



*** QDG DIGIPEAT September 2015 ***

Digipeat is the Official Newsletter of the Queensland Digital Group
Incorporating 'Amateur Eye', the Official Newsletter of the
South East Queensland Amateur Television Group

September QDG Meeting

The Next QDG general meeting will be held on Friday September 18 at the Redcliffe club rooms.
Doors will open at 7:00pm for a meeting start of 7:30pm.

The club is located at MacFarlane Park in Klingner Rd, Kippa Ring.(UBD Map 91 Ref G 1)

<https://plus.google.com/106119512431582251982/about?gl=au&hl=en>

Editorial

Jota is not being held at BP Park this year so members are asked to help out the Redcliffe club
on the third weekend in October 2015, from 9AM at the Murrenbong Scout Campsite -

<http://www.murrenbong.org.au/location.htm>

Alan VK4NA

NEWS FROM THE SEQATV GROUP

New web site

Please check out the new Web site for the latest information and contact details.

<http://seqatv.org/>

The club has a new Post Office box 674 Kallangur, Qld 4503.

Club election, new officers are listed in the information section of this newsletter.

Brisbane VHF Group

New Web site

Please check out the new Web site for the latest information and contact details.

<http://brisbanevhfgroup.com/>

Microwave Dish

Do you need a dish for microwave activity?

There is one (1) only, Mitec 600mm prime focus spun aluminium dish available for pick up from Stanthorpe; **free** to a QDG member if you promise to use it; if you are not a member please join, also free.

Alan Wills VK4NA

qdg@qdg.org.au

Alan Simpson memorial home brew competition

The award is open to QDG members.

Alan VK4AAE was one of the founding QDG members; he always strived to do his best in any endeavour.

This competition is to be judged at the August QDG general meeting each year.

The best quality, most well built or most innovative radio related home built project you have personally assembled will be judged by members present at the meeting.

Your project may consist of hardware, software or firmware and could be anything from lines of computer code to an antenna tower or your very own fully functional TARDIS.

The first, second and third place winners will receive a certificate to frame and put on your shack wall.



If you don't know your system's specs, use this tool.

Download and run our System Scanner and we'll find your system, show you what's installed now and show you compatible upgrades. If you don't know your system's specs, use this tool.

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<http://www.crucial.com/usa/en/systemscanner>



Equipment for Ham radio, APRS, GPS, GSM, Interfaces, SDR, Weather

<http://microsat.com.pl/>

timeanddate.com

World Clock, Time Zones, Calendar, Weather, Sun & Moon, Timers, Calculators, Apps & API.

<http://www.timeanddate.com/>

VK2GOM Radio & SOTA Blog

Determining SOTA Activation Zones in Google Earth

The Flood Tool

Google Earth is a remarkable resource. It's free, for starters! Google Earth is embedded with altitude data. As such, a programmer called Bernard Sterzback in Germany has come up with a clever .kmz extension file that can be installed, and used to access that embedded altitude data to show 'flood' maps, in order to show what land projects above a user-input elevation level.

This is useful for determining the 'within 25m of the summit' Activation Zone for SOTA, as well as for hill walkers in determining likely paths and ridges, and the widths of such ridges.

<https://vk2gom.wordpress.com/>



DMR Tech Talk

DMR Tech Talk is a new concept aimed at encouraging the collaboration of Amateur Radio's finest! We're here to share projects over the air and in this tech blog. The website and the RF talkgroup support one another to drive creative thoughts and solutions. We hope to encourage innovation, communication, and networking.

<http://dmrtechtalk.org/>

VK DMR INFORMATION

THE AUSTRALIAN AMATEUR radio dmr repeater network

Digital Mobile Radio (DMR) is an open source land-mobile radio network standard, developed by the European Telecommunications Standards Institute (ETSI). DMR is used by thousands of professional land-mobile radio networks worldwide.

