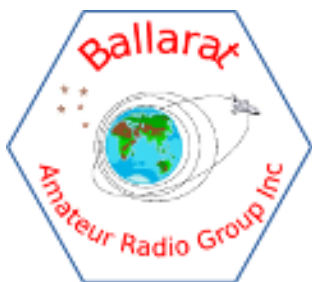


BARG inc. HAMFEST 2023



BARG News



Ballarat Amateur Radio Group

Inc. #6953T

February 2023 Monthly

Newsletter



Next Meeting

7:30pm, Friday 24th February 2023

At the Airport

All Welcome



Contacting us

You can e-mail the secretary

vk3bml@barg.org.au

We're on the web

www.barg.org.au

https://twitter.com/vk3_barg

<https://www.facebook.com/groups/VK3BML/>

Contents

Contents	2
Presidents Report February 2023	3
SCENES FROM A HAMVENTION	4
WARC 2023 Hamfest	6
From The WIA.....	7
Advanced Licence Course (On-Line)	7
Rescue Radio.....	7
The origins of "Mayday":.....	7
World Wide Special Interest Group News Worldwide Flora, Fauna Program, Parks On The Air, Summits On The Air and other Adventure Groups.....	8
Mystery Image	8
Silent Key VK3CAZ (G3IYC) Reg Carter.	9
There Ain't No Justice In This World!!!.....	10
First Aid Training Group	11
BARG COFFEE CLUB.....	12
FREQUENT FRIDAY NIGHT PUB DINNERS	12
PORTLAND AND SOUTH WEST RADIO GROUP HAMFEST	13
Ohio Hams Exempt From Distracted-Driver Law.....	14
Important Amateur Radio Trivia	14
VKS-737 Radio Network Raffle.....	15
Magazine Reviews.....	16
Silicon Chip February 2023 Review	16
QST February 2023 Review	17
SOME PAST AMATEUR RADIO NEWS	19
DIYODE February 2023 Review	20

Times and dates of nets as per below

Club Nets: VHF NET: Every Tuesday Night at 8 pm on 146.750 MHz - VK3RBA

HF NET: Every Thursday Night at 8 pm on 3.608 MHz - VK3BML

6m NET: Every Tuesday Night at 8:30 pm on 53.650Mhz RX / 52.650Mhz TX - FM
with a 91.5 tone - VK3RWU

LINKED REPEATERS: *The local VK3RBA-70cm repeater on Mt Buninyong is part
of a network of linked repeaters covering North-Western Victoria.*

Access details for this repeater have recently changed.

*For full details of this linked network and access details
see <https://www.qrz.com/lookup/vk3rba>*

You can listen to the system live <http://vk3rba.dyndns.org:441/>

This linked system may be accessed via IRLP node 9503.



Presidents Report February 2023



With Hamvention 2023 done and dusted, here are the numbers for this year:

- 52 Tables Booked this includes Club tables and BYO tables.
- 305 General Entry tickets sold.
- The Club table had a recorded number of 64 items for sale and took \$3,390 in known sales there were some that were not on the spreadsheet so it may be a couple of hundred more. After removing what was owed to Deceased Estates and Club members the total amount made was \$1,850. Thank you Kim VK3FMK and Mal VK3OAK for being at the tables most of the day.
- Total to the club overall from the Hamvention was \$5,102.97.

I really think we can mark this one down as a great success. Feedback from traders I had spoken to was good and some of the feedback we had from visitors was also good. We were also aware of the table spacing issue this may have already been solved for next year so please stop emailing suggestions on that. One of the biggest problems this year was traders coming to us asking to be next to trader X after trader X had booked some days before, this will not be allowed next year unless all traders book within 1 hour of each other. Planning is already underway for Hamvention 2024.



Left over items from club tables. There are still a lot of items left over and still for sale I have provided our Newsletter editor with the list so they may be in this edition. After the media coverage in the lead up to the Hamvention we may have generated a bit more coverage of the event and the club now has some recognition again in the Ballarat area.

What is next on the calendar for big events. As of the 9th of June, this year it will be 100 years of known Amateur Radio in Ballarat. Should the club do something for this? I have had a few suggestions already and it would be another great opportunity to get the club out in the public eye again. Suggestions so far have been some sort of competition, operation of the Club callsign with a commemorative QSL card. Over to you on this what would you like to see the club do for this? Email me with your suggestions vk3nrd@gmail.com.

