



GATEWAY

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

November 2013 From The President

Well, the November General Meeting is the last formal meeting of the year for our Club.

It is now a good time to look back on what we have achieved this year. We have had great support from new and existing members that help events like our annual Hamfest, working bees and JOTA all go ahead without a hitch.

Special events, like the Antennapaloosa, our new 70 cm repeater VK3RWD, the Mid-Year dinner and the ongoing work on our IRLP link show that GGREC is alive and well and is in good hands.



Bruno Tonizzo

As president of GGREC, I am very proud of all our members that organise and support our meetings and events to make them so much fun to be at.

See you at the GM,

Bruno VK3BFT

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Event Queue from November 2013

November 10th – Sunday. Yarra Valley Hamfest
yvarg.org.au

November 15th – Friday Night. General Meeting at the Guide Hall
From 2000hrs Talk to be announced

December 6th – Friday Night. Prac Night at the Club Shack
From 1930hrs

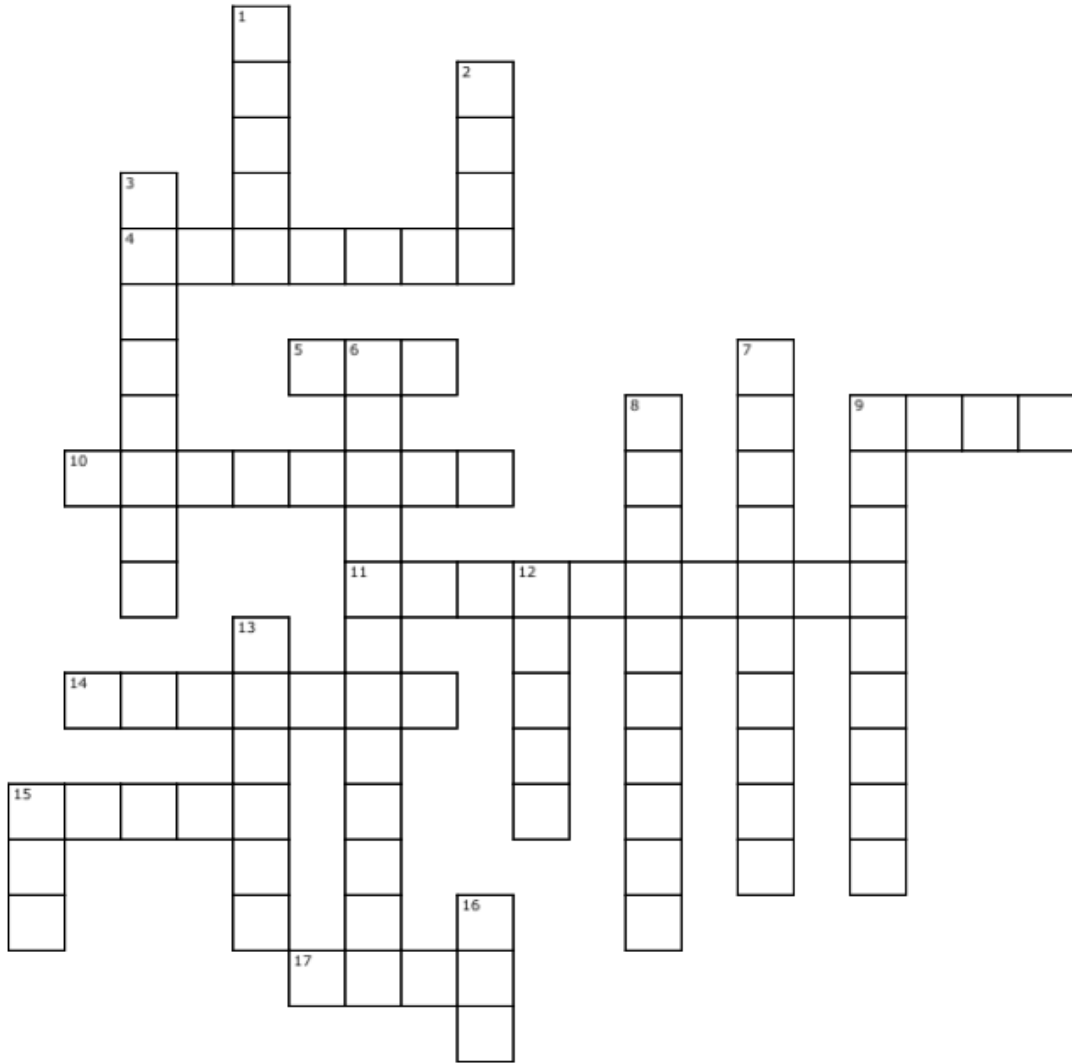
December 14th – Saturday. Christmas Party at Pats VK3OZ
From 1030hrs See page 6 for details