DMR uses Time Division Multiple Access (TDMA) to provide two "slots" per 12.5 kHz radio channel. Each slot can carry independent voice conversations - this means that each DMR repeater provides two simultaneous voice channels

<http://www.vkdmr.info/>

DMR-MARC Networked Repeaters

Our network is an all-digital group of over 500 DMR-MARC repeaters in 44 countries with 15615 registered users. There are 1501 registered DMR repeaters world-wide in our database. We are all amateur radio operators many of whom are Motorola Solutions employees, Motorola Service Station employees, dealers, system installers and Motorola equipment aficionados.

<http://www.dmr-marc.net/repeaters.html>

MOTOTRBO

MOTOTRBO is a Motorola digital radio product marketed primarily to business/industrial users. The format is based on, and compatible with the European 2-slot DMR standard and uses Time Division Multiple Access (TDMA) to effectively accommodate two simultaneous users. A single 12.5 kHz channel is able to carry two simultaneous and independent conversations, or simultaneous and independent voice and data paths each with 6.25 kHz equivalency, however the bandwidth of DMR exceeds the maximum required for UHF 6.25 kHz channel centers. Operation of different talkgroups and talkpaths similar to trunking is possible, as is wide-area operation through IP connectivity. MOTOTRBO transceivers and repeater stations may be retrocompatible with analog FM using CTCSS or CDCSS.

<http://wiki.radioreference.com/index.php/MOTOTRBO>

Amateur Radio Guide to Digital Mobile Radio (DMR)

http://www.trbo.org/docs/Amateur_Radio_Guide_to_DMR.pdf

RF SOLUTIONS

Your supplier of choice in excellent amateur radio products

RF SOLUTIONS is your authorised distributor of superior amateur radio products in Australia, New Zealand, and the Asia Pacific region – catering for both the casual operator and the serious DX-ing and contesting operator. We offer exceptional and personalised customer service combined with comprehensive technical knowledge.

<http://www.rfsolutions.com.au/>

Pultruded Fibreglass Rod

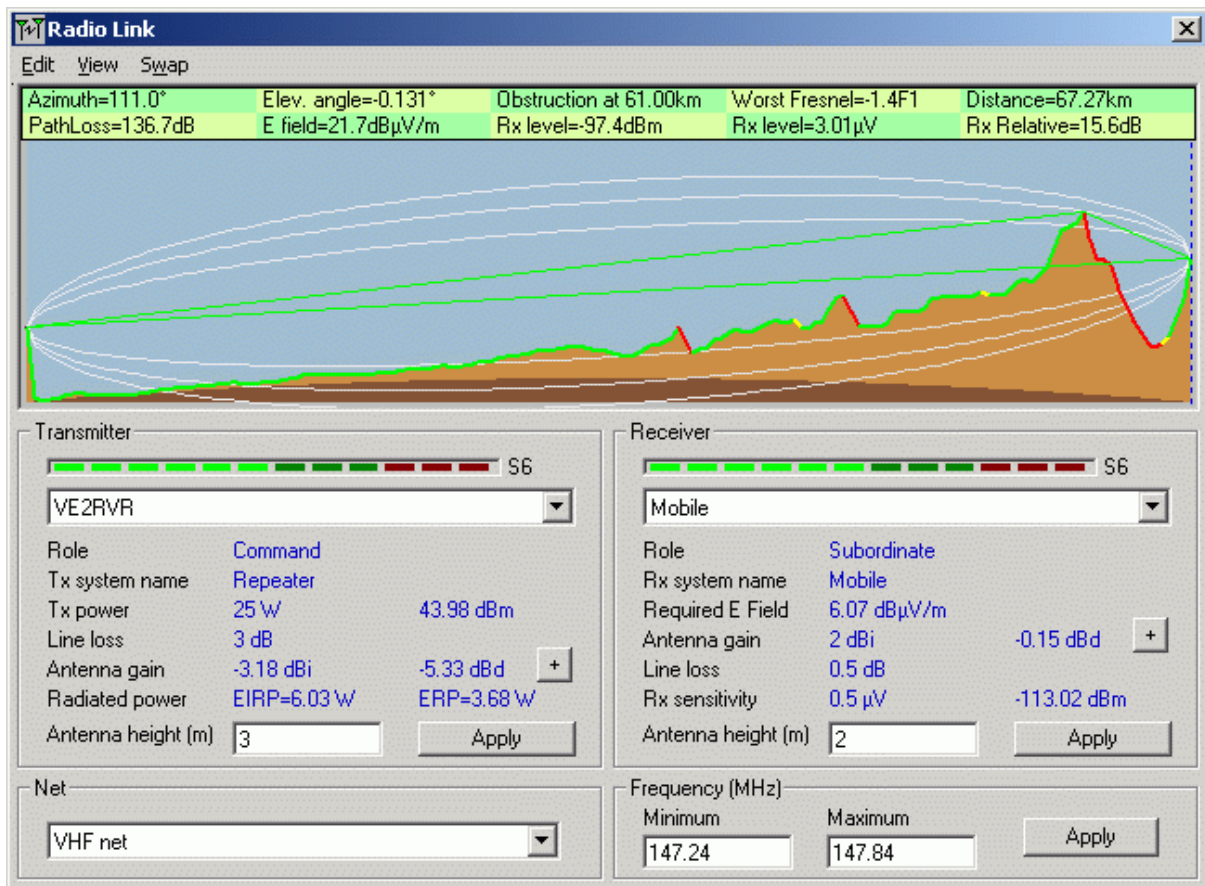
Just what you need to build quad antenna