I was very disappointed by the reaction from some members at the last meeting when Mal and I brought up what has become a regular Club activity even during COVID that happens in March each year, the John Moyle Memorial Field Day contest. To give some greater detail it is on the weekend of the 18 and 19th of March this year covering all bands excluding WARC bands. The aim of the contest is to encourage and provide familiarization with portable and field operation and provide training for emergency situations. Now I would really like to activate the club callsign for this but think it is useless if it is only Kim VK3FMK and Myself. So, if anyone is

interested in helping, I will be sending out another email shortly (it may have already been sent) asking for participation and will also ask at this month's meeting.

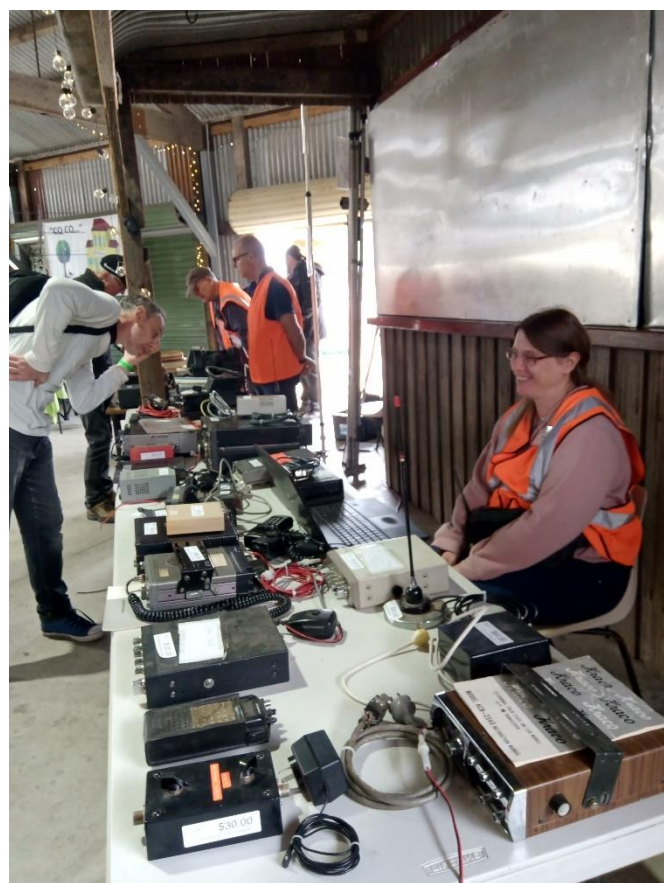
If I can get 5 people for the day, it will go ahead even if we are only using one radio for the day.

At our February meeting on Friday the 24th at 7:30pm Peter VK3HEX will be doing a presentation on his international radio exploits after the meeting. My own little corner of the world. The projects I mentioned in my last report have stalled now so no movement there. I have started being a Hunter again for VKFF/Parks Activations mostly on 40m when I have had the time over the weekends.

Cheers. Ben. VK3NRD.

SCENES FROM A HAMVENTION





Pictures: VK3FIVE, VK3NCC, VK3DMK

WARC 2023 Hamfest

The ONLY one in the Western Suburbs

WARC 2023 Hamfest – Sunday 5th March 2023, at The Italian Sports Club of Werribee.

- Same venue location as previous events
- HUGE under cover, indoor venue.



- HEAPS of free parking.
- Entry is still only \$7.
- Doors are open from 10am till 1pm with Tickets on sale from 9am.
- Major and Minor Door Prize draws are included free with each ticket (Extra Tickets available for purchase).
- Sausage Sizzle available for purchase from 9am with Free Coffee and Tea.



- ICOM is the major door prize sponsor supplying an [ICOM IC-10](#).
- JayCar is also sponsoring a [QM1578 True RMS Digital Multimeter with Bluetooth® Connectivity](#) as a door prize.



- [TET-Emtron](#) will be there.
- [South Eastern Communications](#) as well.

Tables are only \$20 with one free entry included. To book a table please go [here](#).

Hope to see you there. 73's...John VK3JNF

From The WIA

Advanced Licence Course (On-Line)



Peter Cossins, VK3BFG is holding an advanced licence course (on-line) starting Wednesday March 1st.

For further information or to book your place visit <https://shop.amateurradio.com.au/>



Have you changed your email address lately?

