



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

ORARC's Forty-seventh Anniversary Year

July 2018

Compiled by VK2AYQ and VK2TT

PRESIDENT: Henry Lundell VICE PRES: Paul Colledge TREASURER: Larry Lindsay SECRETARY: Steve Wynn

VK2ZHE 6582 0534 VK2ICQ 6580 9912 VK2CLL 6587 1155 VK2ZSW 6585 3327

President's Report

July 2018

President's Report



Membership Renewals

July marks the start of a new Financial Year for the Oxley Region Amateur Radio Club Inc. Membership renewals became due on the 1st of July. Please renew promptly. The simplest way to pay is by direct deposit but Treasurer Larry Lindsay VK2CLL will always be pleased to receive payments in person at the club meetings. Cheques may be posted to the club at PO Box 712, Port Macquarie NSW 2444.

The Committee is pleased to advise that there is no rise in the cost of Membership Subscriptions for the 2018-2019 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 \$10 per annum. Family at Membership remains as a single fee equal to

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

VK2CRN (6m Repeater) O/P 53.800 MHz - I/P 52.800 MHz VK2RCN-1 (APRS Digipeater) SX 145.175MHz 1200bps

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Down the Coax

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

Monthly General Meeting Saturday 7 July 2018 2:00 pm

Friday Night Get-Together Friday 20 July 2018 7.00 pm

Westlakes Amateur Radio Club Car Boot Sale Saturday 28 July 2018, Westlakes club grounds in York Street, Teralba

> Annual General Meeting Saturday 4 August 2018 2:00 pm

Monthly General Meeting Saturday 4 August 2018 after AGM

Remembrance Day Contest 0300 UTC Sat 11 August 2018 to 0300 UTC Sun 12 August 2018 VK2BOR will operate from the club's caravan

> Friday Night Get-Together Friday 17 August 2018 7.00 pm

International Lighthouse and Lightship Weekend 18 & 19 August 2018
VK2BOR will operate from the Club's Caravan at
Tacking Point Lighthouse

Monthly General Meeting Saturday 1 September 2018 2:00 pm

Friday Night Get-Together Friday 21 September 2018 7.00 pm

The 61st Jamboree On The Air will take place on 20 and 21 October 2018.

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

	,	`	,			
	July 20	18				
VK2CHC	Jul - 01	VK2ZHE	Jul - 05			
VK2FMGM	Jul - 08	VK2ICQ	Jul - 12			
VK2CHC	Jul - 15	VK2EM	Jul - 19			
VK2FMGM	Jul - 22	VK2ZHE	Jul - 26			
VK2FMGM	Jul - 29					
1	August 20)18				
VK2FMGM	Aug - 5	VK2ICQ	Aug - 02			
VK2FMGM	Aug - 12	VK2EM	Aug - 08			
VK2FMGM	Aug - 19	VK2ZHE	Aug –16			
VK2FMGM	Aug –26	VK2ICQ	Aug-23			
		VK2EM	Aug-30			
September 2018						
VK2FMGM	Sep -02	VK2ZHE	Sep -06			
VK2FMGM	Sep - 09	VK2ICQ	Sep -13			
VK2FMGM	Sep -16	VK2EM	Sep –20			
VK2FMGM	Sep –23	VK2ZHE	Sep –27			
VK2FMGM	Sep-30					

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.

It is important that all members 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.

Annual General Meeting

The 2018 Annual General Meeting takes place at 2 pm on Saturday the 4th of August 2018 in the SES Building, Central Road, Port Macquarie. Now is the time to consider nominating for one of the club office bearer positions. They all become vacant at the AGM. The strength of the club lies in having an active Committee to inspire and lead the club to do the many worthwhile things that enable the Oxley Region Amateur Radio Club live up to all of its objectives to serve its members and the community, and to promote Amateur Radio as a hobby. The formal Notice of the Annual General Meeting and a nomination form accompany this issue of Oxtales.

The current Committee has worked very hard to make the club's 2017 – 2018 Financial Year a very successful one. The continuing sound financial position has enabled the club to embark on a number of innovative projects to provide the infrastructure to support advances in radio communications. The club already has repeaters at Middle Brother Mountain and

at Telegraph Point which support both analogue FM and C4FM System Fusion digital voice. EchoLink is available on the VK2RPM 146.7 MHz Middle Brother Both Middle Brother repeater. and Telegraph Point have APRS digipeaters for real time GPS tracking. The VK2RCN 53.8 MHz 6 metre analogue FM repeater has installed Telegraph been at Point. Education has always been an important role of the club and it is significant that some members have already upgraded their licences to enable them to operate on 6 metres, and to use the digital modes.

Club Projects

Many members have expressed a desire to use alternative popular digital voice modes to C4FM System Fusion. In response to this It is planned set up an additional UHF multi-mode digital voice repeater at each of the club's repeater sites. The club is indebted to Paul Colledge VK2ICQ for researching and developing a cost effective solution. The new repeaters will be fitted with MMDVM repeater controllers which support C4FM, Dstar, DMR and P25 digital voice modes. It is expected a upgrade to the MMDVM firmware controllers will add support for NXDN as well. Paul has constructed a prototype repeater using this hardware to enable it to be fully tested. Paul is also evaluating and testing hardware and software to provide fail-safe control and monitoring of all the site repeaters. This will enable the intelligent linking of the two sites to facilitate linking at least the VK2RCN and VK2RPM 2 metre repeaters.

Of course, the two new UHF digital voice repeaters will each only be able to operate in one digital voice mode at a time but the MMDVM detects which mode it is receiving and automatically switches to that mode. The new repeaters will have Internet connectivity via the recently purchased microwave radio links. Unfortunately, it is far beyond the club's resources to set up separate dedicated repeaters at each

site for each digital voice mode. Note that the existing VK2RPM 438.525 MHz and VK2RCN 438.425 MHz analog FM/C4FM System Fusion repeaters will continue to operate.

Club Activities

Thank you to everyone for participating in club activities. ORARC runs a surprising number of activities and events each year. These range from the Monthly General Meetings, the Friday night get-togethers on the third Friday of each month, the weekly Sunday morning and Thursday evening club nets on the VK2RPM 146.7 MHz Middle Brother Repeater, the Wednesday morning working bees, and of course special events such as the Christmas Party, the annual Field Day on the June long weekend, and the The Antenna Shootout. club station VK2BOR participates in the John Movle Field Day, the Remembrance Day contest, the International Lighthouse and Lightship weekend, the Jamboree on the Air. In addition, club members provide the safety communications for events such as the Beechwood Billycart Classic, the annual White Ribbon Walk in Port Macquarie, and car rallies in the area.

ORARC 2018 Annual Field Day

The ORARC 2018 Field Day was a great success over Saturday and Sunday the 9th and 10th of the June 2018 over the Oueen's Birthday long weekend. The many visitors attended thoroughly enjoyed themselves, and many reported that they had already booked accommodation for next year. Rain was forecast for the weekend. The forecast was correct but the rain didn't detract from the attendance. There were 103 paid registrations. As well as the regular contingent from Sydney and environs, this year a large Newcastle group from the Westlakes Amateur Radio Club made the journey to Port Macquarie. The attendance list also includes home towns such as Umina Beach, Lemon Tree Passage, Wyoming,

Forster, Tuncurry, Taree, Wingham, Coopernook, Moorland. Harrington, Kempsey, Bellingen, Thora, Coffs Harbour, Toormina, Lismore, Kootingal, Brisbane and environs, plus Lord Howe Island and New Zealand. When added to the many locals from the Hastings and Camden Haven valleys it is clear that the Field Day is indeed very popular. Thank you to everyone who attended. Please tell all your friends about the great weekend. We look forward to an even bigger attendance next year for the 44th annual Field Day.

The Tacking Point Surf Life Saving Club hall was unavailable for this year's Field Day. A grant had been obtained which enabled stage 2 of the hall renovations to be undertaken. The works coincided with the ORARC Field Day so an alternative venue had to found. Thank you to Stuart Walsh VK2FSTU for negotiating the use of the Wauchope High School Hall for the two days of the Field Day. Most of the affordable local halls already have existing weekend bookings so finding a suitable hall took a lot of effort.



Field day location Wauchope High School

The Wauchope High School Hall proved to be a very good venue. The hall comfortably accommodated the field day activities. Table space was at a premium. As can be seen from the accompanying photographs there were several substantial exhibitors' stands and a lot of disposals items in the hall. The plentiful seating was very popular as people took the opportunity to enjoy food and refreshments while catching up with new and old friends between snapping up bargains and taking in the various displays. The level site meant that there were no hills or stairs to climb. Gate keeper to the loading area. Stuart Walsh VK2FSTU, was kept very busy as a seemingly endless procession of vehicles first unloaded all manner of goods and then came back to load up again, Everything that came in had to go out again! Most of the disposals items went home in different vehicles.



