



# 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

## September 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*

September 2023



### Membership Renewals

Thank you to all the members who have already renewed their memberships this year. However, quite a few membership subscriptions are still outstanding. Please contact the ORARC Treasurer Dennis Meade VK2DAM if you are unsure of your financial status.

Your continuing membership is greatly valued by the Oxley Region Amateur Radio Club. The membership subscriptions form a very significant part of the club's annual income. If you haven't renewed yet, please renew as soon as possible. The simplest way to pay is by direct deposit but Treasurer Dennis Meade VK2DAM will always be pleased to receive payments by cash or card in person at the club meetings.

### ORARC VHF/UHF Repeaters

#### MIDDLE BROTHER

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

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

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

#### TELEGRAPH POINT

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

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

VK2RCN (6m Repeater-CTCSS 91.5Hz)  
O/P 53.800 MHz - I/P 52.800 MHz  
VK2RCN-5 (APRS iGate 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.**

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

**Monthly General Meeting  
Saturday 2 September 2023 2:00 pm - Presenta-  
tions VK2ICQ – Chirp Next, GD77, Quansheng**

**Coffee Morning  
Brooklyn's Burger Bar, Thrumster  
10am Thursday 14 September 2023**

**Friday Night Get-Together  
Friday 15 September 2023 7.00 pm**

**Monthly General Meeting  
Saturday 7 October 2023 2:00 pm – Guest  
Speaker TBA**

**Coffee Morning  
Brooklyn's Burger Bar, Thrumster  
10am Thursday 12 October 2023**

**Friday Night Get-Together  
Friday 20 October 2023 7.00 pm**

**The 66<sup>th</sup> Jamboree On The Air  
Saturday 21 October 2023  
VK2BOR JOTA Port Macquarie Participation**

**Beechwood Billycart Classic  
Sunday 29 October 2023**

**Monthly General Meeting  
Saturday 4 November 2023 2:00 pm – Guest  
Speaker TBA**

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

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

**Spring VHF UHF Contest  
Sat & Sun 25 & 26 November 2023  
VK2BOR Participation – Call for expressions  
of interest**

**Liberty Coastal Walk Against Domestic &  
Family Violence Tacking Point to West Port  
Park Port Macquarie  
Sunday 26 November 2023**

## Net Controllers' Roster Nets on Voice Repeater VK2RPM 146.700 MHz

**Sundays  
(0900 Local)**

**Thursdays  
(1930 Local)**

### September 2023

VK2FMGM	Sept 3	VK2EM	Sept 7
VK2FMGM	Sept 10	VK2ZHE	Sept 14
VK2FMGM	Sept 17	VK2ICQ	Sept 21
VK2FMGM	Sept 24	VK2EM	Sept 28

### October 2023

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

### November 2023

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

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**ORARC Christmas Party  
(no Monthly General Meeting)  
Saturday 2 December 2023  
Long Point Winery Picnic Area**

## Stop Press

**Vale David Pilley VK2AYD (SK)**

It is with great sadness that we advise that esteemed ORARC Life Member David Pilley VK2AYD (SK) of Wauchope passed away peacefully yesterday (19) September 2023 after a long illness.

A full Vale will be published in the November issue of Oxtales.

Thank you to Lyle Smith VK2SMI for informing the Club.

**jaycar**

*Continued from front cover*

EFT is available at all ORARC Meetings. Cheques may be posted to the club at PO Box 712, Port Macquarie NSW 2444. If you are paying by cheque it would be appreciated if you could please add 50 cents to the cheque amount to cover the cost of depositing the cheque into the ORARC account.

The Committee is pleased to advise that again there is no rise in the cost of Membership Subscriptions for the 2022-2023 Financial Year. The fees are the same as those of last year. Ordinary Membership remains at \$40 per annum. Associate Membership remains at \$20 per annum. Distant Membership remains at \$10 per annum. Family Membership remains as a single fee equal to the membership fee for the most expensive membership included in the members covered by the family membership. For example **two Distant members covered by a Family Membership would pay just a single fee of \$10.**

An Ordinary Member and an Associate Member included in a Family Membership would pay just a single fee of \$40. Two Ordinary Members covered by a Family Membership would pay just a single fee of \$40.

**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**

It is important that all members please renew their memberships and also encourage those who are currently not members to join or rejoin ORARC. The more members we have, the easier it is to

keep our fees low. The club has a lot of fixed expenses and we rely on membership subscriptions to cover those expenses. Your membership subscription is greatly valued.

The administration of ORARC membership will soon be done electronically on line using TidyHQ. Thank you to Paul Colledge VK2ICQ for undertaking the very labour intensive task of setting up the ORARC TidyHQ account. This has required an enormous amount of data gathering and collation. All ORARC members will receive a TidyHQ email from ORARC and a request to validate their ORARC TidyHQ accounts and set up a password. Once the system goes live, members will be able to log in and check and update their details.

Access to TidyHQ is via the Member Portal on the ORARC website <https://www.orarc.org/> Tidy HQ will in future send members individual email renewals and reminders. Members are encouraged to continue to make their payments by Direct Deposit to the ORARC bank account but for convenience TidyHQ will directly accept payments by Stripe. Please try to validate your ORARC TidyHQ as soon as possible after receiving the email.

### **Monthly General Meeting Guest Speakers**

ORARC Monthly General Meetings now have a short 15 minute business meeting followed by a lecture or demonstration by a guest speaker. There is time to socialize over afternoon tea after the guest speaker has finished.

At the 2nd of September 2023 Monthly General Meeting those present were treated to not one, but three stimulating presentations on highly topical subjects by Paul Colledge VK2ICQ.

Paul's first presentation was on CHIRP Next which is the new version of the well-known radio programming software, Chirp.

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*Paul VK2ICQ giving his presentations*

Paul followed this with a presentation on the very interesting Quansheng UV-K5 VHF-UHF hand held transceiver that is growing in popularity due to its amazing frequency coverage which includes receive on 6 metres and the Aeronautical AM band. There are various firmware updates for this radio and it can be programmed using CHIRP Next.

The final presentation covered the OpenGD77 firmware upgrade which adds many useful features and functionality to the budget priced DMR hand held radios such as the Retevis RT-3S and TYT MD-UV380 and greatly simplifies their DMR programming. If those radios have the GPS option the latest version of OpenGD77 enables the radios to be used as an APRS tracker.

Paul's excellent easy to understand presentations at the September meeting were accompanied by his very professional slides shown on the large screen high-definition SES video projector.

Please read Paul's article on the three presentations in this issue of Oxtales. If you are still using the old version of CHIRP the reasons for upgrading to CHIRP Next will become clear. If you already have the above mentioned radios it's time to connect them to your computer and upgrade them.

Guest speakers for the 7<sup>th</sup> of October and 4<sup>th</sup> of November 2023 Monthly General Meeting have not yet been finalized but they will be advised before the meetings. One of

the talks will be on the subject of how to successfully operate portable on HF. Portable operation has become very popular with Summits on the Air (SOTA), Parks on the Air (POTA) and Beaches on the Air (BOTA) bringing many operators to the great outdoors.

Note that there is no December Monthly General Meeting. Instead, the ORARC Christmas Party is held on the First Saturday of December. The 2023 Christmas Party is on Saturday the 2<sup>nd</sup> of December 2023.

The Committee is seeking suitable guest speakers for the 2024 Monthly General Meetings. Please contact the Committee if you are able to assist in booking suitable speakers, or if you have suggestions for suitable topics.

## **AGM**

The ORARC in person Annual General Meeting was held on Saturday the 5<sup>th</sup> of August 2023.

Thank you to Arthur Monck VK2ATM for being the Returning Officer and conducting the AGM elections.

Written nominations were received for the Committee positions. This was most encouraging and got the AGM elections off to a good start.

I am most honoured to have been re-elected as President, Secretary and Public Officer for the 2023 – 2024 year. I was also re-elected as Repeater Chairman and VK2BOR Station Manager.

Congratulations to Paul Colledge VK2ICQ on being re-elected Vice President.

Congratulations to Dennis Meade VK2DAM on being re-elected as Treasurer.



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Congratulations to the re-elected Committee members, Larry Lindsay VK2CLL, Rob Frost VK2CRF and Lyle Smith VK2SMI.

Larry Lindsay VK2CLL is continuing in his long serving role as Education Officer. Many members have obtained their licences and upgrades through Larry's classes over a great many years. Anyone thinking of obtaining a licence or upgrading should contact Larry. Larry, together with Bob Ecclestone VK2ZRE and Steve Wynn VK2ZSW have AMC accreditation to conduct assessments so the club is well placed to run assessments locally.

Steve Wynn VK2ZSW as a level 3 assessor reminds members that remote assessments can be set up through AMC so anyone who is ready for assessment does have this option if attending an assessment is a problem. The deed with the AMC is not being renewed and at in January 2024 the ACMA will take responsibility for Amateur Radio examinations and licensing. Details are still being finalized and ACMA intends accrediting existing assessors but intending candidates are well advised to try to sit for their licences before Christmas as there are likely to be delays in the processes after Christmas.

