

October 2026

OUTBROADCAST

MONTHLY BULLETIN

MARLBOROUGH AMATEUR RADIO CLUB INC. BLENHEIM NZ

CLUB CALENDAR

General Meeting:.... 8 Oct 7.30pm, **10 Pin BOWLING**
Social Group; 15 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

BRANCH22 NOTICES

1. 10 Pin Bowling, Simcox Stadium, 50 Battys Rd 8 Oct
2. JOTA (Jamboree Of The Air) @ EOC..... 16 - 18 Oct
3. Graeme ZL1BDS, on learning Morse..... 12 Nov
4. End of Year Social, maybe Quiz..... 10 Dec

HF Net Tuesdays
2030 hrs 3876kHz
Note new time due to Daylight Saving.

Website
www.zl2ks.org.nz

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October is Halloween, which seems to be popular to celebrate in NZ these days. The font is called It Lives In The Swamp.

10 PIN BOWLING REPLACES OCTOBER MEETING Simcox Stadium, 50 Battys Rd

We will be challenging Vintage Car Club members to a game or two so let Don marcbranch22@gmail.com know ASAP if you plan to attend please, so he can book accordingly.

Bring something for an after-game snack so we can have a drink (tea, coffee, fizz & juice sold on premises) and chat in the café area after the games and get to know some VCC members at the same time.



Stuart ZL2TW presents Wayne ZL2AIE with the Constructors Award Trophy. Full details P.2 & 3.

GET BOWLING
at Blenheim Indoor Sports Centre
Simcox Stadium, Blenheim

>> fast forward to fun

- 7 State of the art lanes with automatic scoring
- We provide all the equipment (incl. ramps and bumpers)
- Bring your own socks
- Late night, glow in the dark bowling
- Cafe and licensed bar
- Bookings advisable

CALL NOW TO BOOK A LANE

10 PIN BOWLING PRICES

No. of Games	Adults	Seniors (60+) Coll Students (with ID)	5yrs to 13yrs	Under 5yrs	Family Pass (2A/2C) or (1A/3C)
One	\$15.00	\$13.00	\$11.00	\$8.00	\$45.00
Two	\$23.00	\$21.00	\$17.00	\$12.00	\$70.00
Extra Game	\$8.00	\$8.00	\$6.00	\$4.00	\$25.00

OPEN FROM 10AM DAILY

blenheim indoor sports

www.blenheimindoorsports.co.nz

A photograph of a bowling alley with multiple lanes. The lanes are illuminated with colorful lights, and the background features a large mural of various fruits and vegetables.

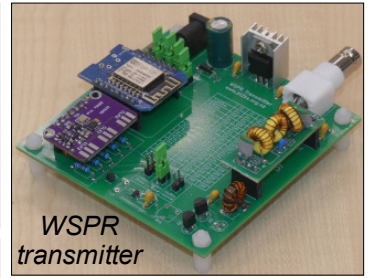
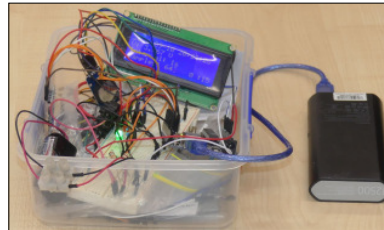
CONSTRUCTORS AWARD 2026



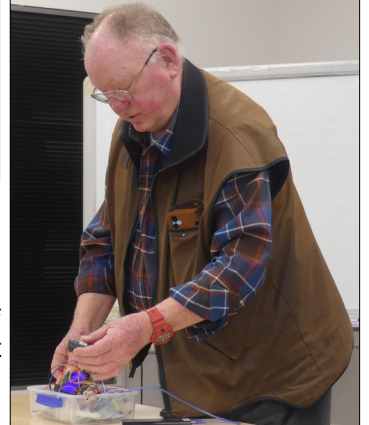
First up was Neville Marr ZL2BNE with two entries - a 40m cw transceiver based on a 1980s design by W7EL and a WSPR transmitter, designed and built for presentation at Topfest.



40m cw transceiver



WSPR transmitter



Following Neville was Don Laing ZL3DN, who showed us his Bird's Nest aka 30V DC Monitor & Data Logger (right).