http://www.permex.com.au/pultruded_fibreglass_rod.htm

VK6UU

Will VK6UU Web site

<http://vk6uu.id.au/index.html>



Radio Mobile

Freeware by VE2DBE

Radio Mobile software is a copyright of Roger Coudé VE2DBE. Radio Mobile is dedicated to amateur radio and humanitarian use.

This software is a tool used to predict the performance of a radio system.

It uses digital terrain elevation data for automatic extraction of path profile between an emitter and a receiver.

This data is added to system, environmental and statistical parameters to feed the Irregular Terrain Model radio propagation model

Elevation data is also used to produce virtual maps in background.

Elevation data for most of the world is available

The software also provides 3D views, stereoscopic views, and animation.

This software is available free on this site.

<http://www.cplus.org/rmw/english1.html>

Talking Electronics

It's an e-magazine for newcomers and everyone who likes to be involved with electronics.

It's an educational e-magazine, aimed at teaching electronics from the beginning with courses, tests and interactive questions to guarantee your success. It will also include many interesting articles and related items.

http://www.talkingelectronics.com/te_interactive_index.html

HIDES

HiDes is a leading provider for digital video transmission and playback equipment. We have expertise in Full HD broadcasting. Our core technology can be applied to a variety of fields which need cost-effective and easy-to-deploy broadcasting systems, such as video broadcasting in a small area, digital signage, surveillance, etc. We can achieve almost real-time transmission with high quality and synchronized video and audio. Looking into our customers' and the market demand, HiDes will keep developing more professional, reliable products to fulfill the requirements for digital video broadcasting.

http://www.hides.com.tw/index_eng.html



HackRead, founded November 2011 (11/11/11) is your gateway to the world of Internet that centers on Technology, Security, Privacy, Surveillance, Cyber warfare, Cybercrime and first-hand Hacking News, with full-scale reviews on Social Media Platforms.

<https://www.hackread.com/>

HACKADAY

Hackaday serves up Fresh Hacks Every Day from around the Internet. Our playful posts are the gold-standard in entertainment for engineers and engineering enthusiasts.

We are taking back the term "Hacking" which has been soured in the public mind. Hacking is an art form that uses something in a way in which it was not originally intended. This highly creative activity can be highly technical, simply clever, or both. Hackers bask in the glory of building it instead of buying it, repairing it rather than trashing it, and raiding their junk bins for new projects every time they can steal a few moments away.

<http://hackaday.com/>

Hams Talk Digital

by: Al Williams

[AA6E] made a very informative video where he carries on a QSO (a conversation) with a distant station using freedv. What makes it interesting, is towards the end when the two stations switch to regular SSB. The difference is dramatic and really points out how even with less bandwidth (roughly 3 kHz for SSB vs 1.25 kHz), the digital mode is superior.