Paul Colledge VK2ICQ was re-elected as Webmaster. Paul has built the ORARC website to an extremely high standard and continues to regularly update it with both club news and breaking Amateur Radio news. The website is a great ambassador for the club, and for the Amateur Radio service as a whole. [Thank you, Paul.](#)

Derek Archer VK2DJA was appointed ORARC Facebook Administrator at the AGM. John Maclean VK2KC is continuing to assist Derek.

There were no nominations for the position of QSL manager so the position is

currently vacant. The Committee will welcome any expressions of interest in taking on the task.

Congratulations to John Hansen VK2AYQ on being re-elected as Oxtales Editor. The club is indebted to John for his tireless work in continuing to publish Oxtales to a very high standard. Thank you and congratulations to Arthur Monck VK2ATM for on being re-elected as Assistant Oxtales Editor.

Also, thank you to Sue Meade and Arthur Monck VK2ATM for their ongoing work as Oxtales proof readers. A lot of work goes on behind the scenes in publishing each issue of Oxtales.

John Bailey VK2KHB was re-elected as Club Historian. Congratulations and thank you to John for continuing to maintain the ORARC history. There is a lot of history to keep track of now that the club is in its 52<sup>nd</sup> anniversary year.

The position of Social Director is still vacant as no nominations were received at the AGM. The Committee would like to hear from anyone who would like to volunteer to fill this vacancy. It is not a very onerous job. Bob Ecclestone VK2ZRE was elected to the WIA liaison position.

A full list of all the Office Bearers elected at the 2023 AGM is included in this issue of Oxtales.

Life Membership was awarded to long time active ORARC members Des Thompson VK9FLHI of Lord Howe Island and Bob Yorston VK2CAN of Roseville.



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Rob Frost VK2CRF was awarded Clubman of the Year 2023 for his dedicated ongoing valuable contribution to the club. Rob has worked tirelessly on the project to create the new site at Telegraph Point for the VK2RCN repeaters.

### Coffee Mornings



The very popular Coffee Mornings continue to be held on the second Thursday of each Month at

Brooklyn's Burger Bar in the Sovereign Hills shopping centre at Thrumster.

### RD Contest



This year the Remembrance Day contest and the International Lighthouse and Lightship Weekend took place on consecutive weekends.

The RD contest took place over the weekend of Saturday and Sunday the 12<sup>th</sup> and 13<sup>th</sup> of August 2023. A call was made for volunteers to operate the club station VK2BOR in the contest but there were no offers. Propagation was good and the activity on the Amateur Bands during the contest was extraordinary. Every available frequency on 80, 40 and 20

metres was continuously occupied. Many people were on air for the full 24 hours of the contest. On Saturday night between midnight and dawn 160 metres was crowded with dozens of stations taking full advantage of the bonus points for the nocturnal 160 metre contacts.

The new single letter Contest Callsigns were very much in evidence but it is significant that most operators mentioned their normal callsigns so that everyone could tell who they were.

While the club station VK2BOR didn't operate in the RD contest this year, it was pleasing to hear quite a few ORARC members participating in the contest.

Those of us who submitted our RD logs generated by the VKCL Contest Logging software spared a thought for the developer of the software, Mike Subocz VK3AVV who passed away on the 5<sup>th</sup> of January this year after a long illness.

### International Lighthouse and Lightship Weekend 2022 - 25<sup>th</sup> Anniversary

The ILLW took place on the weekend after



the RD Contest on Saturday and Sunday the 19<sup>th</sup> and 20<sup>th</sup> of August 2023. A call had been made for volunteers to operate VK2BOR in the ILLW. There were no offers and station manager Henry Lundell VK2ZHE was unable to operate VK2BOR from the Tacking Point Lighthouse for a short while as planned due to illness.

The recent roadworks and "upgrade" of parking at the Tacking Point Lighthouse now makes it very difficult to obtain a parking spot at the Lighthouse which is an extremely popular tourist spot. It is no longer practical to take the ORARC Communications caravan to the Tacking Point Lighthouse for future ILLWs.

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Despite a lack of success in previous applications, ORARC will again try to obtain approval from the Port Macquarie Hastings Council to set up VK2BOR inside the Lighthouse building for the 2024 ILLW.

### **JOTA 2023**



The 66<sup>th</sup> annual Jamboree on the Air will take place over the weekend of the 21<sup>st</sup> and 22<sup>nd</sup> of October 2023. It is also the 27<sup>th</sup> annual Jamboree on the Internet.

1<sup>st</sup> Port Macquarie Sea Scouts have keenly run JOTA and associated activities every year for most of the history of ORARC. Unfortunately the Club was unable to run JOTA during the last couple of years due to COVID restrictions and the delays in the building Sea Scouts' new boatshed at McInherney Park. Now that the Sea Scout's new boatshed has been built and there are no formal COVID restrictions, the tradition can resume with JOTA 2023.

A call for volunteers and the details of the arrangements for JOTA 2023 will be advised at the ORARC October Monthly General Meeting. 1<sup>st</sup> Port Macquarie Sea Scouts will host JOTA 2023 at McInherney Park.

1<sup>st</sup> Port Macquarie Sea Scouts are keen to have HF as well as access to the JOTA DMR Talk Group plus VHF and EchoLink. McInherney Park is a proven location for HF and the JOTA DMR Talk Group can easily be accessed via the Telegraph Point VK2RCN DMR repeater. The Middle Brother VK2RPM 146.7 MHz 2 metre repeater will provide the EchoLink access. Of course EchoLink can also be accessed

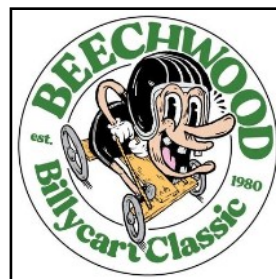
via the Internet.

In preparation for JOTA 2023, club members are reminded that it is a requirement of the Scouting Association that all volunteers must have a Working With Children (WWC) check number. Volunteers whose numbers are about to expire will need to renew their checks in time for next year. Anyone who does not already have a WWC number can easily obtain one on line at <https://www.kidsguardian.nsw.gov.au/child-safe-organisations/working-with-children-check>

Renewals can be accessed using the same link. For volunteers there is no cost. Simply complete the on-line form and you will receive an email. Print out the email and take it the RMS NSW Government Service Centre (In Port Macquarie it is in the building in Central Road that was originally the Motor Registry) where you will have to show your Drivers Licence for identification. The counter staff will verify the identification and you will receive the WWC number shortly afterwards by email. Note that you can add your Working With Children Check to your Service NSW Credentials and Licenses on your mobile phone.

We look forward to being able to participate in JOTA again this year.

### **Beechwood Billycart Classic**



The 42<sup>nd</sup> annual Beechwood Billycart Classic will take place on the morning of Sunday the 29<sup>th</sup> of October 2023.

ORARC members have provided safety communications for the

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Beechwood Billycart Classic every year that it has run.

The Club has been invited to provide the safety communications again this this year. A call for volunteers will be made at the ORARC October Monthly General Meeting. Volunteers will be assured of an interesting morning. All you need is a 2 metre handheld radio. The event only takes a short time during the morning. After the main race down the mountain there will be a short children's race.

The Beechwood Billycart Classic is a great family day out with plenty of entertainment and food stalls in the finish area adjacent to the Beechwood Hotel.

### **White Ribbon Coastal Walk**



The annual White Ribbon Liberty Coastal Walk Against Domestic & Family Violence from the Tacking Point Surf Life Saving Club to West Port Park in Port Macquarie will take place on the morning of Sunday the 26<sup>th</sup> of November 2023. More information is on the Liberty website at <https://libertyservices.org.au/get-involved/coastal-walk-against-domestic-violence/>

In previous years, members of the Oxley Region Amateur Radio Club have provided the safety communications for the event and we look forward to continuing to do so again this year. There will be a call for volunteers at the October Monthly General Meeting.

There will be more news regarding the 2023 walk in November Oxtales.

### **Christmas Party**

The ORARC Christmas party is on **Saturday the 2<sup>nd</sup> of December 2023.**

The venue is again the covered deck picnic area at the very popular Long Point Art Gallery and Vineyard.



Mark your calendar now. The Christmas Party is a very enjoyable social activity for members and their families. There will be a sausage sizzle lunch followed by a delicious dessert. There will be some soft drinks and tea and coffee. There is no charge. Just bring some nibblies for the morning. The cellar door will be open.

### **2024 Field Day**

The 2024 Field Day is only 9 months away. This will be the 48th Annual Field Day.

The dates of the 2024 Field Day are Saturday and Sunday the 8th and 9th of June during the 2024 Kings Birthday Holiday long weekend. Planning is already in progress.

The venue will be the same as last year, the hall at the Wauchope Showground. The hall has been booked for 2024 and the deposit already paid. The hall provides a spacious indoor venue with excellent access and parking in the showground. There is plenty of room in the hall to sit

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down and enjoy the tasty food from the barbeque and the free tea, coffee and biscuits while keeping an eye on the trade and technical displays and the disposals tables.

