



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 fiftyfirst Anniversary Year

November 2022

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

November 2022

President's Report



Christmas Party

The club's 2022 Christmas Party will be held on Saturday the 3rd of December.

The venue will again be the covered picnic area at the Long Point Vineyard and Art Gallery at 6 Coinda Place, Lake Cathie. Coinda Place runs off Long Point Drive which in turn runs off Houston Mitchell Drive. This is the "Ghost Road" which runs between Ocean Drive just south of Lake Cathie, and the Pacific Highway. The location is easy to find but a map is available on the Vineyard web site at <http://www.longpointvineyard.com.au/contact-us/>

The Christmas party will be from 10:30 am onwards. There will be a sausage sizzle barbeque lunch followed by delicious

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

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

TELEGRAPH POINT

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

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

VK2RCN (6m Repeater)
O/P 53.800 MHz - I/P 52.800 MHz
VK2RCN-1 (APRS Digipeater)
SX 145.175 MHz 1200 Bps

VK2RPM EchoLink Node Number 916007

Item	Page No
President's Monthly Report	Front Cover
Down the Coax	2
Christmas Party	1
ORARC Meetings	3
ADS B Aircraft Tracking by Paul VK2ICQ	3
GRN And P25 Digital Voice by Paul VK2ICQ	4
Coffee Mornings	6
Beechwood Billy Cart Derby update	6
WIA Matters and Amateur News	11
Blast from the Past	18
Equipment from the Past	20

Thank you to all the members who have already renewed their memberships this year.

Just a reminder to those memberships outstanding that Membership subscriptions may be paid by Direct Deposit to the club's Regional Australia Bank account. Bank account details on page 2.

Down The Coax

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

Monthly General Meeting
Saturday 5 November 2022 2:00 pm
GRN P25 Reception Presentation by
Paul VK2ICQ

Coffee Morning - Brooklyn's Burger
Bar, Thrumster
10am Thursday 10 November 2022

Friday Night Get-Together
Friday 18 November 2022 7.00 pm

Spring VHF UHF Contest
Sat & Sun 26 & 27 November 2022

Beechwood Billycart Classic
Sunday morning 27 November 2022
ORARC Safety Communications

Liberty Coastal Walk Against Domestic
& Family Violence
Tacking Point to West Port Park Port
Macquarie
Sunday 27 November 2022

ORARC Christmas Party (no Monthly
General Meeting)
Saturday 3 December 2022 10:30 am to
2pm
Long Point Winery and Art Gallery
Covered Picnic Area

Coffee Morning - Brooklyn's Burger
Bar, Thrumster
10am Thursday 8 December 2022

Friday Night Get-Together
Friday 16 December 2022 7:00 pm

Monthly General Meeting
Saturday 7 January 2023 2:00 pm –
Show and Tell and Afternoon Tea

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

Net Controllers' Roster Nets on Voice Repeater VK2RPM 146.700 MHz

Sundays
(0900 Local)

Thursdays
(1930 Local)

November 2022

		VK2ZHE	Nov 3
VK2FMGM	Sept 4	VK2ICQ	Nov 10
VK2FMGM	Sept 11	VK2EM	Nov 17
VK2FMGM	Sept 18	VK2ZHE	Nov 24
VK2FMGM	Nov 27		

December 2022

		VK2ICQ	Dec 1
VK2FMGM	Dec 4	VK2EM	Dec 8
VK2FMGM	Dec 11	VK2ZHE	Dec 15
VK2FMGM	Dec 18	VK2ICQ	Dec 22
VK2FMGM	Dec 25	VK2EM	Dec 29

January 2023

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

Friday Night Get-Together
Friday 20 January 2023 7.00 pm

Monthly General Meeting
Saturday 4 February 2023 2:00 pm -
Bletchley Park Presentation by David
VK2AYD

Bank account details for membership
dues payment.

BSB:932000 A/C 500032744



Continued from front cover

pavlova and trifle desserts. Please bring your own salads and nibbles and drinks. The club will have some soft drinks and water available. Tea and coffee will also be available.

We look forward to a good attendance at this year's Christmas party. Please take the opportunity to come along and socialize. The covered picnic area has an elevated timber floor. The cover provides shade from the sun and offers shelter in the event of rain. There is no charge and family and friends are most welcome. If you have a folding chair and table, please bring them to help with the seating.



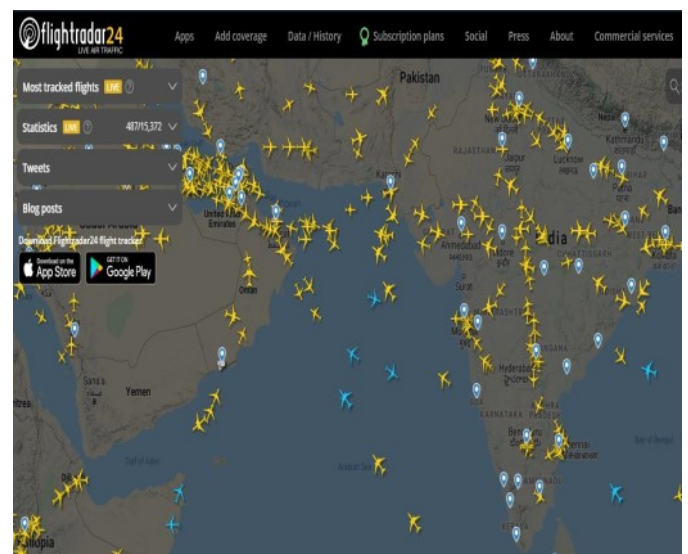
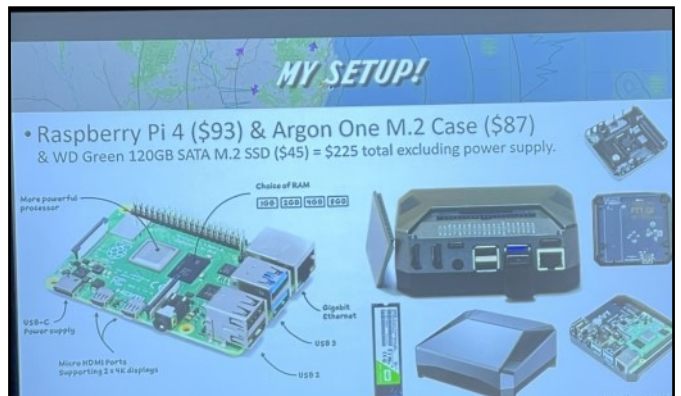
ORARC Meetings

ORARC Monthly General Meetings now only include a short 15 minute business meeting before a presentation by a guest speaker. The new meeting format leaves plenty of time for members to socialize over tea and coffee and biscuits.