January 10th – Friday. Deadline for January Gateways
Magazine articles

January 17th – Friday Night. General Meeting at the Guide Hall
From 2000hrs Talk to be announced

February 7th – Friday Night. Prac Night at the Club Shack
From 1930hrs

November Crossword



Across

- 4. Pump up the volume.
- 5. This Antenna just keeps getting bigger.
- 9. It might take a while for an image to form in your mind.
- 10. Position your antenna for FM.
- 11. Don't lose your balance installing this feed line.
- 14. Don't get in a spin on this one.
- 15. If it gets out its all over.
- 17. Some things in life give you direction.

Down

- 1. Mechanically connect to a cable.
- 2. Popular digital mode.
- 3. Use this transceiver out and about.
- 6. Measure frequency in the time domain with this.
- 7. Measure this and measure that.
- 8. Key this to be heard.
- 9. The design starts here.
- 12. It only flows in one direction.
- 13. The cause of a lot of 2 meter QRM.
- 15. Reflect on this test meter.
- 16. Get you glasses out when using these.

Across
 4- AMPLIFY
 5- LOG
 9- SSTV
 10- VERTICAL
 11- LADDERLINE
 14- ROTATOR
 15- SMOKE
 17- BEAM

Down
 1- GRIMP
 2- RTTY
 3- HANDHELD
 6- OSCILLOSCOPE
 7- MULTIMETER
 8- MICROPHONE
 9- SCHEMATIC
 12- DIODE
 13- PAGERS
 15- SWR
 16- SMD

Our antenna field weekend on October 12 and 13 at Drouin West is over and I have heard some great reviews from those who attended. About 42 people attended over the two days. I'd like to thank Mark VK3PKT and Ron VK3FRDL for helping to prepare for the event. They also helped to get the wood together for the massive camp-fire on the Saturday night. We got through about 1.5 ton of wood, which made a huge blaze of about 0.5 DVC in intensity*.



A wide shot of the Drouin West event site being set up mid-Saturday

The series of lectures held over the two days featured Mike VK3KTO talking about the G5RV, Graeme VK3BXG on portable masts, Jim VK3UFO on Email via HF Radio, Lee VK3HK on the Squid Pole vertical, Ian VK3BUF on Cubical-Quad antennas and a joint talk by Albert VK3BQO and Rob VK3BRS on Antenna Test Equipment.



Graeme VK3BXG on portable masts

The pavilion we hired from the local Scout Group was a big save as it gave good shelter from the wind of early Saturday and the rain showers on Sunday morning. The event was largely self-catered, but that did not stop us for sending out for ten large pizza's on the first evening.

The town of Drouin is just 5km away and has a wide selection of take-away food available.



Jim VK3UFO on Email via HF radio



Paul VK3TGX at his HF station

Many of the group stayed overnight in caravans, tents and campers, which helped to make for a more relaxed timetable. It was a good opportunity for the Club members to organise themselves for battery powered field work.



Graeme VK3XTA set up his regular bush-camp config.

star-pickets to prevent the wind from changing it from vertical to horizontal polarisation.

For the Friday setup and entire Saturday the ground remained hard and dry. Nobody had any difficulty in getting their vehicles to and from the site. A solid burst of rain for one hour on the Sunday morning made the surface a bit slick, so that when visitors left in the afternoon, some had traction problems as they approached the top of the hill. A short tug with a nylon tow strap and the old Ford tractor got everyone out ok.