The Wauchope Showground permits camping and the rates are very reasonable but those wishing to stay on site in their own caravans or motor homes (\$20) or tents (\$10) should book ahead as the number of campsites is limited and the June Long Weekend is always a popular weekend. For bookings see the website at <http://www.wauchopeshowsociety.com.au/camping.html> The phone number for the on site caretaker is 0475 111 074 . The campsites have mains power and the amenities include toilets and hot showers. The Showground is pet friendly and you can even stable your horse for \$10 a night.

The Field Day Dinner will be at 6pm on Saturday night the 8th of June 2024 in the Function Room at the Port Macquarie Golf Club. Thank you to Gary Ryan VK2ZKT of Radio Supply Pty Ltd at Bellingen for the generous sponsorship of the function room hire which has already been paid for. The Function Room is a very pleasant venue for the Field Day dinner. As in past years the excellent full dinner menu of the Restaurant will be available at club prices.

There will be more details in the November 2023 issue of Oxtales.

### **WICEN (NSW) Mid North Coast Group**



WICEN (NSW) Mid North Coast Region holds its monthly meetings after the conclusion of the ORARC Monthly General Meetings in the SES Building in Port Macquarie. Current and prospective WICEN members are cordially invited to

attend the meetings. Anyone interested in joining WICEN should contact Larry Thompson VK2LJT or Rob Frost VK2CRF. For more information, visit the WICEN NSW website <http://www.nsw.wicen.org.au/>

The WICEN AGM was held on Saturday the 5th of August 2023 as an in person and virtual meeting using Google Meet videoconferencing on line. Unfortunately, most Mid North Coast Region WICEN members were unable to participate as the WICEN AGM coincided with the ORARC AGM and Monthly General Meeting and the MNCR WICEN meeting which they attended. The details of the AGM and election of WICEN NSW office bearers may be found on the home page of the WICEN NSW website at <https://nsw.wicen.org.au/>

### **Standard Licensees now have Access to 50 – 54 MHz on 6 Metres**

Holders of the Standard Amateur Radio Licence now have access to the full 6 metre Amateur Band between 50 and 54 MHz. This change was advised in the Radiocommunications Licence Conditions (Amateur Licence) Omnibus Amendment Instrument 2023 (No.1) issued by the Australian Communications and Media Authority (ACMA) on the 13th of July 2023. <https://www.legislation.gov.au/Details/F2023L01010>

Prior to the change in licence conditions, Standard Licensees were restricted to the 52 to 54 MHz portion of 6 Metres. Access to the full band is a very welcome enhancement as most of the 6 metre DX and digital activity takes place in the 50 to 52 MHz portion of the band. Holders of the Standard Licence are now able to join the holders of the Advanced Licence in working the DX in the lower part of the band.

On the negative side of the ledger, the above Amateur Licence Amendment removed access to the 3.4 to 3.6 GHz part of the spectrum which holders of the Advanced Licence previously had.

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## Life Members



Congratulations to long time active ORARC members Des Thompson VK9FLHI of Lord Howe Island and Bob Yorston VK2CAN of Roseville on being awarded Life Membership of the Oxley Region Amateur Radio Club at the 2023 AGM on the 5th of August 2023.

Des VK9FLHI sent his apologies for the AGM as he was unable to be present at the AGM due to family commitments. He will be presented with his Life Membership Certificate and badge when he is in Port Macquarie before returning to Lord Howe Island.

Bob VK2CAN was unable to come to Port Macquarie for the AGM due to his personal circumstances and had to reluctantly tender his apology for the meeting. ORARC Distant Member Stuart Walker VK2BMX has very kindly offered to pick up Bob's Life Membership Certificate and Badge when Stuart visits Port Macquarie later in September 2023. On his return to Sydney Stuart will visit Bob and make the presentation to him on behalf of the Club.

Both Des and Bob attended the ORARC 2023 Annual Field Day in June and caught

up with quite a few members and visitors while they were there.

It is hoped that photographs of both Life Membership presentations will be included in the November issue of Oxtales.

## Silent Keys

It's with great sadness that we report that two amateurs well known by many of those reading Oxtales recently passed away.

### Vale Wayne Memphis VK2KWM

Vale Wayne Memphis VK2KWM of Uralla. Many of us recently saw and spoke with Wayne at the ORARC Field Day on the weekend of the 10th and 11th of June 2023. Wayne was an active Amateur in the New England Tablelands with the Armidale and District Amateur Radio Club. He regularly called back after the VK2WI Sunday morning and evening broadcasts.

Thank you to ORARC Distant Member Jamie Campbell VK2YCI advising the club of Wayne's sad passing.

### Vale David Andrews VK2AWZ



Vale David Andrews VK2AWZ of Vincentia on the South Coast passed away aged 96. During his working life in Sydney Dave was a very keen foxhunter and could always be found participating in the monthly Sydney foxhunts which started at Ryde and ended with supper at the fox's lair which often was quite some considerable distance from the start.

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Supper was traditionally hot dogs and coffee but occasionally we were treated to much more elaborate fare. The foxhunts were regularly reported in Amateur Radio Magazine in the 1970s. For example see the NSW Divisional Notes on page 27 of the November 1971 issue <https://worldradiohistory.com/hd2/IDX-AUSTRALIA/IDX/Amateur-Radio/70s/Amateur-Radio-AU-1971309.pdf> ;

VK2AWZ was first in the 2nd of September 1971 2 metre foxhunt which ended at Meadowbank.

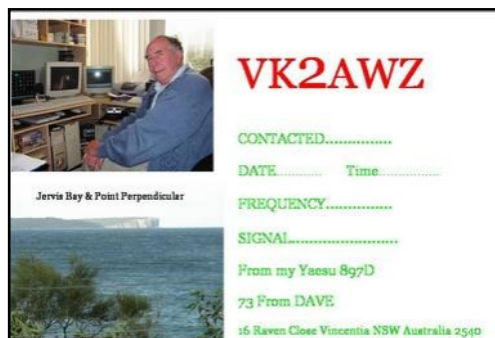
The Amateur Band News and Notes by Pierce Healy VK2APQ (SK) beginning on page 93 in the March 1964 issue of Radio Television and Hobbies magazine indicates just how active Amateur Radio was in the 1960s. It can be read on line at <https://docplayer.net/149380845-Radio-television-hi-fi-electronics-f-id-hobbies-amateur-radio-popular-science-hobbies-ad-in-i-o-periodical-k-ac.html>.

In those notes by Pierce it reports on page 97 on the WIA NSW Division's 14th Annual Convention at the Division's station in Quarry Road at Dural. Dave Andrews VK2AWZ (SK) is mentioned several times for his success in various events including the HF scramble and the 7 MHz Foxhunt. As an aside, in those notes you will note the achievements of past ORARC Members David Macnaughton (SK) VK2ZVW (later VK2BA) and Tim Mills VK2ZTM (SK), amongst many others whom many members will remember.

Dave Andrews was an active Amateur all his life. He obtained his licence in 1948. He embraced the evolution of technology from the valve era through to solid state and today's computer age. The 1960s during which the VK2WI site in Quarry Road at Dural was established were a particularly active period in Amateur Radio. The valve technology of the day made the many achievements on HF and VHF and UHF all

the more creditable. Some of the long distance VHF contacts when operating portable were quite remarkable and foxhunting was popular and keenly contested on both 40 metres and 2 metres. Dave was always very successful.

In the 1970s and 1980s Dave particularly enjoyed the camaraderie of the VK2 Division WIA meetings at the Wireless Institute Centre at 14 Atchison St, Crows Nest. The VHF and TV Group Meetings were particularly enjoyable. Dave rarely missed a Central Coast Field Day, firstly at the Gosford Showground, and later at the Wyong Racecourse. He continued this right through his retirement and always travelled up from Vincentia for the Field Days until he turned 90. Dave was very active on air. I regularly spoke with him on HF in his later years and he was occasionally able to access the VK2RPM 146.7 MHz two metre repeater directly when there was ducting but he also connected to it via Echolink.



Thank you to Steve Leatheam VK2BGL of Jamberoo for advising that Dave had become a Silent Key.