At the 1st of October meeting, Paul Colledge VK2ICQ presented a most interesting talk and demonstration of ADS-B aircraft tracking. Paul produced a high-quality detailed PowerPoint slide show which clearly explained the Automatic Dependent Surveillance Broadcast system transmitted by and used by aircraft for situational awareness of other aircraft, and



also used by Air Traffic Control and other users to track aircraft in real time. Paul demonstrated how the aircraft tracking can be viewed via the internet, and how the ADS-B transmissions from aircraft in flight can be received in real time using an SDR connected to a Raspberry Pi.



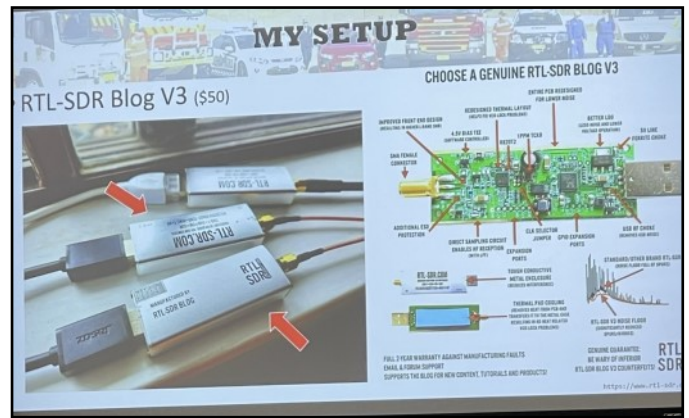
Those at the meeting were extremely attentive and everyone learned a great deal, not only about ADS-B, but also about the capabilities of the

Continued on next page

Continued from previous page

Raspberry Pi. The use of Docker to manage the installation and updating of applications on the Raspberry Pi was great revelation to most of the audience. Paul provided an invaluable printed Resource Sheet to attendees. The Resource Sheet has links to everything referred to in the presentation. The sheet includes a link to download the slideshow presentation itself.

At the 5th of November meeting, Paul Colledge VK2ICQ presented a most informative talk and demonstration of P25 Digital Voice and the reception of trunked transmissions on networks such as the GRN (now referred to as the PSN) using SDRs connected to a Raspberry Pi.



Paul again produced a high-quality detailed PowerPoint slide show which clearly explained P25 digital voice and the GRN, and demonstrated how transmissions on talk groups can be directly received from local GRN base stations.

The very attentive and interested audience at this meeting learned a great deal. The talk and demonstrations further highlighted the capabilities of the Raspberry Pi.



As with his previous lecture, Paul provided an invaluable printed Resource Sheet to attendees. The Resource Sheet has links to everything referred to in the presentation.

Continued on next page

Continued from previous page

The sheet includes a link to download the slideshow presentation itself. Those who hadn't been at the ADS-B presentation were introduced to the use of Docker to manage applications on the Raspberry Pi for the first time. Paul also explained the use of alternative platforms such as laptop computers to overcome the current shortage of Raspberry Pi computers.

If you missed the presentations, or if you have misplaced your Resource Sheets, please ask for a copy at the 18th of November or 16th of December Friday Night Get togethers, or at the 7th of January 2023 Monthly General Meeting.

Note that there will not be a December Monthly General Meeting. As is traditional, the Christmas Party on Saturday the 3rd of December 2022 takes the place of the December meeting.

The January Monthly General Meeting on Saturday the 7th of January 2023 will not have a formal guest speaker. After the 15 minute business meeting there will be an opportunity for "show and tell" and short talks from the floor. There will be extra time for socializing over tea and coffee and biscuits for afternoon tea.

At the February Monthly General Meeting on Saturday the 4th of February 2023, after the 15 minute business meeting, David Pilley VK2AYD will deliver his much awaited video presentation of the contribution of Radio Amateurs to Bletchley Park. This will be a particularly interesting presentation. David has a great deal of interest and knowledge on this subject.

Please let the committee know If you have any suggestions or contacts for future presentations. So far there is a suggestion for an astronomy presentation and Paul VK2ICQ will do a Network Radio presentation later next year.

The monthly Friday night get togethers at

7pm on the third Friday of each month are an excellent opportunity to meet up with fellow members. Members are invited to bring items along for "Show and Tell". There is always something interesting to look at and discuss. It is also an opportunity to bring equipment in if you would like assistance from the collective "brains trust. Rag chewing and brain storming over tea, coffee and biscuits is always popular.

At the 21st of October Friday Night Get together Henry VK2ZHE and Rob VK2CRF brought along their Raspberry Pi 400 computers for show and tell. Derek Archer VK2DJA brought along his Kenwood HF transceiver for the brains trust to assist in sorting out a couple of issues. Club member Grahame O'Brien VK2FA came to the get together from Harrington where he had been holidaying with his wife Judy VK2ZZV in their caravan. Grahame and Judy hail from Cardiff in Newcastle. Grahame assisted Derek in finding the microphone audio problem which was preventing the transceiver from transmitting SSB.

As readers will be aware there is currently a shortage of Raspberry Pi computers in the marketplace. Rob and Henry were fortunate in being able to obtain a Raspberry Pi 400 each. The Raspberry Pi 400 is a Pi 4 installed in a keyboard case. It has 4GB of RAM. It only requires an external 5 Volt power supply, an HDMI display and a mouse in order to make a complete computer system (Photographs below).



Continued on next page

Continued from previous page

The 16th of December 2022 Friday Night Get together will be last Club activity for 2022.

The 7th of January 2023 Monthly General Meeting will be first Club activity for 2023.

Balun Building and Antenna Wire Purchase Opportunity

Early in 2023 Amateur Radio NSW will be providing an opportunity for ORARC members to participate in building a subsidized balun kit and/or purchasing subsidized antenna wire. The previous balun and antenna days have been very popular. There will be more details in the January 2023 issue of Oxtales.

Please let Henry Lundell VK2ZHE know if are interested.

Coffee Mornings

The informal Coffee Mornings at 10am on the second Thursday of each month continue to be popular. Currently the venue is Brooklyn's Burger Bar in the Sovereign Hills shopping centre at Thrumster but other venues are being considered, and there has been discussion of a call for interest in doing lunch. Co-ordinator Ian Lindquist VK2GL will be pleased to hear from you if you have any suggestions.

