



# GATEWAY

**The Official Magazine of the Gippsland Gate Radio & Electronics Club Inc.**

## March 2015 From The President

Well, where do I start this month. As I write this article, the GGREC members are just packing up their camp site at Eildon. It was great fun tuning into 40 metres on Saturday and Sunday night to chat with the happy campers. I think it was the greatest number of Club members talking on their HF radios that we have had for a long time.

The March Prac night was very well attended by members. Rob, V<sub>k</sub>3BRS gave a demo of the radio test set to members so that we have the basics to work from as we learn how to do it ourselves.

The first "Use the radios day" that was held on the 1<sup>st</sup> of March went very well with Mike ide V<sub>k</sub>3KTO teaching us how to tune up the TS850 into a dummy load. Those of us that were used to operating 100% solid state radios found this instruction very helpful should we choose to use the TS850. Later on in the day I had a 5/9 contact with North Borneo which was a first for me. I will schedule another "Use the radios" day in the near future.

I must also thank Albert and Rob for the huge amount of work that they are doing with the repeaters and beacons. V<sub>k</sub>3RWD is currently getting the once-over since being installed and having a settling down period.

Don't forget that April is the Clubs Annual General Meeting and that we need members to nominate for Committee positions as we can only hold a committee position for 3 terms then we must stand down. Being on the committee is rewarding and you can help steer the Club forward to bigger and better things.



Our turn to use the V13ANZAC call sign is fast approaching. I will need help organizing the week but the first thing I need is names of members willing to use the callsign for a day or two between the 2<sup>nd</sup> and 8<sup>th</sup> of May. So, be prepared to put your name down on the roster at the March general meeting and consider helping to organize opening event on Saturday the 2<sup>nd</sup> of May.

That's all for now,

*Bruno Tonizzo V<sub>k</sub>3BFT*

## Contents.

- 3 – Editorial
- 4 – Jenny, Honorary member
- 5 – Pictures & DF antenna payments
- 6 – DF hunt - March 22<sup>nd</sup> Albert VK3BQO
- 8 – How police are finding 'Grow Ops' with AM radios
- 9 – MDRC Hamfest
- 10 – Hands free kit prac night
- 11 – General Meeting Minutes
- 13 – Club Information

Something missing? – YES, YOUR content – Send it in!

In particular – Pictures and stories from the Labour Day Weekend

## 2015 Event Queue

### March

<i>Sunday 1<sup>st</sup></i>	<i>Amateur Radio Operating day at the Clubrooms 11:00 AM onwards.</i>
<i>Tuesday 3<sup>rd</sup></i>	<i>Committee Meeting</i>
<i>Friday 6<sup>th</sup></i>	<i>Prac Night</i>
<i>Sat 7<sup>th</sup> – Mon 9<sup>th</sup></i>	<i>Labour Day Camping weekend – See article by Helmet, Page 9</i>
<i>Fri 20<sup>th</sup></i>	<i>General Meeting</i>
<i>Sun 22<sup>nd</sup></i>	<i>DF Hunt</i>

### Coming events

April/May	Pub Night with EMDRC members (Venue and date to be confirmed)
May 9 <sup>th</sup>	MDRC Hamfest
June 20 <sup>th</sup>	Midyear Dinner at Arthurs Seat – To Be Confirmed.
July 18 <sup>th</sup>	2015 GGREC Hamfest
May 2 <sup>nd</sup> – 8 <sup>th</sup>	VI3ANZAC special callsign for GGREC.Bike Ride – TBA

### Note

In view of the fact that the schedule is fairly packed in March, the pub night has been deferred until later in the year

## From The Editor

This month we were greeted by some rather strong winds (thou nothing like Cyclone Pam of course) Then just when I thought we were past it, off went our power about 4am Sunday morning. Now usually the worst we see is about 2 hours, but after getting up at 7, and finding Untited energy's phone lines jammed I lost all confidence. After we came home from church at mid-day, still with no power thoughts moved to saving our refrigerator. I had popped a wireless temperature sensor into the fridge and it was heading for 20°C Not good, So what to do.



I had long ago bought a GMC 2 stroke generator from Bunnings – a bit of a lemon, however time to resurrect it, 2 hour later, scrapped – HOS (Heap Of ....doggie dooings) Next option, a long shot, I have a 400W inverter bought for camping etc, maybe....