Enthusiastic visitors and members look around the hall at displays and equipment. Below Gerard VK2IO and Bruce VK2EM with Keith VK2FPTL



Everyone thoroughly enjoyed the weekend with many complimentary comments regarding the venue and the excellent catering. No-one went hungry and lots of people found great bargains from the traders who had brought stock in especially for the Field Day. The technical demonstrations created a lot of interest. This year HF digital communications and VHF/UHF digital voice were showcased.



Once again the formidable team of Sue, John VK2KHB and Paula VKFPDC feed the masses.



Arthur VK2ATM and David VK2AYD discuss digital modes.

Continued on next page

Radio Supply had a wide range of accessories and electronic items. Many people stocked up on the various hard to find connectors and adaptors that can't be bought over the counter locally. The 100 metre rolls of quality RG58 coaxial cable were a bargain not to be missed. Thank you to Gary Ryan VK2ZKT and Carol Ryan VK2FCSR for their long-time support of the annual Field Day. Gary reported that sales were good. Gary displayed a range of his beautifully constructed home brew projects. His very professionally completed uBITX QRP HF all band SSB transceiver attracted a lot of interest.



Carol VK2FCSR at the well stocked Radio Supply Table.



uBITX QRP HF all band SSB transceiver kit beautifully made up Gary VK2ZKT

The many diverse bargains from the disposals tables stocked by various vendors were keenly sought. There was everything

from transceivers, test equipment and surplus commercial equipment to antennas, cables, connectors and hardware. There were some high quality items at very keen prices for discerning buyers. Everyone went home with at least something. Quite a few people went home with a great many bargains.

David Tavener VK4ICE kindly put out a table of his remnant stock items at never to be repeated prices and donated the proceeds



to ORARC. A very kind gesture. Thank you David. Amongst David's items were lots of antennas and mobile antenna mounts.

The Field Day dinner at the Port Macquarie Golf Club at Tacking Point was extremely popular again this year with approximately 40 people enjoying good food and a pleasant social evening.



Familiar faces around the table Jamie VK2YCJ, Carol VK2FCSR, Gary VK2ZKT, Henry VK2ZHE, Tim VK2ZTM and Barry VK2LBG

The club wishes to express its sincere thanks to Gary Ryan VK2ZKT for the sponsorship by

Continued on next page

Radio Supply Supply of the hire of Seaview Room at the Golf Club for the dinner. The club was undergoing renovations and the use of the Function Room for the Field Day Dinner made for a very pleasant environment for the evening. As always, the food was excellent.



Familiar faces Charles VK2KCE, Bob VK2BIG with Lynn XYL, Arthur VK2ATM and Norah.

After the dinner Gary Ryan VK2ZKT very generously announced that Radio Supply would sponsor the hire of the Seaview Room in the Port Macquarie Golf Club for the 2019 Field Day Dinner on the evening of Saturday the 8th of June Unfortunately, it was discovered that another party had already booked the room for that night. They had made their booking just after Christmas. It shows just how sought after this venue is when people book 18 months ahead! In the event that this booking is cancelled the ORARC Field Day Dinner booking for the room will be confirmed. A booking for 50 for the 2019 Field Day Dinner has been confirmed for the restaurant so we do have a confirmed venue for 2019. The now renovated restaurant is still a nice venue.

Official Field day photographer Stuart Walsh VK2FSTU took lots of photos. Well done Stuart. Thank you for a great record of the weekend. It's not possible to include them all in this issue of Oxtales but a selection of Stuart's photos together with some of the photos contributed by other

photographers will be added to the Field Day photo gallery on the ORARC website. Keep an eye out for some nice aerial shots. Both Paul Colledge VK2ICQ and David Tavener VK4ICE flew their drones during the weekend.

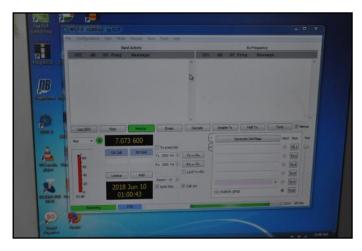
The quality of items entered in the Homebrew display was excellent. It had been hoped that more items would have been on display as quite a number of people had mentioned prior to the Field Day that they were working on projects to bring along. It seems that people assumed that there would be lots of items on display so they didn't bring theirs along so the extra table space we allocated this this year looked a little bare. Hopefully we'll see lots of items on display next year! Special mention must be made of the range of very professionally home built items displayed by Gary Ryan VK2ZKT. His micro BITX QRP all band HF SSB transceiver stood out but the winner of the display was David Pilley VK2AYD with his portable QRP 20 metre PSK digital transceiver and 40 metre CW transceiver.



Stuart Walsh VK2FSTU took out the prize for the best presented amateur vehicle. There were several worthy contenders but Stuart's vehicle stood out.

We were fortunate to have a number of demonstrations of technology which created a lot of interest.

Thank you to Arthur Monck VK2ATM for running the weak signal HF digital modes demonstration on both days of the Field Day. His excellent demonstrations showed how simple it is to operate the various digital modes using the free software that is available today. He answered many questions during the weekend.



Screen shot of weak signal QSO demonstrated by Arthur VK2ATM.

Bruce Ekert VK2EM displayed his portable digital voice Shark OpenSpot standalone digital radio IP gateway operating through the mobile data network. This was a very compact stand-alone battery powered UHF digital radio hotspot which was very

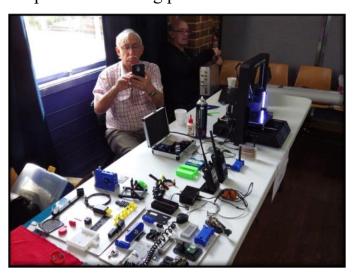
quickly deployed. He answered many questions from interested amateurs.

Portable Shark OpenSpot digital IP gateway operating through the mobile data network.



Bruce also had a lot of interesting and useful disposals items. Many of the items came from the now decommissioned shack of John Lacey VK2KKZ who had been very active since retiring to Forster from Griffith many years ago. Some of the items were kindly donated to the club. Thank you Bruce.

Thank you to Peter McAdam VK2EVB for also running a demonstration of VHF/UHF digital voice. It was Peter's demonstration of digital voice at the Urunga Convention last year that first stimulated interest in this part of the world. He had his Shark OpenSpot standalone digital radio gateway / hotspot set up together with some equipment. Peter of his other demonstrated his 3D printer. It was very kind of Peter to bring his 3D printer to our Field Day, and to set it up. The working printer and a great display of some the things that Peter has printed with it, created a great deal of interest. The 3D printed BITX case caught a lot of attention. The designed custom case looked impressive but Peter said that he thought he could improve on it. Subsequent to the Field Day, Peter did just that and printed a redesigned case with a high standard of finish and metal thread inserts as well as improved mounting points.



Peter VK2EVB with 3D printer.

Thank you to Dot Bishop VK2DB for running the Australian Ladies Amateur Radio Association (ALARA) stand again this Year.



Dot VK2DB on ALARA stand.

Dot and OM John Bishop VK2ZOI are long time supporters of the Field Day. ALARA http://www.alara.org.au/ is one of many international associations of ladies in Amateur Radio. In Australia there are some 200 members. The ALARA display featured the impressive quilt that Dot won last year at the ALARA convention in Canada. Dot did say that bringing it home on the plane took a lot of rearranging of her luggage. The very detailed quilt was definitely the focal point of the ALARA stand and started many conversations.

Amateur Radio NSW ran a stand this year as they have done for many years. Mark Blackmore VK2XOF couldn't attend this year due to work commitments but Tim Mills VK2ZTM set up the stand and spoke with a great many people. Some people wanted to know more about ARNSW but many just took the opportunity to catch up

on old times. Amateur Radio NSW donated several excellent reference books on Amateur Radio topics as prizes including the highly coveted Radio Theory Handbook by Fred Swainston.



Tim VK2ZTM Amateur Radio NSW manning stand.

Fox hunting has a strong tradition at the annual Field Days and this year competition was as intense usual. The transmitters were expertly hidden by stalwart fox Larry Lindsay VK2CLL. Having taught at the Wauchope High School for many years before recently retiring, Larry had an advantage of local knowledge.

The fox hunting was on an even playing field this year as it is many years since fox hunts were last run in Wauchope. Several of the hunters though had some recollection of the terrain. On Saturday afternoon the first question to be asked even before the talk in foxhunt had started was "are you in Fox Crescent?". Those with long memories will know that when the Field Day was last held in the Wauchope Showground, the talk in fox was found in Fox Crescent. Yes, the talk in fox then, as in 2018, was Henry Lundell VK2ZHE, but while he fleetingly thought about Fox Crescent for

2018, he had

wisely chosen to hide at the dead end at the western end of Bain Street. The hidden pedestrian and mobile foxes gave the hounds an opportunity to explore new territory.