Henry Lundell VK2ZHE  
President





At the Annual General Meeting of the Oxley Region Amateur Radio Club on Saturday the 5<sup>th</sup> of August 2023, the following office bearers were elected:

President: Henry Lundell VK2ZHE  
 Vice President: Paul Colledge VK2ICQ  
 Secretary: Henry Lundell VK2ZHE  
 Treasurer: Dennis Meade VK2DAM  
 Committee Member 1: Larry Lindsay VK2CLL  
 Committee Member 2: Rob Frost VK2CRF  
 Committee Member 3: Lyle Smith VK2SMI  
 Public Officer: Henry Lundell VK2ZHE  
 Repeater Chairman: Henry Lundell VK2ZHE  
 Oxtales Editor: John Hansen VK2AYQ  
 Oxtales Co-Editor: Arthur Monck VK2ATM  
 VK2BOR Station Mgr: Henry Lundell VK2ZHE  
 QSL Manager: Vacant  
 Welfare Officer: Henry Lundell VK2ZHE  
 Publicity Officer: Paul Colledge VK2ICQ  
 Education Officer: Larry Lindsay VK2CLL  
 Club Historian: John Bailey VK2KHB  
 Social Director: Vacant  
 Webmaster: Paul Colledge VK2ICQ  
 Facebook Administrator: Derek Archer VK2DJA  
 WIA Liaison Delegate: Bob Ecclestone VK2ZRE  
 Member Liaison Officer: Paul Colledge VK2ICQ

## Summary of Paul VK2ICQ's presentation at the September meeting of the OXLEY Radio Club.



### CHIRP-Next

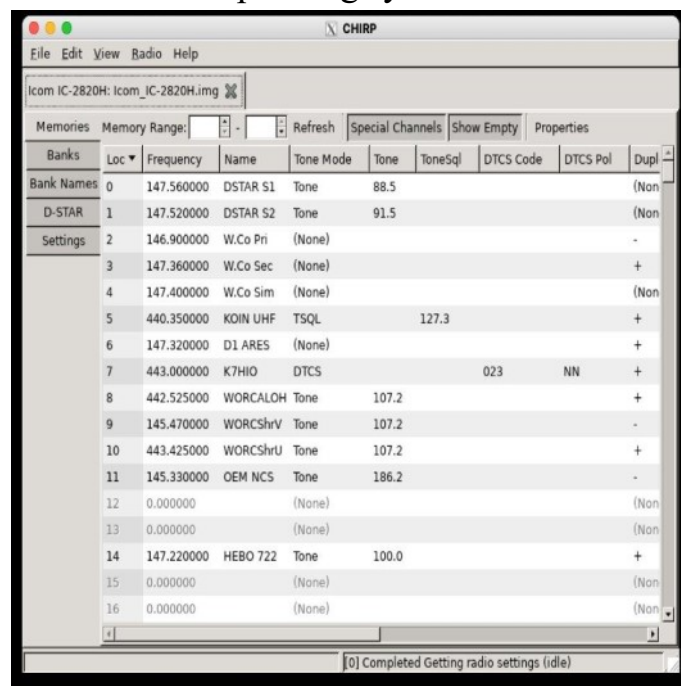
We'd be hard-pressed to find anyone in our community who hasn't used Chirp to program a Baofeng Handheld these days! It's been 15 years now since CHIRP has saved us from questionable and buggy Chinese CPS software offerings (as well as programming a decent selection of models from the

big three). However, technology doesn't stand still, and the Python programming language used by the project evolved into new versions, resulting in many incompatibilities that directly affected CHIRP's operation. CHIRP-Next is the answer – it's a major rewrite of the software to ensure its longevity in the years to come.

CHIRP-Next should be your go-to choice for a new download or an update of the application going forward – as long as you're running an x64 version of Windows, a relatively modern macOS, or a modern Linux distro with Python 3 support. Older computers can continue to use CHIRP Legacy, but it's no longer receiving updates or having any new radio models added.

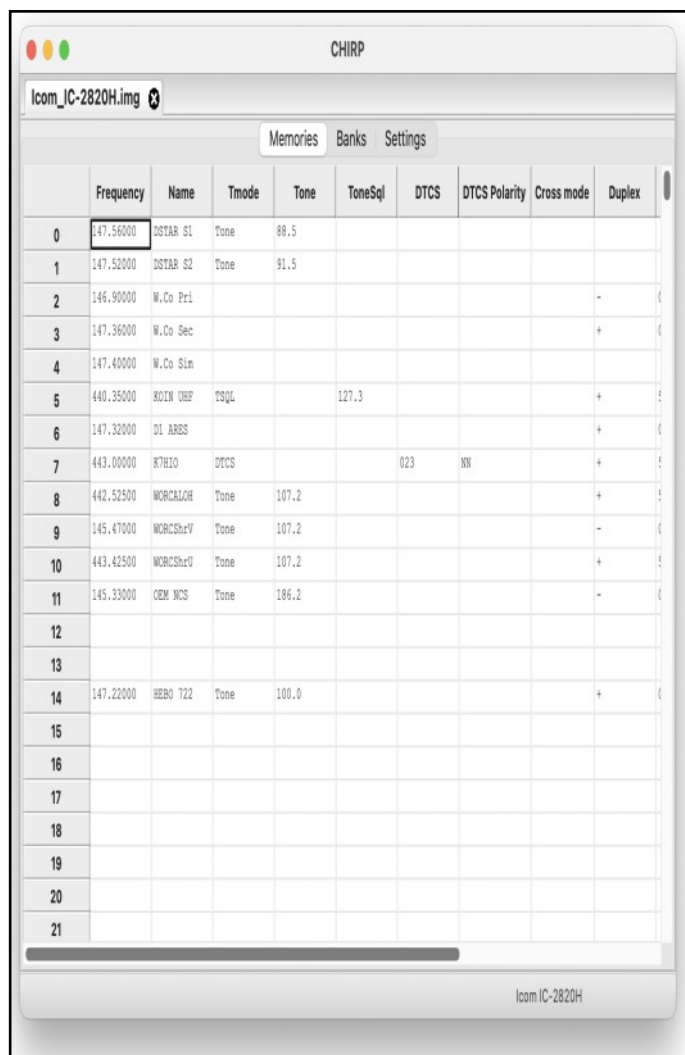
One of the long-standing issues with CHIRP is that it has never properly mimicked the behaviour of a spreadsheet, despite its close resemblance. Any attempt to tab between fields would leave the user scratching their head, wondering what had happened. CHIRP-Next has correctly adopted the look and feel of a spreadsheet, making navigating the interface second nature to anyone accustomed to tabbing between cells in Excel or moving around a modern application.

The visual style of the app has been refreshed, and the app now seamlessly blends with modern operating systems.



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Many other improvements have been made to the application. Some notable ones include the ability to print memories, improved copy/pasting, easier CSV exporting, and the inclusion of a much-loved Com Port Finder for those averse to Windows Device Manager.



Arguably the most significant change is the support for the automated downloading of Australian repeater frequencies from Repeater Book, which includes sorting repeat-

ers based on geographic location (with your closest repeater starting at memory position 1, working outwards) and filtering repeaters based on bands or modes as you see fit.

Want 6M repeaters in your radio? Check the 6M band checkbox!

The list of 'stock configs' in CHIRP now includes AU & NZ UHF Citizen Band frequencies and Marine channels – so if you'd like to include UHF CB RX in your radio, open the UHF CB stock config and copy and paste the frequencies to your radio's memory channels.

During a recent Friday night gathering, a codeplug was generated from scratch for a member's new Chinese Handheld in around 5 minutes. It included all 2M, 70cm & 6M repeaters in a 350km radius, as well as the addition of UHF CB channels and a select few aviation frequencies (manually entered). It couldn't be easier! CHIRP has always been an amazing application, and CHIRP-Next's new functionality is truly going to delight VK Amateurs when it comes to programming their new rigs.

## Quansheng UV-K5



When it comes to CHIRP and Baofengs, it feels like a replacement for the Baofeng UV-5R handheld is long overdue. While there have been countless variants with flashy outer casings over the years, there hasn't been significant progress towards a new, universally affordable, and almost disposable handheld

radio. Enter the Quansheng UV-K5.

What if you could have a handheld radio that covers the 50-600MHz RX range, including 6M FM RX? How about Airband AM RX, or the

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convenience of USB-C charging in addition to the supplied dock? The Baofeng's 2-line LCD display is woefully outdated, so a worthy successor should boast a larger, high-resolution screen. To truly replace Baofeng, it needs to be budget-friendly – really budget-friendly.

Quansheng has answered the call with the UV-K5 (although the name could use some work), and they've nailed the price point. As of now, you can find these radios from an Australian eBay seller for just \$43.19 (even less for eBay Plus members). It's not unusual to see overseas sellers offering them for as little as \$25 AUD. Sounds promising, doesn't it? But the best part is yet to come.

The Quansheng UV-K5 is firmware upgradable, a feature notably absent in old Baofeng models. What's even more exciting is that the firmware has been extensively hacked to enhance the radio's capabilities beyond its standard features and performance.

S-Meters in Chinese HTs have always been subpar, but the modding community has found a solution by adding a calibrated RSSI Signal Strength meter to the radio. Imagine having the ability to send AFSK encoded text messages between your Quansheng radios – all you need is the hacked firmware. And believe it or not, your \$40 Chinese HT can even have a real-time spectrum scope! It's a versatile device, and yes, you can even play Pong on it – though that might be a bit pointless!

The hacked firmware can extend the radio's RX range all the way up to 18-1300MHz, although with reduced performance at the extremes.