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



Peter VK2MPK
Rob VK2CRF
Arthur VK2ATM
Henry VK2ZHE
Rod VK2AJ
Enjoying the coffee and conversations.

JOTA 2022



The 66th annual Jamboree on the Air took place over the weekend of the 15th and 16th of October 2022. It also was the 27th annual Jamboree on the Internet.

Unfortunately, ORARC was unable to participate in JOTA this year. The club had planned to operate VK2BOR from the new boathouse that the 1st Port Macquarie Sea Scouts are building at McInherney Park. Sadly, while the old boathouse has been demolished, the new boathouse has not yet been built. Work has been delayed by weather and the same shortages in materials and tradespeople that ORARC encountered in building the new repeater site at Telegraph Point.

The Club's communications caravan could not be used for JOTA as there isn't enough space inside to provide social distancing while operating on air.

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

Beechwood Billycart Classic



The 41st annual Beechwood Billycart Classic was to take *Continued on next page*

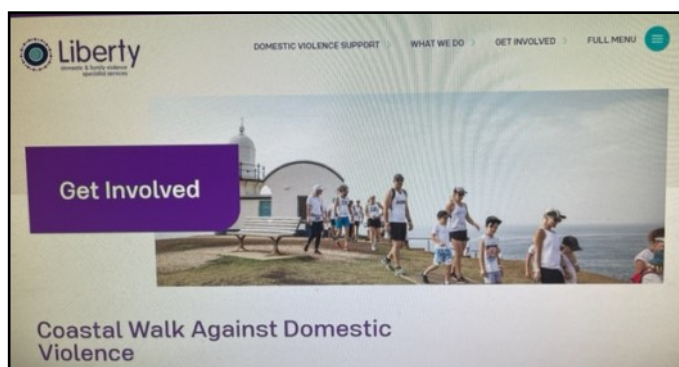
Continued from previous page

place on the morning of Sunday the 23th of October 2022. However, due to forecast rain which did indeed arrive, the Classic has been postponed to the morning of Sunday the 27th of November 2022.

ORARC members have provided safety communications for the Beechwood Billycart Classic every year that it has run. The club members will be providing the safety communications on the new date. Thank you to all the members who have volunteered for the 27th of November 2022 date. Some of those who had volunteered for the original date aren't available on the new date so a call is being made for a few additional volunteers so that all the checkpoints will have radio operators. Contact Henry Lundell VK2ZHE if you are able to assist.

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. There is a very popular short children's bilycart race immediately after the completion of the main race.

White Ribbon Coastal Walk



The annual White Ribbon 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 Sunday 27th of November 2022 <http://www.libertyservices.org.au/walkinwhite>

As with last year's walk, for COVID-19 safety, the walk is being run on an informal

individual ad hoc walk basis so there is no formal walk organization requiring safety communications.

In pre COVID years, members of the Oxley Region Amateur Radio Club have provided the safety communications for the event when it has been run as an organised formal mass walk. The club looks forward to being able provide safety communications again when formal organizational arrangements resume.

Spring VHF UHF Field Day

The annual Spring VHF UHF Field Day takes place from 01:00 hours UTC on Saturday the 26th of November to 01:00 hours on Sunday the 27th of November 2022. This equates to 12 noon Saturday to 12 noon Sunday Eastern Australian Daylight Saving Time.

The contest rules are downloadable as a .pdf document from the WIA website at <https://www.wia.org.au/members/contests/vhfuhf/documents/2022%20Spring%20VHF-UHF%20Field%20Day%20Rules.pdf>

The deadline for submitting logs is Monday the 12th of December 2022.

The downloadable VK Contest Log logging software <http://www.mnds.com.au/vkcl/> makes it simple to keep your log and score so that it can be submitted electronically.

The Spring VHF UHF Field Day will see many stations using their 2X1 contest callsigns callsigns with only one letter for their scoring contacts. As well as VK, prefixes may also be VJ or VL which will require vigilance when logging contacts.

The ORARC club station VK2BOR is not participating in this year's annual Spring VHF UHF Field Day. Club members are encouraged to participate from their individual stations. It is a great opportunity to operate portable. The large number of club members who

Continued on next page

Continued from previous page

will be providing the safety communications for the postponed Beechwood Billycart Classic on the Sunday morning will still be able to participate in the Field Day on the Saturday afternoon and evening.

ORARC 2023 Calendar

John Hansen VK2AYQ is busy creating the club's 2023 calendar.

The 2023 calendar will look quite different to the calendars of past years. With deference to the updated privacy considerations the calendar will no longer contain the gallery of individual members identified by their callsigns. Instead, the calendar will showcase club activities and projects. The change in design means that there will space for more club information. This will make the calendar even more useful in the shack.

The change in design has delayed production of the calendar so the 2023 calendar will not be available at the Christmas Party. It is hoped that it will be available at the Friday night get together on the 16th of December 2022. It will of course be available at the Monthly General Meeting on Saturday the 7th of January 2023, and at subsequent meetings.

The price for the calendars will again be a mere \$2 each. The annual calendar has become a "must have" for every ham shack. The expanded information on the calendar will make it more useful than ever.

The club is indebted to Jaycar Port Macquarie for subsidizing the printing costs of the calendar. This enables the calendars to be sold for the low price of \$2 each.

2023 Callbook

Sadly, a 2023 Amateur Radio Callbook is not being produced.

The long-established annual callbook ceased publication after the 2019 Callbook was published. Negotiations are still underway and it is hoped that eventually publication of an annual callbook can resume.

In the absence of a current callbook you can look up Australian callsigns on line via the ACMA Register of Radiocommunications Licences at https://web.acma.gov.au/pls/radcom/register_search.main_page

VK2RCN Telegraph Point Repeaters

There has been a lot of work by the sub-committee appointed develop a new site for the VK2RCN repeaters at Telegraph Point. As reported in September 2022 Oxtales, the off-grid solar powered site is well advanced. The coaxial feed cables from all the antennas on the new mast have been terminated into the equipment shelter and tested in readiness for connection to the repeater equipment as soon as it is installed.

The target for commissioning the VK2RCN repeaters was November 2022. Unfortunately, due to delays resulting from wet weather and the lead time for delivery of additional steel to complete the equipment shelter roof, the installation of the solar panels will not be completed until late November 2022.