Thank you to Larry Lindsay VK2CLL assisted by John Hansen VK2AYQ for hiding the transmitters and to Peter Kucera VK2MPK for starting the hunts and doing the recording. A special thank you to Craig Martin VK2ZCM for providing the fox timers and setting them up to run the transmitters. The sequenced and identified fox transmissions were greatly appreciated by the hounds.

Congratulations to 2018 Fox Hunt champion Gerard Hill VK2IO of Castle Hill, and to Runner-up champion Chris Williams VK2YMW of Hornsby. The top hunters are always keen to see their names engraved on those little shields that added to the Perpetual Trophy each year. There is very little space left on the Perpetual Trophy to add new shields. In a few years the trophy will be full and we will then need a new Perpetual Trophy.

Gerard VK2IO receiving Fox Hunt Champion Trophy



from President Henry VK2ZHE.

Thanks to many generous donations the major

raffle and lucky door prizes were of a very high standard. Raffle first prize winner Chris Williams VK2YMW of Hornsby took home the much coveted Digitech AR1945 world band AM/FM/SW/LW/Air PLL synthesized portable radio receiver with SSB.



The second prize in the raffle, the Radio Theory Handbook by Fred Swainston donated by Amateur Radio NSW, was won by Phillipa Savins VK2PPS of Toormina. This is a highly sought after reference book which is expensive to purchase.

Gerard Hill VK2IO of Castle Hill was the winner of third prize in the raffle, the ARRL UHF/Microwave Experimenters' Manual which was donated by Amateur Radio NSW.

Merv Savins VK2DMS of Toormina took home fourth prize, the Transmitter Hunting – Radio Direction Finding Simplified book donated by Amateur Radio NSW, Kevin

Dawson VK2KD of Oatley was the recipient of fifth prize, the ARRL RFI Book donated by Amateur Radio NSW.

It's amazing that each of the above major raffle prizes went to such perfectly matched winners!

With a total of 19 prizes in the Major Raffle the draw was keenly watched. The subsequent prizes, all donated by Jaycar, included Jaycar HB6373 leather toolbelts, Jaycar Super Bright LED Pen Lights, Jaycar Super Bright LED Keyring Lights, and Jaycar Ceramic Mugs. Jaycar Port Macquarie continued their support of the Field Day with a great many high quality prizes. They also provided complimentary recently released Jaycar 2018 catalogues which were very gratefully received by those did not already have one. Jaycar are a long time supporter of the Field Days.

The Callsign Lucky Door first prize of a high quality coaxial switch donated by Radio Supply of Bellingen, was won by Shane McBride VK2XUV of Forster.

In all there were 15 prizes in the callsign lucky door draw. 13 of the prizes were donated by Jaycar Port Macquarie. These included Jaycar HB6373 leather toolbelts, Jaycar Super Bright LED Pen Lights, Jaycar Super Bright LED Keyring Lights, and Jaycar Ceramic Mugs.

In the non-callsign lucky door draw, first prize of a Cheese Knife Set donated by VK2ZHE was won by Dannielle May of Cowra. Jacob Bowerman of Wauchope won the Celebration Confectionery Tin. He generously opened it in the hall and had lots of help in sampling the contents. The subsequent prizes of a Jaycar Ceramic Mug, Super Bright LED lights, and a tape measure were all donated by Jaycar Port Macquarie.

There were Jaycar ceramic mugs included in all the draws. These are a limited edition promotional item which quickly became the most coveted prize item at the Field Day. They are a collectors' item. No, they aren't listed in the Jaycar catalog!



A selection of some of the raffle prizes note the Jaycar Ceramic mug which no doubt will become a collectors item!

Full lists of all the Major Raffle, Callsign Lucky Door Draw and Non-Callsign Lucky Door Draw prize winners and a full list of Trophy winners appear in this issue of Oxtales.

Thank you to everyone who contributed to the success of the Field Day weekend. There are too many people to individually thank in this column but as already mentioned, many of the volunteers put in extraordinary efforts during the weekend as a number of those who normally volunteer for various tasks were either absent or not able to undertake the tasks that they had done in previous years. It did mean that some people doubled up and undertook more than one task. The result was that the weekend events all ran smoothly and everyone was well fed.

John Bailey VK2KHB did a great job in obtaining all the provisions and co-ordinating the running of the food service. The High School Hall does not have a dedicated kitchen so there was a lot of extra setting up to cook and serve delicious food and drink throughout the weekend. John very generously donated most of the food and all of the soft drinks. The club only paid for

the steak and sausages Continued on next page

which were supplied at a very generous discounted price by Colonial Quality Meats. The generosity of John and other benefactors such as Henry Lundell VK2ZHE who donated all the bacon and the fruit salad and ice cream ensured that that sale of the very reasonably priced food was profitable.

Special thanks go to Paula Keena VK2FPDC and Sue Meade who with the help of Dennis Meade VK2DAM tirelessly worked to serve the food and drink while running the barbeque. There was access to the school staff kitchen. It was some distance from the hall but it did have a sink for washing up and had some all important refrigerator and freezer space.

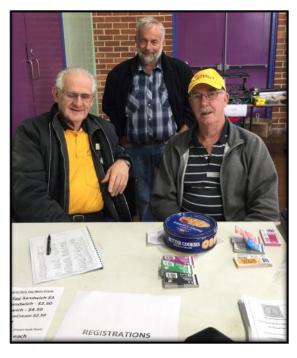
Special thanks to Lyle Smith VK2SMI who, despite having work during the weekend, very kindly donated and delivered the gas to fuel the barbeque. The school provided the barbeque but we had to provide the gas.

Thank you to again to the food service team. There was always someone behind the counter to provide immediate service and the free tea, coffee and biscuits were continuously available.

The big sellers during the weekend were the bacon and egg sandwiches and the steak sandwiches. Word of how delicious these were spread very quickly. The secret was in the quality of the ingredients and the expert barbequing.



Thank you also to those who tirelessly ran the registration desk at the entrance to the hall and sold all the tickets for the food. drinks and the raffle. Special thanks must go to John McLean VK2KC for Saturday and to Bob Small VK2BIG on Sunday with assistance from Dennis Meade VK2DAM. Bob was in pain with limited mobility but still put in the full day. Subsequent to the Field Day, Bob underwent surgery with a week in hospital. We all wish Bob well for a good recovery.



Above John VK2KC, and Bruce VK2HOT staff the registration desk with Grahame VK2FA in the background.

Below Bob VK2BIG on the desk assisted by Dave VK2AYD and Dennis VK2DAM



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Larry Lindsay VK2CLL not only hid and recovered the fox hunt transmitters. As club Treasurer he also kept a rein on the money during the weekend, starting of course with a float so there was change for those who proffered \$50 and &100 notes. At the end of the weekend he was happy that the money and ticket sales reconciled and that the Field Day had made a substantial profit.

Thank you to the many willing hands who set up the hall on Saturday and then packed everything up on Sunday afternoon. Stuart Walsh VK2FSTU as the person responsible to the School for the hall and access worked tirelessly the whole weekend. On the final check before locking up on Sunday afternoon everything was back in its original position and it was hard to believe that only a few hours earlier the hall and environs had been a hive of activity with 100 attendees and a mountain of paraphernalia.

The generosity of the benefactors who so kindly donated all the prizes is greatly appreciated.

Finally, thank you to everyone who attended the Field Day. This year's attendance was greater than last year's.

After all the expenses, the Field Day made a profit in excess of \$1,000 to which must be added the generous donation of \$355 by David Tavener VK4ICE for the clearance items that he sold during the weekend and the donation of the \$77.75 raised through the sale of items donated to the club. This money is a valuable contribution to the club's finances. Clearly, the Field Day was an extremely successful one, both from a financial standpoint, and as the flagship event of the year for the club.

The 2019 Field Day is only 11 months away. It will be the 44th annual Field Day. We still have to finalise the venue. It will either be the Tacking Point Surf Life Saving Club Hall if a booking can be

negotiated, or the Wauchope High School Hall again. The Golf Club has already been booked for the Saturday night Field Day dinner.

Coming Events

RD Contest



The 2018 Remembrance Day contest runs for 24 hours and commences at 1pm local time on the afternoon of Saturday the 11th of August, and finishes at 1pm on Sunday the 12th of August. Fortunately, the RD contest and Lighthouse International and Lightship Weekend are on consecutive weekends this year so VK2BOR will operate in the RD Contest for the full 24 hours from the club's communications caravan. The rules permit contacts with stations in the same call area and there is the incentive of double points for contacts on 160 metres so operating the full 24 hours is a worthwhile strategy. See the WIA web site http://www.wia.org.au/ members/contests/rdcontest/ for details.

