



First published 1980

Club Nets on VK2RPM 146.700MHz (CTCSS 91.5Hz) Sundays 0900 Thursdays 1930

Newsletter of the Oxley Region Amateur Radio Club Inc., PO Box 712 Port Macquarie 2444

Club email address: vk2bor@orarc.org also on Facebook as Oxley Region Amateur Radio Club Club Website: http://www.orarc.org



ORARC's fifty Second Anniversary Year

May 2023

PRESIDENT: Henry Lundell	VK2ZHE	6582 0534
VICE PRES: Paul Colledge	VK2ICQ	6580 9912
TREASURER: Dennis Meade	VK2DAM	6582 2998
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President's Report

May 2023 President's Report



ORARC 2023 Field Day

The ORARC 2023 47th annual Field Day takes place on Saturday the 10th and Sunday the 11th of June during the 2023 Kings Birthday Weekend.

The Field Day dinner will be held in the Function Room at the Port Macquarie Golf Club on the evening of Saturday the 10th of June 2023.

The Field Day program is being sent out with this issue of Oxtales. You can also view and download the program on the ORARC website at https://www.orarc.org/

Daytime Venue

Activities are in the Wauchope Showground Hall in High Street Wauchope on Saturday the 10th and Sunday the 11th of June 2023.

ORARC VHF/UHF Repeaters

MIDDLE BROTHER VK2RPM 2 metre (Voice - CTCSS 91.5Hz) O/P 146.700MHz - I/P 146.100MHz

VK2RPM 70 cm (Voice - CTCSS 123Hz) O/P 438.525MHz - I/P 433.525MHz C4FM digital mode capability

> VK2RPM-1 (APRS Digipeater) SX 145.175MHz 1200bps

TELEGRAPH POINT VK2RCN 2 metre (Voice) O/P 147.000 MHz - I/P 146.400 MHz

VK2RCN 70 cm (DMR) O/P 438.425MHz - I/P 433.425MHz

VK2RCN (6m Repeater-CTCSS 91.5Hz) O/P 53.800 MHz - I/P 52.800 MHz VK2RCN-1 (APRS Digipeater) SX 145.175 MHz 1200 Bps VK2RPM EchoLink Node Number 916007

Item	Page No
President's Monthly Report	Page No Front Cover
Down the Coax	2
ORARC Field Day Field Day 10, 11 June 2	023 1
Antenna Shootout	7
Balun Building and Antenna	
Wire Purchase Opportunity	11
ORARC Monthly General Meetings and	
Friday Night Get togethers	11
Hamshack Hotline	12
Installing Yaesu DR-2X LAN Cards	13
Repeater Report and new site progress rep	ort 14
Education Courses	19
WICEN	19
Annual Subscriptions	20
Milestones	21
WIA Matters and Amateur News	23
Blast from the Past	29
Equipment from the Past	31
Silent Key Diane Wilson VK2DNE	32

Down The Coax

Monthly meetings & Friday Nights held in the SES Building Central Road, Port Macquarie.

ORARC meetings held in the S.E.S. Building Central Road, Port Macquarie.

Monthly General Meeting Saturday 6 May 2023 2:00 pm

Coffee Morning - Brooklyn's Burger Bar, Thrumster

10am Thursday 11 May 2023

Antenna Shootout Huntingdon 10am Sunday 14 May 2023

World Telecommunication Day Wednesday 17 May 2023. AX prefix permitted

Friday Night Get-Together Friday 19 May 2023 7.00 pm

Monthly General Meeting Saturday 3 June 2023 2:00 pm

Coffee Morning - Brooklyn's Burger Bar, Thrumster 10am Thursday 8 June 2023

ORARC Field Day Wauchope Showground Hall Saturday 10 and Sunday 11 June 2023 Field Day Dinner Sat. Port Macquarie Golf Club

> Friday Night Get-Together Friday 16 June 2023 7.00 pm

Balun Building Day SES Building Port Macquarie Sunday 18 June 2023

Winter VHF/UHF Field Day Saturday 24 and Sunday 25 June 2023

> Monthly General Meeting Saturday 1 July 2023 2:00 pm

Coffee Morning - Brooklyn's Burger Bar, Thrumster

10am Thursday 13 July 2023

Friday Night Get-Together Friday 21 July 2023 7.00 pm

Annual General Meeting Saturday 5 August 2023 2:00 pm

Net Controllers' Roster Nets on Voice Repeater VK2RPM 146.700 MHz Sundays (0900 Local) May 2023 VK2EM May 4 VK2FMGM May 7 VK2ZHE May 11 VK2FMGM May 14 VK2ICQ May 18

May 25 VK2FMGM May 21 VK2EM VK2FMGM May 28 **June 2023** June 1 VK2ZHE VK2FMGM June 4 VK2ICQ June 8 VK2FMGM June 11 VK2EM June 15 June 22 VK2FMGM June 18 VK2ZHE VK2FMGM June 25 VK2ICQ June 29 **July 2023** VK2FMGM July 2 July 6 VK2EM VK2ZHE July 13

VK2FMGM July 9 VK2ZHE July 13 VK2FMGM July 16 VK2ICQ July 20 VK2FMGM July 23 VK2EM July 27

VK2FMGM July 30

Monthly General Meeting Saturday 5 August 2023 after AGM

ORARC Treasurer Dennis Meade VK2DAM reminds ORARC members that annual subscriptions are due for renewal on the 1st of July 2023.



Registration is \$5 per person which covers attendance at the Field Day for both days. There are no discounts available. Note that there will be some substantial lucky door prizes drawn during the prize giving on Sunday afternoon. The major raffle will have great prizes as usual. While you are at the registration table, remember to buy your raffle tickets along with the tickets for the food and drinks.

The Showground hall is an excellent venue and will support all the usual Field Day activities. There is plenty of on-site parking and the area is safe for the fox hunts.

Due to popular demand the traders will be open for business on both Saturday and Sunday. Similarly, the disposals will be open both days.

The Wauchope Showground permits camping and is pet friendly. For two people an RV or caravan is \$20 per night with power and a tent is \$10 per night with power. Contact the on-site caretaker 0475 111 074 for bookings. The web page is at http://www.wauchopeshowsociety.com.au/camping.html



Field Day Dinner

The Field Day Dinner is on Saturday the 10th of June 2023 at 5pm in the Port Macquarie Golf Club Function Room. Sign in and follow the Golf Club COVID safety requirements.

Meals and drinks are at Golf Club prices. There is an extensive menu to cater for all tastes.

We must especially thank Gary Ryan VK2ZKT of Radio Supply Pty Ltd of Bellingen for his sponsorship of the Port Macquarie Golf Club Function Room hire for the Field Day Dinner again this year. Thank you, Gary. Gary has been a long-time supporter of the Oxley Region Amateur Radio Club. His company, Radio Supply, has exhibited at every ORARC Field Day for a great many years, and he has always been very generous in his sponsorship.

Field Day Attractions

The Field Day will have all the usual attractions with 2 metre and 80 metre fox hunts on both days, disposals; bring your items to sell, no commission charged, traders, barbeque lunch both days with bacon and egg breakfast available both days. Don't miss out on the traditional fruit salad and ice cream dessert following Sunday lunch. As usual, tea and coffee and biscuits will be free throughout the two days to those who have registered.

Food and Drink

There will be barbeque lunch of sausage sandwiches and steak sandwiches both days with bacon and egg breakfast available both days. Don't miss out on the traditional fruit salad and ice cream dessert following Sunday lunch. Soft drinks and bottled water are available for purchase. Prices are very reasonable as can be seen on the Field Day program.

Tickets must be purchased at the registration desk for all food and drinks items. The tickets are to be redeemed at the serving counter in the kitchen area of the hall.

As usual, tea and coffee and biscuits will be free throughout the two days to those who have registered.

Continued on next page

Just ask at the serving counter in the kitchen.

Raffles

Remember to purchase your raffle tickets from the registration desk. As usual the Major Raffle will have some substantial prizes. Thank you to the sponsors who have generously provided prizes. The sponsors to date include Jaycar Electronics Port Macquarie, Radio Supply of Bellingen, QSL Comms, Tecsun Radios Australia and Battery World Port Macquarie.

The raffle will be drawn at 2:30 pm at the prize giving on Sunday afternoon. This is slightly later than in the last few years

Lucky Door Draw

There will be the usual Lucky Door prizes drawn during the prize giving on Sunday afternoon. There are excellent prizes for those with callsigns and for those without callsigns so everyone attending is asked to please register. Entry in the draw is automatic when you register.

Disposals

Bring your items to sell, no commission charged. It is a great opportunity to sell items that you no longer need, and a tremendous opportunity to find some real bargains. There is always a shortage of tables so please bring your own tables if you are able. Please note that you are responsible for the security of your items. The club is unable to accept liability. Items may be left on the tables overnight on the Saturday night but as there is no security in attendance during the night it is suggested that valuable items not be left unattended overnight. The hall will be locked overnight from 5pm on Saturday until it is opened by the on-site caretaker on Sunday morning.



