

October 2025

INTERFACE

MONTHLY BULLETIN

MARLBOROUGH AMATEUR RADIO CLUB INC. P.O. BOX 432 BLENHEIM NZ

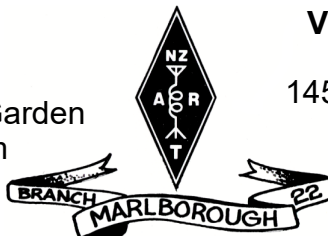
CLUB CALENDAR

General Meeting;..... 9 Oct, 7.30pm, EOC
Social Group;..... 16 Oct, Dodson St Beer Garden
Committee Meeting; **22 Oct**, 7.30pm, via Zoom

VHF Mondays 1930 hrs
146.950MHz,
145.600MHz, 147.225MHz
Net Controller;
Rob Carter, ZL2IW

BRANCH 22 NOTICES

1. Pick-over night — bring cash! 9 Oct
2. Fox Hunt (EOC room unavailable) 13 Nov
3. AREC Presentation & Xmas catch-up..... 11 Dec
4. Star Party ?? ???



HF Net Tuesdays
2030 hrs 3876kHz

Website
www.zl2ks.org.nz

Editor: Caryl Simpson caryl.grant@gmail.com

MARC Contact: marcbranch22@gmail.com



President John, ZL3TIL congratulates Lewis, ZL2RAI on winning the Constructors Award for 2025.

The trophy has been (badly) Photoshopped in as it had not been returned in time for the presentation.

EASTFEST:

Ashburton 18th October 2025.
Now a 2 day event at the Sinclair Centre,
74 Park St. Ashburton.
Car boot sale in the morning
Programmes in the afternoon.

Saturday will be like original plan, with Day 2 being held out at the airport covering more activities, competitions & BBQ lunch.

Cost; \$20 for weekend general tickets & \$30 for non-commercial stall holders.

New coffee vendor being sorted as original pulled out.

RWB not coming due to distance.

Ham Shack & Techoman confirmed commercial stalls.

Ticketing is still to be sorted.

Email will be sent out to each branch via NZART.

Fox hunt will possibly be running for weekend.

More details P4.

Whangarei ARC activities promotion
– September 2025 & February 2026

24hr 100 contacts Challenge: 1st Jan 2026



Forgot to mention
Conways' wedding
anniversary 19th Sept.



PAUL RENNIE



CONSTRUCTORS' AWARD 2025

The annual constructors' evening was held at the club meeting, Thursday 11 September.

While there were fewer entrants this year, with multiple projects from some, there was a good range of designs for the judges to evaluate and the audience to ponder.

First up was George (ZL2GTI) with a clever 3D printed custom DIN mount to allow his Anytone radio to be fitted neatly into the dash console in his 4WD. His design and the finish were to a very high standard.



Anthony (ZL1VBX) was next with an entry that the judges described as the epitome of Ham perseverance and recycling. With a project that started out getting an old radio to work, then morphed several times, and with the addition of several add-ons recovered from the shack, into a signal generator with impressive specifications and features. (Note to editor – this story is worthy of a separate Interface article.)

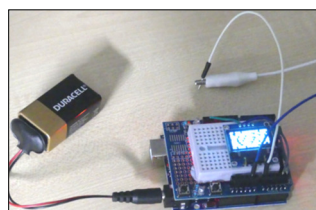
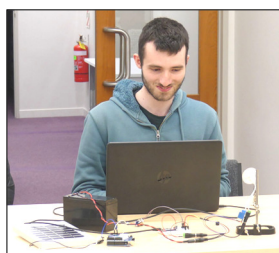
John (ZL3TIL) showed us a 3D printed mount that was cunningly designed to allow a range of standard umbrella bases to be used as a platform for a portable vertical 40M whip. This led to a discussion on the configuration and effectiveness of radials in such a setup — and also the possibility of turning the thing into a light saber, which was met with enthusiasm.