The Club barbecue was used extensively, with free tea & coffee set up in the Pavilion throughout the event made catering simple. A purpose-built 'Field toilet' provided essential facilities for the group. It was well pegged down with



Main pavilion & mobile 6M cubical quad



Geoff VK3HGG set up his van at the top of the rise



Just add water- the sticky track after rain

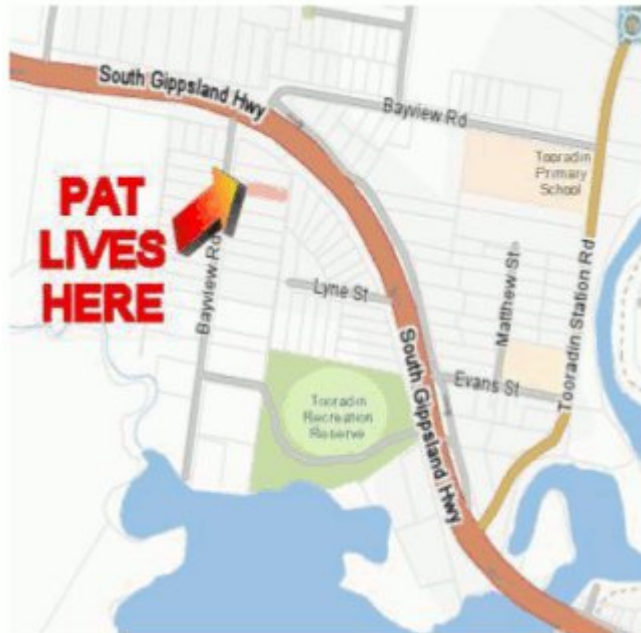
The souvenir 'Antennapalooza' T-shirts will be at the next meeting for those who ordered them. I believe that all who attended had a great time and there is much interest to do this again in late October of 2014. It is likely that an invitation will be extended to a couple of other nearby clubs, as there was plenty of room to expand the event. Keep an eye out for developments in *Gateway* around mid next year and we look forward to doing it all again with some fresh lecture topics.

* The unit DVC is a measure of camp fire intensity. It is a very *large* unit of intensity, as One DVC is the size of bonfire required to cremate One Darth Vader. A typical small bush camp-fire for a couple of blokes to sit around is about 0.1DVC. This regular camp fire size can also be referred to as 1 Deci-Darth-Vader-Cremation or 1 DDVC. So at 0.5 DVC, the Antennapalooza camp fire was still a pretty big fire.

