

# BARG News



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

**VOLUME 31 ISSUE 4 APRIL 2008**



President: Bob Pitcher VK3NBV  
Secretary: Ian McDonald VK3AXH  
Treasurer: Gordon Cornell VK3FGC

**NEXT MEETING - FRIDAY APRIL 25, 2008**

**At 7.30 pm**

## 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 1261  
Mail Centre  
Ballarat. Vic. 3354.



Or E-Mail: [vk3bml@barg.org.au](mailto:vk3bml@barg.org.au)

## BARG Inc. Life members

Kevin Hughes	VK3WN
Ian McDonald	VK3AXH
Charlie Stewart	VK3DCS
Bob Terrill	VK3BNC
Jim Wright	SK (VK3CFB)
Norm D'Angri	VK3LBA
Phil Seddon	Formerly VK3AQM
Stan Widgery	SK (VK3SE)
Maurice Batt	SK (VK3XEX)
George Small	SK (VK3DKJ)

## CLUB INFORMATION

### REPEATERS and BEACON

#### D—STAR

<b>CALLSIGN:</b>	<b>MODE:</b>	<b>FREQUENCY:</b>	<b>TX OFFSET:</b>	<b>USER SETTINGS</b>
VK3RBA	Analogue FM	439.275 MHz	-5.0 MHz	CTCSS: 91.5 Hz
VK3RBA A	Digital Data	1298.700 MHz	Nil (half duplex)	URCALL: VK3RBA RPT1: VK3RBA A RPT2: not in use
VK3RBA B	Digital Voice	439.9875 MHz	-5.0 MHz	URCALL: CQCQCQ RPT!: VK3RBA B RPT2: not in use

VK3RBA	(Voice)	146.750 Mhz	Mt Buninyong
VK3RWA	(Voice)	147.100 Mhz	Mt Ben Nevis
VK3RPC	(Packet)	144.750 Mhz	Mt Warrenheip
VK3RBU	(Voice)	438.475 Mhz	Mt Hollowback
VK3RMB	(Beacon)	435.535 Mhz	Mt Buninyong
VK3RBU-1	(APRS)	145.175 Mhz	Mt Hollowback

**IRLP** Node 6310 using VK3RRWA

**CLUB e-mail** [vk3bml@barg.org.au](mailto:vk3bml@barg.org.au).

**CLUB NET** VK3BML 3.610+/- QRM Thursday Nights at 8 pm E.S.T (Summer & Winter)

**WIA Broadcast and Club Call Back.** Sunday's 11.00 via VK3RWA (IRLP Node 6310)

#### **NEWS ITEMS Send to Harry VK3KGL**

Or mail to Box 1261 Mail Centre BALLARAT 3354 or e-mail [vk3kgl@barg.org.au](mailto:vk3kgl@barg.org.au)

#### **Broadcast Times and Dates on VK3RWA Repeater**

Every Sunday at 11.00 am, WIA National News, followed by VICLINK  
Every Monday night at 9.30 pm, ARRL News  
Every Tuesday night at 9.30 pm, WIA National News Repeat  
Every Wednesday night at 9.30 pm, Spectrum Tasmania News



VK3AXH

## **The Secretary's Page**

### **Minutes of BARG General Meeting March 2008**

**Welcome:** Meeting opened by President Bob VK3NBV at 7:32pm

**Visitors:** Richard Hosking VK3JFK, Peter Wilmot VK3TQ, Paul Engler VK3XDE

**Apologies:** VK3HRZ, VK3CIS, VK3HHK, VK3ADX, VK3PAL, VK3WB, VK3WL  
VK3FGC

Minutes of the February 2008 General Meeting as per the Newsletter.

Moved VK3KQB/VK3BNC Carried

#### **Secretary Report:**

Correspondence: Incoming – Confirmation of Hamvention booking, Email confirming QST subscription, Letter of thanks from Brian VK3KQB and XYL Beryl re the recent loss of their daughter Robyn  
Outgoing – Payment to WIA for BARG's liability Insurance

Moved VK3GND/VK3CAZ Carried

### ***Reports***

Education – Craig VK3CMC reports that a foundation course will be run on April 12/13 with 2 candidates attending.

Beacon – The club is still waiting for news re the 23cm beacon licence. It was suggested contact be made with Peter Young a WIA director re any WIA licensing issues – Secretary to follow up.

