

GATEWAY

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

November 2015 From The President

With Christmas only a month away, it's time to reflect on what we have achieved this year. Education has been the biggest stand out for me during 2015. Graeme Brown VK3BXG and a team of helpers and examiners have been successfully facilitating people's ambition to become radio amateurs. They have also provided the opportunity for "F" calls to upgrade to a higher grade of amateur license.

The work done by Rob Streater VK3BRS and Albert Hubbard VK3BQO on prac nights has been invaluable and appreciated by all Club members. As the old saying goes, you never stop learning.

Thanks to Joe VK3YSP and JulieVK3FOWL, this year's JOTA event was another example of how we can show the next generation how amateur radio can be a sustainable hobby, by utilizing solar power and new technology to power transceivers from anywhere on the planet.

Presentations at the general meetings, our participation in the ANZAC commemorations, the recent Mt Buggery long weekend and a successful Hamfest have all contributed to a great year at GGREC.

The November GM will be an opportunity to reflect and celebrate the successes of 2015, so make sure you come along and join in.

See you at the November GM,



Bruno Tonizzo VK3BFT

President GGREC Inc.

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Event Queue

November:

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1 st	Club Net 8.00 PM
5 th	Prac Night 8.00 PM
8 th	Club Net 8.00 PM
10 th	Committee Meeting 7.30 PM
15 th	Club Net 8.00 PM
20 th	General Meeting 8.00 PM
22 nd	Club Net 8.00 PM
29 th	Club Net 8.00 PM

December:

4 th	Prac Night 8.00 PM
6 th	Club Net 8.00 PM
12 th	Christmas Party
13 th	Club Net 8.00 PM
20 th	Club Net 8.00 PM

No General Meeting in December

27th Club Net 8.00 PM

From The Editor "A Tale of two Power Supplies"

Recently I was building up a piece of test equipment where I work, It needed both 12V & 5V, so the engineers decided a computer power supply would be the easiest solution, especially as only a few of these were to be built.

Sounds familiar? Remember that GGREC project from a few years back where we were combining two PC power supplies to make up a 20A supply to run HF rigs.

Well after the test box was built to the engineers spec, it was handed over to be used, except it didn't last long until it came back with a complaint – Too noisy.

I had to agree, the 'Sunpower' 200W supply had a small fan that tended to scream. So I found a different unit an iEi 180W, it was a bit smaller and the fan (with thermal control) was so quiet it wasn't funny. I eventually talked the engineers into letting me change it.



What a difference it made, a pain to mount (I had to fashion some custom brackets etc.), but what got my attention was the test box now ran a lot cooler. So I took my Arlec power meter to work. I couldn't believe the results; the "High efficiency Sunpower 200W" drew 20W, whereas the iEi supply running the same load drew only 10W.

So how much power is that club supply you built using?, I never built one, so I cannot run any tests. (Anyone have a spare for me to test?)

I doubt they will be as bad as the Sunpower unit, - especially two in series, as was done then but unless you test them, you may never know.

Computer supplies are intended to run fairly heavy loads, and tend to be optimized only for full output, not for running flee power loads.

Unfortunately most radios tend to be flee power loads most of the time. Sure, they may need 22A for that HF SSB QSO, but most of the time they draw under 1A. A well designed linear supply probably would be more efficient in some situations, especially the case of radio's that run almost constantly in receive.

I intended to do more tests, but we had a meeting at work where 32 of us were told that they no longer had a role for us!

Anyone need a used technician?







A \$35, 12-METRE MAST FOR TEMPORARY FIELD USE

By Ian VK3BUF

Next year when the antenna weekend kicks off, we are going to need 4 masts at least 12 metres tall for supporting the four legs of the long wire rhombic antenna. The exercise here was to see how cheaply that could be achieved.



Two 6 metre lengths of 90mm pvc pipe were purchased and a roll of rope. Total cost= \$35

It is very lightweight, with each section only weighing a couple of kilograms,

With 30 minutes of work we had a guyed mast, ready for use. This was achieved without having to drill any holes in the pipes as the ropes attached to 90mm plastic stubs that push into the pipe ends.

This experiment was to see how stable it would be. It holds up

surprisingly well and should do the job needed for March.

Normally rhombic antennas are installed higher than this. While we could conceivably add a third stage using more rope and more pipe, it starts to get a bit more expensive than we would like for just a temporary installation.





Christmas Hamper Raffle

Yes, it's that time of year again.

