



OXTALES

First published 1980

Newsletter of the Oxley Region Amateur Radio Club Inc.,

PO Box 712 Port Macquarie 2444

Club email address: vk2bor@orarc.org

Club Website: <http://www.orarc.org>

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

ORARC's Forty-seventh Anniversary Year

January 2018

Compiled by VK2AYQ & VK2TT

PRESIDENT: Henry Lundell VK2ZHE 6582 0534
VICE PRES: Paul Colledge VK2ICQ 6580 9912
TREASURER: Larry Lindsay VK2CLL 6587 1155
SECRETARY: Steve Wynn VK2ZSW 6585 3327

President's Report

January 2018 President's Report

Welcome to 2018. I trust everyone has had a safe and enjoyable festive season.



Coming Events

ORARC 2018 Field Day 9 & 10 June

The ORARC 2018 Field Day takes place on Saturday the 9th and Sunday the 10th of June during the Queen's Birthday Weekend. The Field Day venue will again be the Tacking Point Surf Life Saving Club building in Matthew Flinders Drive at Lighthouse Beach. Last year's Field Day was a great success and this year's event will be even bigger and better.

Planning for the 2018 Field Day will commence this month so please consider offering your assistance. The committee will be very pleased to hear from you.

The Surf Life Saving Club Hall has been booked for a wedding on the Saturday night

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 (Voice - CTCSS 123 Hz)
O/P 438.425MHz - I/P 433.425MHz

VK2RCN-1 (APRS Digipeater)
SX 145.175MHz 1200bps

In This Issue :

Item	Page No
President's Monthly Report	Front Cover
Down the Coax	2
E-Mail Directory	2
Net Controllers' Roster	2
White Ribbon Walk	4
Christmas Party	5
WICEN Antenna Build day	10
Installation of Antenna for VK2AG	13
Building 6 Meter 5/8 vertical	15
W.I.A Technical Issues	16
Radio Equipment from the Past	17
New Amateur Radio Equipment	18
Blast from the Past	19
Members Register	20

Down the Coax

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

Ross Hull Memorial Contest
1 to 31 January 2018

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

Monthly General Meeting
Saturday 6 January 2018 2:00 pm

Summer VHF-UHF Field Day
Saturday 13 &
Sunday 14 January 2018

Friday Night Get-Together
Friday 19 January 2018 7.00 pm

AX Prefix May be Used on Australia Day
Friday 26 January 2018

Monthly General Meeting
Saturday 3 February 2018 2:00 pm

ORARC Antenna Shootout and
Foxhunt Day
Sunday 11 February 2018 Start 10.00 am
Tuffins Lane Sports Fields BBQ Lunch

Friday Night Get-Together
Friday 16 February 2018 7.00 pm

Wyong Field Day Wyong Racecourse
Sunday 25 February 2018

Monthly General Meeting
Saturday 3 March 2018 2:00 pm

Friday Night Get-Together
Friday 16 March 2018 7.00 pm

John Moyle Memorial Field Day
Saturday 17 & Sunday 18 March 2018

Urunga Convention
Saturday 31 March and Sunday 1 April
2018

Monthly General Meeting
Saturday 7 April 2018 2:00 pm

Net Controllers' Roster

Nets on Voice Repeater VK2RPM 146.700 MHz

Sundays
(0900 Local)

Thursdays
(1930 Local)

Jan 2018

VK2FMGM	Jan - 07	VK2ICQ	Jan - 04
VK2CHC	Jan - 14	VK2EM	Jan - 11
VK2FMGM	Jan - 21	VK2ZHE	Jan - 18
VK2CHC	Jan - 28	VK2ICQ	Jan - 25

Feb 2018

VK2FMGM	Feb - 04	VK2EM	Feb - 01
VK2CHC	Feb - 11	VK2ZHE	Feb - 08
VK2FMGM	Feb - 18	VK2ICQ	Feb - 15
VK2CHC	Feb - 25	VK2EM	Feb - 22

Mar 2018

VK2FMGM	Mar - 04	VK2ZHE	Mar - 01
VK2CHC	Mar - 11	VK2ICQ	Mar - 08
VK2FMGM	Mar - 18	VK2EM	Mar - 15
VK2CHC	Mar - 25	VK2ZHE	Mar - 22
		VK2ICQ	Mar - 29

President's Report continued from P1

so the logistics of putting the Field Day items aside for the evening will have to be worked out.

The Port Macquarie Golf Club has been booked for the Field Day Dinner on Saturday Night the 9th of June 2018.

Summer VHF UHF Field Day Saturday 13th and Sunday 14th January 2017

Last year the club set up VK2BOR on North Brother Mountain on the Saturday and operated in the Summer VHF UHF Field Day. Unfortunately, despite the excellent VHF location, very few stations were heard during the Field Day.

This year members are encouraged to participate in the Field Day individually. This can be done using home stations, or perhaps operating portable or mobile. If enough members do this, quite respectable scores can be amassed by working each other. Activity breeds activity so amateurs from surrounding areas will hopefully be tempted to come on air and add to the number of stations that can be worked.

