



GATEWAY

The official journal of the Gippsland Gate Radio & Electronics Club Inc.

Incorporation Number A0016893M

May 2012 - From the President ...

I am starting this months Presidents report by thanking Albert VK3BQO for so smoothly conducting our Annual General meeting. The Committee remains largely the same, with myself Dianne Jackson VK3JDI as President, Graeme Brown VK3BXG as Secretary, Ian Jackson VK3BUF as Treasurer, and Michael Van Den Acker VK3GHM as general committee member. Mark Clohesy VK3FWSP, who is also the Magazine Editor is taking on the position vacated by Russell White, as the second general committee member.

VK3JDI



Dianne Jackson

The Club assets Sale was very successful. A small but enthusiastic group of members attended and on many items, the bidding was fast and furious. Almost all items were sold on the day. The remaining unsold items will go onto the Club table at the Hamfest sale in July.

By now, the Club members who were DXing in Vanuatu, will have returned home. I hope that they all had a lot of fun and plenty of pileups to sort through.

The mid year dinner is coming up on the 23rd of June. This years theme is the Olympic games. We have already commenced considerable planning, and I know it will be a lot of fun. Most of the games can be done while still sitting in your chair, however there is one game were you will have to stand up. The dinner will be catered by Reddy Roast, and it will cost \$15.00 per head. You can pay a deposit or the full amount, to the Treasurer at the next Club meeting.

Looking forward to seeing you all at the May Meeting.

Item	Page
Event Queue	2
Mid Year Dinner	3
RF Sniffer	3
USB Dongle as Software Defined Radio	3
Open Source Portable Scope	4
ACMA targets pirates in Adelaide	4
2012 AGM Minutes	5
2012 Hamfest Invitation	6
Special Treasurer Report	7
April GM Minutes	8
High Regards	9
Information For Club Members	10

GGREC Event Queue from May 2012

May 18th – Friday Night. Gen Meeting at the Cranbourne Guide Hall
Talk by Mark 'Pockets' VK3FWSP on citizen science and SETI Live

June 1st – Friday Night. Prac Night at the Peter Pavey Clubrooms
From 7:30pm come along to socialise and have a chin wag or use the clubs transceivers for a QSO.

June 15th – Friday Night. Gen Meeting at the Cranbourne Guide Hall
Talk to be announced.

June 23rd – Saturday Night. Club Midyear Dinner
From 630pm for 7pm dinner
Theme will be the Olympics Please pay deposit or full amount (\$15) At the May Meeting.

June 23rd & 24th – Saturday & Sunday. UHF/VHF Winter Field Day
See the WIA contest site <http://www.wia.org.au/members/contests/vhfuhf/> for more information

July 6th – Friday Night. Prac Night at the Peter Pavey Clubrooms
From 7:30pm come along to socialise and have a chin wag or use the clubs transceivers for a QSO.

July 20th – Friday Night. Gen Meeting at the Cranbourne Guide Hall
Talk to be announced.

July 21st – Saturday. The GGREC Hamfest at Cranbourne Community Hall
Corner of Clarendon and High streets, Cranbourne Entry from 10am for buyers \$6.00 entry see the website at <http://ggrec.org.au/hamfest> for more details.

August 3rd – Friday Night. Prac Night at the Peter Pavey Clubrooms
From 7:30pm come along to socialise and have a chin wag or use the clubs transceivers for a QSO.

August 17th – Friday Night. Gen Meeting at the Cranbourne Guide Hall
Talk to be announced.

September 9th – Sunday. SADARC Hamfest
More Details to be announced

November 11th – Sunday. Yarra Valley Hamfest
This Year the event will be held in Yarra Glen at the Gary Cooper Pavilion 16 Anzac Avenue Yarra Glen.

November 24th & 25th – Sat & Sun. Spring VHF/UHF Field Day
See the WIA contest page at the website for more information
<http://www.wia.org.au/members/contests/vhfuhf/>

November 25th – Sunday. Rosebud Hamfest
Eastbourne Primary School Auditorium, Allambi Avenue, Rosebud, Victoria
Contact markybradio@gmail.com or phone 0407844063

MID YEAR DINNER FUN

The theme for this years mid year dinner, is the Olympic games. There will be lots of fun for everyone. Fun games that you can do from your chair. One or two of the games will require you to stand up but there is nothing strenuous.