Bring along something good to place in the Christmas hamper for this year's raffle and make sure you bring some spare cash to purchase your tickets. Tickets are \$1.00 each or 6 for \$5.00 and will be available at the General Meetings and at the Christmas Party.

Are you feeling lucky?



Christmas party.

It is at Leigh's (VK3FACB) House in Pakenham.



The address is 13 Mc Master Crt Pakenham Vic 3810

JOTA/JOTI 2015



JOTA JOTI 2015

Come along and support JOTA/JOTI this year at the GGREC Clubrooms on Saturday the 17th October. Helpers will be treated to a BBQ starting at 12:00 noon and our JOTA activities will start at 1:00pm.

We will be operating on HF and VHF, also hooking to available IRLP repeaters to connect to other JOTA stations. The fox hunt equipment, which is very popular with the Guides, will also be available for use.

2015 Theme -The Earth is Yours

How do you measure success? You can measure it by counting the smiles on the faces of the Guides and Scouts that participated in this year's JOTA/JOTI event.



Bryan and Wayne waiting for the food to cook.

We didn't have a huge turnout of Guides and Scouts but those that attended made up for the lack of numbers with their enthusiasm and participation.

This year, Joe VK3YSP and Julie VK3FOWL, accepted our invitation to demonstrate how a HF amateur station can be operated in a rural setting away from

mains power, in keeping with this year's JOTA theme of sustainability.. This was a big hit with the Guides and Scouts with the station operating past the official 4:00PM closing time. GGREC cannot thank Joe and Julie enough for the excellent work they did during JOTA. GGREC members utilized VHF/UHF facilities to provide communications to Gilwell Park Scout camp.

Luckily, there were enough Scout at Gilwell Park to sustain conversations with our Guides and Scouts for the whole afternoon. Fox hunting was as popular with the kids as ever.



Max getting stuck into the tucker.
Thanks to Graeme Brown for the fresh free range eggs!

We had a relaxing BBQ before the event to reward the members that gave up their time to participate in JOTA. In total, we had seven members, Wayne, Craig and Sharron, Max, Bryan, Graeme and I plus Joe and Julie. This was a great turn out from our Club and OUL contribution to **JOTA** much was very the appreciated by Cranbourne Guides.



Joe and Julie's setup. Solar panels are mounted on the roof of the car.

AUSTRALIA DAY WEEKEND IN THE STRATHBOGIE RANGES

By Ian Jackson VK3BUF, with images contributed by: Albert VK3BQO, Rob VK3BRS, Mark VK3PKT & Geoff VK3HGG

The GGREC Club is not a large one. Although it has a modest membership pool to draw from it does occasionally host a superlative event. Over the recent Melbourne Cup weekend several of our members prepared their food and camping gear and made their way to the small settlement of Strathbogie, about 25 kilometres North of Lake Eildon.

The town has no caravan park, but it does have a very tidy recreational reserve with footy oval, tennis courts, toilet facilities and a large grassy area where we were permitted to establish our respective camps.



The Strathbogie Rec Reserve campsite area & our 12M mast

The event was also an ideal occasion to try out the new GGREC Field Kit of IC706, 12metre mast and off-centre-fed dipole antenna. While the antenna and radio equipment fulfilled all of its important criteria, its performance was sadly limited as we were beset by scattered electrical storms that ravaged Southern parts of the state and laid to waste a good portion of the HF spectrum.

Storms not withstanding, there was still much exploration to be done, much refreshment to be consumed and only a limited number of days to achieve these objectives. The weather proved to be remarkable in its variety, with a little rain, a little sunshine, a little wind and some still, starry evenings punctuated only by the bestial barking of local Koalas in the trees and the clatter of local residents dumping their recyclables in the bins provided at the fringe of the footy oval.

The first mission to complete was the pilgrimage to Mount Buggaree, about fifteen kilometres East of where we had camped. This is the same site that the Club used in the 1990's as a communications hub when providing checkpoint communications for horse endurance rides that were taking place at that time.



While not exceedingly high in terms of metres above sea level, the site is a large granite outcrop surrounded by dense plantation forests and a chaotic matrix of slick logging tracks. To reach the top of the rock, one must first navigate a rocky path that tries to sign its name on the underside of all vehicles accepting the challenge, then grind up the natural face of this gigantic monolith to broach its panoramic summit.



Albert VK3BQO found little difficulty with his new Ford Ranger, while Rob VK3BRS succeeded with his mighty Subaru, which no doubt now sports some fresh Heidelberg scars of valour on its underside.