The venue for this year's RD operation will be the Camden Haven Airfield. This is the same venue that was used

last year. It is an excellent quiet radio location on the banks of the Camden Haven River to set up the club's communications caravan. There are convenient tall trees to tie antennas to. There is plenty of room for the 160 metre dipole. The club's barbeque will provide a sausage lunch and evening meal on the Saturday, and a bacon and egg Sunday breakfast morning. on barbeque and tea, coffee and soft drinks will be free to those who attend. Camping is permitted on payment of a small fee so consider bringing your tent, caravan or motor home. Limited overnight cabin accommodation is also available. Please come along and help run the club station VK2BOR and enjoy a great social occasion.

As well as helping to run the VK2BOR club station from the club's Communications Caravan, members are encouraged to participate from their home stations as well. Most importantly, please submit your logs as every log that is entered helps the VK2 score.

ILLW



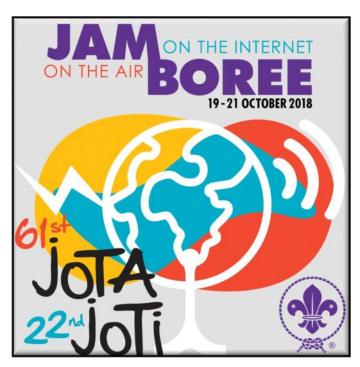
The International Lighthouse and Lightship Weekend (ILLW) https://illw.net/ takes place on the weekend of Saturday and Sunday the 18th and 19th of August 2018.

The club's station VK2BOR will operate from the club's communications caravan at the Tacking Point Lighthouse. Please come along and support this operation. Again, as usual there will be a free hot dog lunch with biscuits, tea, coffee and soft drinks provided in the caravan. It is planned to continue to operate through the night and a sausage sizzle barbeque evening meal and a bacon

Westlakes Amateur Radio Club Car Boot Sale

The Westlakes Amateur Radio Club 11th annual Car Boot Sale will take place in the grounds of the club premises in York Street Teralba on Saturday the 28th of July 2018. The annual car boot sale is an event not to be missed. The bargains are legendary. Enjoy the food from the club barbeque while enjoying the great social event. The bargains are a bonus! There is always a strong contingent of Westlakes members in attendance at the Oxley Region Amateur Radio Club Field Days so it is a great opportunity to reciprocate the interclub support.

JOTA

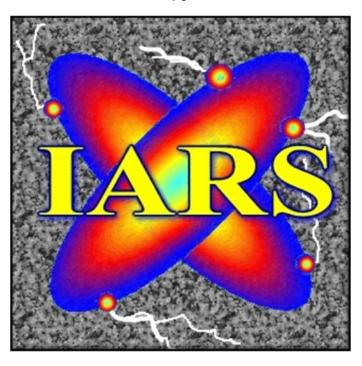


The 61st annual Jamboree on the Air will take place over the weekend of the 20th and 21st of October 2018. It is also the 22nd annual Jamboree on the Internet. As in past years, the Oxley Region Amateur Radio Club will set up stations at Port Macquarie and Wauchope.

Beechwood Billycart Classic

Members of the Oxley Region Amateur Radio Club provide the safety communications for this high profile event each year. The event is always held on a Sunday. The most likely date this year based on the last couple of years is Sunday the 21st of October but this is subject to confirmation. Planning will commence as soon as the date is announced.

Illawarra Amateur Radio Society turns 70



Congratulations to the Illawarra Amateur Radio Society http://www.iars.org.au/ on their 70th anniversary. The club has been celebrating with their special event callsign VI2AMW70 which has been very actively operated on all bands by club members. The club's callsign VK2AMW is well known by several generations of Amateurs.

A special 70th anniversary high altitude helium filled balloon was launched near Yass on Sunday the 1st of July. It was launched around 10am and ascended to a height of approximately 33,000 metres (almost 20 miles!) and traveled at a maximum speed of over 160 kilometres an hour before coming down by its parachute just off the coast north of Ulladulla. You

can check the APRS log at APRS.FI and for VK2AMW-11. See search the accompanying image of the APRS track of the flight. The balloon and payload washed up on the beach next morning and was recovered. It will be on display at the next IARS meeting. The balloon carried a 300 milliwatt 145.175 MHz APRS tracker and a 200 milliwatt 28.636 MHz CW beacon with a dipole antenna. The CW morse beacon was received at Port Macquarie for most of the flight and was quite a strong signal while the



balloon was at high altitude.

WICEN

WICEN (NSW) Mid North Coast Group



The recently formed WICEN (NSW) Mid North Coast Region group has been formally recognized by NSW State WICEN and Stuart Walsh VK2FSTU is now the co-ordinator.

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 invited to attend the meetings. A few more members are still needed in order to make a viable Region. Anyone interested in joining WICEN should contact Stuart Walsh VK2FSTU, or just come along to the meetings. For

more information, visit the WICEN NSW website http://www.nsw.wicen.org.au/

The Mid North Coast Region WICEN group ran a stand at the Oxley Region Amateur Radio Club Field Day. This attracted interest from a number of people, and hopefully a couple of prospective new members.

There will be a strong WICEN presence at the annual VH-MDX multi service SAREX in in the Barrington Tops during the period the 14th to the 16th of September 2018. Some Mid North Coast WICEN members intend participating again this year.

In preparation for the VH-MDX SAREX itself there will be a VH-MDX Search Recce 2 during the period 27th to 29th of July 2018 in the Barrington Tops. This operation currently has several activities for WICEN including providing communications support search teams, identifying repeater locations for the main search in September testing methods establish and to communications to an EOC located in Walsh VK2FSTU Tuncurry. Stuart attending this exercise.

The above exercises are an enjoyable opportunity gain valuable training during a multi service search in challenging terrain.

Milestones

Congratulations to Paul Colledge VK2ICQ and Paula Keena VK2FPDC who are getting married on 20 October this year. You read it first in Oxtales!

The Oxley Region Amateur Radio Club welcomes new members Toby Messina VK2XTX of Port Macquarie, Darren Froggatt VK2MIA of Port Macquarie and David Brewster ZL3DS of Lake Cathie.

On a sad note we have Silent Keys Vale Colin Wall VK2JC and Vale Jim Griffiths VK2BGG in this issue.

Thank you to Stephen Wall for addressing the ORARC July 2018 Monthly General Meeting with a very touching thank you to the club and the Amateur Radio fraternity for the comradery and pleasure that Amateur Radio had given his late father Colin Wall VK2JC throughout his lifetime.

It is also sad to record the passing of well known Newcastle amateur Bill Hall VK2XT on the 20th of June 2018 at the age of 105 years. Bill had been very active on the air throughout his long life.

Henry Lundell VK2ZHE President.

Friday Night Get Together 18 May



Rob VK2CRF, David ZL3DS V, Mark VK2FMGM, Larry VK2CLL, Ivan VK2IJS, Arthur VK2ATM, John VK2KC and John VK2KHB look at the object from outer space, actually John VK2KC's home brew mobile antenna!

The photo on right was taken at the Friday



Night Get Together on Friday the 18th of May 2018. It shows John McLean VK2KC with his home brew manual screwdriver mobile HF antenna with large capacitance hat maximise performance.

Henry VK2ZHE also demonstrated his recently purchased battery powered VHF/UHF spectrum analyser with tracking generator https://www.ebay.com.au/itm/U-V-UHF-VHF-dual-band-spectrum-analyzer-with-tracking-source-tuning-Duplexe-by connecting it to a VHF band reject duplexer. The sweep of the duplexer frequency response can be clearly seen.

The unit was purchased by Henry VK2ZHE



on ebay shown below.



Home Brew project

Radio Stand made by Gary VK2ZKT



The photograph above and below is of a simple and very useful home brew project constructed by Gary VK2ZKT from Radio Supply Bellingen.







ORARC Field Day 2018 - Trophy Winners			
	Callsign	Name	Town (Home QTH)
Saturday 2 Metre Mobile Fox Hunt	VK2BYY	Jeff Pages	Umina Beach
Saturday 80 Metre Pedestrian Fox Hunt	VK2IO	Gerard Hill	Castle Hill
Saturday 2 Metre Talk In Fox Hunt	VK2BZC	Paul Webster	Port Macquarie
Sunday 80 Metre Mobile Fox Hunt	VK2BYY	Jeff Pages	Umina Beach
Sunday 80 Metre Pedestrian Fox Hunt	VK2IO	Gerard Hill	Castle Hill
Sunday 2 Metre Mobile Fox Hunt	VK2IO	Gerard Hill	Castle Hill
Sunday 2 Metre Pedestrian Fox Hunt	VK2IO	Gerard Hill	Castle Hill
Fox Hunt Champion	VK2IO	Gerard Hill	Castle Hill
Runner Up Fox Hunt Champion	VK2YMW	Chris Williams	Hornsby
Best Presented Amateur Vehicle	VK2FSTU	Stuart Walsh	Crosslands
Best Home Brew Display	VK2AYD	David Pilley	Wauchope



Left Henry VK2ZHE presenting Gerard VK2IO with Fox Hunt Champion Trophy.