For his second entry, John then demonstrated his hand-held Yagi made as a family project from Corflute and copper tape. Watch those real-estate and politician's signs get recycled if this catches on!

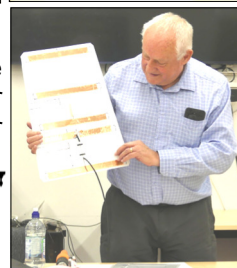
There was some animated discussion about the design and construction techniques available.



Last up was one of our new members Lewis Hill (ZL2RAI) who completed our recent Hamcram and drove in from Rai Valley with his mother Judy to take part in the awards. Lewis showed us 3 projects he had recently completed. A text to CW converter that could drive a light source in a series of flashes at up to 80wpm. He then had a remote detector and decoder that could display the text sent over the line-of-sight light-link. A few members with morse had more success with the setup when he slowed it down to 20wpm and turned on the optional audio in the sending unit. Lewis's final project was a means of controlling a remote display from his phone that could be used for advertising or traffic management.



After careful evaluation of the entries (no bribes being forthcoming) the judges declared Lewis the winner of the 2025 Constructors' Award, for his CW converter and remote detector and decoder. The other participants were highly commended for the innovation and practicality of their entries.



For those of you with an artistic bent, here's an idea. Don't know what she uses for the wings.

Julie Alice Chappell, an artist based in Portsmouth, UK, creates stunning cyborg insects from discarded circuit boards. Her work transforms technological waste into intricate sculptures, showcasing a unique blend of nature's beauty and human innovation.

By meticulously reassembling components from obsolete electronics, Chappell gives new life to forgotten materials, turning them into art that symbolises rebirth and transformation.

My favourite is actually the spider - Ed



WHY POTA? - GARY ZL1GA, ZL1WL & CAROL LODGE

For us POTA is “value added” to our caravanning and outdoor experience. POTA gets us out of our comfort zones, sometimes quite literally, and into places that we might otherwise not go to. I have an involvement AREC but POTA is for fun. I enjoy the dual challenges that POTA presents in terms of location and the portability and reliability of my gear.

Equipment. If I am in my truck I use an Icom 7100. For going QRP I have an Icom 705 which I use with Heil HTH -1 headphones, they are brilliant in windy conditions. For QRP I use the Sotabeam telescopic pole and antenna. I have a set of hand drawn aluminium poles in 1 metre lengths which I engineered myself. These fit together to make a pole that is either 6,7, or 8 metres in height. In extremely windy conditions I will use this with an Alpha Delta wire. For impromptu activations I have a Sotabeam end fed wire. There is also an ancient Kenwood whip on the back of my truck which works surprisingly well. We currently use the Polo logging programme on a tablet, backup in wet weather is a water proof notebook and pencil.

During the winter we spent a month on the West Coast of New Zealand basing ourselves in Westport. The West Coast in winter must be one of the country's best kept secrets. Frosty mornings followed by sunny days and clear skies. Over 4 weeks we did 53 activations. A bit of a marathon...

Favourite activations. Conservation Area Oparara River Lagoon **ZLP/WC-067**, this was memorable not so much for it's swamp appeal but that while we were transmitting an Australian Bittern, one of NZ's rarest birds was “booming” right beside us.

Karamea Bluff Ecological Area **ZLP/WC-0054**. Ignoring the wind chill factor it would be an understatement to say it was windy, but in the battle of the elements the SOTA beam came out on top.

Conservation Area Birchfield East **ZLP/WC-0502** Not so much a “Where's Wally scenario as where's Gary?” This swamp was a flax forest. On being shown the SOTA map the landowner had told us that if we could find a really big fence post and an old chook house we'd be in the right spot. We found them both. Eventually. All part of the fun.

