

Official Newsletter of the Ballarat Amateur Radio Group Inc. # 6953T ABN 44 247 200 143

VOLUME 35 ISSUE 3 March 2012



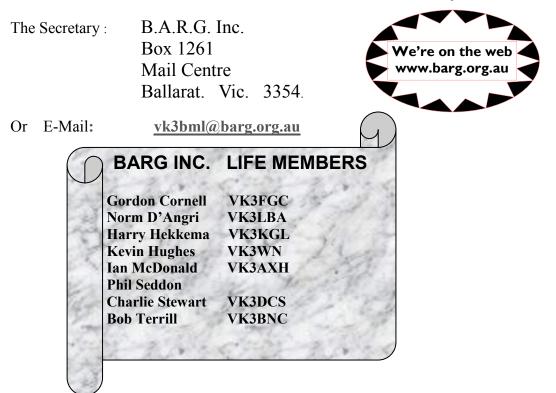


President:	Craig Cook	VK3CMC
Secretary:	Doug Ellery	VK3FDRE
Treasurer:	Bill Wells	VK3PAL

## NEXT MEETING - FRIDAY March 30, 2012 At 7.30 pm

## **Contacting us**

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



#### **CLUB INFORMATION**

#### **REPEATERS and BEACON**

VK3RWA*	(2 m Voice Repeater) (Uses CTCSS of 91.5 Hz to access)	147.100 MHz	Mt Ben Nevis
VK3RPC	(2 m Packet Repeater)	144.750 MHz	Mt Warrenheip
VK3RBU	(70 cm Voice Repeater)	438.475 MHz	Mt Hollowback
VK3RMB	(70 cm Beacon)	432.535 MHz	Mt Buninyong
VK3RBU-1	(2 m APRS Repeater)	145.175 MHz	Mt Hollowback
VK3RBT	(2 m Voice Repeater) (Uses CTCSS of 91.5 Hz to access)	146.650 MHz	Green Hill

\* **IRLP** Node 6310 using VK3RWA

CLUB e-mail vk3bml@barg.org.au.

CLUB NET VK3BML 3.608+/- QRM Thursday Nights at 8 pm E.S.T (Summer & Winter)

WIA Broadcast Sunday 11.00 am via VK3RWA (IRLP Node 6310

#### NEWS ITEMS Send to Harry VK3KGL

Or mail to Box 1261 Mail Centre BALLARAT 3354 or e-mail membermember.member.wk3kgl@barg.org.au

· • • • • • • • • • • • • • • • • • • •	
Broadcast Times and Dates on VK3RWA Repeater	♦ ♦
• Every Sunday at 11.00 am, WIA National News.	
Every Monday night at 9.30 pm, ARRL News	
Every Tuesday night at 9.30 pm, WIA National News Repeat	•
· • • • • • • • • • • • • • • • • • • •	

QST Report with Craig, VK3CMC



**Content review of current QST in library** 

**QST Review** 



QST Review February 2012

What to find this month.

- P4/5 Index this month.
- P20 Up Front: Look at an idea for a port/Emergency J pole antenna kit.
- P24 Correspondence
- P30 Avoiding problems in the RF chain.
- P33 Solar Panels for Amateur Radio Applications.
- P37 Totally GREEN. Moving Off the grid.
- P41 Double your Mobile Antenna Use.
- P43 Whats in QEX for Jan/Feb 2012.
- P44 Relay based Fully Break in TR switch for your Vintage station.
- P47 Link Coupled Tuners for HF.
- P51 Type N for the Dedicated user of UHF/PL-259 User.
- P52 Review: Electcraft KPA500 HF/6M Power Amp.
- P56 Review: Four 25A SMPS

Jetsream JTPS30M. QJE DX PS30SWII Powerwerx SS-30DV Ten-Tec 941.