The 6 meter sporadic E season is still active so if the band opens during the Contest some very impressive scores can be made as there are usually a lot of 6 meter stations participating in the Summer VHF UHF Field Day in the southern states, particularly VK3, VK5 and VK7. Sporadic E signals are usually very strong so even a mobile whip will work extremely well. Most contacts will be made on SSB.

The contest rules are available for download from the WIA website at <http://www.wia.org.au/members/contests/vhfuhf/documents/2018%20Summer%20VHF-UHF%20Field%20Day%20Rules.pdf>

Antenna Shootout and Foxhunt Day



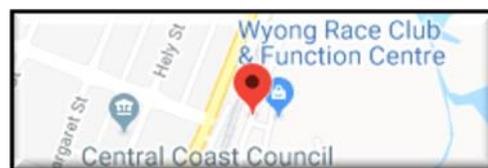
The club's popular annual Antenna Shootout and Foxhunt day will be held on Sunday the 11th of February 2018 at the Tuffins Lane sports fields. The large flat open fields make an ideal VHF and UHF antenna testing range. There is a lot of interest in antenna performance this year with several members already busily constructing new antennas especially for the shootout. This year we expect to see some 6 meter antennas so the antenna range will include facilities for this band as well this year. It is always interesting to see how home brew antennas perform in comparison to the various commercially built antennas.

Facilities will be available to test antennas on 6 metres, 2 metres and 70 centimetres.

As well as the antenna shootout, the day at the Tuffins Lane sports fields is a great social occasion with a bacon and egg breakfast from the barbeque followed by a sausage sizzle lunch.

If there is enough interest a number of 2 meter and 80 meter pedestrian foxhunts will be run during the day. This is a perfect opportunity to hone the skills in readiness for the Urunga Convention and the ORARC Field Day foxhunts in the coming months.

Wyang Field Day Sunday 25th of February



Many club members will make the annual trip to Wyong racecourse for the Central Coast Field Day on Sunday the 25th of February 2018. This year is the 61st annual Field Day. <http://www.ccarc.org.au/wp/ccarc-field-day/>

This event is the largest Amateur Radio Field Day in the Southern hemisphere. The

Continued on next page

Continued from previous page

Wyang racecourse facilities have been significantly upgraded since last year. The flea market will be under cover this year and the Traders will be in an air conditioned environment. This will make for a very enjoyable day regardless of the weather.

There are always lots of bargains at the Field Day and there is a full range of very interesting seminars during the event. Wear your ORARC polo shirt and cap or hat. Our club is always well represented at Wyong and the club yellow and black stands out in the crowd.

Urunga Convention 14 & 15 April 201



Remember to mark your calendars for the 69th annual Urunga Convention during Easter on the 14th and 15th of April 2018. <http://users.tpg.com.au/goldy2/>

Recent Events

White Ribbon Walk

The White Ribbon Walk took place on Sunday the 26th of November 2017. Special thanks to those who came out bright and early on the Sunday morning to provide the safety communications. The walk started at the Tacking Point Surf Club and finished on the Port Macquarie Town Green. The intermediate check points were at Shelly Beach, Flynn's Beach and at the Town

Beach kiosk.



Steve VK2ZSW operating a checkpoint at the finishing point. Note antenna mounted on flagpole.



Town Beach finishing point

Those who manned the check points were Lyle Smith VK2SMI, Rob Frost VK2CRF, Dennis Meade VK2DAM, Bob Ecclestone VK2ZRE, Arthur Monck VK2ATM, Mark McGuire VK2FMGM, Steve Wynn VK2ZSW, Stuart Walsh VK2FSTU and Henry Lundell VK2ZHE.



SES volunteer Alfred at Town Green after the walk

Continued on next page

Continued from previous page

ORARC has already been invited to provide the safety communications for the 2018 walk.

2017 Christmas Party



The December 2017 Christmas Party was held at the Long Point Art Gallery and Winery. Thank you to Arthur Monck VK2ATM for booking the Long Point venue and negotiating the free use of the timber deck picnic area and barbeque facilities.

The day remained fine despite rain being forecast. The rain was warded off by the combined effect of having three gazebos on standby in place on the deck ready for instant erection at the first sign of precipitation. Thank you to Keith Bayliss VK2FPTL for thoughtfully bringing his gazebo which was joined by the two gazebos which Lyle Smith VK2SMI brought along. One was Lyle's personal gazebo and the other was the larger WICEN gazebo. Thank you to Steve Wynn VK2ZSW for arranging the loan of the WICEN gazebo.

Thank you to everyone who attended the party for making the day so enjoyable. The club supplied bacon and eggs breakfast was

barbequed by Lyle Smith VK2SMI. The sausage sizzle lunch was barbequed by Larry Lindsay VK2CLL and Ivan Southwell VK2IJS.



The BBQ team, John VK2KHB, Lyle VK2SMI, Bob VK2ZRE, Larry VK2CLL and Ivan VK2IJS.