Recently, online ROM kitchens have emerged, allowing you to select various options to generate a customized hacked firmware for your radio. You don't even need to download the manufacturer's firmware update software – the website can update your

radio directly from your browser after you choose your ROM options! It's still early days for this radio, and there's no telling what the community will achieve with this affordable little gem in the future.

But that's not all. The UV-K5 has some more tricks up its sleeve. You can wirelessly clone one unit to another UV-K5 nearby, completing the copy in just around 2 minutes. It can identify CTCSS tones on transmissions, and its stock antenna performs admirably. It includes all the standard Baofeng inclusions like a dock, flashlight, FM radio, roger beep, and more. Plus, it's now supported in CHIRP-Next, so creating a codeplug for it won't be a time-consuming task.

If it's been a while since you treated yourself to a new, impulse-buy, budget-friendly HT, the UV-K5 might be the perfect choice. Get ready to marvel once again at how Chinese manufacturers manage to deliver so much for so little!"

## **OpenGD77**

The GD77 is a radio that hasn't been widely seen in Australia. It's sold by RadioOddity, which has a significant presence in the US and Europe. However, like most Chinese radios, it's also manufactured under various other brand names. OpenGD77 is a custom firmware, along with matching CPS software, developed to enhance the functionality of this radio and tailor it exclusively for Amateur Radio use. It's been an intriguing project, but one that has largely remained on the fringes due to the popularity of different radios in our region.

However, everything changed recently when the project added support for our preferred budget-friendly DMR radios – the RT-3S or MD-UV380 from Retevis, Ailunce, TYT, and possibly others. These radios have always suffered from subpar CPS software and, in some cases,

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*Continued from previous page* firmware that's unattractive, rudimentary, and at its worst, buggy and cumbersome to use.

OpenGD77 changes all of that. The firmware can be loaded onto the radio through a somewhat involved conversion process, though one that's not overly difficult. No soldering or disassembly is necessary; it's all done in software with your intact radio and standard programming cable.

You'll need to gather some software files from various sources and perform a backup of your existing firmware (though you likely won't want to revert back to the factory firmware). The process is well-documented on the OpenGD77 website, both in text and through a step-by-step YouTube video walkthrough. Allocate about an hour, take your time, follow the steps, and you'll successfully complete the process.

OpenGD77 addresses a major issue with DMR programming. With the stock firmware, you're required to create one channel per talkgroup on a programmed repeater. If you have, for instance, 40 talkgroups you'd like to use on each repeater, multiplied by 72 repeaters, that's a daunting 2,880 memory channels to manage. Adding a talkgroup becomes even more complicated with the factory CPS, as it doesn't allow for the easy insertion of channels. Even if it did, you'd still need to insert one channel after each of the 72 repeaters, a tedious task no matter how you slice it.

OpenGD77 introduces Talkgroup Lists. All talkgroups are placed in a list, and this list is then applied to the memory channel of the repeater. On the radio, you simply select the channel and can then scroll through any talkgroups in the assigned list. If you need to add a talkgroup, you simply include it in the Talkgroup List, and it's now available on every repeater assigned to that Talkgroup List – no need for channel modifications. This is a game-changer for those who program DMR codeplugs; it significantly streamlines codeplug management.

The only limitation is that you're restricted to 32 talkgroups per list, so some users create multiple lists (one for main talkgroups and another for infrequently used ones). This means you'll need two channels per repeater. However, this still pales in comparison to managing 2,880 channels! This method has cut my repeater channel count down to 114!

OpenGD77 removes many limitations commonly found in commercial radios adapted for the Amateur world. It features a proper VFO mode and allows memories to be programmed and modified directly on the radio. Talkgroups can be switched dynamically, eliminating the need to program all obscure talkgroups – simply key in the talkgroup number as needed. It supports power levels down to 50mW for hotspot use and includes a promiscuous mode for monitoring multiple timeslots.

The RT3S has a limit of 120,000 contacts, requiring users to choose which countries to include in their radio's contact list. OpenGD77, at the very least, will support 390,000 contacts with all contact details selected (no truncation). The complete contact database currently contains 244,000 contacts, so it will remain sufficient for some time. With contact details truncated (removing some address information), this number can extend to over 1 million contacts. The excellent OpenGD77 CPS also offers an automatic update feature, eliminating the need for importing contacts from manually downloaded CSV files.



OpenGD77 introduces an innovative Satellite mode, featuring a database of Amateur Radio Satellites that displays the next pass time, visible duration, and the satellite's path in the sky, including Azimuth and Elevation. This

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information is adjusted according to your GPS coordinates or a manually set location if GPS isn't available. It even compensates for doppler shift, making satellite operation more accessible than ever.

Another notable feature is the Hotspot mode. Placing the radio in Hotspot mode and connecting it to a computer, Raspberry Pi, or Android phone using the programming cable transforms it into a high-powered MMDVM hotspot on demand. It can be paired with a Raspberry Pi running Pi-Star or, via an adapter, connected to your phone's USB port for use with BlueDV, eliminating the need for a separate MMDVM board – it's all emulated in the radio.



There are many more functions to explore, such as APRS TX, but the key takeaway is that your RT-3S or MD-UV380 can be greatly enhanced in performance and features with the addition of the OpenGD77 firmware. It takes an otherwise average

(albeit good value) radio and elevates it to greatness with some remarkable new features. Take your time with the conversion process and consult the excellent online documentation (search for 'OpenGD77 Userguide').

Lastly, for interested members, ORARC can provide a modified version of Ian VK2GL's comprehensive RT3S codeplug, tailored for OpenGD77. If you're in the market for a DMR mobile, consider a late-model TYT MD-9600, which can also run OpenGD77.

Cheers,  
Paul VK2ICQ

The following interesting story about the CPR mannequin that is often used to practice first aid was sent in by Bob VK2ZRE.



Did You Know that the face of the CPR dummy that nearly everyone around the world uses for CPR training, nicknamed "Rescue Anne", (above) was modelled off the death mask of an unidentified young woman pulled from the River Seine in the late 1880s. The death mask was created for public display to assist the police in identifying her, but while she was never identified, the public was taken by her beauty and the mask was copied and distributed around Europe where eventually, in 1958, her face was used to model the CPR dummy.

As an aside Rescue Annie is sometime referred to as probably the most kissed object in the world! As the CPR and resuscitation techniques have been credited as saving untold lives!

Regards...Bob Ecclestone VK2ZRE



## VK2BMX Portable Lord Howe Island

Submitted by Henry VK2ZHE



HADARC (Hornsby and Districts Amateur Radio Club ) and ORARC (Oxley Region Amateur Radio Club) member Stuart Walker VK2BMX and partner Jill recently enjoyed a week on Lord Howe Island. They were shortchanged a day though as their Saturday flight from Sydney to Lord Howe Island was cancelled due to very strong crosswinds on the runway at Lord Howe Island. Fortunately, after an unplanned overnight hotel stay near Sydney Airport, the wind abated a little and aligned itself with the runway on the next morning so they successfully arrived on the Island on Sunday the 3<sup>rd</sup> of September 2023. Their return flight on the following Saturday was on time.

Stuart was keen to fit some portable HF radio operation into the week's holiday activities. Stuart took his Lab599 Discovery TX-500 QRP 10 Watt all mode HF and 6 metre transceiver, a 4.5 amp hour 12 Volt Lithium battery, a SOTABEAMS linked dipole and a SOTABEAMS Carbon-6 ultralightweight carbon fibre 6 metre telescopic mast which made for a very capable compact lightweight station which easily fitted into the baggage allowance for the flights to and from the Island. The mast is only 430mm long when collapsed and weighs a mere 325 grammes including its protective carry bag.



Stuart joined the regular 40 metre afternoon 7146 kHz skeds that have been running each weekday for many years. The skeds began when Des Thompson VK9FLHI obtained his licence in 2006 and are still going despite the sad passing of some of the participants, Tim Mills VK2ZTM (SK), John Bishop VK2ZOI (SK) and Dick Hoffman VK9LH (SK).

The news that regular sked participant Stuart VK2BMX was operating portable VK9 on Lord Howe Island quickly spread and the other regulars on the sked, Tony VK2BTL, Charlie VK2GMT, Steve VK2ZVG, Steve VK2KHA and Henry VK2ZHE were joined by several Hornsby and Districts Amateur Radio Club (HADARC) members including Carmel VK2CAR, Colin VK2JCC, Matt VK2BAI, Rod VK2DAY and Steve VK2SVN.

The skeds normally start at 1700 hours EAST but as Lord Howe Island is a half an hour ahead of Sydney time, the skeds were brought forward for the week to 1630 hours EAST so that Stuart would have time to get to dinner after the skeds.

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Des VK9FLHI would normally be on the skeds but he wasn't on the Island as he was still busy with family commitments on the mainland.

In addition to the afternoon 40 metre skeds, Stuart also participated in the Morning Tea with HADARC Friday morning net at 0900 hours EAST on 7106 kHz on Friday the 8<sup>th</sup> of September 2023. There was a big group on the net and they all enjoyed speaking with Stuart. He will no doubt be asked to tell them more about his trip at the next HADARC meeting.

