July 2023

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

CLUB CALENDAR

General Meeting;..... 13 July, 7.30pm, EOC **Social Group;......** 20 July, Dodson St Beer Garden

Committee Meeting; 27 July, 7.30pm, via Zoom

Editor: Caryl Simpson caryl@simtronics.co.nz

BRANCH 22 N

1. John E – Antenna software (Antennas Part 3) 13 July

2. Video from Don L - Cars to Carrington10 Aug

3. Lighthouse Weekend19/20 Aug

4. CONSTRUCTORS AWARD14 Sept

HF Net Tuesdays & Saturdays 2030 hrs 3876kHz

VHF - USB Net Wednesdays 144.150MHz 1930 hrs

VHF Mondays 1930 hrs 146.950MHz. 145.600MHz, 147.225MHz

Net Controller; Rob Carter, ZL2IW

Website: www.zl2ks.org.nz

MARC Contact: marcbranch22@gmail.com

BLIGHT ON THE LANDSCAPE ERR, I MEAN GRANT'S NEW AERIAL

Photo taken from reserve next door. At least I noticed, before the helpers arrived, that he planned to erect the centre pole right in the middle of the view out our computer room window! Centre pole got moved further right.



MARLBOROUGH AMATEUR RADIO CLUB GENERAL MEETING at EOC, 8th June 2023

Present: John Errington (Chair), Graeme McKay (Acting Secretary), Greg Barton (Treasurer), Ken Menzies, Ian Conway, Neville Marr, Gerard Van Antwerpen, Nick Batt, Stuart Watchman, Ron Harris, Graeme Dillon, Bill Cousins.

Apologies: Don Laing, Helen Harris **Health & Safety:** No issues raised.

Previous Minutes: Accepted. Motion: John Errington/Ken Menzies/Carried.

Matters Arising: None

Correspondence (since Committee Meeting 25 May 2023):

Inwards:

27 May Techoman Electronics Confirmation of members amateur licence

27 May CARC CARC Activities week #22 2 June CARC CARC Activities week #23

Outwards:

29 May NZART Branch 22 AGM delegates

30 May Richard Smart Update request

2 June NZART Examiner application for Gerard ZL2GVA

Finance & Membership:

Membership: 56

Accounts: Available on request **Income:** Interest on deposits only.

Payments: Nil

Events: International Lighthouse Weekend will be held in August.

Conference:

Stuart Watchman, who attended the conference as the Branch delegate, presented a verbal report. Details will be included in the next issue of Interface.

Repeaters & Systems:

- Kaikoura Repeater Installation. No change.
- Branch 05 Collaboration. Don Laing has ongoing discussion with Branch 05.
- > New Site for 695
- > The FENZ installation on the proposed site is non-operational.

The site is reportedly difficult to access, requiring ATV.

John, Don and Stuart held discussion with Grant. Need to review technology.

Branch 05 is proposing a new repeater controller, but there is no immediate progress.

- Brayshaw Park
- The server software controlling operations at Brayshaw Park invites financial contribution for its use. John proposed a contribution of \$50 to the provider for the club's use of the server software.

Motion: The Club to contribute \$50. John Errington / Gerard van Antwerpen / Carried.

Speaker Schedule:

July: John Errington Antenna Software (antennas, part 3)

August: Don Laing "Cars to Carrington"

September: Constructors' Evening

Ideas for following months were sought. John Errington suggested seeking some external speakers.

AREC:

A recent overnight search for a missing walker had AREC involvement at the search base.

General Business & Notices: None.

Next Committee Meeting: Thursday 22 June at 19:30 by Zoom **Next General Meeting:** Thursday 13 July at 19:30 at EOC.

Meeting Close: The meeting was closed at 19:55



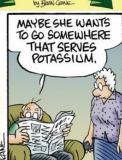
Christine Conway

If you want your birthday or anniversary mentioned, let me know names and dates!









Minutes - MARC Committee, 22 June 2023, 7:30pm, by ZOOM

1. Health & Safety;

- 1.1 General Review Nothing to note.
- 2. Apologies; Don, Graeme, Stuart
- 3. Confirmation of the minutes of last meeting and matters arising. Confirmed, Moved JE, seconded Gerard

4. Correspondence

4.1 To be tabled - attached. Inwards accepted, outwards endorsed. Moved JE, seconded Gerard.

5. Finance & Membership

- 5.1 Financial Report (In committee) Finance Report accepted. Moved JE, seconded Gerard.
- 5.2 The committee agreed that any purchases on behalf of the club will require a club order number.

