



BARG News

Ballarat Amateur Radio Group

Inc. #6953T

July

Monthly Newsletter

Next Meeting

Friday 29th June 2018 @ 7:30pm

At the B.A.R.G. Club House, Ballarat Airport

All Welcome



Contacting us

You can write to the club at the address below, or e-mail the secretary

The Secretary : B.A.R.G. Inc.
Box 1218
Mail Centre
Bakery Hill Vic. 3354

Or E-Mail : vk3bml@barg.org.au

We're on the web
www.barg.org.au

Presidents Report

Welcome to the July newsletter. The shortest day of 2018 has been and gone, though the coldest weather is likely still on the way. Since last newsletter the George Fowler auction has been run. The number of bidders was down a little on previous years, but that was made up for by more quality of goods being sold. Craig, VK3KG, did a great job as auctioneer, seeing the proceedings continue through in quick procession. The day again started with soup and social chit chat and was enjoyed by all who attended.

The July meeting will be the 2018 AGM, with all committee and non-committee positions open for re-election. I'm fine to stay on a president if the club wishes. I understand that Doug feels it's time for someone else to step into the secretary's chair. It'd be good to see some new faces on the committee. There are a number of non-committee roles that we need performed too. Please consider how you could help.

Mal vk3oak



George Fowler Auction. Craig, VK3KG and Lachlan, VK3ALM, discussing the possible value of one of the items up for sale.

Pre-auction soup and buns.



Robert, VK3ARM, and Bob, VK3NBV, going over strategy.

VHF and Above for July 2018

For enthusiasts into this aspect of amateur radio there is not a lot to report that's occurred during the past month. Apart from a couple of temperature inversions where there has been some propagation on 1296 MHz in the Western part of the State and the usual activity most mornings on both 2m and 70cm supported mainly from operators in Western Victoria there is not a lot to report.

Some of the calls and locations include VK3LTA Cobden, VK3DAI Camperdown, VK3VBI Caramut, VK3KG Cape Clear, VK3LTL Gordon, VK5JR Mt Gambier, VK3AUU Warragul, VK3HP Melbourne, VK3YHT Geelong, VK3AXH Ballarat.

Remember the club has a VHF 2m repeater hookup Tuesday evenings on VK3RBA at 8pm so why not join in the fun. It's disappointing that many of our members don't take part in this activity.

This weekend 23/24th June has also seen the WIA Winter Field Day take place. Needless to say the weather plays a big part in stations prepared to venture into the field in our part of the world. VK3AXH had a total of 12 contacts on both 2m and 70cm and only heard one portable station VK3CWF who was backpack portable in the Mt Anakie area. Even the EMDRC who are usually very active were only heard operating from their club rooms from the Eastern side of Melbourne. Let's hope participation is much better for the Spring Field day later in the year.

It is also hoped that some VHF/UHF satellite activity will take place as some simple suitable yagi's are planned to be built over the coming months which may trigger some of us to get enthused in this activity. All that's required is to make a simple 3 or 4 element yagi for 2m and around a 6 element yagi for 70cm on a common boom to get started. This could be an interesting part of amateur radio for members to have some construction and operation in this aspect of our hobby.

There has also been some interest shown is MMSSTV on the VHF bands with some locals conducting tests on the 2m band using both FM and SSB modes. There is also a group in Melbourne active on Monday and Thursday evenings using one of the FM repeaters in the evening using Digital TV program Easypal. If you are interested talk to us about it....it's not that hard.

Download these programs and see what you can see or contact some of the higher frequency enthusiasts to find out more. Perhaps we can setup a club demonstration to show how these modes work.

Like most things it requires someone to initiate these activities so why not look into it and make a worthwhile contribution.

