



# AREC info

Monthly newsletter of  
Amateur Radio Emergency  
Communications

**AUGUST 2020**

## Unite against COVID-19

As this issue is being prepared, New Zealand has moved to COVID-19 Alert Level 3 for Auckland, and Alert Level 2 for the rest of New Zealand.

Don Robertston, AREC National Director, provides the following guidance for AREC members over this time.

- Plan ahead and have a kit available to keep yourself safe
- Where possible stay at home
- Carry masks and wear them when social distancing isn't possible or crowded public places such as public transport
- Carry sanitiser or handwashing soap and wash hands regularly
- Wipe down radio equipment, especially microphones, regularly and when handing over to other operators
- Regularly wipe keyboards and mouse in use
- Wipe down tables and other furniture in use regularly
- Where possible Comms Operators should try and isolate from other IMT members during SAROPs
- Explore the ability to operate radios remotely where possible to avoid being in contact with others
- Request IMT and others to use SARTrack to pass messages rather than having walk ups to verbally pass messages
- If SARTrack is not in use, then use message pads or paper to pass messages between operators and IMT (or consider using handheld radios on simplex to pass messages with IMT)
- Consider setting up SARTrack and radios at home stations and connecting into the Local SARTrack operation via the National SARTrack Server where possible

For recreation specific details, visit <https://www.covid19outdoors.nz/>

## NATIONAL DIRECTOR

It has been another busy month in AREC. After our first full month of the new SAR funding, it feels like we are starting to make some real progress.

I would like to thank our volunteers who are driving AREC forward. Over the last month, I have had the chance to discuss AREC business with a number of our people. Some have wanted to learn more about our future, others have wanted to ask questions about our funding, and others have simply called to pledge support and say they like where we are going.

As has been reported previously, Steve Davis ZL2UCX has been leading the re-set of training for AREC. He has set up a working group to look at our manual and supporting materials, and will shortly be engaging with Group Leaders to gather thoughts from the field.

Andy Brill ZL1COP and his working group has concluded the first round of working out what uniform and PPE we should be thinking about – a report has been submitted and we hope to move forward on that soon.

AREC have also been asked to provide input into the technical specification for the portable SAR repeater upgrades that Police are looking to purchase. Changes in radio and battery technology, and (of course) digital voice options mean this will be an exciting project (and hotly debated!).

I am really pleased to see so much enthusiasm for AREC, keep the fire burning and feel free to reach out if you have any questions.



*Don Robertson ZL2TYR, AREC National Director*

## Meet the Team ...

A new feature for AREC.info is Meet the Team. The purpose of this column is to introduce you to the real AREC, that is the individuals that share a common interest and passion that make up our organisation. In this issue, we will introduce you to two of our AREC National crew.

### AREC Technical Advisor – John Yaldwyn, ZL4JY



“The AREC Technical Advisor is a role that many of our members haven’t even heard of, yet is it one that has significant influence” explains Don Robertson, AREC National Director. “In a technical hobby like ours, it is vitally important that we set and agree standards that mean we can quickly deliver fit-for-purpose communications outcomes to our partner agencies to meet their evolving needs”.

“But beyond that”, says Don, “this role is about looking towards the future. With the constant emergence of new technologies and ways of doing things, we need to be able to adapt and embrace in order to bring new ideas forward in a structured and inclusive way”.

The 2018 Caravel Report defines the role of AREC’s Technical Advisor:

- 1) *Provide technical advice, expertise and recommendations relating to radio communications to AREC’s executive leadership team (ELT) and technical project groups.*
- 2) *Plan, certify and oversee the development of AREC’s communications network and service portfolio within an annually allocated budget.*
- 3) *Define, develop and review applications for network equipment allocations between AREC districts.*
- 4) *Provide thought leadership for AREC’s strategic plans for technical and network development.*
- 5) *Recommend the procurement and allocation of hand-held equipment that is fit for purpose, homogeneous and interoperable with AREC’s partners*
- 6) *Plan and coordinate technical activities necessary to integrate AREC’s equipment and frequency assets*
- 7) *Provide technical assistance for AREC’s local sections on request*
- 8) *Maintain registers of frequencies allocated to AREC*
- 9) *Represent AREC’s interests in discussions with regulatory bodies such as the Radio Spectrum Management Group within the Ministry of Business, Innovation and Enterprise.*

Don rounds out his description of the role by saying “technical consideration is very important to how we work together. While in Amateur radio we are all about experimenting, in AREC we need to know what works and understand how to make it go. While some see the technical oversight as getting in the way, rest assured it is here to make sure we stay aligned to provide the best level of service across the sector”.