GGREC File Photo: Mt Buggaree in November 1991

The way back down was no less arduous, with seatbelts being the only thing keeping ones lips from flattening out on the inside of the windscreen.

It had been a while since the last visit to this excellent RF location. The picture here was taken by Peter VK3KCW while scouting for good RF locations 24 years ago, with his son Christopher, on the roof rack of the Land Rover.

(The position of the two vehicles are exactly reversed from the image on the first page.)

Something should be said about the camps established by each of group. Ron VK3FRDL had his large trailer encampment, which doubled as our operating area. Mark VK3PKT had his compact, but comprehensive tent and tarpaulin for his kitchen. Geoff VK3HGG and family brought along their caravan. An entire genus of camping methodology was represented here.



RON VK3FRDL's camp

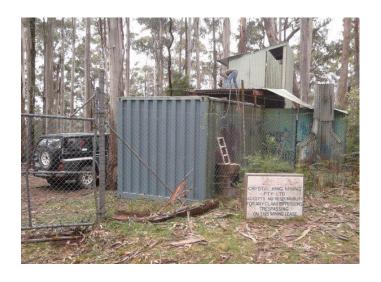


Geoff VK3HGG's camp



Mark VK3PKT's camp

On the second day many of the group travelled in a different direction to seek out the location of the old Crystal King mine. During WW2 quartz crystals for communications purposes were difficult to come by, as they could no longer be purchased from the USA at that time.





Crystals in the Strathbogie Ranges were found and discarded during earlier gold prospecting ventures as having little value. These turned out to be a high grade of natural crystal and were then mined for communications purposes.

(More information on Quartz Crystal mining can be viewed on a quaint old video documentary on You Tube at: https://www.youtube.com/watch?v=b_MUBbLRy9g)

Using some old map and references, our group sought out the old mine sites. By a splendid coincidence we encountered one of the owners of the single remaining shaft who kindly invited us down an unmarked track to their mine location. Some of the largest naturally formed quartz crystals in the world had come out of this mine.



Tallangalook is around here somewhere...

After some very interesting conversation, the miners recommended that we also explore a few kilometres further South at the old gold mining town site of Tallangalook.

Little remains of this once busy mining area, beyond a few big sluice holes and building fragments and some odd trees that look like they shouldn't be there.

A rough old hut still stood in one of the clearings. It would probably look more attractive when it is colder on the outside, and the occupant has more beer on the inside.

Following the expedition to the mines the group returned to the camp for lunch, then continued with another brief excursion to the top of Mt Wombat, which is home to several amateur repeaters on 6 Metres, 2 Metres and 70cm by the Shepparton & District Amateur Radio Club.



Plenty of antennas adorn the top of Mt Wombat

The normally good view was obscured by heavy cloud, so the stay was a short one.

On the following morning some of us returned to the mountain and the full panoramic view that awaited us made the effort worthwhile.

Its easy to see why this is such an effective repeater site, with at least six separate towers scattered about the hilltop.

With the wind dropping on the last day, the flies returned in force. I had to look carefully at the raisins in my breakfast cereal to see if they really were raisins. This fall of the wind allowed some quadcopter operation around the rec reserve area. The 1080P camera perched above the machine makes it a little unsteady, but some interesting footage was captured.



The remote control 'unsteady' cam



The Strathbogie Rec Reserve building & oval

Because of the light overnight rain, some of the soft-soil logging tracks were somewhat treacherous. As long as they were taken carefully, most tracks were willing to let our cars traverse them without trying to capture us forever.



Rob BRS escaping from the clutches of the forest

The final task was to wrap up the Club's dipole and mast to be ready for the next event. The mast consists of seven sections of tube, each being 1.6 metres long, making a total height of around 11.5 metres.

The mast is guyed at two points with nylon rope and mounts on a swivel base that gets pegged to the ground. This simplifies the process of standing up and taking down the mast. The entire mast and antenna assembly weighs only about nine kilograms.

The Field Kit also consists of a pair of 55AH Sonnenschein gel batteries, A toolbox-trolley to store the various items hardware and a radio kit with an IC706mkII & ATU.

This equipment will no doubt get a lot of use into the future.



The GGREC Field Kit mast

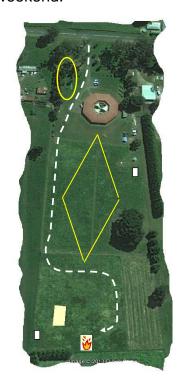
Some video footage of this weekend away was recorded and edited (a little bit) and can be viewed in You Tube using the link: https://www.youtube.com/watch?v=O5kE5k4QiDE
It runs for about 4 minutes.