Repeaters Monitored During the Field Day

The club station VK2BOR will monitor the Middle Brother VK2RPM 146.7 MHz 2 metre FM voice repeater for calls during the Field Day. This repeater requires a 91.5Hz CTCSS sub audible tone for access. You can transmit to it on 146.1 MHz using Yaesu Fusion C4FM digital voice and it will retransmit you as analogue FM on 146.7 MHz.

In addition VK2BOR will monitor DMR Talk Group 505. The Telegraph Point VK2RCN 438.425 MHz DMR digital voice repeater provides excellent coverage in Port Macquarie and Wauchope. You can call on Talk Group 505 via any DMR repeater or suitable hotspot that you can access.

Traders

This year we are pleased to have two major traders at the Field Day: By popular demand the traders will be open for business on both Saturday and Sunday.

Radio Supply



Radio Supply of Bellingen http://www.radiosupply.com.au/ will have a full range of accessories as well as the usual range of items such as the now hard to get analogue multimeters. Thank you to Gary Ryan VK2ZKT and Carol VK2CSR for their ongoing support of the Field Day.

QSL Communications



We welcome back QSL Communications to the Field Day as a trader again this year. QSL Comms have an extensive range of products including

DMR digital voice and analogue FM transceivers, antennas, antenna mounts, power supplies, Continued on next page

batteries for various radios, spare programming cables for various radios, and coaxial cable and connectors etc. Have a look at the QSL Comms website https:// gslcomms.com.au/ for details. At the Field Day the very popular Anytone and TYT DMR and analogue radios will will available available. Also be multimode digital hotspots and the very popular Nano VNA. You can place your orders on line prior to the Field Day and pick your order up at the Field Day. Due to commitments other work **OSL** Communications may only be present on Saturday the 10th of June.

ORARC



As a special service at the Field Day the Oxley Region Amateur Radio Club will be able to install a code plug in your newly purchased or existing DMR radio, if

it's one that they have a code plug for. The timeslots of a number of talkgroups changed earlier this year so this is an opportunity to get an updated code plug which also includes a current user ID database. There are a lot of new callsigns on DMR and many of us have noted that an increasing number of stations are only displayed as ID numbers without callsign and name details. This is an indication that your database is out of date. Models that code plugs will be available for include the TYT MD-UV380 which takes the same code plug as the Retevis RT3S. Please see Paul Colledge VK2ICQ and Ian Lindquist VK2GL on the ORARC stand.

If you are contemplating purchasing a DMR radio for the first time you will need a DMR ID in order for your new radio to be programmed ready for you to use. You should apply for a DMR ID prior to the Field Day so that it will be available by the weekend of the 10th and 11th of June

2023. Just go to https://vkdmr.com/ to learn about DMR and follow the link to apply for a DMR ID.

Please read the very informative DMR article by Ian Lindquist VK2GL/VK2IDL in the May 2021 issue of Oxtales. Past issues of Oxtales are available as .pdf files for reading or downloading on the ORARC website https://www.orarc.org/ Note that the DMR RadNet repeaters provided by ARNSW are part of the VK-DMR network (formerly known as DMR-MARC). There are other world wide DMR networks such as Brandmeister which can be accessed using a hotspot or some other repeaters.

Jaycar Electronics Port Macquarie

Jaycar https://www.jaycar.com.au/ are supporting the Field Day again this year. Jaycar have donated a large number of back issues of electronics magazines such as Silicon Chip and Diyode. A new catalogue has not yet been released so catalogues will not be available at the Field Day this year.

While Jaycar won't have a stand at the Field Day, the Jaycar Port Macquarie store will be open for business on both Saturday and Sunday during the weekend.

Fox Hunting

Foxhunting has always been an important part of ORARC Field Days. This tradition has been carried on continuously since the very first Field Day. I have previously mentioned the report by Pierce Healy VK2APQ in his column in the December 1972 issue of Electronics Australia where he reported on the foxhunts that were held during the ORARC Field Day that was held on the 13th and 14th of October 1972. This was only one year after the club was formed in 1971.

The new 80 metre foxes introduced at last year's Field Day worked very well with all foxes being clearly heard at the start, even for the mobile event.

The 2 metre and 80 metre hidden transmitter hunts always keenly are Remember bring contested. to transistor radio along for the Sunday morning 80 metre standard unmodified radio pedestrian foxhunt. The Saturday afternoon 2 metre talk in foxhunt offers an opportunity for those without direction finding equipment to participate in a foxhunt.

Home Brew Competition

Remember to bring your latest project along and enter it into the Home Brew competition and display. Last year the Home Brew competition was very popular with some excellent projects on display. This year we are expecting even more entries than ever with several amateurs working hard to complete projects in time for the Field Day.

Also have a look on the Radio Supply stand. Gary Ryan VK2ZKT will have an interesting range of his home brew projects on display. Gary has been very busy home brewing over many years. He will have lots of interesting home brew and restoration projects for you to look at.

ALARA http://www.alara.org.au/ have had a stand at ORARC Field Days for many years but there won't be one this year as Diane Wilson VK2DNE who was planning on running the Australian Ladies Amateur Radio Association stand sadly passed away only a few weeks ago. See the Silent Key Vale Diane Wilson VK2DNE in this issue of Oxtales. Diane is very sadly missed.

ARNSW



ARNSW http://www.arnsw.org.au/ is a long time supporter of the Oxley Region Amateur Radio Club Inc. Amateur Radio NSW is very active with the

VK2WI weekly Sunday morning and evening news broadcasts and a wide range of other activities and projects supporting Amateur Radio. The ORARC news appears in the VK2WI club news each week.

The VK2RCN 438.425 MHz RadNet DMR repeater at Telegraph Point provided by ARNSW is the latest major support item to benefit ORARC and all amateurs within the coverage area of this repeater. The new repeater has greatly stimulated interest in DMR by local Amateurs. ARNSW has generously offered to also provide a RadNet DMR repeater for the club's VK2RPM site at Middle Brother. This will complete the DMR coverage in the area between the areas currently served by the Telegraph Pont VK2RCN and Cabbage Tree VK2RGL DMR repeaters.

Previously ARNSW have subsidised 40 metre dipole antenna construction kits and balun kits which created a great deal of interest. A significant number of ORARC members benefitted from this very practical initiative in being able to construct these kits at a very affordable price for use in their stations. The next balun building day at Dural is on Sunday the 11th of June 2023. As this is during the ORARC Field Day, the Oxley Region Amateur Radio Club will hold a balun building day at Port Macquarie on the following Sunday on the 18th of June 2023. Orders for the balun kits and Kevlar antenna wire close at the ORARC Monthly General Meeting on Saturday the 3rd of June 2023. See the separate item headed "Balun Building and Antenna Wire Purchase Opportunity" in the following pages of this report.

Demonstrations

There will be live demonstrations of multi protocol digital radio on air hotspots. You will be able to see the VK-DMR network activity on the DMR Dashboard.

Club station VK2BOR will monitor DMR TG505, as well as on the C4FM/analogue FM Middle Brother VK2RPM 146.7 MHz repeater. Continued on next page



There will a live demonstration of Hamshack Hotline with two VOIP phones set up so that you can see for yourself how Hamshack Hotline works and find out

how you can obtain a connection. The Hamshack Hotline presentation and demonstration by Paul VK2ICQ at the May Monthly General Meeting created a lot of interest and a number of members bought the same model Cisco SPA525G2 VOIP phones that Paul had used for his demonstration.

Thank you to Bruce Ekert VK2EM, Ian Lindquist VK2GL/VK2IDL and Paul Colledge VK2ICQ amongst others for running these demonstrations this year.

Bruce VK2EM will have his high power hotspot in operation.

If you have just bought a new DMR radio and had a code plug installed at the Oxley Region Amateur Radio Club stand it will be a great opportunity to talk with Bruce VK2EM and see his hotspot in action. He will be only too pleased to demonstrate what you can do via your own hotspot. Running your own hotspot allows you full access to the digital modes even if you can't easily access one of the DMR repeaters. You can access several different digital voice radio network protocols using whichever type of digital voice radio that you end up purchasing. You don't need to buy one of each type! For example your DMR radio can of course access DMR networks but with the same radio you can also connect to C4FM Yaesu Fusion networks for example.

Helping to share the load at the Field Day

Please make yourself available when calls are made for assistance in running the Field

Day. By sharing the workload we can all enjoy the weekend without anyone being overworked. It is important to make the field day a success as it is the major fund raising activity for the year.

Field Day Program

The Field Day program is included with this issue of Oxtales. The program can also be downloaded from the ORARC website https://www.orarc.org/

Antenna Shootout Day 14th of May 2023

In previous years the club's popular annual Antenna Shootout had been held on the first Sunday in February at the Tuffins Lane sports fields. The Antenna Shootout was not held during the last couple years due to COVID restrictions. Many members requested that future Antenna Shootouts be held during the cooler months as it's usually very hot during February.