The delicious trifle made by Sue Meade was a special very popular treat which added to the traditional fruit salad and ice cream dessert. As usual there was a veritable feast of party food brought by members to share. No one went hungry!



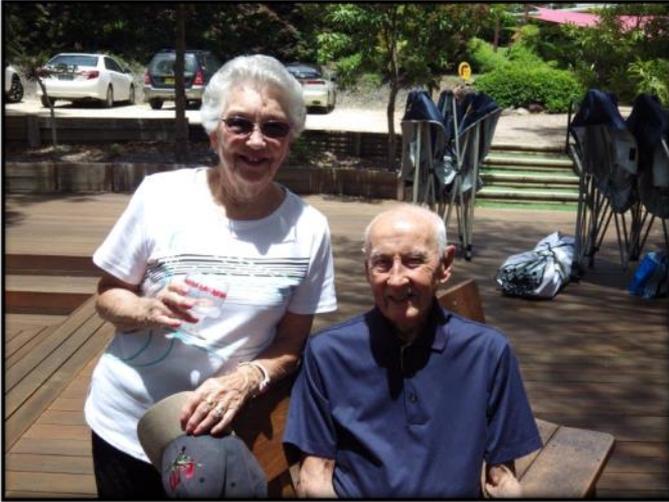
Sue and Richard VK2CHC pose for the camera after enjoying the trifle.

Those attending included Lewis Green VK2AG and Pamela, Bob Ecclestone VK2ZRE and Diana, Richard Court VK2CHC and Linda and her mother, David Pillely VK2AYD, Charles Edmondson VK2KCE, Dennis Meade VK2DAM and Sue, Stuart Walsh VK2FSTU, Arthur Monck VK2ATM and Norah, Peter Kucera

Continued on next page

Continued from previous page

VK2MPK, Paul Colledge VK2ICQ, Paula Keena VK2FPDC and harmonics, Larry Lindsay VK2CLL, Ivan Southwell VK2IJS and harmonic, Keith Bayliss VK2FPTL, John Bailey VK2KHB, John Hansen VK2AYQ, and Henry Lundell VK2ZHE.



Lew VK2AG with Pam



Keith VK2FPTL and Peter VK2MPK share some nibbles and a yarn with Paula VK2FPDC in the background.



Lyle VK2SMI ponders how many more eggs to cook while John VK2KHB and Stuart VK2FSTU offer advice.



Dennis VK2DAM and Paul VK2ICQ solve the world's issues.



Arthur VK2ATM and Dave VK2AYD in conversation.

Continued on next page

Continued from previous page



Charles VK2KCE enjoying the company

This year there were more apologies than usual. Apologies were tendered by VK2TT, VK2AIF, VK2KC and Corrine, VK2JU and Lynne, VK2VIV and Carol, VK2NJJ and Pauline, VK2CRF and Susan, VK2LBG and Fay, VK2DEL and Sandra, VK2ZCM and Jenny, VK2ZTM, VK2BIG and Lynn, VK2FMDW and Sereena. All of the apologies normally attend the annual Christmas party. If they had been able to come this year our attendance would have almost doubled.



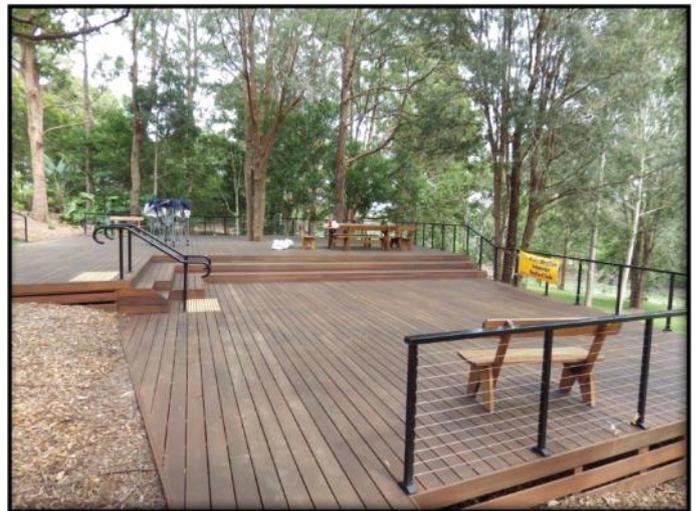
Henry VK2ZHE preparing another photo ambush!



Paula VK2FPDC and Diana talk whilst Stuart VK2FSTU stalks John VK2AYQ for a photo!



A rare photograph of Stuart VK2FSTU on the other side of the camera lens.



The magnificent deck area at the Long Point Art Gallery and Winery

Jaycar
Electronics
Better. More Technical
7/148 Lake Rd Port Macquarie
Ph. (02) 6581 4476

Continued on next page

Continued from previous page

WICEN Mid North Coast Region Antenna Building Day

Members of WICEN Mid North Coast Region spent Sunday the 5th of November 2017 at Sancrox Reserve building and testing HF antennas.

It was a very interesting and rewarding day. A guyed flagpole was set up as a central support for the antenna feed point and balun.



