OXTALES

First published 1980

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: https://www.orarc.org

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

ORARC's fifty fourth year

May 2025

PRESIDENT:	**Henry Lundell**	VK2ZHE	6582 0534
VICE PRES:	**Paul Colledge**	VK2ICQ	6580 9912
TREASURER:	**Dennis Meade**	VK2DAM	6582 2998
SECRETARY:	**Peter Fletcher**	VK2HPF	0423117725

President's Report

March 2025

President's Report

ORARC 2025 Field Day 7 & 8 June Kings Birthday Weekend.

The ORARC 2025 49th annual Field Day takes place on Saturday the 7th and Sunday the 8th of June during the 2025 Kings Birthday Weekend.

The Field Day dinner will be held in the Seabreeze Function Room at the Port Macquarie Golf Club on the evening of Saturday the 7th of June 2025.

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

Continued on Page 3

ORARC VHF/UHF Repeaters

MIDDLE BROTHER
VK2RPM 2 metre (Voice - CTCSS 91.5Hz)
O/P 146.700MHz - I/P 146.100MHz
VK2RPM EchoLink Node Number 916007

VK2RPM 70 cm (DMR Radnet)
O/P 438.525MHz - I/P 433.525MHz

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-5 (APRS iGate Digipeater)
SX 145.175 MHz 1200 Bps

Down The Coax

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

Monthly General Meeting
Saturday 3 May 2025 2:00 pm

Coffee Morning
The Hill cafe, Thrumster
10am Thursday 8 May 2025

Friday Night Get-Together
Friday 16 May 2025 7.00 pm

World Telecommunication Day
Saturday 17 May 2025.
AX prefix permitted

Antenna Shootout Huntingdon
Sunday 18 May 2025 10.00 am

Monthly General Meeting
(1 week before Field Day)
Saturday 31 May 2025 2:00 pm

ORARC Field Day Wauchope Showground Hall
Saturday 7 and Sunday 8 June 2025
Field Day Dinner Sat. Port Macquarie Golf Club

Coffee Morning
The Hill cafe, Thrumster
10am Thursday 12 June 2025

Friday Night Get-Together
Friday 20 June 2025 7.00 pm

Winter VHF/UHF Field Day
Saturday 21 and Sunday 22 June 2025

Monthly General Meeting
Saturday 5 July 2025 2:00 pm

Coffee Morning
The Hill cafe, Thrumster
10am Thursday 10 July 2025

Friday Night Get-Together
Friday 18 July 2025 7.00 pm

Net Controllers' Roster
Nets on Voice Repeater VK2RPM 146.700 MHz

Sundays (0900 Local)		Thursdays (1930 Local)	
		VK2EM	May 1
VK2FMGM	May 4	VK2ZHE	May 8
VK2FMGM	May 11	VK2ICQ	May 15
VK2FMGM	May 18	VK2EM	May 22
VK2FMGM	May 25	VK2ZHE	May 29

May 2025

June 2025

VK2FMGM	June 1	VK2ICQ	June 5
VK2FMGM	June 8	VK2EM	June 12
VK2FMGM	June 15	VK2ZHE	June 19
VK2FMGM	June 22	VK2ICQ	June 26
VK2FMGM	June 29		

July 2025

		VK2EM	July 3
VK2FMGM	July 6	VK2ZHE	July 10
VK2FMGM	July 13	VK2ICQ	July 17
VK2FMGM	July 20	VK2EM	July 24
VK2FMGM	July 27	VK2ZHE	July 31

Annual General Meeting
Saturday 2 August 2025 2:00 pm

Monthly General Meeting
Saturday 2 August 2025 after AGM

ORARC Treasurer Dennis Meade VK2DAM reminds ORARC members that annual subscriptions are due for renewal on the 1st of July 2025.

Call for members to assist with the running of the field day on the Field Day 7 & 8 June , Kings Birthday Weekend.

President's Report Continued from Page 1

Hall in High Street Wauchope on Saturday the 7th and Sunday the 8th of June 2025.

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 7th of June 2025 at 5pm in the Port Macquarie Golf Club Function Room. 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. 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.

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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. Just help yourself from the table 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.

Prize Draw and Trophy Presentations

The raffle will be drawn at 1pm at the prize giving and trophy presentations on Sunday afternoon. Note the earlier time. This is in response to so many people wishing to depart after lunch to drive back home. The earlier time for prize giving means that this year there will not be a 1pm 2 metre mobile fox hunt. The last fox hunt on Sunday will be the 11am 2 metre fox hunt which will now be a pedestrian event. This change means that there will be a bigger crowd for the presentation of the foxhunt trophies.

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. The VK2RMPM 438.525 MHz DMR repeater has excellent coverage south of Port Macquarie and down to Taree down the Pacific Highway.

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You can call on Talk Group 505 via any DMR repeater or suitable hotspot that you can access.

The Telegraph Point VK2RCN 147.0 MHz 2 metre FM voice repeater and the VK2RCN 53.8 MHz 6 metre voice repeater both provide excellent handheld radio coverage in both Port Macquarie and Wauchope. A 91.5 Hz CTCSS tone is required to access the 147.0 MHz repeater and it transmits a 91.5 Hz CTCSS tone which allows you to use CTCSS on your 147.0 MHz receiver to prevent interfering signals from opening your receiver squelch in the absence of transmissions from the repeater. The 6 metre 53.8 MHz FM repeater requires a 91.5 Hz CTCSS tone in order to access the repeater. It transmits a 91.5 Hz CTCSS tone which allows you to use CTCSS on your 53.8 MHz receiver to prevent interfering signals from opening your receiver squelch in the absence of transmissions from the repeater

Traders

This year we are pleased to have five 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.

As well as the items for sale, Gary will have an extensive display of the 1970s Amateur radio related test equipment that he has restored. These items will bring back many memories for those of us who were young in the 1970s.

Thank you to Gary Ryan VK2ZKT and Carol VK2CSR for their ongoing support of the Field Day. Radio Supply have again sponsored the hire of the Seabreeze function room at the Port Macquarie Golf Club for the Field Day Dinner on Saturday Night, the 7th of June 2025. ORARC greatly appreciates this generous gesture as having the Field Day Dinner in the function room makes for a very enjoyable evening in very pleasant surroundings.

QSL Communications

QSL Communications will have an extensive range of products including DMR digital voice and analogue FM transceivers, antennas, antenna mounts, power supplies, spare batteries for various radios, programming cables for various radios, and coaxial cable and connectors etc. Have a look at the QSL Comms website https://qslcomms.com.au/ for details. At the Field Day the very popular Anytone and TYT DMR and analogue radios will be available. Also available will be multimode digital hotspots and the very popular Nano VNA. You can place your orders online prior to the Field Day and pick your order up at the Field Day. QSL Communications have confirmed that they will be present on both Saturday and Sunday this year.

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Jaycar Port Macquarie and Road Tech Marine

Jaycar Port Macquarie and Road Tech Marine will again collaborate to set up a mega stand this year. Last year's stand was very impressive to say the least. This year's stand is planned to be even bigger and better.

Jaycar Port Macquarie

Jaycar will be showcasing and demonstrating a range of products including 3D printers. In addition to their extensive inventory of electronic components and hardware, Jaycar stock a very wide range of equipment and tools for the Radio Amateur.

The Jaycar store in Lake Road, Port Macquarie will be open throughout the Kings Birthday Weekend. Please see Store Manager Krystie at the stand on Saturday if you would like to pick up items on Sunday at the Field Day.

Did you know that by popular request, the Jaycar Annual Catalogue has returned. The 578 page March 2025 catalogue is available online at https://www.jaycar.com.au/annual-catalogue. It can be downloaded as a pdf document but be warned that it is a 340 MB file. The even better news is that a print version of the Annual Catalogue will be available in June 2025. On the Annual Catalogue opening web page there is an option to provide your email address to receive an email when the printed copies are available.