<http://hackaday.com/2015/09/06/hams-talk-digital/#comment-2705023>

FreeDV

Open Source HF Digital Voice

FreeDV is a Digital Voice mode for HF radio. You can run FreeDV using a free GUI application for Windows, Linux and OSX that allows any SSB radio to be used for low bit rate digital voice.

Alternatively you can buy a SM1000 FreeDV adaptor that allows you to run FreeDV on any HF radio without a PC or sound card.

<https://freedv.org/tiki-index.php>



Hints & Tips for getting started on FreeDV

<http://www.areg.org.au/>

FreeDV QSO Party Weekend – September 12/13th

The Amateur Radio Experimenters Group would like to invite all amateurs interested in HF digital voice communications to join us on the weekend of September 12th and 13th in a FreeDV Codec2 digital HF voice QSO Party! AREG in conjunction with David VK5DGR, one of the co-creators of FreeDV, will be activating a FreeDV HF station across the weekend under the Wireless Institute of Australia (WIA) special event call-sign VK100ANZAC. The aim is to encourage as many amateurs as possible to “come and try” this new digital HF mode, joining us and as many other FreeDV operators as possible in making contacts via digital HF voice around Australia and across the world.

Bands and Times?

Various bands will be used, with the primary call channels being 14236kHz +/-QRM and 7175kHz. The VK100ANZAC net control station will be listening and intermittently calling on FreeDV on the following bands:

Saturday evening September 12th from 1130UTC (9pm Australian Central Standard Time (ACST)) beaming short path North America on 20m (west coast).

Sunday morning September 13th from 2130-2330UTC (7am-9am ACST) on 20m beaming long path North America (east coast)

Sunday morning from 2230-0130UTC (8-11am ACST) will see local VK contacts targeted on 40m

0430-0730 UTC (2-5pm ACST) will focus signals towards Europe Long Path as well as VK on 20m.

0530-0830 UTC (3-6pm ACST) will see 40m targeting VK/ZL again

During the middle of the day on Sunday we may activate on 15m as well targeting Asia/Japan/Northern VK. Keep watching the AREG blog for details.

<http://www.areg.org.au/?p=1578>

ZL1TPH Amateur VHF and Microwave DX

Stephen ZL1TPH

This site is a brief historical record of numerous trips to the top of ZL along with other DX activities on the bands 144 MHz and above

<http://zl1tph.yolasite.com/>

Broadband-Hamnet NZ

Developing A Ham Radio High Speed Network in NZ

The BBHM-NZ formed at the beginning of 2014 when a group of ham radio enthusiasts got together to look at forming an amateur radio only network which could be used for remote station operating, but also as a backup network in times of emergency.

<http://www.broadband-hamnet.co.nz>

Broadband-Hamnet

Broadband-Hamnet™ is a network, it is not application software. It is a special firmware build that transforms consumer wireless gear to a specialized ham radio function. It can use application software to transport your data from place to place, but you must provide the application software just like you do at your home or office.

A Mesh network is a highway over which data travels. Turning on two mesh nodes loaded with our firmware creates a data network. This highway carries your cargo (data), and allows your local computer to use information or applications stored in other locations

Mesh nodes were originally consumer wireless routers but changed function when the firmware was changed

After conversion, the WAN, LAN and Wi-Fi ports are linked using special rules and no longer operate like a normal wireless router. Some devices like Ubiquiti Bullet have only a single network connection. Others like the WRT54x series have multiple LAN jacks and the .Internet jack. All have the RF (WiFi) antenna and signal.

Mesh nodes are self discovering, self configuring, self advertising and fault tolerant

<http://www.broadband-hamnet.org/>

New LCD for Amateur Radio

Radiocommunications Licence Conditions (Amateur Licence) Determination 2015 - F2015L01113

[https://www.comlaw.gov.au/Details/F2015L01113\](https://www.comlaw.gov.au/Details/F2015L01113)

ACMA Radcom Database

Register of Radiocommunications Licences

http://web.acma.gov.au/pls/radcom/register_search.main_page

2m SSB

Sunshine Coast 2m SSB net

19:30 Sundays on 144.300 MHz

Don't just use your equipment on field days; come up on air every Sunday.