Gold medals will be awarded to winners, so come along and enjoy the fun. Arrival time will be 6:30pm, Dinner will start at 7:00pm and we should be able to start the games by 8:00pm

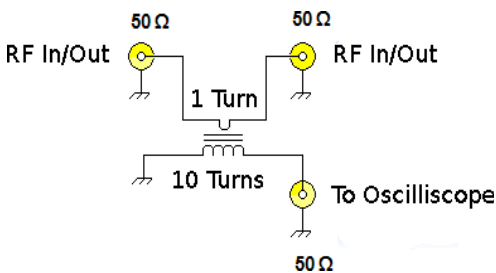
The meal will be catered by Reddy Roast and the price per head is \$15.00. To ensure a place on the night, please pay the full amount to the Treasurer at the May meeting.

The cut-off for the bookings is at the June meeting night, as this is only one week away from the night of the dinner and the organisers will need the final numbers for the caterers. Only those who have booked a position can join in.

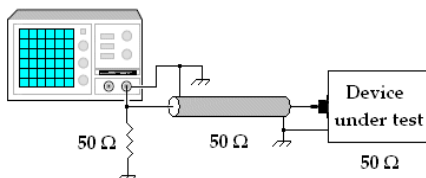
(Note: Gold medals may or may not include real gold)



Simple RF Sniffer for Station Monitor



This is a little circuit to connect your RF output to an oscilloscope to monitor your transmissions. Build in to a small metal enclosure keeping all wires as short as possible, connect to your scope using a commercial 50 ohm terminator on your scope or use the circuit below to make one. Again build in to a small metal box and keep it as close to the scope as possible.

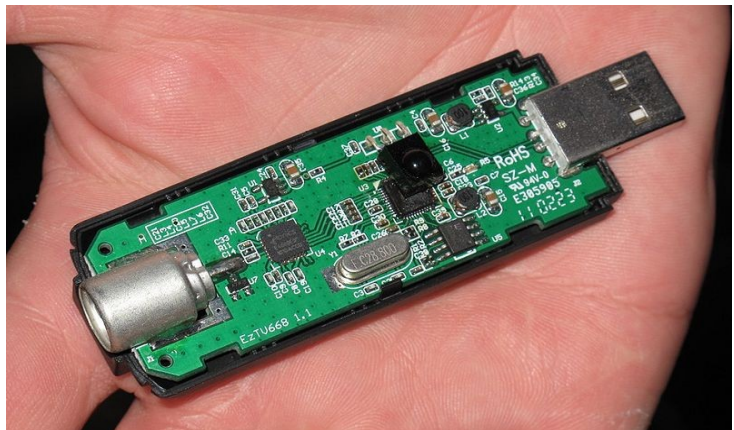


A Commercial 50 ohm Terminator



USB TV Tuner as "Poor Man's" software Defined Radio (SDR)

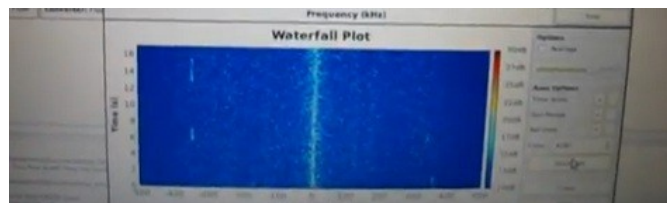
11 weeks ago a researcher from Australia discovered that it was possible to capture the raw stream from a USB Digital TV tuner and save that data to a file. This allowed observation of radio signals although not in real time. Jump ahead to the present day and with work by people across the globe it has led to the ability to use a cheap (about\$15-\$20) USB Dongle as a real time SDR.



USB DTV Tuner

Of course you can not expect the same functions as a high end dedicated SDR but to date the following has been achieved. Real time capture and display of signals on Linux and Windows with a 8 bit ADC of frequencies from 63Mhz up to 1700Mhz at a maximum of 3.2Mhz sample rate although 1Mhz is the preferred sample rate so as not to drop data.

So far they have been able to do AM, FM, GPS, Aviation Mapping in real time of aircraft as well as reception and software decryption of P25digital transmissions using OP25.