I had run a vacuum cleaner from it, it's alert beeper went crazy and the leads got very warm.. (read Hot) Now let's see if it will run a Fisher & Paykel fridge. First attempt lots of beeper and what appeared to be

inverter shutdown. Second attempt, same story. However in trying to figure out what was happening, I connected an inline surge arrester, that had been sold to us when we bought the fridge. I put it inline not because of its surge arresting properties, but because it had two LED's telling me if there is power and earth. What a change, no more beeper and the fridge started!

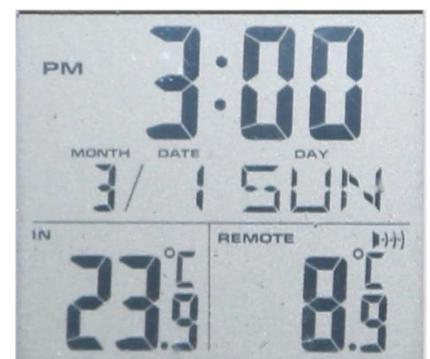
All I had handy was a 38AH battery pack, but it was good enough to bring the fridge back down to 6°C. So what was going on? I never found out, the fridge was running so I elected to just let it run.

This was all rather surprising after being told of the difficulties running a fridge off a small generator set, getting over the start 'surge' apparently is the problem.

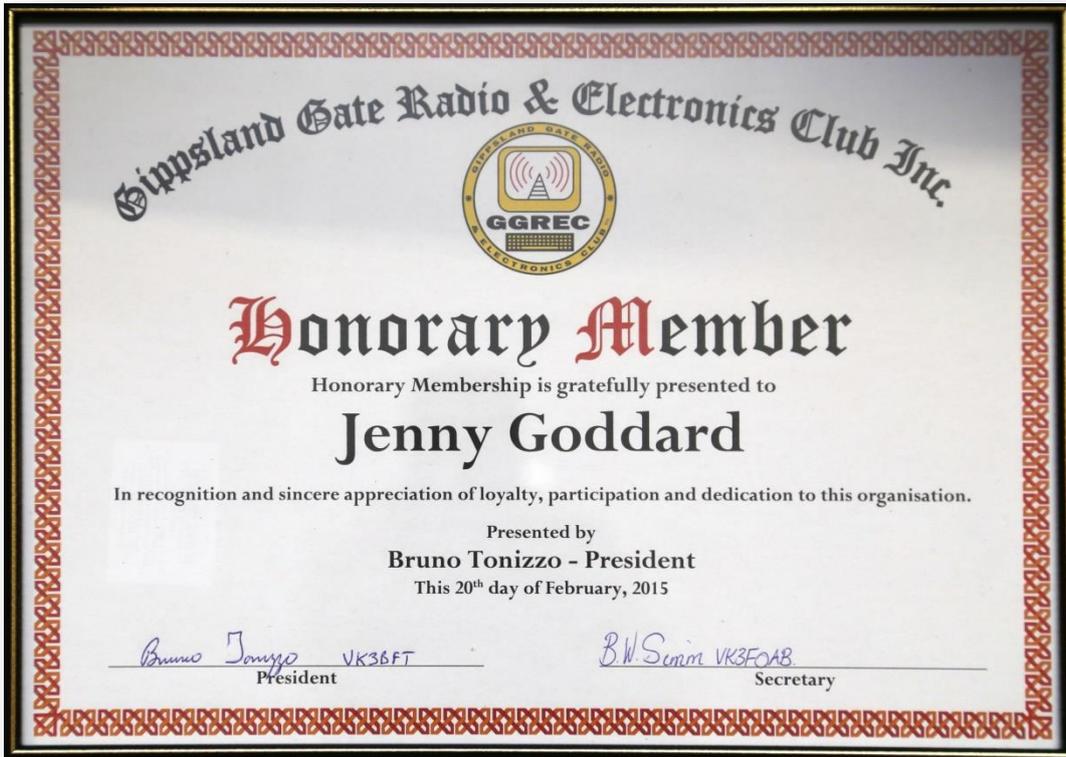
*Pad VK3TGX*



Later on, when the main battery hit 11.8V, I connected a second battery, this brought the DC volts back to up to a more respectable 12.15V



# Jenny Honorary Member





## Reminder:

### Finalisation of payments for DF antennas

Dear Colleagues,

Just a reminder for those people who have not paid for the materials used to make their DF antennas -- the Treasurer would appreciate payment as soon as possible, so that accounts can be finalised.