Right Henry VK2ZHE presenting Chris VK2YMW with Fox Hunt Runner up Trophy.











Above Henry VK2ZHE presents Jeff VK2BYY with Fox Hunt Trophy

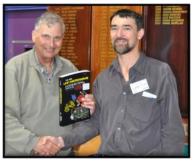
Left Henry VK2ZHE presents David VK2AYD with Best Home Brew Display Trophy.

The Perpetual Trophy for Fox Hunt Championship is rapidly filling up.



	ORARC Field Day Prize Winners 2018					
Callsign	Lucky Door					
	Description	Donated By	Winner Callsign	Winner Name	Town	
1st Prize	High Quality RF Coaxial Switch	Radio Supply Pty Ltd Bellingen	VK2XUV	Shane McBride	Forster	
2nd Prize	Jaycar Leather Toolbelt HB6373	Jaycar Port Macquarie	VK2DB	Dorothy Bishop	Hornsby Heights	
3rd Prize	Jaycar Leather Toolbelt HB6374	Jaycar Port Macquarie	VK9FLHI	Des Thompson	Lord Howe Island	
4th Prize	Jaycar Leather Toolbelt HB6375	Jaycar Port Macquarie	VK2DEL	Paul Jones	Port Macquarie	
5th Prize	Pixie QRP 40 Metre CW Transceiver Kit	VK2ZHE	VK2EM	Bruce Ekert	Forster	
6th Prize	Jaycar Ceramic Mug	Jaycar Port Macquarie	VK2AGA	Des Hancox	Taree	
7th Prize	Super Bright LED Pen Light with Magnetic Pocket Clip - 3 AAA Cells	Jaycar Port Macquarie	VK2KCE	Charles Edmondson	Port Macquarie	
8th Prize	Super Bright LED Pen Light with Magnetic Pocket Clip - 3 AAA Cells	Jaycar Port Macquarie	VK2DMS	Merv Savins	Toomina	
9th Prize	Super Bright LED Keyring Light with Magnetic Clip	Jaycar Port Macquarie	VK2LBG	Barry Gilson	Port Macquarie	
10th Prize	Super Bright LED Keyring Light with Magnetic Clip	Jaycar Port Macquarie	VK2MRK	Hans Mare	Port Macquarie	
11th Prize	Super Bright LED Keyring Light with Magnetic Clip	Jaycar Port Macquarie	VK2JWA	John Alcorn	Ballina	
12th Prize	Jaycar Ceramic Mug	Jaycar Port Macquarie	VK2ZRE	Bob Ecclestone	Kempsey	
13th Prize	Jaycar Ceramic Mug	Jaycar Port Macquarie	VK2ZOI	John Bishop	Hornsby Heights	
14th Prize	Jaycar Ceramic Mug	Jaycar Port Macquarie	VK2EVB	Peter McAdam	Coffs Harbour	
15th Prize	1 metre Tape Measure	Jaycar Port Macquarie	VK2TT	Trevor Thatcher	Wauchope	

Major I	Raffle				
	Description	Donated By	Winner Callsign	Winner Name	Town
1st Prize	Digitec AR1945 World Band AM/FM/SW/LW/AIR PLL Synthesised Receiver with SSB	VK2ZHE	VK2YMW	Chris Williams	Hornsby
2nd Prize	Radio Theory Handbook by Fred Swainston	Amateur Radio NSW	VK2PPS	Philippa Savins	Bowraville
3rd Prize	ARRL UHF/Microwave Experimenters' Manual	Amateur Radio NSW	VK2IO	Gerard Hill	Castle Hill
4th Prize	Transmitter Hunting - Radio Direction Finding Simplified	Amateur Radio NSW	VK2DMS	Merv Savins	Toormina
5th Prize	ARRL RFI Book	Amateur Radio NSW	VK2KD	Kevin Dawson	Oatley
6th Prize	Jaycar Leather Toolbelt HB6373	Jaycar Port Macquarie	VK2HZV	Judy O'Brien	Cardiff
7th Prize	Jaycar Leather Toolbelt HB6373	Jaycar Port Macquarie	VK2CPC	Les Sidebottom	Bonville
8th Prize	Jaycar Leather Toolbelt HB6373	Jaycar Port Macquarie	VK2EVB	Peter McAdam	Coffs Harbour
9th Prize	Jaycar Leather Toolbelt HB6373	Jaycar Port Macquarie	VK2AAK	Andy Keir	Darawank
10th Prize	Super Bright LED Pen Light with Magnetic Pocket Clip - 3 AAA Cells	Jaycar Port Macquarie	VK2FRKO	Richard Osborne	Lemon Tree Passage
11th Prize	Super Bright LED Pen Light with Magnetic Pocket Clip - 3 AAA Cells	Jaycar Port Macquarie	VK2MAX	Grant Snowden	Kempsey
12th Prize	Jaycar Ceramic Mug	Jaycar Port Macquarie	VK2HZV	Judy O'Brien	Cardiff
13th Prize	Jaycar Ceramic Mug	Jaycar Port Macquarie	VK2MAX	Grant Snowden	Kempsey
14th Prize	Jaycar Ceramic Mug	Jaycar Port Macquarie	VK2CLL	Larry Lindsay	Huntingdon
15th Prize	Super Bright LED Keyring Light with Magnetic Clip	Jaycar Port Macquarie	VK2BYY	Jeff Pages	Umina Beach
16th Prize	Jaycar Leather Toolbelt HB6373	Jaycar Port Macquarie	VK9FLHI	Des Thompson	Lord Howe Island
17th Prize	Super Bright LED Keyring Light with Magnetic Clip	Jaycar Port Macquarie	VK2CPC	Les Sidebottom	Bonville
18th Prize	Super Bright LED Keyring Light with Magnetic Clip	Jaycar Port Macquarie	VK2IJS	Ivan Southwell	Port Macquarie
19th Prize	Super Bright LED Pen Light with Magnetic Pocket Clip - 3 AAA Cells	Jaycar Port Macquarie	VK2UJ	Tim Mills	Beecroft







3rd Prize Gerard VK2IO

2nd Prize Phillipa VK2PPS

1st Prize Chris VK2YMW

ORARC Field Day Prize Winners 2018					
Non-Ca	llsign Lucky Door				
	Description	Donated By	Winner Name	Town	
1st Prize	Cheese knife set	VK2ZHE	Danielle May	Cowra NSW	
2nd Prize	Celbrations Confectionery Tin	VK2ZHE	Jacob Bowerman	Wauchope	
3rd Prize	Jaycar Ceramic Mug	Jaycar Port Macquarie	Gloria Savins	Toormina	
4th Prize	Super Bright LED Pen Light with Magnetic Pocket Clip - 3 AAA Cells	Jaycar Port Macquarie	Caitlin Williams	Hornsby	
5th Prize	Super Bright LED Keyring Light with Magnetic Clip	Jaycar Port Macquarie	Mrs Deweger	Morriset	
6th Prize	1 metre Tape Measure	Jaycar Port Macquarie	Robyn Golden	Coffs Harbou	

Photographs of other Prize Winners on the Day



Photographs each row from left to right.

1st row Dot VK2DB and Trevor VK2TT, 2nd row Jacob, Gloria Savins and Catlin Williams 3rd row Ivan VK2IJS, Judy VK2HZV and Larry VK2CLL.

Henry VK2ZHE presented the Prizes















2018 WIA Radio & Electronics Convention & AGM May 18-20 Gold Coast, Queensland

Report by Bob VK2ZRE

My wife Diana and I left Kempsey around 9.30am on Thursday 17 May and arrived in Alstonville around 2.30pm where we stayed overnight with friends.

We left Alstonville around 12.30pm and headed for the Gold Coast and arrived around 1.45pm stopping at the Miami Bakery for lunch where we each had a great bacon and egg roll, a worthy competitor to the legendary ORARC event offerings. They just seemed appropriate for an Amateur Radio outing!

We managed to check into our hotel an hour early. We think they were actually grateful we were early as they were soon besieged by several busloads of tourists who kept counter staff flat out for quite some time.

The early check-in gave us an opportunity to settle back with a coffee and something a little stiffer before getting ready to head off to the Fisherman's Wharf Tavern to register and have dinner on the Friday evening. Fellow ORARC Distant members Grahame VK2FA and Judy VK2HZV arrived in the car park at the same time we did and we all finally managed to negotiate the building works fencing that seemed determined to keep us from our destination.

It was great to finally make an eyeball QSO with Petra, the intrepid WIA Examinations Officer and all round Head Office Wonder Woman, when we picked up our registration lanyards inside the Tavern.

Dinner was very relaxed, the food was good and there was plenty of it. Diana and I shared an entrée and Greek Salad side and we battled to finish it all.