Members site - <https://members.amateurradio.com.au/login>
Update your newsletter subscriptions.

www.amateurradio.com.au
40G Victory Blvd. Ashburton Victoria 3147

Rescue Radio

IARU REGION 3

Emergency Centre of Activity (CoA) frequencies 3.600, 7.110, 14.300, 18.160 and 21.360 MHz

Region 1 3760 7110 14300 18160 21360 kHz

Region 2 3750 3985 7060 7240 7275 14300 18160 21360kHz

The origins of "Mayday":

It's the international signal for an emergency made by planes and boats which use radio communications, which was recently used on Qantas flight QF144 from Auckland to Sydney, which ended up landing safely, be it on only one working engine.

But the history of the mayday call dates to the 1920s and while SOS had been used to signal an emergency via morse code, with the increase in air travel it was less practical to use over radio. Frederick Stanley Mockford came up with a new word for signalling an emergency: "mayday".

Fredrick was in charge of radio at Croydon Airport near London but as planes flew to Le Bourget Airport in Paris, France, just across the channel Mockford proposed the word as it was the phonetic equivalent of "m'aidez" which means "help me" or "m'aider" which means "come help me" in French.

It is repeated three times to avoid confusion and was approved in February 1923.

World Wide Special Interest Group News Worldwide Flora, Fauna Program, Parks On The Air, Summits On The Air and other Adventure Groups.



Wade VK1MIC joins us with news of that special SOTA call VI 10 SOTA which will be used from February to years end.

The callsign will be used by anyone activating a VK1 summit during the year. An online reservation system has been implemented.

While the callsign has been allocated for the entire year, the official launch of the callsign is planned for the 1st of February, which is the date from which the VK1 SOTA summits were officially registered with the SOTA summits database in the UK.

It's worth noting that SOTA was first kicked off in Australia with the registration of VK3 summits in February 2012. VK5 followed later that year and VK1 joined a year later, then VK2 and VK4 SOTA were registered on the 1st September 2013. VK6, VK7 and VK8 were registered in the next few years. Since then, amateurs around Australia have been trudging up hills with radio equipment in their backpacks, to make at least 4 contacts from the summits activation zone, which is the zone that includes the summit itself and the surrounding land that is within 25m of the peak.

SOTA summits require 150m of prominence over surrounding land, so not all peaks are eligible. However, many summits are located within parks registered under the WWFF scheme, and anyone listening on the HF bands will have heard activations of summits and parks under way almost every day of the week.

A summit in a park gives those working the summit on the air credit for both the SOTA and the WWFF awards.

hema.org.uk/index.jsp
<https://minesontheair.wordpress.com/parksontheair.com/>
sota.org.uk
<https://www.vk5pas.com/summits-on-the-air-sota.html>
sotawatch.sota.org.uk/en/
<https://parksontheair.com/>
wwffaustralia.com/

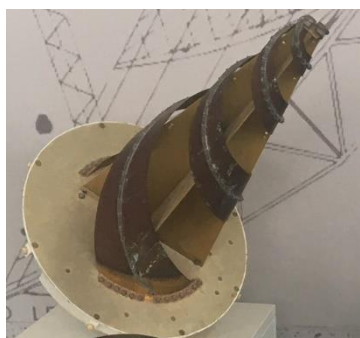


For more information about SOTA, please look at SOTA.ORG.UK sota.org.uk

73 from Wade VK1MIC on behalf of the VK1 management team



Mystery Image



This month's mystery object.
Solution is located elsewhere in this edition.
Hint. You may need to do a bit of Leonardo Da Vinci to read the solution.

Silent Key VK3CAZ (G3IYC) Reg Carter.



I got to know Reg from the Ballarat Amateur Radio Group.

How did he get there? The following jottings are from my memory of the conversations and yarns shared in our ongoing friendship at club nights and his home in Lal Lal over many cups of tea.

He was a POM, like me, but with a different accent; but we managed to communicate.

SO here goes!

Reg served in the Royal Airforce, RAF, in England and the Middle East.

On one base he had to sign off Vulcan Bombers for takeoff during the Cold War. After inspecting his electronics in the tail plane, he had to clamber between two Nuclear Missiles and was ordered not to kick them - they didn't want the paint scratched. I think he enjoyed telling this story, not as an ego trip but as an important discipline which triggered his eccentric sense of humour.

After service he was installing radio communications in to cars, and he explained one of his worst moments when he was presented with a new Rolls Royce which needed an aerial in the middle of the roof!