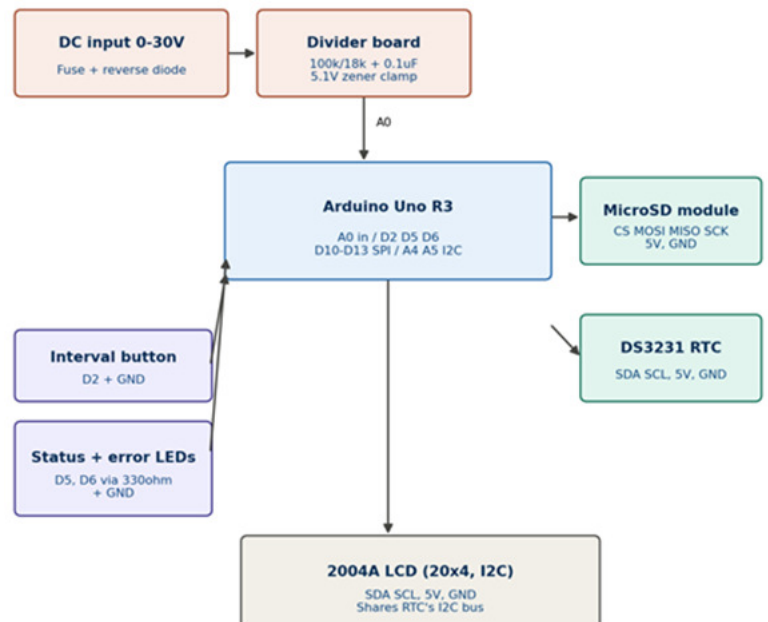
The inspiration came from recent issues at the Brayshaw remote transceiver that were eventually tracked down to failing batteries. With most of our sites relying on old batteries it would be good to be able to monitor battery voltage for a prolonged period and be able to compare with use & weather conditions during the same period. This design will read up to 30Vdc at push button selectable intervals of 10mSec, 100mSec, 1min, 5min or 15min recording on an SD card in csv format. It also has a button battery to maintain date & time when not in use.

Having an Arduino kit, he asked John Errington what he thought of using Arduino. John suggested he ask AI Claude to design and prepare an Arduino script. So Claude, after quite a few minutes pondering, thinking, circulating, clarifying, condensing etc. produced a design. Claude seemed like a reluctant student and need a bit of prompting but eventually finalised the breadboard design & an Arduino sketch including parts list, point to point wiring list.

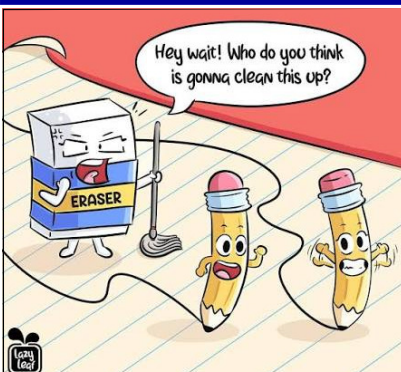
He then had to collect a few parts. John kindly gave him the LCD & SD card modules. He got resistors, LED's etc from stock at Blenheim Electronics (Jaycar dealer) and ordered the button battery module from 'Sound Division', Auckland, who have a large inventory of Arduino modules which he thought were reasonable prices. ie: cost twice as much for the postage.

Don eventually got it plugged it altogether and, using a 2xAAA battery pack as the DC input, the lights came on however it was stuck on 10mSec read intervals. John suggested he ask Claude for a test sketch to check out each of the stages but initially the sketch took too much memory. Claude replied that it wasn't it's fault and it was a program fault. Go figure, but it came up with an alternative program which all checked out and everything was fine once he had corrected a few breadboard connections as they were very fiddly and prone to coming out. It was John's turn to ponder, dissect, etc and he inserted a sketch line to enable the interval button state to be read. Don then noticed that the date & time display was incorrect and, with some more of John's ruminating, mulling etc found that the date & time setting was set at the date/time that the sketch was initially compiled, which was a few weeks prior. More lines in the sketch allowed date/time to be specified and uploaded if needed. Next will be to put it into a box with soldered veroboard connections, terminals etc to enable it to be a robust unit for unattended field use.

Block Diagram



Please note the descriptions of Award entries were sent to me by each entrant, which is why they vary greatly in length and description. Some were edited slightly.