The evening was quite balmy when we arrived but ended up a little chilly, for yours truly at least, as the night progressed. How-

ever it was great to catch up with friends from VK5 we had met during our 12-month "tour of duty" there in 2011 as well as old comrades from VK1. More recent acquaintances from VK2, VK3 and VK4 also welcomed us warmly. All in all, Friday night was a great start to the 2018 AGM weekend.

Saturday did not start quite so well. All the information regarding the WIA AGM advised it was to be held in the Sea World Convention Centre and so I headed there only to discover the venue was locked up. After wandering around the very large Sea World Resort complex for a while, I finally discovered that the AGM had been moved to the main resort building several hundred metres away. So back to the car, where I had to drive back up the road and take the resort entrance to the main atrium entrance. I managed to get a parking spot close to the main entrance and delivered Diana to the area in the lobby where the partners were gathering for their tours. I then made my way to the registration desk to register for the AGM.



President of the WIA Justin VK7TW addresses the meeting.

The Board were not sure what to expect this year given there were still allegations being made on various social media platforms regarding misappropriation of WIA funds, mismanagement and cover ups of various financial matters. So they were pretty careful they knew who was present in the room and lanyards were checked rigorously.

As it transpired, there were no really contentious matters raised and the AGM itself went off with all attendees being very polite. It was probably the most civilised AGM I have attended in the past 5 years. There was one moment when many of us drew breath suddenly when one attendee asked if there was any truth to the rumours circulating on social media regarding fraud and misappropriation.

President Justin VK7TS, acting Secretary Peter VK8ZZ and Director Greg VK2GPK answered the question very comprehensively and the questioner was quite satisfied with the answer. The Board had opted to have a professional accountancy firm go over the books from previous years and to also conduct a full audit of the 2017 accounts, even though, technically, the WIA is only required to undertake a financial review. The Board have also decided to continue the full audit process for at least the next few years. The current Board have managed to turn the financials around and although 2017 was still in deficit, things are looking good for a modest surplus in 2018. Perhaps we should get them to run Australia!

I raised the question as to whether the WIA Board saw RASA as a threat to the WIA. Again, the response was measured and well thought through. Apparently RASA had made approaches to the IARU about being an alternative voice for Australian Amateurs. After some initial confusion by one new IARU member, RASA was advised that the IARU only deal with one organisation from each country and that the WIA was the representative body for Australia.

I don't know how many of our readers completed the WIA surveys held over recent months, but the number one reason for being a member of the WIA given by the majority of participants was "National and International representation". That was certainly the answer I gave.

WIA Membership for 2017 was 3,905, down 225 on 2016 and down 670 on 2011 numbers. The Board was particularly concerned at the loss of Concessional members, down 206 on 2016 numbers. Therefore, 92% of the members lost in the past year were older amateurs. My personal take on this is that older members have become disillusioned with the lack of responsiveness of some previous Boards and the toxic social media campaign for change that surfaced a couple of years ago.

Despite these past problems, the current Board are, in my opinion, doing a very good job of refocussing the organisation. I would urge all Amateurs to join the WIA, if for no other reason than to maintain a strong representative voice both Nationally and Internationally. Even if you are not a great fan of the WIA, look on your WIA membership fees as membership fees of the "Greater Australian Amateur Radio Community". If you can't bring yourself to be that altruistic, then look at it as a down payment on the continued existence of your hobby. Here endeth the First Lesson.

Now to the fun part. The rest of the weekend saw a number of very informative talks on Saturday afternoon and some great demonstrations on the Sunday.

There were so many quality presentations on Saturday afternoon; they had to be split into two streams. These included:

Stream 1

The FT8 Revolution: presented by Rex Moncur VK7MO

FreeDV: What is it – How does it work? Presented by developer David Rowe VK5DGR

MMDVM: How does it work? Presented by Lindsay Harvey VK2AMV

Meteor Scatter: presented by Kevin Johnston VK4UH 630M and 2200M DXing: presented by

Roger Crofts VK4YB

Stream 2

Light Talkers: presented by Tim Dixon VK5ZT

HF meets 4G in the Bush – How Telcal+ is improving outback Communications: presented by Geoff Peck from Austravel Safety Net Inc

Electromagnetic Compatibility presented by Brian Clarke VK2GCE

WIA Spectrum Group – New LCD & Spectrum Outlook: WIA Director Greg Kelly VK2GPK

WIA Strategy Group – Knocking down Barriers to entry: (WIA Director)

As these two streams ran concurrently, the dilemma was "which ones to go to?" I opted for FT8, FreeDV, EMC, Meteor Scatter and the New LCD. I also caught the tail end of the Telcal+ presentation when I changed rooms for the EMC presentation.

Whilst all of the talks were well presented, my personal favourite for the day was on Meteor Scatter (MS). Kevin VK4UH is very passionate about this subject and explained things extremely well. Such as "Why is the early morning the best time for MS?" or "What are the best frequencies to use and why?" and "What digital modes do I use?" I came away with a much better understanding of this obscure corner of our hobby.

The Saturday night dinner started with so much promise, The Sea World "Seafood Extravaganza" in the Shoreline Restaurant. At \$85 a head plus drinks, we were a bit hesitant, but after all it was the WIA AGM Dinner and we were looking forward to the Keynote Speaker. But some attendees decided they did not want seafood, so we were moved to the Waterfall Café by the swimming pool. This in itself was pleasant enough, however, due to

the (relative) proximity to the pool, no glass was allowed in the Café. So we had to drink water from those squishy disposable plastic glasses, wine from disposable plastic wine glasses and beer at least, was served in polycarbonate middy and schooner glasses. They at least looked the part. And the meal? Pleasant enough, but I would expect to pay no more than \$40 each and would still have felt ripped off.

The Keynote Speaker, Jeff Johnson VK4XJJ, walked from Spencer Gulf in SA to the Gulf of Carpentaria in the NT unsupported and with nothing but what he could carry in one backpack, including food and water. But this also included his trusty FT817 to stay in touch with the world. He used a solar panel strapped to his front to charge the Ni-Cad batteries he used to power his rig. Jeff initially started out with the solar panel mounted on his backpack, but soon discovered this does not gather much sunlight when you are walking due north! This very brief description does not do his wonderful talk the justice it deserves. He held the whole audience spellbound.

After Jeff's talk, the main AGM raffle was drawn; the prize, an Icom IC-7300 HF Radio. This was won by Trent Sampson VK4TS. Trent was understandably very pleased with his win.

Sunday saw a great interactive display and demonstration of different aspects of our hobby in the North Pavilion at Broadwater Parklands.



VKS-737 Radio Net Display

Continued from previous page



The Rig Expert's range of Antenna Analysers

There was a great talk and demo on MMDVM which was always well patronised any time I passed the display. There was also a very good demonstration and discussion on cavity filters presented by Drew VK4ZXI where I also spent a lot of time. This demystified a number of aspects surrounding cavity filters that had mystified me for a while.



Drew VK4ZXI Explains Duplexers. Note the bucket filter!

The usual bunch of microwave tragics, including Iain VK5ZD and Tim VK5ZT, were there with equipment running RF up into the hundreds of gigahertz. I think 122GHz was there, 76GHz was well represented and 47GHz was positively passé. 10GHz will soon be the new 70cms! I really take my hat off to those guys, and they make it look so simple!



Ian VK5ZD making a contact on 47 GHz.

My favourite display, was that of Rex Moncur VK7MO with his 10GHz portable moon bounce (EME) setup. Rex made several contacts with Al Ward, W5LUA in Texas, USA and gave anyone present the opportunity to get their callsign in Al's logbook using his equipment. I chose not to do so for all sorts of silly reasons. I had made several microwave contacts with Roger Harrison VK2ZRH at the 2016 WIA AGM on Norfolk Island using other people's equipment and I personally felt I was cheating. Told you I was being silly.



10 Ghz EME dish

Continued on next page

However; being more of a "techie type" than a "chatterer", I really enjoyed scrutinising Rex's equipment setup and getting my head around the fact that the laptop was making the actual contact, including the PTT. It was fascinating to watch and hear the mechanical waveguide switch physically switch between Tx and Rx paths, the little pictogram on the manual knob indicating the path the RF could travel in each of the two positions.



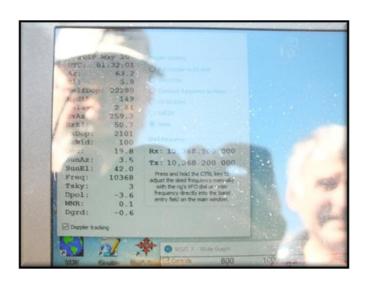
Rex VK7MO's 10 Ghz RF Chassis. Note Rifle Scope sighting through the dish and GPS Antenna on 4WD roof.



Rex VK7MO makes some final adjustments.

