



OXTALES

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

March 2023

PRESIDENT: Henry Lundell	VK2ZHE	6582 0534
VICE PRES: Paul Colledge	VK2ICQ	6580 9912
TREASURER: Dennis Meade	VK2DAM	6582 2998
SECRETARY: Henry Lundell	VK2ZHE	6582 0534

President's Report



March 2023
President's Report

ORARC 2023 Field Day 10 & 11 June Kings Birthday Weekend

Don't forget to mark your calendars for Saturday and Sunday the 10th and 11th of June for the ORARC 47th Annual Field Day over the 2023 Kings Birthday Weekend.

The venue for the 2023 Field Day is the Wauchope Showground hall in High Street, Wauchope. This hall is an excellent venue and will support all the usual Field Day activities. The Field Day has been held in the Wauchope Showground for the last few years and both locals and visitors were very pleased with the venue. There is plenty of on-site parking and the area is safe for the fox hunts.

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)
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

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Down The Coax

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

**Monthly General Meeting
Saturday 1 March 2023 2:00 pm**

**Coffee Morning
Brooklyn's Burger Bar, Thrumster
10am Thursday 9 March 2023**

**Friday Night Get-Together
Friday 17 March 2023 7.00 pm**

**John Moyle Memorial Field Day
Saturday 18 & Sunday 19 March 2023**

**Monthly General Meeting
Saturday 1 April 2023 2:00 pm**

**Urunga Convention - 71st Annual Convention
Cancelled
Saturday and Sunday 8 and 9 April 2023**

**Coffee Morning
Brooklyn's Burger Bar, Thrumster
10am Thursday 13 April 2023**

**Friday Night Get-Together
Friday 21 April 2023 7.00 pm**

**ANZAC Day AX prefix permitted by ACMA
Tuesday 25 April 2023**

**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
Date in May 2023 to be confirmed 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**

**Balun Building Day
SES Building Port Macquarie
Sunday 18 June 2023**

**Monthly General Meeting
Saturday 3 June 2023 2:00 pm**

Net Controllers' Roster
Nets on Voice Repeater VK2RPM 146.700 MHz
Sundays (0900 Local) Thursdays (1930 Local)

March 2023

		VK2EM	Mar 2
VK2FMGM	Mar 5	VK2ZHE	Mar 9
VK2FMGM	Mar 12	VK2ICQ	Mar 16
VK2FMGM	Mar 19	VK2EM	Mar 23
VK2FMGM	Mar 26	VK2ZHE	Mar 30

April 2023

VK2FMGM	April 2	VK2ICQ	April 6
VK2FMGM	April 9	VK2EM	April 13
VK2FMGM	April 16	VK2ZHE	April 20
VK2FMGM	April 23	VK2ICQ	April 27
VK2FMGM	April 30		

May 2023

		VK2EM	May 4
VK2FMGM	May 7	VK2ZHE	May 11
VK2FMGM	May 14	VK2ICQ	May 18
VK2FMGM	May 21	VK2ZEM	May 25
VK2FMGM	May 28		

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

**ORARC Field Day
Wauchope Showground Hall
Saturday 11 and Sunday 12 June 2022
Field Day Dinner Sat.
Port Macquarie Golf Club**

jaycar 

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. The use of toilets and hot showers is included. You can even get a stable for your horse for \$10 per night! Contact the on-site caretaker 0475 111 074 for bookings. The web page is at <http://www.wauchopeshowociety.com.au/camping.html>

The Field Day dinner as usual will be at 6pm at the Port Macquarie Golf Club on Saturday the 10th of June. The dinner will be held in the Function Room. Thank you to Gary Ryan VK2ZKT of Radio Supply of Bellingen for kindly sponsoring this function room for the Field Day Dinner. As usual, please place your orders at the Restaurant. The club offers an extensive dinner menu to cater for all tastes at club prices.

There will be all the usual displays and activities at the Field Day. Entry is still a very modest \$5 which covers admission on both days. The barbeque will work overtime with bacon and egg sandwiches for breakfast both days and sausages and steak for lunch both days. Tea and coffee and biscuits will be free all day for those who have registered. Soft drinks and bottled water will be available for purchase.

Radio Supply of Bellingen will have a large range of accessories and other items at their stand at the Field Day. Gary Ryan VK2ZKT will have a range of his home brew and restoration projects on display. These always create a lot of interest and inspiration. Gary will trade on both days.

QSL Communications will have a stand at the Field Day as a trader. QSL Comms have an extensive range of products including DMR digital voice and analogue FM transceivers, digital radio hotspots, test equipment, antennas, antenna mounts,

power supplies, spare batteries for various radios, programming cables for various radios, coaxial cable and connectors etc. Have a look at the QSL Comms website <https://qslcomms.com.au/> for details. Note that items can be pre-ordered for collection at the Field Day. Mark will trade both days.

Fox hunting is always popular. The new 80 metre foxes provide excellent range for the 80 metre mobile hunts. There will be mobile and pedestrian fox hunts on both 2 metres and 80 metres. If you don't already have a sniffer, now would be a good time to build or buy one for each band.

There is no charge or commission for disposals. While Sunday is the main trading day there will always be some items on the tables on Saturday.

The programme for the Field Day will be included in the May issue of Oxtales. There will be some changes to the foxhunting programme to enable the hunts to run more smoothly and finish earlier on the Sunday.

The planning for the Field Day is already under way. We look forward to another very successful Field Day. The Field Day will follow the ORARC COVID-19 Safety Plan. There is plenty of space in the Wauchope Showground Hall for social distancing. The Field Day Dinner at the Port Macquarie Golf Club is in the quite spacious separate function room.

The successful running of Field Day weekend is dependent upon the efforts of many members to undertake the myriad of tasks that are required, both in preparation, and during the Field Day itself. Please help where you are able. This will spread the work-load so that everyone has time to enjoy the weekend. There are a variety of Field Day jobs, that need volunteers, ranging from assistance in Fox hunts, catering, meet and greet and the all important set up and cleaning up. Please let the Committee know if you can assist in any way.

Foundation Licence weekend and Assessments

A Foundation Licence Training weekend and assessments for all grades of licences will be held on the weekend of Saturday and Sunday the 1st and 2nd of April 2023. Education Officer Larry Lindsay VK2CLL has contacted those who have expressed interest and has ordered papers for those candidates. If you would like to obtain your Foundation Licence or upgrade your existing licence, please contact Larry as the next weekend will be arranged soon as sufficient have expressed interest.

John Moyle Memorial Field Day 18 & 19 March 2023

The major Amateur Radio event on the ORARC calendar in March is the John Moyle Memorial Field Day which commences at noon on Saturday the 18th of March and finishes at one minute to noon on Sunday the 19th of March 2023.

Normally the ORARC club station VK2BOR participates in the Field Day from the club's communications caravan. Unfortunately, it was not possible to make the necessary arrangements to set up the station this year due to the demands of the new VK2RCN repeater site project at Telegraph Point.

Members are encouraged to operate their individual stations portable during the Field Day. If you are not operating portable, please spend some time on air from your home stations and give the field stations some much needed contacts.

For more information on the John Moyle Memorial Field Day visit <http://www.wia.org.au/members/contests/johnmoyle/>

Don't forget to submit a log if you make some contacts in the John Moyle Memorial Field Day.

VK2BOR will definitely operate portable next year in the 2024 John Moyle Memorial National Field Day Contest.

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/>.

Many Amateurs and their families eagerly look forward to going to Urunga each year for Easter. This year, despite the cancellation of the formal Urunga Radio Convention, those Amateurs holidaying in Urunga over Easter 2023 will be informally getting together for meals and socializing and invite others to join them.

World Telecommunication Day



World Telecommunication Day is on Wednesday the 17th of May 2023.

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The day has been celebrated annually on 17 May since 1969, marking the founding of ITU and the signing of the first International Telegraph Convention in 1865. It was instituted by the Plenipotentiary Conference in Malaga-Torremolinos in 1973.

In Australia the ACMA authorizes the use of the AX prefix for Amateur Radio Stations in lieu of the VK prefix on World Telecommunication Day.

Central Coast Field Day at Wyong 2023 Cancelled

The Central Coast Amateur Radio Club Committee has advised that there will not be a 2023 Central Coast Field Day. Last year the Field Day ran as Mayham. The Committee is hoping to again run a Field Day in 2024 on a date to be advised.