GGREC Christmas Breakup Party

Saturday 14th December

Pat's VK3OZ QTH 6 Bayview Rd Tooradin



From 1030 hrs

Club BBQ on site

Fun and Games

Hamper Raffle Draw

BYO Chairs, Food and Drinks

Don't forget to bring along Hamper Donations at the November meeting

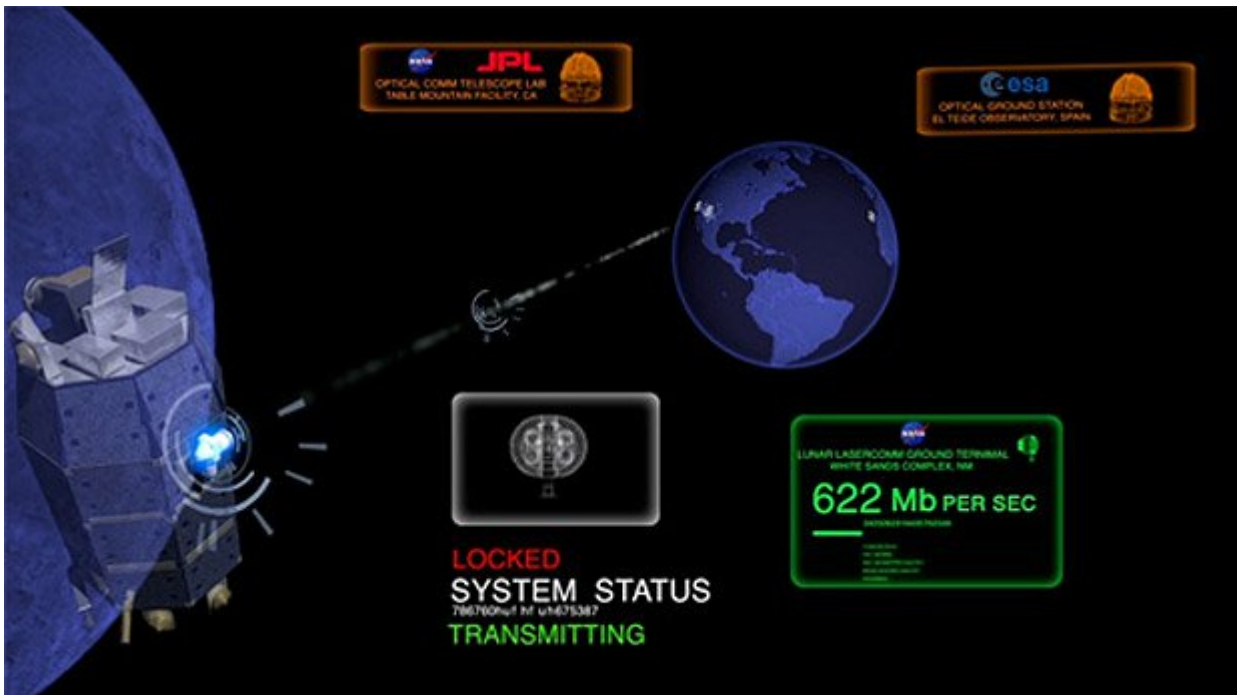
NASA Laser System Sets EME Record

NASA's Lunar Laser Communication Demonstration (LLCD) has made history using a pulsed laser beam to transmit data over the 239,000 miles between the moon and Earth at a record-breaking download rate of 622 megabits per second (Mbps).

LLCD is NASA's first system for two-way communication using a laser instead of radio waves. It also has demonstrated an error-free data upload rate of 20 Mbps transmitted from the primary ground station in New Mexico to the spacecraft currently orbiting the moon.

"LLCD is the first step on our roadmap toward building the next generation of space communication capability," said Badri Younes, NASA's deputy associate administrator for space communications and navigation (SCaN) in Washington. "We are encouraged by the results of the demonstration to this point, and we are confident we are on the right path to introduce this new capability into operational service soon."

Since NASA first ventured into space, it has relied on radio frequency (RF) communication. However, RF is reaching its limit as demand for more data capacity continues to increase. The development and deployment of laser communications will enable NASA to extend communication capabilities such as increased image resolution and 3-D video transmission from deep space.



"The goal of LLCD is to validate and build confidence in this technology so that future missions will consider using it," said Don Cornwell, LLCD manager at NASA's Goddard Space Flight Center in Greenbelt, Md. "This unique ability developed by the Massachusetts Institute of Technology's Lincoln Laboratory has incredible application possibilities."

LLCD is a short-duration experiment and the precursor to NASA's long-duration demonstration, the Laser Communications Relay Demonstration (LCRD). LCRD is a part of the agency's Technology Demonstration Missions Program, which is working to develop crosscutting technology capable of operating in the rigors of space. It is scheduled to launch in 2017.

LLCD is hosted aboard NASA's Lunar Atmosphere and Dust Environment Explorer (LADEE), launched in September from NASA's Wallops Flight Facility on Wallops Island, Va. LADEE is a 100-day robotic mission operated by the agency's Ames Research Center at Moffett Field, Calif. LADEE's mission is to provide data that will help NASA determine whether dust caused the mysterious glow astronauts observed on the lunar horizon during several Apollo missions. It also will explore the moon's atmosphere. Ames designed, developed, built, integrated and tested LADEE, and manages overall operations of the spacecraft. NASA's Science Mission Directorate in Washington funds the LADEE mission.

The LLCD system, flight terminal and primary ground terminal at NASA's White Sands Test Facility in Las Cruces, N.M., were developed by the Lincoln Laboratory at MIT. The Table Mountain Optical Communications Technology Laboratory operated by NASA's Jet Propulsion Laboratory in Pasadena, Calif., is participating in the demonstration. A third ground station operated by the European Space Agency on Tenerife in the Canary Islands also will be participating in the demonstration.