Those that know John speak of his long background in senior engineering and management roles within communications, IT and related fields. He is a driving force behind the AREC DMR network and remains active in Wellington Amateur Radio clubs.



Above: View from Wellington's Colonial Knob EE122 repeater looking north. *Photo: Steve Jepson ZL2KG*  
Left: Kaharoa (Whakatane) EE196 repeater. *Photo: Whakatane LandSAR*  
Below: Pihanga (Central North Island) EE122. *Photo: Turangi SAR.*



### Amateur Radio Emergency Communications

National Director	Don Robertson, ZL2TYR	021 654 085	National.Director@arec.nz
Deputy National Director	Andrew Brill, ZL1COP	022 354 6451	DeputyDirectorNth@arec.nz
Deputy National Director	Lindsey Ross, ZL4KS	021 116 1686	DeputyDirectorSth@arec.nz
National Training Manager	Steve Davis, ZL2UCX	027 436 1796	Training@arec.nz
Health & Safety Advisor	Dave Wilkins, ZL1MR	021 185 7903	HSW@arec.nz
Newsletter Editor	Soren Low, ZL1SKL	021 813 541	newsletter@arec.nz

*Further information about AREC, including regional contacts, can be found online at [arec.info](http://arec.info)*

## AREC Health, Safety & Welfare Advisor - Dave Wilkins, ZL1MR

Hi AREC Team – I need to introduce myself in my new AREC role. After numerous roles in various organisations including AREC and LandSAR I am now the Health Safety & Welfare (HSW) advisor for AREC.

My day job for the past 25+ years has involved auditing management systems primarily in regard to getting things right (Quality ISO 9001) but also in ensuring both the Environment (ISO 14001) and Occupational Health & Safety (ISO 45001) are correctly addressed through the organisation's management system. As a result, I've seen the best and sometimes the not so flash examples of how to run an organisation in an integrated manner.

My focus in AREC will be to concentrate on helping all members and their supporting management to implement best HSW practice whilst keeping things as simple as possible. It isn't the thickness of the HSW manual that keeps us all safe; it is our attitude, our ability to think, plan and anticipate possible

adverse outcomes and to then fix problems before they occur.

We all need to look after each other, to ensure we don't harm anyone and that we all come home after our days - out helping others.

In simple terms 'I've been there and seen that' and managed to survive. I'm here to help you all so if you need HSW advice just email – [hsw@arec.nz](mailto:hsw@arec.nz)

AREC National Director, Don Robertson, adds "the health and safety of our people is a very important aspect we need to manage going forward. Societal and legislative changes mean that we need to be responsible for ourselves and each other, and make sure we adhere to the appropriate policies and procured of those we work with." Don continues "I'd also like to draw your attention to the word welfare; it is there on purpose and is an element that I feel strongly about. Dave's background and his pragmatic approach are a significant asset to AREC."



### Health, Safety & Welfare Message

*By Dave Wilkins, ZL1MR*

Whilst we haven't quite made it into Spring yet, and COVID-19 is still with us, there is the potential for an increase in outdoor activities. Also there has been a great to see boost in AREC activities including training.

Just remember to start putting best HSW practices in place. Stop – Think – Plan – Communicate – Act, then repeat, is the easiest way to get into the habit of keeping safe.

Also don't forget the role of 'Welfare' in keeping us a safe. Look after your personal health and fitness, eat properly, stay hydrated, don't over indulge (well not too often) and monitor your fatigue levels.