The extremely enjoyable 2023 Antenna Shootout was held on Sunday the 14th of May 2023 at Huntingdon, a short distance west of Wauchope. Larry VK2CLL kindly hosted the Antenna Shootout on his property there. He and his wife Penny extended the very best of country hospitality to all who attended the event.



The day started with a sumptuous morning tea served on the verandah of the house. As can be seen from the photos there were scones with jam and cream and a wonderful selection of cakes served with cappuccinos and teas.

The addition of the cheese platter brought by Lesley completed

the spread. It was a great opportunity for socializing, made all the more enjoyable by the inclusion of several partners. After all, it was Mothers' Day.



David VK2AYD, Arthur VK2ATM, Lesley, Sue, Larry VK2CLL, John VK2AYQ, Henry VK2ZHE, Diana, Bob VK2ZRE, Rob VK2CRF at morning tea Dennis VK2DAM and Lyle VK2SMI setting up the transmitting station. Thanks to Penny for taking the photograph.

After that extremely enjoyable morning tea the antenna shootout commenced on the antenna test range across the paddocks adjacent to the long driveway back towards Huntingdon Road. The elevated location of the house meant that the measuring station was set up on the verandah of the house with an unobstructed view down the antenna test range.

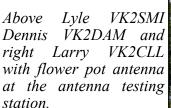
Arthur Monck VK2ATM ably assisted by David Pillev VK2AYD took the measurements with Henry Lundell VK2ZHE and Bob Ecclestone VK2ZRE setting the measuring up antennas. Photographs following.





At the Field end of the antenna range where the antennas to be measured were set up, Lyle Smith VK2SMI and Dennis Meade VK2DAM assisted by Rob Frost VK2CRF, Larry Lindsay VK2CLL and John Hansen VK2AYQ set up first the reference antennas and then the antennas to be tested.











Above several VK2MOOOS came to check out Lyles VK2SMI gazebo!



Dennis VK2DAM demonstrating how to land a fighting fish with a multiband whip antenna. Note Rob VK2CRF''s 6 meter home made Yagi in the background.

Antennas for 6 metres, 2 metres and 70 centimetres were tested. A table of the results accompanies this report.



The overall winner was Larry Lindsay VK2CLL with his 7 element 70 centimetre yagi which achieved almost exactly the calculated gain.



Second place went to Bob Ecclestone VK2ZRE with his J pole antenna on 2 metres.



Third place went to Lyle Smith VK2SMI with his 2 metre packet radio flowerpot antenna.

While the Antenna Shootout was taking place the ladies celebrated Mothers' Day with Champagne.

As in past years the Antenna Shootout was a particularly enjoyable day out. The barbeque sausage sizzle lunch expertly cooked by Larry VK2CLL on his family barbeque augmented by

Penny's coleslaw rounded off with a baked cheesecake topped with berries for dessert was absolutely delicious and a perfect way to end a perfect day.







Antenna shoot outs are a hard days work; however someone has to do it! From celebrating Mothers Day left to preparing food above and finally eating it all up below!



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Those attending included Larry VK2CLL and Penny, Arthur VK2ATM and Lesley, Dennis VK2DAM and Sue, Bob VK2ZRE and Diana, David VK2AYD, John VK2AYQ, Rob VK2CRF and Henry VK2ZHE and Lyle VK2SMI.

Everyone agreed that May was an ideal time to hold the Antenna Shootout. Despite rain falling elsewhere in the area, not a drop fell at Huntingdon during the event. We look forward next year's event which will be in May but not on Mothers' Day. Larry and Penny were the perfect hosts with the ideal venue and we look forward to being invited back next year.

Commiserations to those who were unable to attend and tendered their apologies. We look forward to next year's Annual Antenna Shootout.

Our hosts Penny and Larry VK2CLL right and their great Antenna Shoot out location below.





Now is the time to think about building new antennas and selecting the antennas that you already have that you would like tested at next year's shootout.

Antenna Shootout Results

Number Callsign	Antenna Type	Horizontal Db Ver	tical Db Gain/L	.oss-H Db Gain/L	oss-V Db Wavelength
					2 Mtrs
1VK2BOR	Dipole		-42	0	0
2VK2ZRE	J-pole		-40	0	0
3VK2SMI	Flowerpot		-47	-5	
4VK2DAM	Vert/w Ground		47	-5	
5VK2SMI	Flower Packet		-42	0	
6VK2CLL 7	With Horizontal		-42	0	0
Number Callsign	Antenna Type	Horizontal Db Ver	tical Db Gain/L	oss-H Db Gain/L	oss-V Db Wavelength 70 Cms
1VK2BOR	Dipole	-52	-50	0	0
2VK2CLL	7 El Yagi	-39	-42	13	8
3VK2ZRE	J-pole		-52	0	-2
4VK2DAM	Multi Band		-51	0	-1
5VK2SMI 6	Multi Band		-50	0	0
Number Callsign	Antenna Type	Horizontal Db Ver	tical Db Gain/L	oss-H Db Gain/Li	oss-V Db Wavelength 6 Mtrs
1VK2BOR	Dipole	-46		0	0
2VK2CRF 3	1000	-55		-9	

Coffee Mornings





John VK2AYQ, Rob VK2CRF, Henry VK2ZHE, and Larry VK2CLL and left photographer Rod VK2AJ

The informal Coffee Mornings at 10am on the second Thursday of each month continue to be popular. The venue is Brooklyn's Burger Bar in the Sovereign Hills shopping centre at Thrumster.

Brooklyn's Burger Bar have a copy of the ORARC Calendar and always have a large table reserved for the Oxley Region Amateur Radio Club Coffee Morning. The mornings have proven to be very popular.

The March, April and May 2023 Coffee Mornings were all well attended.

The Coffee Mornings are a great opportunity to meet fellow members and their families socially over a leisurely morning tea.

Balun Building and Antenna Wire Purchase Opportunity

Amateur Radio NSW is again providing an opportunity for ORARC members who are also members of ARNSW to participate in building a subsidized balun kit and/or purchasing subsidized antenna wire. The previous balun and antenna days have been very popular.

The ARNSW balun building day at Dural has been set for Sunday the 11th of June 2023.

As this date is the Sunday of the ORARC 2023 Field Day, the balun and antenna building day in Port Macquarie will be on the following weekend on Sunday the 18th of June 2023.

Please let Henry Lundell VK2ZHE know if are interested as the balun kits and antenna will have to be ordered by the Meeting on Saturday the 3rd of June 2023 at the latest as the kits and cut to length wire will be brought to the Field Day by ARNSW members travelling from Sydney which saves the cost of freight so that you can pick them up at the Field Day at Wauchope. This will be particularly convenient for Members from out of town who are coming to the Field Day but are happy to build their baluns and antennas at home without having to come to Port Macquarie for the balun building day.

The balun kits for 1:1 or 4:1 baluns are \$20.00 each. Please specify which one you want. The Kevlar antenna wire is at an unbeatable 50 cents per metre. Please specify how many metres you require as your order will be cut to length.

Please pay ORARC for your order of balun kits and Kevlar antenna wire. Direct Deposit to the Club's Regional Australia Bank account is preferred.

Bank Name: Regional Australia Bank

BSB: 932000

Account Number: 500032744

Account Name: Oxley Region Amateur

Radio Club Inc.

Please use your callsign and Balun as the reference for the payment

Alternatively, you can pay Treasurer Dennis Meade VK2DAM in person at the Monthly General Meeting on Saturday the 3rd

ORARC members are encouraged to join ARNSW. Membership is not expensive at \$10 per year. More information and a membership application form is available on the ARNSW website at https://arnsw.org.au/html/page_membership.htm As well as the weekly Sunday morning and evening VK2WI broadcasts, ARNSW promotes and supports Amateur Radio in many practical ways including the subsidized balun kits and Keylar antenna wire.

ORARC Monthly General Meetings and Friday Night Get togethers

The Monthly General Meetings and Friday Night Get togethers are held in the airconditioned comfort of the SES Building in Port Macquarie.

The business part of the Monthly General Meetings is kept to approximately 15 minutes so that the major part of the meeting can be devoted to the guest speaker.



At the April General Meeting on Saturday the 1st of April 2023 the meeting was treated to part 2 of the extremely popular presentation showing the contribution of Radio Amateurs to the success of the of the

work at Bletchley Park during World War 2 by David Pilley VK2AYD.

Hamshack Hotline



At the May Monthly General Meeting on Saturday the 6th of May 2023, Paul Colledge VK2ICQ introduced everyone to Hamshack Hotline with a very informative presentation followed by an excellent live demonstration of how Hamshack Hotline works and its capabilities.



To quote the Hamshack Hotline (HH) website https://hamshackhotline.com/ Hamshack Hotline is a FREE dedicated voip telecom service for the Ham Radio community. Typically, phones are established in hamshacks, EOCs, Clubs & club members, ARES (WICEN in Australia), and other Ham related areas and functions.

