



# GATEWAY

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

## ***November 2014 From The President***

Well here we are at the end of another year. It has been a busy time with the Antennapalooza, the visit to the Royal Botanical Gardens in Cranbourne and Prac nights providing opportunities for GGREC members to get involved with our Club.

Our thoughts and best wishes go out to Reg VK3UK and Jenny for a speedy recovery and hope to see them up and about as soon as possible.

Don't forget to top up the Christmas hamper and buy as many tickets as you can for the raffle to be drawn at the Christmas party at the



*Bruno Tonizzo*

home of Dave Campbell VK3XMF. This is an event that should not be missed as it is our final official get together for 2014.

Remember that there is no GM in December.  
See you at the November Meeting

See you at the General Meeting,

*Bruno VK3BFT*

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## ***Event Queue from November 2014***

**November 21<sup>st</sup> – Friday Night. General Meeting at the Guide Hall**  
**From 2000hrs Ian will be speaking on the Sark Antenna Analyser**

**December 5<sup>th</sup> – Friday. Prac Night at the Club Shack**  
**From 1930hrs**

**December 13<sup>th</sup> – Saturday. Christmas party see page 3**  
**From 1100hrs**

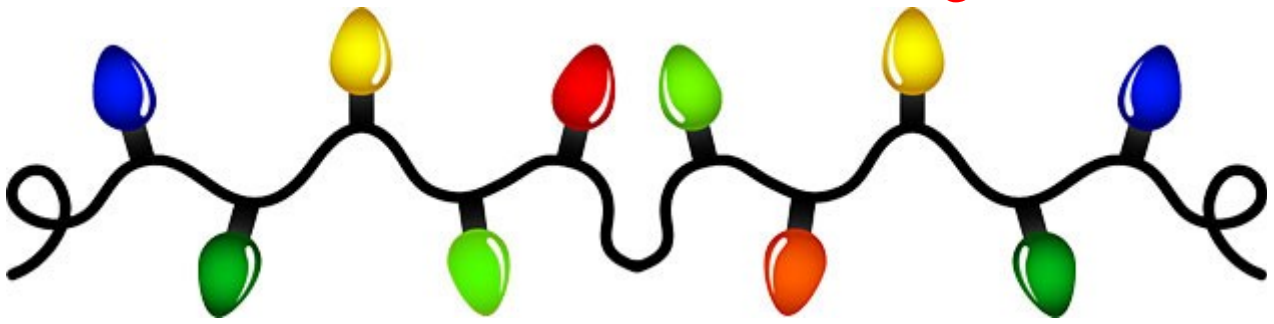
### ***No December General Meeting or January Prac Night***

