



All Access

A newsletter for members and friends of ARNSW, facilitating access to all areas of Amateur Radio.

Issue 25-02 - March 2025

Editor Eric VK2VE

Editorial

Welcome to the second issue of All Access for 2025.

This issue is out a little late due to the preparations for the AGM which was held last Saturday. At that meeting there were elections for half the board with 4 members stepping down and eligible for re-election. Those members were Mathew Magee VK2YAP, Mark Blackmore VK2XOF, John Harper VK2LJ and Matthew Perkins VK2FLY. All four, being eligible for re-election nominated and, there being no further nominations, were declared elected at the AGM. The returning officer, Peter O'Connell VK2EMU was also re-elected for the ensuing 12 months along with Erik Houseman VK2EJH as alternate.

Also, at the AGM two members were put up for Life Membership for the work they have put in over many years. They are Bob Yorston VK2CAN, who has been a stalwart for over 50 years, and Mark Blackmore VK2XOF, who works tirelessly picking up and checking estate equipment for sale at the trash and treasures. These required a 75% majority and were both were passed easily. We congratulate Bob and Mark as new life Members.

We are experimenting with a new look and logo for ARNSW with the header of this issue – let us know what you think.

We have received, over some time, a few reports of our beacons being heard from different part of the world, especially out 10 m beacon. Unfortunately, we do not currently have a QSL card, so we need to remedy that. We will be running a competition for members to design a new QSL card see details later in this newsletter.

To correspond with us, you can just email editor@arnsw.org.au or write to The Editor, ARNSW, PO Box 6044, Dural DC, NSW, 2158.

Eric - VK2VE – Editor

A reminder

Over time, people change addresses, emails, phone numbers, callsigns and so on. This often results in our correspondence being returned. **PLEASE**, if any of your details change, remember to let us know your new details otherwise you are likely to miss out. Now that the ACMA database no longer has your details for us to check against, this is going to be even more important into the future because if you don't tell us, no one else is going to.

All Access goes out to all members who have an email address, it is NOT sent by post. So, if you don't keep us up to date you won't receive it, nor other correspondence from us.

To notify any changes to your details, you can use the membership form on our website at https://www.arnsw.org.au/forms/ARNSW_Membership_23.pdf. The one form can be used for new

All Access is a newsletter published by Amateur Radio New South Wales (ARNSW) for distribution to members and friends of ARNSW. If you wish to comment on any item published or, perhaps, suggest further matters for publication or even submit an article, please contact the editor, Eric – VK2VE by email to editor@arnsw.org.au or post to Editor, ARNSW, PO Box 6044, Dural DC, 2158.

All content of the newsletter is copyright ARNSW and may not be reproduced in any form without the written consent of the editor.

<http://www.arnsw.org.au>

applications, renewals, updates or badge requests—just tick the appropriate box(es) at the top of the form and mail it to PO Box 6044, Dural DC 2158, or email to membership@arnsw.org.au. If you are making a payment, our preferred method is direct deposit, remembering to send us the details of your payment so we know what to attribute the payment to. Preferably, do not send credit card details in emails.

Remember, if we don't have your correct details, you won't get important documents.

Eric – VK2VE - Secretary

ARNSW Database

After the request in the last issue, we had several offers of assistance to update the membership database. I would like to thank all those who offered assistance in one form or another. I am currently working with one of them, who has a lot of MS Access experience, to modify the database to do what we need it to. This will make it possible in the near future to send out renewal notices prior to expiring as well as a lot of other enhancements

Eric - VK2VE - Secretary

Member Meetup & Disposals

Next Sunday, March 30th, is the next Member Meetup and disposals day (Trash and Treasure) in the morning and the ARNSW Experimenters' Group meeting from midday. Members will also be able to sell their own items on the day so bring along any items you'd like to sell and browse the items available for sale.

It starts at 9:00 am for buyers, with sellers allowed access from 8:30 am to set up their stalls. Buyers will be allowed in, to park to the north of the VK2WI building but only sellers will be allowed into the sales area to set up prior to 9am. When parking, please have consideration for other members and park in a way that others can get access and as many cars as possible can be accommodated. Also, please leave access to behind the Vertel compound so that vehicles can get around there if necessary.

The Experimenters' Group meeting will commence at midday.