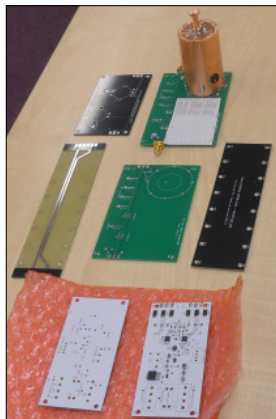
Our third entrant was John Errington ZL3TIL with his Generative AI for Electronic Design.

This entry was a set of circuit boards, mostly from a project to make a remote reading, internet connected, SWR meter for use at the club's Winlink site.

The key point of interest was that they were all made using Generative AI. The boards included: a dual band coupler (2M, 70cm), a notch filter for the VHF/UHF SDR, an HF tandem coupler, and an interface board. The interface board was assembled by Seede and the gerbers, the parts list, and the assembly instructions were all produced by Generative AI.

All the boards work, but the dual band coupler is being rebuilt because it resonates too low, closer to 6M. The interface board is still being tested.

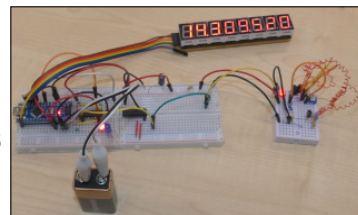
Generative AI will change electronic design completely. It is still early days, and there are still problems to solve, but a set of boards in 53 minutes means it is worth solving those problems.



Last year's winner, Lewis Hill ZL2RAI, was up next with an 8-digit Frequency Counter based on Arduino Nano and SN74F161 divide-by-16 IC. Measures up to around 96 MHz with the value shown to the nearest multiple of 16 hertz and updated once per second.

After Lewis, a 6 metre beacon replacement project was presented by Rob Carter ZL2IW, on behalf of Tony Whitaker ZL2RKL, who is currently in the UK. This explanation is from Rob's notes.

Original encoder and Tait RT equipment designed, modified, installed approx. 1982. Failed sometime 2021, and uneconomic to repair.



Early 2022, Tony picked up the idea for a replacement. No simple solution – so experimented with a kitset solution ex QRP labs. QRP kitset based on a controller, DDS module, GPS receiver, and LPF.

Approx. 50mW output on six metres... so an amplifier is required.

Amplifier: Several prototypes before settling on a FeT design. Output approx. 5 Watts

Beacon transmits CW via FSK shift 300Hz, for about 28 minutes, then jumps to the WSPR frequency for a couple of minutes.

Monitor by: Off Air, listen USB 52.053.6 Fine Tune for best results...

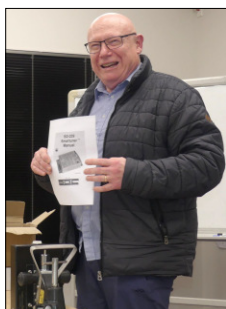
WSPR use a WSPR App, or WSPR web site... database search - six metres - ZL2SIX.

WSPR heard regularly in Australia, also in Europe occasionally, plus Japan.

CW beacon used by Kevin in Westport, as part of aurora, and meteor scatter research.

Beacon Freq assigned 52.054

6 Metre WSPR freq. 50,294.500 kHz +/- 100 Hz



Our final entrant, and the winner, was Wayne Parker ZL2AIE, who built a vehicle HF antenna tow bar mount. The genesis for this project came about when he was offered a damaged bike rack for which he could see potential to construct an HF aerial mount that could be switched between vehicles with the appropriate cabling present. The antenna mount is positioned on the remaining bike rack central component section and a housing constructed to encase a SGC-256 automatic antenna tuner. This is attached by two angle sections fastened by bolts into tapped holes in the housing and bracket. A handle and an higher tow bar fastener key was added for convenience. The design reflects that the mount would only be attached once the vehicle was stationary and be used at lower power levels.



Want to hear a construction joke? Sorry, I'm still working on it.



The WSPRnator was presented at Topfest and circuit boards were given to attendees to build at home. I made a commitment to provide circuit boards to any Marlborough members who "missed out". That's any Marlborough member, whether attending Topfest or not.

Just email nev@marrnz.com and let me know that you'd like a board.