Radio Modernisation Project – David VK3UR reports that at the clubs last working bee issues relating to interference had been resolved with the remote base facility and that club members were now able to use this facility by making application to David.

John Moyle – The members that attended the weekend near Linton had a great time and special thanks were given to our President VK3NBV and Peter VK3FPOL for their food catering skills. In all a great weekend and all were looking forward to next year's event.

Ammenities – Doug VK3VBA reports that a bus is planned for the trip to The Moorabbin Hamfest in May and members wishing go on the bus should contact Doug as limited seats available. Doug also mentioned the possible availability of polo neck shirts with the club logo etc costing around \$16.75 however there would be setup costs of approx \$100. It was suggested the committee would discuss this at its next meeting. Tonights supper will be sav's tea and coffee at very little cost to the club.

Tenders – The successful bidders were VK3CMC, VK3KCA and VK3ADE.

## General Business

VK3RWA will be off the air pending upgrade from Sunday 30<sup>th</sup> March. for approximately one month. Roger VK3ADE and John VK3AIG to visit Ben Nevis site to pick up equipment.

A new auctioneer for the George Fowler Auction is required for this years event.

The club is still looking for one or more of its members to be this year's coordinator/s for the Hamvention on Sunday 26<sup>th</sup> October

The first part of the meeting closed at 8:00pm to allow DSTAR presentations from Icom and club member David VK3UR's and a proposal for BARG to become involved in developing a DSTAR installation.

At the conclusion of the presentations the meeting was reconvened to discuss by the club membership the willingness of BARG's participation to establish a 70cm DSTAR installation on Mt Buninyong.

Motion: That BARG establish and maintain a 70cm DSTAR repeater system on Mt Buninyong. The repeater is to be completed in two stages as set out in the proposal

Dated 15<sup>th</sup> March 2008

Moved David VK3UR/VK3KQB Carried

The meeting closed at approx 10:05pm

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### **BARG D-Star Project:**

Peter Willmott VK3TQ, Icom Australia's Manager of Amateur Radio, and Richard Hoskin VK3JFK, the National D-Star Coordinator, gave an informative presentation and demonstration of D-Star to around 30 members at the March General Meeting.

Following the General Meeting David, VK3UR, presented a proposal for BARG to establish a D-Star repeater system in Ballarat. The proposal considered factors including analysis of possible repeater sites, preferred radio band of operation, internet connectivity options, maintenance and costs to implement the project. The recommendation was based on co-siting a 70cm D-Star repeater with the 2m FM repeater, VK3RBA, and utilise an existing UHF antenna and feedline, courtesy of WICEN Victoria and a cavity filtering system courtesy of Paul, VK3XDE. This would effectively reduce the total cost from over \$7,000 to under \$2,000. The members voted unanimously to accept the proposal and establish / maintain a 70cm D-Star repeater system.



Peter, VK3TQ, then announced that Icom Australia's Managing Director, Takashi Aoki, believed that BARG was a progressive and innovative radio club and wished to provide amateur radio operators in Ballarat and the Western Districts with an Icom D-Star 23cm Fast Data Repeater, at a very attractive price, to complement the D-Star 70cm Digital Voice Repeater. The 23cm Fast Data Repeater will enable data to be transferred at rates of up to 128kbps. This generosity was met with applause from the membership. To further complement the club's commitment to establish a D-Star repeater system it was announced that Ross Keogh, VK3MY, from Strictly Ham had very kindly donated a Diamond F1230 23cm vertical antenna to be used with the 23cm Fast Data Repeater.

Following a number of discussions with the WIA National Technical Advisory Committee and application for additional frequencies for the VK3RBA licence through the WIA, David VK3UR, Roger VK3ADE, Richard VK3JFK and Paul VK3XDE met at the Mt Buninyong repeater site on Saturday, 12<sup>th</sup> April. The team installed the Icom D-Star Controller, Icom D-Star 70cm Digital Voice Repeater, 70cm cavity filters and UHF multi-coupling equipment so that the antenna can be used for both the D-Star repeater a new 70cm FM repeater, for WICEN Victoria, and other UHF equipment into the future.



After a few minor problems were overcome, with the antenna multi-coupling equipment, tests were successfully conducted across the new D-Star repeater with Ernie VK3DET who was only using his hand held radio with a rubber ducky inside the house at Enfield. Tests were also conducted on the new 70cm FM repeater with Shaun VK3FNLY in Nerrina.