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 2023 Antenna Shootout will be held on Sunday the 14th of May 2023 at Huntingdon, a short distance west of Wauchope. Larry VK2CLL has kindly offered to host the Antenna Shootout on his property there. There is ample room for the antenna test range.

There will be facilities to test antennas on 6 metres, 2 metres and 70 centimetres. Now is the time to think about building new antennas and selecting the antennas that you already have that you would like tested.

As in past years the Antenna Shootout will be an enjoyable day out with a barbeque sausage sizzle lunch and plenty of opportunity for socializing.

Mark your calendar now for Sunday the 14th of May 2023.

Coffee Mornings



John VK2AYQ, Geoff, Judy VK2ZZV, Henry VK2ZHE, Larry VK2CLL and Grahame VK2FA

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.



Henry VK2ZHE, Arthur VK2ATM, Rob VK2CRF, Bob VK2BIG, Geoff, Rod VK2AJ.

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

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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 you are interested as the balun kits and antenna will have to be ordered in time for the kits and wire to be brought to the Field Day by ARNSW members travelling from Sydney 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.



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/htmlpage_membership.htm

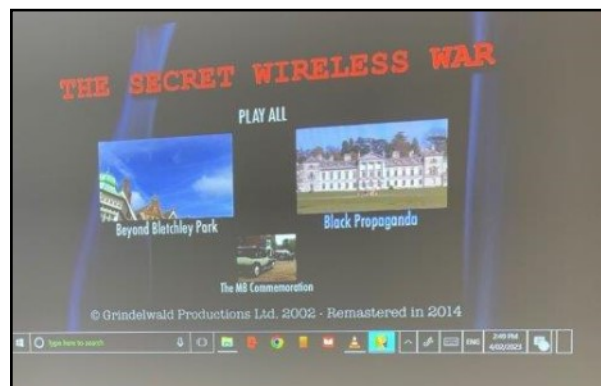
As well as the weekly Sunday morning and evening VK2WI broadcasts, ARNSW promotes and supports Amateur Radio in many practical ways including the subsidized balun kits and Kevlar antenna wire.

ORARC Monthly General Meetings and Friday Night Get togethers

The Monthly General Meetings and Friday Night Get togethers are held in the air-conditioned 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 February Monthly General Meeting on Saturday the 4th of February 2023 the meeting was treated to an extremely popular presentation showing the contribution of Radio Amateurs to the success of the work at Bletchley Park during World War 2 by David Pilley VK2AYD. The presentation was illustrated with some very interesting videos. David has a lot of material on this subject and he will present part 2 at the Saturday 1st of April Monthly General Meeting.



At the March Monthly General Meeting on Saturday the 4th of March 2023, Paul Colledge introduced everyone to ChatGPT with a very informative presentation followed by an astounding live demonstration of the capabilities of ChatGPT on line. For most of the attendees this was the first time they had seen ChatGPT in action. Artificial Intelligence has come a long way. The live demonstration held everyone spellbound as well-structured easy to read plain English text filled the

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screen as fast as it could be read. It wrote a factually correct story on the history and aims of the Oxley Region Amateur Radio Club that could have been placed directly in the pages of Oxtales. Seeing lines of programming rapidly appearing on screen in response to a request to write lines of code was beyond astounding. Many people have now tried ChatGPT themselves.

At the Friday Night Get together on Friday the 17th of March 2023, by special request, Paul VK2ICQ ran a very informative video which explained a lot about artificial intelligence and ChatGPT before running another live demonstration of ChatGPT with the attendees suggesting questions to ask. It was amazing to see how ChatGPT handled even very difficult and hypothetical questions on a broad range of subjects. It even wrote a well-balanced succinct treatise on the meaning of life. Again, we were treated to lines of code on request. Jim Neil VK2VIV went away ready to ask ChatGPT to help him with his ukulele music after seeing the potential to save him a lot of time. ChatGPT demonstrated that it knew all about science fiction as well as non-fiction. Yes, it knew all about Bletchley Park and the Y Service in response to questions from David Pilley VK2AYD.

Remember to come along to the 1st of April Monthly General Meeting to learn more about Amateur Radio and Bletchley Park from David Pilley VK2AYD.

Middle Brother Mountain VK2RPM Repeater Site

The Middle Brother Mountain VK2RPM repeaters are working well.

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 nearing completion but the regular intensive working bees are continuing.

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.



The solar controllers with their solar panel connectors can be seen in the above photograph. The ten Lithium Iron Phosphate 12 Volt batteries can be seen sitting on the shelves along the eastern wall inside the building, photograph on the next page.

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All the 12 volt and solar panel cabling has been run using 25 amp rated tinned copper figure 8 twin cable. All 12 Volt DC cabling is fitted with Anderson Powerpole PP30 connectors at each end which greatly simplifies both installation and fault finding. It makes it very simple if anything has to be temporarily or permanently reconfigured. The small caster wheeled service cart is useful when service work has to be carried out.

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 addition to the lightning protective earth which is bonded to the mast earth.



Ray VK2JU connecting the earthing wiring. Note the all weather 240 volt power inlet above.



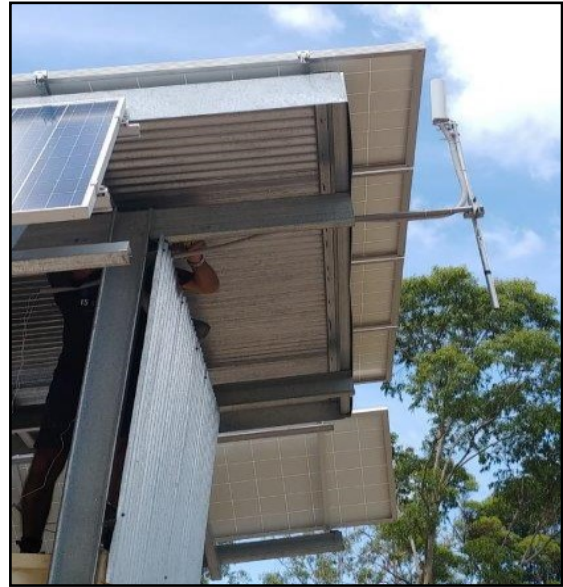
As can be seen from the photographs above, 20 solar panels are mounted flat on the sloping corrugated iron roof of the container with 5

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panels angle mounted on the eastern side of the container to maximise collection of morning sun and another 4 panels are angle mounted on the western side of the container to maximise collection of afternoon sun. The cabling to the solar panels is protected by conduit.

A gutter on the corrugated iron roof feeds a 205 litre water tank sitting on a tankstand, photograph below, so that the water tap is well above the ground. The tank is fitted with a leaf strainer and the overflow is piped away from the building. The overflow has a strainer to prevent insects and frogs from entering the tank.



An elevated dual feed 4G antenna for the internet 4G modem has been mounted above the southern side of the roof.

A lot of work has gone into the design and construction of all of the above. Special thanks must go to Larry Lindsay VK2CLL, Rob Frost VK2CRF, Arthur Monck VK2ATM, Dennis Meade VK2DAM, Ray VK2JU and Lyle Smith VK2SMI.

The photos show the fit out inside the container. The equipment shelter container walls and ceiling have been lined with foil backed insulating sheets to provide thermal insulation, and to prevent condensation.

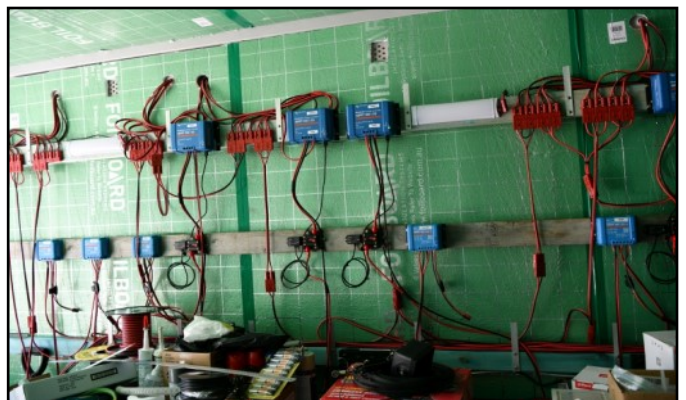
The heavy duty horizontal battens on the shelter walls provide protection against physical damage to the insulation. They also provide substantial mounts for the solar panel connectors and the solar charge controllers, and provide anchorage for the DC and coaxial cabling inside the shelter, as shown below.