Payments can be conveniently made by direct deposit at any branch of the Bendigo Bank by quoting BSB 633000 Account 146016746, and inserting your callsign as the reference for the transaction.

Regards,

Bryan VK3FOAB

Admin. Sec.

## DF hunt - March 22<sup>nd</sup>

Albert VK3BQO

Following on from our meeting presentations and antenna building for a DF hunt, Sunday the 22<sup>nd</sup> March is the date that has been set aside for the event.

The meeting place is to be the Cranbourne Guide Hall (our usual meeting place) at 9.30am.

PLEASE SEE THE INCLUDED DOCUMENT WHERE I HAVE EXPLAINED THE RULES OF THE GAME. HOPEFULLY IT HAS BEEN EXPLAINED CLEARLY WITHOUT TOO MUCH COMPLICATION.

**I DO NEED TO KNOW HOW MANY TEAMS WILL BE COMING SO PLEASE SEND ME AN EMAIL WITH YOUR TEAM DETAILS.**

Although we will be heading towards a shopping area for lunch, you may want to bring some light refreshments for in between.

If all goes well, we may be able to get in two hunts before lunch and maybe two or three after lunch.

### ***You need to bring. (aside from yourself)***

- A mobile 2 metre radio capable of operating on 145.450Mhz. You really do need at least a mobile whip to be able to hear instructions without using your beam for receive. DO NOT TRANSMIT into the beam otherwise you will probably sit out the remaining hunts due to a burned out balun.
- A hand held 2m radio would be very handy so that the DF antenna can remain plugged in while you communicate via the car radio.
- A means to connect the beam to either your handheld or the car 2m radio. (ie. Adapters and/or switches)
- A DF antenna approved by the organizer of the day (usually a simple single element beam).
- For those who are really serious, an attenuator to install in series with the antenna is handy so that the lowest signal strength is being DF'd.
- A pencil and rubber.
- A 30cm (yep that's a one foot) ruler
- A backboard for A4 or preferably A3 size paper.
- A compass may help some. **Actually without one you may not be able to orientate the map correctly.**
- A Melways would be great (with or without the compass or GPS). Remember Melways. These were used before GPS's came along.
- A GPS probably won't help but would make for good stories at the end.
- Refreshments, lunch and utensils or we will be stopping at a small town where food shops are available.
- Bring a seat or 2 also just in case we can't get one at a park.
- Your reading glasses.
- Your sense of humor. Borrow one if you cannot find yours.

## **GGREC FOX HUNT PROCEDURES 2015.**

Each Hunter will consist of a car load of people or can simply be the driver. No teamwork other than within your own vehicle will be required or allowed. Only one DF antenna may be used per vehicle.

Map(s) will be supplied to each car for marking the results of their hunts.

There will be multiple hunts throughout the day.

At the beginning of a group of hunts, the Fox will depart for his/her first hidden location.

At about the 10 minute mark, the Fox will give a quick "get ready" transmission about one minute before the DF transmission. The Fox will then transmit a signal with identifying modulation for a 2 minute period. The first minute of the transmission will be at high power to make it easier to get a start on the signal direction; the second minute will be at low power to make it easier to get a good DF and to save the fox's rig finals.

This should be plenty of time for Hunters to get a bearing to the Fox and to draw a line on the map in that direction from their current location.

At the end of this second transmission, Hunters will be given 5 minutes to relocate themselves to a new location which will be dependent upon the angle that they drew for the first DF from their current location. (remember you are looking for 2 lines intersecting to get a final Fox location)

Once again, the fox will give a quick "get ready" about one minute before the DF transmission. The Fox will then transmit a signal for a 2 minute period once again at high then low power.

At the end of the 2 minute transmission, the Fox will give you about 5 minutes to draw some lines that hopefully intersect on your map. Supposedly where the 2 lines intersect will be the location of the Fox. Try to guess the name of the street or road that the Fox is located in, as there is an extra prize for a puzzle at the end using the street names.