Below are some items which will be for sale in the disposals room. Credit card facilities will be available.

All the following equipment has been tested and is in good working condition unless otherwise noted.
Transceivers.

Kenwood TS430 transceiver with microphone and PS-430 power supply. In good working order.

Sold as a package \$350.00 FIRM

2 x Codan 8525 HF transceiver, local front panel, fitted for USB only, no microphone (7 pin plug supplied) in working order \$200.00 each

2 x Codan 7727, local front panel, crystal locked 100W PEP HF transceiver, fitted with USB only, no microphone in working order \$50.00 each.

1 x Codan 7727 TB, remote front panel, crystal locked 100W PEP HF transceiver, fitted with USB only, no microphone in working order \$50.00.

Remote front panels for Codan 8525 and 8528 (1 each) Price \$30 each

Yaesu FT 200 + power supply/speaker. Price \$150.00

Accessories.

MFJ 962 1.5Kw antenna tuner in good condition. Price \$200

Wawasee JB-2000SW Power and SWR Meter. 3 ranges 20/200/2000W SO239 connectors. Price \$75.00

Midland 23-136 SWR meter good for 50W Price \$25.00.

Revex power meter W502 1.8 to 50MHz 20/200/2000W power and swr Price \$75.00

Revex power meter W540 140 to 525MHz 4/20/200W power and swr. Price \$75.00

Diamond MX 3000 triplexer Frequency: HF -144 / 430 / 1200 MHz Price \$100.00

Autek Research QF11A audio filter for CW and SSB. Price

WELTZ CT-150 150W dummy load DC to 250MHz Price \$50.00.

RL Drake TV-3300 HF (passes to 35MHz) low pass filter 1000W Price \$30.00

WELTZ SP300 power and SWR meter HF/VHF and UHF to 1000W. Price \$100.00

Kenwood SM220 station monitor. No panoramic adapter module. Multifunction monitor oscilloscope and two-tone audio signal generator designed for use with the TS-520 and TS-820 transceivers. Nice bright trace and will work with other transceivers to monitor the transmitted RF waveform Price \$150.00

Sierra TS-1285 RF Power meter with 25 to 52MHz insert 1-50W .

Yaesu FRA-7700 Active antenna. Covering 150 kHz - 30 MHz Price \$50.00

Yaesu SP102 external speaker in good condition with cables. Price \$50.00

Receivers

Racal RA 1217 Solid State Wadely loop HF receiver sold as is for parts or repair Price \$100.00

Racal RA 1217 Solid State Wadely loop HF receiver sold as is for parts or repair Price \$100.00

Racal RA 17 Valve Wadely loop HF receiver sold as is for parts or repair Price \$150.00

Larkspur R210 HF receiver sold as is for parts or repair Price \$50.00

Power Supplies.

Codan 7113 13.5V 20A power supply. Price \$75.00

Topward dual tracking linear power supply 0-30V at 3A x 2 outputs that can be parallel, or series configured. Price \$100.00

Power Amplifiers.

Mirage B1016 2m linear amplifier FM and SSB. 10W input to 160W output Price \$150.00

Mirage D24 70cm 40W amplifier Price \$50.00

HYS TC-VU50 Dual Linear amplifier. Frequency 136-174 and 400-480MHz, Mode FM-SSB-CW. Price \$75.00

Microwave Modules 70cm 50W Linear amplifier.

Model 432/50 10W input to 50W output in good condition Price \$75.00

Test Equipment

Wandle and Goltermann SPM6 selective level meter and PSM 6 level generator.

6KHz to 18.6MHz signal generator and level meter Good for testing and aligning filters. SPM-6 manual on line. Price \$220.00

Anritsu MG714A microwave seep generator 3.6 to 6.5GHz

Has output across the full frequency range. In good physical condition. Price \$275.00

Marconi TF2300B AM/FM modulation meter

8MHz to 1200MHz AM and FM modulation meter AM to 100% and FM to 200KHz in working condition after repair. All bands now work. Price \$200.00

Marconi TF2300A AM/FM modulation meter

8MHz to 1200MHz AM and FM modulation meter AM to 100% and FM to 200KHz in working condition after repair. All bands now work. Price \$150.00

Farnell synthesised signal generator DSG2.

0.001Hz to 110KHz balanced and unbalanced outputs with output level meter. Price \$50.00.