Drinks will be served shortly! Dennis VK2DAM, Larry VK2CLL and Rob VK2CRF take a break.



The finished project making sure that overflow water is discharged well away from the building.



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An elevated cable duct between the two long walls inside the shelter runs above the equipment racks to carry the DC and AC cabling to the racks. The steel overhead cable duct and the equipment racks are earthed to the container using broad copper straps.

Two 12 Volt fans continuously powered by a dedicated solar charged 12 Volt Lithium Iron Phosphate battery draw filtered outside air from the southern side of the shelter.



This pressurises the shelter with external air so that any heat generated within the building is exhausted through the air vents that are fitted to the shelter

eastern and western walls.

There should be very little heat generated by the equipment in the shelter but with the shelter well thermally insulated it is important to exhaust any heat that is generated. The air in the shelter is replaced approximately once every 15 minutes.

The 19 inch glass doored server rack is for mounting all the electronic equipment. The open frame 19 inch rack beside it contains most of the RF filters except for those for the very tall 6 metre repeater and the WICEN mid band VHF repeater. The Teltonika 4G modem for the DMR repeater internet connection is mounted at the top of the open frame rack. This can be seen in the photographs.



It should be mentioned that despite having measured the height of the 6 metre filters during the design phase of the project to ensure that the filters would be able to stand inside the shelter, when it came time to place the filters in the shelter, it was found that the two filters resonant on the repeater lower receive frequency of 52.8 MHz were 20 mm too tall and would not fit under the insulated ceiling of the container. The culprit was the combined total of

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the thickness of the form ply floor and the thickness of the ceiling insulation of the container which had not been taken into account when checking the specifications of the internal dimensions of the container prior to it being purchased. These dimensions had been carefully checked at the time as it was known that there wouldn't be much clearance. Fortunately, in a delicate operation with an angle grinder it was possible to cut 20mm off the top of the tuning plunger of each of the filters without it affecting the tuning adjustments. Another problem solved!



The VK2RCN 2 Metre 147.0 MHz voice repeater and the VK2RCN 438.425 MHz RadNet DMR repeater and associated router are permanently installed in the server rack.

The antenna filters for these repeaters are in the filter rack beside the server rack. See photograph on next column. These repeaters have been in operation continuously since early this year.



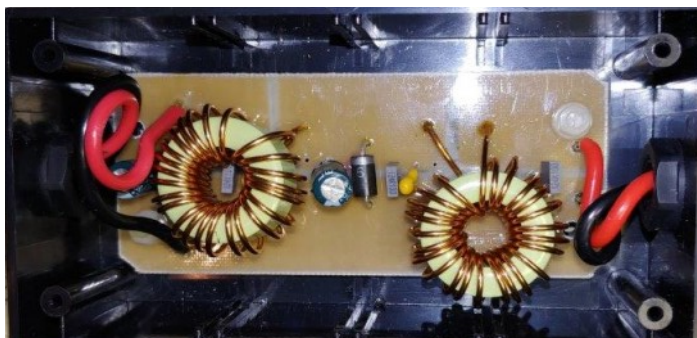
The performance of the VK2RCN 147.0 MHz and VK2RCN 438.425 MHz Radnet DMR repeaters and associated solar charge controllers and batteries has been exemplary. The performance of the VHF and UHF antennas on the mast through the repeater antenna filtering has been excellent with excellent coverage and no signs of desensitization. The batteries have been fully recharged each day, even during the overcast days. The modern solar panels continue to provide very substantial output with indirect sunlight.

The Motorola DMR repeater had mysteriously randomly shut down on three isolated occasions. Motorola advised that this had previously occurred at other sites using Victron MPPT solar controllers. It was likely that occasional fleeting very short duration voltage spikes on the 12 Volt supply from the controller charging the battery supplying the DMR repeater had been the cause. This could have occurred at night when nearby very short duration lighting flashes illuminated the solar panels.

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Henry VK2ZHE built and installed a transient filter on the DC supply to the DMR repeater, photographs below.



The problem has not recurred since the transient filter was installed. The transient filter uses the circuit of the transient filter published in the November 2022 issue of Silicon Chip magazine. Circuit boards for this filter have been sourced from Silicon Chip.

A transient filter will be installed in each of the ten 12 Volt DC solar charged battery circuits at the site. The filters will be fitted inside the rack mounted DC circuit breaker and voltmeter panel that controls and monitors all the DC loads.

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.



Each working bee day it has been very nicely running the 240 Volt oscillating pedestal fan that we brought from the old VK2RCN site.



The site is fitted with 12 Volt DC solar charged battery operated LED internal and external lights.

CCTV cameras and associated equipment have been installed.

There is a 5kg CO2 portable fire extinguisher mounted just inside the entrance to the building.

All of the above has been achieved by a small band of dedicated skilled volunteers during a great many intensive working bees which will continue until all the installation work and commissioning testing is completed. Larry Lindsay VK2CLL and Rob Frost VK2CRF are leading 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 communications equipment. 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.

The VK2RCN repeaters already installed and operational are:

The VK2RCN 438.425 MHz RadNet DMR digital voice repeater.

The VK2RCN 147.0 MHz 2 metre voice FM repeater which

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will accept either analogue FM or C4FM Yaesu System Fusion digital voice input.

The VK2RCN repeaters yet to be installed are:

The VK2RCN 53.800 MHz 6 metre FM voice repeater.

The VK2RCN-1 145.175 MHz 2 metre APRS digipeater

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

A problem in the VK2RCN APRS digipeater has delayed its installation. It is hoped that this can be rectified soon. Similarly, the 53.800 MHz 6 metre repeater still has an intermittent transmitter audio level problem which has delayed its installation.

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 in early 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 totaling \$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 Levado Law + Property and the success in obtaining the second Community Building Partnership grant helped to keep the project viable.

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At the same time the changing regulations applying to this project, and the effects of the COVID-19 pandemic and the 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 to completing the new site for the VK2RCN repeaters to a very high standard without exceeding the Club's budget for the project. Thank you to everyone who has contributed.

Milestones

Well known long standing ORARC member Richard Court VK2CHC and his wife Linda have sold their house in Port Macquarie and are moving up to Goonellabah to be close to their son in Lismore.

Richard was the local WICEN coordinator for a number of years.



Richard VK2CHC and Dennis VK2DAM at the John Moyle Field Day 2013.

When the annual Beechwood Billycart Classic was established Richard became the coordinator for the safety communications network provided by ORARC volunteers. The finish for the race is in front the

Beechwood Hotel which was just across the road from Richard's Real Estate business. For a great many years Richard spent a great deal of time before each year's race finding volunteers to man each check point, as well as someone to take the white knuckle ride down the mountain in the commentary vehicle, and also someone to link the commentary transmission into the public address system at the finish.

Unfortunately, Richard had to reluctantly step down from the Beechwood Billy Cart Classic safety communications co-ordination position in the last couple of years due to health problems necessitating serious surgery with a long convalescence. The strength of Richard's voice was reduced after the surgery. This made it more difficult for him to continue to participate in Club nets. He had previously always been a regular participant in the ORARC weekly Club nets.



Some members will be aware of Richard's enjoyment of playing the ukulele which he introduced members to at various VK2BOR Club station past overnight events such as the RD Contest and John Moyle Memorial National Field Day Contest. Photograph above. Richard continued to play in his local ukulele group in his convalescence.

Amongst Richard's other interests in common with a significant number of ORARC members were his passion for yachting and motor cycle riding.

After over 30 years as an active member of the Club, Richard will be missed but we hope that he will

Continued on next page

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continue to belong to the Club as a Distant Member. He sends his best regards to all ORARC members and is hoping to catch up with those who would like to see him before he and Linda move north in early April 2023. He is keen to get back on the air once he settles in to his new home.

Distant member Stuart Walker VK2BMX is recovering in Sydney after unexpected urgent life saving surgery. He had an early Sunday morning Ambulance trip to hospital with suspected food poisoning which turned out to be much more serious. We wish Stuart well in his recovery and look forward to seeing him hale and hearty at the ORARC Field Day weekend in June.

