



GATEWAY

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

January 2014 From The President

Well, 2014 was ushered in with a bang. I haven't heard so many fireworks in our suburb like I heard this New Year's eve.

It reminded me of when fireworks were easily obtainable and legal to have. Just goes to show that you don't have to travel into town to see the sky light up.

I would like to thank Pat Pavey VK3OZ for opening up here home for the GGREC Christmas party. The afternoon was very relaxed, delicious food on the barbie and a responsible number of ales to wash it all down. The Jackson's had a lucky break, winning the raffle and taking home a rather plump Christmas hamper. Thanks to everyone that donated to the hamper and helped to make the day a success.

By the time you read this, the January committee meeting will have been held and your committee will be busy planning the remainder of the Club year's activities leading up to the elections and beyond. Luckily Ian had noticed that the Good Friday falls on a General Meeting night (April 18th) so we will have to change the date of the GM for that Month.



Bruno Tonizzo

I hope the Christmas and New year break gave you an opportunity to switch on the radios and have a good chat on the air.

See you at the General Meeting.

Bruno VK3BFT

CONTENTS

<i>SOTA</i>	3-5
<i>Australia Day BBQ</i>	6
<i>Origins of '73'</i>	6-7
<i>November GM Minutes</i>	8-10
<i>Club Information</i>	11

Event Queue from January 2014

January 17th – Friday Night. General Meeting at the Guide Hall
From 2000hrs Graeme VK3XTA on the Postie bike Challenge

January 27th – Monday. Australia day BBQ at the Club Shack
From 1100hrs BYO

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

February 21st – Friday Night. General Meeting at the Guide Hall
From 2000hrs Talk to be announced

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

March 15th – 16th - Friday - Saturday John Moyle Field Day
<http://www.wia.org.au/members/contests/johnmoyle/>

March 21st – Friday Night. General Meeting at the Guide Hall
From 2000hrs Talk to be announced

Sink Holes On The Air (The other SOTA)

Amateur Radio Operators are always looking for challenges. When the opportunity to launch a new sport arose, many operators were quick to participate. One amateur was recently quoted as saying "*Simple point-to-point communications just didn't do it for me any more. Sink-holes On-The-Air is an exciting new-low in Amateur Radio tradition that pushes the barriers of communications just one step further into the noise floor*"

The essence of this new DX craze is to find a large hole in the ground, set up your transmitters and antennas at the bottom and see how many other operators you can contact. Points are awarded in accordance with a complex formula based upon the diameter and depth of the hole. Double-points are awarded for Sink Hole – to Sink hole contacts.

One of the characteristics of the sport is that it is not permitted to reach the operating site by mechanical contrivance. The last 50 metres to the station site must be achieved by ladder or abseil descent. Electric winching devices are prohibited unless special dispensation has been obtained for disabled sink hole operators. Equipment should be carried down the hole on the back of the operator. Parachute drops are permissible, but are generally frowned upon and carry a 2-point penalty to the station tally. It is ok for the rim of the sink hole to have an elevated aperture, but the actual station position must be close sea-level to qualify.

Despite the logistics of carrying generators and battery packs out of the hole at the end of each event, by gentleman's agreement all batteries must be removed so that discarded lead-acid batteries don't contaminate the water table at environmentally sensitive locations. Following the successful campaign for visitors to national parks, operators are encouraged to follow the slogan: "*Take nothing but photographs and small rocks, leave nothing but toilet paper*".



The distinctive SOTA logo

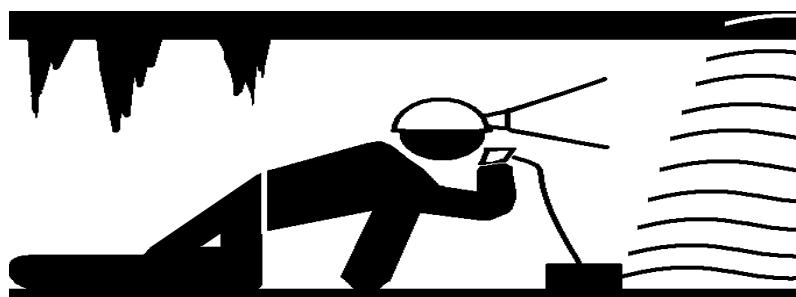
Volcano operation is permitted, but it must be inactive. This ruling follows the formal complaint lodged against the DX group operating with a YJ8 call from the active volcano on the island of Tanna where it was felt that the resonating column of rising ash and steam gave the group an unfair advantage over regular Sink-Hole operations. This was in spite of the logistical issues of operators making themselves understood through a fireproof suit using microphones that tend go soft with heat.