Gould-Advance J35 low distortion (0.05%) sine wave signal generator

10Hz to 100KHz. In good condition and working Price \$50.00.

Fluke 79III digital multimeter with soft case and probes Price \$50.00

Lutron LCR 9183 digital inductance, capacitance and resistance meter with soft case Price \$75.00

Lutron DM8023 capacitance meter. 0 to 20,000uF Price \$50.00.

Digitech QM1565 AC current clamp adapter 0.1 to 400A in 2 ranges with soft case Price \$25.00

Escort ELC130 digital inductance, capacitance and resistance meter with soft case Price \$50.00.

LAN Test RJ45 LAN Cable continuity test set in soft case. Tests the continuity of individual wire in CAT5/CAT⁶ cable assemblies Price \$25.00

Fluke 8020A digital multimeter in soft case with probes. Price \$50.00.

ESI precision voltage reference 0-10V in uV steps. Price \$75.00

AWA F240 noise and distortion meter sold as is Price \$50.00.

Trio VT-104 solid state voltmeter (a solid state VTVM) Price \$25.00

TECH TE20D RF signal generator 120KHz to 500MHz on harmonics. Price \$25.00

Yokogawa 500V insulation tester in hard case. Price \$50.00

Hewlett Packard attenuators 355D and 355C DC to 1000MHz

3 x 355D 0-120dB in 10dB steps price \$50.00 each

1 x 355C 0-12dB in 1dB steps price \$50.00

Bruel & Kjaer type 2007 Heterodyne RF Selective Voltmeter 100 kHz to 305 MHz

Measures RF voltage 100uV to 100V full scale, internal rechargeable battery also runs from AC mains.

Inbuilt battery charger. Generally used for field strength measurements but this would require a suitable antenna or would be suitable for aiming an antenna. Measures AM and FM modulation has wideband and narrow band IF filters. Speaker inbuilt.

Price \$150.00

Mark—VK2XOF—Disposals

Tower for disposal.

A member on the northern beaches has a tower to dispose of. If you are interested, please contact the editor editor@arnsw.org.au to get in touch with the vendor.

Eric - VK2VE - Editor

Experimenters' group meeting.

The last get together of the ARNSW Experimenters Group was part of the members meet up on Sunday 26th January. The get together was well attended with over 30 amateurs in the audience.

At the get together, Peter VK2EMU gave a presentation on the use of KiCad software for designing printed circuit boards. KiCad is a free software package for drawing a circuit diagram and then converting that to a circuit board design.

The presentation involved Peter redrawing a microphone preamplifier circuit from a Drew Diamond VK3XU project, with the addition of a few extra parts. In a little over half an hour the circuit was drawn and the board printed out.

The board files were then zipped and uploaded to a board manufacturer in China where they were checked and approved for manufacture. Five boards were manufactured and shipped just over a week later - for a total cost of \$17.93 - or less than \$3.60 per board. A number of those attending the get together have since installed the software and started designing their own boards.

The next get together will be on Sunday 30th March where Alan Beard VK2ZIW will be giving a presentation on using digital television dongles as software defined radios. He will be concentrating on the RTL TXCO units. These are readily available online and Alan is encouraging people to bring along their dongle and laptop, and he will assist you in getting started.

Peter - VK2EMU – Experimenters' Group

ALARA.

The Australian Ladies Amateur Radio Association (ALARA) will be celebrating their 50th Anniversary on 26th July 2025. There will be a formal lunch at the Novotel in Glen Waverley as well as tours of the Phillip Island Penguin Parade and Puffing Billy for those who can stay longer. In addition, a casual pizza and trivia night will be held on the Saturday evening, for those who would like to meet some of the ALARA members. Details of all the Anniversary events and registration information can be found on the ALARA website at www.alara.org.au

Norma - VK2YL - ALARA

50 Year Anniversary of Colour TV:

The recent 50th anniversary of the introduction of Colour TV into Australia reminded me of an incident that happened when I was an apprentice.

I worked with others on the 1st Colour TV transmitter for channel 10 here in Sydney.

Another apprentice let's call him Tom (not his real name to protect his identity) and I were tasked with adding the finishing touches to the front panel of this huge transmitter. There were a few grubby finger marks on the front panel of this TV transmitter.