The Fox will then tell you to select another "numbered" map upon which a new start location is marked and highlighted in green. Go to that start location. You will have 10 minutes to get there which should be plenty of time. The new start location is in case you are miles away from where you should be for the next hunt. The Fox will move to his new location during this time.

Put your team member names on the rear of the map (all maps actually).

Start from the beginning again for the next hunt.

### **scoring**

The distance from your calculated Fox position to the actual position measured in kilometres will determine the winner of each hunt with the winner having the lowest kilometre total.

We may have time for 2 hunts before lunch and maybe 2 or more after lunch if you are still interested.

Regards  
Albert VK3BQQ

## How Cops are Finding 'Grow Ops' with AM Radios:

Courtesy of Mark VK3PKT is a story of how the police in America are using domestic AM broadcast radio's to find illegal drug 'farms', or as they call them – Grow Ops.



### How cops are finding "grow ops" with AM radios

Kenneth Wyatt - March 10, 2015

'One of my colleagues, Kit Haskins, alerted me to the following article: "How cops are catching grow ops with AM radios". As a long-time EMI engineer, the headline certainly caught my eye. The article was posted by Keith Graves on his blog (PoliceOne.com) in February, 2014. Graves is a police sergeant in the San Francisco area and he described how police were starting to use AM radios in their vehicles to locate illegal indoor marijuana "farms" .....

To read the whole story, follow this link :-

<http://www.edn.com/electronics-blogs/the-emc-blog/4438864/How-cops-are-finding--grow-ops--with-AM-radios>

Or for a pdf of the article, try :-

<http://www.edn.com/Pdf/ViewPdf?contentItemId=4438864>

### From: "Bryan Simm"

"Our next general meeting will feature a presentation entitled "Trials and triumphs in 3D printing". The presentation will feature a working personal printer, as well as examples of the sorts of items that can be produced using the technology. In order that our presenter can get away prior to the business part of the meeting, please be ready for an 8.00pm start. It should be a good night."



# Moorabbin and District Radio Club.

PO Box 58 Highett 3190

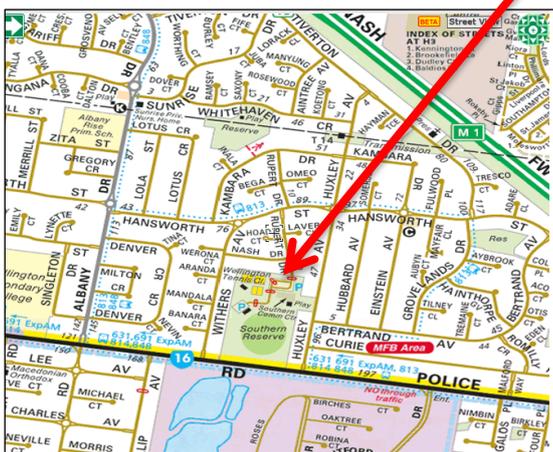
VK3APC

**\*\*\* Saturday 9th May, 2015 \*\*\***

# HAMFEST 2015

**Location – Southern Community Centre - Rupert Drive, Mulgrave**

Melways Reference **80 F4** (Enter via Huxley Ave off Police Rd.)



- \* GREAT VENUE
- \* PLENTY OF SPACE
- \* MELBOURNES BIGGEST
- \* MAJOR AND MINOR DOOR PRIZES

The Moorabbin & District Radio Club have much pleasure in inviting you to participate in

**VK3's BIGGEST ANNUAL HAMFEST**

Snacks and hot food will be available – FREE TEA & COFFEE!

Talk in via 439.900Mhz 70cm VK3RSE

**PRIZE DRAWS:** Every entry ticket goes into the draw & additional tickets on sale

**SALES: NEW** - Importers and suppliers of amateur equipment & accessories.

**SALES: USED** - Preloved ham gear & accessories, PC's & bits & pieces

**All inside and undercover. Demonstrations of Radio equipment and accessories.**

**ENTRY ONLY \$7.00 (Doors Open 10am – entry tickets on sale prior)**

(INCLUDES FREE DRAW IN THE MAJOR DOOR PRIZE.....)