Dipoles were built and tested for the 80 and 40 metre Amateur Bands and for the WICEN commercial 2, 3, 5 and 7 MHz frequencies. Tests were done with and without a reflector for NVIS (Near Vertical Incidence Skywave) operation.

The day started out fine but the forecast rain arrived with a vengeance in the afternoon. Fortunately, we were the only group using the reserve in the afternoon so we had the large covered picnic area to ourselves. It was dry under cover but adjusting antennas meant excursions out into the rain.

A sausage sizzle lunch on the provided

electric barbeque was particularly enjoyable.

Those participating were Rob Frost VK2CRF, Lyle Smith VK2SMI, Steve Wynn VK2ZSW, Larry Thompson VK2LJT and Henry Lundell VK2ZHE. Larry travelled up from Tuncurry for the day. As well as his Amateur Radio and WICEN interests, Larry is the Communications Manager for the SES Mid North Coast Region.

Middle Brother Mountain VK2RPM Repeater Site

The radio link site on Middle Brother Mountain at which the VK2RPM repeaters are located is now owned by TPG Telecommunications. The first phase of the site upgrade work was done by TPG last year. More works are expected this year. Last year's work resulted in a worthwhile reduction in the interference that has been reducing the sensitivity of the VK2RPM 146.7 MHz two metre repeater. The future works are expected to further reduce the interference. In addition, it is hoped to install a favourably sited low internal intermodulation folded dipole antenna on the tower for the 2 metre repeater. It is hoped that this will further reduce the interference problem.

Telegraph Point VK2RCN Repeater Site

The logistics still have not been finalized for the work at the site to replace the mast guys and to install the VK2RCN 6 metre repeater folded dipole antenna together with a mast refurbishment. Much work has been done behind the scene but finding a solution to the problem of complying with the relevant standards while staying within an affordable budget is very difficult. Finding a solution is a priority for the ORARC committee in 2018.

The Telegraph Point VK2RCN 6 metre

Continued on next page

Continued from previous page

repeater may have to be installed using a temporary antenna as the planned 6 metre folded dipole cannot be installed until the mast refurbishment work is carried out.

Repeater Linking, Multi Protocol Repeaters and VK2WI Broadcast Relay

The work on this project has been progressing slower than originally envisaged. Unfortunately, Paul Colledge VK2ICQ who has been doing the key digital development and integration tasks unexpectedly had to take on a very significant additional professional workload in his business last year. This left Paul with much less time to devote to the club project. Paul is hopeful that he will have a more balanced workload in 2018 so that he can spend more time on the ORARC project.

Education and Amateur Licence Assessments

The club's long serving Education Officer and WIA Nominated Assessor Larry Lindsay VK2CLL is very pleased that the club now has two additional WIA Assessors. Steve Wynn VK2ZSW and Bob Ecclestone VK2ZRE recently gained accreditation as WIA Assessors.

Congratulations to Steve and Bob on gaining their assessor accreditations. Obtaining accreditation is far from straightforward and requires considerable work. Well done!

With three assessors in the club it means that it is now much easier to conduct assessments for all three grades of Amateur Radio Licence.

We are looking forward to being able to run a Foundation Licence training and assessment weekend soon. As well, at least a couple of club members are planning to upgrade their licences.

If you know anyone who would like to obtain their Foundation Licence or would like to upgrade their existing licence, please contact Larry Lindsay VK2CLL.

ORARC 2018 Calendar

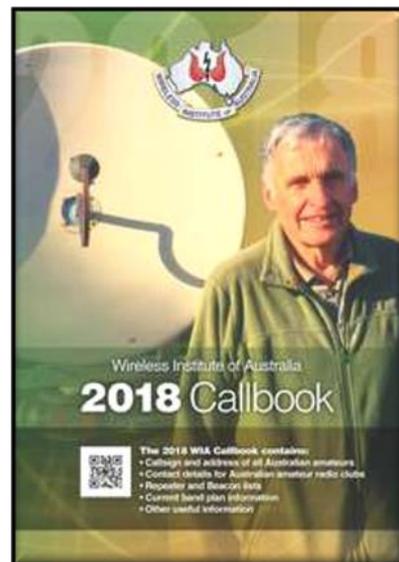
The club's 2018 calendar is the most popular yet with photos of almost all of our current members. Copies are still available and may be purchased at the various club activities. The price, a mere \$2 each.

The club meeting dates and the ORARC Field Day dates are all marked on the 2018 Calendar. The calendar also contains the details of the frequencies for the club's repeaters.

As always, ORARC is indebted to Jaycar Port Macquarie for their sponsorship of the printing of the calendar. Thank you Jaycar.

2018 Callbooks

The first batch of 2018 WIA Callbooks sold out one day after they arrived just prior to Christmas.



Orders will be taken for a second batch of Callbooks for any members who may have missed out on the first batch. Unfortunately, the pricing structure for the callbooks has changed this year and the price to ORARC

Continued on next page

Continued from previous page

members for the next order will be \$40.00. Contact Henry Lundell VK2ZHE as soon as possible as an order will be placed as soon as the WIA office reopens for business. The minimum order for clubs is 5 callbooks so at least 5 orders will need to be received before we can order a second batch. WIA members will be able to purchase the 2018 Callbook in person from the WIA stand at the Wyong Field Day for \$29.50 each.