Denniston Plateau and Millerton Township, we did activations up there over several days including **ZLP/WC-0460** Conservation Area Denniston, being up high amongst the old coal mining relics was like being in another world. Stunning views.

Mirror Tarn **ZLL/0907** and others including Honeycombe Caves Hills **ZLP/WC-0242** and Mossy Burn **ZLP/WC-0517** towards Karamea.

On Matariki – Maori New Year morning we activated Cape Foulwind Recreational Reserve **ZLP/WC -0437** close to Cape Foulwind Lighthouse **ZLB/-011**. Later we activated Cape Foulwind Beach Conservation Area **ZLP/WC-0611** from the Cape Foulwind Walkway.

This turned out to be great winter trip. Not too many people around. Very few sandflies. Great scenery and we got to taste the famous West Coast Pies Wild Game pies. Special thanks to all our chasers.

We'll finish the way we started with a question. Why not POTA? Whether as a chaser or an activator come on board and have some fun. Talk to us about getting involved.

Gary Lodge 73 ZL1GA, ZL1WL



Cape Foulwind Walkway

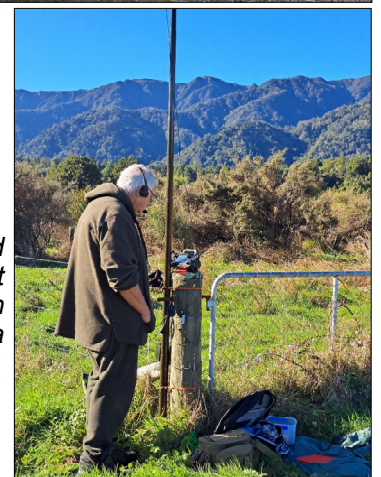
Karamea Bluffs



Oparara River Lagoon



Birchfield East Conservation Area



**MARLBOROUGH
WINE & FOOD
FESTIVAL 2026
14th February**

Volunteers will be called for, so give it some thought.

Sunday 22nd September saw a group of radio enthusiasts get together at Spencer Park in Christchurch. The morning was organised by Greg ZL1GUD (Hamshack) and a notification put on The Potaholic Crew's Facebook page.

We were in Christchurch so went along as it seemed like too good an opportunity to miss - getting to meet the people we make contacts with all the time. Faces to call signs. It was an excellent morning, very windy but antennas were put up and everybody got to check out each other's set ups.

The green radio guys turned up too, their radios generated a lot of interest amongst passersby who had never seen or heard the old radios working. Rick ZL1RIK spent time taking a couple of new hams through their first activations, someone else demo'd their "budget" SDR set up for the first time. POTA stories were shared, sausages got sizzled and all in all it was a very good morning.

Gary ZL1GA and Carol Lodge



EAST FEST PROGRAMME

Weekend Pass General Admission \$20
Weekend Pass Non Commercial Stall Holder \$30

Sat 18th Oct Sinclair Centre, Park St, Ashburton

0800 - 0900	Stall holders' setup
0900 - 1200	Radio & Electronics Market
1200 - 1300	Lunch break (AARC setup for presentations)
1300 - 1330	Welcome & all-star presentation
1330 - 1400	Antenna project for gardens with limited space
1400 - 1430	All things VHF & microwave
1430 - 1500	Getting started in POTA/SOTA
1500 - 1530	Planning a POTA activation
1530 - 1600	Antenna testing

Sun 19th Oct Club rooms

(Ashburton Aviation Museum Portacom)

0900 - 1000	Newcomers' intro to ontheair.nz
1000 - 1030	Power QRP/QRO & power sources
1030 - 1100	Coax & connectors
1100 - 1130	Logging paper vs electronic
1130 - 1230	Competition/Fox hunting
1230 - 1330	BBQ lunch/Social



You're not losing
your memory...

You're just really good
at letting go of the past!

ARE WE READY FOR THE WORST SPACE WEATHER?