The photographs show the progress of the construction of the frame for the shelter roof. Thank you to the regular working bee participants Larry Lindsay VK2CLL, Rob Frost VK2CRF, Arthur Monck VK2ATM and Dennis Meade VK2DAM. Henry Lundell VK2ZHE completed the shelter lightning earthing at the last working bee.

Once the solar panel installation is completed the fit out of the shelter and installation of the solar power system and repeater equipment will only take a few weeks. All that equipment is already on hand.

Continued on next page

Continued from previous page

It is now hoped that the existing VK2RCN repeaters from the old site will be on air at the new site before Christmas 2022.



Beams being put in place for the installation of the solar panels to power the repeater.

Earthing the container to a common earth point with the tower. Involved digging a short channel from the container to the common earthing point.



The VK2RCN repeaters are:

- The VK2RCN 438.425 MHz RadNet DMR digital voice repeater.
- The VK2RCN 147.0 MHz 2 metre voice FM repeater which will accept either analogue FM or C4FM Yaesu System Fusion digital voice input.
- The VK2RCN 53.800 MHz 6 metre FM voice repeater.
- The VK2RCN-1 145.175 MHz 2 metre APRS digipeater

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

The VK2RCN 147.0 MHz 2 metre FM voice repeater will be linked to the Middle Brother Mountain VK2RPM 146.7 MHz 2 metre FM voice repeater early in 2023. This requires installation of additional equipment at both sites.

The new VK2RCN *Continued on next page*

Continued from previous page

70cm UHF multimode digital voice repeater will be installed in early 2023. The club is awaiting assignment of the frequencies for this repeater.

Amateur Radio Licence Training and Assessments

Education Officer Larry Lindsay VK2CLL is working towards running training and assessments for the Foundation Licence and assessments for the Standard and Advanced Licences early in the new year. Prospective candidates should contact Larry as soon as possible to register their interest so that a mutually convenient date can set.

Mid North Coast Region WICEN



Amateurs are invited to join Mid North Coast Region WICEN. WICEN meetings are held in the SES building in Central Road Port Macquarie after the conclusion of the ORARC monthly general meetings on the afternoon of the first Saturday of each month except December. The next meeting will be on the afternoon of Saturday the 7th of January 2023 after the ORARC Monthly General Meeting.

WICEN NSW Operations Manager Simon Brown VK2TW came up from Sydney to the WICEN Mid North Coast Region 5th of November 2022 meeting. He met up with the members present at the meeting and

presented the Region with VRA Field Operations UHF portable radios and accessories.

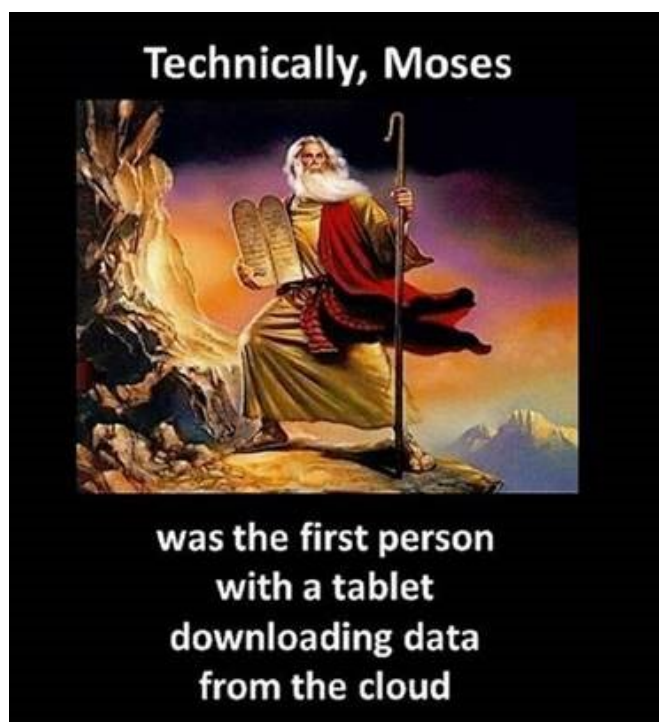
Mid North Coast WICEN welcomes all amateurs to call in to the weekly 7 pm Thursday Night 3600 kHz LSB 80 metre nets. The nets conclude by 7:30pm so that participants can join the ORARC 7:30 pm Thursday Night Nets on the VK2RPM 146.7 MHz Middle Brother 2 metre repeater, either directly via the repeater 2 metre input, or via the VK2RPM EchoLink Node. The VK2RPM EchoLink Node number is 916007

WICEN NSW now runs a new state-wide HF Sunday Night 40m voice net, starting at 6:30pm on 7110 kHz LSB. Net control is VK2WIZ.

For further information, please contact Larry Thompson VK2LJT, Rob Frost VK2CRF or Bob Ecclestone VK2ZRE.

I wish all members and their families and friends a safe and happy Christmas and best wishes for 2023.

Henry Lundell VK2ZHE
President



Continued on next page



Have you recently renewed your Amateur Radio Licence with ACMA?

Date : 27 / 10 / 2022

Author : Lee Moyle - VK3GK

A number of Amateur Radio operators have recently reported that their Amateur Radio licences have shown up on the ACMA RRL database as “Expired” when they have previously thought to have been successfully renewed well prior to the expiry date.

One affected WIA Member, on phoning ACMA to rectify the issue was politely instructed by ACMA staff to forward by email, with the given ACMA reference number, supporting evidence of the successful payment to ACMA.

This could consist of a screen grab of your bank statement, receipt numbers etc. ACMA would then investigate and resolve the issues.

It was reported that the new recently installed ACMA payment portal may have some “anomalies” to still be ironed out with Credit and Debit card payments seeming to have created the “non payment” status.

Payments to ACMA using the Bpay method is said to be currently functioning without any known issues.

*** Although ACMA do notify us of the upcoming licence expiry date, it is our responsibility to renew our licences prior to the date of expiry.***

You can find the ACMA RRL at <https://web.acma.gov.au/rrl/>

Just enter your callsign in the appropriate box on the website and your file with your client ID should be shown displaying your licence details.

Please take note and if you have recently paid your ACMA renewal in the last few months, please check that your licence is still current and flagged as “Granted”

If it states “Expired”, then check the expiry date and check your records to confirm you have actually paid.

ACMA can be contacted directly on 1300 850 115 to discuss payment or any other issues.