David Pilley VK2AYD is not in the best of health but he has still been spending time on the air and attending ORARC meetings. He is looking forward to sharing more of the history of Bletchley Park with members at the 1st of April Monthly General Meeting.

Judy O'Brien VK2ZZV recently had an urgent serious operation to save her eyesight after a problem was picked up in an eye examination. Judy still has to have another operation but she is recovering well as evidenced by her visiting Port Macquarie for an early March Country Music event with OM Grahame O'Brien VK2FA. While they were staying in Port Macquarie in their caravan she and Grahame joined fellow club members at the March Coffee Morning. Photograph on page 5 of this edition of Oxtales.

They both visited the VK2RCN repeater site. Grahame spent an extra day at the repeater site where he joined the working bee and amongst other things played an instrumental part in turning a package marked "assembly required" into a mobile service trolley which is now in use at the site. Grahame and Judy will be back for the Field Day on the June Long Weekend.



Grahame VK2FA and Judy VK2ZZV at Telegraph point working bee.

New Members

The Club extends a very warm welcome to two new members, Paul Froome of Beechwood and Lance Harris of Macquarie. Both Paul and Lance, along with Geoff Thorley are looking forward to obtaining their Foundation Licences at the next Foundation Weekend.



Henry VK2ZHE preparing the Optus antenna



Continued on next page

Silent Key – Dick Hoffman VK9LH



It is with great sadness that we record the passing of Dick Hoffman VK9LH. He passed away peacefully at home on Lord Howe Island on the 15th of March 2023 aged 85 years.

After a career as a ship's Radio Officer, Dick and his wife Noelle ran a plant nursery at Dural in Sydney. Dick and Noelle moved to Lord Howe Island in the early 1970s where they built a house with an Art Studio for Noelle's painting who is a well-known artist.

In recent years Dick had back troubles which made walking difficult but he maintained his mobility. His very distinctive electric mobility scooter often took him to the coffee mornings at the Museum café which he particularly enjoyed. He even famously led the Island ANZAC march on the scooter. Following a hip replacement last year after a fall while visiting Port Macquarie, Dick worked very hard to restore his mobility. Unfortunately, after he contracted COVID his health deteriorated this year.

Dick will be sadly missed. He was well known to quite a few members of ORARC who regularly spoke with Dick on air and looked forward to opportunities to catch up with him in person when visiting Lord Howe Island, or when Dick and Noelle were visiting Port Macquarie. Until very recently Dick was still active on HF.

To his wife Noelle, the Amateur Radio community extends its sincere condolences.

Dick's funeral was held on the 22nd of March at the Lord Howe Island cemetery. A large crowd paid their respects at the very touching service.

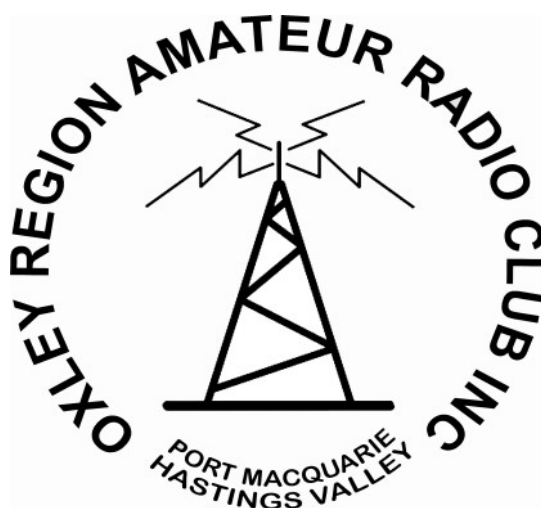


Thank you to Des Thompson VK9FLHI and to Noelle Hoffman for advising the Club of Dick's passing and supplying the eulogy given by Dick's friend Barney Nichols.

Barney Nichols's eulogy may be read in full in this edition of Oxtales.

Vale: Dick Hoffman VK9LH

Henry Lundell VK2ZHE President



Magnetic Loop Antenna

Graeme VK2GCF

I was moving from my house in Forster, on top of a hill, with a 40 and 10 meter dipole, to my wife's apartment in Port Macquarie overlooking the river/ocean and knew that this would limit my choices of antenna.

I had experimented with a magnetic loop before I left Forster, using RG213 coax with a PL259 attached to both ends (shorted out) as the main loop and a big variable capacitor found on eBay and bits from Buntings.

The loop was then tuned 1.1 to 1 SWR on 80 and 40 metres, with a circumference of just 4.71 meters. I found it to be 1 to 2S units down on 40 meters (compared to the dipole) but was fairly quiet on 80 meters as it was very inefficient.

The apartment in Ports balcony is very large and the 40 meter dipole fitted; however I found it noisy (as the apartment is right in the CBD district) but more importantly, the wife didn't like it so it couldn't stay up in the day or if we had visitors.

I experimented with a variety of antennas including mobile antennas and found that the magnetic loops worked better than all of the other antennas and were also much quieter QRM wise. In addition the magnetic loop worked well on 40 meters.

Magnetic loops have a tiny bandwidth/Swr window (makes them efficient given the small size of the loop as all power radiated in a tiny bandwidth). They are very, very fiddly to get spot on frequency/swr, a millimetre movement of the capacitor sees Swr go from 1.2 to 10 to 1. I tried 12 volt motors as slow as 0.6rpm, I tried reduction drives and various things but by the time I was tuned the person whom I wanted to speak to had vacated the frequency. Being impatient did not help either!

I figured that it would be easier to make individual loops for the main bands I used so

made one for 40 as well with another eBay capacitor. At the last Oxley field day I was blessed to pick up 4 decent variable caps so now have them on separate loops on 15, 10 and 11/12metres. Making it so much easier now to work HF and find the action. Photograph below.



My 10 meter loops diameters are about 8 feet so that it becomes is about 90% plus efficient. With the band open now I'm making dozens of contacts.

Magnetic loops put out a few thousand volts

across the capacitor running 100 watts so closely spaced variable capacitors "arc" out. I had tried high voltage fixed capacitors, for example 22pf that can be bought from Jaycar, however found that as the SWR rises above 10 watts they become hot. Consequently I thought that they wouldn't last long.

I would suggest that members who have interest in Magnetic Loop antennas check out web sites such as www.66Pacific.com as has links to a site dedicated to mag loops and a calculator with all the details about the loop, including frequency, main loop size, driver (small) loop size, capacitance needed, efficiency, voltages etc.

I'm also happy to help out as well if I can.

Regards VK2GCF



Editors note: The photograph on the left shows that the 'antenna farm' has a very low profile from street level and is quite unintrusive, which adds to its appeal for use in apartment buildings.



OXLEY REGION AMATEUR RADIO CLUB

47th ANNUAL FIELD DAY

Saturday and Sunday the 10th & 11th of June 2023



TRASH & TREASURE

TRADE DISPLAYS

FOX HUNTS (Saturday and Sunday)

HOME BREW COMPETITION

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

The above advertisement has been submitted to the Wireless Institute of Australia WIA, for inclusion in the next edition of 'Amateur Radio' with the following request.

ORARC Field Day Advert for May/June 2023 AR

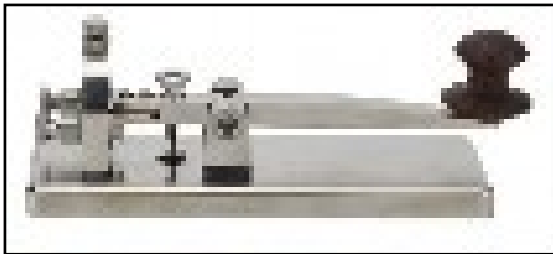
The Oxley Region Amateur Radio Club Inc. (ORARC) at Port Macquarie NSW will be holding its 47th Annual Field Day at the Wauchope Showground hall on Saturday and Sunday the 10th and 11th of June 2023 over the NSW Kings Birthday Holiday Long Weekend.

The Oxley Region Amateur Radio Club Inc. as an affiliated club would be very appreciative if a half page ad for the Field Day could please be included in the May/June 2023 issue of AR.

The following should be of interest to club members interested in CW.