It is not the intention of HH to replace traffic carried over radio in an emergency or other tactical operation, but rather to augment it, by offloading managerial tactical operations and providing a full duplex path for such communications when spectrum is occupied, conditions diminished, or otherwise unavailable. HH also supports FAXing of information (with appropriate equipment)

which allows tactical offices to share documents & data between tactical locations.

In a non-tactical use, HH is an effective resource for off-air troubleshooting when you need to coordinate a troubleshoot of a radio circuit off-air and between multiple SMEs. In addition to all this, conference bridges on the HH network allow large groups of Hams to coordinate & meet in real time anywhere in the world.

Paul's talk and demonstration created a lot of interest and at least one member present had ordered his Cisco SPA525G2 voip (voice over internet protocol) phone on ebay by the time the demonstration concluded.

So far Paul VK2ICQ and Henry VK2ZHE have Hamshack Hotline phone numbers and their phones operational on line. Several other members also have obtained suitable phones so should have Hamshack Hotline soon. Thank you to distant member Jamie Campbell VK2YCJ of Newcastle for inspiring and supporting the spread of Hamshack Hotline. He is also a member of the Westlake's Club and has demonstrated the equipment to their members. VK2ATZ should be on line soon.

More information is on the available https:// Hamshack website Hotline hamshackhotline.com/. The website contains Hamshack Hotline Wiki https:// wiki.hamshackhotline.com/doku.php? id=start which explains everything you need to know in order to get your Hamshack Hotline service up and running. It lists all the supported voip phones and even includes on line provisioning to update the firmware of your supported phone. To apply for a Hamshack Hotline number is very simple by raising a ticket on the Help Desk at https://apps.hamshackhotline.com:9090/

There is no cost and it's all done by volunteers but I had my number and welcome pack in a couple of days. If you have purchased a supported phone you will receive a

Continued on next page

provisioning link which will automatically fully set up your phone for you so that it shows your callsign and is ready to use. All you have to do is insert the IP address of your phone into the link. This is very straightforward and it's all explained in the Wiki.



The audio quality of Hamshack Hotline is superb and at least on the Cisco SPA525G2 phones that Paul and I have the hands free works magnificently (picture of phone) below. All the features that you would expect on a modern telephone service are available on Hamshack Hotline. A really nice service is that you will receive an automatic email to let you know when someone has left you voicemail.



There will be a live demonstration of Hamshack Hotline on the ORARC stand at the Field Day on the June long weekend.

Friday Night Get Together 19th of May 2023 – Yaesu DR-2X LAN Cards

At the Friday Night Get together on Friday the 19th of May 2023 Paul Colledge

VK2ICQ installed the LAN (Local Area Network) cards in the new Yaesu DR-2X repeaters to replace the Telegraph Point VK2RCN 147.000 MHz and Middle Brother VK2RPM 146.700 MHz FM C4FM voice repeaters to enable the two repeaters to be linked. The linking will use TCP/IP via the internet through the 4g wireless data modem already at the VK2RCN Telegraph Point site and a second 4g wireless data modem to be installed at the VK2RPM Middle

Brother site.
Paul VK2ICQ
configuring the
Yaesu DR-2X
LAN connection
watched by
Lance VK2EZY
Dennis



VK2DAM, Arthur VK2ATM and Larry VK2CLL



Paul VK2ICQ connecting to DR-2X LAN and Ethernet Port.



The inside of the repeaters with the newly installed LAN and ethernet port.

The photos above show the keen interest taken in the LAN card installation by those at the Friday night get together. It was the first time any of us had seen the inside of the new Yaesu DR-2X repeaters.

Middle Brother Mountain VK2RPM Repeater Site

The Middle Brother Mountain VK2RPM repeaters are working well.

Equipment is on hand to upgrade the VK2RPM 146.700 MHz 2 metre repeater to a new Yaesu DR2X FM and C4FM voice repeater with internet connectivity for TCP/IP linking to the Telegraph Point VK2RCN 147.000 MHz 2 metre voice repeater. It is hoped that this work can be completed in time for the ORARC Field Day on the June 2023 long weekend.

With the availability of an internet connection at the Middle Brother site the 438.525 MHz 70cm UHF repeater will be replaced with a new Motorola DMR repeater courtesy of Amateur Radio NSW. This will provide DMR coverage to fill in the area between the coverage areas of the Telegraph Point VK2RCN DMR repeater and the Cabbage Tree VK2RGL DMR repeater. As with Telegraph Point an application will be made for a second UHF repeater channel for Middle Brother so that there will be 70cm FM and C4FM voice repeaters at both sites.

Telegraph Point VK2RCN New Repeater Site

The project to build an entirely new repeater site in the Red Hill area at Telegraph Point for the VK2RCN repeaters has been by far ORARC's most ambitious project since the club was formed. As well as the great many visible working bees there has been a lot of work behind the scenes on this project. Thank you to everyone who has contributed.

The site is almost complete.

The VK2RCN 53.800 MHz 6 metre FM voice repeater and the VK2RCN-5 145.175 MHz 2 metre APRS iGate digipeater were both installed and placed into service in

VK2RCN 53.800 MHz 6 Metre Repeater

Unfortunately, despite intensive fault finding by Ian Lindquist VK2GL, the intermittent transmitter audio fault in the original VK2RCN GE Master Executive II 6 metre repeater was unable to be eliminated. There is always a solution and Henry VK2ZHE built a new 6 metre repeater using two Yaesu FT-8900R transceivers and an Id-o-Matic repeater controller. The two transceivers are rack mounted on Yaesu base station stands fitted with cooling fans. The Id-o-Matic repeater controller is also mounted on the rack shelf. The Id-o-matic controls the cooling fan under the Yaesu FT-8900R transceiver that is the repeater transmitter.



The new VK2RCN 53.800 MHz 6 metre voice repeater (photograph above) has an output power of 50 Watts and transmits and receives on the single 6 metre side mounted folded dipole at a height of 20 metres on the mast via the full size four coaxial resonator band pass, band reject duplexer.

The 6 metre repeater is working very well with excellent signals from home stations in Krambach, Taree and Wingham, and excellent mobile coverage in the Hastings Valley.

Initially the 6 metre repeater did not use CTCSS but after a few weeks a weak drifting interfering

signal which intermittently fleetingly keyed the repeater whenever it drifted onto the repeater input frequency suddenly appeared. The signal persisted so the VK2RCN 53.800 MHz 6 metre repeater now requires a 91.5 Hz CTCSS sub audible tone for access. This has eliminated the intermittent fleeting keying by the interfering signal. The repeater also transmits a 91.5 Hz tone which allows users to enable CTCSS squelch on their receivers if they wish.

VK2RCN-5 APRS iGate Digipeater

The original VK2RCN-1 APRS Digipeater transceiver and Tiny 2 TNC were destroyed by the lightning strike at the old VK2RCN Site last year.



Henry VK2ZHE built a new rack mounted **APRS** digipeater using Simoco SRM9000 2 metre FM transceiver and ANT51 **APRS** an TNC with iGate capability. At the April 2023 ORARC Committee Meeting it was resolved that

the VK2RCN APRS digipeater should be made an iGate as internet connectivity which is required by the VK2RCN DMR repeater is available at the site.

Thank you to Lyle Smith VK2SMI for programming the ANT51 TNC as the VK2RCN-5 iGate shown below ready for installation.



The new VK2RCN-5 APRS iGate digipeater works extremely well with excellent coverage as can be seen by the improved tracking of mobiles in the Hastings Valley on the live APRS Google map at

https://aprs.fi/#!mt=roadmap&z=9&lat=-31.2457&lng=152.6459&timerange=3600 &tail=3600

The VK2RCN-5 APRS iGate digipeater transmits with a power of 10 Watts on the APRS frequency of 145.175 MHz as well as sending valid APRS position packets to the server in Finland via the internet. In the event that internet connectivity is not available the digipeated position packets will be sent to the internet via other digipeaters in range such as VK2RMY-1 at Mt Yarrahapinni. The Middle Brother VK2RCN-1 digipeated position packets are being forwarded via the internet to the APRS server in Finland by the VK2RCN-5 iGate.



Above the VK2CRN repeaters in rack

Linking of VK2RCN 147.000 Mhz and VK2RPM 146.700 MHz Repeaters

The major remaining task is to link the VK2RCN 147.000 MHz 2 metre repeater with the



Have bike will travel!

Paul VK2ICQ makes a visit to the repeater site to install the linking equipment to VK2RCN to install the 2 metre linking equipment.

Middle Brother VK2RPM 146.700 MHz repeater. A new Yaesu DR-2X repeater with internet connectivity has been installed as a replacement for the DR-1X 147.000 MHz repeater at the site. The new repeater is now in service.

Paul VK2ICQ with the new Yaesu DR-2X 2 metre repeater installed and set up in the repeater rack.



Paul Colledge VK2ICQ is configuring and testing the repeater linking equipment. When the linking has been proven the remaining equipment will be installed at the VK2RPM site at Middle Brother. It is hoped that this can be done in time for the ORARC Field Day on the June 2023 Kings Birthday long weekend.