Note that there is no CD included in the 2018 Callbook and the WIA does not offer a PDF download of the callbook this year.

2018

2018 will be a year of significant milestones for several of our long time members. For example, Mark McGuire VK2FMGM will turn 60 during the year. Richard Court VK2CHC and Des Thompson VK9FLHI will both be 80 by the end of 2018. Of course Life Members such as Trevor Thatcher VK2TT and Lewis Green VK2AG who celebrated their 90th birthdays in past years will say that the real milestone to aim for is 100 years!

Just a reminder that members who turn 85 years are rewarded with Life Membership. Eligible members must be nominated by the end of June so that they can be included in the agenda for the ORARC Annual General Meeting.

Best wishes to all members and their families for a happy and healthy 2018.

Henry Lundell VK2ZHE
President

WICEN ANTENNA BUILD DAY AT SANCROX RESERVE 5 November 2017 by Steve VK2ZSW

The day started off badly with adverse weather predictions, so we should have

been prepared for the torrential deluge that came that afternoon.

First problem was when Stuart VK2FSTU, yes the guy who can't spell Stewart!, was supposed to meet me at my place so I could show him the way to Sancrox Reserve, I waited until 5 minutes after I should have left home and no Stuart, no message, no email, so I left.

Arrived at Sancrox 5 minutes late to find everyone waiting in the car park, looking skyward, not to check out propagation but the threatening rain clouds. We exchanged greetings and complaints because I was late, so I promptly blamed Stuart (Stewart). Editors note: There is a good spirit of camaraderie between our WICEN members with considerable amount of jocular and banter among team members. In no way should the comments be viewed as being critical.

Next we started to unload mountains of gear from our cars, to be carried what seemed like 5 kms across the park to the large covered BBQ area. Sometime later all the gear was deposited in the BBQ shed. No one was rushing since we knew it would not rain being eternal optimists!



The large BBQ Shed in the park. Distances always feel to be in inverse proportion to the amount of gear that has to be carried.

We erected the mast, a 7.6m flag pole purchased for the purpose, got all the guy ropes tied off and proceeded to do the

Continued on next page

Continued from previous page

calculations for measuring off the correct amount of radiator to cut for making aerials for 4 dipoles, cut to NVIS frequencies, between 2mHz and 8mHz. We also made some 10, 14 & 28mHz amateur dipoles while we were at it. Fitting all the hardware, although you could not call it hardware it was almost all soft plastic, anyway we fitted all the 'bits' to the radiators and proceeded to erect the dipoles to the top of the mast, OK the flag pole, it was a mast to us.



Flagpole/mast assembled storm clouds gather.

Once we had the 'mast' setup and dipoles erected on top, we had to find trees to tie the dipole ends off to. Looking West there was no difficulty, small trees everywhere, however to the east, not a tree for miles, or kms if you prefer. Some ingenuity needed so a certain big fella in white WICEN uniform used the down pipes from the roof of the ablution block to tie off on the Eastern side of the dipoles.

Henry ZHE fired up a radio and we tuned into the WIA broadcast, had a QSO and were happy with the result. The testing began, using 2, not one but 2, antenna analysers and finding the sweet spot for each frequency, measuring and recording the lengths after each dipole arm, that also meant extending and shortening the radiators, so lots of untying from the trees, shortening and lengthening the radiators and then re-tying back up in the trees. We

seemed to spend 3 weeks doing this, although I am told it was just the Sunday afternoon, those who told me that were not the ones adjusting the dipoles, were you Henry?

Being in a huge BBQ shed meant we had to have a BBQ, I thought that is what it meant anyway, so we proceeded to eat up large quantities of sausages and onions, throwing caution to the wind, literally.



Rob VK2CRF, Lyle VK2SMI, Steve VK2ZSW and Larry VK2LJT. Wonder who ate the sausages!

After we wasted or spent an hour resting and eating, we thought it prudent to get a wiggle on with the testing and building, the sky was coming in very black. Too late, down it came and flooded the park, since we were only just starting to sort the dipoles it meant some of us were in and out of the cover doing the dipole shortening etc which meant we were all soaked to the skin after a very short time of 'working' in the pouring rain, except for Henry, somehow he got elected the body to stay under cover and work the radio, I still don't recall that election, Its hard work but someone has to do it! By this time the park is flooded, we are soaked, except henry of course, and the roof is leaking everywhere which concerned Henry since he was bone dry, we did not care cause we were all soaked.

We did the WICEN thing, as one does and soldiered on through the downpours until we had finished all the aerials, then came

Continued on next page

Continued from previous page

time to pull it all down and pack it away with Henry supervising again, how does he always get the good jobs.

It was still deluging down and we were 5kms from the cars, it seemed like 5kms, you weren't there, with something like 3 trips each with equipment in the rain to the cars, Henry also got wet, no I did not laugh.