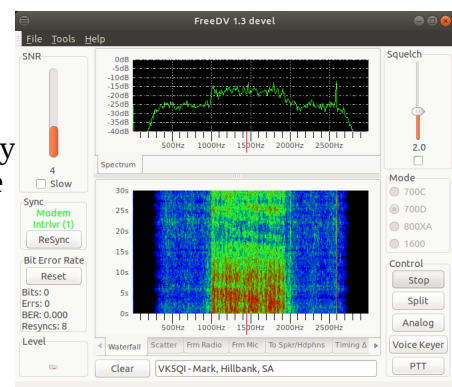
Till next time 73 VK3AXH

FreeDV Digital Voice

FreeDV is a relatively new digital voice mode that seems to be gaining in popularity. The codec was originally written by David Rowe, VK5DGR, in 2012, and David continues to be one of the maintainers.

With the poor conditions on the bands, there's more interest for the new digital modes. Why not give it a try.

<https://freedv.org/>



PRACTICAL WIRELESS JULY 2018.
Reviewed by Craig VK3KG.

- p6 Keylines
- p7 News and bits.
- P10 Review: INRAD M629 & DMS-1 Desk Mic Set.
- P13 Network Radio. What is it and why could it be good for amateur radio? The Internet is now part of our hobby.
- P16 Introduction to NETWORK Radio with Inrico TM-7& T-320.
- P24 [ARDF] Amateur Radio Direction Finding. Intro to radio sport.
Try [HTTPS://tinyurl.com/yb7b8yys](https://tinyurl.com/yb7b8yys)
- P28 Radials for Quarter Wave Verticals. See N6LF
K6MHE.COM/FILES/GroundSystems.PDF
- P34 DX to the Isle of Scilly.
- P40 Microphone Processor. The "Fat Max." see www.s9plus.com
Build a kit see the PDF file. GW4GTE
<http://tonnesoftware.com/appnotes/speech/speechamp.html>
- P44 HF Highlights around the bands,
- P47 Build an HF receiver in a Marmite [Vegemite jar]
- P52 Collins. The Wiz of Oz. Some history.
- P56 Starting Over. Antenna Time.
- P58 Making Waves: Signal Polarisation
- P60 Data Modes: RTTY and Lime SDR.
- P63 Kits & Modules. Big Blue Clock.
www.nt9k.com/stuff/clockmanual.pdf
- P64 World of VHF. Remote Operating.
- P70 Letters.



And that's all from the Practical Wireless magazine until August.

End of an Era – Canon stops selling film cameras

Not amateur radio, but thought it was worth a mention. Canon has announced that it's going to stop selling its last film camera model.

Actually what they're really saying is the stock of the last film model that they stopped making eight years ago is about to sell out.

With camera's in everything these days, I'd guess there's more photo's being taken now than ever before. Would you go back to shooting on film?



6 Silicon Chip June 2018

Review by Craig VK3KG

FEATURES & REVIEWS.

- P14 AgBots – Robots working on the farm of tomorrow.
- P77 Degen’s wind-up or solar-powered AM/FM/SW radio.
- P80 El Cheapo Modules 17: 4GHz digital attenuator.

CONSTRUCTIONAL ARTICLES.

- P24 The USB Flexitimer: accurately timed switching.
- P32 Wide range digital LC meter: FARADS and HENRIES.
- P44 Switch on or off anything with a temperture switch.
- P64 800W (+) Uninterruptible Power supply (UPS) Part 2.

FAVOURITE COLUMNS.

- P58 Servicemens log.
- P85 Circuit notebook.
 - a. Atari Punk console 4-16 step synthesize/sequencer.
 - b. Use a phone to capture glitches on a scope.
 - c. Low cost automotive ammeter.
 - d. PICAXE based millisecond reaction time.
 - e. Servomotor tester.



EVERYTHING ELSE.

- P2 Editorial viewpoint.
- P4 Mailbag.
- P42 SC Online Shop.
- P96 Product Showcase.
- P97 Ask Silicon Chip.
- P103 Market Centre.
- P104 Advertising Index.
- P104 Notes & Errata.