Order numbers will be authorised as set out in club rules for the authorisation of expenditure and issued by the Treasurer.

Moved JE, seconded Gerard, passed unanimously.

6. Events

- 6.1 International Lighthouse Weekend, August. Noted the date and booking. No further action this month.
- 6.2 Promote the monthly lunch. Notice planned for interface.

7. Repeaters and Systems

- 7.1 Kaikoura Repeater reinstallation Dave and John working on this.
- 7.2 New Repeater Site no report, deferred to next meeting
- 7.3 New Repeater equipment development no report
- 7.4 Brayshaw Park Software donation Greg to liaise with Don and to arrange the donation.

8. Speaker and Meeting Schedule

- 8.1 July John E. Antenna software (antennas part 3)
- 8.2 August Cars to Carrington (Don)8.3 September Constructors Evening

9. AREC

- 9.1 Grant application (Communications Package). The objective is to prepare an application for funding to enhance the connectivity options for the truck. The details are reported separately. The essential next step is to obtain a commitment from (say) council or police to pay the standing charges for Starlink or 4G options.
- 9.2 Replacement Tuner for EOC deferred until the next meeting

10. General Business

10.1 Exam invigilator - appointment completed? Nothing heard from NZART, possibly due to staff absences at NZART.

11. Notices for Interface:

- 11.1 Advise members of the requirement for order numbers as per 5.2 above.
- 11.2 Promote the monthly lunch as per 6.2
- 11.3 Repeat the notice re the memorial service for Christine Grant.
- 12. Next General Meeting: 13 July 2023, 7:30pm, at EOC.
- **13. Next Committee Meeting:** 27 July 2023, 7:30pm, by ZOOM.

Meeting closed; 8:05pm

at quite good prices.

ANTHONY WINTER'S NEW SOLDERING IRON

I got a new soldering iron recently, and it has a number of interesting features.

First of all, it's the first iron I've seen with its own operating system (IronOS!) using a 144MHz 32-bit processor.

It has a display built into the handle, with push-buttons for temperature control and setup.

It runs from 12V-24V - ideal for the car. You can also use a USB power-pack (it has a barrel and a USB

connector) so you can solder a powered-up circuit without shorting it out. It has an automatic sleep mode (programmable). I guess an

accelerometer knows when you've put it down.

The price? USD26, at the moment! But watch out for postage and shipping costs - it might make sense to get together and order a few. Also - I got an extra set of tips, and there are various other accessories

https://pine64.com/product/pinecil-smart-mini-portable-soldering-iron/

Nick Batt's WSPR presentation last month was very interesting. Gerard has put the slides from it onto the club website for those of you unable to attend the meeting. A link doesn't work from a pdf so go to the website, zl2ks.org.nz, click on Presentations, then Nick's is the first mentioned so click on the link there.

CONFERENCE 2023 REPORT FROM NZART HQ INFOLINE ISSUE # 474

Subscriptions - Subscriptions for 2024 will increase by \$5, with Students incurring an increase of \$1.

\triangleright	Transmitting/Non-Transmitting	\$120.00
\triangleright	Family Transmitting/Family Non-Transmitting	\$30.00
	Total for Family membership payable	\$150.00
	Students	\$50.00
	Overseas (excluding GST)	\$155.00

A rebate of \$15 is applicable to Transmitting/Family, Nontransmitting/Family non-transmitting members only. Subs must be paid by 30 November 2023 to be eligible for this rebate.

Call Book

- > Call Book will be produced in December this year, digitally only and made available via the NZART website. If there are no privacy restrictions it will be released on the NZART web site. If this is not possible, a Call Book CD-ROM will may be the alternative.
- > The Call Book Editor and Repeater/beacon/map Editor requests that branches ensure their details are correct on the website. Neill ZL1TAJ will only amend maps on request from a branch, as he is no longer going to chase branches for this information. All amendments need to be notified immediately.

> The Study Guide for the NZART Examination Question is 95% complete. Categorising questions to align with HAREC requirements 2 and questions is approximately 40% complete. The final stage is getting RSM sign off and approval to go live. Updates on this progress via HQ InfoLine, the Official Broadcast and the NZART website.