There are prime DX sites opening up all the time in South America. A major DX-Pedition is planned for the Yucatan Peninsula in South-Eastern Mexico in 2015 to take advantage of the extensive limestone formations and the points multiplier that applies to floating SOTA stations where the sink hole is partially filled with water.

CW operators should listen out for the new 'Q-code' abbreviations – 'QDH' which means:

What is the depth of your hole? / The depth of my hole is nn metres. Apparently this new abbreviation is sometimes used in conjunction with the existing QRP code for operators quietly transmitting from their hole at very low power, but contacts of this type are extremely rare. A second code 'QHL' may accompany a distress call from a SOTA station. This code essentially means: '*Help...my Ladder is broken*'.

Not just any sink hole can be used for operating. Only specially gazetted and approved sink holes may be occupied. For training purposes, operators may dig an hole to rigid specifications in their back yard to operate from to practise for contest events. This is referred to as 'The Castle Option' for reasons that are obvious to movie goers. ("*Dad, I dug a hole....it's filling with water...*")



The list of valid SOTA sites is long and is getting longer. One satirical application was made recently to embarrass road maintenance services for a large pothole that spontaneously appeared in the inbound lane of the Monash Freeway, to the South-East of Melbourne.

SOTA signals can often be identified on-air by the odd fluttering affects on their transmission known as 'batscatter' caused by the movement of bats. For brief signal surges, careful application of a starter pistol from the bottom of a sink hole can cause enough bat movement to trigger RF reflections over the lip of the hole. There is also a rare propagation effect known as 'Mohorovicic Ducting' where signals permeate through the earth between sink hole's when several planets in the solar system line up sufficiently to apply combined gravitational forces to our planet's mantle. There are many such subtleties to this sport that are not immediately obvious to the uninitiated that will take considerable time to master.

A small number of operators have been pushing boundaries even further by taking portable microwave dish antennas to the bottom of their holes for the very exclusive art of **SMS** communications. (**Sinkhole-Moon-Sinkhole** transmissions) Timing for these events are critical and contacts tend to be extremely brief.

Operators are ranked in order of points obtained from their contacts. At the end of each year The top ranking operators can apply for the coveted **Amateur Radio Sink Hole Award**, affectionately referred to as the **ARSHole Award**. After careful verification of their contacts are complete, qualifying operators will receive their ARSHole Award certificate in the mail. The award comes with a hat bearing bright LED lamps and the distinctive award logo, that say '*I'm an ARSHole Operator*' so that award operators may recognise their counterparts at conventions and special events. Organisers of the sport are hoping to double the number of qualifying ARSHole Operators on-air over the next 2 years. To find more details of this highly sought award visit the web site. This can be found by entering the key words 'arshole award' into any Internet search engine.

This competition will in fact supersede the poorly subscribed **Coal-Mines-on-the-Air** which fell into disrepute two years ago, following the tragic event a little West of Rockhampton in Northern Queensland when the corona discharge from a 1kw transmitter into a vertically oriented quad-beam triggered a coal dust explosion 300 metres below ground level.

If you are a Radio Amateur and find that all the regular challenges have been met, you may want to spice it up and have a go at this new sport. It's a great way to get fit and make new friends.

The motto of the Sink Hole Operator creed:

"We're going down - and we're taking you with us!"

Australia day BBQ 2014



The clubs Australia day BBQ will be held on Monday the 27th of January. Note this is not on Australia Day itself the 26th but on the day of the public holiday. The club BBQ will be fired up, it is BYO food and chairs. We are hoping to have the BBQ in the yard behind the guide hall this year if it is not being used by the guides.