That’s all for June.
73 Craig

Teacher: “If you had one dollar and you asked your father for another, how many dollars would you have?”
Little Johnny: “One dollar.”
Teacher: “You don’t know your arithmetic.”
Little Johnny: “You don’t know my father.”

PRACTICAL WIRELESS JUNE 2018.

Reviewed by Craig VK3KG.

- p6 Keylines
- p7 News and bits.
- P12 REVIEW: EAntenna DUOSAT 3 and 5 element LFA Yagi.
- P14 Starting Over. Returning to the hobby and surveying the state.
- P16 144MHz QRP contest time again. Some hints for the shack.
- P18 Kits and Module- A DDA VFO Synthesizer up to 40MHz.
- P23 World of VHF: Not Real radio !! WSJT, sats and around the bands.
- P26 The 2018 GMDX Convention A report.
- P30 Vintage: VALVES.!! Reminisces by Ben Nock G4BXD.
Makes a interesting history of vacumn tube development.
- P34 HF Highlights: Feast and Famine.
- P40 Simple Construction for simple Circuits . Make a simple pcb.
- P44 Technical for terrified. Szlikai and Darlington.
- P46 Data Modes: RTTY Software comparisons.
- P52 The Morse Mode. More Bad Morse. Are you ashamed of using it?
www.cwops.org Join the academy at
www.cwops.org/cwacademy.html
- P54 What next: Mini Dxpediton planning.
- P57 In the Shop: Memories of fault finding equipment.
- P60 Buying Second Hand: The KW202 receiver line.
- P63 A DATA modes Primer. The "Signalink USB" and FT8 problems.
- P69 Letters. A new slant on Network Radio and a relax from licensing.

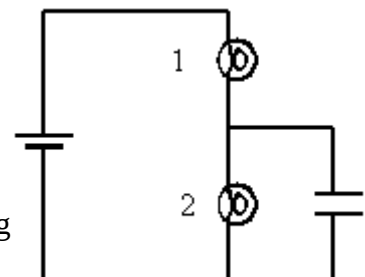


And that's all from the Practical Wireless magazine until July.

Puzzle: Using a battery, two bulbs, a capacitor.

(a) Predict what happens to the brightness of each bulb during the 10-s time interval immediately after the battery is inserted into the circuit.

(b) After the capacitor becomes charged, what happens over time to the brightness of each bulb when the battery is removed, leaving an open circuit.



5 Silicon Chip May 2018

Review by Craig VK3KG.

FEATURES AND REVIEWS.

- P14 Drone Air Taxis -Autonomous, Pilotless and soon.
- P24 Tiny Capsule measures, radios your gut gas data.
- P43 LTSpice Simulation: Analysing/Optimising audio circuits.
- P82 El Cheapo Modules 6: 35-4400MHz frequency generator. **

CONSTRUCTIONAL PROJECTS.

- P28 800W (+) Uninterruptible Power Supply (UPS)
- P36 Multi Use Frequency Switch
- P57 USB Port Protector- Just in case.
- P70 12V Battery Balancer.

FAVOURITE COLUMNS.

- P63 Servicemans Log
- P76 Circuit Notebook.
 - f. 20V 2.5A adjustable /current limiting.
 - g. Personalised speedometer for jogging.
 - h. Sunset switch discourages nocturnal animals.
 - i. Adjustable audio lowpass filter.

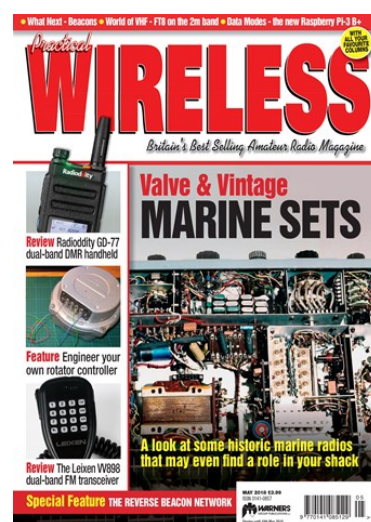
EVERYTHING ELSE.

