allowed better copy than with the "barefoot" IC9700 used in last year's contest. Nevertheless, several contacts could not quite be completed: more power than the current 10 W would probably have helped.

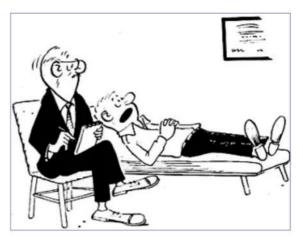
Using ic9700 with masthead preamp and 25w amplifier on 23cms into a 36 element Yagi. Band conditions were nothing special as is often the case in contests. Highlight was working Mike ZL2YW in Wellington using Aircraft Scatter.

Nice Sunday morning contest a few showers but nothing too extreme. Managed to activate seven microwave bands including 9cm. Checked the 9 cm band with the portable spectrum analyser. Couldn't detect any 5G services at 3400 MHz +/- 50MHz.

Weather was on and off rain with having to cover transverters with a cardboard box - wires everywhere and operating out of a doorway because of the rain. Was good to test things and show the Musick Point members about microwaving.

Thanks to all that participated

Greg, ZL1GSG Simon, ZL1SWW



\$2760 worth of equipment and I can't get a signal past the Bombay Hills!

#### 5.9 GHz Band News

The FCC has intensified its focus on the 5.9 GHz band where new rules are being finalized for the use of cellular delivery of communications to and from cars and trucks on the road.

Intelligent Transportation Systems, or ITS, scored a big gain in late November as the FCC voted on a proposal enabling the use of "cellular vehicle-to-everything" or

C-V2X, on the 5.9 GHz band.

To quote the FCC Press Statement:

"...accelerate the automotive industry and state and federal government plans for transitioning from dated technology to the more advanced C-V2X automobile safety technology."

This would establish new rules for the use of ITS within 30 MHz of that spectrum. The system is already in use by many automakers, sending and receiving messages over existing 5G cellular networks with alerts about traffic issues, weather conditions, road hazards or speeding cars. The FCC measure also sets out the technical parameters for the use of C-V2X, including power and emission limits. The system permits vehicles to communicate with roadside infrastructure and the cellphones of pedestrians, cyclists and road workers, enabling safety communications even when there are no line-of-sight warnings.



Answer at our December meeting if you have not worked it out beforehand!

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### Amateur Radio Emergency Communication. Volunteers in radio communications. Using our resources to help the community.

### INFORMATION

The Auckland VHF Group has an AREC Group that works closely with Auckland Council Emergency Management. They provide advice, resources and manpower to assist in times of need.

The AREC section is headed by Group Leader Matthew King ZL1YOT.

From time to time the VHF Group has training sessions and exercises. Members also assist with sports events, parades and other community activities. For further information about AREC please see the NZART web site: http://www.nzart.org.nz/arec/

# **JOIN BRANCH 66 AREC**

All members of the Auckland VHF Group are encouraged to join the AREC section. Your contribution, large or small is appreciated by all involved.

For further information about joining Branch 66 AREC contact the Group Leader:Matthew King ZL1YOT022-6493310mattking@gmail.com

The Deputy Leader position is currently vacant

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# **AUCKLAND VHF GROUP (INC)**



# SUPPORT THE EFFORTS OF THE VHF GROUP THROUGH YOUR SUBSCRIPTION

#### SUBSCRIPTIONS FOR 2024—2025 YEAR

Subscriptions are now being accepted for the 2024-2025 year, being 1 July 2024 to 30 June 2025. This coincides with the Group's financial year which ends on 30 June 2025.

THE SUBS GO TOWARDS;

- Maintenance and on-going improvements to beacons, repeaters and linking systems for the national system, including the Klondyke repeater site.
- Providing on-time and free access to spectrum magazine as soon as it is available.
- Providing facilities for good speakers and lecturers at our general meetings.
- Discounted access to our trading table goodies.
- Access to test equipment and technical help when needed.

FULL MEMBERSHIP **\$70.00** 

ASSOCIATE MEMBERSHIP **\$55.00** 

FAMILY MEMBERSHIP ADDITIONAL \$25:00

#### SEE ATTACHED MEMBERSHIP RENEWAL FORM (next page)

### REMEMBER TO KEEP US INFORMED OF YOUR EMAIL ADDRESS! OTHERWISE WE CANNOT SEND YOU SPECTRUM!



#### Thought for the month:

" If it is explained so clearly nobody could misunderstand, someone will. "

#### **TRADING TABLE**

Currently our Trading Table is only open on meeting nights.

We have heaps of parts from dismantled commercial analog TV gear – transmitters, filters, circulators, patch panels, power supplies. Too much to list individually, so come along to the clubrooms and have a look.

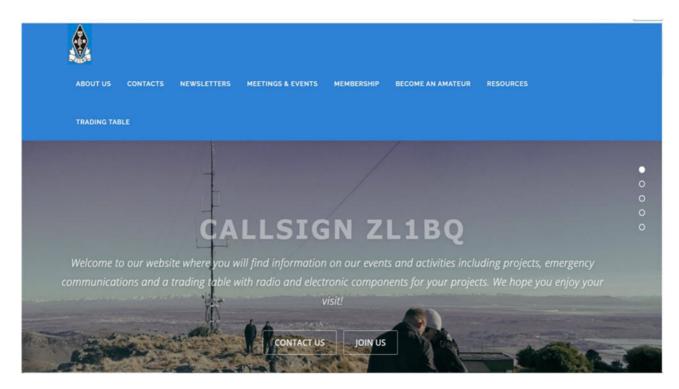
**New** – RG58C/U 50 Ohm Coaxial Cable. Thanks to a bulk purchase we are able to offer this good quality coax at a competitive price. The cable has tinned centre conductor and screen braid making it resistant to long term corrosion.

The price is \$2.00 per metre and we will offer a discount for purchases of 20m or more.

The Trading Table is now on line. Navigate your way to our new look web site at <a href="https://aucklandvhf.org/">https://aucklandvhf.org/</a> and click on TRADING TABLE (the most right hand tab.

Wait a few seconds and the on-line version of the Trading Table will pop up. From here you can browse the various sections, dig deeper to look at what's available and even place your order online.

If you prefer to just look at the Trading Table List, just hover your mouse pointer over the TRADING TABLE and a pull down list will appear. From this you can access the full trading Table list and download it in .PDF form.



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