The event will commence from 1100 hours and it should be a great day, looking forward to seeing you all there.

Monday 27th January at the Club Shack 1100 hours

The origins of '73'

Many amateurs already know that "73" is from what is known as the "Phillips Code", a series of numeric messages conceived for the purpose of cutting down transmission time on the old land telegraph systems.

It appears from research of telegraph histories that in 1859 the telegraph people held a convention, and one of its features was a discussion as to the saving of 'line time'. A committee was appointed to devise a code to reduce standard expressions to symbols or figures. This committee worked out a figure code. Most of these figure symbols became obsolescent, but a few remain to this date, such as 4, which means "Where shall I go ahead?". Figure 9 means 'wire', the wire chief being on the wire and that everyone should close their keys. Symbol 13 means 'I don't understand'; 22 is 'love and a kiss'; 30 means 'good night' or 'the end'. The symbol most often used now is 73, which means 'my compliments' and 92 is for the word 'deliver.' The other figures in between the forgoing have fallen into almost complete disuse."

Now days, 22 has become 88 (love and kisses). I don't know when this came about. 30 is still used in the newspaper and magazine business to indicate the end of a feature, story, or column. And, of course, 73 is still used by amateur radio operators to mean "best regards". Making any of these numbers plural (73s, 88s, etc.) is incorrect since they are already plural. 73s would mean best regardses and 88s would mean love and kisseses. This make no sense.

WIRE SIGNALS

- 1 *Wait a moment*
- 2 *Important Business*
- 3 *What time is it?*
- 4 *Where shall I go ahead?*
- 5 *Have you business for me?*
- 6 *I am ready*
- 7 *Are you ready?*
- 8 *Close your key; circuit is busy*
- 9 *Close your key for priority business (Wire chief, dispatcher, etc)*
- 10 *Keep this circuit closed*
- 12 *Do you understand?*
- 13 *I understand*
- 14 *What is the weather?*
- 15 *For you and other to copy*
- 17 *Lightning here*
- 18 *What is the trouble?*
- 19 *Form 19 train order*
- 21 *Stop for a meal*
- 22 *Wire test*
- 23 *All copy*
- 24 *Repeat this back*
- 25 *Busy on another wire*
- 26 *Put on ground wire*
- 27 *Priority, very important*
- 28 *Do you get my writing?*
- 29 *Private, deliver in sealed envelope*
- 30 *No more (end)*
- 31 *Form 31 train order*
- 32 *I understand that I am to ...*
- 33 *Car report (Also, answer is paid for)*
- 34 *Message for all officers*
- 35 *You may use my signal to answer this*
- 37 *Diversion (Also, inform all interested)*
- 39 *Important, with priority on thru wire (Also, sleep-car report)*
- 44 *Answer promptly by wire*
- 73 *Best regards*
- 88 *Love and kisses*
- 91 *Superintendent's signal*
- 92 *Deliver promptly*
- 93 *Vice President and General Manager's signals*
- 95 *President's signal*
- 134 *Who is at the key?*

General Meeting 15th November 2013

Location:	Guide Hall Cranbourne
Start Time:	Meeting commenced at 2005 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, VK3RLP account. Robert Broomhead, WIA requesting suggestions for the proposed AR promotion next April. WIA, advising of the Kyneton Hamfest cancellation. Shire of Casey advising of a fund-raising workshop 5th December 2013. SPARC inviting other radio clubs to put on a club display at their Hamfest on 24th November.

Correspondence out:- Karen Ashton, Cranbourne Guides with the JOTA radio log.. WIA, with information regarding the update of VK3RWD.

Treasurers Report:- The books are done on the 15th of the month. The Bendigo Investment account is at \$9,420.11; Bendigo savings account \$3675.10 and the Quick books balance also at \$3675.10. Total income for the month was \$3.47 whereas expenses were \$339.94 making a loss of \$336.47 for the month.

Moved Ian VK3BUF, seconded Albert VK3BQO, all in favour, carried.

Previous Meeting minutes as per our November "Gateways" magazine distributed. Briefed over by Bruno VK3BFT accepted, seconded Russ VK3MWR, all in favour, carried.