When you look at the amount of money spent on weather forecasting (despite the fact that almost every forecast is wrong) it would surprise you to realise that although space weather has never been more necessary in today's high technology world, it still gets only a pittance of funding.

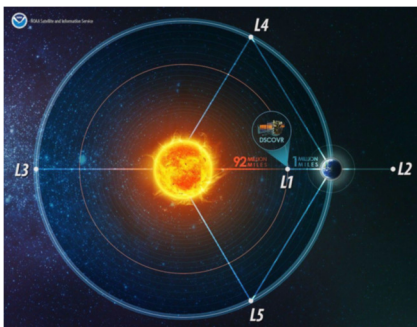
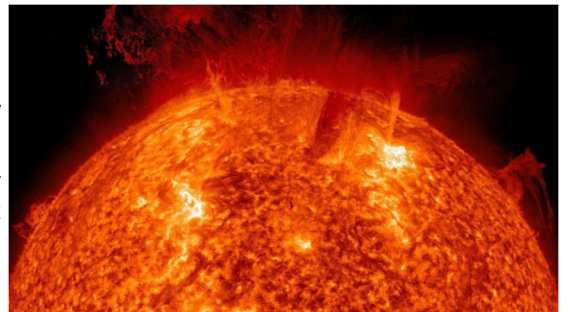
Imagine being told a storm is heading your way, but you won't know how bad the winds are or whether they'll knock out power until just minutes before it hits. That's the challenge scientists face when it comes to predicting solar storms.

We've come a long way in understanding space weather. We can spot solar storm eruptions, track their speed, and estimate when they'll arrive at Earth, sometimes with up to a day's warning. However, one critical piece of information remains frustratingly out of reach until the last moment: the orientation of the storm's magnetic field, known as the Bz component.

When a coronal mass ejection (CME) erupts from the sun, it carries with it plasma and magnetic field from our star. The orientation of the magnetic field will either be a northward or southward Bz, or a combination of the two, and that magnetic orientation determines how strongly the incoming solar storm will interact with Earth's magnetic field. A southward Bz connects more easily with Earth's own field, allowing energy to pour in and supercharge auroras — or in extreme cases, disrupt satellites, radio signals, power grids, and GPS. A northward Bz, on the other hand, may pass by with minimal impact.

Our current measurements only occur when it reaches the L1 (Lagrange Point) giving us no more than an hour or two's warning. If we are to have more advanced warning, we would need to know the Bz as soon as it leaves the sun.

Most Space weather scientists put our ability to predict solar weather, based on current expenditure and focus, as being about 50 years away. That's how long it will take to get additional satellites at more Lagrange points (Specifically L4 and L5 to give more information to feed prediction models).



But will 50 years be too late?

So why don't we just build this system now? The short answer is cost and complexity. Space weather forecasting doesn't yet command the same resources as Earth weather forecasting, even though the stakes are growing. As our world becomes more dependent on satellites, navigation, and global power infrastructure, we are increasingly vulnerable to space weather extremes.

The improvements needed could take decades to fully implement. That's assuming consistent investment and a clear prioritisation of space weather infrastructure — neither of which is guaranteed.

But 50 years might be too late. Extreme solar storms — like the famous Carrington Event of 1859 — are rare, but they do happen. A similar event today could cause trillions in damage globally by disabling satellites, knocking out power for weeks or months, and severely disrupting communications and aviation. A more recent example, a near miss in July 2012, where the sun fired a colossal CME into space that missed Earth by just a week.

In 2013, Dan Baker, director of the University of Colorado Boulder's Laboratory for Atmospheric and Space Physics (LASP), wrote a paper (<https://agupubs.onlinelibrary.wiley.com/doi/10.1002/swe.20097>) about the 2012 eruption, stating that if it had happened just a week earlier, Earth would have been in the line of fire and "would still be picking up the pieces technologically," a year after the event.

