



All Access

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

Issue 25-05 - September 2025

Editor: Eric VK2VE

Editorial

Welcome to the fifth issue of All Access for 2025. Our spring issue.

In this issue we are starting a new item welcoming new members to the fold and farewelling silent keys. We will probably also carry a yearly list for the previous year in each January issue.

We have the usual features as well as another short article from Colin VK2JCC on the Clansman PRC-320.

We also have a couple of other requests from other members and other clubs which you'll find below under "Other Notes".

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

New members and Silent Keys

In the last few months, we welcomed the following new members:

Aaron	Cherrybrook	VK2ZAA	Tyson	Cherrybrook	VK2TYS
Jared	Chippendale	VK2WAY	Robert	Berowra	VK2ZTN
Kel	Hill End	VK2KOS	David	Millfield	VK2VMC
Richard	Kareela	VK2VD	Christopher	Beecroft	Pending
James	Eveleigh	Pending	Edwina	Everleigh	Pending
Song	Hurstville	Pending	Elise	Winston Hills	Pending
Denai	Gwandalan	VK2DEE	Brett	Orange	Pending
Matthew	Emu Plains	Pending	Miltiadis	Riverstone	Associate
Malcolm	Emu Plains	VK2OZE	Joshua	Carcoa	VK2WJG
Geoffrey	Annangrove	VK2CUT			

And we farewell the following Silent Keys:

Vale:

Walter (Wal) Kelly	VK2ZWK	Eaglevale
Bob Yorston	VK2CAN	Roseville
Stephen Stebbing	VK2AAV	North Wahroonga

Some Notes from Your Board

The board has been discussing the possibility of discontinuing the magnetic calendars after 2026. The magnetic calendars are quite an expense accounting for most of the current annual membership fees. On top of that, there are other expenses such as printing and mailing of AGM material for those who elect to get them by post. One of the problems with the calendar is that it has to be produced in October/November each year, and often dates change in the interim which, of course, can't be updated in the calendar such as we've had to do with our November foundation course this year. To this end, the ARNSW website now includes a dynamic calendar which is kept up to date with upcoming events and can easily be changed on the fly when dates change or new items come up. Please let us know your thoughts about whether the calendar should be continued after 2026, by email, to office@arnsw.org.au.

Planning has commenced for the population of the two new 20 metre wooden poles installed recently at VK2WI. One is just outside the transmitter building and will be used for all the VHF/UHF beacon antennas, ensuring a short run to the beacon transmitters. The other one is located about 20 metres behind the Vertel compound and will be used to terminate some of the HF dipoles, instead of relying on trees as they are currently. This will include a major overhaul of many of the halyards used on the various poles which have become tangled over the years and very difficult to use. There will also be some additions on the pole closest to the Centenary building to accommodate some VHF/UHF antennas used by WICEN and us.

The board has also received an offer from a member to supply a 13 cm beacon to be installed on the new pole as well. This could lead to other beacons in the future for more of the microwave bands.

Eric – VK2VE - Secretary

Other Notes

We've had a couple of items we are passing on for the benefit of members or for members to assist.

From Peter Schrader VK4EA.

Brisbane VHF Group proudly presents the inaugural **QTech 2025** – a weekend conference all about amateur radio.

A program filled with inspiring presentations, live demonstrations, construction projects and more, including:

- YOTA
- Lightning Scatter
- Future of VHF/ μ Wave Beacons
- And much more
- Future of AR Townhall
- ARISS Live feed
- 10GHz EME

Dates & Times: Sat November 1st, 2025 9:00am - Sun November 2nd, 2025 12:00pm AEST

Location: Kedron-Wavell RSL, 21 Kittyhawk Dr,

The future of amateur radio is in your hands.

Dinner: Saturday night [at additional cost]

Places to stay: 25-min travel from BNE airport. List of local accommodation options available on event web site.

