



# AREC info

Monthly newsletter of  
Amateur Radio Emergency  
Communications

JANUARY 2020

## CIMS, Third Edition

The Coordinated Incident Management System (CIMS) 3rd edition represents New Zealand's official framework to achieve effective co-ordinated incident management across responding agencies. From 1 July 2020 the 3rd edition replaces all previous versions of CIMS.

More information, and links to copies of the new document can be found here <https://www.civildefence.govt.nz/resources/coordinated-incident-management-system-cims-third-edition/>

## ZL4SB Recognised

David Stevenson ZL4SB was recognised for 40-years of service at a LandSAR event in Dunedin during November.

Lindsey Ross, AREC Deputy Director (and MC on the night) commented "it is great to see how our members skills and dedication make a real difference to the organisations we work with".

More here <https://www.odt.co.nz/news/dunedin/40-years-communications>

## AREC Announcements

Don Robertson ZL2TYR, AREC National Director is pleased to announce the appointment of Steve Mercer ZL2YD to the AREC Health & Safety Advisor role.

"The evolving landscape in the Health & Safety space means we need to have a professional and pro-active approach within our organisation, and Steve's appointment will help us deliver that" says Don.

## Kordia National Systems Award

The Wellington VHF Group is running this year's award that goes from Saturday 21 December 2019 until Friday 31 January 2020. The award is based around operating from Telephone Exchanges. Contact can be made on the analogue National System or ZL Talkgroup on the ZL-TRBO DMR network. Questions to [info@vhf.nz](mailto:info@vhf.nz)

## Contact Details

We had a number of e-mails bounce back from the December newsletter distribution. If you have changed your details recently, please advise [arec.newsletter@gmail.com](mailto:arec.newsletter@gmail.com).

## NATIONAL DIRECTOR

Happy New Year! I hope you all have or are having an enjoyable break over the holiday season.

I would like to thank all our AREC volunteers for the last 12 months. AREC is reliant on your voluntary efforts to keep our repeaters and equipment running and to provide the services to our SAR and emergency and community partners.

AREC support of a number of public events throughout the country service the purpose as both AREC exercises and training as well as providing a public service. Again, thanks again for your willing participation.

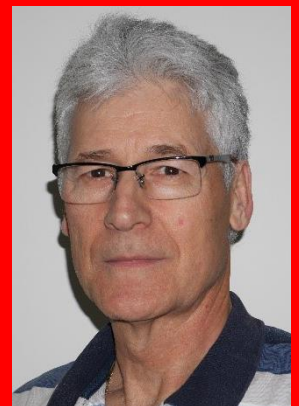
Thanks go to Soren Low for implementing the Tait EnableFleet online radio programming system. This has been deployed in conjunction with LandSAR under our Service Level Agreement with them to enable nationally consistent programming of the TM/TP9300 radio fleet.

The system both simplifies and speeds up the programming of the radios. AREC has access to this same system for programming our fleet as well and there will be more on this in the next newsletter.

I am pleased to report that we will be continuing the expansion of the AREC DMR UHF network this year. See article in the newsletter for more on this.

There has been a delay in the processing of the funding business case through NZSAR to Ministry of Transport. This is now back on track and we are likely to hear the result in mid to late February now.

Here's to a quiet and safe holiday period.



Don Robertson, ZL2TYR

### Amateur Radio Emergency Communications

National Director	Don Robertson, ZL2TYR	021 654 085	<a href="mailto:zl2tyr@qsl.nz">zl2tyr@qsl.nz</a>
Deputy National Director	Dave Wilkins, ZL1MR	021 185 7903	<a href="mailto:dfwilkins@outlook.com">dfwilkins@outlook.com</a>
Deputy National Director	Lindsey Ross, ZL4KS	021 116 1686	<a href="mailto:dunedin.lindsey@gmail.com">dunedin.lindsey@gmail.com</a>
Newsletter Editor	Soren Low, ZL1SKL	021 813 541	<a href="mailto:soren@outlook.co.nz">soren@outlook.co.nz</a>

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

# NZART Portable Activity Day, Wednesday 1 January 2020

After a successful 2019 event, 2020 marked the second NZART Portable Activity Day. The purpose was to encourage people to get outdoors and get on the air! And, from the feedback received so far, it was another great day with a number of Amateurs, including a number of AREC members, joining in.