Office appointments

- > Council approved the appointment of Stewart Robinson ZL2STR as the new NZART Awards Manager
- > Council also acknowledged from Philip Sharp ZL1PSH his resignation and has therefore appointed his deputy Douglas Beale ZL3DUG to the position of Break-In Editor effective 3 June 2023. A reminder that close off for the July/August issue of Break-In is 10 July 2023.

Annual Accounts & 2024 Budget forecast

- > Stuart Burns, the new Association Treasurer reported a small surplus was achieved in 2022 compared to 2021. During COVID a higher rebate was offered which affected the bottom line. In 2022 this was reduced back to the normal rebate.
- Term Deposit interest continues to increase. A recent term which matured on 7 June 2023 saw an increase from 3.5%, to 5.6%.

Remit 1 was lost on voices after considerable discussion, however the following motion was put and passed. Motion: NZART Council to create a digital copy of Break-In and make it available to the membership electronically.

Remit 2 was withdrawn by the branch.

Future Conferences

- > Christchurch Branch 05 and surrounding branches have offered to host the 2024 AGM and Annual Conference at Kings Birthday Weekend (1-2 June 2024). Venue yet to be confirmed, however are considering a venue at Wigram Air Force Museum.
- > Plans are well underway for the Centenary Conference to be held in Auckland in 2026. Regular updates will be available, although yet to be officially confirmed, the venue may be the Ellerslie Convention Centre.

Awards; The following awards were presented:

Young Amateur of the Year - Corban Paterson ZL1CAP, Branch 53

Jumbo Godfrey award - Lawry Carr ZL2HQ - Manawatu Branch 20

Youth Award under 20 - best exam result - Logan Costa ZL3XOF 57/60 aged 19 - Christchurch Branch 05.

Best Examination Result 100% Examination Passes:

- Branch 02 Auckland; Andrew Creegan ZL1ACR,
 Branch 05 Christchurch; Nicolas Lynch ZL3NLA, David Palmer ZL3CLV, Ian Thompson ZL3IVT, Jack Pribis ZL3JAX, Chris Dinh ZL3TTD, Robert Helps ZL4XP, Kaiwang Li ZL4KWL
- > Branch 12 Hamilton; Graeme Glasgow ZL1COD
- > Branch 20 Manawatu; Rhys Nicholls ZL2RH, Matthew Watson ZL2KDR
- > Branch 78 Far North; Don White ZL1DEW
- ➤ Branch 89 Radio Electronics Group Philip Dew ZL2DEW

Rothschild Cup - Christchurch Branch 05 - 32 successful passes. Other branch results include. North Shore Branch had 19.

Radio Electronics Group 15, Gisborne 13, Manawatu Br 11 & Dunedin 10!

Break-In Awards:

Best technical award - Alan Page ZL3UJY General Articles Award - Craig Crawford ZL3TLB

Column Award - Geoff Clark ZL3GA

Long Service Award - Simon Watt-Wyness ZL1SWW

Cost of break In per Issue

1500 Magazines

\$2200.00 Set Cost Design Printing \$4900.00 Postage \$2900.00 GST \$1500.00 TOTAL \$11500.00

NZART 2023 AGM AND CONVENTION KINGS BIRTHDAY WEEKEND PALMERSTON NORTH

Last year, with COVID uncertainty, there was no branch offering to run conference 2023 so a small committee, led by NZART councillor Warren Harris ZL2AJ, organised things with some help from Manawatu branch 20. About 100 people attended the event based at the Copthorne Hotel.

The infoline reprinted by Caryl on the previous page covers the AGM well except for the following:

General business

One item not mentioned on the previous page was national system repeater licence fees. At present NZART funds these. In order to help NZART balance its books, it was suggested from the floor that branches in the coverage area of national system repeaters chip in toward this. Council have taken this on board.

The stirrers award was presented by Daniel ZL2DRV to Mike Barnes ZL3TMB, the proponent remit 1 for quite a few witty comments made during the AGM.

At the conclusion, the badge of office was handed over by outgoing President Mark Gooding ZL2UFI to Daniel Vandenberg ZL2DRV. The vice president remains Warren Zl2AJ.

AREC

There was an update on AREC matters after the AGM, Paul ZL2RE will cover this.