Have your ACMA Client ID available along with your ACMA invoice number to make things easier.

To be safe it would be wise for everyone to check that current status of your licence on the ACMA RRL database as an expired licence after 60 days will lose the callsigns attached and they will be relinquished back into the “Callsigns Available” register for others to apply for.

Losing our callsign can be very disappointing and the process to recover your old callsign once reissued can be a frustrating long drawn out

Continued on next page

Continued from previous page

process and in the end not always possible.

Let's try and avoid that situation altogether and check the ACMA RRL.

Please do it now and while you are checking yours, check some others and as well, especially any Old Timers callsigns you may know.

100 Years of Amateur Radio Transatlantic Communications

Transatlantic Centenary Tests

Date : 01 / 10 / 2022

Author : Nick - G4FAL

The RSGB are hosting an International Radio event, The Transatlantic Centenary Tests, on the HF bands, for the month of December 2022, to celebrate the centenary of the Transatlantic success of the RSGB in December 1922.

24 December 1922 was when the very first verified amateur radio signal from Europe was heard in North America; this was from the RSGB station (G)5WS which was established at Wandsworth in South London, as part of the Third Transatlantic Tests.

Unlike the tests of the 1920s, which consisted of one-way communication, the 2022 tests will encourage world-wide two-way communication with UK & Crown Dependency based stations by having a series of awards available for making QSOs with those who are activating special call signs. The Club Log team have kindly agreed to provide the supporting infrastructure.

In anticipation of this centenary celebration, the RSGB have renewed five call signs which they held in the 1920s:

G5WS, from the 1922 tests – “the first to get across”

G5AT, from the 1923 tests

G6XX, from the 1923 tests

G6ZZ, used for the first amateur tests on a moving railway train in 1924

G3DR, Scottish Highlands Call - GM3DR.

These historic call signs will be activated by RSGB members and Clubs, using G5WS, G5AT, G6XX, G6ZZ and G3DR (England), GM5WS (Scotland), GW5WS (Wales), GU5WS (Guernsey), GD5WS (Isle of Man), GJ5WS (Jersey) and GI5WS (Northern Ireland).



ACMA proposals on Class Licensing and high power WIA working on response

Date : 05 / 10 / 2022

Author : Roger Harrison VK2ZRH

A Working Group has hit the ground running to develop the Wireless Institute of Australia's response to the ACMA's proposal on Class Licensing and high power operation by Advanced amateurs.

Deadline for responding to the ACMA's proposals is 29 November. The ACMA intends to implement the proposed arrangements from 1 July 2023.

Leading the Working Group is the WIA's Regulatory Counsel, **Peter Young VK3MV**.

Peter has been licensed since 1965 and has a background in maritime communications engineering. He is a former Regional Manager with the ACMA in Melbourne and

Continued on next page

Continued from previous page

since retiring, held positions with the WIA as a director in the WIA Board, director with the Region 3 International Amateur Radio Union (IARU) and on the Spectrum Strategy committee.

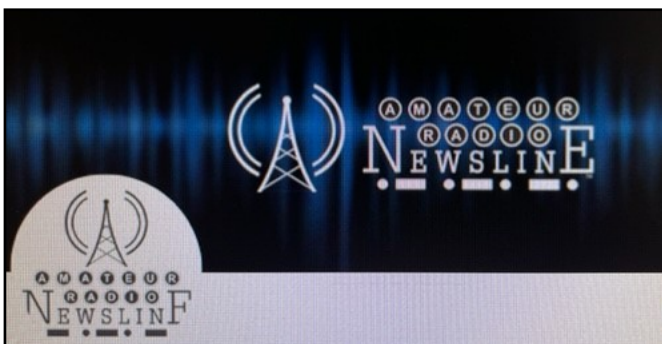
Members of the Working Group come from a wide variety of backgrounds and experience, but particularly having experience in preparing persuasive responses to government proposals, expertise in RF engineering, in science, and in the machinery of government. Members also have interests in contesting and DX, home design and construction, and propagation.

The first meeting of the Working Group was held by Zoom on Monday 3 October, which identified key issues to be addressed in developing the WIA's response and setting regular meetings.

Firstly, it is clear that we will have to address the Class licensing questions, and the matter of Advanced amateurs wishing to use high power, as separate issues.

As we've done before, a survey of the Australian radio amateur community will be held to gather viewpoints and suggestions from individuals, groups and WIA Affiliated Clubs.

Look out for regular despatches from the WIA Working Group on the ACMA's Class Licensing proposals.



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

Amateur Radio Newsline Report 2341 for Friday September 9th, 2022

HAMS AT THE READY IN PHILIPPINE CYCLONE

DON/ANCHOR: Our top story takes us to the Philippines where a radio group called Ham Radio Emergency Operations was preparing for the region's latest cyclone. John Williams VK4JJW brings us up to date.



AFP/UNICEF/UN0726542/CabreraResidents gather next to their belongings by destroyed homes in the landslide-hit village of Kusiong in Datu Odin Sinsuat Maguindanao province, in Southern Philippines, on 29 October 2022. Severe Tropical Storm Paeng (international name: Nalgae) hit the Philippines on 29 October, unleashing flash floods and landslides.

JOHN: A tropical cyclone delivered deadly flooding and landslides in the Philippines in late October, as dozens died and thousands of others sought shelter. Romy Isidro, DU1SMQ, chairman of the National Traffic System in the Philippines, said that Ham Radio Emergency Operations, or HERO, began monitoring emergency frequencies and awaiting further instructions.

Romy said that reports from cities and provinces indicated that much of the traffic over emergency frequencies were from the various localities for flooding, commercial electricity, impassable roads, destroyed bridges and requests for ambulance aid. When a wall collapsed, an amateur radio operator in Central Luzon, in Region 3, volunteered to relay word of that to the nearest Disaster Risk

Continued on next page

Continued from previous page

Reduction Office, which was already monitoring the emergency frequencies.

Romy said however that most of casualties and fatalities were reported in very poor regions of the Philippines where the lack of HF radios can complicate emergency communication. Offers of aid to the hardest-hit provinces came in from the United States, China, Japan, and Australia.

This is John Williams VK4JJW.

PILOTS SELECTED FOR 2023 BOUVET ACTIVATION



DON/ANCHOR: As the time draws closer for the Bouvet Island activation, new members of the team are being put into place as pilots. We have that update from Jim Meachen ZL2BHF.