After all this nonscience, he got some sense- or the RR went open circuit, and the family came to Australia.

He went to the radar weather station at Cloncurry, beaming north for the rolling clouds, thunderstorms, and objects flying above 80,000 feet. He knew all the circuitry of this facility and taught his successors in that field.

Before his retirement years, Reg was at Broadmeadows Weather Radar which we visited. He was respected and revered by all on our walk around. His forecasting after this was from his acres in Lal Lal surrounded eventually by forty foot pines which he and Sheila planted as sprouts.

His shack was a short walk from the house, but he was a regular participant, during all seasons during the BARG 80m net, and took his turn at being controller giving him more friends in the fellowship of Amateur Radio.

He also contributed radio history and technical articles in the club newsletter.

Reg, gentleman, teacher, friend, and raconteur – the English boffin – will be remembered by many. His times, experience, and knowledge have gone, but his will be retained in the cosmic ripples.

As was said in the radio nets, “thanks for being there”.

We will remember him, RIP.

John VK3CFH



There Ain't No Justice In This World!!!

THERE AIN'T NO JUSTICE IN THIS WORLD!!

It's funny how some people get credit for a device that really belongs partly to another 'unsung hero*.

Take the reflex Klystron for example, where everybody repeats the old story of its invention by the Varian brothers. It is true that they did conceive and develop the 'two cavity klystron* where the first cavity is used to bunch the electron stream and deliver power to the second cavity so that, if the wanted signal is fed to the first cavity a magnified version will appear at the second cavity. Being an amplifier if the output is coupled back to the input cavity we have an oscillator at microwave frequencies as well. But in the early days getting the two cavities to stay on the same frequency was not easy especially in a tossing ship or buffeted aircraft. The thing would get out of 'sync* and oscillations cease.

Enter Robert W Sutton of the Royal Navy Signal School who looked at the thing and devised a repeller electrode to replace the second cavity. Now with that held at a voltage considerably negative with respect to the potential of the cavity then a whole new event happened. The bunched electrons (remember the Applegate diagram?) would reverse their direction of travel and return to the cavity delivering up their power to the cavity. No amplification but definitely an oscillator and only ONE cavity so no detuning problems, plus the bonus of 'electronic tuning* for AFC purposes by adjusting the volts on the repeller. Developed in the USA as the Shepherd-Pierce, later to be renamed the 'reflex klystron* it became the standard device with the two-cavity klystron left to languish until needed for microwave power amplification but still no acknowledgement of Mr. Sutton.

Likewise with the development of the 'TR* cell for shielding the sensitive frequency changer crystal from the raw power of the magnetron in a radar. After a lot of trial (and mainly error) using two cavity klystrons for isolation, up pops the TR cell, as we know it today thanks to A.H.Cooke of the Clarendon Laboratories Oxford. He took a Sutton klystron and filled the cavity area with water vapour at a low pressure. Then when the power from the transmitter hit the cavity the immediate (almost) ionisation of the water vapour caused the device to go short-circuit and so protect the crystal, de-ionising immediately after the transmitter pulse to allow the returned signal to reach the mixer. To speed up the action he found that applying a high voltage low current supply to the device kept it in a state of 'almost ionised* so that it responded even quicker to the transmitter pulse. Again no credit to him and I suppose it is only we 'doddering old fools' who learnt our radar in the 1940s who even knew of Sutton and Cooke Valves/Tubes. But as a certain Kelly fellow said, "such is life"

73 from Reg VK3CAZ

First Aid Training Group

First Aid Training Group in Ballarat and Regional Victoria

Through our highly interactive First Aid training courses delivered exclusively by experienced Paramedics, Nurses and Healthcare Professionals all with real-life experience, you can be assured you are receiving the best training possible.

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admin@firstaidtraininggroup.com

826 La Trobe Street Ballarat 3350



We offer a wide range of First Aid Courses within Ballarat and the surrounding areas.

Our courses include First Aid Training for individuals who want to help protect their friends and families as well as businesses that want to provide a safer working environment for their employees.

When somebody requires First Aid attention the first few minutes are the most important ones. Within the first few valuable minutes you could save a life. It can take time for an ambulance to arrive, or you may be in a situation where it is hard to get help. But you could be the individual who helps assist these emergency services by helping an injured person with the valuable skills learned through First Aid Training.