I was tossing up reporting Henry VK2ZHE and Larry VK2LJT, as the path in front of the tennis courts, which we had to traverse, turned into a small river flowing across it from the tennis court towards the river and both of them fearlessly walked through it, I am sure I saw something about not entering flood waters, on an SES brochure back at the clubrooms.

We eventually got all the gear back and into the cars, being soaked we just stood in the pouring rain and chatted for five and then headed off home.

Great day of fun and fellowship with a BBQ to top it off, oh and we got our aerials sorted too.

Thanks to Larry VK2LJT who travelled from Tuncurry, Rob VK2CRF who came in from Pappinbarra, Lyle VK2SMI who came from his place, Henry VK2ZHE came from that eastern suburb of Wauchope, called Port Macquarie and me VK2ZSW.



Editors note: If you would like to join WICEN and take part in important Amateur Radio and Community Activities please contact Steve VK2ZSW.

Helping fellow club members. The Club has a proud history of members helping out each other in various projects. The following two stories illustrate the assistance that is given by club members. The first is by Stuart VK2FSTU written in a jocular manner about the help given by Steve VK2ZSW in setting up various radios in Stuart's 4WD.

'I have the honour of having a very handy "old" man that helps me no end have all sorts of wonderful things added to my new 4x4 radio wise. He is a man of many talents.

But, oh yes, a big but, he has this annoying habit of "now I did have that in here somewhere" or "it was on the bench". I asked for a rag I could see half a dozen in the place, but no, he had to find the right rag to do the job with, ended up getting one of the rags I suggested in the first place.

Now, I'm know I'm not the smartest log on the fire, but when I went to Steve's place again another day, to have my 4x4 fitted with the bracket Steve made to hold 3 radio heads on the goose neck I have in my 4x4 that brings the radios at an angle I can see them easily and tucked in out of the way of legs, arms, and gear sticks.

Well, I looked at Steve's set up before mine was completely finished, and said, "Steve, I'm not sure how fat your fingers are, but mine won't fit in to work on the top buttons of the Yaesu 857D if it's under the TYT". He said, "won't affect it"" hold on, oh yeh, I can see what you mean now", [this was shortened, the long version would mean 2 pages].

So, reengineering was needed, all fixed it went in my vehicle. Works a treat and is a testament to Steve's ingenuity and endless Mr Fix-it attitude . . .'

Lewis Green's Antenna

Lewis Green VK2AG is a long time life member of our club. Members may remember the numerous articles that Lewis wrote on scientific matters for Oxtales and the number of club activities that Lewis was involved in. However there comes a time in life when it is simply not possible to clamber on roofs to install antennas. A call went out for help for an antenna installation. This saw a team of club members , Arthur VK2ATM, Dennis VK2DAM, Lyle VK2SMI and Rob VK2CRF answer the call.

Arthur VK2ATM takes up the story:

Due to the zealous replacement of roof tiles by tradesmen Lewis VK2AG lost all his wire antennas, mast and cable.



The before photo of Lewis VK2AG and Pam's house before antenna work started.

The group of club members, after determining what his requirements were, got together all the hardware and arranged a time to reinstall his antennas.

On a hot morning in December, 2017, Arthur VK2ATM and Dennis VK2DAM drilled the tiles to refit eyebolts for the guys while Lyle VK2SMI and Rob VK2CRF assembled the Diamond five band trap dipoles.

A six meter mast was mounted perpendicular on the roof ridge, with pulley and halliards, new stainless steel guys and turnbuckles. The antennas were then ceremoniously hauled up and tied off to suitable points at each end of the roof and garage. The RG 213 was then carefully fed through the wall to the shack after a lot of hole enlarging.



Dennis VK2DAM ponders the best way of getting the long wires onto the roof.



The ladder work begins

Continued on next page

Continued from previous page



Antenna wires always have a life of their own and need careful sorting out. Rob VK2CRF, Lyle VK2SMI and Arthur VK2ATM laying out the traps and tuned lengths.



Arthur VK2ATM doing a final inspection.

Then it came time to tune the traps with John VK2KC's analyser. This required many trips up and down for the antenna and personnel.

We then tidied up, sealing all the holes and pinning the cable to the ceiling of the patio. After a refreshing cold drink provided by



A job well done Lyle VK2SMI and Arthur VK2ATM look skywards.

Pam, Lewis's XYL, we all left, only for Dennis and Arthur to be called back to find out why nothing worked. It turned out to be an intermediate antenna tuner which was no longer required. Direct connection to the Yaesu Transceiver solved the problem.



Refreshments Bob VK2CRF chats with Lewis VK2AG and Arthur VK2ATM relaxes.



*Arthur VK2ATM
Lew VK2AG
Dennis VK2DAM
Lyle VK2SMI*

Continued from previous page



The finished installation being admired by Arthur VK2ATM, Lyle VK2SMI and Pam

Unfortunately there is not a lot of activity on the HF bands due to conditions so Lewis will have to be very patient and persistent to get some contacts.