Off-Grid Solar Power

The individual access to the 29 solar panels has enabled them to be flexibly connected in

series and series/parallel to provide optimum solar energy to the separate 30, 20 and 15 amp 12 Volt solar controllers which charge the ten separate Lithium Iron Phosphate 12 Volt batteries that power the various repeaters and other site loads. Each 12 Volt battery has its own MPPT solar controller. Each solar controller is fitted with individual Bluetooth connectivity which enables full monitoring of the power system. With 7.25 kilowatts of installed solar panels and 18 kilowatt hours of stored battery power it is expected that the site will have sufficient off grid power even during prolonged low sun periods including during the winter months when there will be significant shading from the trees to the north of the site when the sun is low in the sky.

So far the batteries have been fully charged each day despite some days being very dull in overcast and rainy weather with reduced hours of sunlight as the winter Solstice on the 22nd of June approaches. The state of the batteries is being carefully monitored.

Provision has been made to recharge the batteries using an external generator if this becomes necessary. An earthed generator shelter has been built beside the equipment shelter and a weather proof 240 Volt AC power inlet has been installed on the outside of the shelter to connect the generator into the shelter to power several mains operated 20 and 30 amp 12 Volt DC Lithium Iron Phosphate battery chargers. The shelter has an electrical earth in additional to the lightning protective earth which is bonded to the mast earth.

The site has a 12 Volt DC solar battery charged pure sine wave 600 Watt 240 Volt 50 Hz AC inverter to power small AC loads without having to run a generator.

The site is fitted with 12 Volt DC solar charged battery operated LED internal and external lights. The lights provide good illumination for working inside the shelter and the external lights provide an oasis of light around the

shelter when working at night. The temperature inside the shelter is being continuously monitored by the DMR internet router. It shows that with the 12 volt battery powered ventilation fans continuously drawing outside air into the equipment shelter to maintain positive pressure, the temperature inside the shelter is remaining significantly above the very cold winter night time outside air temperatures at the site.

Thank you

All of the above has been achieved by a small band of dedicated skilled volunteers during a great many intensive working bees to complete all the installation work and commissioning testing. Larry Lindsay VK2CLL and Rob Frost VK2CRF have led the work supported by Arthur Monck VK2ATM, Dennis Meade VK2DAM, Lyle Smith VK2SMI and Henry Lundell VK2ZHE. Larry and Rob have brought a great deal of expertise to the project as they have both recently completed major building projects of their own.

Henry VK2ZHE is drawing on his working life experience in design and installation of the communications equipment with Paul Colledge VK2ICQ with his IT knowledge and experience taking care of the data communications including the repeater linking. They and all the team have been particularly generous in using their own tools and equipment and provided a lot of the material to carry out the Telegraph Point work. Special thanks go to Matt Perkins VK2FLY of ARNSW for his generous support of the Radnet DMR repeater equipment and performance.

The VK2RCN repeaters already installed and operational are:

The VK2RCN 438.425 MHz Motorola RadNet DMR digital voice repeater.

The VK2RCN 147.0 MHz 2 metre Yaesu

DR-2X LAN capable voice FM repeater which will accept either analogue FM or C4FM Yaesu System Fusion digital voice input in readiness for linking to the VK2RPM 2 metre 146.7 MHz voice repeater.

The VK2RCN 53.800 MHz 6 metre FM voice repeater.

The VK2RCN-5 145.175 MHz 2 metre APRS iGate digipeater

There is also a recently installed WICEN mid band VHF analogue FM voice repeater mounted in the equipment cabinet rack at the site. It uses two Simoco SRM9000 radios with an Id-o-Matic repeater controller. It is off-grid solar powered. It uses the mid band VHF side mounted half wave folded dipole at a height of 15 metres on the mast. The repeater transmits and receives through the one antenna via a full size four resonator band pass, band reject antenna duplexer. Photograph below.



The VK2RCN repeaters to be installed when additional UHF repeater channels are assigned:

A new VK2RCN 70cm UHF multimode digital voice repeater supporting DMR, DStar, P25, C4FM and NXDN.

The VK2RCN 147.0 MHz 2 metre FM voice repeater will be linked to the Middle Brother Mountain VK2RPM 146.7 MHz 2 metre FM voice repeater early in 2023. This requires installation of additional equipment at both sites. Paul Colledge VK2ICQ is responsible for this part of the project.

The new VK2RCN 70cm UHF multimode digital voice repeater will be installed during 2023. The club is awaiting assignment of the frequencies for this repeater. Paul Colledge VK2ICQ has this equipment on hand in readiness for its installation.

The project was greatly assisted by the two grants that ORARC was successful in obtaining from the NSW Government Community Building Partnership. In 2020 a grant of \$23,361.00 went towards the cost of the mast footings and guy anchors and the equipment shelter. The completion report for this grant was submitted in 2022 once these items were in place. An approved variation in the scope of the second grant of \$6,800.00 received in 2022 towards the cost of providing electrical power to the site went towards the cost of installing off-grid solar power to power the equipment at the site.

Initially it had been intended that the repeater would be powered by mains electricity which required the installation of a long underground cable. However, during the life of the project the cost of mains electrical power continued to increase and the cost of trenching in an underground cable in the rocky ground at the site greatly increased. At the same time the cost of installing off-grid solar power decreased very significantly to the point where this was by far the most cost effective way to power the site. Fortunately,

the Community Building Partnership approved the change of scope to off-grid solar power for the grant.

The completion of the installation of the off-grid solar power installation enabled the completion report for the second grant to be submitted. This marked another very significant milestone in the project.

The two grants totalling \$30,161.00 made a very significant contribution towards the cost of the project. Without the grants the Club would have been unable to embark on such an expensive project as the budgeted cost far exceeded the Club's resources. The VK2RCN Repeater Site project had its genesis in the \$1,900.00 of donations which Paul Jones VK2DEL had obtained, and the donation of the mast sections by John McLean VK2KC. The Club had astutely been accumulating funds for some years as a provision. When the application for the first grant was successful the project was commenced with a budget within the Club's means.

However, due to the many various delays beyond the Club's control, once the project had commenced costs continued to escalate. The generous pro bono legal services provided by Levido Law + Property and the success in obtaining the second Community Building Partnership grant helped to keep the project viable. At the same time the changing regulations applying to this project, and the effects of COVID-19 pandemic and unprecedented combination of fires, floods and storms played a big part in creating a very significant funding shortfall that was filled by the very generous donations of both cash and kind by Club members. While some donations such as the \$30,000.00 towards the cost of erecting the mast and installing the antennas and feeders have been visible to the membership, most of the other donations have been quietly made in the background by those committed completing the new site for the VK2RCN repeaters to a Continued on next page

very high standard without exceeding the Club's budget for the project. Thank you to everyone who has contributed.

Education

A Foundation Licence Training weekend and assessments were held on the weekend of Saturday and Sunday the 1st and 2nd of April 2023. Education Officer Larry Lindsay VK2CLL and Assessor Bob Ecclestone VK2ZRE ran the very successful weekend which resulted in three more ORARC members obtaining their Foundation Licences.

Congratulations to Paul Froome VK2JSB of Beechwood, Lance Harris VK2EZY from Port Macquarie and Geoff Thorley VK2GJT of Port Macquarie.

If you would like to obtain your Foundation Licence or upgrade, please contact Education Officer Larry Lindsay VK2CLL. This will help Larry to plan the next Assessment weekend.

Urunga Convention 8 and 9 April 2023 Easter Weekend Cancelled



The Urunga Radio Convention has a long history. Until the cancellation of the 2020, 2021, 2022 and now the 2023 events which were to be the 71st Annual Convention, the convention had been held annually each year since 1949. It is hoped that the

delayed 71st annual convention will now be held over Easter in 2024.

For some history and photographs of past conventions visit the web site http://users.tpg.com.au/goldy2/.

WICEN (NSW) Mid North Coast Group



The WICEN (NSW) Mid North Coast Region group holds a monthly meeting at the conclusion of the ORARC Monthly General Meeting on the first Saturday of each month. A number of new members have recently joined WICEN. They are looking forward to participating in the activities of the group.

The WICEN (NSW) Mid North Coast Region group conducts a net on the WICEN 80 metre frequency of 3600 kHz LSB at 7 pm local time on Thursday nights. The nets finish in time for members to participate in the ORARC Thursday night net at 7:30 pm on the VK2RPM 146.7 MHz 2 metre repeater.

The WICEN mid band VHF repeater at the VK2RCN site at Telegraph Point is now on air and working well. Like all the other equipment at the site it is off-grid solar powered so is not subject to mains power grid interruptions.

More information on WICEN may be found on the WICEN (NSW) website http://www.nsw.wicen.org.au

ORARC 2023 Christmas Party



The ORARC Christmas Party is held on the first Saturday in December each year. The 2023 Christmas Party will be held on Saturday the 2nd of December as marked on the ORARC 2023 calendar.