JIM: In preparation for the Three Y Zero Jay (3Y0J) DXpedition to Bouvet Island in early 2023, the team has announced the addition of pilots.

These hams provide a critical role as intermediaries between the DXpedition team and the DX chasers. They will be keeping an eye on propagation in their designated parts of the world to help facilitate contacts. The chief pilot and pilot for Europe is Morten, LA3MHA; North America's East Coast will be covered by Steve, N2AJ. The West Coast of North America will have Rich, KE1B, as pilot. South America's pilot will be Siso, HK3W. Hams in VK/ZL/OC will have Lee, VK3GK, as pilot; and in Asia and Japan, hams will rely on Champ, E21EIC.

The team expects to activate from the sub-Antarctic island between January 13th and February 28th.

This is Jim Meachen ZL2BHF.

RETIRED REPEATER" LIVES ON IN COLORADO

DON/ANCHOR: Where do old repeaters go when they retire? In the case of one very old repeater in California, that would be the Colorado Rockies.

Ralph Squillace KK6ITB shares this story, which was told recently on the website eham.net:



RALPH: In the early 1960s, before the area had frequency coordination groups and standards for repeater offsets, a privately owned repeater went up on a place called Contractors Point, high above San Fernando in southern California. The W6AQY solid-state repeater, which operated on VHF FM, relied on the parts of a Motorola walkie-talkie that it was built from.

On the website, eham.net, Paul, W0RW, said he helped install it on the mountain-top long ago with Jim, W6UJX, and Jim's father, facing the challenge of putting a 30-foot telephone pole in a trench in that rocky soil. The repeater itself was protected from the elements inside a waterproof Motorola truck mount box and its batteries needed changing every three months.

He said that the transmitter had an output of about 20 watts ERP and used a three-element beam turned toward Los Angeles and it served all of southern California successfully for much of that decade. It was finally taken out of service in 1969 and after some refurbishment moved to Colorado where it was put back to work -- this time as WR0ACR. A half-century later, it is still doing its job - but like most retirees, it is on standby service for much of the time.

This is Ralph Squillace KK6ITB.

(EHAM.NET)

Continued on next page

Continued from previous page

HAMS IN KOLKATA SOLVE RF ISSUE FOR POLICE RADIOS

When you have a radio interference problem, who better to turn to than an amateur radio operator? That's just what police officials in one part of India thought when their handheld radios were knocked out of service by holiday lights.

Graham Kemp VK4BB brings us the details.

GRAHAM: A group of major Hindu festivals were coming up on the autumn calendar, starting on Sunday October 30th, and police officials in West Bengal, India, were once again struggling with their radios.

Something was causing havoc with their handhelds during the autumn Hindu festivals and it appeared that VHF radio communication was again going to be nearly impossible for crowd control and security.

This year, police took their radio dilemma to some local radio amateurs in the West Bengal Radio Club.



According to a report by the Indo Asian News Service, the hams conducted a variety of tests on the officers' radios. Ultimately, they noticed the interference peaked when signals had to pass through areas where traditional holiday lights were being used to decorate Kolkata's parks and gardens during the festive season.

With the help of physicist Pasupati (posso potty) Mandal (mon dall), VU3ODQ, a club member, the hams determined the interference came from the strings of LEDs manufactured in China, which used cheaper components. According to Dipak (dee pock) Chakraborty (chock rah boar tee), VU3OKT, when they were illuminated, the LEDs emitted a noise on a

frequency very close to the one the police radios were using.

The hams recommended replacing the Chinese LEDs with ones manufactured in India, which had different components that did not seem to cause the same issue. According to Ambarish Nag Biswas, VU2JFA, that seemed to have solved the problem in time for the festivals.

This is Graham Kemp VK4BB.

WORLD OF DX

This week's World of DX looks at the various contacts you can make during the CQWW CW contest taking place on November 26th and 27th. They include Henning, OZ1BII (OH ZED ONE BEE EYE EYE) who will be on the air from Pristina, Kosovo as Z68EE during the contest. Listen for Henning on all HF bands. QSL via LoTW, OQRS.

A Slovenian team will be active as TKØC in Corsica during the CQWW CW contest. Before and after the contest, listen for the various team members using their personal calls with the TK/ prefix. QSL via LoTW, eQSL or S5ØC.

Be listening for Doug, VA3DF, and Anthony, VE3RZ, operating from Grand Turk during the contest using the call sign as VP5Y. QSL via MØURX. Outside the contest, both Doug and Anthony will be operating mainly on CW on 160-10m. They will be using the callsigns VP5/VA3DF and VP5/VE3RZ

Listen for the call sign HQ9X from Roatan Island, Honduras, IOTA number NA-057, during the contest. The call will be used by team members K1TR, K1XM, KQ1F, SM7IUN and W1UE. QSL via KQ1F, LoTW.

(DX-WORLD.NET)

Continued on next page



Reaching Youth Through Amateur Radio in the Classroom

11/10/2022



ARRL Education and Learning Manager Steve Goodgame, K5ATA, attended the Georgia Educational Technology Conference,

held November 2 - 4, 2022. The conference was the first part in a series of planned ARRL exhibits to meet with teachers and promote amateur radio in the classroom. Assisted by ARRL Teachers Institute Instructor Wayne Greene, KB4DSF, along with volunteers Cyndi Goodgame, K5CYN, and Betsey Greene, they spoke to hundreds of teachers, school administrators, and technology directors about the ARRL Teachers Institute on Wireless Technology.

ARRL's participation at this conference, as well as future events, is meant to inform and network with educators looking to incorporate amateur radio into their curriculum.

"The level of interest among teachers was incredible!" said Goodgame. "Our booth enjoyed heavy traffic for the duration of the

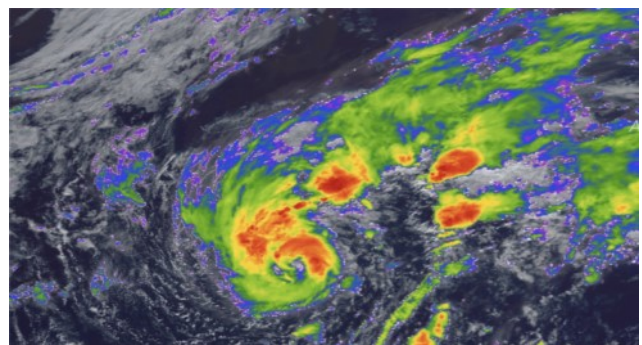
conference, much of the time with all four of us engaged in discussions with multiple people simultaneously. Except for a couple of teachers we met who were already hams, few teachers had heard of amateur radio before this conference. These teachers were absolutely amazed at the possibilities that exist when including amateur radio and related educational experiences in their schools."