You will notice the rifle scope in the photos, which sights through the dish, used to physically align the dish with the moon. Meanwhile, Rex has several aids to assist him to get the dish pointed in the right direction for the initial acquisition when the moon is below the horizon. The tripod has

an Azimuth Ring, which he sets to the current bearing for the location he is working from. There is an inclinometer mounted on the RF chassis to give Elevation data. He then uses a piece of software that calculates the live lunar ephemeris data. This gives him azimuth and elevation information to enable him to point the dish in the right direction. This is run in a window on the main Weak Signal software screen he was running.



As you can see from the rather reflective photo of the laptop screen (above), operation was on 10.3682GHz Simplex. The Moon was at 63.2 degrees East at an Elevation of 6.9 degrees as at 01:32:01 UTC on 20 May 2018 when the photo was taken. It is amazing to see how much the moon moves and how fast it moves when you are actually watching it! The whole system has to be GPS locked, as the bandwidth is very narrow at 10GHz. The time setting on the laptop driving the system also has to be fairly accurately set as equipment at both ends of the contact must be synchronised so one station listens whilst the other station transmits. This Tx / Rx switching is done automatically by the controlling laptop. You can see the GPS antenna on the roof of Rex's 4WD in one of the photos.

On the day, the moon was only a very small crescent, and as it was 11am on a bright, sunny day, it was very difficult to see the moon as it broke the horizon over a line of trees. Finally someone of more tender years spotted the moon *Continued on next page*

and we realised the Azimuth Ring was set about 4 degrees off the correct bearing. Since the 1 metre dish only had a -3dB beam angle of around +/- 1.5 degrees at 10 GHz, we were well off the target. Rifle scope to the rescue, a quick visual adjustment was made and we managed to make the first QSO. Another EME tragic assumed the role of "moon tracker" and kept the dish aligned by making manual azimuth and elevation adjustments visually using the rifle scope. Rex managed to maintain a path with Al in Texas until 2pm EST when the display area at North Pavilion was finally packed up.

Again, fascinated, I asked Rex how he collimates the scope with the RF axis of the dish. Any ideas? You will find the answer at the end of this article.

Along with the amateur equipment displays, there were also displays by a number of Queensland Emergency Services groups including the RFS and Queensland Ambulance.



Queensland Ambulance Mobile Control Centre

The RFS had their main (serious) Command Unit as well as an Incident Control Trailer. Both vehicles were well equipped with communications technology including UHF radios, 4G phones and satellite phones as well as GPS mapping. They were also equipped with telescoping LED lighting masts that would perform much better than many incandescent options and would draw considerably less power. The Queensland

Ambulance Command Vehicle was equally impressive if size is any measure and although I did not look through it, I understand it contained a similar suite of equipment to the RFS unit.



Above the Queensland RFS Command Unit and below the RFS Incident Control Trailer. Note LED lights on mast.



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The Gold Coast ARC also had their new communications trailer on display. Although still in the fit out stage, it certainly looks like being a very capable unit. It even boasts a split system airconditioner that I am sure the operators will appreciate in the hot, humid Queensland weather. The Mid North Coast Region WICEN squad now have two comms trailers to lust over, the other currently being built by WICEN SA.

All in all, a very well run event and much credit must go to the boys and girls at the Gold Coast Amateur Radio Club for arranging venues, speakers and exhibitors. And much thanks to all the speakers and exhibitors, both amateur and non-amateur, who made the weekend such a great success.



The microwave source for the microwave shoot out even.



Microwave equipment set up for the microwave shoot out event.

And the answer to how Rex collimates his EME gear:

He peaks the dish on the Sun's RF noise signal using the EME receiver, then centres the Sun's image in the rifle scope using a welding helmet filter in front of the scope as an optical attenuator.

I told you these microwave guys were clever!

Bob Ecclestone VK2ZRE



A steady hand and a good eye for the continuous EME tracking equipment is needed.



Thailand Cave Rescue - Ham Radio Link

Date: 11 / 07 / 2018

Author: WIA

The amateur radio group on Reddit Link carried a story about the use of the Hey-Phone communications device that the cave rescuers used during the recent rescue in Thailand.

The HeyPhone was designed by John Hey G3TDZ (SK 2016) with the support of the British Cave Rescue Council BCRC and the Cave Radio & Electronics Group (CREG), which is a special interest group of the British Cave Research Association (BCRA).

The HeyPhone design uses single-sideband radio, usually operating at 87kHz USB. It is operated with earthed electrodes separated by 25m to 100m that injects current into the earth similar to the trench communications of the First World War.

Further information on the HeyPhone can be found at: http://bcra.org.uk/creg/heyphone/index.html

Further information about the rescue and use of the HeyPhones: https://hackaday.com/2018/07/11/ham-designed-gear-used-in-thailand-cave-rescue/

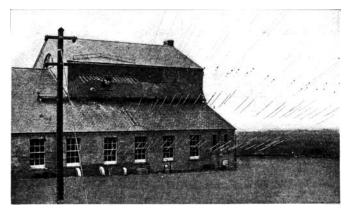
Hackaday Story on Heyphone https://www.xray-mag.com/content/thailand-cave-rescue-brit-cave-divers-report-gnarly-diving

Pictures Credit to Peter Dell and sourced from the Link story.



HeyPhone

Marconi 100 Year Commemoration of First Direct Wireless Message from UK to Australia.



September this year marks the 100th anniversary of the first wireless transmission between Australia and the United Kingdom. Messages were transmitted from the Marconi station at Waunfawr in Wales on the 22nd September 1918, and were received at the Wahroonga home of Ernest Fisk, the Managing Director of Amalgamated Wireless (Australasia) Limited (A.W.A.).

Silent Key - Colin Hart Wall (MBE) VK2JC



It is with great sadness that we record the passing on Tuesday the 8th of May 2018 of Colin Hart Wall VK2JC at Wauchope Palliative Care. He was 86 years old.

Colin was a retired dental surgeon and cranio-facial surgeon with a distinguished career.

Colin was born in Sydney on the 16th of August 1931. After graduating in Dentistry from the University of Sydney in 1954 he moved to Broken Hill before practicing in Narrabri, Coffs Harbour and Gilgandra, with periods working in the UK and the Northern Territory. In the Northern Territory he often collaborated with the late Dr Fred Hollows to bring his surgical skills to remote communities. After Cyclone Tracey he returned to Sydney as the Executive Director of the Australian Dental Association from 1974 until 1993. Colin received many awards including an MBE in recognition of his services to dentistry.

In 1993 Colin retired to Urunga where he lived on a small acreage until he moved to Wauchope in 2016 to be closer to family.

Colin was a keen Amateur Radio operator and electronics hobbyist who previously also held the callsigns VK2CM and VK8CM before becoming VK2JC on his return to NSW. VK2JC had special significance as his father J.C. Wall, who was also a dentist, had previously continuously held this callsign from 1934 until his passing. A

great many stations will have Colin's callsigns in their log books over the last 60 years. Colin had recently become a member of the Oxley Region Amateur Radio Club but illness robbed him of the opportunity to participate in club activities.

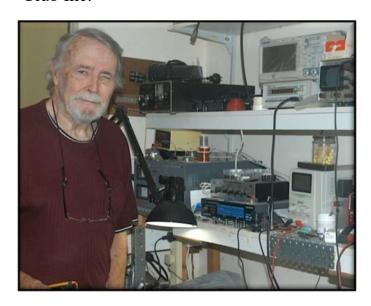
In the UK Colin developed an interest in tarmac rallying. His other hobbies included music and fishing.

Colin and his late wife Marie whom he married in 1957 had six children, Stephen, Clare, Julie, Jane, Alan and Gabrielle. There are two sets of twins amongst them.

Colin's Funeral was held in Port Macquarie on the 11th of May 2018. His children and their families were joined by relatives and wide cross section of friends at the service.

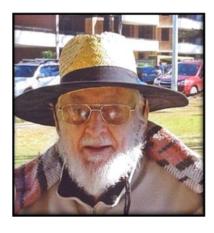
Vale: Colin Hart Wall VK2JC

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





Silent Key: James (Jim) George Griffiths VK2BGG



On the 20th of February 2018, Wauchope and the Hastings Valley lost one of its loved senior citizens, James (Jim) George Griffiths, at the age of 91 years.

Jim was born at Summer Hill in Sydney in 1927 and later his family moved to the Blue Mountains where Jim did most of his schooling and began his working life.

Jim was a member of the Griffiths Tea family. In 1873, one of Jim's close relatives migrated to Australia with his wife and a cousin to start a tea business. By 1875, Griffiths Brothers Tea had become a sensation, providing tea, coffee, cocoa and chocolate to caffeine junkies all over Australia. It was a very successful business and indeed the Griffiths Tea Building still stands in Sydney, now housing many luxury apartments.