## NZART Portable Activity Day

By *Lindsey Ross ZL4KS, AREC Deputy Director*

I am only equipped for portable operation on 80m so I thought that I would join the NZART Portable Activity Day as a mobile operator.

I took a drive to a nice quiet location at Scroggs Hill, South of Dunedin where I setup my station. A dipole fed with open wire feed line was attached to the top of my portable mast and connected to a LDG Z100 auto Tuner via a balun. The beauty of this arrangement is that I am now able to tune this antenna to pretty much any HF frequency I wish.

My mobile HF radio is an Icom 706 mk1 and after tuning up on 40m SSB I managed to hear some reasonable South Island stations and a few North Island stations. While I did not work many stations, I found the activity a worthwhile opportunity to press my mobile equipment into action and I enjoyed working a few SOTA stations. ZL4CBG, ZL3RIK, ZL2TW, ZL3GIG and ZL2AJ.



## Operating Portable

A QRP transceiver and simple wire antenna are all that are generally required to get you started operating portable. The Yaseu FT-817 / FT-818 models, and the Elecraft KX2 and KX3 radios are very popular amongst portable operators. All have internal batteries, and the Yaseu models also have 2m and 70cm coverage.

Simple wire antennas for HF include the popular linked-dipole or end-fed through a tuner (the Elecraft radios have built-in tuner options).

Building a roll-up "slim-jim" for 2m / 70cm from TV ribbon is a good way to extend coverage from your handheld radio.

The attraction of taking a transceiver, a battery and a length of wire to a local park or a remote location has kept generations of Ham's challenged.

With radios and batteries getting smaller and lighter, portable operation has never been easier than it is today. However, there is something to be said for those who like to use haul vintage equipment, such as the ZC1, to really appreciate the history in our hobby.

NZART Vice President, Warren Harris ZL2AJ, says that portable activities provide a unique perspective on amateur radio. "In the shack, you often have everything you need close at hand to fix any problems that arise with power or your antenna, in a portable situation you only have what you've brought – so it forces you to be very creative".

Warren is the Summits on the Air (SOTA) ZL Association Manager. SOTA is an award scheme that encourages portable operation from summits (hill-tops) and rewards both activators (hill-climbers) and chasers (those who work the activators).

Since bringing SOTA to New Zealand in 2015, it's following has grown steadily with over 20 regular activators and a strong group of regular chasers.

"SOTA appeals to those who love the outdoors, as well as those who like doing more with less in radio" explains Warren, "so it is no surprise that AREC members are well represented in SOTA".

"Having a basic knowledge of how to operate off-the-grid is an excellent skill for AREC members" adds Don Roberston ZL2TYR, AREC National Director. "I was really pleased to see the excellent turnout this year" he says.



### Summits on the Air (SOTA)

Summits on the Air, or SOTA, originated in the UK in the early 2000's. It is an awards program that encourages ham radio operators to set up portable stations from hilltops and work other hams to gain points.

Points are awarded to these portable stations ("activators") and also to those who contact them ("chasers"). There are some simple rules – these outline the requirements for qualifying "summits", what constitutes the "activation zone" and other details. Importantly, two key points to know are firstly that the final access must be non-motorised (so on foot or bicycle are OK) and that you need to be powered from a portable power source which excludes fossil-fuel generators.

So, in real terms, this means that you can drive to the summit (where you can), but your station needs to be set up away from the vehicle and you cannot use it to power the rig. And while there are some drive-to summits, the majority need some hiking. So that means a long, hard think about what you actually *need* to work from the top of that hill.