- P60 The Doctor: Answers different questions posted in.
- P62 Short Takes: A Pico Keyer Plus.
- P63 Hands on Radio. Exp 109 PCB Layout Pt 3.
- P65 Hints & Kinks. AC Power fail alarm, Check Toroids on MFJ Analyser, make a T connector L-Match, Solder station timer, Mobilemic mount and a tool to remove ground rods/pegs.
- P68 Work the Space station on QRP. Also has some web site imfo.
- P71 Antarctic Activity week.Feb 20-26.
- P73 Beginners QRP Moonbounce Adventure.
- P77 OP-ED. A new signal reporting system.? Worth a read.
- P80 Project OSCAR is now 50Years old. Read about Amateur Radios first satelite package. Also <u>www.arrl.org/space-communication</u>
- P92 How's DX? HK0 Malpelo Island.
- P94 World above 50Mhz. When will 6M open for worldwide DX.?
- P98 Ecletic Technology: More Morse applications.
- P99 Vintage Radio: Wireless pioneer W2ZI Part 2.
- P104 75, 50 and 25 years ago. Index.
- P156 QST Index of Advertisers.

73 Craig VK3CMC



# Presidents Report

Craig - VK3CMC

Well another month has passed and we are a quarter way through the year. I appeal to you all to give due consideration to electing the next committee of management in July, and to think about offering yourself to serve on a position. Copies of nomination forms will be available at the General meeting and also on the last page of the newsletter.

We will be setting the subscription costs for the next twelve months at that meeting and the subs will be due for payment from that month until October. After a period of three months all mail outs will be confined to only those who have paid to that date.

The June newsletter will carry a renewal subscription form that we ask all members to fill in for updating the membership database at the same time as payment is made. The committee has decided to nominate a separate membership secretary who will handle all renewals at this time and will then produce a new data list of members and name badges will be printed.

The result of our selling tickets for the 2011 Rotary club raffle resulted in BARG gaining \$400 for our funds. Next year we will ask all members to take and sell at least one booklet so we can benefit further. Congratulations and thanks to those members who sold more than one book. Unfortunately none of our tickets were the major prize winners. Maybe next year. ?

The annual George Fowler auction coming up on Sun 27 May and is a chance to recycle bits and pieces and to assist the clubs finances and yet to have an entertaining day. If you have any preloved gear to sell we will sell it for you on a 10% commission basis. Feel free to donate other things for the club to sell also. We will have a soup and bread rolls lunch before the auction starts as normal.

We are again having a club field day activity to encourage some band operation but to also get as many members to take their gear into a field day position and work other club members. Details of the day are already posted on our web site. There will be a prize to member who gains the greatest number of points provided that they are in a field day location and not operating from home. Start preparing your gear now. Sunday 15 April is the date and the band is again the 40Metre band.

Has anyone noted an improvement in the quality of the signals on the IRLP link from the clubrooms yet.? The VHF link yagi has been repaired and there should be a much better signal now to the repeater. There had been reports earlier of some noise on the signal.

Our speaker for the March meeting will be David Martin VK3KQT and he will discuss smart meters and show us how they are meant to work and the communication system that has been designed for heir operation. In the light of recent reports in the newspapers and the doubts about their workings this will be an interesting talk by one of our club members..

Finally next months construction group meeting [Mon 9<sup>th</sup> Apr] we will be looking at possibility of a group activity in a Soft Ware Defined Radio (SDR) as discussed in AR magazine of Sept & Oct 2011.

73 Craig VK3CMC



# **BARG Equipment Loan Book.**

Please fill out book as you borrow items.

Maximum duration for loan is four weeks (meeting to meeting) and must be signed in and out again if you wish to re-borrow item for a further period.

Please report any malfunction or damage to the Secretary, preferably in writing or e-mail thank you.

This book is not for recording Library borrowings!

**B.A.R.G** Items for Loan.

Antenna Analyser MFJ269 HF-VHF-UHF Antenna Analyser MFJ249 HF/VHF Antenna Analyser VHF. Autek. Receiver Drake SSR-1. Receiver FRG-7. Transceiver TS-530. Oscilloscope BWD 509. Grid Dip Oscillator. Safety Belt. Antenna Gin Pole.

Bits and Pieces Page

The Committee is looking for the clubs safety climbing harness that normally is kept in the rooms. If you have borrowed it could you please return it as soon as possible as it is required for a job now.

Thanks again to the anonymous person who donated again this years prize money for the Homebrew Section of our Hamvention. Thank you BARG Committee.

Our field day contest is getting closer......Get your gear ready..... April 15.