SEQATV Club Net

Wednesday nights

8:00 PM EST on VK4RRC 146.925MHz repeater

2015 dates

Sept 12 VK4 SUNFEST Woombye

<http://vk4wis.org/>

Oct 24 VK4 Gold Coast Hamfest Broadbeach

<http://www.gcars.com.au/>

Contests 2015

Spring VHF-UHF Field Day the weekend of 14th and 15th November

<http://www.wia.org.au/members/contests/vhfuhf/>

QDG information

QDG meeting dates 2015

January 16 (Combined SEQATV Group QDG meeting, meeting Room 1)

February 20

March 20

April 17

May 15

New Venue - Redcliffe club rooms

June 19

July 17

August 21

September 18

October 16

November 20

December 18

Unless otherwise noted, QDG group general meetings are held on the third Friday of the month at the Redcliffe Club rooms

The club is located at MacFarlane Park in Klingner Rd, Kippa Ring.(UBD Map 91 Ref G 1)

<https://plus.google.com/106119512431582251982/about?gl=au&hl=en>

QDG Membership

QDG Membership is presently free.

As of June 2015 the QDG has 65 members.

Information and a list of members are up on the web site <http://www.qdg.org.au/qdgmemb.htm>

Membership forms are on the web site.

QDG Membership services

Members receive additional 'Digipeat Extra' emails and invitations to other club activities not included in the Digipeat newsletter.

Sound Card to Radio Interface

This computer to radio interface can be used for any audio mode including voice.

The SCI provides isolation to remove earth loops as well as providing switching and level adjustment.

Contact Richard VK4ZA on 07 3376 5231, email richatkn@tpg.com.au or via the QDG web site.

Please contact Richard if you are interested in a dual interface PC board or a mark 2 version with modified connections.

QDG club contacts

Club contact: Alan Wills VK4NA

Digipeat Editor: Alan Wills VK4NA

Web site: Alan Wills VK4NA

Web site hosting: Tim O'Donohoe

Supper: Alan Wills VK4NA

JOTA: Richard VK4ZA

Phone: Alan Wills VK4NA 61 07 3491 8032

0401 716 778

Twitter @VK4NA

Email: qdg@qdg.org.au

Web site: <http://www.qdg.org.au>

Digipeat <http://www.qdg.org.au/qdgdigi.htm>

QDG

37 Evergreen Parade

Griffin QLD 4503

Australia

South East Queensland ATV group Information

SEQATV meeting dates 2015

Please check the SEQATV [Web site](#)

Unless otherwise noted, SEQATV group general meetings are held on the first Tuesday on the month at the Redcliffe Club rooms

The club is located at MacFarlane Park in Klingner Rd, Kippa Ring.(UBD Map 91 Ref G 1)

<https://plus.google.com/106119512431582251982/about?gl=au&hl=en>

SEQATV group Membership

SEQATV group Membership is set at the AGM, please contact the secretary for the current fee.
The membership fee remains at \$20.00 for 2015

SEQATV group Membership services

Members receive additional 'Amateur Eye Extra' emails and invitations to other club activities not included in the Digipeat or Amateur Eye newsletters.

SEQATV Club Net

Wednesday nights

8:00 PM EST on VK4RRC 146.925MHz repeater

The SEQATV group Officers

Elected officers:-

President: Arnold Youngberg VK4SU

Secretary: Bruce Jones VK4EHT

Treasurer: Andy Beales VK4KCS

Coopted Officers:-

Callback Officer: Peter Jones VK4YAC

Vice President: Alan Wills VK4NA

Assistant Secretary Bill VK4ZWJ

Additional coopted officers will be added as required.

SEQATV group Contact Information

South East Queensland Amateur Television Group

PO Box 674 Kallangur, Qld 4503, Australia

Amateur Eye (club mag) Phone: Alan Wills VK4NA 61 07 3491 8032

Email: secretary@seqatv.org

Web site: <http://www.seqatv.org/>

Enjoy your hobby!

73 Alan VK4YAR / VK4NA

***** Queensland Digital Group *****

***** SEQATV group *****

**** Supporting Radio Communications in VK4 ****