After the success of the ORARC 2022 Christmas Party last year we look forward another great Christmas Party this year on Saturday the 2nd of December 2023. The venue remains the same. It is the excellent covered outdoor picnic area at the Long Point Vineyard and Art Gallery.



Annual Membership Subscriptions Due 1 July 2023

ORARC Treasurer Dennis Meade VK2DAM reminds ORARC members that annual subscriptions are due for renewal on the 1st of July 2023.

Membership fees for the 2023 – 2024 Financial Year will be the same as last

year's. The Committee is very pleased that almost every member renewed their subscriptions in the 2022 – 2023 Financial Year. This almost perfect level of renewal and the addition of a substantial number of new members during the year despite a number of members becoming Silent Keys means that the club is able to hold member subscription rates at their current rates.

Ordinary Membership is \$40.00 per annum, Associate Membership is \$20.00 per annum, and Distant Membership is \$10.00 per annum. The Family Membership discount applies.

Membership subscriptions may be paid by Direct Deposit to the club's Regional Australia Bank account:

Bank Name: Regional Australia Bank

BSB: 932000

Account Number: 500032744

Account Name: Oxley Region Amateur

Radio Club Inc.

Please use your callsign as the reference

for the payment

Alternatively, you can pay by a cheque made out to Oxley Region Amateur Radio Club and post it to PO Box 712 Port Macquarie 2444, or you can pay in person at the club meetings or at the Field Day during the June Long Weekend. Contactless card EFT will be available at the Field Day and at Club meetings.

Silent Keys

Sadly another of our members has become a Silent Key. Diane Wilson VK2DNE of Lemon Tree Passage who had been planning to run the ALARA stand at the ORARC 2023 Field Day passed away on May 10 2023. She will be sadly missed.

Please see the Silent Key article Vale Diane Wilson VK2DNE in this issue of Oxtales.

Milestones

Well known long standing ORARC member Jim Neil VK2VIV and his wife Carol have sold their house in Port Macquarie and are moving to Bargara near Bundaberg in Queensland on the 5th of June 2023. Jim is remaining a member of ORARC as a Distant Member. We all wish Jim and Carol well in their move.

Distant member Stuart Walker VK2BMX in Sydney is recovering well after his recent unexpected urgent life saving surgery.

Peter Kucera VK2MPK is having urgent serious life saving surgery in Sydney and will not be able to participate in this year's Field Day. His serious medical issue was only detected because of the extensive tests and procedures he had as a result of his motorcycle accident last year.

Peter is normally the starter and recorder for the fox hunt events. We all wish Peter the best for his surgery and recovery which is expected to take several months.

Ziggy Malter VK2TN of Lake Cathie has not been well and uncharacteristically had to miss several recent club activities but is now recovering after treatment in hospital.

David Pilley VK2AYD is not in the best of health but he has still been spending time on the air and attending ORARC meetings and events including the recent Antenna Shootout.

Life Membership

ORARC members are reminded that they are eligible for Life Membership at 85. Any members turning 85 please let the Committee know as Life Membership proposals must go before ORARC AGMs which are held in August each year.

At least two of our members become eligible for Life Membership this year.

The following invitation and request has been received from the 1st Port Macquarie Sea Scouts.

The club has supported the Scouts by participating in JOTA/JOTI where possible.

Please find attached an invitation that is extended out to the ORARC Team who has support JOTA/JOTI throughout the years.

Please also share this invitation out to the wider community as everyone is invited to our day.

We have a BBQ at 12pm and a small ceremony at 1pm.



90th
Birthday
Celebration
4th June 2023

Your invited to help us celebrate our special milestone achievement in the community.



Recognition awards,
Pictural history of scouting
in Port Macquarie



1st Port Macquarie
Sea Scout Hall
9 Buller Street PMQ
1000am to 200pm

The Oxley Region Amateur Radio Club Inc. (ORARC) at Port Macquarie NSW will be holding its 47th Annual Field Day at the Wauchope Showground hall on Saturday and Sunday the 10th and 11th of June 2023 over the NSW Kings Birthday Holiday Long Weekend.

Henry Lundell VK2ZHE President

OXLEY REGION AMATEUR RADIO CLUB 47th ANNUAL FIELD DAY Saturday and Sunday the 10th & 11th of June 2023 77 V. TRASH & TREASURE TRADE DISPLAYS FOX HUNTS (Saturday and Sunday) FREE COFFEE, TEA & BISCUITS www.orarc.org Talk-in frequency 146,700 MHz (91.5 Hz CTCSS) Station Callsign VK2BOR \$5 ENTRY | WAUCHOPE SHOWGROUND HALL Field Day Dinner - Saturday 10th PORT MACQUARIE GOLF CLUB Contact: HENRY LUNDELL VK2ZHE email: vk2bor@orarc.org



Mobile Fox hunters at the upcoming Oxley Field Day may get some ideas on upgrading their fox hunting cars or not!

The picture below is of an impressive antenna display on a couple of cars from the Hamvention in Xenia OHIO.



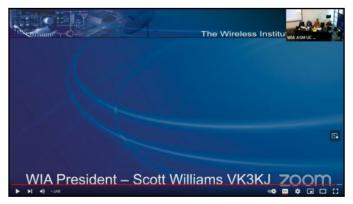


Finally an 'oldie but a goodie'





Watch the 2023 WIA AGM Live via YouTube



Date: 13 / 05 / 2023 Author: WIA Board

You can watch the 2023 WIA AGM Live

via YouTube

Here is the Link

Wireless Institute Of Australia 2023 AGM - YouTube

ACMA Consultation on Frequency allocations

Date: 01 / 05 / 2023

Author: Peter Clee - VK8ZZ

ACMA consults on proposed changes to amateur access in the 50–52 MHz and 3.4–3.6 GHz frequency bands.

In September 2022, the ACMA consulted on proposed amateur class licensing arrangements and higher power operation. They proposed changes to the draft amateur class licence to provide access to the 50–52 MHz frequency band for Standard amateur licensees and overseas visiting amateurs with equivalent qualifications (overseas equivalents).

The ACMA advised that, pending consultation outcomes, they would make these changes to the Radiocommunications Licence Conditions (Amateur Licence) Determination 2015 (the Amateur Licence LCD) and the Radiocommunications (Overseas Amateurs Visiting Australia) Class Licence 2015 (the Overseas Amateurs Class Licence), before the amateur class licence is implemented.

All submitters who commented on these changes supported the proposal.

The draft amateur class licence also reflected their intention to remove access from Advanced amateur licensees and their overseas equivalents in the 3.4–3.6 GHz frequency band. This is within areas reallocated for spectrum licensing under the Radiocommunications (Spectrum Re allocation – 3.4 GHz and 3.7 GHz Bands) Declaration 2022 for Advanced amateur licensees and overseas equivalents.

The 3.4–3.6 GHz frequency band has also been identified for possible long-term earth station protection zones (ESPZs). This is defined in frequency coordination procedures for the earth station protection zones (RALI MS44).

The ACMA are now consulting on making these changes to the Amateur Licence LCD and the Overseas Amateur Class Licence.

The ACMA welcome your views on the proposed changes by 5 pm (AEST), Thursday 1 June.

Special Event Callsigns Issued

Date: 13 / 04 / 2023

Author: Lee Moyle - VK3GK

VI2023HRH

In celebration of the coronation of His Majesty King Charles III on the 6th of May 2023.

Event duration May 1st until May 31st 2023.

VK90AR

For the Amateur Radio Magazine. In October 2023, this year, the WIA will be celebrating 90 years of continuous publishing of Amateur Radio Magazine, the official journal of the Wireless Institute of Australia.

The WIA will be running a commemoration activity celebrating this milestone from 1st March until Dec 31st 2023.

VK100ZL

On April 26th this year, it will be 100 years since the first amateur radio contact between New Zealand and Australia was made, between Frank Bell of Shag Valley Station, Waihemo in Otago and Charles Maclurcan, 2CM in Sydney.

This is a significant event in Amateur radio in which NZART (New Zealand) and WIA will be jointly celebrating. WIA will be running a commemoration activity contest from April 26th until July 25th 2023 to coincide with the ZL100 callsign activities from NZART.

To book an operational timeslot for either of the Special Event Callsigns, please use the WIA website online booking portal, nominating your WIA affiliated club to register.



WIA to award a new WIA MERIT AWARD at this years AGM

Date: 08 / 05 / 2023

Author: Peter Clee - VK8ZZ

This year the WIA will be awarding the **BRENDA EDMONDS EDUCATION AWARD** for the first time.



The new award was named in honour of Brenda Edmonds VK3KT (sk) who was the Federal Education Officer, on the WIA Federal Council, and through the IARU Region 3 STARS (Support to the Amateur Radio Service) program in

less affluent nations, and Chair its Harmonisation of Licence Qualifications Committee.

Brenda was always focussed on supporting the WIA and was a Victorian Division appointed Federal Councillor. Upon her retirement in 2002, the WIA Victorian Division made her a WIA Life Member in recognition of many years of service.