Costs: \$125 + booking fee. Includes Sat morning tea, lunch and afternoon tea, Sunday morning tea.
\$30 + booking fee [streamed online only]

Tickets: <https://events.humanitix.com/qtech-2025>

Website: <https://qtechbrisbanevhfgroup.wordpress.com/>

Hello ARNSW,

My name is Ashley Clayton. I am a complete radio novice who is interested in pagers. I have been trying to find a local forum to ask about pagers but could only find your club.

I was reading about DAPNET and noticed it had some coverage in Sydney and so I thought there might be some local radio guys that knew about it. I guess we'll see if anyone contacts me.

Is there a Sydney/NSW online forum or a discord that you could point me to? Alternatively, is there anyone in your organisation I could ask about pagers?

As we don't know of anything directly, we are putting his request to members in case anyone is able to assist him. His email is ashman2600@gmail.com. If you can help, please get in contact with him. He has given permission for us to include his email.

Member Meetup & Disposals

Next Sunday, September 28th, is the September 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\Debit card facilities will be available.

All the following equipment has been tested and is in good working condition unless otherwise noted. Transmitting and RF amplifiers sold to licenced amateurs only.

Transceivers.

Icom IC7000 HF-VHF and UHF all mode transceiver with book power cable and microphone. Price 750.00

Icom IC7200 HF/50MHz mode transceiver with power cable and microphone. Price \$650.00

Icom IC910 2m 70cm 100W Transceiver with a partly working UX-910 23cm module. Receive on 23 cm work fine but transmit is down to 1W. The 23cm power amplifier module is faulty. 2m and 70cm work correctly Sold as a dual band transceiver for \$550.00

Icom IC-730 HF 100W AM/CW/SSB transceiver with PS-15 power supply in working condition with microphone Price \$350.00

Codan X2 HF transceiver as is Price \$75.00

Clansman PRC320 military HF transceiver 2 to 29.999MHz USB/AM/CW (can be modified to add LSB) in working order with rucksack, handset and whip antenna. The battery (24V 5AH NiCad) is at end of life but included so you know what it looks like. The transceiver is in fair condition no bent case parts and all knobs intact. Paint is a bit scuffed but in fair condition.

These sell for around 450 to 500 UK pounds. Price is \$950.00

TYT UVF1 handheld 2m/70cm FM transceiver with drop in charger base and user manual. Price \$75.00

Yaseu VX-170 with new battery. \$150.00

Antennas

Alpha-Spid azimuth and elevator rotator pair with controller and cables. Price \$750.00

Antennas and amplifiers PA-1296-36-JUT 20dbi 300W 36 element Yagi. Price \$200 (new price in Europe \$290 plus shipping) We have two of these.

Antennas and amplifiers 15 element Yagi. Price \$100.00

Antennas and amplifiers PA144-472-13-2CB 13 element yagi 10.4dbi on 2m and 12.3dbi on 70cm with a feed line for each band. Price \$150.00

Diamond A430S15 70cm Yagi in original Diamond plastic sleeve seem to be unused. Price \$125.00

2m Yagi \$100.00

6m Yagi \$100.00

Diamond CP-6 (80m/40m/20m/15m/10m) 200W vertical. Used in good condition. Price \$200.00 (\$599 New locally)

Accessories.

LDG Z-11 Pro. Low power automatic antenna tuner. With cable for connection to a FT-817 Price \$200.00

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

Kenwood SM220 station monitor x 2. 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 \$100.00 each

DMU 2000 data management unit for the FT-2000 Price \$200.00

FC-40 automatic long wire antenna tuner for the FT-897 Price \$300.00

MFJ-956 Receiver Preselector tuner 150KHz to 35MHz Price \$ 75.00

Kenwood AT 230 antenna tuner Price \$ 150.00

Kenwood TV506 6m transverter for a TS520 Price \$50.00

Kenwood RD300 300W 50 ohm dummy load Price \$ 75.00

Power Supplies.

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

Dick Smith D3800 13.8V 25A Linear power supply in good condition Price \$95.00 Collect only.