Waterfall Display of Signal

For more information here is a link to the website about the project <http://wiki.spench.net/wiki/RTL2832U>

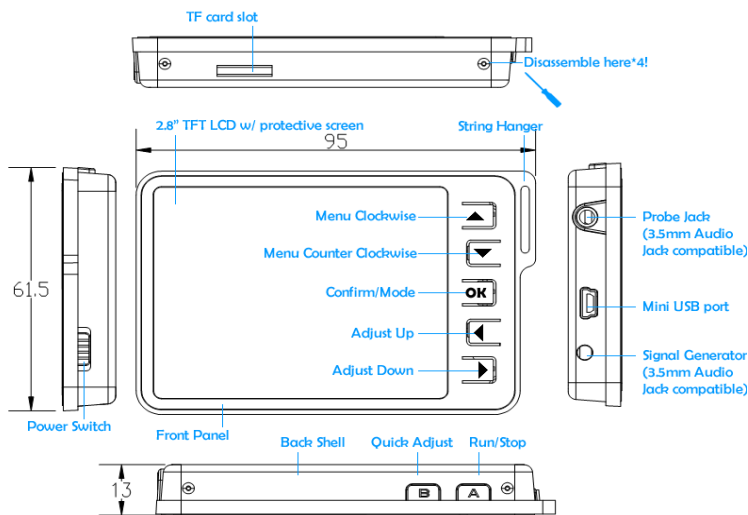
Open Source Portable Digital Storage Oscilloscope

Are you looking for a small digital storage scope to use in the field? An open source project has developed a small (think MP3 player) Digital scope. The hardware and software are open source and you are free to redesign it to your own needs if you have the desire to do so.

Don't expect the same performance or features as a desktop scope but for a small (95mm x 62mm) device that weighs less than 80 grams and a small price (about \$100 on eBay) you will have a great little field tool.

The scope has a 1Mhz analogue bandwidth and runs on an ARM Cortex 32 bit processor. It has a 320 x 240 colour screen, lipo battery, USB connection, signal generator and Micro SD card storage.

There is also a 4 channel (2 Analogue/2 Digital) version although that will set you back about \$200. You can take on screen measurements with markers and get signal information. The scope is future proof in that you can download new firmware from the projects website and re-flash it to upgrade the software.



Specifications

- Display** Full Color 2.8" TFT LCD 65K 320x240
- Analog bandwidth** 0 - 1MHz
- Max sample rate** 1Msps 12Bits
- Vertical** 10mV~10V/Div x1 probe 0.5V~100V/Div x10 probe
- Max input voltage** 80Vpp (by x1 probe)
- Trigger modes** Auto Single Scan Rising/Falling edge/level trigger
- Waveform Functions & Auto measurement** frequency, cycle time, duty cycle, peak volts, RMS volts, Avg volts and DC volts
- Signal Generator** 10Hz~1MHz square wave
- Dimensions** 95mm*62mm*13mm
- Weight** 76 gram

<http://code.google.com/p/dsonano/> for information on the project and to purchase see eBay or <http://www.sparkfun.com/>

ACMA Undertakes Major Regulatory Action in Adelaide

It was confirmed that a major compliance action had been undertaken in Adelaide recently. A Report by the Adelaide Advertiser suggested that Ham Operators had been involved but this has been denied by the ACMA.

Monitoring by the ACMA of radio frequency infrastructure in Adelaide confirmed that a number of Pirates had been active on frequencies licensed to other parties. Intelligence gathered by the ACMA by monitoring indicated these pirates had equipment programmed with various frequencies. Enquiries by the ACMA found these users did not hold ACMA licences to operate on these frequencies.

The radios operated by the pirates involved in this matter had been programmed with a number of frequencies which were licensed to other organisations. The ACMA had received reports of interference from a licensee although the extent of the disruption to their communications was not known.

The ACMA didn't have any information indicating that there was a danger to public safety. The notices issued were in relation to the transceivers in the possession of the individuals and nine transceivers were surrendered to the ACMA. The ACMA is still considering whether to take prosecution action.



Annual General Meeting Minutes - April 20th, 2012

Date: 20 April 2012
Start time: 08:30 PM.
Location: Guide Hall Cranbourne.
Chairperson: Albert Hubbard VK3BQO
Minute Taker: Bruno Tonizzo VK3BFT

Present: As per attendance sheet.
Visitors and Guests: As per attendance sheet.
Apologies: As per attendance sheet.
Correspondence Received: As per GM minutes.
Correspondence Sent: As per GM minutes.

The old committee was thanked by Albert VK3BQU and then released from their roles with Albert VK3BQO Chairing the AGM.