Saturday evening during dinner, Warren ZL2AJ presented a great slide show on his SOTA endeavours from his first activation to the most recent with Mt Ruapehu and Blake Birch / Altimarloch here in Marlborough in between.



Badge of office hand-over

AGM for sub groups were held on Sunday Morning:

OTC; Has decided to go into recess for a year as there was no people prepared to occupy any of the officer vacancies. The record of membership will continue to be maintained by Don Wallace ZL2TLL. A meeting will be held next year in Christchurch to

Kiwisat; The decision was made to wind up the project as there is realistic option for a launch. There is a private space museum in Te Kuiti where it may go on display. Current location is with Ian ZL1AOX in south Auckland who worked on the microcontroller for the bird. This is a real shame as considerable work had gone into what was a flight ready device. Fred Kennedy ZL1BYP had been a real driver.

SPAM; The group continues with no elected officers but Martin Seay ZL3CK will continue the newsletter and 3850 net. H night will continue courtesy of our Rob ZL2IW.

Forums / Talks; There were a number of interesting talks, I could not go to all as many were concurrent but where I missed one I asked others for a quick summary:

COVID: a hospital response; The Palmerston North hospital head engineer who is a radio amateur explained the planning and implementation of engineering solutions for the pandemic.

Oxygen supply was identified as a problem and emergency storage and the evaporator capacity was increased. In the early effort to control airborne spread it was realised that individual negative pressure rooms would be too difficult to implement so key areas were made negative pressure and two wards as well, which would be for COVID positive patients to be grouped. The impressive additional ducting and filters were shown in a slide show.

Receiving Weather balloons; Ian ZL1AOX on something different. Weather radiosondes are launched twice daily from Auckland, Paraparaumu and Invercargill. These transmit telemetry on 401 MHz and their progress is visible on line. Ian and others have been tracking these and recovered some that have landed on land after balloon burst at approx 90 000 feet. On one occasion he arrived on a farm at the same time as another tracker. A few recovered radiosondes and balloon remnants were handed around.

Klondyke site update; This the Auckland VHF group site in south west Auckland that is a main terminal in the national system. During tower maintenance a contractor has damaged the heliax feeders for the national system antennas. The branch is in the process of repairing these but not without significant cost. The site was built in the mid 1980s and uses a transpower type 110 KV pylon as the tower.

NZART centennial convention 2026; Discussion led by Craig Crawford ZL3TLB the NZART historian and NZART President Daniel Vandenberg with ideas for the year and the convention to be held in Auckland, the location of the founding of NZART in 1926.

Special callsigns, awards, kick off on Jan 1 with branches getting active and merchandise are being looked at. The convention will be held in Auckland (the location of the founding meeting in 1926)

Grotating; (green radios, military surplus, on the air) A Christchurch based group of enthusiasts who enjoy getting out and operating these old boat anchors in the field.

National System repeater trustee meeting; A closed meeting. Spooky.

The Hawkes Bay Power Outage; The first talk was from the Trans power perspective. The 220KV and 110 KV network was explained and all the damage suffered: water to two major (Whirinaki and Redcliffe) sub stations and subsidence and trees landing on overhead lines.

Bridge and road damage took out their fibre network which meant loss of telemetry. Innovative techniques were used including temporary feeding 110 and 33 KV along one circuit of double circuit 220 KV lines. Fibre was temporarily bypassed, in some cases with cable along the ground. Many tons of mud and silt had to be cleared

from sites before repairs made.

Control electronics in substations were suffered considerable damage, replacements were cannibalised from projects from around the country.

SOTA; Warren ZL2AJ, who kicked off SOTA in ZI presented some of his SOTA tips. He showed the relevant websites to use and also emphasised the value of being able to set up anywhere from scratch: an AREC asset. You need 4 contacts from a hill top to activate: make sure you pre arrange contacts. Warren shared some of his adventures including becoming bluffed during a descent near National Park and spending the night with a helo rescue at first light! He was well prepared and kept warm and dry.

Local power restoration after the cyclone; Warren ZL2AJ is the engineer with the lines company in the King Country where there was extensive tree damage to lines. Helicopter reconnaissance was a key to surveying the network.

He showed the danger of well meaning people helping cutting down trees in rural area: danger of shock when livened up from control rooms.