The 10 Watt PEP 40 metre signal from Stuart VK2BMX operating portable on Lord Howe Island from the waterfront of the Island's lagoon proved to be reliable with consistent S7 to S9 signals into Port Macquarie, Sydney and Illarwill during the afternoon skeds.



*Stuart VK2BMX Basic set up on the picnic table.*

Signals were a couple of S points less into Sydney during the morning HADARC net but were still S9 at Port Macquarie and Illarwill.

Stuart set up his linked dipole as an inverted V with the centre feedpoint supported by the telescopic mast. Most of the time the wind was quite strong so the telescopic mast could only elevate the feedpoint to 4 or 4.5 metres above the ground. On several occasions the wind was very strong and a couple times exceptional wind gusts collapsed the mast and Stuart had to scramble to re-erect

the antenna. The carbon fibre telescopic mast proved to be very strong indeed and did not break. The ends of the 40 metre dipole were simply supported by the shrubs on either side of the picnic tables which Stuart took advantage of to provide comfortable operating positions. The picnic tables very conveniently had holes in the middle of the table tops. Normally these are used for umbrellas but they provide a perfect mount for antenna masts!

Stuart is a very experienced QRP portable operator who has done a great deal of experimenting with different radios, antenna and batteries. He has found that an inverted V dipole antenna on 40 metres constantly results in the strongest radiated signal when compared to end fed wires and loaded verticals. The big advantage of the dipole set up as an inverted V is that, so long as the feed point is elevated at least 4.5 metres above the ground and the ends of the dipole are kept a couple of metres above the ground, the antenna can be very quickly erected and will have a reproduceable low VSWR each time. This is a big advantage as an antenna tuner is not required which greatly simplifies operation and of course doesn't incur additional losses which can be ill afforded when operating QRP. In tests Stuart has found that the signal from a resonant inverted V antenna will usually be several S points stronger than from the other antennas mentioned.

On 20 metres and the higher HF bands, loaded verticals with good counterpoises, and end fed long wires with a counterpoise, can often yield very good results.

The lower angle of radiation from a vertical will have a distinct advantage when working DX. On the higher bands the loaded verticals will be much more efficient than on the lower frequencies where they are electrically shorter and have very significant losses.

Long wires over one wavelength in length will have very significant lobes which can be very advantageous if the lobes are in the

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direction of the stations being worked. The high angle of radiation from a horizontal dipole close to the ground is an advantage on 40 and 80 metres when communicating with stations over distances of a few hundred kilometres.

Stuart's QRP portable operation from Lord Howe island was very successful and should encourage others to take radio equipment on their travels. Carrying a station which is lightweight and quick and easy to set up is a great way to be able to get on the air without taking too much time out from the other travel activities. Significantly, the compact lightweight 4.5 amp hour 12 Volt lithium battery lasted the whole week of Stuart's VK2BMX portable VK9 operation without needing recharging.



The TX-500 transceiver (pictured above) draws 100 mA on receive with a peak current of 3 Amps when transmitting at 10 Watts PEP.

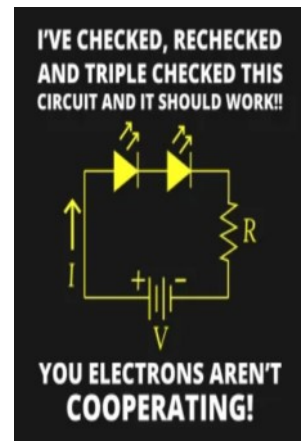
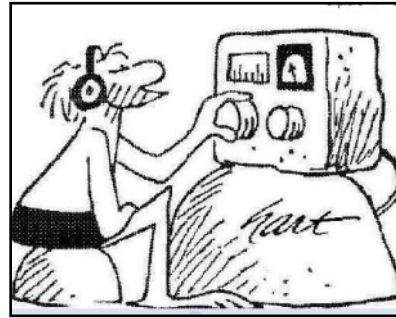
The radio only weighs 550 grammes measures a very compact 90 x 207 x 21 mm. The very sturdily built radio is splashproof and protected against dust ingress which makes it ideal for field operation. In the windy conditions at the exposed waterfront locations where Stuart operated on Lord Howe Island he did notice some salt and moisture precipitation on his equipment when packing up after sunset so it was comforting to know that his radio was rated for

exposure to the elements.

More information on the TX-500 can be found on the Lab599 website at <http://lab599.com/products> The SOTABEAMS website is at <https://www.sotabeams.co.uk/>

Thanks to Henry VK2ZHE for writing up this report.

And now for a couple of lighthearted moments gleaned from the world wide web!

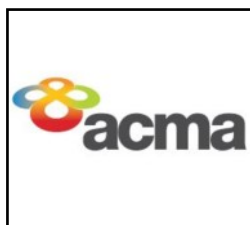




## **ACMA makes changes to amateur access in 50–52 MHz and 3.4–3.6 GHz frequency bands**

Date : 19 / 07 / 2023

Author : ACMA



Following consultation on changes to amateur access in the 50–52 MHz and 3.4–3.6 GHz bands, we have made the Radiocommunications Licence Condi-

tions (Amateur Licence) Omnibus Amendment Instrument 2023 (No.1). [Link](#)

The proposed changes will:

- Give Standard amateurs and overseas equivalents access to the 50–52 MHz frequency band.

- Remove access to the 3.4–3.6 GHz frequency band for Advanced amateurs and overseas equivalents.

This is in areas that have been re-allocated for spectrum licensing and identified for possible long-term earth station protection zones.

You can view the public submissions and outcome of the consultation on the ACMA website.

## **Latest updates on Maui's Amateur Radio and communication infrastructure amid wildfires**

Date : 12 / 08 / 2023

Author : Lee Moyle - VK3GK



Latest updates on Maui's Amateur Radio and communication infrastructure amid wildfires, detailing affected and operational radio systems, repeaters, and other emergency communication details.

Maui Wildfires have affected phones, internet, and cell services across Maui. VERY Limited Cell contact was established with Lahaina or its ham operators due to burned fiber lines and VERY limited hams in the area.

Amateurs worldwide are asked to monitor 7.088 MHz but refrain from using 7.088MHz as this is being used on the island for local communications.

## **ACMA updates its spectrum management work program**

Date : 24 / 07 / 2023

Author : ACMA Newsletter

The ACMA have released their annual progress report for the Five-year spectrum outlook 2022–27 (FYSO), updating the status of work scheduled for the period 1 July 2022 to 30 June 2023.

The report shows their 2022–23 work program is largely complete. It also outlines where some activities have been delayed or deferred, primarily due to the need to address additional issues, or because of the introduction of additional priority projects.

The ACMA expect to release the FYSO 2023–28 in the coming months.

## **Remembrance Day Contest Opening Address**

The Remembrance Day Contest opening Address is available as an audio and text file on the WIA web page.

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## North Carolina School Contacts the International Space Station

On August 28, 2023, students at Bowman Middle School in Bakersville, North Carolina, talked to

NASA Astronaut Stephen Bowen, KI5BKB, who as on board the International Space Station (ISS).

For months, 22 students had been preparing for a 10-minute window to ask Bowen about his time and experiences on the ISS. They were able to ask 13 questions, like, "What is it like to be in space?" and, "Is the crew doing any research on diseases that affect humans?"

Section Manager of the ARRL North Carolina Section Marv Hoffman, WA4NC, presented the Supporting, Upgrading, Growing Amateur Radio (SUGAR) Award to the school and its science, technology, engineering, and mathematics (STEM) teacher, Dan Hopson, for arranging the ISS contact.

Hopson said, "The waiting and static, are suspenseful but when you hear the man's voice or that person's voice come over the air, the kids know this is really happening."

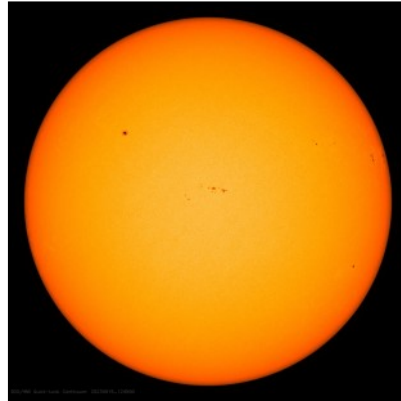
Bowen, returned to Earth with SpaceX Crew-6 on September 5.



*The students of Bowman Middle School with Teacher Dan Hopson. Photograph used with parental permission.*

## The K7RA Solar Update

09/15/2023



Like last week, eight new sunspot groups emerged this reporting week, September 7-13.

One appeared on September 7, another September 9, four more on September 10, another on September 11 and one more on September 12.

Solar activity made a nice comeback, with average daily sunspot numbers rising from 95.4 to 138.1, and solar flux from 137.6 to 159.9.