Links to the downloadable on-line catalogue and access to the full Jaycar product inventory and downloadable manuals and datasheets can be accessed on the Jaycar website at https://www.jaycar.com.au/

Road Tech Marine - RTM

Road Tech Marine Port Macquarie will be showcasing and demonstrating a range of products. Their extensive product range caters to the road and marine market so if you own a trailer, caravan, recreational vehicle, four-wheel drive or boat or just go travelling and camping; you should visit their store. As well as electronic and electrical items they stock everything from rope to spare wheels with tyres. If you are going out to operate portable in POTA, SOTA or BOTA etc; you will find lots of the items that you will need. Last year we were treated to samples of freeze dried ice cream. Delicious!

The RTM annual catalogue is coming but all their products and specials are online at https://www.roadtechmarine.com.au/

The Road Tech Marine store on Hastings River Drive, Port Macquarie will be open throughout the Kings Birthday Weekend. Store Manager Amber at the stand at the Field Day will be pleased to help with any items that you may need.

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Mad Dog Coils

Keen Parks on the Air (POTA) operator Marty Nelson VK4KC will set up his Mad Dog Coils https://maddogcoils.com.au/ business stand again this year. His stand is a welcome addition to the Field Day. It created a lot of interest last year and he did a brisk trade in his coils and antenna mounts and accessories.

POTA

Visit the Parks on the Air stand and learn all about POTA. Marty Nelson VK4KC is the Australian POTA Co-ordinator. Marty will be assisted by several very experienced POTA operators including Gerard Hill VK2IO, John Jones VK4MUD, Richard Osborne VK2OKR and Bruce Ekert VK2EM in running the stand.

The stand is certain to attract a lot of interest as POTA and allied field portable operations are becoming increasingly popular. If you are new to POTA operation, or just thinking about it, come along to the stand learn how you can participate in this interesting Amateur Radio activity.

ALARA

ALARA have a stand this year. Norma VK2YL and Frank VK2AKG O'Hare from Sydney will be running the stand and are looking forward to meeting as many people as possible. For more information go to the ALARA website at http://www.alara.org.au/ Also, see the ALARA column in each issue of Amateur Radio Magazine. We welcome ALARA back this year after missing a couple of years after the untimely passing of Dianne Wilson VK2DNE who had taken over running the stands when Dot Bishop VK2DB retired after the sad passing of her husband John Bishop VK2ZOI. Dot and John had previously run the ALARA stand at ORARC Field Days for a couple of decades so ALARA is very much part of the ORARC Annual Field Days.

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. Also learn more about the OpenGD77 firmware with many enhanced features for these and other radios. Please see Paul Colledge VK2ICQ, Ben Waters VK2BJW or Tim Tuck VK2XAX on the ORARC stand.

If you are contemplating purchasing a DMR radio for the first time

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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 7th and 8th of June 2025. 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). Matt Perkins VK2FLY presented an excellent 8 part "Introduction to DMR" series on the VK2WI broadcasts between 11 February 2024 and 31 March 2024. The transcripts and audio files of these broadcasts including Matt's Introduction to DMR Series are available for download on the ARNSW website at https://arnsw.org.au/html/news_vk2wi.htm There are other world-wide DMR networks such as Brandmeister which can be accessed using a hotspot or some other repeaters.

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. There is a nice trophy to be won for the best display.

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. This year he will have an extensive range of his restored 1970s test equipment on display.

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 and the VK2RPM 438.525 MHz RadNet DMR repeater at Middle Brother have both been provided by ARNSW as a major support item to benefit ORARC and all amateurs within the coverage area of these repeaters.

Fox Hunting

Fox Hunting 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

Continued on next page

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Australia where he reported on the Fox Hunts 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 work very well with all foxes being clearly heard at the start. The 2 metre and 80 metre hidden transmitter hunts are always keenly contested. If you don't have a dedicated 80 metre sniffer, remember to bring your transistor radio along for the Sunday morning 80 metre radio pedestrian foxhunt. In the past only unmodified transistor radios could be used in this event but this year there is no restriction and you can use your 80 metre sniffer for the hunt. The Saturday afternoon 2 metre talk in fox hunt offers an opportunity for those without direction finding equipment to participate in a fox hunt.

Demonstrations

It is hoped that as in past years there will be a number of live demonstrations showcasing various aspects of technology in Amateur Radio.

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 as a separate printable pdf file. The program can also be downloaded from the ORARC website https://www.orarc.org/

Annual Membership Subscriptions Due 1 July 2025

ORARC Treasurer Dennis Meade VK2DAM reminds ORARC members that annual subscriptions are due for renewal on the 1st of July 2025.

Membership fees for the 2025 – 2026 Financial Year will be the same as last year's. The Committee is very pleased that almost every member renewed their subscriptions in the 2024 – 2025 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.

TidyHQ

Members are now able to check their membership status by logging in to TidyHQ. To access TidyHQ simply click on the MEMBER PORTAL button at the top of the Home Page of the ORARC web site https:// www.orarc.org/ This will take you to the Oxley Region Amateur Radio Club TidyHQ Membership Portal. Click on the green Log In button at the top right-hand corner of the page. Use your email address to

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Log in. When you first log in you should set your password. If you forget your password there is an "I forgot my password" link which will send you a temporary password to your email address.

Renewals for the 2025 – 2026 financial year are now open. When you are logged in to TidyHQ you can securely pay your membership renewal via the Stripe payment option. There is no surcharge to members for paying this way. This is the recommended method of paying your renewal as it will immediately update your membership status. If you prefer you can pay your membership renewal by direct deposit to the ORARC bank account, or by cheque or by cash at any of the ORARC meetings, or at the Field Day.

TidyHQ will send you an email reminder if you do not renew by the 1st of July 2025.

At the Field Day ORARC Vice President Paul Colledge VK2ICQ, Secretary Peter Fletcher VK2HPF and Treasurer Dennis Meade VK2DAM will be pleased to answer any questions that you may have.

ORARC Direct Deposit Details

As an alternative to renewing on line by logging in to TidyHQ, 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.

Antenna Shootout Day 18th of May 2025

The 2025 Antenna Shootout at 10am on Sunday the 18th of May 2025 will be held at Huntingdon. Thank you to Larry VK2CLL and Penny for again hosting the event at their property this year.

The address for the Antenna Shootout is 145 Huntingdon Road, Huntingdon. Huntingdon Road is on the right hand side of the Oxley Highway just past Colonels Creek a short distance west of Wauchope. Just look for the ORARC banner at the entrance to the property on the left hand side of Huntingdon Road.

The day will start at 10am with a sumptuous morning tea served on the verandah of the house. The antenna shootout will then commence. There will be a sausage sizzle barbeque lunch. After packing up there will be afternoon tea to be enjoyed before departing.

Antennas for 6 metres, 2 metres and 70 centimetres are able to be tested as in previous years. Thanks to Tim Tuck VK2XAX we will have facilities to test antennas on 1.2 GHz and 2.4 GHz this year.

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A table of the antenna test results and photographs will be included in the July issue of Oxtales.

We look forward to seeing you at the Antenna Shootout.

Coffee Mornings

The informal Coffee Mornings at 10am on the second Thursday of each month continue to be popular. The venue is now The Hill café in the Sovereign Hills shopping centre at Thrumster.

The Hill café welcomes the ORARC members and will always have a large table available for the Oxley Region Amateur Radio Club Coffee Morning.

The dates of the Coffee Mornings are listed in "Down the Coax" in this issue of Oxtales, and are shown by a yellow square on the second Thursday of each month on the ORARC Calendar.

The Coffee Mornings are a great opportunity to meet fellow members and their families socially over a leisurely morning tea. Visitors are always welcome to join us and at least a couple of recent new Club members have joined up at Coffee Mornings.

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 at 2pm on the first Saturday each month is kept to approximately 15 minutes so that the major part of the meeting can be devoted to the guest speaker.

The well-attended May General Meeting on Saturday the 3rd of May 2025 was treated to a very interesting presentation on the very versatile AI application, Grok, by Ben Waters VK2BJW.

Ben introduced everyone to the basics of Grok and then went on to demonstrate some of its capabilities in practical scenarios on the big screen.