Business from the Previous Minutes.

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

JOTA weekend. Bruno VK3BFT reports went well with excellent IRLP to New Zealand which kept the Guides occupied and that he has received a sincere thank you from the Guides.

Rosebud Hamfest 24th November, with reference to SPARC's invitation, Wayne VK3XF proposed to go to display GGREC. He proposed to take the banner, flyer information.

Christmas Party will be the second Saturday in December (14th December) and at Pat's **VK3OZ** Bruno reports. Start time for those who are interested to arrive there at 10am to help set-up and for all others, 12noon.

Christmas Hamper Bruno reports that donations are still being sought and tickets will be \$1 each or six (6) for \$5.

Event Queue Bruno **VK3BFT** reports will be tight over the next month or so with a proposed working-bee, Rosebud Hamfest, the last prac-night for the year and our Christmas party. There is no General Meeting in December or prac-night in January but an informal prac-night can be arranged if desired.

Antenna Weekend, I, **VK3BXG** reported that when mentioned, keen interest was shown by members of the Eastern Zone in participating if we have one next year.

New Business.

Microwave Weekend Bruno **VK3BFT** reports that EMDRC have a former scout hall as a club room and are very well set-up.

Our members were very well received and shown the Moon-bounce achieved by microwave which is all controlled and tracked by microprocessor and a lot of mechanics.

Albert **VK3BQO** reiterated Bruno's report that it was very educational and a lot of information gained for maintaining our beacons.

Trestle tables which belong to our club, have been stored at Pat's **VK3OZ** for the past ten years. Bruno **VK3BFT** reports that the committee has made a discussion to dispose of them but this must go to the members for consent.

Bruno **VK3BFT** proposed "that the club dispose of the trestle tables". Seconded Mark **VK3PKT** and Ivan **VK3ARV**, all in favour, carried.

In order for those members who wish to acquire a table, the matter will now be advertised in our club magazine.

PR4Amateur Radio request from WIA the club will need a response Bruno, **VK3BFT** suggested.

Discussion arose as to if the PR4Amateur radio event should be shared with another club or another event or even at a show or festival.

The question was asked "does the City of Casey" have a show weekend? Ian **VK3BUF** reported that no interest was shown in an amateur radio exhibit at a Dandenong Show, so this will not be the answer.

I, **VK3BXG** reported that I had replied privately to PR4Amateur radio of a hobbies weekend I was invited to attend and display a working amateur

station. I deemed it successful working in with other hobbies with people who would not otherwise come if it was for amateur radio only. Ian VK3BUF felt that this idea would not attract.

Mike VK3GHM suggested that it may fit in with an Emergency Services promotion put on by the Cultural Centre at Pakenham.

Committee needs to agree on a response.

[Working-bee](#), Bruno VK3BFT reports, that strong winds have damaged the log-periodic and a working bee is now needed to salvage an element replace it and repair the antenna.

From the last committee meeting, a working bee is planned for 10 am tomorrow Saturday 16th November as it will be the last opportunity for repair this year.

Discussion arose as to the easiest way to access and repair the broken end.

Bruno VK3BFT suggested a 10am start for assessment and repair and then a BBQ lunch.

[Dummy Load kits](#) Rob VK3BRS reports are now available for those members who wanted them.

VK3RWD, Albert VK3BQO reports is not being used as much as it should and that he is monitoring it all the time.

He requested that the WIA clubs lists now be notified that it is now operational.

[E-mail via Internet](#), Bruno spoke of Jim VK3UFO's talk at the Antenna Weekend giving a brief of Internet remote radio mail services.

Meeting concluded at 8:55 pm

Next General Meeting 17th January 2014.

General Meeting Guest Speakers

We are always on the look out for people within the club or outside of the club to give a talk at our General meetings. If you have a talk you can give or know of someone that is in to a particular area of Ham radio or electronics that would be willing to give a talk please see a member of the committee to help arrange this.

Thanks from the Committee.



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.
Commercial Advertising is \$10 full A4 Page or \$5 ½ A4 Page per edition

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