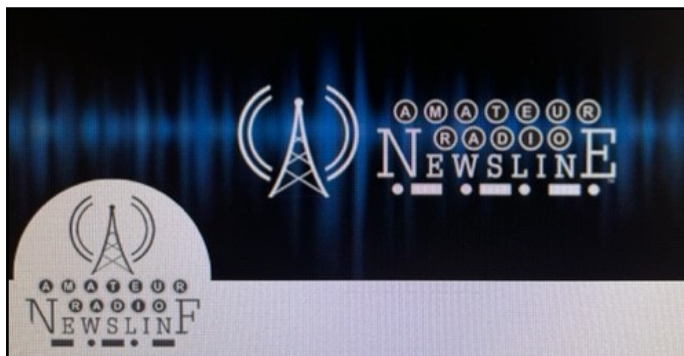
The most active geomagnetic day was September 12, when the planetary A index was 25. Spaceweather.com reported a "stealth CME" (unexpected) that had aurora visible down as far as Missouri.

Average daily planetary A index decreased from 15.4 to 10.4, and middle latitude numbers from 16.3 to 11.3.

The Autumnal Equinox in the Northern Hemisphere is just a week away, on September 22.

It seems that the next sustained short term peak in solar flux is a few weeks off, with values between 150 and 155 over October 12-17, although it is expected to reach 150 on September 23-24.

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## Amateur Radio Newsline Report 2394 for Friday September 15th, 2023

### US MILITARY EXPLORES WIDE- BAND ABOVE 100 GHZ



Despite their potential for use in communications, radio frequencies in the terahertz and sub-terahertz ranges - that is, those above 100 GHz - are considered underutilized.

The United States Air Force is about to share its plans for a radio they are hoping could change all that. Kent Peterson KCØDGY tells us about it.

**KENT:** A project in the works in the US Air Force Research Laboratory is exploring the potential that radio frequencies above 100 GHz have for secure wideband communications. The military is looking to develop an ultra-broadband radio that can adjust output power, data rate and even carrier frequency and are hoping to find defense contractors in the industry who can assist with the project.

Although frequencies in those ranges, which can be used for 6G communications, have a high level of atmospheric absorption that can restrict how far the transmissions travel, the military is hoping to capitalize on the frequencies' ability to accommodate secure channels.

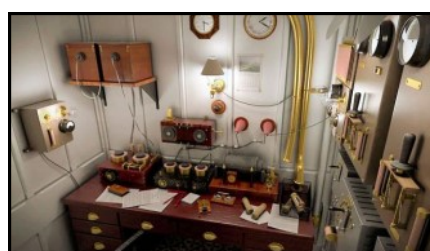
The Air Force is hosting an informational day for the industry next month and will be

looking for defense contractors who are US citizens to get on board the project.

Early experiments have already proven successful, according to a report on the Inside Towers website. Last December, communication was achieved at frequencies higher than 300 GHz during flight experiments by the Air Force, which has been exploring these options for almost a decade.

This is Kent Peterson KCØDGY.

### US GOVERNMENT BLOCKS SALVAGE OF TITANIC'S WIRELESS



In the latest chapter surrounding controversial salvage operations at the wreckage of

the Titanic, the US government is challenging a company's plans to recover the doomed ocean liner's wireless telegraph.

**JACK:** The planned recovery of the Marconi wireless telegraph from the wreckage of the doomed luxury liner Titanic is being blocked by the United States government, citing federal law and an agreement with Great Britain that the ship should be treated as a gravesite.

The salvage company RMS Titanic Inc., based in Georgia, had announced its plan to visit the wreck site next May to recover items - including the radio and telegraph used to send the distress call in 1912.

Attorneys for the U.S. government claim the expedition would violate a pact with Great Britain that classifies the wreckage as a memorial. The government also maintains that the salvage trip would violate protections that the US Congress granted the Titanic site. The RMS Titanic company has particular interest in the Marconi room, where messages in Morse Code were transmitted, signalling that the ship was damaged after striking

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berg in the North Atlantic while enroute to New York from Southampton, England.

RMST, which had been granted salvage rights earlier by the court, told the Associated Press recently [quote] "The company will continue its work, respectfully preserving the memory and legacy of Titanic, her passengers and crew for the future generations."

The company plans to put the radio in an exhibit that tells the story of the lost liner. In May 2020, the court gave RMST permission to recover the radio because of its historical significance but the US government challenged the plans for the expedition that year. The expedition was called off.

This is Jack Parker W8ISH.

## HAMS IN BELGIUM HAVE NEW 8M ACCESS



There's new access on the 8M band for amateurs in Belgium. Jeremy Boot G4NJH tells us more.

JEREMY: Hams in Belgium have been given privileges on the 40 MHz band, joining radio operators in South Africa, Slovenia and Ireland with 8-metre access. The Belgian regulator informed the UBA, the Royal Belgian Amateur Radio Union, that hams with a Class A operating certificate, the HAREC licence, are granted the use of frequencies between 40.660 and 40.690 on a secondary basis. Operators' power is limited to 5 watts ERP and operating bandwidth cannot exceed 3 kHz. Hams will also be required to keep a log of all transmissions and must submit it to the regulator at year's end.

The UBA had petitioned the BIPT some time ago to grant this limited portion of the band for amateurs' use and, following a period of consultation, anticipated that the regulator would favour it.

This is Jeremy Boot G4NJH.

## EXPERIMENTAL LOW-PASS FILTER MAKES DEBUT IN LONDON



JIM/ANCHOR: A different kind of RF filter has just been introduced by a defense company in Sweden to assist in military communications. Again, here's Jeremy Boot G4NJH.

It is being called the Ultra-Lightweight Camouflage Screen-Frequency Selected Surface, and it introduces a new capability for soldiers' communications in the field. It is a filter that permits certain radio frequencies to pass through the mesh of a camouflage net protecting military vehicles. The surface, which is not yet in service, was introduced by the Swedish defense company Saab earlier this month.

Saab says that until now, camouflage nets' ability to reduce enemy sensors' detection of equipment has also prevented GPS signals and other communications passing through, jeopardizing soldiers who then must move out of camouflage cover to perform certain tasks. At times that has even meant sticking antennas through the mesh in order to transmit or receive signals.

Johan Jersblad, a Saab senior development engineer, told reporters that the surface functions as a low-pass filter, which allows transmitted or received signals to penetrate the camouflage screen but retains the screen's ability to be undetected by higher-frequency radar.

The surface was on display for visitors at the DSEI Defence Exhibition held in London from the 12th to the 15th of September.



## 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 September issues of Oxtales. The club had 78 members. Henry VK2ZHE was President, Larry VK2CLL Vice President, Secretary David VK2FRAB and Keith VKFKJA (SK) Treasurer.

The main club's activities mentioned in the September issue of Oxtales were the Bago Classic Car Rally, The International Lightship Contest, the Remembrance Day contest and the AGM.

The AGM was well attended with more than 17 members voting as can be seen in the following photograph.



Ten years ago the club also took part in providing safety communications for several car rallies. Highlights of the rally can be seen in the extracts from the following report.

*'... The Oxley Region amateur Radio Club provided assistance with communications for the Bago Forest Classic Car Rally on Saturday 24 August 2013.*

*The day was a fine winters day sunny and warm although rather dusty in some spots. Seventeen club members turned out on the day to help make the day a car rally success ...'*

*Rally HQ was at the Kendall showground and the rally was part of the famous Southern Cross Rally Serries as can be seen in the following photograph.*



*Bill VK2ZCW and David VK2AYD operating club station VK2BOR at Rally HQ.*

*'... A thank you to the following: Larry Lindsay VK2CLL, Arthur Monck VK2ATM, Steve Wynn VK2HOO, Lyle Smith VK2FCVI, Stuart Melville VK2KSM, David Hogan VK2FRAB, Richard Court VK2CHC, Ralph Downes, John Winchester VK2NJJ, Bob Ecclestone VK1ZRE, Bruce Walker VK2HOT, Barry Gilson VK2FBRG, David Newey VK2DFN, John Hansen VK2AYQ, Leonie Newey VK2LPN, Bill Brooke VK2ZCW, David Pilley VK2AYD, and Henry Lundell VK2ZHE ...'*

*Continued on next page*

The International Lighthouse and Lightship event was held at the Tacking Point Lighthouse. In 2013 the club was able to park the Club's caravan around the top road of the lighthouse and Lyle VK2SMI was also able to park his caravan dubbed 'the Palace' due to its spacious interior on the top road without any problem.

The following is a report on the International Lighthouse and Lighthouse event and the Remembrance Day event held on the Saturday and Sunday 17 and 18 August 2013.