For example, the COVID-19 issue forced me to get out of the house and go for a walk most days. When I first got exercising again, I was quite shocked to see how unfit I had become. After a week or two of regular walking for 20 minutes per day (only 2km around the block – it does include a good hill section) I was getting back to a good level of fitness, no longer puffing like an old steam engine when I got to the top of the hilly part.

So, if you can, get off your bum and go for a walk every day. Tomorrow you may only make it the letterbox and back, after a few months – who knows, you may be sprinting to the dairy to pick up the milk or get your Lotto ticket!

### AREC Patches Available!

Patch \$6 each plus postage available from:  
Christchurch AREC Group  
PO Box 1733  
Christchurch  
Or Contact [treasurer@chc.arec.net.nz](mailto:treasurer@chc.arec.net.nz)



## AREC in Lockdown

By Andy Brill, ZL1COP

*Last month, AREC Deputy National Director North, Andy Brill, provided an overview of the Auckland Emergency Management radio network, and the role AREC play in supporting communications across the region. This month, Andy explains how Auckland AREC continue to provide service to Auckland Emergency Management during lockdown.*

During the latest COVID-19 Alert Level 3 in Auckland we are continuing the weekly CDEM radio sked with those groups that are able to access their radios, and for the key infrastructure agencies. Although face to face activities at the branch are temporarily curtailed the radio net will be maintained by Kieran ZL1GER and Andy ZL1COP operating from their homes.



Above: Andy ZL1COP conducting the weekly CDEM radio net during the COVID-19 lockdown from his home QTH using one of the Br29 AREC portable base units.

### **A bit about some of the Rodney Community Response Groups we work with on the ESB CDEM net:**

The **Mahurangi East** group is located at Snells Beach on the Mahurangi peninsular, 8km West of Warkworth. The group operate from the Snells Beach Community Constable's office which is manned during the week by Police volunteer staff, some of whom are also part of the CRG. The CRG radio operations are managed by Frank Babbott ZL1ABE (a.k.a. "Chip"). The base is equipped with a Motorola ESB base radio for comms with Auckland and a PRS base station for local UHF communications amongst the CRG members.

**Scotts Landing** is a small community at the end of the Mahurangi Peninsular. Access is via a single road, making the community susceptible to being isolated the road becomes impassable. The CRG at Scotts Landing is currently without a permanent home as the council owned building in which they were previously based has been converted to accommodation for the local park ranger. Until a new home is found their ESB, VHF marine and PRS base station equipment is in storage and they are maintaining their comms from members' homes using a portable setup with a Motorola radio in a Pelican case and a Slim Jim antenna loaned by AREC.

**Warkworth** is the major population centre in the Rodney area and the local CRG is based at the RSA building in the centre of town.

They are well equipped with two Motorola ESB radios, a PRS base station and a number of Vertex UHF hand-held radios programmed for comms on both PRS channel 28 for local members and a number of UHF simplex channels licensed to Auckland Emergency Management for use with their volunteer Initial response teams. Backup power is available from a 6kW generator.

**Mahurangi West** CRG covers a remote coastal area South of Warkworth. They are also susceptible to isolation by road, and the area has fragile phone, cellphone, power and internet service. The residents are widely dispersed in a number of coastal bays. The community has a comprehensive emergency plan and the communications team is led by Cluny ZL1MAC and Rob ZL1EMR.

They operate from a base located in a shed adjacent to the local hall. Power is supplied by a generator and Comms are via the ESB03 repeater on Mt Tamahunga. PRS channel 10 is used to communicate with CRG members in most of the area. The terrain means that a number of the population centres are out of UHF range, and they are currently experimenting with 26MHz CB for local comms and also considering a passive repeater using back to back UHF yagis to assist in getting a signal over a ridge line and into a UHF dead spot. Cluny and Rob also operate 2 metre VHF via the 730 Rodney repeater and VHF simplex.