Treasurer's Report: As tabled by Ian Jackson.
Income: \$11,952.70 Expenditure: \$11,606.43 Balance: \$346.27
Moved by: Ian Jackson VK3BUF Seconded by: Dave Campbell VK3XMF Carried: Yes

New Call signs - Nil

Previous Minutes: Year 2010 – 2011 AGM minutes were read out by Bruno Tonizzo
Business Arising from Previous Minutes: None
Moved By: Albert Hubbard VK3BQO Seconded by: Steve Harding VK3EGD Passed: Yes

New Business:
No increase in Club fees were recommended by the committee for the 2012 – 2013 Financial Year. Bruno Tonizzo VK3BFT noted that the Bunning's BBQ profit made this possible.

Albert Hubbard VK3BQO put a motion forward to allow Mark Clohesy VK3FWSP the opportunity to run as a general committee member as he had been a financial member with the club for less then 12 months The members voted unopposed and Mark was allowed to run for the position.

2012 – 2013 Committee Nominations

President	Dianne Jackson VK3JDI
Secretary	Graeme Brown VK3BXG
Treasurer	Ian Jackson VK3BUF
General Comm Member	Michael Van Den Acker VK3GHM
General Comm Member	Mark Clohesy VK3FWSP

As there was one candidate per position, Albert VK3BQO moved to elect all nominees. This was seconded by Steve Harding VK3GD and the nominees were elected unopposed.

Meeting Closed 09:00 PM.
Next Prac Night: 4th May 2012
Next General Meeting: 18th May 2012



Gippsland Gate Radio & Electronics Club Inc.
Hamfest 2012
AN INVITATION TO
STALLHOLDERS



On Saturday the 21st of July 2012, the Club will be conducting its annual HAMFEST for the sale of new and used electronics and radio equipment. As it was last year, the venue will be at the Cranbourne Community Hall on the corner of Clarendon and High streets, Cranbourne. High Street is part of the Sth Gippsland Highway. Melway 133 K4.

The club takes pleasure in offering you the opportunity to become a Seller at our 2012 event. Forty tables will be available for stall holders, but demand will be high as usual. Please book early to avoid disappointment. All the details can be found on our web page at <http://ggrec.org.au/hamfest>.

- Table hire will be unchanged at \$20 per table. A limit of four (4) tables per Stall Holder applies. Table Hire provides access for TWO people to operate the stall. It will also include two tickets to the door prize and free tea/coffee throughout the day.

- The \$20 fee must be paid in full to the Club within 7 days of booking your table. Cancellations made more than 14 days prior to the event will be given a full refund by cheque.

- To make a booking contact Steve Harding VK3EGD on 0408 878934. Or email details to hamfest@ggrec.org.au Payment may be made by sending a cheque or money order (payable to 'GGREC') to Post Office Box 1098 Cranbourne 3977 or by direct payment to: **BSB 633000 ACC 134761279** with remittance advice to Steve upon transfer. If you do a direct transfer please include your "callsign/name" and "table fee" on the transfer.

- When making a table booking, Stall Holders will be asked to provide a Name, Postal address and Contact phone number.

- Upon receipt of the \$20 fee and contact details, a Booking Number will be posted with a receipt of payment. IMPORTANT! No booking is confirmed until this number has been received by the Stall Holder.

- Access to the Hall shall be from 8:30am for Stall Holders (not later than 9:30 am unless by arrangement).

- Transfer of your booking to another person is not permitted. Please contact Steve if you cannot attend or wish to discuss your booking.

- The doors will open for buyers at 10am with a \$6.00 entry fee. Each year, this event is a great success with many hundreds of people through the door in our large Cranbourne venue making it a premier event for radio markets in this state. We look forward to working with you again.



GGREC SPECIAL TREASURER REPORT

Our club has been active for almost 35 years now. We have many achievements to be proud of, including the construction of our Clubroom facilities. We have just gone through a process whereby we have disposed of assets excess to the Club's needs via the auction sale by its members.

The sale has been successful for several reasons. We have freed up valuable space in the Clubroom taken up by boxes of dormant magazines and hardware. We have turned these physical assets back to cash so that the funds may be used in different ways for the future. Lastly, this process has distributed radio and electrical equipment back into the hands of Members and this has inspired a flurry of activity both on-air and in project work.