SOTA has been active in New Zealand since 2015, NZART Vice President and ZL SOTA Manager, Warren Harris ZL2AJ, comments "SOTA has been well embraced by the ZL Amateur community with a growing number becoming active". Early adopters such as John Shaw ZL1BYZ, Andrew White ZL3CC (now sadly silent key), Wynne Morgan ZL2ATH and Warren's wife Emma have blogged about their experiences, including detailing the summits they have visited, how to get there and what to expect on the hike. "This has made it easy for new comers to get involved" says Warren "and gives them the opportunity to find summits that meet their fitness levels or time availability".

SOTA is supported by some excellent resources including [www.sota.org.uk](http://www.sota.org.uk), [www.zl-sota.org](http://www.zl-sota.org) (which includes sign-up details for the ZL-SOTA e-mail list) and ZL-SOTA on Facebook. There are also a number of phone apps available for activators and chasers to be alerted when activations are taking place.



*Wynne Morgan ZL2ATH activated SOTA summit ZL3/MB-194 for NZART Portable Activity Day. This Marlborough summit is 1,015 metres high and was accessed by Wynne on his electric mountain bike!*

### **Parks on the Air (POTA)**

New to ZL in 2019 is the Parks on the Air programme. This programme was originally launched in the United States and is for “portable amateur radio operations that promote emergency awareness and communications from national and state/province level parks”.

Glenn Carss ZL1MY is the ZL Regional Coordinator for POTA and explains “POTA is a concept that will suit us in ZL because of the number of regional and national parks that are accessible to many. POTA will attract Amateurs of all ages and physical abilities as you can activate portable within the park or from your car or camper van in the carpark”.

While POTA is still getting started in ZL, there are already a small number of regular participants with more joining all the time. “The idea of heading out to a park, and getting on the air from either your vehicle or the nearby picnic table is very relevant to AREC and this is a programme that is likely to appeal to our members” says Don Robertson ZL2TYR, AREC National Director.

POTA is supported by a number of resources, a great place to start is the [www.parksontheair.com](http://www.parksontheair.com) website. There is also a ZL-POTA Facebook group to join.

For Activators, Glenn has developed an Android app that shows where the parks are and information about them available from the Play Store <https://play.google.com/store/apps/details?id=pota.maps.information>, Hunters can be kept up to date on activations through the Slack app.

For more information, contact Glenn ZL1MY at [glenn@zl1my.co.nz](mailto:glenn@zl1my.co.nz)



*Glenn ZL1MY operating a Parks on the Air (POTA) station from the Waitkaere Ranges, near Auckland. He is using a Yaseu FT-897D powered by a deep-cycle marine battery, the pole is a 12m Spiderbeam fibreglass pole which supports a linked dipole.*

## Expansion to ZL-TRBO AREC DMR Network

AREC management have approved the continued expansion of the DMR network. Presently there are 11 repeaters in the UHF 70cm network:

Auckland, Hamilton, Manawatu, Kapiti, Porirua, Wellington, Wairarapa, Tasman, Christchurch, Dunedin, and Oamaru.

There are also three DMR repeaters on VHF for All-of-SAR use (which includes Police, LandSAR, and AREC) on the AREC licensed EE band frequencies.

We are planning to add three more repeaters for Hawkes Bay, Tauranga and Whangarei. This will make 18 operational repeaters once implemented.

Thanks go to John ZL4JY in particular for his engineering design, provision and support of the network. Thanks also to the rest of the team and local AREC Branch sections supporting the DMR network.

AREC management have also recently approved the refund of the annual DMR repeater license fee for those Branches that request it.