Current and Future Missions

Our increasing dependence on technology is making us more vulnerable than ever. It's not that the sun is doing anything different, it's the fact that we have become more and more dependent on technology. Especially space-based technology. So, how are we currently keeping a watchful eye on the sun, and what future missions can we look forward to?

Some of our most dependable tools for tracking the sun are already hard at work. One of these is the Global Oscillation Network Group, or GONG. This worldwide network of six identical telescopes provides nearly round-the-clock coverage of the sun. Run by the U.S. National Solar Observatory, GONG has been monitoring solar activity since the 1990s and remains a crucial part of our space weather forecasting toolkit.

GONG delivers a steady stream of images showing the entire face of the sun, updated every minute. These images include information about solar motion and magnetic fields — key ingredients in predicting when and where solar eruptions might occur. The network even helps scientists monitor the far side of the sun, using solar "vibrations" to detect active regions we can't see directly. All of this helps forecasters spot potential solar storms before they erupt and fine-tune models that estimate how those storms might affect Earth.

Another vital piece of our current space weather warning system is the Deep Space Climate Observatory (DSCOVR) located at Lagrange 1 (L1). Akin to a sensor buoy at sea warning of an oncoming tsunami, DSCOVR provides real-time data on the solar wind, which helps forecasters issue alerts about incoming geomagnetic storms. Depending on the speed of the solar wind, DSCOVR can give anywhere from 15 to 60 minutes' warning.

before a solar storm hits Earth. That short window is critical for operators of satellites, power grids, and communication systems.

Together with other satellites like NASA's ACE and ESA's SOHO, these missions form a patchwork of solar monitoring tools, but gaps in coverage still remain. That's where future missions like Vigil aim to make a big difference.

Looking ahead, one of the most promising additions to our solar storm warning system is the European Space Agency's Vigil mission, slated to launch in 2031. Vigil will sit at the Lagrange Point 5 (L5) — a location that gives it a unique sideways view of the sun-Earth line. From there, it will monitor solar eruptions from the side, helping scientists detect the shape, speed and crucially, the magnetic orientation (Bz) of incoming CMEs before they head our way.

Observations from L5 will give scientists a heads-up on what is heading to Earth about a week in advance, a huge increase on the current hours.

But in reality, it's unlikely that we will take Space weather seriously until there is a major impact on our space hardware (or our earth based systems), and history tells us it's not a matter of if it happens, but rather a matter of when it happens.

Then perhaps Private companies will be interested in setting up their own monitors, and we might start to get more data to allow us to predict space weather, rather than just react to it.

- Taken from the Papakura Radio Club Inc Newsletter, June 2025



One of the GONG network telescopes is located at El Teide Observatory, Canary Islands. (Image credit: Carlo Morucchio/REDA/Universal Images Group)

This snippet appeared in the Blenheim Sun newspaper 26/09/25.

The photo was taken by our own member Graeme, ZL1BDS. Great shot Graeme!



Partial eclipse of the sun

Local photographer Graeme McKay captured this stunning shot of the partial eclipse of the sun from Rārangī on Monday morning.

Although the skies remained overcast despite a

forecast of clouds possibly clearing, Graeme was able to find a brief gap in the sky to take this wonderful photo.

The photo shows the sun partially obscured by the moon, as well as several sunspots on the solar disk.

Br 26 CAMP-OVER - GIRL GUIDE CAMP "PARETAI" 129 LEE VALLEY ROAD BRIGHTWATER, NELSON

Over the weekend of 1st - 2nd NOVEMBER you are invited to join Nelson Br26 for a camp-over. Arrival time from midday Friday 31st October stay through to Monday if you wish. \$5 per head per night with hot showers and toilet facilities available.

A relaxed unstructured weekend to socialise, play with antennas, bike ride the district, tell lies etc.

Evening entertainment is sitting around campfire. Bring your marshmallows.

We will have a POT-LUCK LUNCH on Saturday, BBQ provided and a sausage or two thrown in.