The team also installed the Icom D-Star 23cm Fast Data Repeater, along with the 23cm antenna on a temporary pole 6m above the ground, however tower rigging works are still required to install the antenna in its final position for the D-Star 23cm Fast Data Repeater.

From BARG approval to proceed with the D-Star project, the time to purchase the D-Star repeaters from Icom, configure the 2 repeaters, prepare the site, have the D-Star 70cm repeater installed and tested on its permanent antennas and have the D-Star 23cm Fast Data repeater installed on a temporary antenna, pending rigging works, was 15 days.

Work will commence shortly to provision an internet connection at the repeater site so that the D-Star Gateway (VK3RBA G) can be implemented allowing interconnection of the Ballarat D-Star system to the world-wide D-Star network.

Predicted radio coverage maps, for the Ballarat D-Star Repeaters, and other information about D-Star can be found at the Australian D-Star web site at: [www.dstar.org.au](http://www.dstar.org.au) Initial testing indicates that the radio coverage maps are quite accurate.

Frequencies and settings for the new D-Star and analogue FM repeaters are:

Callsign:	Mode:	Frequency:	Tx Offset:	User Settings:
VK3RBA	Analogue FM	439.275 MHz	-5.0 MHz	CTCSS: 91.5 Hz
VK3RBA A	Digital Data	1298.700 MHz	Nil (half duplex)	URCALL: VK3RBA RPT1: VK3RBA A RPT2: not in use
VK3RBA B	Digital Voice	439.9875 MHz	-5.0 MHz	URCALL: CQCQCQ RPT1: VK3RBA B RPT2: not in use

David Tilson, VK3UR



### RAFFLE NEXT MEETING

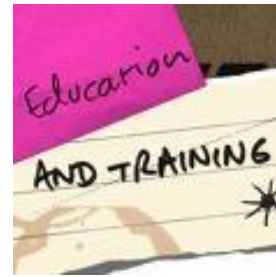
A raffle will be held at our next meeting, this is a genuine raffle good prizes, to make it easier for organizers bring along \$ 1-00 dollar coins.

Three prizes to be won.

Many thanks Doug 3vba



## EDUCATION with Craig, VK3CMC



**EDUCATION:** For all BARG club members.

For the club to run training and assessments for the Foundation licence we need to have at least a minimum of three people who are appropriately accredited as either WIA examiner or Learning Facilitators [previously called Invigilators]

To be able to run these learning assessment we must have two accredited people to be present at the same time. The Learning Facilitator assists the WIA Assessor during the assessment stage as well as provide technical and practical training classes. At the moment we have NO ONE suitably accredited. If the club is to provide this ongoing facility we need to address this matter NOW.

Under rules of the WIA Exam Service both people present at an assessment must be appropriately registered. Details are found in the document on WIA web site called "WIA Learning Facilitator Instructions"

Learning Facilitators are required:

1. to hold a Standard or Advanced licence.
2. have access to the Internet.
3. use Email and have an Email address.
4. be nominated by their club.
5. be a member of the WIA.

"To be qualified a candidate for Learning Facilitator must have successfully completed the subject MEM15.2 Apply Quality Systems, which is a unit of competency taken from a Nationally accredited training program, or equivalent, and demonstrated a clear understanding of the WIA Assessment process, as set out in the Assessment Instructions." This training will be provided either online or in a formal class session that will be arranged. Those previously registered as WIA Invigilators are welcome to apply as well as others who relate to the criteria listed. Facilitators are required to register for a Working with Children accreditation.

Please consider this matter and contact me if you want to ask any questions or to offer to apply. I will supply you with the forms required. The process of qualifying for MEM15.2 is not time consuming and can be done in about four hours work.

73 Craig  
VK3CMC  
5342 2448  
[VK3CMC@BARG.org.au](mailto:VK3CMC@BARG.org.au)

73 Craig VK3CMC



## BARG Radio Modernisation Project

By David, vk3ur

After a few unfortunate delays the BARG Radio Modernisation Project is nearing completion. The Kenwood TS-480sat HF transceiver is now available for use, both at the club rooms and across the internet, by club members on 80m, 40m, 20m, 15m and 10m.