Above: Warkworth CRG radio operating position within the RSA

**Branch 29 AREC portable base station unit:**



Above: Tait T2020 VHF programmed for local 2metre, CDEM, SAR and Marine VHF.  
Tait TM8200 UHF programmed for amateur 70 cm, PRS and AEM special purpose UHF channels.

## New recruits for the CDEM net

Recently several local community response groups around Auckland have indicated interest in joining the existing network operated by North Shore Branch AREC. These are at Puhoi, Devonport, Glorit (near Helensville) and Greenhithe. We will be working with them in the near future to get their comms set up and provide some training in radio procedures and use of their equipment.

As always volunteers from the amateur radio community are welcome to help out with both operations and training.

## Situations Vacant – Microsoft 365 Administrator

AREC National Director, Don Robertson, would like to call for a volunteer to provide administration support and maintenance for the AREC Microsoft 365 Subscription.

This could include user support, 365 administration, security configuration, Teams and Sharepoint subscription.

Anyone with skills in Microsoft 365 who is interested should send through to the National Director their expression of interest for this role outlining their experience and knowledge to [ND@arec.nz](mailto:ND@arec.nz).

## NZART & AREC AGM's

A reminder that (at the time of writing) the NZART and AREC AGM's are planned to take place on Saturday 5 September at Brentwood Hotel, 16 Kemp Street, Kilbirnie, Wellington. The NZART AGM will start at 10.30am, AREC AGM will follow.

Both AGM's are free, however you must be an AREC member to attend.

## TM8/TM9xxx Radio Interface

AREC in Christchurch found that they needed an interface unit to easily and reliably connect our TM8/9xxx series radios to computers for:

- Monitoring (recording) of radio traffic
- Connection of RS232 GPS based data to software applications such as SARTrack ([www.sartrack.co.nz](http://www.sartrack.co.nz))

Richard Smart (ZL4FZ) has designed and built an interface device to provide isolated audio signals to connect to laptops for recording of radio transmissions and provide a reliable means of connecting the GPS tracking signals from the GPS equipped radios to the PC's for use with the SARTrack.

### Description

The interface adapter is designed to condition and buffer the signals from the Tait mobile to simplify connections for audio recording and data access.

This interface provides:

- Transformer isolated connections
- Audio level adjustments to suit microphone or line levels signals
- Audio bandpass filtering to reduce noise
- A RS232 line driver to for reliable connection of data in/out to Serial to USB adapters
- Single cable connection to the radio for audio, data and power
- 3.5mm Audio out connection for quick and easy connection to a laptop
- DIN-8 connection for 4W4W connection to other devices (includes audio in/out and PTT)



### Cost

Assembled units \$250.00 ea.

PCB, parts list and instructions \$ 50.00 ea.

For more details contact Richard Smart – email [rsmart@netaccess.co.nz](mailto:rsmart@netaccess.co.nz)

## AREC Access to LandSAR Courses

### *An update from AREC National Training Advisor – Steve Davis, ZL2UCX*

We have been working with LandSAR to allow AREC members who are not members of a LandSAR Group to access LandSAR Training courses. They are working on new student management systems which will make things easier, but in the meantime, we have a process to use as an interim solution.

A District Manager or Group Leader can determine courses in their area either from the LandSAR Website if they have a login, or from the list circulated from time to time. Members interested in courses should contact their Group Leader or District Manager who will pass details on to the National Training Advisor ([training@arec.nz](mailto:training@arec.nz)). The National Training Advisor will work with LandSAR to have the AREC member added to the LandSAR Website as an Associate and added to the list for the course. Sometimes there may be a waiting list etc. Minimum information needed from Members/Group Leaders/District Managers to register an attendee: Full Legal Name, date of birth, e-mail address and the requested course

Once the AREC member has been added an Associate they will get Login details and other information from LandSAR about the course, and to complete the enrolment process.

AREC members will only be eligible to enrol in the 1000 series numbers courses. This is due to these events being SAR sector funded, the 2000/3000 series events are internally funded by LandSAR for their members. AREC members who are also full members for LandSAR can access their courses. One last requirement is that the AREC member must be a New Zealand Citizen or Resident.