Total Sales at the auction reached just on \$4600. Of the 67 items in the sale, only 9 items remain unsold at their collective reserve value of just \$130. (These will go to the Club table at the Hamfest Sale)

Following the recent auction and assessment of value of remaining Club assets, the notional value of physical assets has fallen from \$52,707 in 2011 to \$47,003 at present, However, with revenue from the auction, plus, fundraising and members subscriptions, the cash-at-bank for the Club is approximately \$12,000. With the upcoming Hamfest Sale in July, this figure is likely to increase by \$1500-1800.

On Membership Renewals, we have had a good response to the mailed Membership Renewal invoice with about a 95% renewal of last years members now in place. This has netted approximately \$1000 in fees so far. The decision to keep the fee structure unchanged for another year was an appropriate one.

What the Club does with its cash funds and when it happens is a topic for much discussion and there is no pressure to take action in the short term. However I will be recommending that we re-organise our banking to greater advantage.

Presently we have a Bendigo Bank Club 'at call' account, which attracts no fees, but also provides no interest. Placing say \$8000 of that cash into a *6-month term deposit* with the same bank would yield about \$450 annually in interest. Moving the remaining funds to an at-call *Not-for-Profit Community account* with Bendigo Bank would see balances above \$2000 attract a further 2% interest. All this takes place without exposing Club funds to risk or moving it to a different bank. As Treasurer it would be remiss of me to not make recommendations of this nature. I will move a motion to this effect at the next meeting.

So we have reached a point where we have choices about how the Club uses its funds. The money is not to be wasted, but it needs to be used to the advantage of the members and aims of the Club. We have one recent request made to purchase some more comfy chairs for the Club shack, perhaps similar to the four that we already have there. We will discuss this further at upcoming meetings.

So the Club is now capable of pursuing new directions and activities, but such moves won't necessarily come from the committee. We can help facilitate the ideas and projects, but the inspiration and direction still needs to come from the membership. Have a think about this, discuss it with others and see what you can come up with.

Cheers, Ian VK3BUF

General Meeting Minutes - April 20th, 2012

Date: 20 April 2012
Start time: 08:05 PM.
Location: Guide Hall Cranbourne.
Chairperson: Dianne Jackson VK3JDI
Minute Taker: Bruno Tonizzo VK3BFT

Present: As per attendance sheet.
Visitors and Guests: Nil
Apologies: Graeme Brown VK3BXG
Correspondence Received: Amateur Radio Magazine and FAMPARC
Correspondence Sent: Nil reported

Treasurer's Report: As tabled.
Income: \$215.00 Expenditure: \$1,416.07 Balance: (-\$1201.07)
Note this includes a write down of assets of \$1035.00
Moved by: Mark Clohesy VK3FWSP Seconded by: Reg Goddard VK3UK Carried: Yes

New Call signs: Nil

Previous Minutes: As printed in April Gateway magazine.

Business from Previous Minutes:

- Hamfest – Plan implementation and table bookings are all progressing well. We need to find a major sponsor now that Yaesu has left Australia. We should maybe try Kenwood.
- Asset Sale – This Sunday morning 11:00 AM starting time. Sale items are in the shack if anyone wants to view the items before the auction.
- Repeaters – Albert and Bruno to meet with the ACMA at the VK3RDD repeater site to start of the official investigation into our interference issue. VK3RLP is working well. The recent visit to the Frankston Water Tower resulted in the removal of the existing beacon antennae, replacing the 1.2GHz with a standalone unit while the original antennas are overhauled.
- Mid Year Dinner - 23rd June. Reddy Roasts will be catering again. Bookings and payments to be made at the next general meeting please.

New Business:

- There are extra items to be auctioned off from the estate of Ron Robertson.
- Ian VK3BUF read out the items and moved that they be sold. This was seconded by Michael Van den Aker VK3GHM and passed.
- Chris Chapman, Brenton Vowles and Michael Van Den Aker will be travelling to Vanuatu tomorrow 21/4/2012 to 5/05/2012 for a DX-pedition. Visit their website for operating frequencies etc.

Meeting Closed at around 08:30 PM.
Next Prac Night: 4th May 2012
Next General Meeting: 18th May 2012

High Regard

As Amateur Radio Operators, some of what we do is regarded by the rest of our community as odd, perhaps a little mystical and certainly a bit eccentric. This works in multiple ways. First Impact is when people see that your car has more than one antenna. That's fine. You may have two, or four or five of them. This is perfectly reasonable, as we have more than one band to operate on. And of course modern transceivers are quite compact, so we no longer have the need to remove the front passenger seat to squeeze in an equipment rack. It certainly differs from those persons who pierce their lips and eyebrows with shiny metal hoops then blackly declare "*What are you looking at?*" should your observations of disbelief linger for more than a few moments. The esotericism of the Radio Amateur is not so much about asserting individuality as it is about doing what works really well. If it happens to freak-out a few people along the way - well then, that's just a bonus.