General Meeting 18th October 2013

Location: Guide Hall Cranbourne
Start Time: Meeting commenced at 2000 hrs
Chairperson: Bruno **VK3BFT**
Minutes taken: Graeme **VK3BXG**
Present and Guests: As per attendance sheet.
Apologies: As per attendance sheet

Correspondence in:- EMDRC news letter.
NERG news e-mail link.
FAMPARC news letter.
Rotarua email news letter.
ACMA, **VK3RWD** account.
WIA requesting suggestions for promotion in April

Correspondence out:-
Email to Ryan Unsworth, **VK3HRU** offering help with JOTA.
ACMA **VK3RWD** payment.

Treasurers Report, The Bendigo Investment account is at **\$9,420.11**; Bendigo savings account **\$4011.57** and the Quickbooks balance also at **\$4011.57**.

Total income for the month was \$103.68 whereas expenses were **\$638 01** making a loss of **\$534.33** for the month.

Moved Ian **VK3BUF**, seconded Mark **VK3PKT**, all in favour, carried.

New Callsigns Mark now **VK3PKT** and Ryan Unsworth **VK3HRU**.

Previous committee meeting minutes as per our October magazine distributed. Read out Bruno **VK3BFT** accepted, seconded Russ **VK3MWR**, all in favour, carried.

Business from the Previous Minutes.

Opening address, Bruno **VK3BFT** personally thanked Ian **VK3BFT** and Dianne **VK3JDI** on behalf of the club for making their property available for the club Antenna weekend event and apologised to Ian for leaving his name off the last presidents report in respect to the Drouin repeater project.

Repeater Reports Albert **VK3BQO** in his absence this evening submitted a written report which was read out and tabled by Bruno **VK3BFT**.

Rob **VK3BRS** reiterated that although the beacons were running, both needed maintenance.

He further reiterated that the antennas built by Ian **VK3BUF** for the **VK3RWD** repeater are now working very well.

Ian **VK3BUF** concluded that there is enough information on them now that it could be published in AR for the wider amateur community to use.

Mark **VK3PKT** reported that the **IRLP** is progressing nicely and all it needs now is the RAM for the motherboard.

Christmas Hamper Bruno reports that donations are still being sought.

Christmas Party will be the second Saturday in December (14th December) and at Pat's **VK3OZ** Bruno reports.

Antenna Weekend, Ian **VK3BUF** reported that despite the diverse weather pattern there seemed enough enthusiasm to have another next year.

Consensus from the members was positive but would it may be better later in October or November when it could be a bit warmer and before the fire season? Also do we extend the invitation to other groups for example FAMPARC and or the Eastern Zone?

Ian further reported that the lecture format was good and the variety of subjects went over well.

T shirts for the occasion will be available early next week.

TV antenna Russ **VK3MWR** has he will give to anyone who wants it to build a 2 meter antenna.

New Business.

Amateur Radio promotion Bruno **VK3BFT** reports the WIA is looking to advertise Amateur Radio on mass to the public and needs ideas for a date in April.

I, **VK3BXG** suggested that the best way that this could be done is to tie it in with some other events for example a hobbies-expo weekend.

Antenna maintenance, Bruno reports that the log periodic has now lost an element because of the high winds and a working bee needs to be arranged to repair it. It will not be able to be used for JOTA.

Request for photos Ian **VK3BUF** reports photographs are needed of the former Lyndhurst Radio station if available before the land disappears under housing development.

Altronics in Springvale Rd will offer discount to club members for their patronage, Bruno reports.

November Prac-night for the dummy-loads Rob **VK3BRS** reports will need to be postponed as the parts have not arrived.

Ballarat Hamfest, Lee **VK3GK** reports is on this weekend, Sunday.

Solar Challenge Mike **VK3GHM** gave a brief of his involvement on the Darwin to Adelaide event run between 6th to 13th October. As part of the support crew for a team from Hong Kong they came fourth (4th) in their overall class.

He spoke of the advances made in solar car technology but expressed concern at the lack of appreciation of safety by the Hong Kong team.

(Because of JOTA/JOTI tomorrow there was no guest speaker this evening).

Meeting concluded at 9:15 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	Graeme Brown	VK3BXG	Web Master	Stephen Harding	VK3EGD
Treasurer	Ian Jackson	VK3BUF	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 or pockets@twistedsouls.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

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