#### QST Review June, 1971

- P11 HIGH Performance 2 Meter Convertor by Doug Demaw W1CER.
- P17 First steps in RTTY. The Local Loop Circuit.
- P18 Putting a Spark Plug on 2Metres.
- P22 Converting the GE MTS Progress Line Transceiver for Amateur use.
- P27 Beginners & Novice. New life for the American Five
- P32 The Helix-Rope Antenna on Vinyl Plastic rope covers 80 to 10Metres.
- P34 Motor speed control for Power tools using a Diac device.
- P36 Gimmicks & Gadgets: a 42foot crank up Fold Over Tower
- P42 Review of Johnson 504 and the 540 VHF transceivers.
- P46 Review of Henry Radio Kenwood pair. R599, T599.
- P58 Study Techniques for passing exams. Still current ideas.
- P96 The YL's page. Interesting how long we have had YL operators.
- P98 World above 50 MHz

Craig, vk3cmc

A very interesting project is coming up at the next Project Night. In the pipeline is a very basic and simple SDR (Software Defined Radio). Can be single or dual band. It's connected to your laptop or home computer. Very low cost and should be a project not to be missed. Follow this link to a 7 minute information video. <u>http://www.youtube.com/watch?v=mfdgxZPc2BI</u>

#### DON'T MIS NEXT PROJECT NIGHT.

#### APRIL 9, 2012

#### ALWAYS THE SECOND MONDAYNIGHT OF THE MONTH AT 7.30pm.

Volume 35, Issue 3

BARG News – March 2012

#### Insert by REG, VK3CAZ

# An inventive ghost story for Christmas

Ignoring spaces and punctuation, the following festive ghost story has the names of 20 famous inventors and innovators hidden randomly within it. We'll give you the first: 'Stephen, son', inventor of The Rocket. That's an easy one. Now, can you find the other 19 using the list of inventions at the end as a clue to their surnames?

by Mike Barfield

'It happened on a Boxing Day, the Feast of Stephen, son.' said the old sad man, his wrinkled face turned towards the fire. His companion, a young engineer, looked up in surprise. He'd had a good year and was spending the last day of it sitting with residents at the Old Inventors Home. Of all the Old Inventors. his current charge was the oldest and was said never to talk. The old man stared at him, his face looking suddenly fuller, his eyes sparkling: 'Are you ready, son, for a spooky story? The young man nodded, hooked by his gaze. Some residents in a nearby bay listened too.

'Many years ago,' the old man continued, 'I had a friend, a fellow inventor called Max. Well, I say 'friend', rival would be a better word. While I struggled to perfect my prototype edible chocolate fireguard – a



boon for all polar explorers – he patented invention after invention, all co-authored with a mysterious and unseen 'S. A. Tan'.'

'A Chinese gentleman?' asked the young man. 'Possibly,' the older man replied. 'He had spent some time in a foreign land, and kept a hideous carved idol by his workbench in the form of a horned goat. He also ate only raw liver and pickled walnuts. Strange grub, I know, but it seemed to give him inspiration...'

'Indigestion, more like!' laughed the young man. The old inventor did not smile but resumed his story. 'Well, our paths diverged. I, son, continued to struggle. He grew rich and would swan around the globe. Then one Boxing Day, as if by magic, he suddenly materialised in my tiny bare flat, walking right through the wall! The wall, I should say, was solid brick... He was like a ghost, and there in his hand was the idol! He held it out to me and pointed:"You! You," he shouted, "You shall die selling nothing without this idol. It generates largesse, but it will bond you to Satan. With him you shall invent anew, tons of ideas will come to you - and all this in return for your mortal soul!"

The young man looked shocked: 'A pact with the Devil! What did you do?'The old man smiled: 'I saw right through his evil scheme to swap my soul for his. I seized the idol from him and flung it screaming into the open fire.' At this the fire in care home flared and subsided again. Perspiration broke out on the young listener's brow.'And then?'

The old man turned back to look at the fire. 'Neither he nor the idol were ever seen again, while I became rich selling novelty firelighters to Satanists. The idea came to me immediately afterwards.'

The young man's gaze was suddenly drawn to a strange goat-shaped wooden figure on the mantelpiece above the fire. 'That's the idol!' he cried, 'You made the whole thing up!'The old man smiled for a final time: 'Son, if you are going to lie, lie big,'he grinned.

#### The Inventions

Wind-up radio/Diesel engine/ Noise reduction/Bagless vacuum cleaner/Phonograph/ Lightning switch/Geodesic dome/Rubber vulcanisation/ Iris diaphragm/Polaroid/ Nitrogen fertiliser/Colour photography/The assembly line/Reflecting telescope/Toy Cube/Incandescent lightbulb/ Induction motor/Bouncing bomb/Airplane

If you find them all, email your list to etc@mikebarfield.co.uk.