DAY VISITORS MORE THAN WELCOME to join Potluck Lunch.

There are 2 power points for campers if required for medical reasons. Please book these if required.

Plenty of space for caravans, mobile homes, tent sites and if you would like indoor accommodation there are dormitory bunks available. Please book these as well.

Any questions contact Stewart ZL2STR on 022 459 0415 or strobznz@gmail.com



HAM PROFILE - Robert (Bob) Walker, E51BQ

All the information here came from Bob's personal page on qrz.com. I contacted him while I was on holiday in Rarotonga (is that dedication to the club or what??) last week. It turns out that, as I suspected, he knew Grant (and, it turns out, his dad Bill ZL2BO, formerly ZL2BGV), very well and had been saddened to hear of Grant's death last year when he received the notification. When I read that he had been a Telecom tech I wondered if he knew Grant from putting in the microwave links so decided to try and make contact with him. We had a lovely phone chat and he said he knew Grant before we were married (1977) and said he was a great tech and also remembered his great love for his Jensen Healey. He even remembered it was yellow!

Bob's QTH is the village of Muri on the SE side of Rarotonga. Muri is known for its beautiful lagoon and several tree covered 'motus' or small islands. It is a popular spot for sailboarding and kite boarding, as well as swimming and snorkelling, and the ever-popular lagoon cruises.

He first arrived in Rarotonga in 1970 to work as a Telecommunications Technician employed by the Cook Islands Government looking after the radio communication to the 15 outer islands using 300w CW transmitters and a 1.5KW ISB transmitter for New Zealand which had 2 phone circuits and 50bd telegraph. He travelled to all the outer Islands many times and had a great time.

It was then he met his beautiful Polynesian princess Ana. She was 18 and he was 23. They returned to New Zealand in 1973, where they were married, and returned to Rarotonga in 1977. This is when they changed all the outer island communications to SSB using Codan 100W transceivers, which made phone contacts from the outer islands to Rarotonga and New Zealand possible. They also installed new antennas and solar panels for charging the radio batteries.

They returned to New Zealand, now with 3 sons, in 1982 where he continued working with Telecom New Zealand on mobile radio, cellular systems, broadband analogue and digital microwave systems. For his last 4 years with Telecom he designed and delivered radio courses for the Telecom Training centre in Auckland.

Bob got his license in 1977, ZK1BQ, and held ZL2BNB in NZ. He left Telecom in 2007 and he and Ana retired to their little paradise of Rarotonga. He welcomes any hams visiting Rarotonga to please drop in and say hi. His local number is 26320.

Station

Bob's station consists of a two Icom 7300's one for phone the other for digital modes

(the pics of his station are 12 years old, he needs to update them!)

Most of his operating is on FT8 and occasionally SSB phone



Antennas

K4KIO 5 band Hex beam up at about 38 feet.

30m dipole around 30ft high

6m 4 element Yagi around 20ft off the ground (no Rotator) courtesy of ZL1RS Bob Sutton



The K4KIO Hex Beam is rotated with a Yaesu G450A is mounted on a 38 foot steel mast tied.

Ham Radio in the Cook Islands

There are 3 active licenced active Hams living in the Cook Islands.

E51JD Jim, Rarotonga

E51WL Warwick, Penryyn Island (Northern Cooks)

E51BQ Bob, Rarotonga



I met a girl who runs a battery kiosk at the park.
So basically, she sells C cells by the seesaw.

Why are monks so good at protesting?

The more ohms you have,
the greater the resistance!



We have 14 clocks (including the car clock and my watch) and only 4 change automatically (phone, tablet, laptop and PC). I finally managed to set them all correctly for the first time today! It was Grant's job to change the damned things.

My watch and the old Post Office clock in the dining room just have a knob to manually turn. The others all require pressing numerous buttons or arrows. Two need a remote!

I HATE DAYLIGHT SAVING!