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Email: admin@aviationrescueservices.com

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DON'T FORGET

10:00AM EVERY THURSDAY MORNING

BARG COFFEE CLUB

ALL WELCOME



**Food Seduction on Doveton
524 Doveton Street North**

ALSO

FREQUENT FRIDAY NIGHT PUB DINNERS

**KEEP WATCH ON BARG CHATTER EMAIL
FOR THE NEXT OUTING**



PORTLAND AND SOUTH WEST RADIO GROUP HAMFEST

Portland & South West Radio Group

HAMFEST

8th April 2023



**Monitoring
VK3RPL 70cm
439.950
Tone 91.5**



**Monitoring
VK3RPL 2M
146.825
Tone 91.5**

***Location: Portland South Hall**

***Address: 114 Wellington Road, Portland South. Victoria 3305.**

***Time: Doors open 9:30am (Traders 8:00am)**

***Entry Fee: \$7.00 (Traders \$20 with Table)**

***Traders (new and used radio equipment)**

***Guest speakers*Drinks/Food available*Raffle prizes**

***Info stands & much more**

For further details contact Peter 0428857367 or David 0488943770

Visit us at www.portlandsouthwestradiogroup.wordpress.com & on Facebook

Made by VK3H1V



"The good news is THIS TIME
he's coming out the other side!"



"Sorry, lady, we gotta quit for the day. Our radio broke."

Ohio Hams Exempt From Distracted-Driver Law

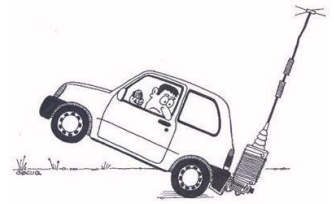
Amateur radio operators are getting a break in Ohio under a new law restricting the use of handheld electronic devices by drivers. Jack Parker W8ISH has those details.

Under a new law taking effect in Ohio, if you are holding a cell phone or similar device in your hands while operating a motor vehicle, that is sufficient reason for you to be stopped by the police: It is considered a primary offense.

Hams, however, needn't worry. The distracted-driving law exempts radio amateurs as well as utility workers and first-responders, such as police.

Penalties are increasing for those drivers found to be engaged in so-called distracted driving but with the new law, the next six months will provide a grace period. Drivers who are not eligible for the exemption will only be issued warnings while the state launches a public-education campaign about the change in enforcement.

With this law, Ohio joins the ranks of other states where exemptions were granted for amateur radio use while driving, including Indiana, Minnesota, Wisconsin and Washington state.



<https://www.arnewline.org/news/2023/1/5/amateur-radio-newsline-report-2358-for-friday-january-6th-2023>

Important Amateur Radio Trivia

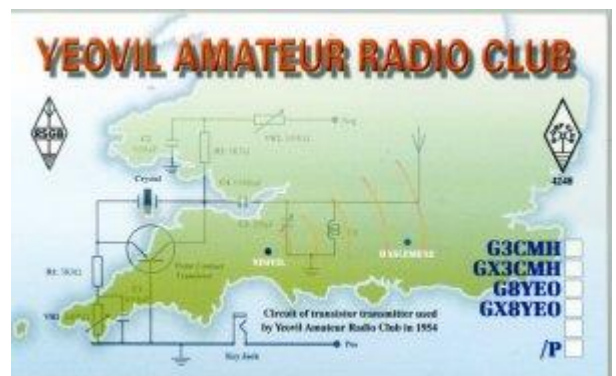
On 21st February 1954, Yeovil Amateur Radio Club made what is almost without doubt, the first long distance radio contact using a transistor transmitter.

The distance was 85 miles, from Yeovil in Somerset to Haslemere in Surrey.

The transmitter input power was 30 milliwatts, the frequency and mode were 3504 kHz CW.

With this contact, Yeovil Amateur Radio Club made radio history because 85 miles was a quantum leap in distance for a transistor transmitter at that time.

Subsequently, the Club was invited to display the transmitter at the prestigious four-day National Amateur Radio Convention which was held in Bristol in September 1954.



VKS-737 Radio Network Raffle

VKS-737 & HF-Tel

Divisions of the Australian National 4WD Radio Network Inc.



Established 1993

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Elizabeth Park, SA. 5113

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email: info@vks737.on.net



VKS-737 Radio Network Raffle

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RADIO COMMUNICATIONS




MINELAB

First Prize:

Codan Explorer Package comprising an Envoy X1 Radio and 3040 Auto-Tune Antenna. Valued at \$5654.00
Generously donated by Codan Radio Communications.