Slow Morse Contest



The Don Edwards Memorial Slow Morse Contest 2023

Intent: The intention of the Don Edwards Memorial Slow Morse Contest is to remember Don Edwards VK2NV (SK) a long time member of the St. George Amateur Radio Society and keen Morse operator. A further intention of the contest is to encourage amateurs who rarely or never use Morse code to give it a try.

When: The contest will be held in May, on the weekend following Mother's Day, which is close to Don's birthday. The contest is held in two parts.

Saturday evening 20th May 2023 between 6pm and 9pm Eastern Standard Time (0800 - 1100 Hrs UTC) on 80 metres.

Sunday afternoon 21st May 2023 between 1pm and 4pm Eastern Standard Time (0300 - 0600 Hrs UTC) on 40 metres.

Who: The contest is open to all VK and ZL amateurs. The contest is open only to single, non-assisted stations. Multi-operator stations are not permitted. Operators must use their normal callsign such as VK#ABC - 2, 3 or 4 letter callsigns. The use of 2x1 contest call signs is NOT permitted.

Where: On the 80 metre and 40 metre bands. Frequencies and power levels in accordance with the current LCDs.

Modes (The important bit): The mode for use is ICW (mostly commonly called CW and marked as such on most radios).

The Morse is to be sent by hand and received by ear. NO keyboards, memory keyers or computer readers are to be used. Hand sent Morse code can be from a straight key, a mechanical bug or an electronic keyer - BUT NO MEMORY OR CANNED MESSAGES.

Speed: To encourage amateurs who do little or no Morse, speed will be limited to 10 words per minute. Experienced operators are encouraged to go slower if the other station has difficulty keeping up.

Scoring: Each contact will be counted as 1 point.

Bonus points: Contestants who were licensed without passing a Morse Code test (at any speed) can self declare and add 2 bonus points per band. Contestants who also self declare that "they had fun" during the contest can add 1 extra bonus point!

Operation: Operation is permitted from home, portable or mobile. Operators are encouraged to regularly change frequency within their LCDs.

Logs: Logs entries must show; Date, Time, Frequency, your serial number (2 digits), other station's serial number (2 digits), other station's name. Logs must also show Scores per band, Bonus points and total score.

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Contacts with other stations not participating on the contest can be recorded as NIC (Not In Contest) rather than a serial number.

Logs are to be submitted by midnight 31st May 2023 to either contest@sgars.org or The Contest Manager
St. George Amateur Radio Society
P.O. Box 530 Engadine NSW 2233

Entrants are encouraged to submit a photograph of their station set-up including their key, paddle or keyer.

Certificates: Certificates will be issued to winners and place getters as well as participation certificates. These will be determined after the contest.

Submitted by:
Peter O'Connell VK2EMU for the St George Amateur Radio Club.

How well do you know your fellow club members?

The following are photographs of participants taken at the March General Club meeting. The challenge is to identify the members and their call signs.



A light-hearted look at ways of hiding your antenna!





Located 60 kilometers from The Manor, where Mike Oldfield spent long months producing his great album, was Rugby Radio, where it was built at the end of the Great War and during the Second World War it was used as a very low frequency radio station (VLF) for communication with submarines in the North Atlantic and for telephone service between England and the United States.

This station stopped broadcasting in 2003 and closed in 2007.

Video: https://www.youtube.com/watch?v=b1g_wJQKihc

WIA Announce New Insurance Partner: GippsInsure

Date : 15 / 03 / 2023
Author : Scott William



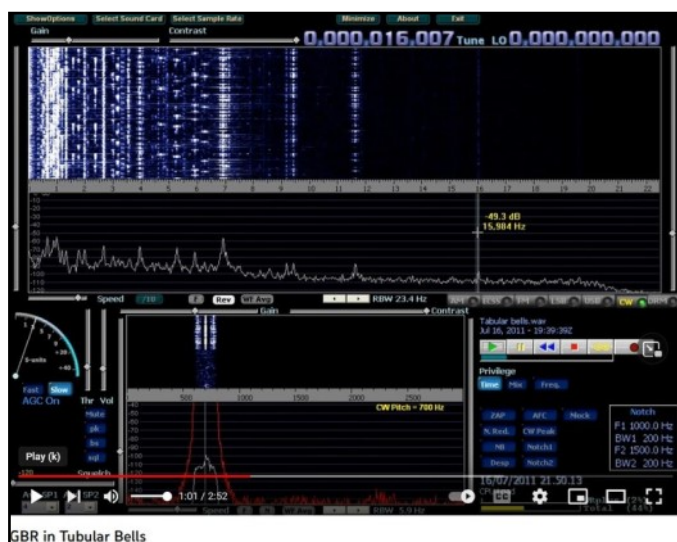
This week, the WIA wrote to all Affiliated Clubs, and we were delighted to announce that the WIA has formally entered into a new insurance arrangement with our preferred insurance partner, GippsInsure, to provide insurance products and services to Clubs.

GippsInsure is a Victorian based insurance Broker and is part of the large Steadfast insurance network throughout Australia.

Over the past 3 months, the WIA has reviewed the insurance needs of clubs and the way the arrangement has been previously administered

Coastal UK Radio Station, GBR recorded on Mike Oldfield's "Tubular Bells" re- cording.

Date : 30 / 01 / 2023
Author : Lee Moyle - VK3GK



Forever immortalized on Tubular Bells: Coastal Radio Station, GBR. You can hear GBR transmitting on the “TUBULAR BELLS” recording by Mike Oldfield.

A Morse code signal inadvertently entered the Tubular Bells recording and can be heard on the CD and decoded today.

This great story features a radio station called Rugby Radio Station (GBR) that was in Warwickshire, in the heart of England, and the famous mansion/studio The Manor that Richard Branson of Virgin made available to Mike Oldfield for whom he worked at Tubular Bells between 1972 and 1973.

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through the WIA.

What became clear is WIA Affiliated Clubs had a broad range of insurance needs that extended from Public & Product Liability insurance, Association Liability insurance incorporating Professional Indemnity, Management Liability insurance, Volunteer Workers insurance, General Property insurance also covering equipment taken away from club rooms and a range of other insurance requirements.

Overall, the new arrangement that has been put in place is price attractive and enables clubs to consolidate their insurance needs, making the administration of insurance far simpler.

Affiliated Clubs will now be able to liaise directly with GippsInsure and under our group buying arrangement, supported by our 136 Affiliated Clubs, have access to a comprehensive range of insurance products and services.

All WIA Affiliated Clubs who have previously pursued insurance through the old arrangement, will find generally their policy expires at the end of this month, so clubs will need to act promptly if you wish to ensure continuity of insurance.

All Clubs are encouraged to carefully consider your insurance requirements and ensure adequate insurance is in place commensurate with your activities.

WIA DX

Leaderboard Clubs Competition

Date : 14 / 03 / 2023

Author : Graham Alston - VK3GA

The winners of the WIA DX Leaderboard Clubs Competition for 2022, Bunbury Radio Club, received their medals last week from our sponsor DX Radio Systems.



From L to R: Steve Kennedy VK6SJ (Managing Director DX Radio Systems), Alek VK6APK, Peter VK6RZ, Ian VK6DW, Steve VK6IR, Steve VK6OZ .

WIA AGM to be held in May



NOTICE OF ANNUAL GENERAL MEETING of the WIRELESS INSTITUTE OF AUSTRALIA

Notice is hereby given that the Annual General Meeting of The Wireless Institute of Australia will be held on Saturday 13th May 2023 at 10.30am Australian Eastern Standard Time.

The Annual General Meeting will be a Hybrid event conducted both in person and by video conference and able to be viewed on an internet streaming platform.

The venue for the Annual General Meeting is yet to be finalised but is proposed to be held in Canberra ACT.

By Order of the Board
Peter Clee VK8ZZ
Secretary of the Wireless Institute of Australia.

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To commemorate the 100th edition of The ARRL Handbook for Radio Communications, ARRL is offering a collector's edition – hard-bound in black finish with silver foil embossing. The collector's edition includes a special insert looking back across decades of content that built the reputation as a “must-have” for the radio experimenter.

Details for ordering can be found on the ARRL website. Hard copy special edition are \$79.95 US and include a searchable e-book.

Amateur Radio on the International Space Station Seeking Contact Proposals 02/24/2023

The Amateur Radio on the International Space Station (ARISS) program is seeking formal and informal educational institutions and organizations, either individually or working together, to host an amateur radio

contact with a crew member on board the International Space Station (ISS).