### Current Courses (as at 6 August 2020)

Course Start	Course Type	Course Number	Location
5-Sep-20	RCOM - Radio Communications	1202	Christchurch
12-Sep-20	SRM - Stretcher Management & Rope Safety	1208	Greymouth
19-Sep-20	RCOM - Radio Communications	1209	Nelson
19-Sep-20	SART1 - SARTrack User Training	1210	Canterbury
19-Sep-20	SSE - Searching Suburban Environment	1211	Dunedin
19-Sep-20	TCS - Tracking Core Skills	1212	Horowhenua
20-Sep-20	SART2 - SARTrack Technical User Workshop	1213	Canterbury
26-Sep-20	ST - Search Techniques	1148	Whakatane
26-Sep-20	FTL1 - LandSAR Team Leadership Skills (1 day)	1197	Kaikoura
26-Sep-20	4WD2 - 4 Wheel Drive (2 days)	1214	Greymouth
3-Oct-20	SSE - Searching Suburban Environment	1152	Wellington
3-Oct-20	TWE - Tracking in the Wilderness Environment	1215	North Otago
10-Oct-20	SSE - Searching Suburban Environment	1174	Methven
17-Oct-20	SSE - Searching Suburban Environment	1216	Motueka
17-Oct-20	ST - Search Techniques	1217	Wairarapa
17-Oct-20	SRM - Stretcher Management & Rope Safety	1238	Whakatane
31-Oct-20	SRM - Stretcher Management & Rope Safety	1127	Omarama
31-Oct-20	SRM - Stretcher Management & Rope Safety	1136	Te Aroha
31-Oct-20	SSE - Searching Suburban Environment	1219	Wakatipu
7-Nov-20	RFS - River & Flood Safety	1220	South Canterbury
13-Nov-20	Cave2 – Cave SAR Rescue - Lvl 2	1201	Takaka
14-Nov-20	NAVMC - Navigation - Map & Compass	1221	Motueka
14-Nov-20	SART1 - SARTrack User Training	1222	Wairoa
21-Nov-20	RFS - River & Flood Safety	1108	Hanmer
21-Nov-20	TCS - Tracking Core Skills	1138	Tararua
29-Nov-20	RFS - River & Flood Safety	1139	Wakatipu
5-Dec-20	RFS - River & Flood Safety	1223	Westport
12-Dec-20	RFS - River & Flood Safety	1224	Marlborough

Highlighted courses are those most likely to be of interest to AREC Members (Suburban Search for those involved in WanderSearch response). AREC members with a suitable background, interest and who meet pre-requisites may be able to get places on the other courses in some circumstances.

Any queries can be directed to: **Steve Davis, National Training Advisor, [training@arec.nz](mailto:training@arec.nz)**



# AREC Section Leaders Net

Third Monday of each month

Now on 3.550MHz USB at 20:30hrs, and AREC DMR Network, ZK Talkgroup at 21:00hrs

For COVID-19 advice about outdoor activities, go to <https://www.covid19outdoors.nz/>

Guidance for personal outdoor recreation during COVID-19

The **Auckland Region is currently in Alert Level 3** and the rest of NZ is Alert Level 2.

You can use this site to find activity-specific guidance and resources, which have been updated to reflect the varying alert levels.

Find out what activities you can do using the search function below

Please select your area

Please select or type your activity

If you have questions, errors to report or suggestions, please email us at [covid19@mountainsafety.org.nz](mailto:covid19@mountainsafety.org.nz)

## Health and Safety is the responsibility of us all

### Remember to:

**STOP** – In your mind you need to be constantly pausing and evaluating no matter the task or the location.

**THINK** – You need to think about what you see. Identify Hazards and associated Risk (the chance of it going wrong)

**PLAN** – Talk to others, compare notes, make a plan

**COMMUNICATE** – Brief the plan and plan to brief others as they arrive.

**ACT** – Execute the plan, monitor and review progress.

As required – **STOP** again and then re-Think, re-Plan, Communicate & re-Act.