Grok is a generative artificial intelligence chatbot developed by xAI. It is based on the large language model (LLM) of the same name and was launched in 2023 as an initiative by Elon Musk. The chatbot is advertised as having a "sense of humor" and direct access to sister platform X, formerly known as Twitter. Ben explained that it was important to be civil and respectful when interacting with these AI programs as they will react adversely to any forms of abuse but in the case of Grok, at least, it does have a sense of humour.

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ORARC members were first introduced to Artificial Intelligence (AI) at the Monthly General Meeting on Saturday the 4th of March 2023 when Paul Colledge VK2ICQ introduced everyone to ChatGPT with a very informative presentation followed by what was then an astounding live demonstration of the capabilities of ChatGPT online. For most of the attendees this was the first time they had seen ChatGPT in action and the live demonstration held everyone spellbound as well-structured easy to read plain English text filled the screen in response to plain English requests.

Ben's on-screen live demonstration of the capabilities of Grok at the May 2025 meeting kept everyone spellbound in seeing how quickly and logically requests turned into well-structured, coherent, relevant text on screen.

Ben's live demonstration culminated in Grok writing a May 2025 issue of Oxtales on screen in record time. It was based on previous issues of Oxtales and contained all the usual topics expected in an issue. While the President was very tempted to forgo having to write a May 2025 President's Report, and Oxtales Editor John Hansen VK2AYQ was similarly tempted to not have to compile a May 2025 issue of Oxtales, we forwent the opportunity to save the on screen offering. Instead, the President and Oxtales Editor are producing this issue of Oxtales in the traditional hard way. The downfall of using AI to write copy is that it doesn't have access to new material which is mainstay of keeping Oxtales relevant. We are, however, taking notes!

Ben was heartily thanked by the meeting for providing a great insight into just what AI can do. There have been a lot of advances and AI programmes such as ChatGPT and Grok are now amongst the well-established tools for those who are in business. As Ben explained, by taking a paid subscription to Grok, the application will safeguard your data and not share it with other users so it can be used for sensitive business purposes. It will of course continue to draw on the information that is in the Public Domain.

The Friday night get togethers are at 7pm on the third Friday of each month. They are a great opportunity for show and tell, and for socializing over tea or coffee and biscuits in the comfortable air-conditioned SES Building. A brief account of the last Friday's get together follows this report.

VK2RCN 147.000 MHz 2 Metre Repeater

Some members have been experiencing interference on their 147.0 MHz receivers, particularly when mobile in various places in Port Macquarie. A 91.5 Hz CTCSS tone is required in order to access the Telegraph Point VK2RCN 147.000 MHz repeater. The repeater transmits a 91.5 Hertz CTCC tone. This allows 147.000 MHz receivers to be operated with CTCSS enabled which will prevent interference and unwanted signals from opening the receiver mute in the absence of transmissions from the repeater.

If you are unable to key the VK2RCN 147.0 MHz repeater, please check that you have transmit CTCSS 91.5 Hz enabled. You may need to have your code plug updated at the Field Day if you are using last year's code plug in your RT3S or MD380 or Anytone hand held radios.

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Telegraph Point VK2RCN Off-Grid Solar Powered Repeater Site

The Telegraph Point VK2RCN repeater site is totally off-grid. 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. With the wet summer and autumn and the continuing wet mild winter, the trees to the north of the site have grown even taller in the last year and the leaf canopy is particularly dense which has increased the amount of shade at the site this winter. The state of the batteries is being carefully monitored.

The wet summer and autumn resulted in significant weed germination around the mast and building. Thank you to Larry Lindsay VK2CLL and daughter Claudia for treating the new weed germinations to keep the ground around the site free of weed growth as part of the strategy to mitigate against fire hazard.

Middle Brother VK2RPM Repeater Site

As reported in the March 2025 issue of Oxtales, the VK2RPM repeater equipment is now located inside the building at the repeater site. All the repeaters continue to work well.

Education

Now that Amateur Radio licences are a Class Licence, and Amateur Radio Licensing is administered by the ACMA, there is no charge for Amateur Licences and Amateur Radio Licence assessments are free.

The Oxley Region Amateur Radio Club Inc runs Foundation Licence Training weekends and assessments as soon as sufficient candidates have registered. Candidates should contact Education Officer Larry Lindsay VK2CLL to register. The simplest way to do this is via the Contact Form on the ORARC website https://www.orarc.org/ Please provide your name, phone number and email address on the form and Larry will contact you.

The next Foundation Licence training and assessment weekend is on the weekend of Saturday the 31st of May and Sunday the 1st of June 2025.

If you have self-studied and are ready for assessment, the Oxley Region Amateur Radio Club Inc is able to conduct assessments for any grade of licence at short notice. Contact Education Officer Larry Lindsay VK2CLL to register. The simplest way to do this is via the Contact Form on the ORARC website https://www.orarc.org/ Please provide your name, phone number and email address on the form and Larry will contact you to make the arrangements. The Club has several ACMA Accredited Assessors. Please note that you can only sit for assessment for the same grade of licence once every three months.

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.

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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. Everyone is welcome to join this net. 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 2025 Christmas Party

The ORARC Christmas Party is held on the first Saturday in December each year. The 2025 Christmas Party will be held on Saturday the 6th of December as marked on the ORARC 2025 calendar.

After the success of the ORARC 2024 Christmas Party last year we look forward another great Christmas Party this year on Saturday the 6th of December 2025. The venue remains the same. It is the excellent covered outdoor picnic area at the Long Point Vineyard and Art Gallery.

New Members

The Oxley Region Amateur Radio Club is pleased to welcome three new members:

Michael Lohmann VK2MKL of Port Macquarie
Joe Cannon VK2AIF of Nambucca Heads
Rod Bell of King Creek

We wish Michael, Joe and Rod a long and happy association with the Club.

Rod is one of the candidates for the next Foundation Licence training and assessment weekend so we look forward to seeing him on the air in the future.

Milestones

Welcome back to ORARC Secretary Peter Fletcher VK2HPF after completing a most ambitious life "bucket list" odyssey by boat down the navigable part of the River Murray all the way to the Ocean. See the report in words and pictures of this remarkable achievement in future issue of Oxtales.

I hear Peter is already planning his next river journey!

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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.

Henry Lundell VK2ZHE
President

A brief report from Tim VK2XAX from the last Friday Night Get together Multimeter Challenge.

The Challenge by Tim VK2XAX.

‘ Hi all,

How accurate is your multimeter ?

Would you like to know ?

What about AC? does your meter read true RMS , average or peak-to-peak ?

Can your meter measure an AC voltage on a DC offset ?

Answers to these questions and more at next Friday nights get together.

I'll bring along my little transfer standard for you to test your meters against and my HP34401A bench meter to demonstrate 4 wire resistance measurement.

I'll also bring along some challenging resistors to measure i.e. a 0.0015ohm current shunt.

Additionally I'll bring my HP33120A Arbitrary Waveform Generator to exercise those AC,AC+offset & frequency ranges.

Bring your meters along to test see you there.

73s
Tim VK2XAX’

The Response

Last nights Multimeter challenge was well attended with the star of the show being an old AVO Model 9 mark 4 in excellent condition brought in by Rob, VK3CRF. The Model 9 was 1st produced in 1969 and this AVO was still spot on with the tests we put it through.

Also on display where some interesting test leads and accessories from Pomona Electronics with Tim, VK2XAX, explaining what you might use each type for.

Tim also gave a short discussion on the

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triboelectric issues with test leads. These often manifest as static buildup and discharge which can significantly impact the accuracy and reliability of electrical measurements. These issues arise from the triboelectric effect, where contact and separation of different materials, like the test lead's material with the test equipment or environment, generates static electricity.

One other thing that should be mentioned was to watch out for thermal electric effects as a source or errors in low-voltage measurements.

More info on the Pomona test leads can be found here..
https://www.pomonaelectronics.com/

More info on the AVO Model 9 mark 4 can be found here…
https://www.pomonaelectronics.com/

A search of the internet will turn up interesting scientific documents on the triboelectric effect.