- P2 Editorial comments.
- P4 Mailbag
- P88 Product Showcase
- P94 Sil Chip Online shop.
- P96 Ask Sil Chip
- P103 Market Centre
- P104 Advertising Index
- P104 Notes & Errata.



5 Practical Wireless magazine. May 2018.

- P5 This months Contents page.
- P6 Keylines:
- P7 Newsdeck
- P12 Review: Ailunce HD1 2/70cm DMR Transceiver.
- P16 Review: Leixen VV898 Dual band FM Mobile.
- P18 Review: The Radioddity GD-77.
- P23 HF Highlights. DX in the Cold. Mozambique.
- P26 JOTA Code Oscillator & Bat detector kit.
- P30 Vintage looks at RT-142, Type 86D, R105 recvr, and the AJAX sets.
- P34 World of VHF looks at 144MHz FT8.
- P40 Carrying on. The Simple Sixty [5262kHz.]
- P44 Data Modes. A New PI and a GPS. Want to Synchronise your rig ?
- P47 What Next. BEACONS. What are their uses.
- P50 Are you interested in our own variable band pass filter?
- P54 Emerging Technology. New radios and technologies.
- P57 Digging down into the Reverse Beacon Network.
- P60 Home made Rotator Controllers.
- P64 Coronal holes.
- P68 Hints and tips.
- P70 Letters.



73 Craig VK3KG

A frog goes into a bank and approaches the teller. He can see from her nameplate that her name is Patricia Whack. "Miss Whack, I'd like to get a \$30,000 loan to take a holiday."

Patty looks at the frog in disbelief and asks his name. The frog says his name is Kermit Jagger, his dad is Mick Jagger, and that it's okay, he knows the bank manager. Patty explains that he will need to secure the loan with some collateral.

The frog says, "Sure . I have this," and produces a tiny porcelain elephant, about an inch tall, bright pink and perfectly formed.

Very confused, Patty explains that she'll have to consult with the bank manager and disappears into a back office. She finds the manager and says, "There's a frog called Kermit Jagger out there who claims to know you and wants to borrow \$30,000, and he wants to use this as collateral." She holds up the tiny pink elephant. "I mean, what in the world is this?"

The bank manager looks back at her and says...

"It's a knickknack, Patty Whack. Give the frog a loan. His old man's a Rolling Stone."