Tables available at \$20 each, (1.8m long) includes lunch voucher. Please contact:

Lee Moyle, VK3GK. Tel: BH/AH (03) 9705 1051 Email:

[vk3gk@aanet.com.au](mailto:vk3gk@aanet.com.au)

Graeme Lewis, VK3GL. Tel AH: (03) 9702 1199 or Mobile (0418) 171601

Email: [vk3gl@bigpond.com](mailto:vk3gl@bigpond.com)

Webpage - [www.mdr.org.au](http://www.mdr.org.au)



## Hands Free Kit

Hello Members,

As we are between stages with the Hands Free Kit at the moment this month's Prac night this Friday will be a demonstration of the newly donated Communication Test set. Some of the features of the test set including configuration, Do's and Dont's, transmitter frequency and deviation testing, receiver sensitivity / SINAD testing and CTCSS operation will be demonstrated.

Looking forward to seeing you there, (yes it's a tad late - ed)

Rob VK3BRS



# General Meeting Minutes 20/02/2015

**Start time :** 8:00 pm.

**Location :** Club rooms.

**Chairperson :** Bruno

**Minute Taker :** Bryan

**Present :** Attendance sheet

**Visitors:** Nil

**Apologies :** As per attendance sheet

## Correspondence received :

1. Email from Ted Thrift re. Anzac Day 2015 operations by clubs.
2. Email from Fred Swainston re. Darwin ARC using VI8ANZAC from 20/02/15-03/03/15.
3. Email from WIA re licences which have not been renewed.
4. Letter from Victorian Commission for Gambling & Liquor Regulation re. renewal of declaration status as a community & charitable organisation.
5. Letter from Steve VK3EGD re. transfer of website content.
6. Letter from Bruno VK3BFT to Steve VK3EGD acknowledging relinquishment of his role as GGREC webmaster and manager of domain services.
7. Breakout magazine January 2015.
8. Email from Warren Stirling VK3XSW re. donation to club.
9. Email from Lou VK3ALB re. date for GGREC hamfest for GARC calendar.
10. Email from Helmut VK3DHI with directions to Blue Gum Flat Campground for Labour Day weekend.
11. Email from the WIA Board.

## Correspondence sent :

1. Advance notice of EMDRC Hamfest.
2. Application for Active Adults Guide 2015 to City of Casey.
3. Reply to Steve VK3EGD re. obtaining website content (via Mark VK3PKT.)
4. Thank you note to Warren VK3XSW for his donation of test gear to the club.
5. Email from Albert VK3BQO re. parts required for DF antenna and expression of interest from those wishing to build same.

**Treasurer's report:** Graeme VK3BXG presented a financial report covering the period 15 January 2015-15 February 2015 for the information of members, and circulated a copy for members' perusal. Any members wishing to receive a personal copy should contact the Treasurer direct.

**Read:** Graeme VK3BXG **Moved:** Graeme VK3BXG **Seconded:** Albert VK3BQO **Carried:** Yes

**Presentation:** At this point in the meeting, Bruno VK3BFT presented Jenny Goddard with her Honorary Membership Certificate, thanking her for her dedicated service to the club over many years, a sentiment which was seconded by members present. Well done, Jenny, and thank you again.