The new AREC DMR UHF equipment for the Hawke's Bay site.  
Photos: Steve Jepsen ZL2KG

ZL-TRBO AREC DMR Repeater Network				ZL-TRBO Channel Details			
Location	Repeater Output	Repeater Input	Status	Colour Code	Talkgroup		Description
					Number	Name	
Auckland	439.7000	434.7000	On air	1	530	ZL	All NZ, General
Hamilton	439.7250	434.7250	On air	1	8	ZK	All NZ, AREC
Tauranga	439.7500	434.7500	Expected live 2020	1	9	LCL	Local Area
Hawke's Bay	439.2375	434.2375	Expected live 01/20	1	1	WW	Worldwide
Manawatu	439.7125	434.7125	On air	1	13	WWE	Worldwide English
Kapiti	439.7000	434.7000	On air	1	113	UAE1	User Activated English 1
Porirua	439.7500	434.7500	On air	1	123	UAE2	User Activated English 2
Wellington	439.7250	434.7250	On air	1	119	UAA1	User Activated 1 (any language)
Wairarapa	433.8250	438.8250	On air	1	129	UAA2	User Activated 2 (any language)
Tasman	439.6875	434.6875	On air	1	153	DMRpSP	DMR Plus South Pacific
Christchurch	439.7000	434.7000	On air	1	99	Simplex	Simplex
Oamaru	439.2375	434.2375	On air				
Dunedin	439.7000	434.7000	On air				
DMR STSP	438.7500	433.7500	Portable Repeater				

**Radio Settings:**  
 Use Timeslot 2 for ZL and Local and Timeslot 1 for all others  
 Admit Criteria - Colour Code Free  
 Automatic Registration Service (ARS) - Disabled  
 IP Site Connect (IPSC) - Enable

*Users outside the network coverage area can connect using a local or personal hotspot connected to DMRplus reflector 4850 as detailed on the DMR section of the AREC.info website.*

Further information: <http://arec.info/arec-dmr-network/>

## Jock White Field Day 2020

This annual contest is named to honour Jock White ZL2GX, NZART Contest and Awards Manager for over 40 years, for the service he gave to NZART over that time. Held on the last full weekend in February, this year's contest will take place on Saturday 21 and Sunday 22 February 2020.

The contest promotes NZART Branches and clubs to establish effective temporary HF radio stations, to work as many other New Zealand stations as possible and to learn to operate in an abnormal situation in less than optimal conditions. A perfect AREC exercise if you're branch isn't already involved!

# Situations Vacant

The AREC National Director calls for expressions of interest for the following voluntary positions:

## AREC National Training Advisor

The role encompasses:

- Coordinate a training advisory committee.
- Coordinate the design and implement an AREC training competency framework.
- Research and revise AREC's existing beginner, intermediate and advanced training curriculum based on AREC's and members' requirements.
- Interact and liaise with AREC's partners to ensure consistency in course material and content.
- Ensure that trainers have the necessary skills and experience to deliver the course materials and content in a volunteer-based environment.
- Instil a "Train the Trainer" approach to building and maintaining AREC members' competencies and experience.
- Work with District Managers and Group/Section Leaders to ensure AREC team member competencies through access to appropriate training and experience.
- Develop training delivery plans that ensure training coverage and quality are maximised.
- Develop an annual training budget for AREC approval and track expenditure against delivery.
- Provide input and advice to support AREC's Senior Leadership Team's strategic planning activities.
- Research and propose new training requirements to reflect new SAR standards, technologies and practices.
- Develop and maintain a webpage for AREC members to review their minimum training requirements including refresher and upgrade courses

## AREC National Project/Service Coordinator role.

The role encompasses:

- Assist the delivery of AREC's annual project plan and budget.
- Provide governance, oversight and reporting on the projects and services.
- Take submissions for new AREC project/funding requests and present to the Management for approval.
- Provide support, coordination to the AREC project owners/managers and teams.
- Oversight of the distribution and installation of AREC equipment and its ongoing maintenance.
- Provision of communications equipment maintenance services for other SAR organisations such as LandSAR.
- Implementation and delivery of a battery replacement programme for AREC and LandSAR.
- Managing the AREC asset register.

Anyone interested in learning more about these positions should contact Don Robertson ZL2TYR, AREC National Director at [zl2tyr@qsl.nz](mailto:zl2tyr@qsl.nz) or 021 654 085.

### 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.**