What is the WSPRnator? Check it out ... <https://zl2ks.org.nz/wp/wsprnator/>

This is an easy build, zero skills needed and help provided when requested. All you need is a desire to build a simple ham radio transmitter and watch your signals propagate around the planet.

- Neville, ZL2BNE

Branch 26 CAMP OVER, Girl Guide Camp "Paretai"
129 Lee Valley Rd, Brightwater, Nelson



Paretai from the air

Over the weekend of the 21st to 22nd November you are invited to join Nelson Branch 26 for a camp-over. Arrival time from midday Friday 20th November. Stay over to the Monday 23rd if you wish. It will cost \$10 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. The evening entertainment is sitting around campfire. Bring your marshmallows. We will have a POT LUCK Lunch on the Saturday. BBQ provided and a sausage or two thrown in.

Day Visitors are more than welcome to join the Potluck Lunch.

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

As always members of Marlborough Branch 22 and Motueka Branch 24 are very welcome to join us.

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

SHACK CRAWL Saturday 10th October: Everybody welcome.

Please be at EOC by 8.45am to leave at 9am.

There are 5 shacks on the tour from Witherlea and Omaka in town, out to Rarangi, then ending at Herrie's shack at Penzance in the Marlborough Sounds. Lunch will be at a café somewhere along the way, or bring your own.

If you want to bring a caravan or RV, you are welcome to stay overnight at Herrie's property. If you need more info, please call or email Herrie 0212380516 grens360@gmail.com.

Another member has sent 'look at our lovely weather' photos from their holiday. I received these on a day when it was 10C and drizzling. Elvys were enjoying themselves in Mooloolaba on the, aptly named, Sunshine Coast.



EOC Thursday Radio Check: Request for more volunteers please as two have withdrawn. Thursdays 09:45 - 10:30am excluding school holidays. More volunteers means fewer individual attendances.

Halloween is right around the corner.
You can tell because all the shops are decked out for Christmas!



Thanks to those who have already put their hand up for **JOTA** (Jamboree on the Air).
If anyone else wishes to help, please contact secretary Don, marcbranch22@gmail.com

HAMCRAM: 23 - 24 January 2027.
Know anyone you think would enjoy/need this?
Start talking about it and convincing them NOW!

"Calling New Zealand" Ham Radio Event:

This month-long event runs every Saturday and Sunday throughout November 2026, starting at 6:00am each weekend day. It is designed specifically to overlap with Parks on the Air (POTA). Activators heading into NZ parks, and Chasers tracking them down, have an opportunity to contact as many New Zealand towns and cities as possible over the 4-week period.

Blenheim POTA/QRP Field Day:

A dedicated POTA/QRP event scheduled for November Saturday 7th and Sunday 29th 2026 (exact times TBD) across various local parks. If you are planning an activation, you can check active park listings, track live spots, or log your contacts directly on the official POTA App or coordinate with the local community via ZL On The Air.

FROM YOUR PRESIDENT

Hi all, the weather is getting a lot better, the days are longer and the influenza season is over so things are looking up.

TOPFEST

This went off very well with 50 odd people attending (*Ed note: Some of them weren't odd!*). The majority who attended were from out of town, several came from the North Island and as far south as (sunny) Balclutha and Invercargill. The speaker lineup worked out very well and they were all well received. Topsy's (ZL2LS) catering for the morning and afternoon teas was excellent. Caryl has an excellent report in this edition. Thanks to Nick who organised the speakers and worked along with me doing the organising, Don for sorting the venue and opening and closing each day, Greg for handling registration and all the Branch 22 helpers doing set up and tidy up.

TEN PIN BOWLING

If you would like to join in for this at our next club night, please let Don our secretary know ASAP.

BRANCH POTA (ETC) DAY

Proposed dates Saturday November 7th and Sunday November 29th

Get out and operate portable, POTA or SOTA or whatever you fancy and participate in the Calling New Zealand competition.

We were planning on Sunday November 8th but Caryl has pointed out that there is the Garden Marlborough Fete in Pollard Park that day which would make that activation difficult. We don't have a formal club meeting before the dates (ten pin bowling) so updates will be sent out via the club email list.