Brenda was the driving force behind the WIA having a booth at the Great Australian Science Show in Melbourne (1993) to promote Amateur Radio to the younger generation, and had several clubs combine their resources to make it a success.

When the National WIA began in May 2004, she was a regular office volunteer, making further contributions. She was also a behind the scenes proof-reader for the WIA journal Amateur Radio magazine for many years, and Editor of the WIA Callbook until 2008.

Sadly, Brenda Edmonds became (SK) in 2017.

The recipient of the Brenda Edmonds Education Award will be announced at the WIA AGM on Saturday 13th May 2023.



ARRL Helps Radio Amateurs Comply with New RF Exposure Evaluation Rules

05/05/2023

ARRL The National Association for Amateur Radio® provides free, comprehensive resources to help radio amateurs ensure they are compliant with the new RF exposure rules.

On May 3, 2021, new FCC rules governing RF exposure evaluations went into effect. While the exposure limits were not changed, the requirement to conduct an evaluation was made more broadly applicable to amateur licensees. A 2-year transition period was implemented to allow existing amateur licensees to conduct evaluations and make any changes necessary to ensure that their station complies with the exposure rules. On May 3, 2023, the transition period ended. All licensees must now conduct evaluations of their current station and reassess compliance when making changes to their stations that would affect exposure going forward.

As detailed in a May 2023 QST article by Greg Lapin, N9GL, the rules now require amateur radio operators to perform station evaluations.

The Amateur Radio Service is no longer categorically excluded from certain aspects of the RF exposure rules, and licensees can no longer avoid performing an exposure assessment simply because they are transmitting below a given power

The ARRL website features an RF Exposure landing page with resources, such as an RF exposure calculator, the entire RF Safety section from the 100th Edition of the ARRL The Handbook, a video explaining the topic, FAQs about the subject, and more. These tools and resources are available to the public without an ARRL membership or website account.

For further assistance with technical matters, ARRL members enjoy the additional resources of the ARRL Technical Information Service, and access to the experts within the ARRL Lab.

National Hurricane Center Amateur Radio Station Annual Test 05/15/2023 **Updated 5/16/2023**



The amateur radio station of the National Hurricane Center, WX4NHC (NHC), located on the campus of Florida International University in Miami.

will conduct their on-the-air Annual Communications Test on Saturday, May 27, 2023, from 9 AM - 5 PM EDT (1300z-2100z).

This is the NHC's 43rd year of public service. NHC Amateur Radio Assistant Coordinator Julio Ripoll, WD4R/WX4NHC, reports that the purpose of this event is to test amateur radio equipment and antennas at the NHC as well as operators' home equipment, antennas, and computers prior to this year's hurricane season. The 2023 hurricane season begins June 1. Continued on next page

and runs through November 30.

This event is good practice for amateur radio operators worldwide to practice amateur radio communications during times of severe weather.

WX4NHC will try to stay on the Hurricane Watch Net frequency, 14.325 MHz, for most of the time, as well as 7.268 MHz depending on propagation. They may also change frequencies due to potential QRM.

The VoIP Hurricane Net will also be active from 4 PM - 5 PM EDT (2000-2100z), RLP node 9219/EchoLink WX-TALK Conference node 7203. Visit their website for more information.

QSL cards are available via WD4R with a self-addressed stamped envelope. More information about the NHC is available at their website.

The K7RA Solar Update 05/12/2023



We saw a modest increase in solar activity in this reporting week, May 4-10.

Average daily sunspot numbers nudged up from 114 to

119.3, and average daily solar flux from 151.5 to 167.1

Average daily planetary A index changed from 13.6 to 15.1, and average middle latitude A index remained the same, 11.9.

Predicted solar flux is 160 on May 12-13, then 155, 150 and 150 on May 14-16, 145 on May 17-18, 155 on May 19-21, 150 on May 22, 145 on May 23-25, then 140 and 145 on May 26-27, 155 on May 29-30, 160 on May 31 through June 1, 155 on June 2-3, 160 on June 4-7, then 165, 160, 150, 145 and 150 on June 8-12, and 155 on June 13-17.

Predicted planetary A index is 30, 12 and 8 on May 12-14, 5 on May 15-22, then 12 and 20

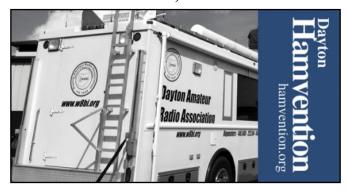
on May 23-24, 15 on May 25-26, 10 on May 27-28, 8 on May 29, 5 on May 30 through June 1, then 16, 12, 16 and 12 on June 2-5, 8 on June 6-8, and 5 on June 9-18, then 12 and 20 on June 19-20.



David VK2AYD is kindly supplying various Amateur Radio Newsline Reports on the world of Amateur Radio.

Amateur Radio Newsline Report 2377 for Friday May 19th, 2023

HAMVENTION IS HAPPENING IN XENIA, OHIO



As Newsline went to production, hams from all over the world were converging on a busy fairground in the US state of Ohio for Hamvention. Be sure to listen to our newscast next Friday, May 26th, for a Hamvention wrap up.

JUPITER SPACECRAFT RESOLVES ANTENNA ISSUES

There's antenna work......and then there's antenna work. If your antenna is a folding antenna that won't unfold - and it's out in space - you're going to need to do a little more than just climb up the tower to fix it. Graham Kemp VK4BB tells us what happened



with the launch last month of the European Space Agency's JUICE mission - short for Jupiter Icy Moons Explorer - hopes were high for its antenna, which had been folded up inside the spacecraft ready for its eventual full deployment. The 16-metre-long antenna, known as RIME - for Radar for Icy Moons Exploration - was to completely unfold in its first week after the launch date and it did - that is, all but one final part.

According to various media accounts, a variety of remedies were tried without success until the flight control team finally freed the remaining part by delivering a shock that moved a tiny stuck pin that had left the antenna section jammed in its folded position. The shock came via a device known as a nonexplosive actuator that was located inside the bracket. What happened was disruptive enough to shake things up.

May 12th brought freedom as the stuck part became unstuck.

Now the antenna should be ready for an even bigger challenge - the moons around the giant planet Jupiter. The mission will use the antenna to study those icy moons as far down as 9 km, analysing both the surface and subsurface. What unfolds there may possibly deliver some shocks of its own.

HAMS, START YOUR ENGINES FOR THE BIG RACE

Hams, start your engines. A big race - and a big special event station - is getting under way in Indianapolis, Indiana. Jack Parker W8ISH has the details.



Now that the dust has settled from the Indy Grand Prix race, members of the W9IMS Special Event Station are gearing up for another week of logging contacts leading up to the 107th running of the Indianapolis 500 Mile Race beginning May 22nd.

This is the 20th year for the W9IMS team to reach out and let ham radio operators be a part of the racing season in Indianapolis. For two decades they have logged over fifteen thousand contacts a year for the three race series at Indy. That is a lot of QSL cards.

Check the W9IMS page at QSL.com for more information.

Reporting from Indianapolis, this is Jack Parker, W8ISH.

TRY NEWSLINE'S HAIKU CHALLENGE



If a great QSO feels like poetry to you, you might enjoy this new challenge from Amateur Radio

Newsline. We're inviting listeners to channel their most creative selves and share the joy of ham radio in the form of a haiku. On our website, arnewsline.org, you will find a submission form for sending your most inspired offering. All haikus must follow the traditional form to qualify: The first line is five syllables, the second line is seven syllables and the finishing third line five.

AUSTRALIAN HAMS OFFER A QSO WITH A 'VAMPIRE'

Ever have a QSO with a vampire? It's not so hard as you might think. Richard, VK2SKY, brings us this story about an Australian warship that makes it possible.

G'day, Amateur Radio Newsline listeners, this is Richard VK2SKY in Sydney, Australia, with a little vampire story for you. Yes, I know, Halloween is months away, but I think you'll like this story anyway.



A team of amateurs, led by Colin VK2JCC, has set up shop in the radio room aboard HMAS Vampire. "HMAS" stands for His Majesty's Australian Ship, and the Vampire is located at the Australian National Maritime Museum here in Sydney. The radio room is part of the museum, and thus open for visitors to learn about the importance of radio communications, both in wartime and in peace.



The Vampire team has been active for a few weeks now, using the callsign Victor Kilo

Two Victor Mike Papa (VMP - Vampire, get it?). If you've never worked a warship before, now is a great time to start!

So far, eight amateurs are on the roster to keep Vampire on the air, using CW and Sideband on 20 and 40 metres, and the station is now a permanent fixture on the ship.

But wait, there's more! Over the weekend of the 3rd and 4th June, the Vampire will be active for 24 hours for a special event, Museum Ships on the Air. You'll find the station on or near 14.250 MHz Vampire will join many other ships around the world for this fun event.

So, listen out for Victor Kilo Two Victor Mike Papa on board HMAS Vampire in Sydney, Australia. And check out the VK2VMP page on qrz.com. Hope to catch you on the air!