#### **Patently Obvious**

Christmas is a brilliant invention, but one for which the patent was never registered. However, Patentscope, the UN's patent database, has millions that were. Two of the patents below were found with the search words 'Merry Christmas, Happy New Year'. The third is bogus. Can you spot it?

a) Multi-Season Pest Controller A system for controlling indoor pests, such as moths, in which the poison delivery device is visually coded to indicate the correct season for its use. These cues may take the form of a snowflake for winter, a sun shape for summer and so on. Words may also be included, such as 'Merry Christmas' and 'Happy Spring', or seasonal odours, including pumpkins, tulips and gingerbread. **b) Roasted Turkey Adornments** Food safe, re-usable, moulded plastic parts that can be used to decorate a poultry carcass, such as that of a turkey. The pieces may be facial features, such as eyes, ears and lips.

A whole bird can be decorated as a pilgrim, a snowman, Father Christmas or the Easter Bunny. c) Chewing-Gum Mailer A specially adapted greetings card to allow chewing gum to be sent through the post. If sent at Christmas, the card may be red in colour and in the shape of a candy cane. The gum is held in a transparent window and spaces are provided for postage, the address and a message such as 'Merry Christmas and a Happy New Year!'

(Answer on the right)

#### Free *E*&*T* rib-ticklers for your Christmas crackers! What did Santa say to the three hydroxyl radicals?

HO HO HO.

What has antlers, can fly and goes 'blip...blip...'? **Rudolphthe red-nosed RADAR**. What was the astronaut's favourite Christmas ditty? **Good King Weightlessness**. What did the Earth's core say to the mantle?

Merry crust-mass! Which carol do site safety managers sing at Christmas? The holly and Hi-Vi.

#### **Clerihew Corner**

Sir Edmund Halley Studied star charts daily. (Fortunately, Sir Edmund Halley Was only very occasionally poorly.)



For a chance of winning a signed print, send your own classy clerihew to etc@ mikebarfield. co.uk

# BARG HF FIELD DAY SUNDAY 15<sup>th</sup>. APRIL 2012.

Building on last year's event another fun day for BARG members is planned for Sunday 15<sup>th</sup> April. We hope that you will take the opportunity to operate portable at the place of your choice for as long as you want and even invite friends to join in. There are a few rules and to top it off there is a nice prize offered to the winning station which will be presented at the April BARG meeting. The winning station will have to have participated as a "field station" and not deriving its power from the mains! Field stations can score from any other amateur stations. If operators can provide photos of their field stations for inclusion in the BARG News this will certainly add to the spirit of the day.

.Event. BARG HF Field Day.

Band 40m. 7050khz to 7100khz.

Mode. Voice Modes.

Time. 10.30am – 3.30pm.

-Members may operate as long as they wish within the above time slot and may change portable QTH as required but must be shown on Log sheet.

- -Members exchange numbers as per standard contest procedure, eg 59001 as the first contact including call sign worked, time and frequency.
- -Score 5 points per contact with each club member.
- -Score 1 point per VK3 non club member.
- -Score 2 points per VK1/2/5/7 non club member.
- -Score 3 points per VK4/6 non club member.
- -Score 1 point per DX contact.
- -Score 6 points for contacting the club station VK3BML.
- -For scoring purposes only one contact per hour per station is permitted.
- -Record time of contact but no grid square information is required.
- -Transceiver power to be shown along with antenna details.

-Log sheets are to be forwarded to Harry, VK3KGL, 29 Cromwell Street Sebastopol, 3356, and showing your claimed score.

Your log sheets can be submitted electronically, posted, or hand delivered.

All logs must be submitted by 5pm on Wednesday 25<sup>th</sup> of April 2012.

The decision of the adjudicator will be final and no correspondence will be entered into.

There will be a prize for the winning club station and will be presented at the April BARG meeting. The committee is considering an annual Trophy for this event so your input would be most welcome.

Log Sheets are available on the BARG WebSite.

# BALLARAT AMATEUR RADIO GROUP LOG SHEET

Call Sign ...... Portable QTH ..... Page .....

TIME EST	STATION	RST RECEIVED	RST SEND	FREQUENCY	NAME	COMMENT	POINTS