Jim had many passions. The Australian bush and environment was a passion and in those school days in the Blue Mountains he took any opportunity to enjoy it. Jim and school mate, Freddie Wiggins, both conscientious students, but on occasion would decide not to waste time at school today, so they would leave the school train and disappear into the local bush and forest, not far from the Three Sisters. Nearby was a large sandstone area trimmed by nature to resemble a ruined castle. This was a favourite haunt. What better place to spend a school day. Then back to the school train and home.

During these youthful years, Jim was an avid bicycle rider. He was known on more than one occasion to ride down the Blue Mountains to Sydney and catch the train back...BUT...if he missed the train, it was a long, hard and slow ride home. He also rode his bike beside the Zig Zag railway. Not surprisingly he was riding his bike well into his 80's.

On completion of his schooling, Jim's first job was at ASTOR Radio factory in Sydney. He later was to buy his own radio shop, back in the Blue Mountains at Hazelbrook. It was a natural progression for a man who had been building radios, crystal sets and generally building and fiddling with all things electrical, particularly radio. TV wasn't around just yet. Jim was the man who installed the first two-way radios in Sydney taxis. Shortly thereafter, he installed them in Newcastle taxis. He was then, and remained for all his long life, devoted and passionate to radio.

In 1957, Jim and wife Helen moved to Wauchope where Jim had successfully applied for a position at Bill Cavanagh's TV, Radio and Electrical store, in High Street in Wauchope. Bill Cavanagh (SK) will be well remembered as VK2WC who, as a passionate exponent of the cubical quad antenna, always had a big signal on the HF bands.

Since his early days in the Blue Mountains, Jim had become very enthusiastic in the Scouting Movement, and he carried it on in a very big way in Wauchope. In total, he gave 25 years of his life to scouting. He was supported by Helen, who also gave much of her life at this time to the Girl Guides at all levels. It was a period when Jim and Helen made a wonderful contribution to the community, and a mentoring contribution in the development of the lives of so many young teenagers.

Jim organized and directed some wonderful projects and opportunities for the scouts. Examples such as senior scouts constructing a

number of two-man canoes, built when spare time from high school and other commitments allowed. They were beautifully made. Marine ply, all copper and brass, and more coats of lacquer then that applied to the paintwork of a Rolls Royce.

Jim was an enthusiastic amateur radio operator, with his station set up in his home. He taught the scouts about amateur radio, the phonetic alphabet, microphone procedures, the functioning of the equipment, aerials, dipoles and so on.

Jim was a member of the Westlakes Amateur Radio Club and a lifetime member of the Old Timers Network. Jim had also been active in the Oxley Region Amateur Radio Club, particularly in the 1980s when he was the photographer for "Oxtales" at club events such as the annual Field Days and car rallies.

Another passion was Morse code. He never stopped believing that society would rue the day it totally abandoned Morse code as a means of communication. Again, he taught his seniors all about Morse code and how to use it.

Long before it was 'fashionable', Jim and Helen were very aware, very passionate about protecting the environment. Protection of so many local species ...wildlife, insects, plants of all kinds and, of course, the land itself. Family recreation time was so often travelling into national parks, forests, camping and enjoying the great outdoors. The Forbes River was a particular favourite spot.

Jim always spoke his mind and didn't suffer fools. He loved Wauchope and the Hastings Valley, often said: "There is nowhere else I would rather be than Wauchope." If Jim considered things/events were not right in the community, if he reckoned the council, the councillors were wrong, had lost the plot and were not acting in the best interests of the community you could read all about

it in Letters to the Editor in the Hastings Gazette. Bless the various editors for publishing, and probably also bless them when they didn't publish, because they considered his contribution was a little too harsh.

Jim loved tinkering, inventing, not to change the course of mankind, but he knew he could design and build an existing product of interest in a better way. Inevitably he did. And to make it last was imperative...he hated the 'throw away' mentality.

Jim had a marvellous sense of humour and like so many, loved British comedy, the Goons, Harry Secombe, Peter Sellers and the great Spike Milligan, Monty Python and many, many BBC radio comedy shows.

Music was another great passion - jazz, big swing bands and classic stuff. He had many original recordings on 78's, 45's and LP's. Music was one of the most important gifts he gave the senior scouts.

Jim was a talented musician. He played piano, guitar, banjo, mandolin, double bass, and if you gave him an instrument he hadn't played before, just wait a short while and he would be producing tunes. He taught some senior scouts to play a musical instrument and eventually established a Senior Scouts Band.

The most important gift Jim gave many young people was, he encouraged them to think. He made them analyse, ask questions; he challenged their thinking.

Jim was also a professional photographer and his life-long passion for motor racing was the source of some wonderful action shots. From black and white shots of open-wheelers racing at Mount Panorama in 1945 to rally driving on the Mid North Coast.

Sometimes we are blessed to know quite remarkable and outstanding people. Such was James (Jim) George Griffiths.

THE "OXTALES CUP"

Vale: James (Jim) George Griffiths VK2BGG

The Oxley Region Amateur Radio Club is indebted to Helen Griffiths for permission to publish the above Silent Key almost entirely based on the Obituary published in the Wauchope Gazette on the 14th of March 2018.

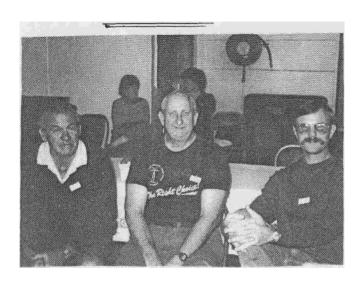
https://www.wauchopegazette.com.au/story/5285125/vale-james-jim-george-griffiths-1927-2018/

Submitted by Henry VK2ZHE

Blast from the Past

'Blast from the Past' this month is taken from the 1986 edition of Oxtales. In it there is a report on the 1985 Field Day and also an interesting item on the current Fox Hunt Trophy.

It is interesting to note that James (Jim) Griffiths VK2BGG (SK) was one of the field day official photographers.



Editors note: Would any member care to name the people in the above photograph?

This magnificent trophy for our FOXHUNT CHAMPIONSHIP will be fiercely contested again this year at our Annual Field days over the Queen's Birthday week-end in June 1986.

The event was very closely contested for the first time last year and we saw a very

excited VK2BME (Mark) of Newcastle become the initial winner. The trophy is perpetual

and fitted with suitable shields on which the winners call sign is engraved each

year A suitable replica goes to the lucky winner as a permanent memento.

The championship foxhunt events are held on both days Four events on Saturday and four on Sunday. Each event stands alone for individual events, but attracts special points to decide the championship of the week-end.

FOXHUNT CHAMPIONSHIP TROPHY (For the Port Macquarie Field Days)



Editors note: The above story and photograph was scanned as it was from the 1986 edition of Oxtales. The photograph shows Mark VK2BME receiving the Foxhunt Championship Trophy from the WIA President Peter VK2PJ. The quality of the print reflects the technology and printing of the time.

Equipment from the Past

Following on from the 1986 flavour from the Blast From the Past; it was interesting to see what type of equipment was being used by Amateurs at that time.

Digital modes were being used and units such as the Kantronic terminal unit as pictured below were used to transmit and receive CW/RTTY/ASCII/AMTOR or Packet when connected to a computer and transceiver.



The above unit connected to a computer via an RS232 or TTL port. Computer programs were supplied for the following computers.

IBM, Kaypro, Commodore 64, VIC 20 and TRS-80 Model computers. The programs were supplied as a disk or cartridge. Compared with today these computers had very limited amounts of processing power, memory and storage space.

The Kenwood TS TS 940 Transciever was a very desirable piece of equipment in amateur shacks.



The **Kenwood TS-940S** was considered to be for the discerning operator. I had interference reduction circuits and a high dynamic range receiver. It was an all mode transceiver covering 160 to 10 meters with a general coverage receiver. Operates 250 W PEP input on USB, LSB, CW, FM and FSK

and 140W DC input on AM. The recommended retail price in 1986 was US\$2,500 which was considered to be a very large amount of money in 1986.



The Yaesu FT-757GX was an HF transceiver covering 160 to 10 meters and has ten memories. The general coverage receiver tunes from 500 kHz to 30 MHz. Power is 100 watts in CW, SSB, FM and 25 watts AM. The FT-757GX features IF Shift, Electronic Keyer, Squelch and Noise Blanker. This was a very popular compact amateur radio which cost approximately US\$900 which made it much more affordable proposition for many amateurs.



The Yaesu FT-209R operated on 2 meters from 144-148 MHz with 2.5 watts (or up to 3.7 watts output with optional FNB-4). It had easy to operate controls. High/Low power and VOX on/off was selectable from the top panel of the radio.

19 soft rubber, dual-function keys provide flexible control.

The ICOM IC- 745 was another desirable amateur Transceiver at the higher part of the ICOM range with a similar price range to that of the Kenwood TS-940.

The above is just a sample of the many different types of equipment that were in use in 1986. Much of this equipment is still in use today. When buying used equipment members should be aware that capacitors often need to be replaced and specialised parts may be difficult to obtain.