**January 9<sup>th</sup> – Friday Night. Committee Meeting at the Guide Hall**  
**From 1930hrs**

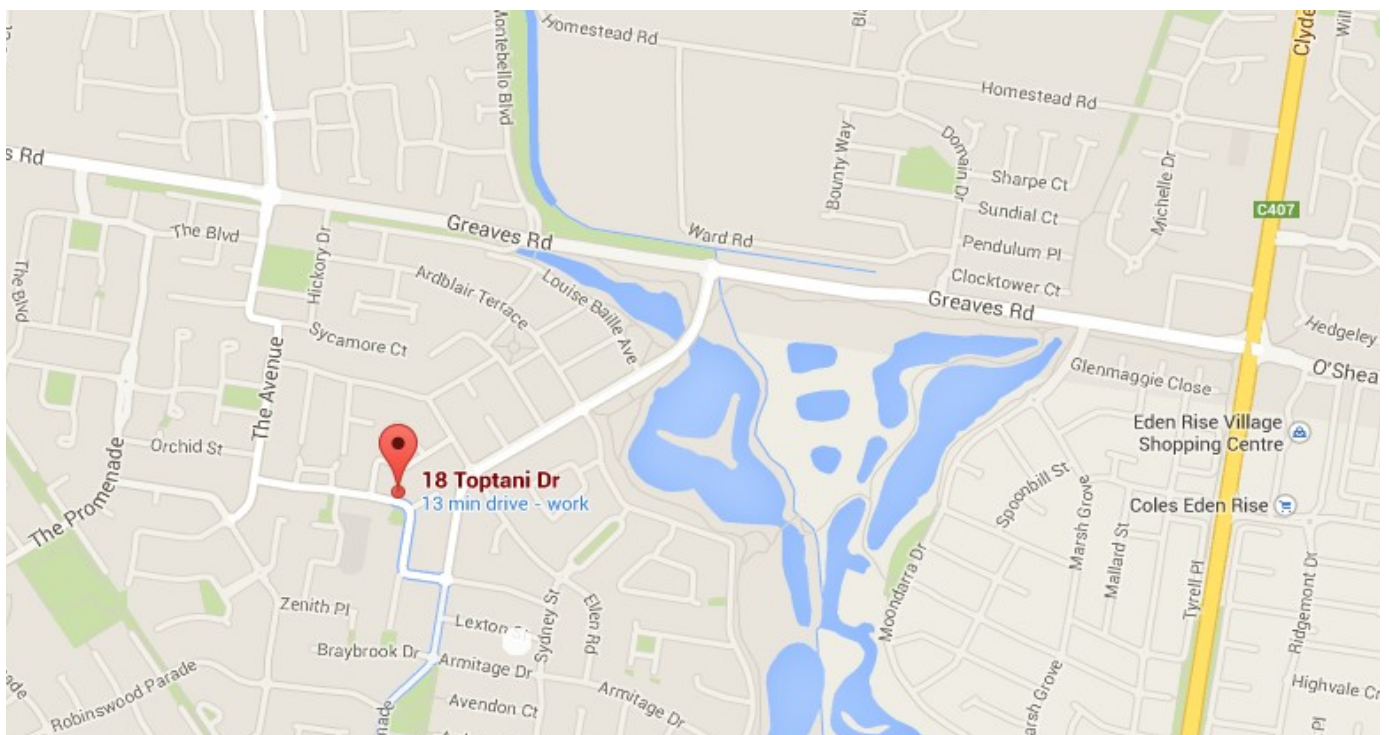
**January 16<sup>th</sup> – Friday Night. General Meeting at the Guide Hall**  
**From 2000hrs**

**There is no official prac night in January but those that want to  
discuss the hands free kit project may like to get together**

# Christmas Party

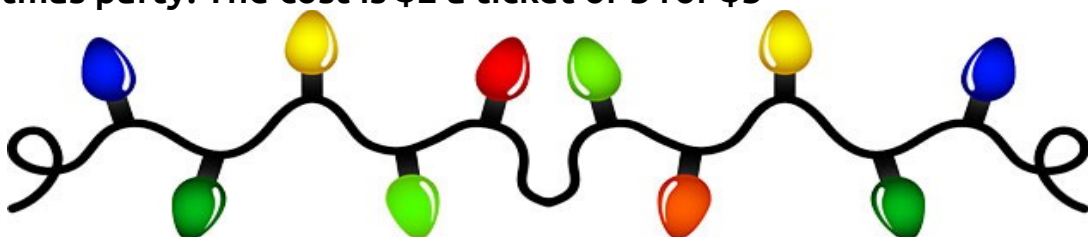


**This year the club Christmas party will be on Saturday the 13<sup>th</sup> from 11am at Cathie and Davids home located at 18 Toptani Drive Narre Warren Sth**



**The hamper is now at general meetings so please could you bring non perishable food items or other suitable donations for the club hamper. As always you will need to bring along your own food, drink and chairs for the event. The club BBQ and trestle tables will be there on the day.**

**Raffle tickets for the hamper will be on sale at this months meeting and also at the christmas party. The cost is \$2 a ticket or 3 for \$5**





## **Visit to the Royal Botanical Gardens in Cranbourne.**

On Melbourne Cup day, Bryan VK3FOAB and I visited the Royal Botanic Gardens in Cranbourne and enjoyed a picnic lunch. I have seen short snippets of the Gardens on television gardening shows but I was still very impressed with the huge scale of the native gardens, waterfalls, lakes and water ways. All this was in the Australian native garden section of the gardens.



Bryan and I walked to the lookout at the nearby Trig point and were amazed that we had clear line of site to the City, You Yangs, Mt Dandenong, Western Port Bay and Frankston. I put a call out on 145.450 MHz and spoke to Ray, VK3CEO in Endeavour Hills and Noel, VK3CJJ with excellent signal reports. All this and only a kilometre from our clubrooms. I can see the gardens being a great location for a future bike ride / picnic day out. See you at the Christmas party, Bruno Tonizzo VK3BFT.

## **February Pub Night**



The club will be having another pub night sometime in February. The venue and date is to be decided with discussion on the event at this months meeting.