Arthur VK2ATM

Build Your Own 6 Meter Five - Eighth Vertical Antenna

By Arthur VK2ATM

Build specifications

Main Element	3393 mm
Matching Loop	714 mm
Tuning capacitor	17.6 pf
Feed point	approx half loop



The Main Element and base were made from 25mm aluminium tubing, Insulated between the loop attachment and ground end of loop with 100 mm of Delryn rod machined to fit with 20 mm gap.

The Loop and Coax feed

Braid can be attached with stainless steel screws through the tubing into the rod.

The tuning capacitor may be made up from approximately 130 mm of RG213 cable. However; start with 250 mm and cut as needed for resonance. After resonance adjust the position of the feed point for best match.

The match is made from small strip of



aluminium bent around the loop wire and bolted with 3mm bolt and nut.

The loop wire is from street mains type aluminium wire unravelled and straightened (wondered why the power went off during construction!)

The theory behind the antenna operation is that it acts as a half wave radiator fed at the high impedance end with a split quarter wave feed grounded at the bottom end, so that the entire antenna is effectively grounded to minimize lightning damage. This also makes for easier mounting

Arthur VK2ATM



The IARU watches Wireless Power Technology (WPT) developments .

Date : 06 / 01 / 2018

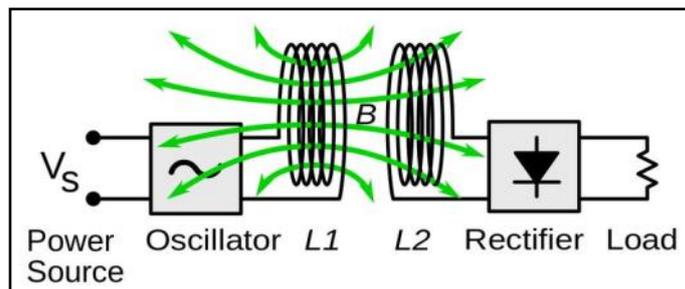
Author : Jim Linton - VK3PC

Widespread interest continues in Wireless Power Transfer (WPT) technology, reflecting the considerable concern about its potential to cause radio frequency interference. Studies continue ahead of the World Radiocommunications Conference 2019 with its Agenda item 9.1.6 - Wireless Power Transmission (WPT) for electric vehicles.

WPT applications are expanding to mobile and portable devices, home appliances and office equipment. The automotive industry looks to it for electric vehicle applications in the near future. Power levels range from milliwatts to hundreds of kilowatts and typical transmission ranges are up about 30 centimetres.

Radio users are concerned that while the intended distance can be small, it is inevitable that some energy will be coupled into other conductors acting as unintended antennas. This may cause harmful interference to incumbent services through the radiation of harmonics. WPT is recognised as having potential advantages but must develop in such a way that prevents harmful interference to incumbent services in the frequency band or bands to be considered.

Protection of incumbent in-band radiocommunication services as well as adjacent and harmonically related bands from spurious and out-of-band emissions must also be ensured.



Locating significant Australian Amateur Radio equipment

Date : 04 / 01 / 2018

Author : Jim Linton - VK3PC

The WIA Historical Archives Committee has received inquiries over the past few years about the availability of historical radio equipment for viewing and photography. Some important collections are held by individuals, clubs, and of course, public museums around Australia.

The number of inquiries has encouraged preparation of a rudimentary database of known significant collections. WIA Historian Peter Wolfenden VK3RV says initially sought is information about publically accessible collections. They don't have to be major public collections such as the Sydney Power House Museum or the Melbourne Science Museum. However, most of their collections are not on public exhibition, and often difficult to access.

Max Howden's 1924-25 record breaking shortwave receiver and Gil Miles' early television experiments from the 1920s, are occasionally displayed at the Melbourne Science Museum.

The Australian War Memorial in Canberra permanently displays Winnie the War

Continued on next page

Continued from previous page

Winner, the famous transmitter used to raise help by isolated army personnel.

Community or Private Museums such as Ian O'Toole's VK2ZIO, Kurrajong Radio Museum, just out of Sydney, or the Mareeba Heritage Centre in the Queensland are two very good examples of museums with readily accessible significant items. The Kurrajong Radio Museum has an extensive wireless, radio and broadcasting collection including some WWI Australian Navy equipment made at what was Shaw's Sydney Wireless Works.

Pre-WWI, amateur equipment can be seen at the Mareeba Heritage Centre. There is the complete 1913-14, home-made station of XQA, Marcus Brimms minus the interconnecting wires, battery and aerial. This station was closed down in 1914 under wartime requirements and the equipment was boxed up as instructed. This station was not re-assembled after the war and is now all on display in a glazed cabinet in the museum building. This is a 'world class' amateur radio collection made by an Australian amateur who resided in the district.

The WIA's National Amateur Equipment Register welcomes input to WIA Archive via with WIA office.

Radios from the Past

IP-501 Johnson Valiant Viking



The Johnson Valiant Transmitter was built in the years 1955 to 1962 in the USA. The sets could be bought as a kit or purchased pre wired for around \$500.

The Transmitter was all valve and was used for AM Modulation and also CW modulation.