"Teachers were especially excited at the connections between amateur radio and space. We shared information about the ARISS program -- Amateur Radio on the International Space Station -- as well as communicating via amateur satellites. Enough teachers were interested in learning more about the relationship between amateur radio and satellites communications that we put together an impromptu live demonstration using two handhelds and an Arrow antenna we had for display in the booth. We gathered a crowd of teachers, along with a few students who were presenting their Student Showcase projects and headed outside. We enjoyed a good satellite pass and made contacts through AO-27. One of the students even got on the air

"Overall, it was a great conference and a great opportunity for ARRL to network with educators and work with them to help get more youth engaged in amateur radio."

Hurricanes Lisa and Martin Kept Amateur Radio Operators Busy

11/07/2022



Amateur radio operators were closely monitoring hurricane and weather nets, as
Continued on next page

Continued from previous page

two tropical storms in the eastern and southwest Atlantic were upgraded to hurricane status late Wednesday, November 2, 2022.

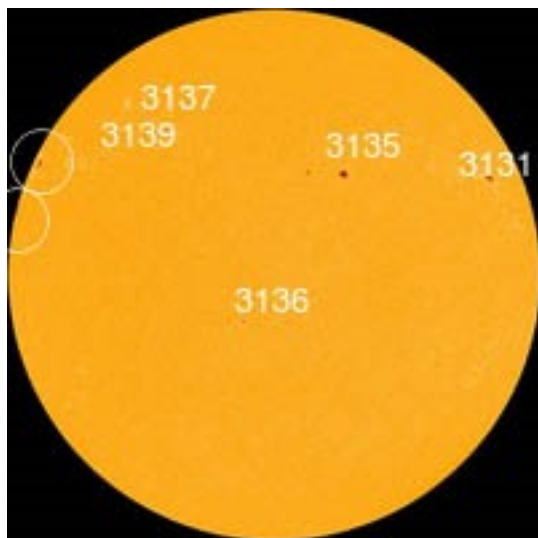
Hurricane Lisa made landfall late Wednesday in the Central American nation of Belize, near Belize City and the town of Dangriga, with 60 MPH winds and heavy rain. The hurricane has now been downgraded to a tropical storm, but a state of emergency has been issued and remains in effect.

Meanwhile, Hurricane Martin, in the eastern Atlantic, has also been downgraded to a tropical storm. The National Hurricane Center (NHC) is predicting that Martin will become a large and powerful post-tropical cyclone by late Thursday, November 3, 2022.

The Hurricane Watch Net (HWN) was activated late Wednesday morning on 14.325.00 MHz, and later on 7.268.00 MHz. The VoIP Hurricane Net was also activated, and as of early Thursday morning, both nets are in standby mode.

Amateur radio operators will continue to monitor the hurricane and weather nets to be ready if help is needed.

The K7RA Solar Update

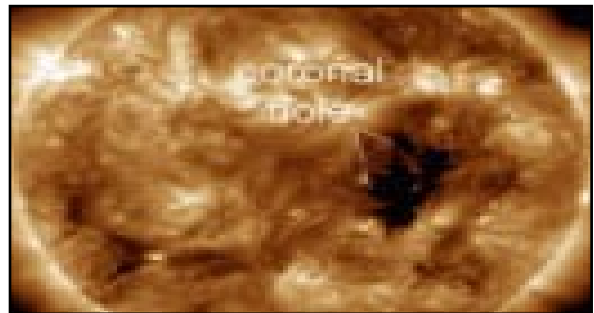


11/04/2022

Solar activity perked up this week. Average daily sunspot number rose from 58.4 to 70.3, and solar flux averages increased from 113.3 to 129.9.

At 2318 UTC on November 3, 2022 the Australian Space Weather Forecasting Centre issued a geomagnetic disturbance warning:

"Increased geomagnetic activity expected due to coronal hole high speed wind stream from November 4-5." Pictured below.



The solar flux prediction shows the highest values over the next week.

F.K. Janda, OK1HH wrote:

"A week ago, there were five quiet sunspot groups on the Sun. None of them posed a threat of strong flares. All had stable magnetic fields that did not look like they would result in an eruption.

"Then, on the far side of the Sun, a sunspot appeared so large that it changed the way the Sun vibrated. "Another flare took place on November 1 on the far side of the Sun.

"Watch for a larger coronal hole that has since moved to the Sun's western hemisphere. Minor G1-class geomagnetic storms may result on November 5, when a solar wind stream is expected to hit Earth's magnetic field. Which will definitely affect shortwave propagation conditions."

An archive of past propagation bulletins may be found at <http://ar1.org/wlaw-bulletins-archive-propagation> and information and tutorials on propagation at <http://k9la.us/>.

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 2012 September issue of Oxtales. The club had 69 members. Henry VK2ZHE was President, Bruce VK2HOT Vice President, Keith VK2FKJA (Now SK) Treasurer and Henry VK2ZHE Secretary.

The club had an active month participating in JOTA held at the Sea Scouts Hall, an enthusiastic Antenna Shoot Out at Greenmeadows and The Beechwood Billy Cart Derby and a very successful Foundation Licence Training Course.

November 2012 also marked a change in the Oxtales editorial team as the following extract from Henry VK2ZHE's President report explains.

“ . . . This issue of Oxtales is being produced by John Hansen VK2AYQ . . . Trevor Thatcher VK2TT and John Hansen VK2AYQ have been taking turns to produce alternate issues for a long time but Trevor has had to very reluctantly step down so John will produce the January and subsequent issues. The Oxley Region Amateur Radio Club is indebted to Trevor for his tireless stewardship of our bimonthly newsletter for a great many years. I won't say how many years until I have had time to establish exactly when Trevor took on the task. It was many moons ago!

Thank you again Trevor for a great job executed to the highest standards. Trevor has made it clear that he will continue to contribute to the club as much as he is able to in other ways . . .”

Also from the presidents report.

“ . . . The inaugural Antenna Shootout on Saturday the 13th of October was a great success. It is certain to become an annual event. The antenna range in the park on Greenmeadows Drive in Port Macquarie worked very well on VHF and UHF. Thank you to John McLean VK2KC for organizing and running the event and providing the signal sources and masts. Thank you to Arthur Monck VK2ATM for providing the precision measuring instrument and for so accu-

rately making the measurements.