*' . . . VK2BOR operated portable during the daylight hours on Saturday 17 August 2013 from the club's communications caravan at the Tacking Point Lighthouse AU 0034, Port Macquarie, NSW. VK2BOR made 18 contacts from the Lighthouse. The weather during the day at the lighthouse was overcast and very windy with rain showers during the afternoon. The tea, coffee, soft drinks and hot dogs were very popular. The HF bands were very noisy with QRN and once the RD contest started at 1pm local time it became difficult to find new lighthouses to contact. VK2BOR made contacts in both events during the afternoon.*



*VK2BOR being operated by Henry VK2ZHE and Bob VK1ZRE*



*Lyle's travelling radio palace with Ross VK2RR (SK) and Rob VK2CRF*

*Special thanks to John Winchester VK2NJJ for towing the caravan to the lighthouse on Saturday morning despite having to head north to a Caravan Club meeting later in the day.*

*Thank you to Lyle Smith VK2FCVI (now VK2SMI) for towing the caravan back to the QTH of VK2ZHE in the late afternoon after unhitching his own caravan. Lyle's impressively equipped transportable radio shack caravan was a popular place to shelter from the elements during the afternoon for those who could not find a seat in the club's caravan. . . '*

#### ***' . . . Remembrance Day Contest***

*1300 hours local time on Saturday 17 August 2013 to 1300 hours local time on Sunday 18 August 2013.*

*VK2BOR operated portable from the club's communications caravan during the 24 hours of the RD contest. On the Saturday afternoon VK2BOR worked both Lighthouse and RD stations while the caravan was at the Tacking Point Lighthouse. At 4pm local time the caravan was relocated to the QTH of VK2ZHE at Port Macquarie, NSW. VK2BOR made 92 contacts for a total of 102 points.*

*After the overcast, windy and wet Saturday at the Lighthouse, the skies cleared and the wind dropped at dusk and the remainder of the weekend was fine and clear. The sausage sizzle and hot party pies were delicious on Saturday night. The bacon and egg breakfast and sausage sizzle lunch kept up the energy on Sunday until the RD concluded at 1pm.*

*The HF bands were very noisy with QRN all day and night from thunderstorms associated with a cold front in the southern part of NSW. The QRN was extreme during the evening which limited the number of triple scoring contacts which Lyle VK2FCVI was able to make after midnight despite staying up until 2 am.*

*Thank you to everyone who participated in the two events during the weekend. The weekend was a great success with 16 club members and their families, and one visiting Amateur, Les Keppie VK2DSG from Duri on the Northern Tablelands . .*



*The interior of Lyle's VK2FCVI (VK2SMI) caravan radio shack, Palace*



## Equipment from the Past

### Yaesu FT-620



### Yaesu FT-620 B



The Yaesu FT- 620 was introduced in 1972 and then replaced in 1975 with the Yaesu FT -620 B.

These transceivers were built as for amateur use in the 6 meter bands and could be used as a base station or for mobile operation. They were built in the days when many amateurs still used AM as an operating mode.

The Yaesu FT-620B is a solid-state, multi-mode 6 meter transceiver. Modes include AM, CW, LSB and USB. The output power was 20 watts SSB PEP, 20 watts CW and 8 watts AM.

Coverage was divided into 8 segments: 50-50.5, 50.5-51, 51-51.5, 51.5-52, 52-52.5, 52.5-53, 53-53.5 and 53.5-54 MHz.

Additionally, four fixed crystal positions were available. Features include unique analogue display, noise blanker, built-in speaker, squelch, CW break-in and automatic final protection.

These radios were listed as all transistorised with a double conversion superheterodyne receiver with the first IF being 14-14.5 MHz and the second IF 9 MHz. However FM was not offered as a mode.

Crystals could be used to provide 4 easily selected channels.

Power was modest with AM being up to 8 Watts, SSB PEP 20 Watts and CW 20 Watts. The radios weighed around 8 Kgs and presented as a solid unit.

Although being a reliable and solid performer for operators who were using 6 meters they had a limited appeal to the wider amateur radio community especially against the new line of the new FT-101 transceivers.

Yaesu had started production of the FT-101 transceivers in 1970 and were on sale in the USA by late 1971 at a price of around \$600 US. The Amateur world was rapidly changing and SSB was becoming the predominate operating mode replacing AM.

Yaesu ceased production of the FT-620 B during the late 1976.

Today prices of second hand Yaesu FT-620 B can range from 150 \$USD to 299 \$ US depending upon condition. However these radios are now more than 40 years old and would probably require a considerable amount spent on replacing capacitors.

Collectors and restorers are attracted to these radio sets due to the lack of digital electronics and specialised integrated circuits which make refurbishments much easier and the visual attraction of these museum pieces.

### Acknowledgements:

<https://www.eham.net>

<https://www.universal-radio.com/>

<https://www.rigpix.com/yaesu/ft620b>



## New Radio Communications Equipment Today

It is interesting to compare radio communications equipment from the past with those of today. Below is an overview of an Yaesu FT-710 Transceiver.



The following is a summary of various promotional material. The Yaesu FT-710 is being offered for sale by the various Amateur Radio outlets in Australia now with preliminary starting prices around \$1,700.

The Yaesu FT-710 is Yaesu's compact shortwave transceiver that adopts the SDR technology of the Yaesu FT-DX101 and FT-DX10.

The Yaesu FT-710 AECS (Acoustic Enhanced Speaker System) provides 100W of transmit power (adjustable from 5 to 100W). The RF input stage builds on the experience of the large Yaesu FT-DX101 and FT-DX10 transceivers and uses SDR technology. A series of band filters for the amateur radio bands filter out unwanted signals from outside the band. The high-resolution 250 MHz synthesiser allows simultaneous reception of multiple signals.

Operation is greatly simplified by the large 4.3" colour display; as with its larger siblings, a mouse and/or keyboard can be connected for easier control. Clearly visible LEDs to the side of the large VFO knob indicate the current operating status (VFO-A, VFO-B, memory, clarifier/split).

A 'preset' function helps to set all parameters for FT-8 operation.

There is a built-in antenna tuner. If an external tuner is needed, the Yaesu FT-710 offers the possibility to connect the Yaesu FC-40 tuner.

To improve the integration into the radio station, the Yaesu FT-710 offers the possibility to connect an external monitor (DVI-D). In addition to the two USB ports (1x type A, 1x type B), there is also a port for network control. An SD memory card remembers all settings, memory contents and also records QSOs at the touch of a button. Firmware updates may be carried out via the SD card.

Yaesu FT-710 AECS transceiver technical data:

Freq Range Receiver (kHz): 30 kHz - 75 MHz

Supported Bands: 160m, 80m, 60m, 40m, 30m, 20m, 17m, 15m, 12m, 10m, 6m

4 m Band TX capable with modification

6 m Band TX capable

Weight [kg]: 4.51 kgs

Transmitting power: 5 - 100 W

Tuner built-in

Yaesu SDR technology

4.3" colour display

DVI-D port for ext. screen

Preset mode for FT-8

AECS: Acoustic Enhanced Speaker System

Remote control via network

## A radio for the active Amateur

### The LAB 599 Discovery TX-500

This is the mobile radio that Stuart Walker VK2BMX and partner Jill took on Holiday to Lord Howe Island see story on page 17 of this issue of Oxtales.



LAB 599 Discovery TX-500 – Military Style Portable Transceiver - Made in UAE Tailored for adventure, for extremes, for using in places unattainable before, with no sacrifice of performance or features. The radio is also splash proof and dustproof.

The Lab599 Discovery covers 160-6 meters, all modes, with a maximum power output of 10 W. It comes with true desktop-radio features, like auto-notch, noise reduction, and RX/TX EQ.

The TX-500 also has a built-in fast Panadaptor, for easier search for new contacts and evaluation of band conditions.

The specifications list and features are very impressive and include:

- General 'receive' coverage 0.5 - 56.0MHz
- All modes: SSB, CW, DIG, AM, FM
- High-performance 32-bit floating-point DSP
- Current drain as low as 100 mA in 'receive' mode (backlight on, preamp off, no signal)
- External power supply DC 9-15V, 1 to 3A typical in transmit
- High-contrast LCD with 256×128px
- High-performance real-time Panadaptor (48 kHz wide)
- On-line firmware updates
- Rear folding kickstands for viewing angle and transportation

- Ultra-compact size (H×W×D): 90mm (3.5") × 207mm (8.1") × 21mm (0.8 ")
- Weight: 0.55Kg (19,4oz).
- Adjustable output power 1—10W
- Digital Hi-PerforDigital Hi-Performance Filtering (4 receive, 2 transmit)
- 48 kHz Build-in HI Speed Panadaptor
- I/Q Output

The transceiver is 30 mm thick, including knobs, weighing only 0.55 kg. Fold out the kickstands at the rear makes it easy to use on a desktop or picnic table.

The transceiver's body is made of durable aluminium by the method of precision milling, to ensure a unique shock protection and provide good heat removal from the output part of the transmitter.

Dust and Liquid Protection - Thanks to the liquid-protected housing and the absence of through-holes, spatter resistant plugs, valcoders with sealing rings, the transceiver will work reliably in extreme conditions.

In addition the TX-500 has an Internal CW keyer with 10-300CPM range, a 100 general-purpose memories to store VFOs, modes, etc plus a CW keyer memory with 4 cells for 20 seconds each and a Voice message memory with 2 cells for 20 seconds each.

Computer control is possible via a USB connector. Online firmware upgrades are also offered.

Among the accessories offered are a waterproof case and an interesting iambic key pictured below.