695 RELOCATION PROJECT

We have nearly finalised the exact site for the building with the land owner. Quotes are coming in for the equipment and material we need so that we can get the application in to the charity for funding, so any financial impact on the club will be minimised. The NZART engineering and licensing group (ELG) has given us the green light that 695 will be fine to license at the new site. If you want to have a look on the map it is at these decimal coordinates: -41.551996 173.983462

NZART CONFERENCE 2027 IN NELSON JUNE 5 AND 6

There will be a promotion of this in the next edition of break-In. Our branch is helping with organising the forums and we will need helpers to sit in forum rooms and make sure speakers start and finish on time. The Nelson branch may need our help for other tasks, that will be sorted next year.

Save the date, it is not often we have this event so close to home. I have been to every conference since 2001 and enjoyed them all.

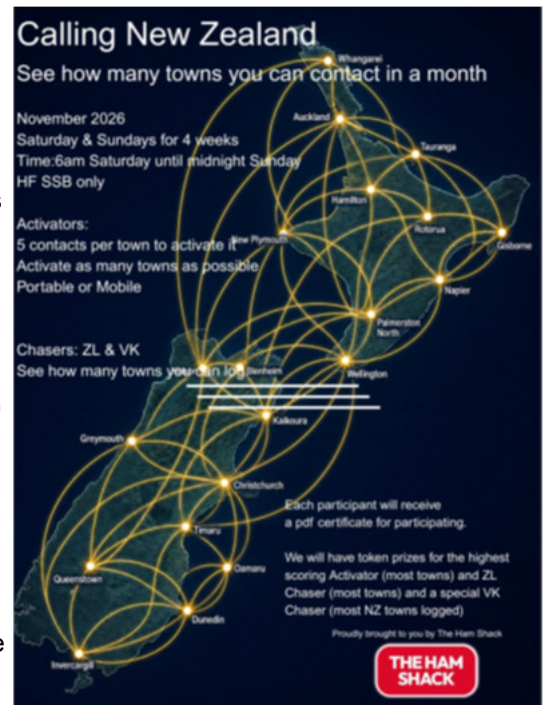
INTEREST GROUPS

Have a look at your last edition of Interface about this. We need enthusiasts in the branch to take the lead on this.

CONSTRUCTION PROJECT

Neville ZL2BNE gave an excellent talk at Topfest on his WSPR (weak signal propagation reporter transmitter) project. Neville is absolutely mad keen on building stuff and wants to infect as many others as possible with this affliction. He is keen to lead a group activity to assemble these units. Watch this space.

- **Stuart ZL2TW**





Since I am sure a detailed and informative article on Topfest will be going into Break-In, I will just use photos I took during the event, with brief explanations if I remember what it was they were talking about. I apologise in advance if I get something wrong. As you all receive Interface via email, I can also make the photos quite small as I am sure you all know how to use the zoom in/out icon in your pdf reader!

The lower quality of the photos is due to the fact they had the lights off so people could see the overhead projector screen so I was using a flash from the back of the room, reflecting off all the bald spots. The fact I am merely a 'point and shoot using auto-focus' photographer, who doesn't know what all the buttons on her camera do, probably contributed as well.

All indoor photos were taken by me and the outdoor ones of the antenna racing were taken by Greg ZL2GBX, who always takes wonderful photographs and obviously knows what the buttons do on his camera!

From all the positive comments I heard from various attendees, the weekend went very well. This was due to all the hard work put in by the organisers Nick ZL2NEB and Stuart ZL2TW, with help from Greg ZL2GBX, informative presentations on a variety of subjects by the guest speakers, and particularly delicious morning and afternoon teas provided by Topsy ZL2LS. The venue, thanks to Don ZL3DN, was just the right size and the vintage cars in the museum provided a lovely backdrop to the sales tables set up by Techoman Craig ZL3TECH and The Ham Shack's Greg ZL1GUD. From the number of people leaving the museum with something in their hands and a smile on their face, I gather both business's did good trade.

There were 56 registered, although we had a couple of no-shows. The prize for the one who travelled from furthest away went to the man who came over from the Chatham Islands. Herrie claimed he should have got the prize since he was from Holland but was immediately disqualified, for obvious reasons. Over 30 attended the evening meal at Speights on Saturday night. When asked if it was back to Murchison for Westfest next time, a number suggested Blenheim host it again! The comment was made that we would certainly not meet in Dunedin as that would be called Bottomfest, which didn't have the right ring (no pun intended) to it!