Jeff, VK3PAP, and his team of helpers did a sterling job modifying the Nally Tower, replacing the dead rotator with a new Yaesu G800 rotator, replacing the aged TH3JR with a TET33 (10m, 15m & 20m 3 element yagi) and installing the Rippletech TZ-RD3 Rotary Dipole for 30m, 17m and 12m.

We experienced some initial RF feedback problems in the shack but this was quickly taken care of by Bob, VK3BNC, and Roger, VK3ADE, through some additional bonding of equipment to the station earth.

Works required to complete the modernisation project comprise:

- Installation of the 6m yagi and 160m vertical;
- Interfacing of the Yaesu G800 rotator to the computerised control system; and
- Implementation of the automatic antenna switching system, designed by Roger, VK3ADE, which will allow additional antennas to be connected to the radio that will be selected automatically based on frequency.

At the time of writing about 10 club members have been allocated unique accounts to access the radio station via the internet, with good reports of station performance to date.

All that is required to access the system is a Windows based computer (Win 98 SE or later), a sound card, microphone, speakers and preferably a broadband internet connection.

BARG members wishing to utilise the station remotely should send an email to: [remotebase@barg.org.au](mailto:remotebase@barg.org.au)

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### From our 'Roving Reporter'

Just a reminder that the Ben Nevis repeater was removed from service last Sunday, March 30.

There is a new repeater to replace the existing unit courtesy of John VK3TJW and Ian VK3AXH, this will be put together with the cavities at the club rooms in the near future and given a soak test for several weeks. If all is well it will be returned to service around the end of the month.

Regards.  
Roger VK3ADE





## QST Report with Craig, VK3CMC

Content review of current QST in library



### Review QST 2008-3 Mar

**This month is the Antenna Issue.**

- P30 New Spin on the Big Wheel. [Also known as Clover Leaf]
- P35 Portable PSK has finally arrived.
- P39 Just got my License and a Used HF Transceiver- Now what.?
- P43 A Station for the 500Khz Experiment.
- P46 REVIEW. Yaesu FT950 HF & 6 M Transceiver.
- P51 REVIEW. Array AS-AYL-4 Rx antenna.
- P53 Technical Correspondence.
- P56 HF Antennas and Restricted living spaces.
- P59 Happenings...Solar cycle 24 has arrived.
- P63 The Doctor is In. Answers your questions.
- P65 Short Takes looks at QSO Wizard for Mac OS.
- P66 Hands on Radio Exp 62 About Resistors.
- P68 Getting Antenna cables into the House.
- P69 Getting on Air. The First Contact.
- P71 Hints & Kinks. Add 60M to the MFJ207 Analyzer
- P85 Hows DX. YK9SV Dxpedition to Syria.
- P87 The World above 50Mhz. Station Automation Pt1.
- P90 Public Service. Simply Simplex.
- P92 Old Radio. Nostalgia in old broadcasts.
- P94 WRC The rest of the story.
- P95 Eclectic Technology. PropNET another software program.
- P101 Hamspeak. A Glossary of words in this edition..

Well that's all there is for this month, happy reading.

73 Craig VK3CMC

### **D – STAR Project**

As part of a longer term project by Wicen along with the assistance of BARG a new UHF Analogue repeater was installed at Mount Buninyong. We thank Paul Engler (VK3XDE), Richard Hoskin (VK3JFK) and David Tilson (VK3UR) for the mammoth effort today to effectively install 3 repeaters (David UR will detail the others).

The details of the new Analogue Repeater are.....

439.275Mhz with 5.0MHz negative offset. Because this repeater is on a frequency susceptible to LIPD's it is necessary to transmit a 91.5Hz CTCSS tone to access and maintain access to the repeater. The repeater's antenna is on the same tower as the VHF Buninyong repeater.

The repeater is on air now and is available for general use by all and sundry.

Regards.