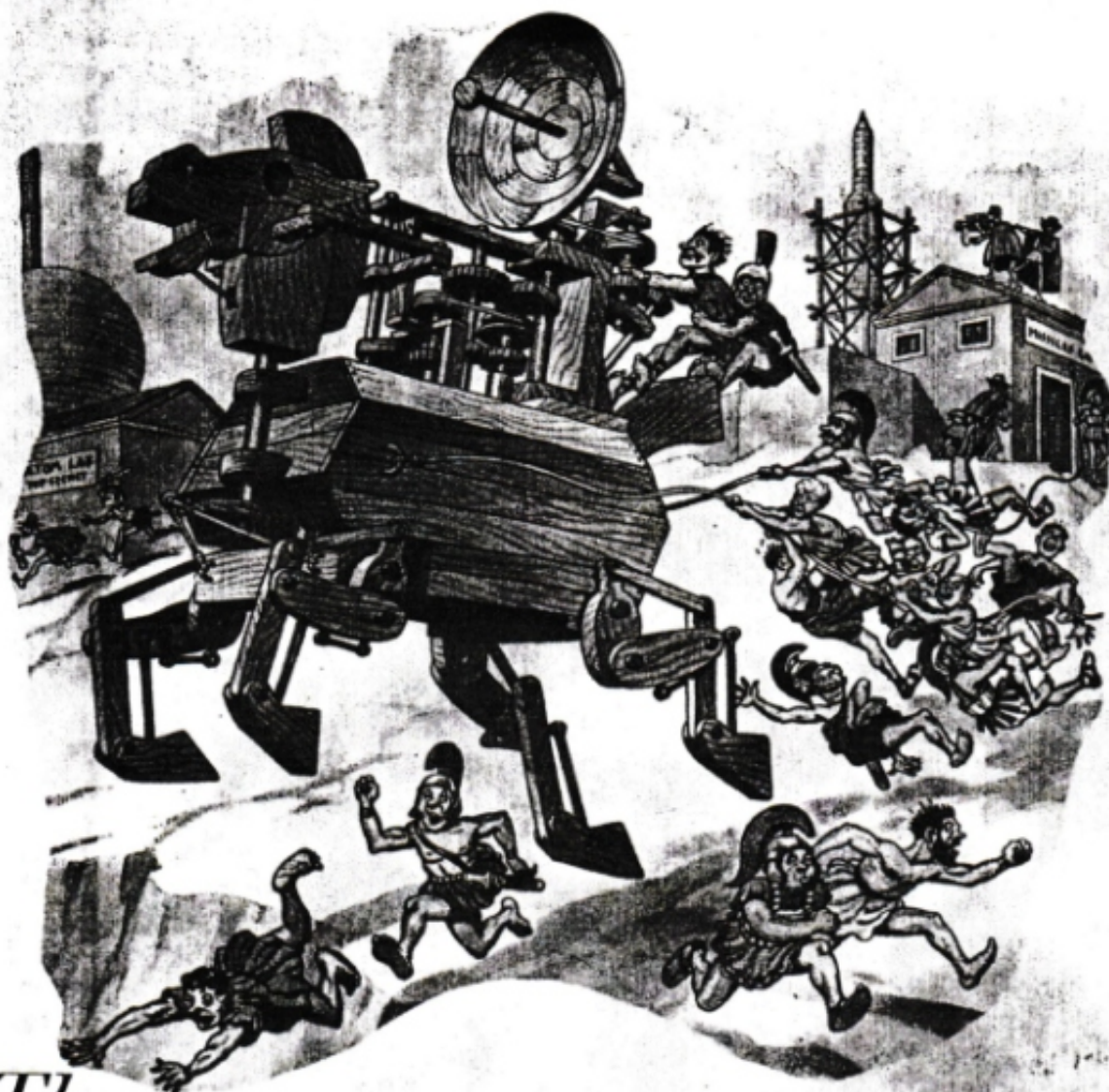
HF Net Controller Roster - 2018

DATE	OPERATOR	NAME	ALTERNATIVE	NAME
28-Jun-18	VK3GGG	MICK	VK3DRE	DOUG
5-Jul-18	VK3DRE	DOUG	VK3YFD	IAN
12-Jul-18	VK3AXH	IAN	VK3KG	CRAIG
19-Jul-18	VK3YFD	IAN	VK3GGG	MICK
26-Jul-18	VK3KQT	DAVID	VK3DRE	DOUG
2-Aug-18	VK3KG	CRAIG	VK3AXH	IAN
9-Aug-18	VK3GGG	MICK	VK3YFD	IAN
16-Aug-18	VK3DRE	DOUG	VK3KG	CRAIG
23-Aug-18	VK3AXH	IAN	VK3GGG	MICK
30-Aug-18	VK3YFD	IAN	VK3DRE	DOUG
6-Sep-18	VK3KQT	DAVID	VK3KG	CRAIG
13-Sep-18	VK3KG	CRAIG	VK3YFD	IAN
20-Sep-18	VK3GGG	MICK	VK3KQT	DAVID
27-Sep-18	VK3DRE	DOUG	VK3GGG	MICK
4-Oct-18	VK3AXH	IAN	VK3DRE	DOUG
11-Oct-18	VK3YFD	IAN	VK3AXH	IAN
18-Oct-18	VK3KQT	DAVID	VK3DRE	DOUG
25-Oct-18	VK3GGG	MICK	VK3KG	CRAIG
1-Nov-18	VK3KG	CRAIG	VK3GGG	MICK
8-Nov-18	VK3DRE	DOUG	VK3DRE	DOUG
15-Nov-18	VK3AXH	IAN	VK3AXH	IAN
22-Nov-18	VK3YFD	IAN	VK3YFD	IAN
29-Nov-18	VK3KQT	DAVID	VK3KG	CRAIG
6-Dec-18	VK3KG	CRAIG	VK3KQT	DAVID
13-Dec-18	VK3GGG	MICK	VK3DRE	DOUG
20-Dec-18	VK3DRE	DOUG	VK3GGG	MICK
27-Dec-18	VK3AXH	IAN	VK3YFD	IAN