ARISS anticipates the contact will be held between January 1, 2024, and June 30, 2024. Crew scheduling and ISS orbits will determine the exact contact dates. To maximize these radio contact opportunities, ARISS is looking for organizations that will draw large numbers of participants and integrate the radio contact into a well-developed education plan.

The deadline to submit a proposal is March 31, 2023. Proposal information and more details, such as expectations, proposal guidelines, and the proposal form, can be found at <https://www.ariss.org/apply-to-host-an-ariss-contact.html>.

An ARISS introductory webinar will be held March 1, 2023, at 8:00 PM EST. The Eventbrite link to sign up for the free webinar is <https://www.eventbrite.com/e/ariss-proposal-webinar-for-spring-2023-proposal-window-registration-515706320487>.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. The United States sponsors are ARRL, the Radio Amateur Satellite Corporation (AMSAT), Amateur Radio Digital Communications (ARDC), NASA's Space Communications and Navigation program (SCaN), and the ISS National Lab Space Station Explorers (SSE).



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Tornado Season and Amateur Radio

03/17/2023

Tornado season is fast approaching, and amateur radio operators will again play a key role in helping the National Weather Service (NWS) issue accurate and timely warnings.

In fact, March through May is considered the most active period for tornadoes to develop.

The NWS reports there have already been 255 preliminary filtered reported tornadoes and 213 confirmed tornadoes in the United States in 2023. Worldwide, nine tornado-related deaths have been confirmed, all of them in the United States.

January saw the third-highest number of tornado watches and confirmed tornadoes of any January on record in the United States. Additionally, the first two months of the year saw the fourth-highest number of confirmed tornadoes for the first 59 days of any year on record.

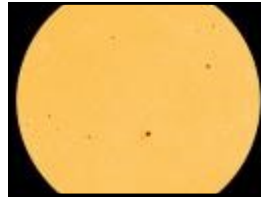
The SKYWARN® (weather.gov) Storm Spotter Program is available to anyone interested in helping the NWS track and report potentially dangerous weather. Anyone can become a SKYWARN weather spotter, and the information is available at the SKYWARN website. Most states have amateur radio networks that are activated during severe weather. Trained volunteers use their radios to report rapidly changing activity and share the information with local weather offices. A list of the states that have scheduled special weather awareness activities can be found at the NWS Awareness and Preparedness Calendar (weather.gov).

The NWS Forecast office in Norman, Oklahoma, uses amateur radio as one method of communicating with spotter groups and

emergency management organizations. For decades, amateur radio operators have provided invaluable service in support of the SKYWARN storm spotter program by using their unique communications capabilities to share critical information between the NWS, the local emergency management officials, and storm spotter networks.

The K7RA Solar Update

03/10/2023



So far this month, two new sunspot groups appeared on March 1, another one on

March 2, three more on March 3, one more on March 5, two more on March 6, and another on March 7, then two more on March 9. Average daily sunspot numbers rose from 126.3 to 143.6. Average daily solar flux changed from 158.2 to 181.6



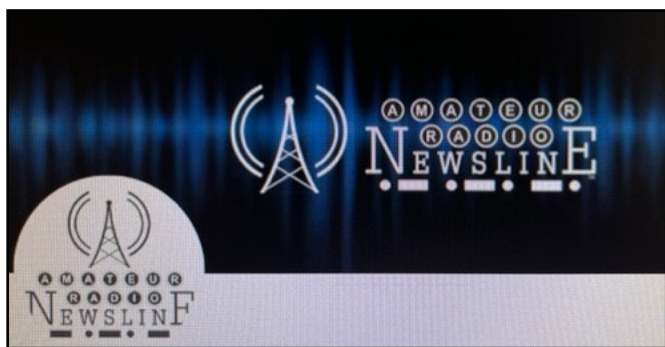
Schools Set to Talk with Astronauts via Amateur Radio

03/07/2023

Amateur Radio on the International Space Station (ARISS) has announced that several schools are planning to communicate with orbiting astronauts in the coming weeks.

Lana'i High & Elementary School in Lana'i City, Hawaii, will attempt the contact between March 20 and 24, 2023. Students attending the high school already study amateur radio and the research being done on the ISS, among other scientific pursuits.

Stone Magnet Middle School in Melbourne, Florida, will make their contact between March 27 and April 1, 2023. In their application, Stone Magnet wrote that they work to inspire students to develop interest in science, technology, engineering, arts, and mathematics (STEAM) careers. The school has a special program for science research, and students from that program place well in district and statewide science fairs each year.



David

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

Amateur Radio Newsline Report 2368 for Friday March 17th, 2023

SEVERE WEATHER UNDERSCORES HAMS' OF VITAL ROLES

PAUL/ANCHOR: Our top story brings us tales of extreme weather on both coasts of the United States. These severe conditions have served as a reminder of hams' vital roles during these challenging times. Randy Sly W4XJ brings us up to date.

RANDY: With life-threatening floods, heavy rain and snow in California and severe winter storms barrelling through the Northeast, amateurs involved in emergency communications in the United States were hard at work recently providing support to emergency management officials and other organizations such as the Red Cross.

While offering assistance to served agencies, these hams were also bringing about an additional benefit: increasing confidence in the amateur radio service. For example, in the San Joaquin Valley area of California, the Tuolumne County Amateur Radio Emergency Services was asked to assist in passing traffic via ham radio in the Emergency Operations Center. Daniel Sohn, WL7COO, San Joaquin Valley Section Emergency Coordinator, told AR Newsline that the group was invited to assist as a "work in progress" training exercise to distribute announcements on the air and solicit Situational Awareness as eyes and ears of the EOC. He also reported that Amateur Radio Ser-

vice volunteers have been alerted for potential deployment by either the Sheriff's Office or County OES Officers in other counties as well.

In addition, hams across the Northeast, if not working in SKYWARN nets, were self-activating in order to provide reports of strong winds, snow fall and damage reports to the National Weather Service.

Remembering the health and safety of "Self and Family First," amateurs on both coasts are proving their worth now and for the future during severe weather events.

2-YEAR ADVENTURE TESTS OUT 'REMOTE' DXPEDITIONING



A two-year journey is well under way for two hams from the US on board a catamaran crossing the South Pacific Ocean. They have two missions to accomplish and Kevin Trotman N5PRE tells us what they are.

KEVIN: George Wallner, AA7JV, and Michael Snow, KN4EEI, left Costa Rica in late February, setting sail and getting on the air as KH7Z/MM - the callsign for the Dateline DX Association. They are on board George's yacht, Magnet. Using their personal calls as well as the DX association call, the two are active on HF as well as 6m. They will be on the Marquesas islands through to the end of the month, then head to the Tuamotu Archipelago, IOTA number OC-066, where they hope to be on the air from late

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March to the 5th of April.

This is a two-year journey with two goals: The hams are activating grids on their journey in the Pacific and they are testing out the possibility of remote operations for DXpeditions. Their stops include various rare or semi-rare DXCC entities as the opportunity allows. They also have three stations. Two of them are 100-watt remotely operated Radios in a Box, or RIBS, that will be operating FT8. A Radio in a Box contains a transceiver and amplifier, along with cooling and control systems, all inside a waterproof case. Using their third station, the two are operating on HF using CW and SSB.

This is the latest remote-operation test undertaken by George and Michael on their travels. George writes on his page on QRZ: [quote] "The goal is to develop the capability for future DXpeditions to have remote operators, working from home or wherever."

This is Kevin Trotman N5PRE.

MICROWAVE ENTHUSIASTS PREPARE FOR CONFERENCE

In less than a month, microwave enthusiasts will be getting together in Connecticut to share ideas, equipment design and operating stories at the first Microwave Update Conference to be held since the pandemic was declared in 2020. The international conference at the Hilton Garden Inn at Bradley Airport in Windsor, Connecticut will include the 46th Eastern VHF/UHF/Microwave Conference. It will be held on April 14th and 15th and will be hosted by the North East Weak Signal Group, a regional group in Massachusetts devoted to operations on 50 MHz and above.

Although speakers and activities will focus on operations on the microwave bands, discussions are not limited to that part of

the radio spectrum. Talks will center on circuit design, the latest microwave devices, software-defined radios, small-dish EME and microwave propagation, among other topics.