A role call of those who did make it is in order. We had Albert VK3BQO, Rob VK3BRS, Mark VK3PKT, Ron VK3FRDL, Geoff VK3HGG with his wife Rebecca and family, Tristan and Justine. Pat VK3OZ dropped in a couple of times. There was Dianne VK3JDI and myself lan VK3BUF and Eric Jackson.

These events don't come along all that often, and they are great experiences in both adventure and education. When they come along, all members would do well to try to get involved and make the most of the occasion. Amateur Radio is a great pastime, but Amateur Radio while travelling can present the hobby at its best. Don't miss out!



We are pleased to announce that there will be another antenna field weekend at Drouin West. This will be on Saturday March 19 and Sunday March 20. (the weekend before Easter) Members and friends of members are welcome to come along stay for a day, or set up camp for the weekend.



We shall continue with the theme of short lectures on antennas and interesting topics to be spread over the two days. Visitors are welcome to set up antennas of their own and operate as a portable station.

The Club Station and field kit will be in operation, with its 12 metre mast and Off-centre fed Dipole and the Club's IC706 transceiver.

For experimentation and discussion, we intend to erect a temporary Rhombic antenna on 40 metres to see how well it compares with more conventional wire antennas. (The Rhombic is a very large antenna requiring a lot of space. Ours will be a relatively small one of about 130 metres in length and sixty metres wide, mounted on four guyed poles. (shown left) It will be erected the day before the event. It will

be the topic of one of the lectures over the weekend.

Unrelated to Amateur Radio, but a bit of fun anyway, we will have a military Humvee on display during the event

and its owner will tell us a little about what makes these vehicles so special.

Fire ban days permitting, we intend to continue the tradition of activating a campfire on the Saturday night.



On display ar Antennapalooza 2016

No bookings are required in advance. It is a free event, but visitors will need to bring their own tent or caravan if they intend to stay over. The Club barbecue and coffee making facilities will be available all weekend. As before, an invitation shall be extended to members of other Amateur Radio clubs in our region.

More details will be publicised as the event draws near. We still have some slots for interesting lectures on the Saturday and Sunday. If you have a topic of interest you'd like to share, contact lan, VK3BUF on 5625 2545.

If you want a reminder of what we got up to last year, take a look on You-tube using the link: https://www.youtube.com/watch?v=hUhxYctA3RU Or just do a search for antennapalooza

General Meeting Minutes 16/10/2015

Start time: 8.05 p.m. Location: Club rooms. Chairperson: Bruno Minute Taker: Bryan

Present: As per attendance sheet

Visitors: Nil

Apologies: As per attendance sheet.

Correspondence received:

- 1. WIA Newsletter
- 2. Prac night notice for 2 Oct 2015.
- 3. October 2015 Newsletter from the EMDRC.
- 4. Flyer from the Yarra Valley ARG re. their upcoming Hamfest.
- 5. Notice from Michael VK3GHM re. his participation in the World Solar Challenge.
- 6. Breakout Magazine for Sept 2015 from NZ.
- 7. Note from St. George ARC re. errors in the ACMA's new SPECTRA licensing database.
- 8. Flyer from SPARC re. their Hamfest on 29 Nov 2015.
- 9. NERG News for Oct 2015.
- 10. Refund cheque from Cranbourne Hall Committee re. Hamfest 2015.
- 11. WIA Board Newsletter for Aug/Sept 2015.
- 12. Notice from Yarra Valley ARG re. cancellation of their Hamfest.
- 13. Notice from EMDRC re upcoming events for Oct 2015 and beyond.

Correspondence sent:

- 1. NERG News for Oct 2015.
- 2. Prac night notice for 2 Oct 2015.
- 3. EMDRC Newsletter for Oct 2015
- 4. Flyer from Yarra Valley ARG re their Hamfest.
- 5. Note from Michael VK3GHM re. World Solar Challenge
- 6. Breakout magazine for Sept 2015
- 7. Note from St. George ARC re. errors in the ACMA's new SPECTA licensing database.
- 8. Thank you note to Bernadette Brodribb for pots and sockets sent.
- 9. EMDRC upcoming events Oct 2015 and beyond.

Treasurer's report: Graeme VK3BXG presented the financial reports for the period 16/9-15/10, and circulated details for the meeting to read. Members wishing to receive a copy of the reports should contact the Treasurer direct.

Read: Graeme VK3BXG Moved: Bruno VK3BFT Seconded: Craig VK3FDRG Carried: Yes

New Callsigns: Nil

Previous Minutes: As circulated in the Gateways magazine.