Another amateur, a lineman from Hastings gave us a talk on his experience there. A task he performed was safety inspections before livening up local areas. Generator safety checks were performed when found including disconnecting suicide plug set ups (male to male 230v to liven a house) where the danger can also be to line staff if the main switch is on: 230 vaults fed into the local network. Eighteen 2 to 3 MW 11 KV generators were used to feed more isolated areas until the network was repaired.

Icom; Another fine effort by RWB communications the NZ Icom dealer with 10% discount for conference weekend. I bought an IC-T10 dual band hand held. I have to say in attending all of the conferences from 2001, RWB has had the best range and prices of any local supplier.

Sunday evening dinner included a quiz presented by Lynn Wallace wife of councillor Don ZL2TLL which was a mixture of all sorts of subjects. The winning table was Paul's and second place was my table... I demand an enquiry!









I think food is always the most important part of a conference. If attendees enjoyed the food, they tend to remember the whole conference as being good. If the food was not tasty, or there wasn't enough of it, when asked about conference they will immediately mention the perceived food problem before anything else. Looks like this year's attendees were well catered to (or for)

Thanks to Stuart ZL2TW for his report and photos from conference and to Mike ZL2TMB and Steve ZL2SJ for additional photos.

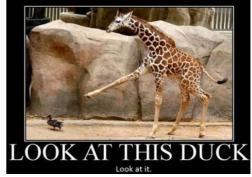








A couple of the raffles on offer



The woman pointing in the photo on the previous page reminds me of this meme



MEMORIAL SERVICE CHRIS GRANT, ZL2CHG

St Andrew's Church, 5 Henry St. Blenheim Monday, July 31, 2.00pm



MONTHLY SOCIAL GROUP LUNCH HELD AT DODSON ST BEER GARDEN, BAR & RESTAURANT

Have you thought about attending these, if you don't already? People usually arrive just before 12; an average attendance would be about 10, but it varies considerably. We go ahead anyway no matter how many, or few, indicate they will be coming. Sometimes a smaller group can be more inclusive.

Dietmar, the owner, is very efficient and is usually ready to take our orders soon after we have all arrived. The meals come out vey promptly; we have a variety of tastes. Some order a dessert only, others a bowl of chips. The menu is quite varied so a pizza is often popular as well. Usually we are finished by around 1.15, if someone needs to get away that is not a problem, we never feel rushed to leave the table so, depending on the topic of the day (totally unorganised), we can sit a little longer.

There is usually a group of non-hams who do not talk radio, there's plenty else to discuss. Detailed radio discussions appear to happen afterwards, if they are required, almost never club business unless there is an event to be reminded of or similar. We do get to hear some really interesting stories about members' 'other lives' and what/where they may have been working or living.

Come and join us next time - 20th July. If you have questions, require transport, or are too shy to go by yourself, call Christine Conway, 577 7114 or email tine.ian@farmside.co.nz for assistance.

ARTIE MOORE & HIS AMAZING RADIO RECEIVER

Sent to me by John Elvy, who got it via Mike 2CC, who got it via Laurie G3UML who posted it on a web forum. I cannot vouch for the veracity of this article but the information is on his Wikipedia page so it must be true!

The Titanic sank 15 April 1912 and many will be surprised to learn that a few fields across from where Bryn Meadows Golf Club is, at Gelligroes Mill (near Pontllanfraith), local fella Artie Moore was in his garden shed, suddenly becoming a part of the Titanic story. He'd built a radio receiver by himself and managed to generate electricity for it by using a large water wheel and some self made batteries. This was 1912 by the way, radio had only just been invented. Artie was intrigued by it though and was clearly a seriously clever guy. The year before he intercepted a message from inside the Italian government where they declared war on Libya, nobody knew him before then but they soon did when he dropped that bombshell and the world learned that it was true.

On the night of the Titanic sinking, he was in his shed experimenting and somehow managed to pick up the SOS distress calls from on board the ship at the very moment the crew raised the alarm. "We have struck an iceberg, sinking.".... "Women and children in boats, cannot last much longer"..... "We are sinking fast. Passengers are being put into boats. Titanic."