# Who is making that terrible DIN?

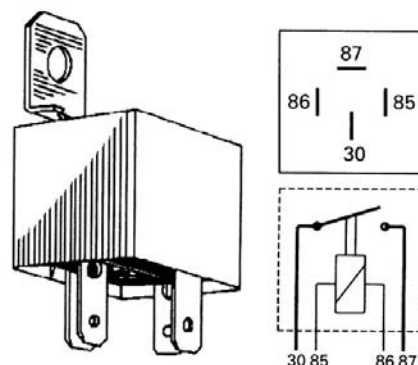
Undoubtedly there are those amongst us who cannot sleep at night because they wonder what the numbers on the bottom of Automotive Relays actually mean.

You have seen them. The relay coils are labelled **85** and **86**. Contacts are labelled **30**, **87** and **87a**. Who got to say What the numbers were? Why are we still stuck with them? Is it *really* the relay numbers that prevent you from sleeping?

Set the wayback machine to 1917 when the German Institute for Standardisation (*Deutsches Institut für Normung*) was formed, who's name was translated and abbreviated to *DIN standards*.

Then fast-forward to when they announced DIN standard 72552 Electrical terminal numbers in automobiles. Yes, there is a list for the designation of almost every wire within a car. They successfully persuaded the auto relay manufacturers to continue to put these codes on their relays, even though they have forgotten why. Sure it is likely that motor vehicle electricians have moved on somewhat since 1917, but don't hold your breath waiting for the numbers to disappear from the bottoms of Chinese made relays displayed on your supermarket peg board.

12v 30a Normally Open Mini Relay



## The DIN 72552 CODE

Code	Wire Function
1	Coil, distributor - low voltage
1a	To contact breaker I (distributor with 2 separate circuits)
1b	To contact breaker II (distributor with 2 separate circuits)
2	Shorting circuit - magneto ignition
4	Coil, distributor - high voltage
4a	From coil I (distributor with 2 separate circuits)
4b	From coil II (distributor with 2 separate circuits)
7	Ballast resistor terminal to/from distributor
15	Switched + downstream of battery (output of ignition/driving switch)
15a	Output at ballast resistor to coil and starter
17	Glow plug and starter switch - Start
19	Glow plug and starter switch - Preheat
30	Input from battery +, direct 12/24 V series-parallel battery switch
30a	Input from + terminal of battery II
31	Battery negative terminal, or chassis ground, direct
31a	Return line to battery II, negative (12/24 V series-parallel battery switch)
31b	Return line to battery negative terminal, or ground via switch or relay (switched negative)
31c	Return line to battery I, negative (12/24 V series-parallel battery switch)
<b>Motors</b>	
32	Return
33	Main terminal connection
33a	Self-parking switch-off
33b	Shunt field
33f	For 2nd low-speed range
33g	For 3rd low-speed range
33h	For 4th low-speed range
33L	Anticlockwise
33R	Clockwise
<b>Starters</b>	
45	Separate starter relay, output; starter, input (main current) Two-starter parallel operation - Starting relay for engagement current
45a	Output, starter I, Input, starters I and II
45b	Output, starter II
48	Terminal on starter & on repeating relay for monitoring starting procedure
<b>Turn-signal flashers (pulse generators)</b>	
49	Input
49a	Output
49b	Output, 2nd circuit