Codan Envoy Radio



Codan 3040 Antenna

Second Prize:

Minelab Equinox 600 Metal Detector. Valued at \$1099.00
Generously donated by Minelab.

Third Prize:

Minelab Vanquish 540 Metal Detector. Valued at \$629.00
Generously donated by Minelab.



Minelab Metal Detector

3,000 numbered tickets @ \$5.00 to be drawn 17:30 Friday 16th June 2023 at VKS-737 Head Office.

Tickets are available from VKS-737 Head Office or VKS-737 Website

Please Note: Ticket Orders must be received no later than Friday 9th June 2023

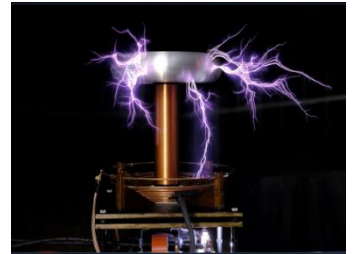
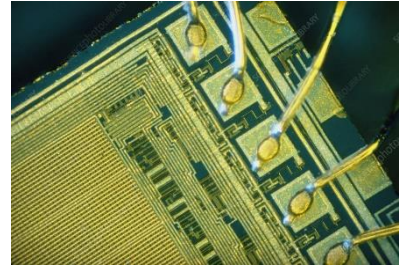
Proceeds are to be applied to the VKS-737 Radio Network to provide better communications services for our subscribers, and in times of emergencies by all outback and remote area travellers.



Magazine Reviews

Silicon Chip February 2023 Review

- P14 Computer Memory, Part 2. A continuation of this fascinating subject. This time looking at the silicon revolution that bought memory into the smaller compact world. SRAM, DRAM and Holographic Memory.
- P24 More on Computer Memory. As the world of computer memory is so volatile, the advancement of different types and densities continues. Here the way images and video is stored in these devices.
- P33 Active Mains SOFT STARTER. Part 1. A soft stater to help minimise high inrush or starting currents from such things as motors, so to reduce the physical starting kick from tools such as electric saws and angle grinders. Will work on tools up to 750W with tuning the soft start for 6 different scenarios. Includes an excellent explanation of how and why they function?
- P44 Advanced SMD Test Tweezers. Some more improvements/advancements to the SMD Test Tweezers project in previous editions. More features and improvements with a basic oscilloscope and UART decoder functions along with a curve plotter.
- P52 30mm Desktop Spark-Gap Tesla Coil. This small Tesla Coil produces some remarkable discharge arcs. Includes a cooling fan and discharge cap, this project looks as good as it spectacularly performs with its added top load cap.
- P62 Active Sub-Woofer, Part 2. Designed for use with the Active Monitor Speakers from Nov-Dec Silicon Chip 2022. Finishing the wiring and installing the driver ans cabinet feet.
- P72 Heart Rate Sensor Module. Review of a Jaycar kit XC3784. Show how to read and place the sensor pads and connecting it to an Arduino.
- P76 Noughts & Crosses Machine, Part 2. Uses only logic gates, this part discusses the logic of gameplay decisions and how it was “coded” into logic gates. Includes circuit and chassis construction.
- P86 Serviceman’s Log. “Nature abhors a vacuum, and so do I”. Fixing a vacuum cleaner, replacing a TV Yagi antenna, electric toothbrush repair, multiple rotary encoder standards, faulty PICs.
- P96 Circuit Notebook. Light with automatic switch-off. Automatic mouse clicker. Frequency comparator using discrete logic. Skylight controller.
- P90 Vintage Radio. 1938 VE301Wn Dyn Volksempfänger: the Peoples’ Receiver. The model initially released by request of Goebbels in 1933. A minimalist design with two valves for signal and one for rectification, a mains powered wireless featuring regeneration for extra sensitivity.
- P105 Ask Silicon Chip. Question about the Breadboard PSU. IKEA clock. GPS Analog Clock voltages. Bench Supply problems. Increasing VGA PicoMite resolution. SC200 Amp with active sub-woofer. Charging a battery with load. Any other transistor options for the 500W Amp? Bass Block driver is no longer available. Getting parts for Low-Noise Stereo Pre-amp. Parts for the Hearing Loop Level Meter. Repairing Active Loop Antenna. Circuit for driving a VU meter.



QST February 2023 Review

Review By Craig VK3KG.