He rushed to the local police station and they thought he was crazy. Back in 1912, it was considered fact that the Titanic was unsinkable and the thought of plucking messages from the air was mind bendingly impossible. He told others and nobody believed him. 2 days later the news hit the British press and the nation learned what had happened for the first time. Once the shock of the news had subsided, people started to learn that this fella Artie had raised the alarm days in advance from his shed in the Welsh Valleys.

It was such a wild achievement, the inventor of radio Guglielmo Marconi came to know about him. Marconi had just won the Nobel prize for Physics, the same almost impossible to attain prize that Albert Einstein won a few years later. You're talking uber genius, the inventor of wireless communication and he's so mind blown that he ends up here in the valleys, in Artie's garden shed to find out how the hell he managed to learn about the Titanic before anyone else did, it shouldn't even have been possible being so far away. Marconi's Nobel prize winning technology was installed on the Titanic with a range of 2,000 miles absolute maximum, but Artie's home made set up was picking it up from 3,000 miles away. Marconi was shown how it was achieved and he offered Artie a job on the spot. Artie went on to lead the installation of wireless equipment on battleships during World War 1, invented the pre cursor to Sonar and was in the thick of developing technologies which have enabled radio to be what it is today.

Somehow, not many of us know about Artie. Hopefully posts like this one will help to bring him back into the consciousness of local people. A phenomenal man with a phenomenal story.

Google him, there is a lot of info to find.



INTERNATIONAL LIGHTHOUSE WEEKEND



This event is taking place on the weekend of 19/20th August at, for us, Cape Campbell lighthouse.

It is NOT a contest as such, but the aim is to work as many other lighthouse-based stations around the world as possible. Hence it is quite laid-back and casual.

The station has to be operated from the actual lighthouse being activated, therefore we stay overnight in the old lighthouse keepers quarters, which were upgraded some years ago for the film "Light Over the Ocean", and is very comfortable and warm. When I say "we", there is a hard-core of seasoned members who have taken up the opportunity over several years now, but anyone is invited to join the party, keeping in mind that participants share the cost of the hire of the lighthouse

premises (usually around \$50 each, depending on numbers).

We travel by car, leaving Blenheim around 0800 on Saturday and usually return on Sunday afternoon.

If you have not been to Cape Campbell before, this is an ideal opportunity to see a part of the country otherwise only accessible via the foreshore at Marfell's Beach at low tide, unless you have farmer's permission (and a key) to use the road access. The access road is good this year!

The weather has usually been very kind to us - only once can I remember arriving and putting up antennas in the teeth of a southerly gale and rain.

If it sounds of interest to you, or you want more information regarding what to take (food, bedding etc) call lan Conway on 027 661 3634 or email him tine.ian@farmside.co.nz.

The committee are asking members to ensure they obtain an order number from the club treasurer before placing an order on behalf of the club. (See note 5.2 in the Committee Minutes on page 2)



GIBB'S HILL LIGHTHOUSE HAS GONE DARK

Speaking of lighthouses, here is a bit of interesting info on one of Bermuda's biggest lighthouses...

The light has been extinguished since Sunday evening, and a navigation warning was sent out to mariners at that time.

The Department of Marine and Ports today told us that replacement lightbulbs have been sourced and are in transit to Bermuda.

An update will be provided next week, Bermuda Broadcasting was told.

When asked what other marine safety measures were in place, the Department told us, quote: "Broadcasting "Notice to Mariners" with respect to light being extinguished and Mariners to take precautions accordingly." end quote.

The 177-year-old Gibb's Hill lighthouse last went dark for four days in June 2021, after a cartridge fuse had blown.

While more modern navigational aids are now available to ocean vessels, such as GPS, one veteran mariner told us the lighthouse is still extremely important.

Ralph Richardson, President of Winsome Tours, former sub-mariner, and past Commodore of the Royal Bermuda Yacht Club, said of the lighthouse, "its three rotating beams can be seen from as far as 64.3kms off shore, and the apparent flash as the lens passes at approximately every 10 seconds is the first and clearest indication that Bermuda is near when approaching the island at night."

Built in 1846 from cast iron, Gibb's Hill Lighthouse is the oldest of its kind in the world, and one of only two cast iron lighthouses still in existence. There are 185 steps and 8 platforms in the lighthouse.