2 x Dick Smith Q1753 13.8V 23A switching supply Price \$75.00 each

Fold up solar panel with charge controller 20W. Price \$55.00

Fold up solar panel with charge controller 120W. Price \$145.00 Collect only.

0-30V 2.5A Dick Smith Electronics power supply Price \$50.00

Manson SPA-8330 13.8V 33A switching power supply Price \$200.00

Test Equipment

Farnell synthesised signal generator DSG2.

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

Marconi 2019 synthesised signal generator 100KHz to 1040MHz AM and FM modulation calibrated output attenuator. Price \$330.00

Mark—VK2XOF—Disposals

A Reminder

Remember to notify any changes to your contact 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 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 may not get important documents. *Ed.*

The Clansman PRC-320

PRC-320 (Clansman) Background

The PRC-320 (also designated RT-320 in vehicle form) is the man-pack HF/SSB transceiver from the British Army's Clansman family. Built in the late 1970s / 1980s by UK defence contractors (Plessey and others), the PRC-320 was intended as a lightweight, long-range personal HF set for patrols, special forces and vehicle installations. It became a key element of the Clansman combat-net radio system until later replaced by newer families



Frequency, modes and performance

The PRC-320 covers essentially the HF short-wave range: **approx. 2.0 – 29.999 MHz** (commonly quoted as 2–30 MHz) with fine channel spacing (the man-pack set offers 100 Hz channel steps giving a very large number of selectable channels). It supports **SSB (USB/LSB), compatible AM and CW** in its mode set, and selectable RF output (typical ratings quoted are ~3 W low power and ~30 W high power depending on configuration). It was engineered for high stability (synthesiser with a temperature-compensated reference) and good sky-wave range for long-haul communications.

Operational use and conflicts

Clansman sets — including the PRC-320 — entered service from the late 1970s/early 1980s and saw use with British forces worldwide: in Northern Ireland, the South Atlantic/Falklands era period of operations, the 1990s and into the Gulf/peacekeeping deployments where HF long-range communications were required. They were widely used by patrols and Special Forces because of portability and hand-generator options for remote use.

Accessories issued with the set

Typical issued ancillaries for a PRC-320 man-pack included: carrying frame or DPM Bergan pack, battery containers (24 V battery packs and/or vehicle power leads), hand-crank generator adaptors, a range of antennas (portable whip, end-fed wire/long-wire kits, and vehicle antennas for the VRC/RT variant), handset/headset, microphone, spare fuses, tools and often vehicle mounting brackets and power supply modules for vehicle/mains use. Field carrying and accessory kits vary by unit and era. Conditioning old sets: replacing capacitors before first power-up.

A WORD OF CAUTION.

If you acquire a PRC-320 that has been in storage for decades, technicians and veteran restorers strongly recommend inspecting and **replacing ageing electrolytic and some tantalum capacitors in the synthesizer and in the power-supply modules before powering the set**. The PRC-320's PSU produces a high internal rail (around 110 V for varicap tuning/PLL circuitry) and leaking or open capacitors can cause incorrect voltages or damage on switch-on. Restorers report that degraded tantalum/electrolytic parts in the PSU and PLL/synth modules are a common failure mode; many hobbyist guides and service notes show step-by-step capacitor replacement. Because of the high internal voltages and the sensitivity of the synthesiser, this **should** be done by someone comfortable with military radio electronics, with the service manual to hand and with safety precautions (isolation, discharge of caps, correct voltage-rated replacements). If you are not experienced, use a qualified technician.

I have two PRC320 and would never part with them

73 Colin VK2JCC

Aka Professor Portable

Experimenters' group meeting.

The next meeting of the Group will be at midday, next Sunday the 28th of September, as part of the Member's Morning Meetup at ARNSW Dural.

Following on from the previous presentation on radio receivers, this month's meeting will feature an in-depth presentation on transmitters. Once again following through the key building blocks, from microphone or morse key, through to the antenna – and everything in between. Even the most complex designs follow the same concepts and basic principles apply. We will take a look at the key concepts, building blocks and circuit diagrams, of both commercial and homebrew transmitter designs.