This was in the era of big equipment the Transmitter was around 37 Kilos! This was a set that made a statement on your shack table and took up quite a bit of space.

The set was designed as an amateur band transmitter between 160 to 20 meters. In the later years an SSB exciter became available in the years 1962 to 1965.

The set used 18 valves and power output was:

200 Watts on Am

275 Watts on CW.

Dimensions were:

536 mm x 295 mm x 441 mm.

Weight 37.6 Kilos.

Powered by 110 to 120 Volts AC.

Metal Case.

A 'ham shack' needed plenty of space as Amateur receivers of that era were also large heavy and bulky.

Compare the specifications with modern equipment and the difference in size and especially weight is quite remarkable.

For Sale

Hans VK2MRK is having a moving sale and has 100 meters RG 213 unused on a roll. Price \$175 for 100 meters. If interested please contact Hans



New Amateur Radio Equipment Today ICOM IC-7610



Front and Rear View of the ICOM IC-7610



The ICOM IC-7610 represents a high quality and performance Amateur Base Station HF and 6 meter Transceiver priced in Australia between \$5,200 and \$5,500. This is considerably lower than the price of the top of the line ICOM IC-7851 which is close to \$14,000.

The ICOM IC-7610 has a very impressive list of features. That includes:

Colour 7" **touch-screen** high resolution (800x480 pixels) LCD

TWO completely independent receivers use direct RF sampling

DIGI-SEL RF filter preselectors for both main and sub bands

Dual receive with one antenna

Diversity reception possible

Automatic antenna tuner has emergency high-swr tuning feature

Digital preselector enables receive performance similar to IC-7851 and is superior to IC-7300's receive performance

Dual spectrum displays

Audio scope displays FFT with waterfall and tx/rx audio

110dB RMDR (reciprocal mixing dynamic range)

VCXO (voltage controlled crystal oscillator) for master clock yields ultra-low phase noise

Four USB sockets in total

DVI-D connector allows an external display to be used

Requires 13.8Vdc @ 23A average current

Size; 340w x 118h x 227d mm. Weighs approximately 8.5kg.

Editors note it is interesting to compare the size and weight with that of the Johnson Valiant Viking on the previous page especially the weight!

An overview of the specifications are

Frequency coverage

Rx	0.030– 60.000 MHz*1
Tx	1.800–1.999, 3.500–3.999, 5.255–5.405*2 7.000–7.300, 10.100–10.150, 14.000–14.350, 18.068–18.168, 21.000– 21.450, 24.890–24.990, 28.000–29.700, 50.000–54.000 MHz

Mode	USB, LSB, CW, RTTY, PSK31/63, AM, FM
Number of channels	101 (99 regular, 2 scan edges)
Antenna connectors	SO-239 × 2 (50 Ω unbalanced (Tuner off)) BNC × 1 (RX antenna In/Out)
Power supply requirement	13.8 V DC ±15%
Output power (HF/50 MHz)	SSB/CW/FM/RTTY/PSK: 1–100 W AM: 1–25 W Digital P.S.N.
Modulation system	
SSB	Digital P.S.N. modulation
AM	Digital low power modulation
FM	Digital Reactance modulation

The operational features are too numerous to list and are available from the ICOM website. Acknowledgements: ICOM website, Andrews Communications and Strictly Ham.

Blast from the Past

Blast from the past outlines various activities of the club as reported in as far as possible the same Oxtales issue of 5 years ago or 10 years ago.

The January 2008 issue of Oxtales showed a membership of 47. Also it marked the time where the club meeting place moved from the old SES centre to the Port City Bowling Club.

The Christmas Barbeque as our Christmas Party used to be called was held at the Settlement Point Park. Below is an extract from the Oxtales report of the gathering.

The 2007 Christmas barbeque was held on Saturday 1st December to coincide with the December monthly general meeting. Much discussion took place regarding the wisdom of holding the Christmas outdoor function on the first weekend of December due to the history of rain attracted by the Touch Football competition, which is held in Port Macquarie on this same weekend each year. Obviously, the decision to defy the odds was the correct one.

The 1st of December did fall in a wet week but the Saturday dawned fine and sunny.

The most important decision was to select the correct venue. Settlement Point Park proved to be just that. Perhaps it was the large roof over the picnic tables, but despite the many dark clouds on the horizon, the rain stayed away. The roof was essential as it provided very welcome shade from the hot December sun that beat down on the park all day. The temperature remained very comfortable in the shade thanks to the cooling sea breeze that blew in across the Hastings River.

The attendance was very good. It was great family day with plenty of stimulating conversation and much sharing of good food.'



The December monthly meeting in progress, following the BBQ lunch.

Current members may care to try and identify those that were present at the meeting. Many of whom are still with us today.

The Christmas Party encouraged the tradition of show and tell. John VK2KCE today with call sign VK2KC set up a portable HF antenna system picture below that attracted much attention.



The executive at that time. John VK2KCE, now VK2KC, Treasurer, Alan VK2GD, (SK) President and Jim VK2VIV secretary.