Gibbs Hill Height - 74.6m Cape Campbell built 1870 Lighthouse Height - 35.6m Tower Height - 22m Light Height - 110.3m above sea level 47m above sea level

Reach of light - seen by ships up to 64.3kms, seen by planes (at 10,000ft) up to 193kms (Cape C - 35km)

Lens revolves around the light and weighs 2.49 tonnes with a series of concentric prisms.

Powers light up to 1/2 million candlepower. It completes revolution once every 60 seconds and flashes of 2 second duration at every 10 second interval.

The lighthouse has a gift shop, restaurant and hosts weddings in the grounds.



The club has radios available, as well as an antenna analyser, for members to borrow when required. Contact a committee member for more details if you would like to avail yourself of any of these. marcbranch22@gmail.com

AREC VOLUNTEERS RESPOND TO CYCLONE GABRIELLE - Press Release

The New Zealand Amateur Radio Emergency Communications (AREC) kick into gear to respond to Cyclone Gabrielle.

Around New Zealand AREC volunteer members and other license Radio Amateurs geared up as Cyclone Gabrielle approach the coastline. Cyclone Gabrielle was expected to bring extreme winds and rainfall across the Auckland commencing Sunday12 February. Winds in excess of 120 km/h to 130km/h are forecast with speeds up to or exceeding 150km/h in some areas. These wind speeds have the potential to cause damage to power and telecommunications infrastructure. Heavy prolonged rainfall we predicted to cause serious flooding across large parts of the North Island East Coast.

Auckland - Andrew Brill ZL1COP

After meetings with Auckland Emergency Management (AEM), AREC was asked to provide radio communication support across the entire Auckland Region for field teams comprising of a mix of NZ Response Teams, NZ Defence force personnel, and other volunteers.

AREC developed a detailed communication plan and personnel rosters to assist with the operation. Radio Comms planned for the disastrous event consisted of:

- AEM VHF network 8 x channels (ESB Band) for CD coordination
- Commercial 2x channels (1x EE band, 1x CN band)
- Amateur 3x repeater channels (Auckland 670 2m repeater, Kohukohunui 875 STSP, ZL1BQ ZK DMR) for coordination and liaison between AREC members. (Due to an outage of an AEM repeater a crossband repeater using 70cm uplink from the comms base with an ESB band simplex downlink provided to the operational area).

Fourteen Civil Defence centres were established throughout the Auckland region and AREC maintained VHF contact with these centres; including local community response groups in the Rodney District and Waiheke Island together with various AEM and NZ Response Team resources.

AREC was based at the North Shore CDEM base (400 East Coast Road Sunnynook) and provided the link between the field teams throughout Auckland and the Incident Management Team located at the Auckland Emergency Coordination Centre in the Auckland CBD; reporting, and general situation reporting for the duration of the emergency.

AREC volunteers' roles who assisted with the following activities consisted of:

- Communicators talking on the radio
- Log keepers recording messages, forwarding messages via email, data entry etc.
- People with SARTrack software experience
- People with computer skills including Excel, Microsoft Office, Email etc (AEM will be using these systems)
- Supporters/gophers Handling phone calls, logistics, making coffee etc.

AREC operations and preparation were activated on Wednesday, 8th of February, where actions commenced on Sunday, the 12th of February, and continued through to Thursday, the 16th of February. During this time, 18 amateurs supported the operation at the base. A total of 25 people on standby throughout the Auckland region to provide remote support if needed. A total of 337 Person/Hours were worked.

Our team identified additional radios were needed. AREC member Soren Low ZL1SKL sourced 60 VHF radios. He, along with Jim Smith ZL1TGS, spent 8 hours programming these radios onto CDEM channels, then loaning them to AEM. A team on Waiheke Island led by Joe Bell ZL1PMY, were able to issue hand-held radios to the island communities and provide VHF coverage using their private

VHF handheld radios loaned by AREC awaiting deployment to Evacuation Centres

Alistair ZL1NEO operating

at North Shore Comms

Base

commercial repeater, to maintain contact 24 hours a day for the duration of the operation. Without this support Evacuation centres around Auckland would not have had any backup communications.



Peter ZL2AK at manning radios at Napier Coastguard IMT

During the afternoon of Tuesday 14 February, we were requested to provide a portable repeater to provide on scene comms between rescue workers operating at Muriwai in the search for the missing volunteer fireman, as cell coverage was down. The ESB164 Inter agency liaison repeater was deployed by the North Shore Response team NZRT5. AREC conducted a coverage analysis to locate a suitable site to provide good coverage of the scene and also direct comms to the Sunnynook Base.

