

# .info

Monthly newsletter of Amateur Radio Emergency Communications

## **MARCH 2022**



### AREC.info is the newsletter of Amateur Radio Emergency Communications, the public service arm of the New Zealand Association of Radio Transmitters. AREC.info is published monthly (except January).



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		Regional Manager South

#### Cover:

Paul Rennie ZL2RE and Graeme McKay ZL1BDS with the Marlborough Civil Defence truck supporting LandSAR at Rakautara (near Kaikoura) looking for a Kaikoura man who went missing in late February.



**AREC Administration – Debbie and Annalise** admin@arec.nz, 04 939 2189

Newsletter Editor - Soren Low, ZL1SKL newsletter@arec.nz, 021 813 541

**National Training Advisor** Steve Davis, ZL2UCX

Lindsey Ross, ZL4KS

**Project Coordinator** John Murphy, ZL2XJ

training @arec.nz, 027 436 1796

RMSth@arec.nz, 021 116 1686

projects @arec.nz, 021 0807 5075

**Health & Safety Advisor** Dave Wilkins, ZL1MR hsw@arec.nz, 021 185 7903

Treasurer – Evan Sayer Treasurer@arec.nz, 021 612 164

#### **District Managers:**

Northland/Auckland - Richard Gamble DMAuckland@arec.nz, 021 729 270

**Bay of Plenty – Karl Hunt** DMBOP @arec.nz, 021 167 0477

**Central – Brian Purdie** DMCentral@arec.nz, 027 321 4470

Eastern - John Newson DMEastern @arec.nz , 027 230 3642

Wellington – John Murphy DMWellington@arec.nz, 021 0807 5075

Tasman - Paul Rennie DMTasman@arec.nz, 027 458 9740

Canterbury - Don MacDonald DMCanterbury@arec.nz, 027 551 6683

Southern - Lindsay Eunson DMSouthern @arec.nz, 027 432 5136

#### AREC Needs Your Feedback

As I briefly mentioned last month, AREC is planning to conduct a survey of our members on their voluntary participation in AREC. The last survey of our membership was carried out in 2019. The feedback we received was very informative and the analysis culminated in a number of recommendations and actions. These recommendations and actions were used as input into the creation of the successful business case to the Aotearoa New Zealand Search and Rescue (NZSAR) Council for increased funding. The business case set out a number of project initiatives which are being implemented. Thank you to all those who responded back then to the survey. Your input was extremely valuable and enable AREC to embark on a significant change programme which is well underway.

A lot of change has already been made and is continuing. It is time to check in again with our members to see how we are doing, and we encourage all members to participate in the survey this time round. This is due to commence in April 2022.

As part of our partnership in the Search and Rescue (SAR) Sector AREC has been working jointly with the other SAR Sector Agencies, NEMA and Aotearoa New Zealand Search and Rescue (NZSAR) to have a common set of demographic and core volunteering questions. This is to enable not only the ability for AREC to get feedback but also combine our data with the other agencies data to obtain a high-level overview of the state of volunteering throughout the sector. In addition, AREC will have a unique set of questions that are specific to AREC to cover the areas that are different from the other agencies.

The agencies involved are AREC, Coastguard New Zealand, LandSAR New Zealand, Surf Life Saving New Zealand, MEMA New Zealand Response Teams (NZ-RTs). A New Zealand Survey company called Ask Your Team Ltd has been engaged by NZSAR who is sponsoring the survey.

If you are a volunteer across multiple search and rescue organisations, you may receive an invitation to participate in a survey for each organisation. These invitations may come via email, SMS or QR codes. We encourage you to participate in all these surveys, but please respond according to your volunteer role at AREC.

Please be assured that your responses to the survey are completely confidential - it is not possible to identify any responses made by an individual. All the results from this survey are anonymised and reported on at a high-level to tell the story of the SAR volunteer sector and help us make things better.

Thank you and remember that your participation in this survey will help to improve your experiences and those of all future volunteers.

Keep a look out for the survey heading to your email box in April!

#### **NZART Conference Postponed**

In case you haven't seen it, the NZART Conference to be held on 11-12 June has been had to be rescheduled to 10-11 September due to COVID-19 restrictions delaying renovations at the James Cook Grand Chancellor Hotel meaning the space won't be ready for June. The new venue will be the Bentwood Hotel which is walking distance from the Wellington airport. The AREC management meeting will be held on Friday 9 September at the same venue.

#### **Tech Innovation Lead**

I would like to welcome Philip Sharp ZL1PSH to the team in this recently advertised role. Some will know Philip as the new editor of *Break-In* and QRP newsletter the *5-Watter*. Thank you for stepping into this role Philip.

Until next month, stay safe.

Don, ZL2TYR

Chief Executive Officer, AREC



## **Meet the Team**

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

The newest appointment to the AREC National Team is Dr. Philip Sharp ZL1PSH into the newly-established **Tech Innovation Lead** position (originally titled AREC Innovation in Technology Leader).