The transmitter was the size of a double sized fridge with lots of meters, dials and switches on the front panel. It had been tested and was ready to be delivered.

Lighter fluid was used throughout the organisation for cleaning down finished products to remove grease and finger marks. It never occurred to me how dangerous cans of flammable lighter fluid sitting under many work and assembly benches in all departments could be!

Tom the other apprentice picked up some clean rag and lighter fluid which was plentiful within Amalgamated Wireless Australasia. He commenced using the cleaning rag to remove the marks with a large wiping arm action with his right arm.

To both our surprise it took the paintwork and stenciling away and it was back to bare aluminum. A lovely arch of bare metal was now showing.

Tom said "what are we going to do?" I said "I am doing nothing; you're going over to the supervisor to tell him what you did. " I said "well if you don't tell Louis the supervisor I'm going to!"

He plucked up the courage and told him. Immediately Louis walked over almost in tears with his hands resting on his hips. This was one of the biggest contracts assigned to our department.

This incident occurred late in the afternoon on a Thursday. The handover of the transmitter to the General Manager of Channel Ten was due on the Monday morning at 9am.

All staff in the section were called together and advised no one was going home until the transmitter front panel had been stripped, repainted, re-stenciled, all meters and switches replaced and wired.

This required enormous resources from the plating shop, mechanical and electrical fitters to test room staff.

We all did our bit with the panel finally being finished on the Sunday before the handover.

Totally exhausted due to the workload and lack of sleep we finally stepped back, away from the transmitter. We all went home ready for the next workday.

At the designated time the entourage of big wigs arrived to inspect the first Colour Television Transmitter.

The AWA General Manager and other department managers posed for photographs. All very proud of their new transmitter with lots of discussion occurring.

These photos later appeared in major newspapers of the day and of course the companies own news letter

To this day, no one would ever know about this incident other than those 20 people who worked at the AWA plant at North Ryde.

Colin - VK2JCC - Aka Professor Portable

QSL Card design competition

Over the last couple of years, we have received a few reports from overseas stations of reception of our beacons, mainly the 10 m one.

Currently, ARNSW does not have a proper QSL card and we would like to have one designed, using the new logo at the head of this newsletter. The idea will be to have a standard QSL card which we can print off as needed. The reception details will be printed on a sticker to go on the rear of the card for paper cards and be included with electronic versions of the card. There are a number of callsigns in use including VK2WI, VK2AWI, VK2BWI, VK2RSY (beacons) and VKE580.

All Access is a newsletter published by Amateur Radio New South Wales (ARNSW) for distribution to members and friends of ARNSW. If you wish to comment on any item published or, perhaps, suggest further matters for publication or even submit an article, please contact the editor, Eric – VK2VE by email to editor@arnsw.org.au or post to Editor, ARNSW, PO Box 6044, Dural DC, 2158.

All content of the newsletter is copyright ARNSW and may not be reproduced in any form without the written consent of the editor.

<http://www.arnsw.org.au>

Please submit your entries to the editor (editor@arnsw.org.au). There will be a small prize, yet to be decided, for the design chosen.

Eric – VK2VE - Secretary

Dural Update.



The new kitchen is finally finished with the last couple of installations complete. We now have running water, both cold and boiling, on tap at the sink in the new kitchen. The tap delivers almost boiling water (about 95°C). To use it, double tap on the centre of it until the lights start flashing. The turn the black collar either to the left or right, half way for auto return or fully to run for longer.



Work has also started on reinstating the PA system although it appears that some of the speaker cables were damaged during the lining.

It is intended to hold a working bee some time in the not too distant future to install the mounts and beacon antennas on the new wooden pole outside VK2WI as well as some work on several of the other poles to sort out halyards and also mount some WICEN antennas on the pole next to the ladies toilet. More to come in the near future.

Other planning work continues for the eventual upgrade of the technical side of the VK2WI transmitters and studios.

Many of you will also have noticed that we now have several new, younger news readers on VK2WI. This is great to see and we hope to have more in the future. Remember that we are always looking for people to assist with the broadcasts, either as readers, or as engineers (panel operators) or behind the scenes in the running or preparation of the news broadcasts. If you would like to assist in any capacity, drop an email to news@arnsw.org.au.

Eric – VK2VE – Secretary.