A good read on the thermometric effect as pertaining to low voltage measurement was produced by Martin L Kidd of the Fluke Corporation and that can be found here...

https://xdevs.com/doc/_Magazines/CalLab/
Watch_Out_for_Those_Thermoelectric_Voltages_Cal_Lab_Journal_reprint_182_MB.pdf

The AVO Model 9 mark 4 in the above photograph was brought in by Rob VK2CRF. Rob said that he spied it at a hamfest several years ago at a reasonable price and just couldn't resist the purchase. Many technicians would have liked to purchase the AVO however the price was several hundred dollars.

The Universal AVO meter model 8 was the most ubiquitous multimeter in the AVO range which started life back in 1923, and although it was initially a DC-only

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instrument many of its features remained almost unaltered right through to the last Model 8 of 2008. In particular the mirror scale, the "smiley" meter scale, the two switches and two terminals. AVO multimeters are renowned for their reliability and robustness, the early incorporation of a mechanically operated cut out linked to the meter movement and the two switch range selection system have endeared these meters to generations of electrical and electronic engineers. By 1965, the company had already created over one million AVO meters. The firm also produced a range of smaller multimeters, the AVO Minor and later the AVO Multiminor as well as a number of special instruments such as the Heavy Duty model. Production of the iconic model 8 meter ceased in 2008. Though known for their Avometer general purpose multimeters, they made a wide range of test gear including valve testers, oscillators and light meters.

The Avometer Model 9 Mk. 4 which was introduced in 1969 is a high sensitivity instrument for the measurement of voltage, current and resistance. It is designed primarily for the electronics engineer and is similar in specification to the Avometer Model 8 Mk. 4. The Model 9 incorporates all the traditional design features of the Model 8 including the Avo automatic cut-out mechanism and reverse moving coil facility.

The Model 9 is, however, scaled in basic units of 10 and 3 and all range switches, controls and terminals are identified by graphical symbols, which in general follow the requirements of the International Electrotechnical Commission.

The protective devices incorporated in the Model 8 Mk. 4 are all retained and an insulation resistance range now enables measurements up to 600A to be made using a range of external shunts. The decibel scale is, however, not included on this instrument.
SPECIFICATION

A.C. 10mA to 10A f.s.d. in 4 ranges.
D.C, 50uA to 10A f.s.d. in 7 ranges.
A.C. 3V to 3000V f.s.d. in 7 ranges.
D.C. 3V to 3000V f.s.d. in 8 ranges.

Test Leads

A variety of test leads were also exhibited at the Friday night Get Together and their purpose explained.

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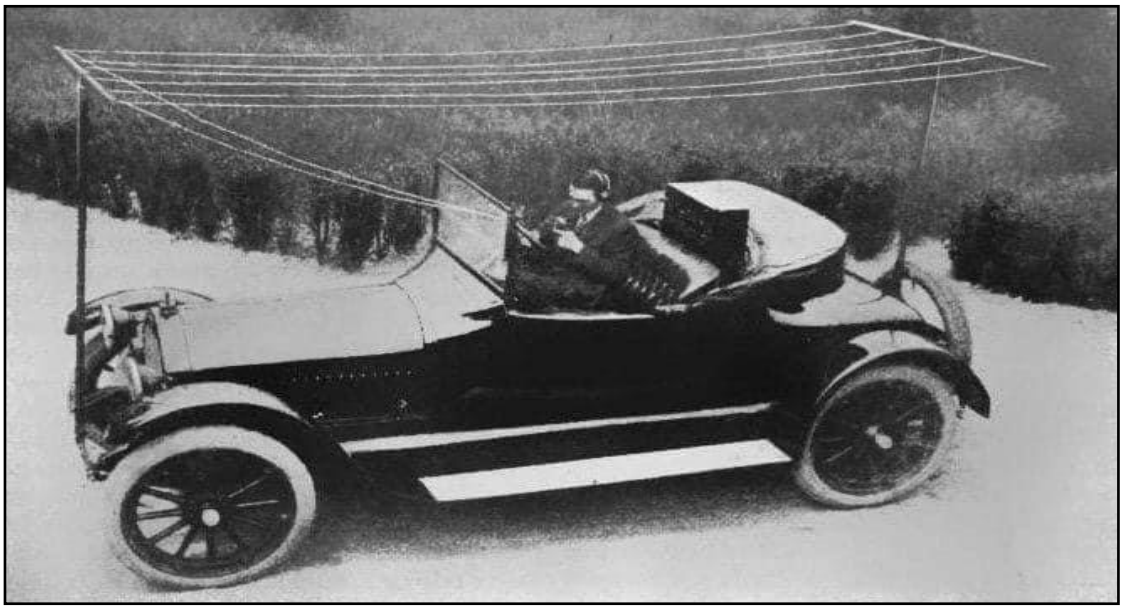
President Henry VK2ZHE thanked Tim for his initiative in running the Multimeter Challenge. Henry also suggested that it would become an annual event especially as it wouldn't be at the mercy of the weather!

Field Day Reminder

Don't forget there is a trophy at the field day for the best presented amateur car. A trophy which has been hotly contested in the past. I am sure that the person below would have entered their car showing its unusual antenna system would have stood a chance of a trophy.



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 2015 May issue of Oxtales. The club had 70 members. Lyle VK2SMI was President, Charles VK2KCE Vice President, Larry VK2CLL Treasurer, and David VK2 FRAB Secretary.

The main reports on club activities was on the participation in ANZAC Day Returned services club, Urunga Radio Convention and John Moyle Memorial Field Day. An edited report on the ANZAC Day activity written by Lyle VK2SMI follows.

'. . . ANZAC Day this year was the 100th anniversary of the landing at Gallipoli and ORARC set up the Club's Communications Caravan at the Wauchope RSL Club in line with the idea from our brother amateurs in Queensland.

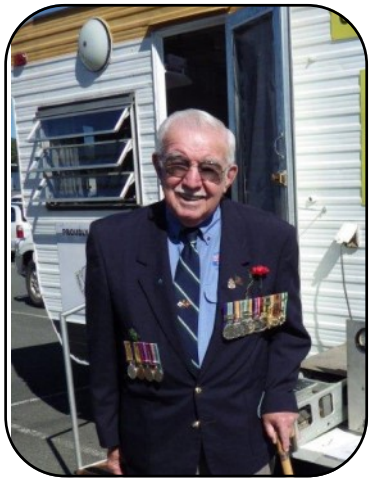
I arrived with the caravan in tow at 5am to secure a suitable parking spot, and after attending the Dawn Service, the van was set-up with the on-board vertical antenna, generator and several WWII vintage radios supplied by Arthur VK2ATM, for display.'

Preparing for dawn march

'. . . Henry VK2ZHE, and I took advantage of the ANZAC breakfast supplied by the Wauchope RSL Club, and for $10 we received bacon, scrambled eggs, baked beans, potato wedges, fried tomato, toast, mushrooms (I passed on those), tea, coffee and orange juice, and a great start to the day then back to the set-up and the radio lay silent except for the RFI from those poker machines inside!

Upon return to the RSL Club there were several speeches and photo opportunities. It is noted that the Club's Communications Caravan was prominent in its location as the background to these photos.

Left Dave VK2AIF with an impressive selection of medals. Dave is displaying his own medals on the left and his father's on the right hand side of the blazer.



Right Craig VK2ZCM proudly wearing his father's sparkling medals.
Editor's Note: Sadly since 2015 both Dave and Craig have become silent keys (SK).

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The photograph on the previous page shows club members:

David VK2FRAB, Lyle VK2SMI, Arthur VK2ATM, Rob VK2CRF and Steve VK2HOO looking at vintage radio equipment. Bendix MN26C radio compass receiver and the Command transmitter and receiver supplied by Arthur VK2ATM . . .'