A decision was made last year to split the Technical Advisor role held by John Yaldwyn ZL4JY with John now holding the Licensing & Technical Advisor portfolio.

AREC CEO Don Robertson explains "the MOU we have in place with LandSAR, and the work we are doing with NZ SAR and other partners has shown that we need a different approach to our technical innovation. For AREC to remain relevant into the future, we need to think differently about solving communications challenges in a way that can be easily accessed, understood and stoodup by our members."

"While there is a strong technical component to this role, we need strong leadership to bring together the AREC technical gurus into a Technical Working Group (TWG) focussing on priority projects. We also need to think more broadly – including how to we deliver appropriate value-add services to our partners and provide an environment where our members can continue to grow their technical and operational capabilities" Don adds.

Philip hasn't been an Amateur for long, being licensed in February 2021 – but has quickly jumped head-first into the hobby and is an active member of North Shore Branch 29 and its AREC group. "I strongly believe in lifelong learning and the need to get involved to both learn and contribute" says Philip.



Philip is currently a half-time Senior Lecturer in the Department of Mathematics in the University of Auckland. In his time in academia, he has held both teaching and management roles including Chair of the IT Committee for the Department which meant working closely with IT staff to develop the department's technology strategy and delivery. He holds a BSc in Maths and Physics, BSc (Hons) in Maths, and PhD in Maths.



Outside of work, Philip is very much at home in the outdoors. He is passionate about long-distance walking as well as having been a Bushcraft instructor for four years, and an Outdoor First-Aid instructor for two years, both with the New Zealand Mountain Safety Council. He was also a member of NZ-RT5 for two years and was deployed to Christchurch in 2011 with the group.

Philip is a keen SOTA activator and chaser, and can be found on summits most weekends.

"I see this role as an exciting opportunity" says Philip, "I have enjoyed learning the technical aspects of the hobby and getting to know many Amateurs who have a wealth of skill and experience and are only too happy to share."

Welcome to the team Philip!

Visitors to Wellington may be surprised to see AREC FM show on their in-car display, John Yaldwyn explains ...



Wellington AREC and VHF Group members Peter ZL3TC, Steve ZL2SJ, and John ZL4JY have developed an interesting trio of low power FM stations at Porirua, Kapiti, and Wellington operating under the AREC FM banner to carry an officially sanctioned BBC World Service feed. The system operates at no cost to AREC and was built using quality ex-broadcast equipment.

The stations were put on the air to demonstrate the ability of AREC to transmit information over the normal FM band to the general public on behalf of Civil Defence in the event of an emergency that takes out local broadcast transmitters or affects the ability for local CD authorities to communicate in a timely manner with commercial radio studios which are usually remotely located in Auckland. This is another opportunity for AREC, as the public service arm of the New Zealand Association of Radio Transmitters (NZART), provide communications in case of emergencies. These three simulcast network stations have been built by amateur radio enthusiasts with a strong interest in quality programme content and excellent technical transmission standards.

AREC FM is a low power FM network established under the Radiocommunications Regulations (General User Licence for Low Power FM Broadcasting) Notice 2010. This provides for a general user licence granted to allow



transmissions intended for local-area broadcasting, known as LPFM broadcasting.



87.6MHz - Porirua.



107MHz - Wellington.



The stations transmit in mono from sites overlooking Wellington, Porirua, and near the Hemi Matenga in the hills above Waikanae. Transmission from Porirua started in March 2018 on 87.6 MHz with coverage tests and Waikanae followed in August 2018 on 87.9 MHz.

The Wellington station is on 107.0 MHz. The LPFM Radio Regulations limit unlicensed stations to low power, operating in the guard bands at the edges of the normal broadcast band. External antennas are required for best reception results.

You can read more about AREC FM at http://AREC.fm please take the time to comment on coverage by writing to <a href="mailto:arec.fm@xtra.co.nz">arec.fm@xtra.co.nz</a>.

And yes, that is Jim ZL2BHF announcing on the hour!

At left are simplified plots of the coverage. They are more or less accurate for the coverage of State Highway 1 but optimistic in terms of the terrain away from the major traffic corridors. As AREC FM operates under the LPFM rules the sites have been very carefully chosen to cover SH1 and vehicles, there is not enough power for blanket coverage.

AREC FM carries the BBC continuously with only the legally required station ID at the top of the hour. On the hour, the BBC programme is ducked 6 dB while the AREC FM announcement is sent but the BBC programme underneath remains audible. The ID is about 15 seconds long and occurs exactly on the hour, the BBC time pips usually follow a few seconds after the ID due to the internet delays from the UK to NZ.

All three AREC FM transmitters have RDS with the Alternative Frequency (AF) option to enable RDS equipped receivers to automatically retune to the different frequencies when driving around the greater Wellington area. With one memory set to AREC FM on a car radio display and the programme will be found by the radio within the coverage areas.

For the technically minded, the Program identification code (PI code) for AREC FM is 9400.