**New Callsigns:** Nil

## Previous Minutes:

**Read:** as distributed    **Moved:**    **Seconded:**    **Approved:** yes

## Business arising from the previous minutes:

1. Pub night has been postponed until after Easter – probably late April or early May.
2. Hands Free Kit update: Some boards have been assembled and tested, which has resulted in the need to redesign parts of the circuit. The redesigned circuit will go to Ian so that new boards can be produced. The project is steadily moving forwards.
3. Repeaters: Albert VK3BQO reported that VK3RWD is being taken off the air for a period of time for repairs and work on the antenna. Both VK3RLP and VK3RDD are operating satisfactorily at this stage.
4. Beacons: Extra parts for the beacons have been ordered. The disciplined oscillator has been mounted in its housing, and a visit has been paid to the water tower site to enable some measurements and tests to be made. Dead shorts were found on the coax, with the fault being sourced to corrosion in the fly leads.
5. Hamfest: The Cranbourne Public Hall has been secured for 18 July 2015. 11 tables have been booked so far. The food permit will be applied for later on. Public liability insurance certificate still required.
6. ANZAC Commemoration: We have had no further correspondence from the RSL, but have applied for use of the callsign from 2-8 May 2015. A roster of members willing to operate the station will be organised closer to the date.
7. Working Bee 21/02: The OCF dipole balun needs to be repaired. The grid pack antenna needs to be removed from the tower as well.
8. Antennapalooza 2015: Proposals about whether we run this event this year would be welcomed by the committee. Perhaps we should delay it until March 2016, and expand it to include EMDRC and FAMPARC, as there has been some interest displayed in those quarters.
9. Licence classes: Graeme VK3BXG indicated that he has one candidate for his Foundation class this weekend. Training will commence at 9.30 am on Saturday, and exam will be 9.30 am on Sunday.
10. Mid-Year Lunch will be held at the Arthurs Seat Hotel on Saturday 20<sup>th</sup> June 2015. Keep this date free in your diaries.
11. Donation received from Warren VK3XSW: Bruno detailed the generous donation which had been made to the club of a radio test set by Warren VK3XSW, which will be a valuable asset for members to use, particularly on prac nights.
12. IRLP/Internet: There was discussion about the relocation of the IRLP node and Internet access for the shack. Mark VK3PKT indicated that IRLP requires a static IP address. Anyone housing the IRLP node would not be able to use UHF because of desensing that may occur.
13. Fox Hunt: Will take place on 22 March. Participants should meet at the clubrooms in the first instance at 9.30am for a 10.00 am start. A reminder also that those people who still owe money for materials used in the construction of their DF antennas can pay Graeme VK3BXG tonight, or preferably via direct deposit into the club's account, with their callsign as a reference.

## New business:

1. Soldering irons in the shack: The units which Bruno acquired recently will be disposed of if members have no further use for them.
2. Wireless microphones: Must comply with the new regulations.
3. Club website: The temporary website set up by Mark VK3PKT is ready to go. When the data is received from Steve VK3EGD, we can get it online.

**Meeting closed:** : pm

**Next Committee Meeting :** 03/03/2015

**Next Prac Night :** 06/03/2015

**Next General Meeting :** 20/03/2015



# Club Information



Meetings 2000hrs on third Friday of the month at the  
 Cranbourne Guide Grant Street Cranbourne  
 Prac nights first Friday in the Peter Pavey Clubrooms Cranbourne 1930hrs  
 Visitors are always welcome to attend

## Office bearers

President	Bruno Tonizzo	VK3BFT	Repeater Officer	Albert Hubbard	VK3BQO
Admin Sec	Bryan Simm	VK3FOAB	Web Master	Stephen Harding	VK3EGD
Treasurer	Graeme Brown	VK3BXG	Magazine Editor	Paul Stubbs	VK3TGX
General 1	Mark Clohesy	VK3PKT	Property Officer	Bruno Tonizzo	VK3BFT
General 2	Wayne Cooke	VK3XF	Secretary	Ian Jackson	VK3BUF

## Call in Frequencies, Beacons and Repeaters

The Club Station VK3BJA operates from the Cranbourne Clubrooms.  
 6m Repeater Cockatoo VK3RDD In 52.575, Out 53.575 CTCSS 91.5  
 70cm Repeater Cranbourne VK3RLP In 434.475 Out 439.475 CTCSS 123Hz  
 VK3RLP Repeater supports Remote Internet access (IRLP) Node 6794.  
 70cm Repeater Drouin VK3RWD In 433.575 Out 438.575 CTCSS 91.5Hz  
 Simplex VHF - 145.450 MHz FM • Simplex UHF - 438.850 MHz FM  
 VK3RLP Beacons 1296.532 MHz & 2043.532 MHz

## Membership Fee Schedule

Pension Member rate \$25.00 Extra Family Member \$20.00

Standard Member rate \$40.00 Junior Member rate \$25.00

Fees can be paid by EFT to BSB 633000 - Account 146016746.

- Always identify your EFT payments.
- Membership Fee's Are Due at each April Annual General Meeting.

Magazine Articles to [editor@ggrec.org.au](mailto:editor@ggrec.org.au) or [vk3tgx@gmail.com](mailto:vk3tgx@gmail.com)

All other Club correspondence to: [secretary@ggrec.org.au](mailto:secretary@ggrec.org.au)

or via Snail Mail : PO Box 1098, Cranbourne 3977

GGREC Web Site & Archive may be viewed at: [www.ggrec.org.au](http://www.ggrec.org.au)

Facebook Page [www.facebook.com/GippslandGate](http://www.facebook.com/GippslandGate)