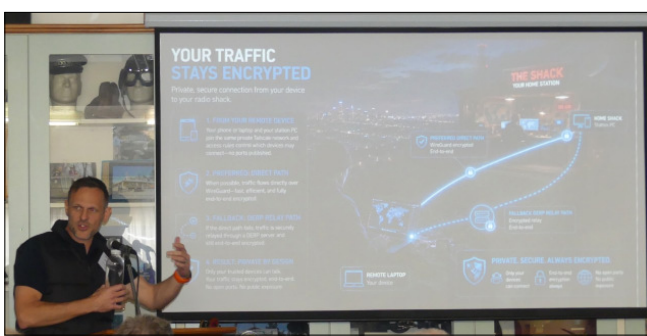


The weekend began on Saturday with a welcome and introduction from Stuart then straight into the first presentation from Warren Judkins ZL3TQR (photos left and right) on Amateur Broadcast Radio. He was a teacher at a special character school in Christchurch and talked about setting up The Fridge radio on 88.3FM, broadcasting initially from the school then branching out across other locations. He noted quite a few students who got involved went on to careers in radio.



Warren was followed by Jay Haines ZL4JAY, who spoke about Tailscale, which gives private and secure connections, with remote access, to your devices.

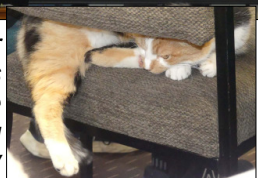
We then took a break for morning tea, which consisted of scones, whipped cream and jam to go with cups of tea or coffee. People took the opportunity to stretch their legs and check out the sales tables.



The next speaker was Nick Batt ZL2NEB, talking about Remote Station Control - a guide for people who have absolutely no idea.



A visitor relaxes while listening intently



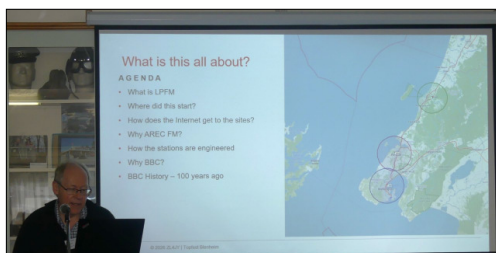


Next up was John Errington ZL3TIL, to explain about the ZL2KS infrastructure, SDR/RBN and Winlink, then we broke for lunch.

After lunch they held the Antenna Racing World Champs up on the grass area behind the venue. Although sunny, there was a very cold wind but this didn't stop the competitors doing their best. The winner was Chris Scott ZL2CS followed by runner-up Grant Gilbert ZL1GGL (*love his callsign!*)



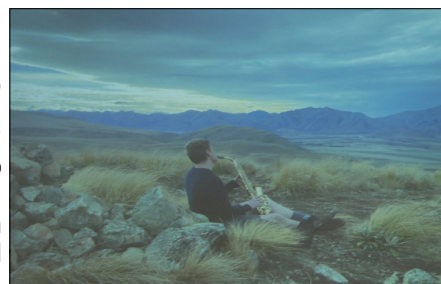
Chris (above left photo) and Grant (above centre photo) receiving their prizes, donated by Greg ZL1GUD from The Ham Shack



Once everyone was back inside warming up, John Yaldwyn ZL4JY, started the afternoon sessions talking about the AREC FM LPFM network in Wellington, why it broadcasts the BBC World Service, and how this came about.



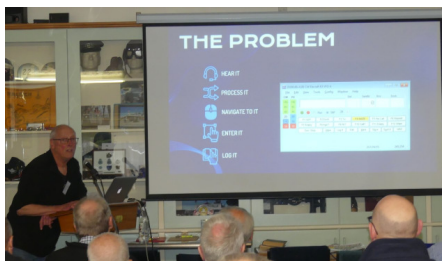
Rick Jackson ZL3RIK, then had everyone laughing as he talked about the lighter side of 'OTA and the problems that can arise which will either make you laugh, or cry, depending on your outlook on life. It turns out he is terrified of cows and many sites seem to be guarded by them. Some people have had interesting reactions to finding him setting up for an activation. One time he said he could hear a weird wailing noise up ahead, way out in the middle of nowhere and finally found the source - a lad



(right) practising on his saxophone!