So friends and relatives come to visit, they pretend not to notice the occasional bundles of coax in the hall, ponder the abstruse meaning of the wires, electronic boxes and great circle maps that adorn the hub of the household. In the end, it's always the antennas in the yard that gets to them. The rest of the home may look normal, leastways, from the outside. But it's that vertical monolith with a starburst of aluminium wobbling on top that disturbs them like an elephant in an ensuite. Reactions vary. Some observers can be relatively indifferent. Others are abhorred by its unfamiliarity. They would like to see the structure razed and the perpetrators catapulted from a public place. (These are also the people who would seek to burn down the observatory should an asteroid venture too close to our planet.) There exists a level of naivety that *should* be affronted. Sometimes a big tower in the yard does that quite nicely.

If you drive slowly down a street and you see the curtains in windows move in a wave of silent observation, then you have found a place that needs a prominent radio tower, or at the very least, a wind turbine, to help focus their ire.

While they don't realise it, or perhaps deny it, the community needs Radio Amateurs. We are the essential blot on the landscape, the element of chaos that must be present. The symbol that says to the world that we ought to move past the sublime and seek the next level.

The appropriate regard for a tower and antenna installation is not something to dismiss lightly. It goes beyond mere compensation for physical shortcomings. More than a painting in a museum, or a or a sculpture in a garden, a radio tower transcends conventional art because it has both form and function. Once completed, it is far more than appropriate, it is *essential* to stand back, hands on hips, regale the creation and say, "Yes, now the world is a better place."



by Ian VK3BUF



Information for Club Members



General Club meetings are held at 8:00pm on the third Friday of each month at the Cranbourne Girl Guide Hall in Grant Street, Cranbourne.

Prac nights are held on the first Friday night in the Peter Pavey clubrooms, (at the rear of the Guide Hall) they commence from around 7:30 PM.

Visitors are always welcome to attend.

Office bearers

President:	Dianne Jackson	VK3JDI
Secretary:	Graeme Brown	VK3BXG
Treasurer:	Ian Jackson	VK3BUF
Gen. Comm Members:	Paul Stubbs	VK3TGX
	Mark 'Pockets' Clohesy	VK3FWSP
Public Officer:	Ian Jackson	VK3BUF
Distribution Email :	Graeme Brown	VK3BXG
Property Officer:	Bruno Tonizzo	VK3BFT
Repeater Officer:	Albert Hubbard	VK3BQO
Web Master:	Stephen Harding	VK3EGD
Magazine Editor:	Mark 'Pockets' Clohesy	VK3FWSP

Call in Frequencies and Repeaters

- The Club Station is VK3BJA which operates from the Cranbourne Clubrooms.
- 6m Repeater at Cockatoo is **VK3RDD** : Freq. In **52.575**, Out **53.575** MHz
The 6m Repeater requires CTCSS tone access of **91.5** Hz
- 70cm Repeater Cranbourne is **VK3RLP** Freq. In **434.475**, Out **439.475** MHz
The 70cm Repeater requires CTCSS tone access of **123** Hz
The 70cm Repeater supports Remote Internet access (IRLP) **Node 6794**.
- Simplex VHF - **145.450** MHz FM
- Simplex UHF - **438.850** MHz FM

Membership Fee Schedule

Standard Member rate	\$37.00	Junior Member rate	\$22.00
Pension Member rate	\$22.00	Extra Family Member	\$17.00

- Fees can be paid by EFT to **BSB 633000 - Account 134761279**.
- Always identify your EFT payments.
- Due after each April Annual General Meeting.

Please direct all magazine articles to:
All other Club correspondence to:
or via Snail Mail :

editor@ggrec.org.au
secretary@ggrec.org.au
Box 1098, Cranbourne 3977

GGREC Web Site & Archive may be viewed at: www.ggrec.org.au

Disclaimer. The opinions expressed in this publication do not necessarily reflect the official view of GGREC Inc. and the Club cannot be held responsible for incorrect information published.

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