As always, attendees are encouraged to take part in the "show-and-tell" and discuss any project or piece of equipment that they have been working on, with the group.

Peter - VK2EMU – Co-ordinator

Antenna Day

Following on from the HF antenna days of 2024, our next member's presentation will be moving up... in frequency.

Sunday the 12th of October will be part one of the 2025 VHF/UHF antenna days, here at VK2WI Dural.

Starting at 10am, the day features several presentations on VHF and UHF antennas. The emphasis is on practical antennas you can build, in presentations, by those who have built them. Antenna types covered will include the BI quad, slot, flowerpot, Yagi and more.

Lunch will be provided; so, numbers are limited, and registrations are required by Thursday the 2nd of October.

Registrations are preferred by email to events@arnsw.org.au; please include your name, callsign and a contact telephone number.

AI – VK2OK – Events

Board Member Bio – Stuart Walker

Board Member Bio Stuart Walker VK2BMX/VK2LHI

I have been on the ARNSW Board for a little over five years taking over from Tim Mills VK2ZTM (Silent Key) and am now the oldest member age wise of the Board.

You may know me from the VK2WIA weekly broadcasts as a regular announcer and engineer and the broadcast team coordinator managing the small team of broadcast volunteers. One aspect of this role that is in development is to encourage newly licenced young amateurs (YOTA) to join the broadcast team. To date we have had some success. There are now three young amateurs on the team and a fourth in the wings.



Getting involved in Amateur radio was on a whim just another hobby at first that I didn't think I would stick with for very long. Here I am ten years (10) later still playing radio and still in the hobby and enjoying activities constantly learning. Amateur radio replaced a much more expensive hobby that of aviation flying various aircraft types and configurations single and twin VFR and IFR. Whilst aviating communication using radio and navigating using radio navigation aids was as important as controlling the aircraft. Many times comms was only available via HF frequencies. So as a pilot you are expected to be proficient in the use of radios and nav aids and be familiar with RF propagation. I digress.

Back to the hobby through a friend I was encouraged to obtain my Foundation licence as a starter more or less as a "suck it and see" if the hobby was for me. I am still at it with an Advanced Licence. My QTH has restrictions in that that I am not permitted to instal any type of antennas no matter how stealthy. As I am more interested in the HF bands I tend to go portable with lower powered lightweight transceivers and resonant antennas. Works well for me and have had some good contacts

Where did my interest in electronics come from well like a lot of youngsters I built crystal sets and moved onto single transistor receivers. Reading and learning from electronics publications of the day. Living in a country town had the benefit of an RF environment that was extremely quiet. My father was an avid shortwave listener with an excellent Phillips short wave radio. I was fascinated by what could be heard from all over the world. In my early teenage years whilst still in High School the local AM radio station employed me after school and during school holidays in the record library and in the studios doing panel operating. As much as I wanted to make a career in radio it was not to be.

As far as a career in radio and electronics it was a mixture of sales/marketing logistics, technical and field operations with Government and Commercial organisations. Although not technically qualified other than an electrical trades certificate I was able to learn from those I was associated with in the industry and that knowledge has remained with me to this day. I am grateful to those in the industry that mentored me despite being and newby.

I forgot to add my working life started in a Bank prior to short period of national service then into the accounting profession working in Banking and Manufacturing industries for approximately three decades.

73 - Stuart - VK2BMX

Eric – VK2VE - Secretary

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

:- When: next Sunday, September 28th

:- Where: 63 Quarry Road Dural:-

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

:- Other admitted for parking 8:30

:- If you are queueing to enter, please queue on the other side of Quarry road as queueing on the property side can be quite dangerous for vehicles approaching along Quarry Road.

:- Starting: at 9:00 am for buyers

:- Sausage sizzle will **NOT** be running as we don't have sufficient staff to run it this month as they are off on other activities.

:- Drinks will be available inside

:- Experimenters' Group starting from Midday

We hope to see you there.