The last speaker for the day was Roger Corbett ZL3RC who had two sessions split by the presentation of the Antenna Races awards. His first session was entitled 'Things Never Change, Or Do They?' followed by him demonstrating a programme that makes the Jock White Field Day log processing quicker and easier than writing it all out by hand. This generated a lot of questions so I think there are a lot of keen operators looking for an easier way to fill out the required forms!



Somewhere between the speakers mentioned above, we stopped for afternoon tea, again provided by Topsy ZL2LS and this time consisting of loaf slices and biscuits. These breaks provided time to stretch, visit the facilities, buy more stuff from the sales tables, or catch up with fellow Hams.

On the left are Craig Sullivan ZL3TECH, Techoman and Greg Van Der Reis ZL1GUD from The Ham Shack who also provided giveaways and prizes.

The day ended with everyone heading home, or back to their accommodation. Some met for dinner at Speights Alehouse. See Herrie's photos P.8. As I didn't attend this, I can't spill any gossip about what went on but most appeared on time the next day for the rest of the event.



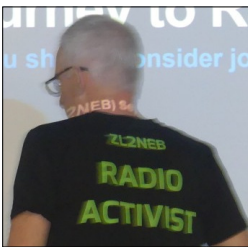
Sunday started off with Neville Marr ZL2BNE, giving a talk on the WSPRnator. Some of you heard an abbreviated version of this at the recent Constructors Award night. He was another presenter who showed how useful AI can be for the amateur radio enthusiast and how quickly and easily it could produce things like circuit boards.



We stopped for morning tea (this time muffins and biscuits), a stretch and a natter before settling back down again to hear Nick Batt ZL2NEB, talking about his life



as a Radio Activist and his enthusiasm for activations. He explained it was a great excuse to travel and a good way to see the country, visiting places you may never want to see again! He considers activations to be a great learning opportunity and a fun way to teach technique and procedure to newbies. Nick also warned you would spend a lot of time online looking at maps, normalising travelling 100km for a 30-minute activation, becoming fixated with portable equipment and its weight, while memorising the first names of more radio operators than you ever expected was possible. He also warned it was addictive!



Our penultimate speaker was George Timmermans ZL2GTI (right), who spoke about Rapid Prototyping. This involved explanations about the different types of 3D printers and cutters available along with a few safety warnings.

To finish off the event sessions, Stuart Watchman ZL2TW, explained the history of the club's remote HF station, explaining a lot of the equipment used had fallen off the back of various trucks, plus we had some generous donations of equipment from members. Attendees were invited to go and have a look at the tower since it wasn't far away from their location.



Stewart Robinson ZL2STR (lower right), was then invited to say a few words about next year's NZART Conference which will be a combined effort between Nelson and Marlborough and held in Nelson. He encouraged all to attend and said they were looking for guest speakers, especially of the calibre heard this weekend, if anyone wanted to volunteer.



See what I mean about the bald heads' reflections?

Stuart ZL2TW, finished by thanking everyone for their attendance and those who helped to make it such a successful weekend. Extra thanks also to the Branch 22



members who helped with setting up and/or the tidying and vacuuming afterwards.

The rest of the photos are random ones from the weekend. Again, I hope I got names, call signs and information correct throughout this article and my apologies for any errors but, considering I am not a Ham, I felt proud just not to have fallen asleep during any of the talks (although I was close early afternoon when the room warmed up a bit much).



Winners of the giveaways (from an anonymous supporter) with Nick ZL2NEB



Techoman
Craig Sullivan
ZL3TECH



Topsy ZL2LS
Baker extraordinaire





Stuart with his horn



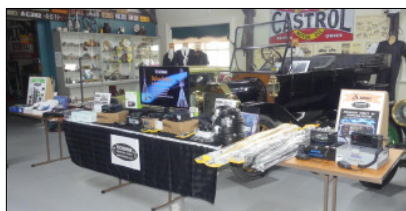
Display by Gary (& Carol)
Lodge ZL1GA of their
POTA adventures



Left - right; Craig ZL3TECH,
Nick ZL2NEB Stewart ZL2STR



Rick ZL3RIK parked up for an
activation near Aoraki/Mt Cook



Techoman's
table

Some of the happy attendees at the start of Topfest.



Thanks to Herrie for these photos from the Topfest evening meal at Speight's Alehouse.