Craig, VK3KG, in full flight as auctioneer.





The Real Story of the Trojan Horse

(Also known as Helen's Heliumatic Honey-Pony)

None of the books tell it this way, but the Trojan war was really brought to an end by millimeter-wave radar.

Fact is, the Spartans, headed by their King Menelaus, developed a transportable multi-function radar and fire-control system which they mounted ingeniously in a horse-shaped van to avoid recognition.

Now Helen, who some books say was seduced by Paris, the Trojan King, with the help of a spell cast by Aphrodite (while other books say she went quite willingly) both ends against the middle, but she maintained secure communications—through a compact VARIAN millimeter-wave Klystron HPA—continuously with Menelaus and directed his final march on the walled city. Just as Menelaus was preparing to unleash his devastating ordnance against his arch enemy Paris, Helen's heart did another flip-flop as she suddenly yearned for the life of Paris. Helen knew the Trojan missile system was no match for the Spartan's sophisticated active seeker system employing VARIAN millimeter klystrons. She promised to live happily ever after with Menelaus if he would not employ his superior technology but, instead, would leave the "horse" as a gift outside the city walls. We all know the widely-storied conventional ending.

The Trojans learned, too late that you always look a gift horse in the belly. Don't you be too late.—look VARIAN square in the eye and know you're getting the best in millimeter klystron technology.*

varian 

*Today VARIAN has the most state-of-the-art solid and CW millimeter klystrons available. This sale of the Greek Gods.

Thanks to Reg, VK3CAZ for these.

VARIAN MICROWAVE TUBE DIVISION / 611 Hansen Way / Palo Alto, CA 94304 / 415-493-4000



about waterloo... Shortly after Waterloo, the Duke of Wellington received a letter, postmarked St. Helena. It was from Napoleon. It read: "Excellency: I was amused to hear your recent remark that 'The Battle of Waterloo was won on the playing fields of Eton'. To have won an engagement in Belgium from a field in England, you must have been further back of the battle lines than I thought.

"The reasons for my defeat were two, and Eton was neither. In the first place, the radar broke down for two hours in the heat of battle. Not even a Napoleon can be expected to make radar work without Varian (CTNT's) *

"But I might easily have defeated you, faulty tubes and all, had I not been persuaded to partake of a bottle of Scotch on the evening before the battle. I have reason to suspect my drink was tainted. At any rate, on the day of Waterloo, I did not display my usual energy and decisiveness.

"It appears, in short, that you owe the battle to the bottle. (Signed,) N."

The Emperor received a brief reply by return boat. It read: "Excellency: In view of the fact that your loss at Waterloo appears to have been less a matter of Eton than of Drinking, I am withdrawing my original statement. I have replaced the following in its place, which I here submit for your approval:

'You can mix Scotch and Water
And Water and Scotch
But don't whatever you do
Make the mistake Napoleon did,
And mix Scotch and Waterloo.'

(Signed,) Wellington

varian

* VARIAN MAKES THE FINEST COMPLETELY TRADING
WIRE TUBES AND COILS OF ALL KINDS.

Thanks to Reg, VK3CAZ for these.