The team are waiting for the new major highway project, Transmission Gully, to open so that coverage can be reviewed. It is possible that a fourth station will need to be established to cover the expected gap in highway coverage between 87.6 Porirua and 87.9 MHz Waikanae.

## Call for Applicant to assist AREC at Police National SAR Course

We are looking for an experienced AREC member to attend with Christchurch and Marlborough AREC at the Police National SAR Course at Dip Flat in May (possibly subject to change depending on the ongoing Covid situation).

We provide a small team to assist with communications for the practical exercise portions of the course. This helps Police, and other attendees get to know a bit about AREC capabilities and see typical SAR Comms in action. As attendees, and trainers, come from Police SAR from around the country it is advantageous to have some AREC presence from other centres. Attending will also give you some experience with providing SAR Comms in a challenging environment and see how other Groups work.

While there are no costs involved, catering and accommodation is covered during the course and AREC will cover travel costs. You will need to be available at a minimum from Saturday 7th May until Friday 13th May. Suitable travel will be arranged and paid for depending on the location of the applicant.

Expectations of the applicant are that they will participate and learn while working with Christchurch and Marlborough AREC Groups and take back some new ideas and skills to their own Group. AREC National will also expect a short report suitable for publishing in the AREC-Info Newsletter (or Break-in) from the successful applicant after the course on how they would use that experience gained for AREC in their Group.

Applications with a brief bio of background and experience need to be sent to <a href="mailto:glchristchurch@arec.nz">glchristchurch@arec.nz</a> by 31st March

#### **Steve Davis**

for Christchurch AREC Group

## **Health, Safety & Welfare**

## David Wilkins ZL1MR

I hope everyone reading this article is safe and well and if you have been, or are currently sick that you are progressing well and getting over your ailments. I haven't heard of many SAR activities lately after a flurry of action around Christmas time. Whatever is happening no-one has reported any injuries or near misses so we must be doing something right.

Remember if you do have a near miss or an incident send an email to HSW@ arec.nz. Only by sharing our experiences can we all learn. All reports are confidential and only general details are divulged as learning material unless the people involved have already disclosed what happened in a public manner.

#### **Access to Police Stations**

From March 11<sup>th</sup> 2022 access to Police Stations across Aotearoa New Zealand has been restricted to fully vaccinated people able to produce a current vaccination pass. So make sure you either have your pass loaded on your phone or carry a hardcopy on your wallet or AREC Go-Bag. You can then enter a Police Station without delay. Remember it may only be to use the toilet – what are your alternatives? Plan ahead and don't end up standing outside with legs crossed looking agonised or after having had to tie a knot in it!

#### Winter is coming

What do we need to do to get prepared for colder temperatures and longer nights? I see the replacement beanies are starting to get deployed with the logos in the correct locations. Very bright. No excuses for a driver if they run you over when wearing one of those.

Also winter rain will soon be upon us with lower temperatures. You may well require your parka more often. Though looking at the weather forecast the Westcoast sems to be taking a bit of a pummelling with rain on a regular basis, summer, or winter!

So make sure your warm and wet-weather gear is packed into a handy carry bag ready to be grabbed before you head out. I tend to use an old-style supermarket or Jaycar bag as that seems to be just the right size.

#### Keep your energy up

Jim Rowe up here in the Auckland-Coromandel area was one of the stalwarts of AREC. He always boiled the jug and filled a thermos before heading out on a search. So in winter you may want to do the same but make sure you have a few tea bags, hot chocolate or some coffee sachets in your bag. You never know when you will need them.

Another challenge may be to get used to not having milk in your tea or coffee. Try it! You'll find the tea tastes much more tangy and tasty. As for sugar see if you can get off that habit as well. Just another contribution toward avoiding type 2 diabetes, though sugar does give you a bit of a perk up when in the middle of a late shift and you need an energy tweak.

Apparently dark chocolate taken in small quantities is good for you. Now I'm not sure if Whitakers started that rumour as I am partial to their 72% Cocoa Dark Ghana. But there have been some peer reviewed studies that confirm the findings, unfortunately only at low doses of say 2 segments a night, not half a large bar per night. In this case more of a good thing is not always better.

#### Cultural change in regard to HSW

Whilst everyone bangs on about health & safety, what we are really hoping to achieve is a change in our safety, health and wellbeing culture. That means we want to change the way we think about things so we start to automatically do the right thing. We shouldn't have to consciously think about HSW matters, we should just do what we need to do to keep everyone safe.

In other words if we come across as situation that is changing we automatically just Stop, Think, Plan, Communicate and Act in order to do the right thing.

So keep safe as we start to hit the autumn months and don't forget to change your clocks, watches and other timepieces when daylight saving ends in the early hours of 3<sup>rd</sup> April.

Keep up the good work and don't forget to send any questions, queries or advice to HSW@arec.nz.

David Wilkins ZL1MR AREC Health & Safety Advisor



#### 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.