Roger VK3ADE



## QST Report with Craig, VK3CMC

Content review of current QST in library



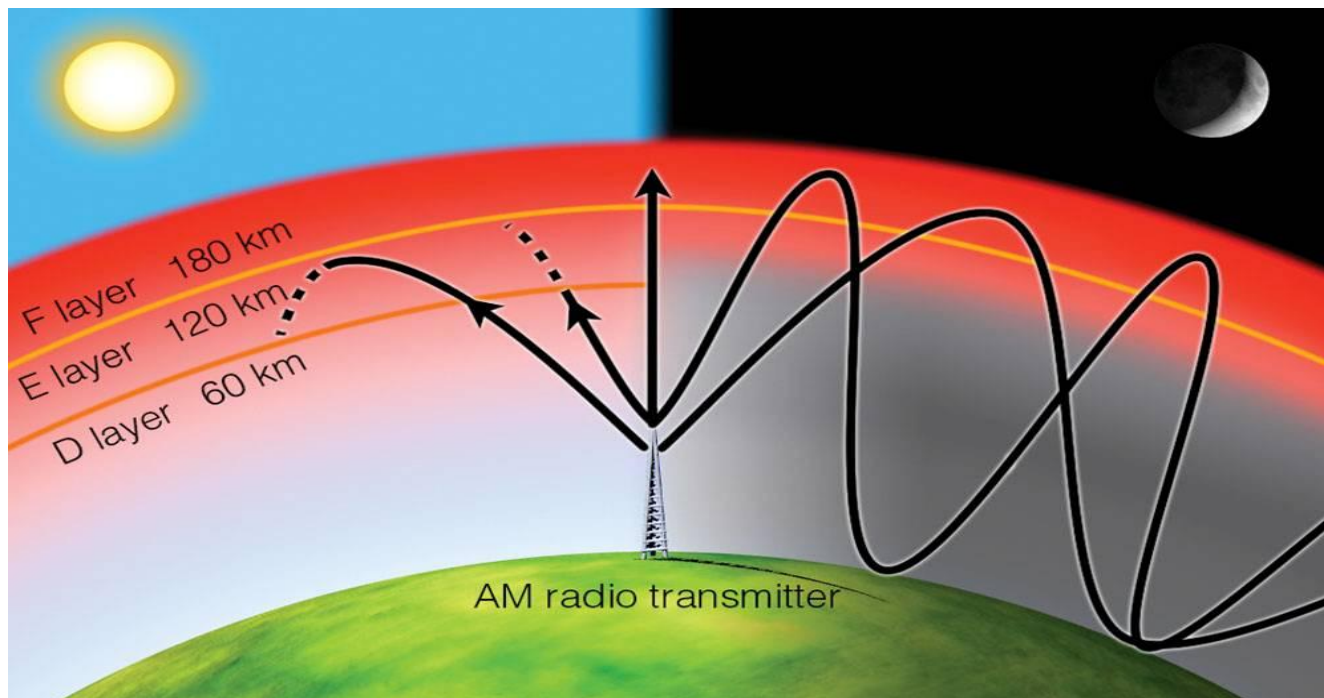
### Review QST 2008-4

- P30 Lightning: Understand it or Suffer the Consequences.
- P35 Outpost: Packet Radio for Emergency Messaging.
- P38 Convert a Heathkit SB-220 Amp to 6Meters.
- P41 REVIEW. Elecraft K3 HF/6 Meter Transceiver.
- P45 REVIEW. Kenwood TH- $\{G\}$  Dual band Handheld.
- P51 Dxpedition to Scarborough Reef.
- P55 PAVE PAWS Radar and the Amateur 70cm Band.
- P57 AF Enhancement through Microphone, Antenna and Speaker design. Really looks at old mic responses.
- P63 Public Service: The ALCO 85 Story.
- P66 The Doctor. Answers about antennas, DX prefix, Hi/Lo mic impedances, Centre fed Zepp antennas.
- P68 Short Takes. TigerTronics SignaLink USB Interface.
- P69 Those Type N Coax Connectors.
- P71 Hands on Radio. Exp #63 About Capacitors.
- P72 Repair & Upgrade Low cost Geiger Counters.
- P75 The Switcher. Control box for Boat Anchor rigs.
- P77 Hints & Kinks. Various ideas.
- P80 Eclectic Technology. Narrow Band Emergency Messaging System. NBEM.
- P96 World Above 50Mhz. Station Automation Part 2.
- P89 Hows DX. St Barts in The Caribbean. [FJ]
- P92 Old Radio. The Gernsback Story.
- P94 Microwavelengths. Isolators and Switches.
- 101 Hamspeak. A Glossary of used terms this edition.

And then Adds, Adds and more Adds.

Well that's all there is for this month, happy reading.

73 Craig VK3CMC



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## Propagation Report April 2008

### **HF Bands:**

Again this month reported activity has been a bit low however Neil VK3GND is having some success with his antenna setup particularly for 160 and 80m where some good contacts have been made. I hear Neil is continuing to plug away with his previous setup so lets hope he has some success.