Business arising from the previous minutes:

- 1. JOTA tomorrow. Joe VK3YSP and Julie VK3FOWL will set up their portable station for the day.
- 2. Melbourne Cup Weekend. Recreation reserve has been booked in Strathbogie.
- 3. Key fobs/name tags: Members wishing to obtain these should contact the Admin. Secretary.
- 4. Foundation Course: Carol was successful in passing her Foundation licence. The next course will be held on the first weekend in December (5/6 December.) There will be an upgrade course conducted in Morwell on 15 November for anyone wishing to upgrade.
- 5. Club Computer: If members are seeking to install a program onto the club computer, please speak to a member of committee first.
- 6. Hamfest: The committee is still seeking possible alternative sites for our Hamfest. We also need additional people to undertake the food handler's course. (We currently have Bruno, Sharon and Geoff VK3HGG who have shown interest.)
- 7. Club membership details: Database is up and running.
- 8. Freebies are still available: See Dave Campbell if you are interested.
- 9. Field Kit: Is now largely complete. Be careful when erecting it, as it does need at least 4 people to put it up safely.

New business:

- 1. Hands-free kit: Is still being worked on. Albert is putting one in his car to test, while Rob has one to test the noise cancelling facility. Work is ongoing.
- 2. Beacons: Owing to a recent bereavement, no work has been conducted to put the beacons back on air.
- 3. Club website: Needs to be updated and corrections made. We will be looking for someone to take over the reins from Mark.
- 4. Pots and valve sockets: Help yourself. Remainders will be disposed of at the Hamfest.
- 5. VK3RDD: What is to be done with it? Lee VK3GK suggested that it might be possible for it to be hosted on a tower in Narre Warren North where VK3RMC is currently located. The change of location would require a \$90 fee to be paid to the ACMA, and we would need to get hold of a rigger to undertake the installation. A site visit could be arranged for anyone who was interested in inspecting the location. Lee will take the matter up with the MDRC committee next week.
- 6. Mt. Buggaree Cup weekend visit: We need to confirm the numbers attending. Bookings have been made for Friday-Monday at the Recreation Reserve in Strathbogie. If the numbers attending are going to be over and above what we have booked for, a donation of \$5/person/night would be well received by the Rec. Reserve committee.
- 7. Christmas Hamper: Please remember to bring something to contribute to the hamper. Tickets will be available in the near future.
- 8. 10m RG58: If anyone has any RG58 available, could they speak to Rob VK3BRS. (Ray VK3CEO offered 20m, which was gratefully accepted. Thanks, Ray.)
- 9. Australia Day BBQ 2016: Pencil this into your diary now 26 January 2016.
- 10. Upcoming hamfests: Ballarat Hamfest is next Sunday (25 October) and Rosebud on 29 November. Put these in your diary now.
- 11. Antennapalooza 2016: Planning has commenced, with thought being given to staging the event in March 2016. We need to think about bringing in other clubs, as the previous formula worked well. We need also to make sure we don't clash with other WIA events. If you have any ideas, please speak to a committee member.

Meeting closed: 9.00 pm.

Next Committee Meeting: 10/11/2015

Next Prac Night: 06/11/2015

Next General Meeting: 20/11/2015

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	Acting- Bryan Simm	VK3FOAB	Web Master	Mark Clohesy	VK3PKT
Treasurer	Graeme Brown	VK3BXG	Magazine Editor	Paul Stubbs	VK3TGX
General 1	Rob Streater	VK3BRS	Property Officer	Bruno Tonizzo	VK3BFT
General 2	Vacant	VK3XF	Secretary	Ian Jackson	VK3BUF

Call in Frequencies, Beacons and Repeaters

The Club Station VK3BJA operates from the Cranbourne Clubrooms.

6m Repeater VK3RDD – Currently de-commissioned until further notice - sorry

70cm Repeater Cranbourne VK3RLP In 434.475MHz Out 439.475MHz CTCSS 91.5Hz

VK3RLP Repeater supports Remote Internet access (IRLP), Node 6794.

70cm Repeater Drouin VK3RWD In 433.575MHz Out 438.575Mhz CTCSS 91.5Hz

Simplex VHF - 145.450MHz FM • Simplex UHF - 438.850MHz FM

VK3RLP Beacons 1296.532MHz & 2403.532MHz

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 or vk3tgx@gmail.com All other Club correspondence to: 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 Facebook Page www.facebook.com/GippslandGate