'. . . Thanks to: Steve VK2HOO, Arthur VK2ATM, Rob VK2CRF, Mark VK2FMGM, Stuart VK2FSTU, Henry VK2ZHE, David VK2AIF, Larry VK2CLL, Craig VK2ZCM, Paul VK2ICQ, David VK2FRAB, Jim VK2VIV, John VK2AYQ and Peter Kucera for your attendance and participation . . .' Lyle VK2SMI.

Henry VK2ZHE wrote the report on the John Moyle Memorial Field Day extracts below:

' . . . The Oxley Region Amateur Radio Club operated the club station VK2BOR from the club's communications caravan which we set up in the car park at McInherney Park, Port Macquarie NSW. The location was quite favourable for HF as there wasn't too much electrical noise and the park is on the southern bank of the Hastings River.

We used the club's 5 band HF trap vertical antenna mounted on the caravan for the contest. VK2BOR only operated for the first 6 hours of the contest on the Saturday afternoon. We were intending to put up dipole antennas but the continual heavy rain on the Saturday morning while we were setting up, and the even heavier rain during the afternoon convinced us to just erect the trap vertical . . . '

' . . .The caravan and its waterproof annexe provided a dry comfortable area from which to operate, and to stand down. We erected a simple shelter for the generator to keep the rain off it. The park has under cover barbeques which enabled us to enjoy a sausage sizzle lunch.

HF conditions were better this year than during a couple of previous years' contests. It was good to see 15 and 10 metres open on the Saturday afternoon . . . '

There were isolated intense local thunderstorms in the afternoon which created very heavy QRN on 40 metres at times so it was good to be able to use 20 metres when this was the case. Unfortunately the QRN and man-made QRM made 80 metres unusable all day. Setting up the club communications caravan and operating in the heavy rain was a good exercise which helped to maintain member's skills in field communication. The caravan proved its worth as without it we would not have been able to set up a self contained portable station under such adverse conditions.

I've attached a few photos which Bob Ecclestone VK2ZRE took on the day. Note the need for the lights to be on inside the caravan at 13:45 in the afternoon! The creature comforts were a real morale booster.

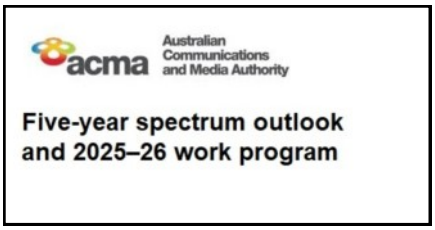
Rob VK2CRF, Craig VK2ZCM (SK) and Henry VK2ZHE operating in the dry! . . . '

Wireless Institute of Australia response to the Australian Communications & Media Authority Consultation

Date : 20 / 04 / 2025
Author : Spectrum Strategy Committee

"Strengthening the Future of Amateur Radio in Australia"

The Wireless Institute of Australia (WIA) has made a formal submission to the Australian Communications and Media Authority (ACMA) in response to the draft Five Year Spectrum Outlook (FYSO) 2025–30 and the proposed 2025–26 Work Program. This document outlines the WIA's continued commitment to supporting and advancing the Australian Amateur Service and ensuring its alignment with contemporary spectrum planning.



Key Recommendations from the WIA Submission

1. Clarifying Operator Rights Under the Class Licence

The introduction of the Radiocommunications (Amateur Stations) Class Licence 2023 was a significant step forward, but gaps remain in the documentation that amateur operators use to verify their legal operating status.

2. Fixing Callsign Administration in External Territories

Persistent issues with call sign management in Australia's external territories and Antarctic stations continue to hinder operations and operator confidence. The WIA is calling for clear policy and procedural updates to ensure that call sign allocation and oversight are consistent across all Australian regions, including those in unique geopolitical contexts.

3. Planning for Higher Power Access

The WIA has asked ACMA to commit to beginning work in 2026 on a new framework that would provide broader access to higher transmitter power privileges. This would align Australian amateur practice more closely with international norms and support a wider range of technical experimentation and emergency communication capabilities.

4. Enhancing Exam Administration

The administration of the Amateur Radio Assessment system remains an area of concern. The WIA has recommended improvements to transparency, including clearer processes for syllabus updates and question bank reviews, ensuring consistency and quality across all levels of amateur radio training and assessment.

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5. Streamlining Repeater and Beacon Call Sign Allocations

Amateur clubs and operators continue to face delays and inconsistencies in the allocation of assigned call signs for repeaters and beacons. The WIA has requested that ACMA take steps to simplify and accelerate this process, which is critical for maintaining Australia's repeater infrastructure and experimental stations.

6. Expanding and Preserving Critical Spectrum

The WIA has advocated for expanded access to the 51–52 MHz and 5351.5–5366.5 kHz bands, offering additional operating flexibility, especially for Foundation and regional operators. Additionally, the WIA has reiterated the importance of preserving amateur access to the 2300–2302 MHz segment, which is vital for weak-signal and advanced technical communications.
These recommendations reflect the WIA's enduring commitment to ensuring that the Australian Amateur Service remains a technically vibrant, innovative, and accessible part of the communications ecosystem. Together, we can ensure a strong and sustainable future for amateur radio in Australia.

ACMA Announce "Remaking the Amateur LCD"

Date : 14 / 04 / 2025
Author : ACMA

The Radiocommunications Licence Conditions (Amateur Licence) Determination 2015 (the Amateur LCD) is due to sunset on 1 October 2025. ACMA propose to remake the Amateur LCD with minor changes.

The focus of this review is ensuring the Amateur LCD 2025 remains fit for purpose and relevant conditions align to the Radiocommunications (Amateur Stations) Class Licence 2023, where appropriate.

ACMA will not be considering major reforms, such as amateur access to additional bands, as part of this review.

Find full details in the consultation paper and draft instrument on the ACMA website.

ACMA welcome your comments by 5 pm (AEST), Monday 26 May 2025.

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ARRL Coverage of 2025 Dayton Hamvention - Sunday, May 18

By: Rich Moseson, W2VU

Closing day at 2025 Dayton Hamvention® is a half-day on the clock, but for the team from ARRL The National Association for Amateur Radio®, it was a full day of activities packed into a shorter period of time. There were four forums to lead — the "ARRL FCC Update" with Monitoring Program Director and former FCC Special Counsel Riley Hollingsworth, K4ZDH; "ARRL Youth Outreach Through STEM," anchored by Education and Learning Manager Steve Goodgame, K5ATA; the "ARRL Radiosport Forum — Level Up!", led by Radiosport and Field Services Manager Bart Jahnke, W9JJ; and Director of Emergency Management Josh Johnston, KF5MHV, moderated "ARES – Building Relationships in Public Service."

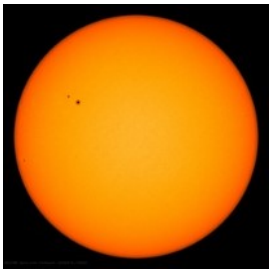
Johnston noted as examples of these relationships the fact that the heads of both Army and Air Force MARS were in the audience, while Hollingsworth urged amateurs to operate with courtesy and respect, and to "stay off the radar screen" of those who don't understand amateur radio but may have influence over frequency allocations. He also reminded his audience that "there is no one representing amateur radio before the FCC except ARRL."

Outside the forum rooms, about half of the two dozen young hams who had participated in Saturday's Youth Rally returned to make brief 2-meter contacts with skydiver Carlos Ortiz, K9OL, as he parachuted to the ground from an altitude of 14,000 feet; and then to launch an APRS-equipped micro-balloon — transmitting as W1AW-11 — on a hopefully long-distance flight. (At the time of this writing on Sunday afternoon, it was making its way eastward across Virginia.)

Finally, when all the forums, jumps, and launches were over, it was time for the entire ARRL team to pack up the dozen or so booths in the ARRL Expo and say goodbye to Hamvention until next year.

The ARRL Solar Report

05/16/2025



After weeks of calm, solar activity is suddenly high again, with two strong solar flares erupting from opposite sides of the Sun. A Coronal Mass Ejection (CME) was associated with a strong solar flare on May 12, but modelling shows the ejection passing behind Earth. The geomagnetic field has been at unsettled to active conditions.