### **VHF and Above:**

Little activity in terms of DX this past month. There have been some contacts on 2m into VK1/5/7. Brian VK3KQB reports having an aircraft enhanced qso with Chris VK2DO at 5x3 on 144.2 this past week.

Kevin VK3WN is working hard to get his 2.4G setup working and is not far away from working. Some tests were done on this band from Ian VK3IDL's qth and Ian VK3AXH at Mt Buninyong to VK3XPD in Melb and Mike VK3AAK on the Mornington Peninsula. Good signals were heard from Alan VK3XPD. Ian VK3IDL now has his amplifiers working and delivering around 10 watts output.

### **Construction Group:**

Progress in underway with the HF SWR bridge with 7 members busy making pcb's and now having most of the components are now getting stuck into putting it all together.



Bob, VK3NBV

## **A few words from the President.....**

G'day All,

Seems we have now hit Autumn and winter coming along we need a few radio activities that can be done in the comfort of being indoors.

We now have a lot of repeaters to keep us interested in the hobby. New and replacement ones at that.

We now have the new technology of D STAR running up on Mt Buninyong in the form of 2 new repeaters.

Frequencies have been sent out in other emails.

Ben Nevis has a new repeater on trial at the clubrooms at the moment, try it out if your in the Ballarat area. Hopefully this will be being attached to Mt Ben Nevis next weekend.

Don't forget Mt Hollowback idling away there, where you will find Clem, Ted and Stewart. By the way Stewart could hear the new Ben Nevis repeater running at the clubrooms from his home location of Wheatsheaf. That's almost DX. I think.

I would like to thank all the members involved in these projects, most of us that are watching from the sidelines don't realise the hours and days that go into these projects. It's not only time but personal cost as well. We are very lucky to have these people available that will do these activities for others in our Amateur Community.

The beacons will also be up and running soon with the frequencies now allocated..

Coming up in May is the George Fowler Memorial Auction on Sunday 25. This is where you bring along all your used and unloved gear to sell and make some money for yourself and the club. Now with the money you've made you can buy someone else's used and unlo..... etc etc etc!! Of course next year ,you will have the chance to buy back all that preloved gear again.

We are the leaders in the reuse society. Governments have just thought this idea up, but we have been there for years...

Looking for someone to act here as auctioneer. Please?

Our annual Hamvention is coming on October 26, I am still looking for a person to come forward and head up the running of this major event. If you would like to do this challenge please contact Ian AXH or myself.

We discussed a few meetings ago having a coffee morning get together once a month, I was supposed to set Date Time and Place. We will try this out for a while.

I have chosen Beechworth Bakery in Grenville Street, Ballarat Central next Thursday April 24 at 10.30am. There is plenty of parking for cars and pushbikes there including a backyard. See you there.

Coming out of the committee meeting was the possibility of raising club membership fees from 30 to \$40 at the August AGM. Discussion will take place about this on Friday night (ANZAC DAY).

Well that's it for this month, see you at a function soon,  
73's Bob Pitcher. VK3NBV..

## **Breakings news this week. !!**

The small sleepy hollow of Cape Clear near Ballarat has now erected its long awaited light house tower.

Although no ocean liners have been seen nearby for some time the dangerous reefs and rocks will soon be installed to make sure that ships keep well clear. The tower was erected last Saturday after much planning and contrary to popular thought Telstra WILL NOT be using it for its mobile phone services. Keep a weather eye out for this structure as you pass through and maybe stop and refresh yourself in the Lions park or at the hostelry opposite. The nearby store can also cater for hunger and thirst. A navigation light is soon to be installed but will not be encoded using Morse code. The nearby fire shed may yet get an antenna in place.!

The site of the "Original" Cape Clear light is still up on higher ground in the vicinity of Craig VK3CMC but his flashing light hasn't yet been seen from afar. Maybe next summer when the bands are open again on higher frequencies.

Better watch out for the smaller pirate ships that are coursing about the country side also.

Craig, vk3cmc



## **COFFEE MORNING**

**Beechworth Bakery, 10.30am**

**Thursday 24<sup>th</sup> April. Grenville Street.**

**Come along have a talk and a cuppa.**

**Plenty of Parking Room.....**