49c	Output, 3rd circuit
	<b>Starter control</b>
50	Starter control (direct)
50a	Series-parallel battery switch - Output for starter control with parallel operation of two starters with sequential control
50b	Starting relay for sequential control of the engagement current during parallel operation of two starters
50c	Input at starting relay for starter I
50d	Input at starting relay for starter II
50e	Start-locking relay Input
50f	Start-locking relay Output
50g	Start-repeating relay Input
50h	Start-repeating relay Output
	<b>Alternator</b>
51	DC voltage at rectifier
51e	DC voltage at rectifier with choke coil for daytime driving
	<b>Trailer signals</b>
52	Additional signals from trailer to vehicle
	<b>Wiper motors</b>
53	Wiper motor, input (+)
53a	Wiper (+), self-parking switch-off
53b	Wiper (shunt winding)
53c	Electric windshield-washer pump
53e	Wiper (brake winding)
53l	Wiper motor with permanent magnet and 3rd brush (for higher speed)
	<b>Trailer signals (see also 52)</b>
54	Trailer plug connections and lighting combinations, brake light
54g	Pneumatic valve for continuous brake in trailer, solenoid-operated
	<b>Lighting</b>
55	Fog lamp
56	Headlamp
56a	High beam, high-beam indicator lamp
56b	Low beam
56d	Headlamp-flasher
57a	Parking lamp
57L	Parking lamp, left
57R	Parking lamp, right
58	Side-marker, tail, numberplate and instrument panel lamps
58b	Taillight changeover for two-wheeled tractors
58c	Trailer plug and receptacle assembly for single-conductor taillight with fuse in trailer
58d	Variable intensity instrument panel light, tail light and side marker.
58L	Numberplate lamp, left
58R	Numberplate lamp, right
	<b>Alternators and voltage regulators</b>
59	A/c voltage output, rectifier input
59a	Charging armature, output
59b	Tail light armature, output
59c	Brake light armature, output
61	Alternator charge-indicator lamp
B+	Battery +
B-	Battery -
D+	Dynamo +
D-	Dynamo -
DF	Dynamo field
DF1	Dynamo field 1
DF2	Dynamo field 2
U,V,W	Three-phase alternator terminals
	<b>Multi-tone horn and emergency lights</b>
71	Input
71a	Output to horns 1 & 2 low
71b	Output to horns 1 & 2 high
72	Alarm switch - revolving emergency light
	<b>Radio, cigarette lighter</b>
75	Radio, cigar lighter
76	Speakers
77	Door valve control
	<b>Normally closed and changeover switches</b>
81	Input
81a	Output 1, NC side
81b	Output 2, NC side
	<b>Normally open switches</b>
82	Input
82a	Output 1
82b	Output 2
82z	Input 1
82y	Input 2

	<b>Multi-position switches</b>
83	Input
83a	Output, position 1
83b	Output, position 2
83L	Output, left-hand position
83R	Output, right-hand position
	<b>Current relays</b>
84	Input, actuator and relay contact
84a	Output, actuator
84a	Output, relay contact
	<b>Switching relays</b>
85	Output, actuator (end of winding to ground or negative)
86	Input, actuator (start of winding)
86a	Start of winding or 1st winding
86b	Winding tap or 2nd winding
	<b>Relays - N/C and changeover</b>
87	Input
87a	Output 1(NC side)
87b	Output 2
87c	Output 3
87z	Input 1
87y	Input 2
87x	Input 3
	<b>Relays - N/O and changeover</b>
88	Input
88a	Output 1
88b	Output 2
88c	Output 3
88z	Input 1
88y	Input 2
88x	Input 3
	<b>Directional signals</b>
C	Indicator lamp 1
C2	Indicator lamp 2
C0	Main connection for separate indicator circuits worked by turn signal switch
C3	Indicator lamp 3 (e.g., when towing two trailers)
L	Turn-signal lamps, left
R	Turn-signal lamps, right

## Foundation Course & Exam Session

The club will be holding a foundation course on Saturday the 6<sup>th</sup> of December with exams both for the foundation licence and for anyone wishing to try for an upgrade on Sunday the 7<sup>th</sup>. Graeme will also be running courses for the foundation licence every even month at the club shack on the first weekend. So February, April, June, August, October and December. If you want to attend a session please contact Graeme Brown VK3BXG at [education@ggrec.org.au](mailto:education@ggrec.org.au)



## Hamfest Coordinator Needed

We require a coordinator for the hamfest. If you are willing to take this on please contact the committee

## **General Meeting Minutes**

**Date : 17/10/2014**

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

**Location : Club rooms.**

**Chairperson : Bruno**

**Minute Taker : Bryan**

**Present : Attendance sheet**

**Visitors: Norm Taylor VK3MG, Steve Clark**

**Apologies : As per attendance sheet**

- Correspondence received :**
- 1. Licence renewal for VK3RWD**
  - 2. Bond refund cheque from Cranbourne Public Hall.**
  - 3. Working with Children Check notice (VK3EGD)**
  - 4. Licence renewal notice for VK3RLP**
  - 5. Hamfest Survey from EMDRC**
  - 6. Email from Bruno seeking help of members to clean up shack prior to JOTA.**
  - 7. Email from Albert re. Nally tower for sale (on behalf of a club member.)**
  - 8. Email from WIA re. online awards system via MEMNET.**
  - 9. NERG News, October 2014 edition.**
  - 10. Email from Bruno re. registration of GGREC for JOTA**
  - 11. Email from Max VK3TMK, attending JOTA.**
  - 12. Email from Bruno seeking members able to assist at JOTA/JOTI.**
  - 13. Email from Bruno seeking members able to assist with exam weekend, 11-12 October.**
  - 14. Email from Albert if renewal of VK3RWD has been received from ACMA.**
  - 15. Email inquiry about obtaining an amateur licence (cc. Graeme VK3BXG)**
  - 16. Email from Ian VK3BUF re. venue offered for Christmas BBQ.**
  - 17. Breakout magazine for September 2014.**



Correspondence sent : 1. Cheque sent to ACMA for payment of VK3RWD licence.