The weather was perfect and the club's Communications caravan and awning provided welcome creature comforts such as shade and cold soft drinks plus of course tea and coffee and nibbles. Thank you to Col Terry VK2VQT for so expertly sizzling the sausages for lunch. They were delicious! The shootout results and a full report appears in this issue of Oxtales . . .”

The communications caravan swings into action.



Rob VK2CRF, Col VK2VQT, Arthur VK2ATM, Ross VK2RR (SK) Bill VK2ZCV (SK), Bruce VK2HOT, Keith VK2FKJA (SK), Paul VK2UPR, Keith VK2FPTL, John VK2KC, Barry VK2FBRG (VK2LBG), Henry VK2ZHE, Mark VK2FMGM, Alex VK2FOAB, (also helping were John VK2KHB, David VK2FRAB, Neil VK2EI (SK), David VK2AYD, Craig VK2ZCM and Les VK5JL), (John VK2KHB and John VK2AYQ) not in photo.



Ross VK2RR (SK) , demonstrates how to go portable with two phased beams!

Continued on next page

Continued from previous page

Beechwood Classic Billy Cart Derby 21 October.



Part of the communications team Lyle VK2FCVI (now VK2SMI), Henry VK2ZHE, Larry VK2CLL, Arthur VK2ATM and John VK2FGAA (now VK2NJJ)

Richard VK2CHC organised the deployment of radio operator for essential safety communications for the event. The faster carts would slide around some of the corners and the race was won in record time this year.



A really good turn out of club members for the event included, Lyle, VK2FCVI, Henry VK2ZHE, Larry VK2CLL, Arthur VK2ATM, John VK2FGAA, Bruce VK2HOT, Charles VK2KCE, Lewis VK2AG, Neil VK2EI, Craig VK2ZCM, David VK2AYD, Mark VK2FMGM, Ross VK2RR, Rob VK2CRF, Col VK2VQT, Stuart VK2KSM, David VK2FRAB, Alex VK2FOAB, Richard VK2CHC and John VK2AYQ.

JOTA Saturday 20 October 2012

The bands were not very open and contacts extremely hard to find on HF. The few contacts heard were deep in noise and consequently VHF was used to enable 33 Scouts and Guides to take part in the JOTA radio experience. Alex Dorahy VK2FOAB and John Hansen provided a pedestrian mobile and mobile stations for the scouts to contact.

The Guides and Scouts were from all ages and many engaged in amusing and interesting talks on their overs!



Nic a scout operates in the club's communications caravan. Below The mighty URAL gets ready to be a mobile unit operated by John VK2AYQ.



Foundation Licence Training and Assessment Weekend

Report by Larry VK2CLL

Four new Foundation Licence call signs will soon be heard on the local repeaters. These new calls were the result of a Foundation Licence training and assessment weekend conducted by our club at the Port Macquarie SES headquarters on the 22nd and 23rd of September. Ross VK2RR, Henry VK2ZHE and Larry VK2CLL instructed the candidates on the Saturday and ran assessments in the theory and practical components on the Sunday.



Ross VK2RR (SK), Ralph, Alex VK2FOAB (now VK2HBF) Larry VK2CLL, David VK2FRAB, Paul (VK2ICQ) and Thomas (now VK2ATR)

Equipment from the Past

In this section we look at radio equipment from previous years. This month a very interesting general coverage receiver from the Hammarlund Company.

Hammarlund HQ108A Receiver



The Hammarlund Company was founded in 1910 by Oscar Hammarlund, an electrical engineer from Sweden. In the 1950s, the company was sold to Telechrome, who later sold it to the Giannini Scientific Company. It was sold again in the late 1960s to the Electronic Assistance Corporation (EAC), who owned it until the early 1970s when they closed the company and sold off the remaining equipment to The Cardwell Condenser Corporation.

The company quickly gained a reputation for producing high quality equipment for the amateur and commercial markets. The equipment represented state of the art for its day. This came at a price; for example the HQ-180A came with a retail price of more than \$689US. The amateur only version of the radio was slightly less at about \$509US which was a considerable amount in the 1950's. Options including having a crystal switch as shown in above photograph or having an analogue clock which included a timer to switch the radio on to allow for warm up time were extras.

The following is an extract from the Hammarlund product catalogue.

'The Hammarlund HQ -180 meets the most critical needs of both commercial and amateur user for a general coverage, SSB communications receiver.

Modern tuning techniques yield optimum performance in the most crowded bands. The combination of bandspread and 3 KCS vernier tuning, slot filter, selectable sideband, tuned 1F, separate linear detector, extreme selectivity, and inherent Hammarlund craftsmanship creates a receiver whose qualities are unsurpassed at any price.

Literally thousands of users throughout the world will attest to the quality and performance of this outstanding receiver-convince your self, just ask the man who owns one!

TRIPLE CONVERSION 18 tube superheterodyne circuit with automatic noise limiter.

FREQUENCY RANGE Full dial coverage from 54 KCS to 30 MCS.

BANDSPREAD Bandspread calibration for 80, 40, 20, 15, and 10 meter amateur bands.

BFO CONTROL - 2 KCS. CRYSTAL CALIBRATOR Built-in 100 KCS crystal calibrator.

AUTO RESPONSE Exclusive design automatically adjusts audio passband to fit receiving conditions.

AVC ACTION Operates on RF and 3 IF stages. Provides fast attack adjustable decay, smooth acting AVC.

ADJUSTABLE SELECTIVITY AND ADJUSTABLE SIDEBANDS 6 db bandwidths. Upper sideband 1-2-3 KCS. Lower sideband 1-2-3 KCS. Both sidebands 0,5-2-4-6 KCS.

SENSITIVITY An average of 1.5 micro Volts AM and approximately .7 micro volts on CW produces 10 to 1 signal-to noise ratio.

WEIGHT approximately 20 Kg.

These Radio Sets have become quite a collectors item and the internet has considerable information on the radio for the restorer.

References:

antiqueradio.org

[swling.com/blog/tag/hammarlund-hq-180a/HAMMARLUND COMMUNICATIONS EQUIPMENT CATALOGUE](http://swling.com/blog/tag/hammarlund-hq-180a/HAMMARLUND_COMMUNICATIONS_EQUIPMENT_CATALOGUE)