A CME associated with a filament eruption in the northern hemisphere is expected to pass above Earth on May 17, glancing influences will likely enhance the solar wind field during this time. The co-rotating interacting region (CIR) associated with the large,

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Continued from previous page positive polarity Coronal Hole (CH) in the southern hemisphere is expected to become geoeffective on May 18 which will further enhance the field. There remains a 65% chance that M-Class (R1-R2, Minor-Moderate)
level flare activity will occur through May 18 with a 30% chance for X-Class (R3-Strong) levels during the same time due to the complex magnetic field within Region AR4087.

The forecast of Solar and Geomagnetic Activity for May 17 to June 2, 2025: Solar activity is expected to be predominantly low through the outlook period, with varying chances for M-class flare activity.

No proton events are expected at geosynchronous orbit. The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at moderate levels until May 28, and again on June 6 and 7. High levels are expected from May 29 to June 5 as CH HSS influences increase during this time.

Geomagnetic field activity is anticipated to reach minor storm levels on May 28 to June 1 under negative polarity CH HSS influences. Active levels are likely June 2 and 6. Mostly unsettled levels are likely on May 18 to 21, as well as June 2 and 5. Quiet levels are expected on May 22 to 26.

The latest solar report from Dr. Tamitha Skov, WX6SWW, can be found on YouTube at: https://youtu.be/5hRRuaP-bT0?si=bQr5hSz0vc8WPepn. For more information concerning shortwave radio propagation, see http://www.arrl.org/propagation and the ARRL Technical Information Service web page at, http://arrl.org/propagation-of-rf-signals.

IARU OUTLINES RE-ENGINEERED VISION, ELIMINATING REGIONAL ENTITIES

DON/ANCHOR: Our top story this week is the International Amateur Radio Union. Marking 100 years of representing member countries around the world and coordinating frequencies and other concerns, the organization enters its second century with one big change on its mind. We have those details from Graham Kemp VK4BB.

GRAHAM: Imagine, for a moment, an IARU without separate entities known as Region 1, Region, 2 and Region 3. Imagine a total restructuring that would create a single global entity, erasing the discrete regions separated by oceans, languages and cultures.

The IARU has announced that it is considering just that and has released a proposal to unite the independent regions as one, combined with the

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International Secretariat, to streamline decision-making, to better coordinate shared concerns and to bolster membership in regions where it is declining. The IARU's administrative headquarters is presently based at the ARRL in the United States.

The IARU has released guidance on potential restructuring to help the organization meet modern challenges. The proposed changes would combine the 3 separate regional organizations into a single global entity.

The proposal (PDF) outlines a number of areas where the currently independent, regional organizations struggle. Problem areas include declining membership, duplication of resources, lack of coordination, and other various inefficiencies. The changes are designed to establish a number of benefits:

This overwhelming change would not happen overnight, of course. The IARU will be asking member societies to vote after they have reviewed the consultation on restructuring, which is available on the IARU website. Any changes that are approved would not take place before next year.

This is Graham Kemp VK4BB.

UNIVERSITY IN ROME LOGS QSOs TO WELCOME NEW POPE

DON/ANCHOR: If you were lucky enough to work HV5PUL in Rome recently, you were part of this small university-based station's celebration that a new pope had been elected. Jeremy Boot G4NJH tells us about the activation.

JEREMY: Two days after the conclave of cardinals had elected Pope Leo XIV, amateur radio station HV5PUL - the Pontifical Lateran University - was on the air in the Vatican City State in the heart of Rome, celebrating. The station's administrator, Luca Della Giovampaola, IWØDJB, reported that traffic was lively on 20 metres SSB and 17 metres FT8. He said that the simple 100-watt station logged an estimated 400 contacts in four hours. Propagation was challenging and so, with the exception of one Japanese station , all the contacts were within Europe.

It's not often a new pope is chosen nor that HV5PUL is put on the air. Luca said the callsign is active mainly on Saturdays in connection with special occasions, such as the opening day of the university's academic year -- and of course, the election of a new pope.

This is Jeremy Boot G4NJH.

(LUCA DELLA GIOVAMPAOLA, IWØDJB)

HISTORIC TURNOUT FOR BANGLADESH HAM RADIO EXAM

DON/ANCHOR: Amateur radio test-taking hit an all-time high among candidates in Bangladesh recently. John Williams VK4JJW is here to explain what happened.

JOHN: A record number of candidates showed up to take Bangladesh's amateur radio exam on Friday, May 9th,

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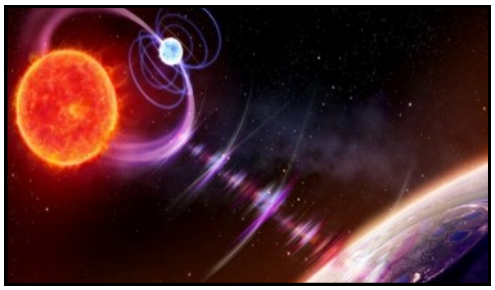
a total estimated at more than 900 participants. The Amateur Radio Society of Bangladesh said on its website that [quote] "this remarkable figure represents the highest number of participants ever recorded for an amateur radio exam in Bangladesh's history."

Weeks of preparation had gone into preparing candidates for the exam by offering online seminars as well as in-person training and workshops. There was also a field day as well as classes in basic electronics and antenna-building. The amateur radio society said there was great support from the Bangladesh Vespa Community, a community-service group of motorised-scooter enthusiasts - many of whom also took the exam, which was organised by the Bangladesh Telecommunication Regulatory Commission. It was not yet known how many of the candidates were successful in getting their licence.

PROJECT KUIPER LAUNCHES ITS FIRST SATELLITES

DON/ANCHOR: After a series of delays that pushed its first satellite launch well past its target date of early 2024, Amazon's new broadband internet constellation project has moved ahead with its first liftoff. We have those details from Kent Peterson KCØDGY.

KENT: The broadband internet constellation known as Project Kuiper is on its way at last, following the launch on Monday, April 28th of its first 27 satellites from Cape Canaveral Space Force Station in Florida. Amazon envisions its long-anticipated $10-billion project as a direct challenge to the massive SpaceX Starlink network, which dominates the market, as well as Eutelsat OneWeb, AT&T and T-Mobile. Ultimately Project Kuiper will send 3,236 satellites into low-Earth orbit, making its global broadband service accessible to rural and underserved regions.



WHEN THE "STATION IDENTIFICATION" IS A BINARY STAR SYSTEM

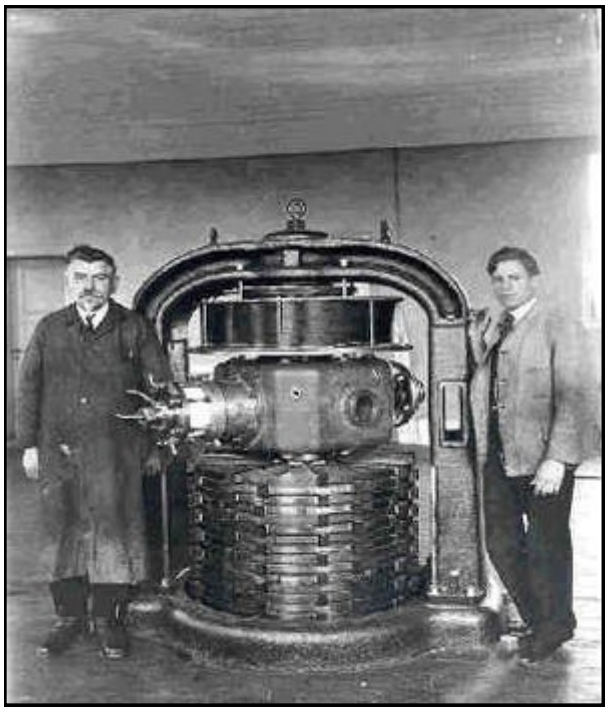
DON/ANCHOR: We end this week's newscast with the story of some mystery radio signals that are mysteries no more. Thanks to researchers, there's been some "station identification." We learn more from Travis Lisk N3ILS.