At the Eastern VHF/UHF/Microwave Conference, speakers will discuss antennas, propagation, roving, SDRs, digital modes and activity nights. Additional activities are planned for this conference on April 13th and 16th.

For details, visit the website microwaveupdate.com.

RECORD FINES FOR STATIONS CHARGED WITH PIRACY

A New York City broadcaster charged with piracy has become the first of two stations to be targeted under a law passed three years ago enabling larger and, until now, unprecedented penalties. The FCC has proposed a record fine of more than \$2.3-million against Radio Impacto 2, which the agency said was still on the air at the time the commission made its announcement on Wednesday, March 15th. According to a report in Radio World, the radio signals are being transmitted from the New York City borough of Queens. Radio Impacto's website calls it "The Official Radio of Ecuadorians in New York." According to the Radio World report, the FCC issued a \$20,000 forfeiture against the station in 2015 and a year later its broadcast equipment was seized by US Marshals.

The second station was identified in the Radio World report as "Pirate Radio Eastern Oregon," and its operator faces an \$80,000 forfeiture. The FCC is awaiting response from both stations.

DO YOU HAVE NEWS?

PAUL/ANCHOR: Do you have a piece of Amateur Radio News that you think Newslines would be interested in? We are not talking about advertising your club's upcoming hamfest or field day participation, but something that is out of the ordinary. If so, send us a brief overview via the contact page at arnewsline.org.

Blast from the past

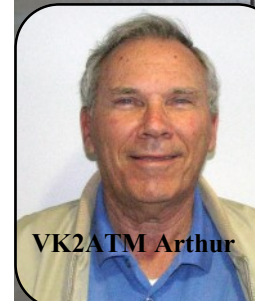
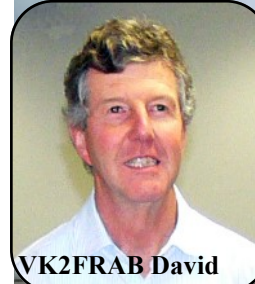
Blast from the Past' is the section of Oxtales where we reflect on what the club and its members were doing in years gone by. Members are also encouraged to send in items relating to club members or club activities in previous years.

This month's blast is taken from the 2013 and 2018 March issue of Oxtales. In 2013 The club had 74 members. Henry VK2ZHE was President, Bruce VK2HOT Vice President, Keith VK2FKJA Treasurer and Henry VK2ZHE Secretary. In 2018 In 2013 The club had 70 members. Henry VK2ZHE was President, Paul VK2ICQ Vice President, Larry VK2CLL Treasurer and Steve VK2ZSW Secretary.

The following is an extract from the President's report in March 2013 which is quite pertinent for today.

'... This time last year I reported on severe storms in our part of the coast that occurred in February 2012. This year a prolonged dry spell leading to bushfires was broken by very heavy cyclonic rain in late January 2013. A similar event over the weekend of 23rd and 24th of February 2013 brought some of the worst flooding for 25 years to the Hastings valley and to the rivers north to the border and into Queensland. As I write this report on Tuesday the 26th of February the Pacific Highway is still cut by flood waters at Clybucca north of Kempsey. Over the weekend the Hastings River flooded to 1.72 metres which resulted in evacuation of people from inundated areas and a great deal of sandbagging in an attempt to keep flood water from entering buildings. This was compounded by storm damage from the strong winds accompanying the rain. SES was very busy up and down the coast. ORARC members who are also SES members had a very busy period over four days of intensive 24 hour a day operation. Those who manned shifts at Port Macquarie SES included Michael Ward VK2FMDW, Stuart Melville VK2KSM, Da-

vid Hogan VK2FRAB, Richard Court



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In March 2018, the club held an Antenna Shootout, had 14 members attend the Central Coast Wyong Field Day, Paul VK2ICQ gave a drone demonstration and held a Telegraph Point working bee at the old transmitting site as the following photographs show.

‘Antenna Shootout Sunday 11th February 2018 at the Tuffins Lane sports fields in Port Macquarie . . . As it was a warm day plenty of chilled water and soft drinks were provided and adequate shade was available at both ends of the antenna range, and at the covered picnic tables used for the barbeque bacon and egg breakfast and sausage sizzle lunch.

Thank you to the members who arrived early to set up the caravan in the carpark. The interior of the caravan was kept quite comfortable with the aid of the electric fan. As in past years, Arthur Monck VK2ATM brought along his spectrum analyser to make the received signal strength measurements.



Rob VK2CRF and Arthur VK2ATM charting the results with the spectrum analyser.

The VHF and UHF receiving antennas made by John McLean VK2KC were set up and connected to the spectrum analyser.

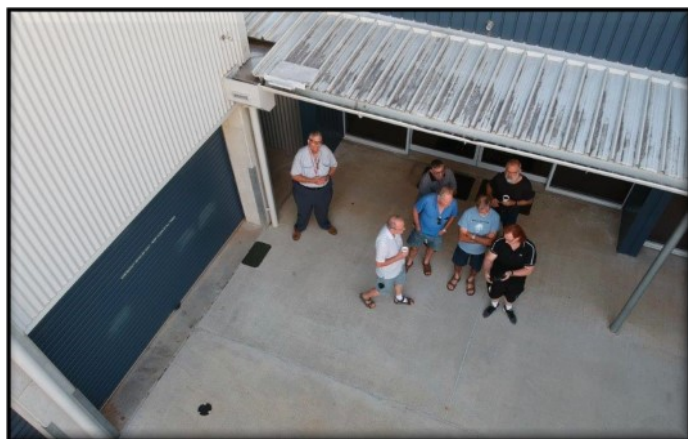
The transmitting site was set up at the far end of the sports fields. Thank you to Lyle



Smith VK2SMI for bringing his gazebo for shade and for running the transmitting site which involved setting up the reference 6 and 2 metre VHF and 70 centimetre UHF antennas and then setting up each antenna that had been offered for testing in order for the measurements of gain relative to a dipole to be made. Thank you to Larry Lindsay VK2CLL and Dennis Meade VK2DAM for assisting Lyle in all these tasks.

Drone Demonstration at the 3 February 2018 Friday Night Get Together

At the Friday Night Get Together on the 3rd of February, after the usual show and tell, Paul Colledge demonstrated his then newly purchased drone. Below a photograph of the gathering taken by Paul's drone . . .”



Equipment from the Past

Yaesu FL-50 B transmitter and FR-50 B Receiver Amateur Radio Station.



The Yaesu 'F' Line of equipment was introduced by Yaesu in the 1960's and discontinued in the 1970's. The FL-50 B and FR-50 B were designed for the amateur market as a budget priced alternative to the Collins 'S' line equipment.

The FL-50 B and the FR-50 were produced as companion products and together could be used for transceiver operation. They were both featured hybrid type construction using valves and transistors.

Amateur bands covered were 80m, 40m, 20m and 10m. Output power of the transmitter was around 50 watts depending on the transmission mode. The radios had a reputation of being well built and good reliability. The radios were marketed in Europe under the name of Sommerkamp.

The FL-50 B and companion FR-50 B are considered to be collectors items now and lend themselves to refurbishing as they used mainly discrete parts without specialist chips. However collectors are reminded that these radios are over 50 years old and many parts may need replacing.

Technical Specifications for the FL-50 B.

Type:

Amateur HF transmitter

Frequency range: 3.5-4 MHz, 7- 7.5 MHz,

14-14.5, 21-21.5, 28 - 30 MHz.

Mode: AM / SSB / CW

Channels / memory management:

1 TX, XTAL controlled

Power supply:

Mains: 110 / 220 VAC

Current drain / power consumption:

Max 130 VA @ 220 VAC

Output Power 50 Watts

Antenna impedance / connector:

50-75 ohm / SO-239

Dimensions (W*H*D):

334*153*262 mm (13.15*6.02*10.31")

Weight:

7 Kg (15.43 lb)

Other features:

VOX option.

Manufactured:

Japan, 1966-1973 (Discontinued)

Additional info:

12BY7A driver and 6JS6A final

Companion receiver, FR-50B

The FR-50B receiver used a double conversion technique, however it used a VFO controlled first oscillator and crystal controlled second oscillator to reduce costs. The first IF was at 5173.9 KHzs, and the second at 455KHz to provide good image rejections and selectivity.