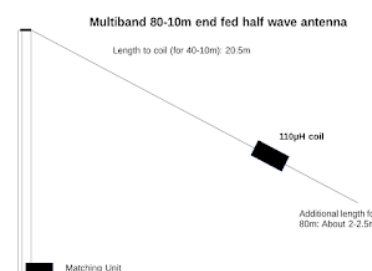
P9 Second Century. Looks at why we Volunteer. Apply those thoughts to Amateur radio and encourage others you meet to be a volunteer in advancing our hobby. NA2AA is the ARRL CEO and compares the challenge to his daughter when she graduated from University, she was very narrowly focused on her chosen career to one cause which is the eradication of Breast cancer. Are we focused as much as that in furthering the goals of amateur radio and encouraging others also.



P13 Member Spotlight: Bob Heil K9EID. A well-known name in audio and sound circles as a musical person and later developed his own company in 1966 while still touring as a muso. From this company that made organ equipment, sold amateur gear and servicing. After building his first equalizer box that now graces most serious brands of amateur radio and his design into microphones. Starting of as "Ye Olde Music Shop" the company is now better known around the world as "Heil Sound" and their range of mics and headsets are renowned. Bobs passion now is teaching other amateurs and he is still not slowing down yet.

P24 Letters. Covering QSL cards from past days, Xmas and valve transmitters and a method to stop STATIC shocks using plastic matts and carpets as discussed in Sept 22 QST.

P30 Multiband End fed Antenna with loading coil on a 35mm white plastic drainpipe section [83 turns and equally spaced at every ten turns. He describes his simple and easy to make L matching network as well. Further read at www.arrl.org/qst-in-depth and <https://G0kya.blogspot.com/2017/01/a-shortened-multi-band-end-fed-half.html> are listed to read.



P34 RF Measurements using Homemade Equipment. While many shacks may have commercial operating equipment on their benches there is still a lot of ancillary test equipment that can be homebrewed and used in the shack without the need to own expensive commercial gear. Of course, if you work in the industry the opportunity arises to borrow the work box and bring it home. However, if you can build some gear why not.? Ken WB3JOB talks about some of his ideas.

P37 A 15Meter portable Oval Moxon Antenna. For background see QST May 2003 for "" The Black Widow"" Moxon by Allen KG4JJH. This design uses a 8 foot [3.78M] boom. And by turning the two elements back onto themselves with just a 150mm gap between their ends makes the two element beam less likely to foul adjacent trees and shrubs when taken into the field. Now here is a challenge for constructors and portable operators.



P40 Review: Xiegu XPA125B 1.8 -50 MHz 100Watt Amplifier. With built in auto tuner and typical input required of 5W for 100 out on all bands except 6M which develops 80W, still quite respectful for this band once it opens. Having a visual display for operation it also displays its fault condition and will reset and clear when amp is unkeyed.



The report is very good on its assessment however the first test unit did not quite meet some of its own specs and those of the FCC which the lab always tests to. On request a second unit was tested and again some shortcomings noted, so a third was tested with similar results. Interesting to read the CONCLUSION report.

P45 CW Hotline Radio solutions review. A kit form of 20 parts and pcb with box. Using a ESP8266 chip and on the WiFi, you can use two units to communicate with each other while you practice your CW.



www.hamradio.solutions/cwhotline and www.hamradio.solutions/vband will assist your understanding. Kits are US\$50 and as a couple of members have been showing interest in practicing their CW again this may be a suitable project to construct and then talk to one another on the key. I didn't mention that the pcb is made to have a straight key mounted there and protrudes out the end of the plastic box. Facility is provided for straight and iambic keys. Linking key units by Wi-Fi would have been far easier than cw trainers in the past with wiring between all units when conducting classes for training.

P48 Smart Antenna rotator controller by MicroHAM. Just a controller with screen and capable of quite a complex list of activities and comes with a price to match. US\$899 from www.dxengineering.com



P51 Ask Dave: More about lightning protection and use of Polyphasers, Earthing Some interesting reading here today.

P54 Benefits of leasing a Remote Station. www.remotehamradio.com

P56 Low Power Desert Operations

P58 Wild West Rove. A two-week vacation and amateur radio in between.

P67 Notes from a Catastrophe: Hurricane Ian. Sept 28th, 2022

P74 Club Station. Keeping members active through Creative club events.

P76 Media Playlist. KM4ACK – Video's through an EmComm Lens.
See Jason KM4's website.