2. Email to Steve VK3EGD re. commissioning of IRLP, from VK3PKT.

3. Email of Gateways magazine to members.

4. EMDRC Hamfest survey forwarded to members for response (if interested).

5. Email re. shack clean-up day.

6. Email re. Nally tower for sale.

7. Email of NERG News, October 2014.

8. Email seeking assistance for JOTA/JOTI.

9. Email seeking assistance for exam weekend, 11-12 October.

10. Email to inquiry regarding obtaining amateur licence (cc. VK3BXG).

11. Breakout Magazine, September 2014.

Treasurer's report : Graeme VK3BXG tabled financial reports for the period 15/09-15/10, and circulated a copy for perusal. Members wishing to obtain a copy can apply to the Treasurer.

Read : Graeme VK3BXG   Moved : Graeme VK3BXG   Seconded : Leigh VK3FACB   Carried : yes

New Callsigns : Nil

Previous Minutes :

Read : As distributed   Moved :   Seconded :   Approved : yes

Business arising from the previous minutes :

1. Nally tower: Albert VK3BQO advised that he is selling gear on behalf of Reg VK3UK. He has a 3 element triband antenna, along with a rotator and control unit. He is allowing a couple of months for clearing of the gear. Albert also advised that Jenny has been unwell, but is slowly improving.

2. 2015 ANZAC Commemoration Plan: There will be a need for discussion between the local RSL Sub-branch and GGREC once further details have been obtained from the WIA.

3. Antennapalooza: Preparations going well. The details will be circulated to members along with the schedule of talks which have been planned.

4. Prac night: 2m antennas are being completed, and discussion will be take place about what the next project should be – possibly a

hands-free kit.

5. APRS: The listing of our repeaters and beacons on APRS was discussed, so as to encourage greater use to be made of them. Mark and Albert to liaise on this.

6. Hot Water System: We are changing to an on-demand system. Suitable hardware (connectors) etc are available.

7. Exams: Graeme VK3BXG suggested that, in view of the demand for Foundation courses, a definite date (being the first weekend in each month) be set aside for training and testing. If club members want to upgrade, arrangements can be made as required.

8. Christmas Hamper: Contributions welcome now.

9. Melbourne Cup Weekend: Bruno suggested members might like to consider a picnic at the Cranbourne Botanic Gardens.

Barbeques/pavilions are available, or members could enjoy a car boot picnic, and then have a browse through the various sections of the Australian Garden displays.

10. Christmas Party: Will be held at Cathie and Dave's, 18 Toptani Dve, Narre Warren South. The club barbeque will be available for use on the day. Thanks to Cathie and Dave for making their home available to us.

11. Hands-free kit: What features would you like to see in the system? It will need to be able to be used with a variety of radios. A Bluetooth kit is in development for the EMDRC kit. Do we go ahead with the EMDRC kit (@ \$72 per unit or develop our own?

12. Antennapalooza Mugs: Mugs with the GGREC Antennapalooza logo are now available, at \$12.00 each. See Ian VK3BUF if interested.

13. Printed copies of the current Gateways magazine will be sent out this week.

**New business :**

1. JOTA/JOTI tomorrow, and helpers will be required between 1.00-5.00 pm local. A reminder that traffic will be heavy, on account of the motorbikes parade prior to the journey down to Philip Island for the Grand Prix.

2. Diane VK3JDI reminded members of Belly Dancing end-of-year concert to be held at Timbarra community hall in Berwick on 22 November at 1.30pm. Tickets are \$8.00 per head, available through Diane, or simply pay at the door on the day.

**Meeting closed : 8 :45 pm**



## **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	Mark Clohesy	VK3PKT
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**

Standard Member rate \$40.00 Junior Member rate \$25.00  
Pension Member rate \$25.00 Extra Family Member \$20.00

- 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 [pockets@twistedsouls.com](mailto:pockets@twistedsouls.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)

The deadline for magazine items is the Tenth day of each month.  
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