AREC volunteers also provided and programmed equipment to allow comms with Welfare teams who were operating rented UHF portable radios on a commercial repeater channel on the Auckland Skytower.

AREC was stood down at midday on Thursday 16 February with a few remaining on standby if needed.

The majority of communications handled up by our volunteers was routine SITREPS with no major issues, however the operation has confirmed the value of AREC and radio comms in disaster situations, and has underlined the need for

comms knowledge and skills in the event of infrastructure failures.

SARTrack is proving to be a valuable tool for logging radio traffic, and our improvised link to ECC is working, as long as we retain internet connectivity.

Auckland ECC operations manager Josie Beswick passes on her thanks and congratulations for the outstanding service provided by AREC volunteers, and that is echoed by feedback from the Community groups and Civil Defence evacuation centres around the region, who were kept in touch when the power and phones were down and things looked gloomy.

Hawkes Bay - John Newson ZL2VAF

AREC and Čivil Defence (CD) activated the ECC in Hastings which covers the wider Napier, Hasting's area and up through Wairoa, testing the CD radio network up the east coast and set up ready for Cyclone Gabrielle bearing down on them.

The severity of the cyclone caused significant damage including power outages, with the main high voltage substation flooded that fed the wider area.



Gerry ZL2XL providing comms support for LandSAR searching beaches

The rivers rose so high that the bridges between Napier and Hastings became unpassable. This meant a number of AREC/CD communications volunteers were cut off and unable to attend to ECC. In the first 48 hours, only 3 members continued to support the comms in 12-hour shifts with very little sleep. A mammoth effort by these three.

Most of the radio network stayed on the air other than an occasional outage due to power or internet outages which were rectified within a few hours. More details will be forth coming as the teams recover.

Te Tairawhiti – Gisborne Region – Mike MatherZL2CC

Tairawhiti was hit really hard, with all communication going out for a lengthy period. Long before the last cyclone hit the North Island, a small group of radio amateurs (hams) set up emergency communications via "HF" radio to enable the passing of messages from Gisborne area to the outside world.

The hams in Gisborne area were Roger (ZL2RC), Tom (ZL2MOT) and Mike (ZL2CC) and the "out of town" station was Barry (ZL2BJA) in Palmerston North. As soon as Cyclone Gabrielle hit over the night of Monday the13th and 14th morning, the "net" (as they are called) sprung into action. They kept regular contact with Barry ZL2BJA for days and passed on several personal messages via the radio where Barry sent them off as emails to the various people who had requested such information.

As Mike ZL2CC is located in Te Karaka (where some of the worst flooding was and about 80% of the houses had water through them), many messages were sent from the local township, along with reports of damage road conditions etc. as it became known



Main Operating area North

Shore Comms Base

Gerry ZL2XL continuing Comms support for beach searches

It wasn't long before poor Barry ZL2BJA was inundated with requests, as other hams from all over the country were asking him for information about family and friends in the Gisborne and Hawkes Bay areas. Luckily, he was joined by other licenced amateur radio operators listening in and helping send emails etc, and in some cases actually visiting houses to perform welfare checks on their behalf.

Our team used HF radio and it was just as well as the internet was down, power was out and the cell phones dead. The local VHF and UHF repeaters are set up to be used into Bay of Plenty and Hawkes Bay which were hit hard and had their own communications problems as well.

Barry ZL2BJA and others did an excellent job and I know it would have been hard work taking messages and information, passing it on usually by email, and sometimes by any means possible. This is what the amateur radio community are trained to do, and always be ready to help out in an emergency such as this. You may think we are geeks, but we can be useful and helpful geeks.

Bay of Plenty

Similar to Gisborne information is yet to come of Amateurs involvement.

Wellington

At the request of NEMA a large number of AREC members were placed on standby ready to travel to Hawkes Bay and Gisborne if required. They were stood down as communications were slowly re-established.

There are many more stories of the heroic efforts by AREC members and licensed Amateur radio operators and the details will come out in due course. My thanks go to all involved for providing this excellent service to the communities impacted by the cyclone.

Statement ends 21/02/2023

Press release attributed to: Don Robertson AREC CEO ZL2TYR/ZK6EX CEO@arec.nz