The receiver incorporated several transistors in the design; Although the main line-up used valves, the VFO used for the first local oscillator, its buffer and the crystal oscillator for the second conversion all used transistors.

At this time the performance of an all transistor line up was not equal to using valves especially in terms of spurious signals, overload performance and general dynamic range. The FR-50B used a total of eight valves and three transistors for the main receiver circuitry.

Both of these sets are now very dated and their performance is well down on what would be expected by a modern radio in terms of coverage, frequency stability and selectivity.

Acknowledgements:

[Yaesu Sommerkamp FR50B » Electronics Notes \(electronics-notes.com\)](http://www.radiomanual.info/)

<http://www.radiomanual.info/>

Silent Key

Dick Hoffman VK9LH



Eulogy given by friend Barney Nichols at the service held on Lord Howe Island the 22nd of March at the Lord Howe Island cemetery.

DICK HOFFMAN: sailor, radio operator, horticulturist, small business owner, general duties labourer with the Lord Howe Island Board, TV technician, sales agent and actor and not least of all, loving husband of Noelle for nearly 60 years. That's a lot of life that he lived well!

The sympathy card I bought was captioned, "one life lived, many lives touched". I thought, how appropriate, and I'll add to it the descriptor: "and so many things achieved..."

Dick was born in July 1937 to Harry and Chloe Hoffman. He had a brother, Dennis, who died early. Harry was with the Bank of NSW and the family lived in many country towns as he was promoted from branch to branch, ending up in Sydney in the 1950s.

Dick wanted to go to sea so he studied at the Marconi School of Wireless, obtaining the Morse code and radio qualifications necessary to become a radio operator on the many merchant ships operating around the coast of Australia. He joined Amalgamated Wireless Australia ("AWA") as that

company actually employed the operators and placed them on ships as required.

During the Vietnam War he was a radio operator on the Jeparit, a merchant ship that gained some notoriety when some unionists, who were opposed to the war, refused to load it. (However, I do believe that not all waterside and maritime unionists shared this stance.) So the ship was taken over by the RAN and with a mixture of civilian and naval crew, was designated "HMAS Jeparit". All told she made over 40 voyages to Vung Tau and Cam Ranh Bay in South Vietnam, ferrying material for the Australian forces.

I don't know how many of those trips Dick was on – certainly quite a few – and from this service on a navy ship in a war zone he qualified for membership of the RSL. He eventually joined the LHI sub-branch and three members of the RSL are pallbearers today. Incidentally, although the ship pictured on today's program was one Dick worked on I don't believe it is the Jeparit.

Dick and Noelle met in 1963 and married in 1964, although it wasn't entirely a whirlwind romance as their families already knew each other. They both then studied horticulture and eventually bought a garden nursery at Dural, which they called "Watgardens".

During that time they had two holidays on Lord Howe and when Dick had a serious knee accident they decided they had to go somewhere he could swim a lot to aid his recovery. The first place they thought of was, fortuitously for both them and the Island community, Lord Howe. They moved here in 1970.

As I'll touch on, Dick deserves credit for many things. After all he made his mark in the acting world – a bit more on that later – so is it possible that the famous TV character "Dickie Knee", introduced in 1971, was based on Dick's situation? Right time, right place, right name!

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Dick and Noelle initially lived at Beachcomber and started a business doing painting, craftworks, island baskets, leatherwork, kentia candles, etc. In 1982 they became eligible for a block of land on which they built their current home and their Sea Spray art gallery.

Early on, Dick was “invited” to work for the LHI Board on general duties and worked with, among others, Tom Derwent and Harry Ackers. When the Board acquired a new vehicle the then superintendent, Horton Ward, called an all-staff meeting and told them the car was for official office use and he didn’t want “any old Tom, Dick or Harry driving it”! From then on Dick was cast as “Dick” in any old “Tom, Dick and Harry”.

Also working for the Board then were Bill Retmock and Brian Young, two of whose sons are pallbearers here today.

Dick soon became an integral member of the Mitchell Film Committee – with his background skills he was the ideal regular projectionist for the very popular Saturday night movies in the Community Hall, along with Tom Derwent (supper organiser) and Harry Woolnough (usher). Guess what? The “Tom, Dick and Harry show” lived on! He also screened the movies for the school fundraiser in the hall each Wednesday for many years.

In the mid-1980s satellites enabled the Island to receive TV for the first time. Dick was the man for the job, having the right skills for this newfangled technology and was appointed LHI agent for Acesat Satellite Receiver Corp. Of course, many people wanted TV and Dick was kept very busy importing the necessary dishes, lines and connections.

Lots of people have TV in their bedrooms and Dick used to joke that he had been in most bedrooms on the Island. Due to his expertise in digital technology he’d already

earned the nickname “Digital Dick” and perhaps this may have added some imaginary spice to his claim!!!

As time and technology advanced a new, more modern service was provided by Austar and Dick became the go-to man for the new installations until he retired.

He was also called on by many people to help out with phone and PC problems – remember those clunky devices and programs we used to struggle with? He truly was our technical whizz – to illustrate our reliance on him, compare him to Rover’s role in the community today.

Dick was a long-time ham radio fan. His call sign was VK2AGT, later changed to VK9LH. For many years he talked to other ham operators in Australia and overseas. Fellow enthusiast Des “Bonk” Thompson (VK9FLHI) said he was very well-known in many countries.

Dick was always a willing advocate for the Island and Des opined that it’s more than likely some potential tourists’ interest in Lord Howe was piqued by conversations with him that eventually led to them visiting. Des’ son, “Bonk Jnr”, is the sixth pallbearer today.

I mentioned Dick’s acting experience earlier. To be sure it was brief, but it was noteworthy. When the movie “Indecent Obsession”, set in the tropics in WW2 was filmed here some local residents were cast as extras, Dick included. He played a wounded soldier recovering in a field hospital. In 1983

The Signal printed a poem written by Paulette Hicks (the then local doctor’s wife) about the movie. One stanza stands out:

“Hoffman dressed from head to toe
In bandages and blood
Sustained a knock upon his head
When they tipped him in the mud.”

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Noelle wasn't acting when she had to nurse him and perhaps unsurprisingly, this ended his acting career.

Time moves on and Dick and Noelle eventually settled into retired life. He enjoyed going to morning teas with his friends (I was privileged to be one), where we had many and varied discussions to solve the world's problems (we all agreed that was easier than solving some of the Island's problems!). He enjoyed his home life and hobbies and continued to have regular radio skeds on the mainland.

He and Noelle travelled widely – to the Caribbean, USA, South America, Canada, PNG, Europe, Japan, and interestingly, Pitcairn Island and Antarctica but they were always happy to come home.

When it comes to that descriptor, “significant service to the community”, often used in Australia Day awards, Dick and Noelle are right up there. In addition to Dick's involvement in installing and maintaining TV and other communications devices and his part in the “Tom, Dick and Harry show”, he helped with radio services in several Gosford to Lord Howe yacht races.

The Signal in 1977 reported the efforts of him and radio LHI in that year's race. Also worth mentioning is The Signal's report in August 2000 titled “Olympic Torch Thrill for Schoolchildren”, where “local technician Dick Hoffman adjusted the Island's satellite dish to receive Channel 7 (the official Olympic telecaster)”. He supported Noelle with her many engagements, especially as the local agent / contact for Port Macquarie Veterinary Hospital, and her involvement in tennis activities and singing in the local choir, The Lord Howlers.

Finally, Dick had a keen but understated sense of humour. He was a regular contributor of jokes to The Signal during my time

as owner / editor and, indeed, in July 2014 I reported: “As Dick is usually one of the first people at Joy's Shop on publishing day to pick up his copy, it is only fair that today he will be among the first to read his own contribution. He submitted all three jokes in that edition.”

I said earlier that it was fortuitous for all when Dick and Noelle chose to move to Lord Howe. When we reflect on what they've subsequently contributed to the community and, I know, on the love and happiness they have it turn experienced here, it certainly was.

Noelle wishes to express her gratitude to the hospital staff who looked after Dick so well in his last days and all their friends who have looked after her at this awful time, especially Shona, Lucia and the seniors.

Thank you.
Barney Nichols



Eulogy and photographs supplied to Henry VK2ZHE by Des Thompson VK29FLHI for publication in this months Oxtales.