Education

Our dedicated education team consists of a team of ACMA assessors and a couple of non-assessors who provide regular foundation courses at Dural, usually on the second weekends of March, May, July, September and November. They also provide upgrade assessments for those wanting to upgrade to Standard or Advanced level.

At the course held a couple of weeks ago, there were four candidates who did the course and assessments as well as two others who just did assessments, one foundation and one advanced. We're pleased to note that all passed so are probably on air by now. We have noticed that the ACMA is generally very responsive in issuing new certificates and callsigns, with some candidates receiving their callsigns within days of their paperwork being submitted. This is very pleasing to see.

The next course weekend will be May 10th & 11th, 2025. If you know anyone wanting to do the foundation course, or upgrades, they should contact education@arnsw.org.au for details and to reserve a place.

As you may be aware, Raffy Shammay OAM VK2RF, has been acting as the team leader for the education team for the past seven years. He has been successfully leading the education team in promoting amateur radio with the public by education sessions and assisting those who would like to either enter the hobby, or upgrade their existing qualification, by holding foundation courses and examinations for all qualification levels in amateur radio.

A big achievement for Raffy was in 2024. The changes to a class license and examination administration saw a need for ARNSW education team to adapt to the changes. Raffy embraced the changes and established a new administration system to assist in providing a good candidate experience with ARNSW.



Now in March 2025 Raffy has chosen to step down as team leader due to personal commitments. The education team would like to ask the board and all members of ARNSW to recognize and thank Raffy for his contribution to the education team as team leader. Raffy will continue to support the education team, when he can, as he will continue to assist with presentations and assessments.

Thank you Raffy for all that you have done with the education team. We wish you the best.

There has been a consequent change in the leadership of the team. Pete Cherry VK2LP has stepped up to the plate to lead the team with admin assistance from Bob Demkiw VK2TG.

Pete – VK2LP – Education team leader

Know your Board



Mathew Magee VK2YAP

I'm Mathew VK2YAP, a member of the ARNSW Board of Directors currently holding the portfolio of President.

Born and raised in Sydney, I have had a long fascination with pretty much anything electronic. This was reinforced by some holidays with relatives "out west", where I found interest in attempting to receive distant radio broadcast stations.

I became a licenced amateur radio operator at 14 – after much reading and some watching Gladesville Amateur Radio Club theory videos, I passed the AOLCP as it was at the time. I have held the callsign of VK2YAP since then.

My career started in consumer electronics before moving to an engineering role in commercial television. In a way, it was like more TVs and bigger VCRs - but the real interest was in the transmitter hall!

With the introduction of Digital TV broadcasting in Australia, I took up a role with the ABC – where we had to come up with technical solutions for Australis's unique challenges, sometimes using equipment barely out of the prototype stage. Later, my responsibilities covered all engineering aspects of the ABC's radio and TV transmission, including Domestic Shortwave and Radio Australia. I left the ABC to lead a specialist consultancy specialising in Radio and TV engineering, which gave me the opportunity to visit many sites around Australia, working with broadcasters big and small.

In 2017, I took the opportunity to go 'back to school' – undertaking some telecommunications research at postgraduate level and working as a casual academic; including sneaking some amateur-radio related topics into classes!

While my day job is still primarily the RF the world below 30MHz, on amateur radio I tend to focus more on VHF and UHF. Key areas of interest are improving quality of voice transmission both on transmission and receiving end, and DSP applications – including audio signal processing and SDR.

I have been on the board of Amateur Radio NSW since 2008, and on the VK2WI Broadcast team for about as long. I still take part in producing items for the news bulletins, as well as in the station engineering team. My primary focus right now is in building support for the next generation of radio amateurs – looking for ways that we can engage with emerging technology in society, and how this can lead to attracting new people into amateur radio.

Mat – VK2YAP - President

Don't forget— Member Meetup, Trash and Treasure & Experimenters' Meeting

:- When: next Sunday, March 30th

:- Where: 63 Quarry Road Dural:-

:- Sellers admitted: from 8:30 am to set up

:- Other admitted for parking 8:30

:- Starting: at 9:00 am for buyers

:- Sausage sizzle will be running from 9:30 – Supporting Youth Activities

:- There will be no coffee cart. Drinks will be available at the BBQ and from midday in the Centenary Building.

:- Experimenters' Group starting from Midday

We hope to see you there.