TRAVIS: Think of them as the dynamic duo of the universe: No, they're not caped crusaders but a red dwarf star and a white dwarf, a dead star. Together, they have been sending a steady radio pulse every two hours for at least 10 years.

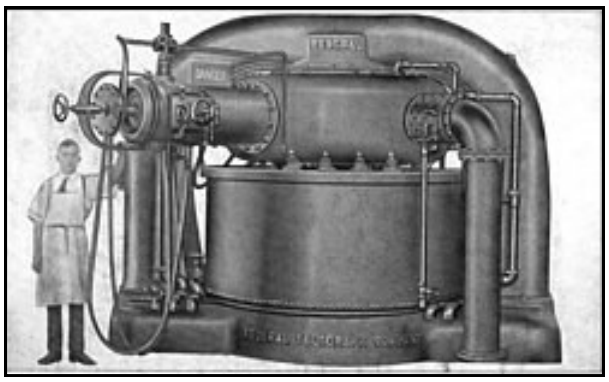
Scientists have heard their transmission but until recently no one knew the source of the sounds, which appeared to emanate from the direction of the Big Dipper. This past spring, the signals were found to come from a binary system - two stars - that send the pulse by repeated contact between their magnetic fields. Researchers cracked the mystery with the help of a low-frequency array radio telescope. The discovery debunks the long-held belief that only highly magnetized neutron stars known as magnetars, can emit such pulses.

This challenge to the old way of thinking opens up the chance to explore other mysteries and binary systems. Researchers call this binary star system ILTJ1101 [EYE ELL TEE JAY ONE ZERO ONE]. Although it sounds like a very large and exotic callsign for this long-distance transmitter, it's not. Still, with all those steady, regular signals over the years, this pair surely deserves some kind of operating award.

Equipment from the past



Poulsen Arc Transmitters



Pictured right and above.

Poulsen Arc Transmitters were used in the early days of radio transmission before the development of valves.

The Poulsen Arc Transmitter was part of an important develop of radio and communications using a technology that was almost ubiquitous for long distance communication using very low frequencies typically between 20 and 50 khtz. Because these transmitters produced continuous sinusoidal waves there was much experimentation with the transmission of voice and music. Due to the large wavelength of the output, huge antennae were built some exceeding 200 meters high.

The arc transmitter pictured above was commissioned by the United States Navy and was a 1 megawatt Poulsen arc transmitter built around 1918 for use in shore radio stations to communicate with its fleet worldwide and was one of the largest arc transmitters ever built. Efficiency was usually much less than 50%. When used for telegraphy the output used frequency shift modulation. This necessitated the construction of a special type of receiver to receive the messages.

The arc converter, sometimes called the arc transmitter, or Poulsen arc after Danish engineer Valdemar Poulsen who invented it in 1903, was a variety of spark transmitter used in early wireless telegraphy. The arc converter used an electric arc to convert direct current electricity into radio frequency alternating current. It was used as a radio transmitter from 1903 until the 1920s when it was replaced by vacuum tube transmitters. One of the first transmitters that could generate continuous sinusoidal waves, it was one of the first technologies used to transmit sound (amplitude modulation) by radio. It is on the list of IEEE Milestones as a historic achievement in electrical engineering.

Valdemar Poulsen succeeded in raising the efficiency and frequency and Poulsen's arc could generate frequencies of up to 200 kilohertz which was patented in 1903.

After a few years of development the arc technology was transferred to Germany and Great Britain in 1906 by Poulsen, his collaborator Peder Oluf Pedersen and their financial backers. In 1909 the American patents as well as a few arc converters were bought by Cyril Frank Elwell. The subsequent development in Europe and the United States was rather different, since in Europe there were severe difficulties for many years implementing the

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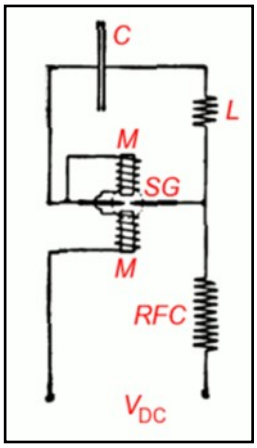
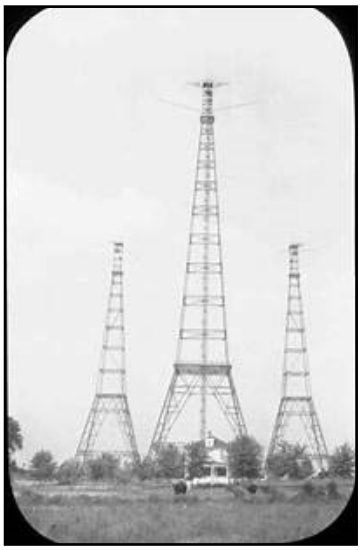
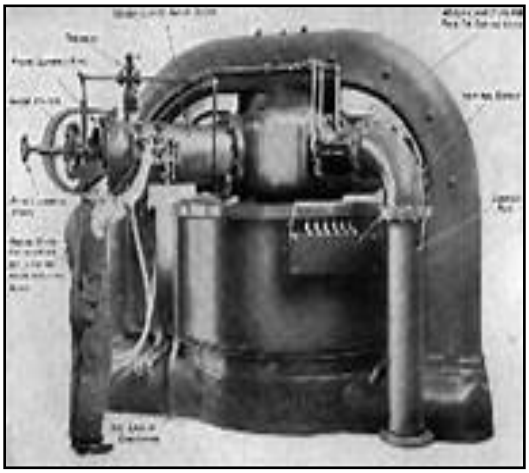
Poulsen technology. In 1922, the Bureau of Standards stated, "the arc is the most widely used transmitting apparatus for high-power, long-distance work. It is estimated that the arc is now responsible for 80 per cent of all the energy actually radiated into space for radio purposes during a given time, leaving amateur stations out of consideration."



The Poulsen arc converter had a tuned circuit connected across the arc. The arc converter consisted of a chamber in which the arc burned in hydrogen gas between a carbon cathode and a water-cooled copper anode. Above and below this chamber there were two series field coils surrounding and energizing the two poles of the magnetic circuit. These poles projected into the chamber, one on each side of the arc to provide a magnetic field. It was most successful when operated in the frequency range of a few kilohertz to a few tens of kilohertz. The antenna tuning had to be selective enough to suppress the arc converter's harmonics.

A number of high power arc transmitters were built by the Federal Telegraph Company in Palo Alto, California, for the U.S. Navy before and during World War I. At about the same time, Charles D. Herrold was able to broadcast intelligent speech from an arc transmitter by inserting a microphone between the transmitter and antenna. This crude system of modulation operated on the principal that sound waves caused the resistance of a carbon microphone element to vary, producing a corresponding change in antenna current. The complication was the great amount of heat dissipated in the microphone; Herrold solved this by using an array of six water-cooled mics in parallel. This method only created a modulation level on the order of ten percent. Even so, using this crude system Herrold was able to maintain a schedule of weekly music broadcasts to local ham radio operators between 1912 and 1917.





These systems were expensive to produce and operate with costs estimated to be many hundred thousands of dollars not including the cost of erecting giant antenna systems, and also the cost of operating the transmitters. Although the Navy continued to operate their systems into the 1940's the rapid development of the thermionic valve consigned the arc transmitters to ancient history. Pictured at right is the early US Naval Radio station at Arlington.

There are some excellent publications on this subject on the internet for further reading some examples are listed below:
http://www.theradiohistorian.org/transmitters/transmitters.html
https://en.wikipedia.org/wiki/Arc_converte
www.bing.com/images/search?
q=poulsen+arc+transmitter+sites&qpvt=poulsen+arc+transmitter+site

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New Equipment

Icom-7760

The Icom-7760 is the latest HF equipment recently released from Icom. This equipment is aimed at the high end amateur contest and DX user and offers many features with an accompanying price of $11,500 plus accessories.

The following information on the Icom-7760 has been taken from the Icom website IC-7760 | Products | Icom Inc.