P78 How's DX.? Bouvet Island 2022. 3Y0J 2200 miles east of the Falkland and roughly 1,000 miles north of Antarctica. www.3y0j.no

P80 World above 50Mhz. Bob ZL1RS to North America on 29 Nov 2022. Using FT8 N9PGG, [FM08] N5DG and K5YT. Bob then worked Mexico and Ecuador

P88 Looking Back. QST March 1973. Feeds for Parabolic antenna. Tin can wave guide still good use.

P94 Classic Radio. Restoring the SST-1-E Suitcase Transmitter. This was a spy set developed in 1942 and used by resistance agents in Europe and the China Burma conflict.

P96 100, 50 and 25 years ago.



And still those adverts at the back of this month's magazine are mouthwatering.

73 Craig VK3KG.

SOME PAST AMATEUR RADIO NEWS



**FYI Ballarat Courier
29-10-1976**

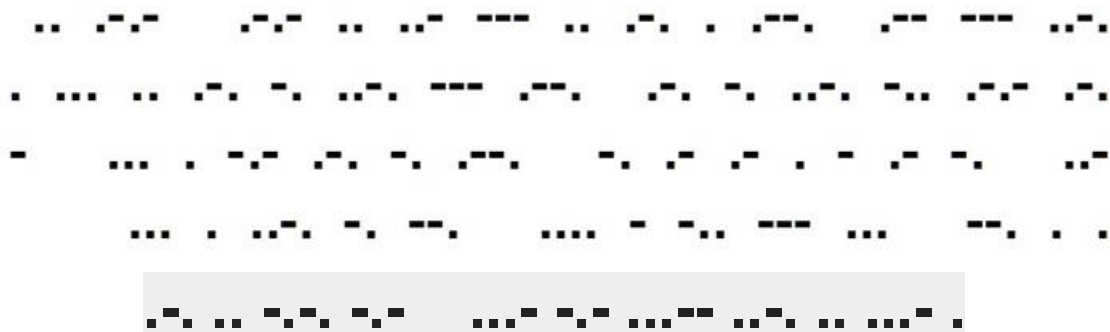
**Contributed By;
Dick VK3VU**



"A GOOD QUESTION. ACTUALLY I GOT INTO THE BUSINESS WHEN SOME CONSERVATIONISTS UP IN CANADA TAGGED ME WITH A TINY RADIO TRANSMITTER."

DIYODE February 2023 Review

- P7 Automatic Zen Garden. An Arduino powered Zen sand garden. You control a steel ball as it rolls around a sand-based playground. The mathematics of the control system and the construction method as well as the source code for the Arduino and the 3D printed parts.
- P25 System Stats, a Pico based Tiny System Monitor. A handy little display to have next to your computer graphically displaying the resource usage of your device.
- P29 Electronic Stethoscope. An experiment with a sensitive microphone amplifier and some different enclosure designs. Shows how an Electret Microphone works and the need for a pre-amplifier to get a good signal volume to use in a small single chip amplifier.
- P38 EZ-ATX Part 2. Assembly and Testing the final unit, with discussion on the prototyping procedure and final panel assembly.
- P59 Air Quality Monitor V2. An Arduino Nano based Air Quality Monitor, Datalogger and Clock. A four digit display, different options for output display and compact construction make a versatile piece of equipment.
- P66 Fundamentals, Crystal Radio. Basics of AM radio, early detectors and some construction instructions for simple crystal sets and aerial information.
- P82 Tick, Tock! Ornamental Clock Goes Digital. Breathing new digital life into an older style analog clock face. Using all digital hardware instead of software to control the display and keep it on time.
- P88 Amplifier Antics. A good look and experiment with a single BJT amplifier, big enough to drive a small speaker.



MESSAGE FROM YOUR NEWSLETTER EDITOR

To keep the quality of this newsletter!



- **If you have a project, antenna, vehicle installation, some club or amateur radio history or somewhere you have operated amateur radio.**
 - **Have you bought a bit of gear or accessory that you have used and think it would be interesting for others to know about.**
 - **If you go bush to operate.**
 - **Tell us about it!!!!!!!**
 - **Some pictures and a simple bit of text telling about your endeavours is all we need.**
 - **If you don't think your journalistic talents are lacking, like most of us, then apply pen to paper and in point form write what you want to say. Some massaging from the editor will make your article readable.**
- No matter how small or big, contributions gratefully accepted. tomvk3dmk@gmail.com**