WORLD OF DX



In the World of DX, be listening for special event station GBØAEL which is on the air until May 26th. Hams with the North West Group Amateur Radio Club are marking the anniversary of Amelia Earhart's transatlantic flight. In May of 1932 she became the

first woman to make that trip solo and nonstop, departing from Canada and landing 15 hours later in Londonderry, Northern Ireland. QSL instructions are on QRZ.com.



Blast from the past

Blast from the Past' is the section of Oxtales where we reflect on what the club and its members were doing in years gone by. Members are also encouraged to send in items relating to club members or club activities in previous years.

This month's blast is taken from the 2018 May issue of Oxtales. The club had 72 members. Henry VK2ZHE was President, Paul VK2ICQ Vice President, Larry VK2CLL Treasurer and Steve VK2ZSW Secretary.

The club had a busy time in May 2018, the main activities being the:

AMSAG Blacksmiths Inn car rally by providing safety communications, the John Moyle Memorial Field Day and the installation of a new 6 metre Repeater and working bee at Tacking point. A short description taken from the activity reports follows below.

'. . . Thank you to everyone who participated in the AMSAG Blacksmiths Inn car rally on Saturday the 17th of March 2018 by providing the safety communications.

Thank you to Lyle Smith VK2SMI for taking over the co-ordination of the communications when Steve Wynn VK2ZSW had to reluctantly step down due illness. Lyle did a sterling job in juggling the allocation of the only just adequate number of personnel to man the check points required by the rally organisers. This was critical to the success of the ORARC participation in the rally. It was made all the more difficult by a number of changes to the requirements close the date of the event. Thank you to Lyle for a great job, and thank you to everyone who volunteered and very competently carried out their allocated tasks.

The ORARC involvement in providing rally communications didn't end until after 8 pm so it was a long day for everyone. The night time finish added an extra degree of difficulty and increased the logistics for everyone who was involved. Thank to everyone for maintaining a high standard of communications right to the close down.

Those who participated include Lyle VK2SMI, Arthur VK2ATM, Rob VK2CRF. Henry VK2ZHE,

Bob VK2ZRE, Stuart VK2FSTU, Glen VK2FAIL, Dennis VK2DAM, Bruce VK2HOT, Bob VK2BIG, Vic VK2UVP and XYL Meredith, Larry VK2CLL and John VK2AYQ.



The Clubs communication Caravan above with Arthur VK2ATM operating below.





Two great photographs from Stuart VK2F-STU, (now VK2WAL) above capturing the essence of speed and below the quintessential rally road through the forest.



Continued on next page

John Moyle Memorial Field Day

The John Moyle Memorial Field Day began at noon on Saturday the 17th of March 2018 but ORARC was committed to providing the safety communications for the AMSAG car rally which also ran on the Saturday until about 8 pm. The club's Communications Caravan had been set up in the carpark of the Kew Hotel for the car rally and it remained in the same location on Saturday night and Sunday morning for the John Moyle Memorial Field Day.



Once the car rally was over, Lyle Smith VK2SMI and Stuart Walsh VK2FSTU (Now VK2WAL) operated VK2BOR in the John Moyle Memorial Field Day from the caravan all Saturday night and Sunday morning. Photograph above.

Rob Frost VK2CRF, Bob Ecclestone VK2ZRE and Henry Lundell VK2ZHE stayed on as well until after midnight before going home. Henry Lundell VK2ZHE came back on Sunday morning for the balance of the Field Day, and to help pack up and then tow the caravan back to Port Macquarie. Thank you to the above stalwarts.

Telegraph Point VK2RCN Repeater Site

The new VK2RCN 53.800 MHz 6 metre repeater equipment is now almost ready for installation at the Telegraph Point repeater site. On Monday the 16th of April 2018 a working bee was held at the VK2RCN site. Those participating included John Winchester VK2NJJ, John McLean VK2KC, Arthur Monck VK2ATM, Rob Frost VK2CRF, Dennis Meade VK2DAM and Henry Lundell VK2ZHE.

John Winchester VK2NJJ very kindly transported to the site the four coaxial filters that comprise the duplexer for the 6 metre repeater.

The size of the filters can be judged from the photographs showing the individual filters being manhandled from the rear of John's utility and then placed in position inside the building as a four filter band pass/

band reject duplexer. Editors note: These filters have subsequently been transported and installed at the new Telepoint site.





The assembled duplexer Rob VK2CRF with Arthur VK2ATM holding his spectrum analyser.

Thank you to Arthur Monck VK2ATM for bringing his spectrum analyser to the working bee so that the alignment of the duplexer could be checked after being transported and reassembled. John VK2NJJ clearly treated the filters very gently when transporting them as it was found that alignment had not changed.



Thank you to Lyle Smith VK2SMI for donating a full height 19 inch equipment rack and delivering it to the site on Sunday the 15th of April in readiness for the working bee. Lyle was unable to attend the working bee as the Monday was a work day for him.

Equipment from the Past

Hallicrafters S-20R Sky Champion



The Hallicrafters S-20R Sky Champion was made in America between 1939-1945 with a retail price of USD \$49.50.

The Hallicrafters S-20R was a four-band communications receiver, covering frequencies from 540 Khz to 44 Mhz. The radio was a Single Conversion Superheterodyne using nine valves. The S-20R replaced the prewar S-20 and in turn was replaced by an S-40. Modes covered were AM and CW.

Features of the S-20R Sky Champion included bandspread tuning, AVC (automatic volume control), ANL (automatic noise limiter), BFO (beat frequency oscillator), a three-position tone control, and a headphone jack.

The back panel contained sockets for two optional accessories. One socket for power, enabling mobile use with batteries (one 6-volts for valve filaments and a 340-volt for plate voltages.. The second socket was for an external S-meter to show signal strength while tuning (the photograph above shows a typical external S- meter set up.

The S-20R represented a value packed receiver for the price. The higher-priced SX

models added features such as variable selectivity, a crystal filter, calibrated band spread, and a built-in S-meter.

A full-page introductory ad on the back cover of the **January 1940 Radio News** claimed

"A BETTER SKY CHAMPION THAN EVER BEFORE! at no increase in price!

Mr. Halligan decided that it would be in keeping with the Hallicrafters policy to produce the finest communications receiver possible to sell just below \$50.00. It is the new \$20R Sky Champion.

It has all the fine features of the former model plus these quality additions: I additional stage of I.F. (2 I.F. stages in all); I additional tube (making 9 tubes in all); Dickert Automatic Noise Limiter; Separate electrical bandspread - Inertia controlled; Drift-Compensated High Frequency Oscillator; 3 Watts output; Both Dials illuminated.

Of course it retains all the essential features of the former model such as a Stage of Pre-selection; Sponge mounted Speaker; Beat Frequency Oscillator; Continuous coverage from 545 kc. to 44 mc, etc."

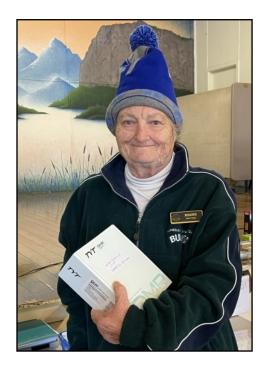
As the following tube lineup shows, the S-20R has an RF amplifier and two stages of IF amplification.

Tube	Туре	Function
V1	6SK7	RF amplifier
V2	6K8	Mixer/oscillator
V3	6SK7	1st IF amplifier
V4	6SK7	2nd IF amplifier
V5	6SQ7	2nd detector/AVC/1st audio
V6	6F6G	2nd audio amplifier
V7	6H6	Automatic noise limiter
V8	6J5GT	Beat frequency oscillator
V9	80	Rectifier

Acknowledgements:

Hallicrafters Model S-20R Communications Receiver (1939) (antiqueradio.org)

Silent Key Diane Wilson VK2DNE



It is with great sadness that we advise that ORARC and ALARA member Diane Wilson VK2DNE of Lemon Tree Passage passed away peacefully in the morning of the 10th of May 2023.

Diane always looked forward to attending the Oxley Region Amateur Radio Club Field Day each year. The above photograph shows Diane with the DMR hand held transceiver that she won as first prize in the major raffle at the 2022 Field Day.

Diane was an active ALARA member and last year took over running ALARA stands at NSW Field Days from Dot Bishop VK2DB when she stepped down.

Diane ran the very popular ALARA stand at the ORARC 2022 Field Day. In previous years she had assisted Dot VK2DB in running the stands (Photograph Below).



In November 2022 Diane and her husband Richard Osborne O.A.M. VK2OKR/VK2AUS were officially recognised for a combined total 68 years of service to Lemon Tree Passage Marine Rescue.



Diane was also a long-time member of the Westlakes Amateur Radio Club.

Diane will be very sadly missed by all who knew her.

Vale Diane Wilson VK2DNE

Thank you to Richard Osborne VK2OKR/VK2AUS for advising the Oxley Region Amateur Radio Club of Diane's passing.

Submitted by Henry Lundell, VK2ZHE on behalf of the Oxley Region Amateur Radio Club Inc.