The IC-7760 introduces a new connected system consisting of a control head and an RF deck, connected over the Internet or a home LAN network (Wired or Wi-Fi®). This concept increases the flexibility of your station installation, making more space available on the desktop by placing the RF deck in a location closer to the antenna feed point. In addition to the direct connect feature, you can place the RF deck at your remote HF station and operate a full-scale remote with the control head at your home. For example, it enables you to operate a club station with the control head at your home. In this offers remote operation over the Internet or a home LAN connection.

The IC-7760 has independent MAIN/SUB receivers, from the antenna to the speaker, so that one receiver section has no effect on the other, providing simultaneous reception of two signals in different bands/modes with identical performance. As with the IC-7851, dual spectrum scopes provide simultaneous display of the MAIN and SUB bands allowing the operator to see the changing band conditions. The IC-7760 adopts the RF direct sampling system, in which RF signals are directly converted to digital signals and the signals are processed by an FPGA (Field Programmable Gate Array). This system avoids non-linear distortions that occur in mixer stages during the analog signal processing. In addition, by employing DSP units in both the RF deck and control head, the IC-7760 is able to handle complex audio path switching due to various interface inputs and outputs, while minimizing delay in a home LAN environment.

A Total of 15-separated BPF (Bandpass Filter) are used in the IC-7760 and in addition, has sharp filters specialized for each amateur band, the BPF efficiently

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attenuates out-of-band interference signals in the RF stage, and prevents overflow at the A/D converter.

The Icom-7760 is capable of 200 Watts power output at 100% duty cycle and has an inbuilt antenna tuner, the control head also has a dual display and dual speakers.

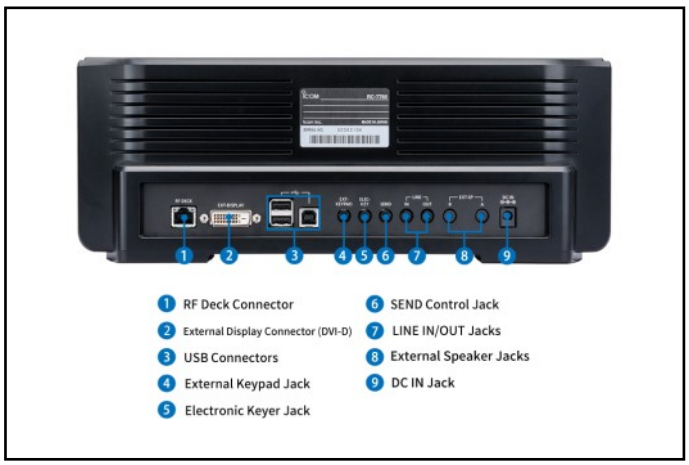
The control head also has Dual Spectrum Scope and Waterfall display. The dual Spectrum Scope provides excellent sweep speed, resolution, and a wide dynamic range of 100 dB with FPGA, DSP and CPU combined processing for main and sub bands. It can also monitor two different bands at the same time, which is useful for monitoring conditions and during contests. Dual scopes can be shown left-to-right or top-to-bottom layout, depending on the situation and needs. In the Continuous SCROLL mode, a wide bandwidth exceeding 1 MHz can be seen on the scope screen. The waterfall display shows changes in the frequency spectrum vertically, enabling the user to find a weak signal that is difficult to detect with the spectrum scope. Increases QSO possibilities without missing weak DX stations.

The displays can be set for an audio scope function. The Audio Scope screen shows the transmit and received signal's frequency components on the FFT scope, and its waveform components on the Oscilloscope. The Audio Scope makes it easy to monitor signal characteristics such as microphone compressor level, filter width, and notch filter. You can monitor received CW keying wave forms in the Oscilloscope.

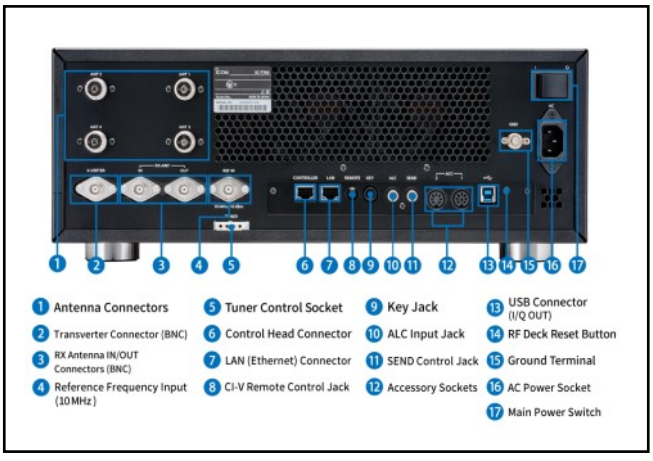
The Icom-7760 includes an Automatic Contest Serial Numbering system. This function is powerful in CW and RTTY contests. Each time the pre-programmed memory is transmitted, the serial number is automatically counted from 001. The serial number can be set in multiple locations to ensure that the contest number is reliably copied.

By connecting the optional RC-28, shown right, via a USB connection, the SUB band tuning of the IC-7760 can be conveniently operated with your fingertips. MAIN/SUB switching buttons can be assigned to the F-1 and F-2 buttons on the RC-28 and it can operate as the main dial for both MAIN and SUB bands. This allows for quick response to DXpedition stations in split operation, as well as Dualwatch. Basic specifications Receiver range 0.030 ~ 60.00 MHz, Transmitter in Amateur bands HF from 1.8 to 50 MHz, modes USB, LSB, CW, RTTY, PSK31/63, AM, FM, at 200 Watts output. Power supply 90 to 264 Volts at 800 VA. A combined weight of RF deck and control unit nearly 20 Kgs.

Rear Deck



Rear Control Pannel



Silent Key – Larry Thompson VK2LJT

It is with great sadness that we advise that Larry Thompson VK2LJT of Tuncurry passed away peacefully in Forster Hospital after a long illness on Saturday the 24th of May 2025. He was aged 71 years.

Larry was well known for his career in the NSW National Parks and Wildlife Service where he had many roles over the years. He had specialist skills in communications and management which took him to all aspects of the Service including fire-fighting. Larry was always very fit and had experience in being lowered into difficult terrain by helicopter to fight fires. Perhaps less well known was that he had been a Commercial Pilot with a sea plane endorsement and had many interesting aviation experiences.

Larry was a long time SES volunteer who was deployed to many critical operations. He was a past Controller of the Forster-Pacific Palms unit and more recently had been the Communications manager for the Mid North Coast. He was highly respected by SES for his dedication.

Larry was instrumental in reactivating the Mid North Coast Region of WICEN where he was a very active member. He was responsible for developing communication plans and strategies. Mid Band VHF was one of his passions. He advocated for WICEN to retain Mid Band VHF capability. He refurbished a stock of VHF Mid Band VHF hand-held radios and assembled go kits. He also built up deployable base station and repeater kits. One of the hand-held radio kits together with the base station were deployed in the May 2025 floods. He also passionately espoused the value of HF communications in emergencies.

Larry was an active long-time member of both the Oxley Region Amateur Radio Club and the Great Lakes Radio Club.

Larry will be sadly missed by his family, the Amateur Radio Fraternity, and by the Emergency Services including WICEN and SES

Vale Larry Thompson VK2LJT

Thank you to Larry's son for advising of Larry's passing.

Larry's funeral details are: Wednesday 4 June 2025 at 1:00pm at the Manning Great Lakes Memorial Gardens, 183 Pampoolah Road, Taree NSW 2430. Larry's wish was that in lieu of flowers that donations be made to Mid North Coast WICEN. A donation bowl will be at the funeral.

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

Field Day Sponsors

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Oxtales depends upon contributions from our members; please feel free to contribute articles, photographs and amusing cartoons. Contributions may be sent by email to the editors, Arthur VK2ATM, or John VK2AYQ at hansenjo1@bigpond.com or to the President Henry VK2ZHE.
Thanks to K4ADL https://www.qsl.net/k4adl/ for the use of his cartoons.