



*** QDG DIGIPEAT January 2018 ***

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

January QDG Meeting

The Next QDG general meeting will be held on Friday January 19 at the **Chermside Library**,
375 Hamilton Rd, Chermside QLD 4032

Car park off Kittyhawk Drive

Doors will open at 7:00pm for a meeting start of 7:30pm.

If the door is closed please phone Alan 0401 716 778

Editorial

Happy new year everyone, I hope your holiday season went OK and you now have new radios to play with. The first QDG meeting for the year is this Friday, I hope to see many arrive to great the new year.

Alan VK4NA



New kits and components

<http://shop.qrp-labs.com/>

Some news from the world of science and amateur radio

The Germans will bring a WSPRnet beacon to the Antarctica

And install it properly.

So we will soon be able to gauge reliably the propagation

to/from that continent down south.

<https://m.facebook.com/groups/2208853839?view=permalink&id=10156790756983840>

D-star, DMR, Fusion, Which is right for you?

If you are an amateur radio operator and have not been living under a rock, then I am sure you have heard of one of the digital modes: D-Star, DMR or Fusion. You may be wanting to dip your toes into the digital modes water but not sure which pool to dip them in. This blog post is intended to present a fair unbiased opinion on each of the modes.

<http://www.mikemyers.me/blog/2016/2/19/d-star-dmr-fusion-which-is-right-for-you>



Today's technology allows us to build radio receivers that sample radio signals and process them on a PC or an embedded system. Similarly, transmitters can be built that generate the RF signal digitally, then convert it to analog. Software Defined Radio (SDR) refers to the technologies that make these exciting things possible.

This site has been created to popularize SDR technology. With the help of a cheap USB DVB-T dongle you can get into SDR quite easily. It allows you to listen to the radio signals around you, but it also lets you to learn about DSP and code your own receiver.

<http://sdr.hu/?q>

Power Amplifier Projects

for Experienced VHF/UHF PA Builders

http://www.qsl.net/yu1aw/Misc/xb_pa.htm

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.

<https://hackaday.com/2017/12/28/antenna-alignment-and-hunting-rogue-access-points-with-the-esp8266/>



AM Rally

Operating Event on the HF+6M Amateur Bands

0000Z Saturday February 3 - 0700Z Monday February 5

(7:00pm EST Friday February 2 - 2:00am EST Monday February 5)

(4:00pm PST Friday February 2 - 11:00pm PST Sunday February 4)

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



Please mark your calendar on Sunday 25 February, 2018 for the next Wyong amateur radio field day. Brought to you by the NSW Central Coast Amateur Radio Club (CCARC).

<http://fieldday.org.au/>

A 1 KW SSPA for 1.8-54 MHz

It can accommodate almost any driving radio, and only requires 2 to 3w drive for 1kw out,

http://www.w6pql.com/1_kw_sspa_for_1_8-54_mhz.htm

6 of the Best Linux Distros of 2017

<https://www.maketecheasier.com/best-linux-distros/>



WWFF, World Wide Flora and Fauna in Amateur Radio, is encouraging to leave your shack and go outside portable operating in protected nature parks all over the world.

More than 20.000 nature parks world wide are already registered in our WWFF Directory. Hunters and Activators can apply for colorful awards, globally and national.

<http://wwff.co/>

SpectrumWaterfallcom

Enabling Commander's Spectrum-Waterfall Window when Controlling an Icom Transceiver
When controlling an IC-7300, IC-7610, IC-7850, or IC-7851 via a direct USB connection with a baud rate of 115200, Commander can display a Spectrum-Waterfall window that displays realtime spectrum data, a waterfall display, and callsigns of active DX stations color-coded for award progress need and participation in LoTW and eQSL AG:

<http://www.dxlabsuite.com/dxlabwiki/SpectrumWaterfallcom>

History of Video Calls: From Fantasy to Flops to Facetime

A visual history of the science and sci-fi of phone calls you can see. (And, no, it didn't start with The Jetsons.)

<https://www.pcworld.idg.com.au/slideshow/350404/history-video-calls-from-fantasy-flops-facetime/>

How to Perfectly Clean Wires in Minutes!!!

Here is an old ham radio operators trick for cleaning wires for soldering that are old and corroded. It is hard to find this technique printed anywhere! I am a ham, NH7ZE, and learned it from my elmer (mentor). I am passing it on. I hope it helps people who need to clean wires

<http://www.instructables.com/id/How-to-perfectly-clean-wires-in-minutes/>

Carrying The Signal

Transmission lines are the link between your station equipment, transmitter, receiver, transceiver, and the antenna. There are many different varieties but two major types of line predominate for frequencies in general use by radio amateurs.

<http://www.nzart.org.nz/assets/exam/sg/sn26-trlin.html>



4KZ FIRES UP!

Shortwave's Newest Station!

Much talked about but slow to get on the air, 4KZ has finally got underway with transmissions this afternoon (December 20), just in time for the Christmas holiday season. Here's my log so far:

<http://medxr.blogspot.com.au/2017/12/4kz-fires-up.html?m=1>

Lightning tracker

During storm events, lightning is one of the main reasons for damage to our electricity network. It can also delay restoration efforts because it's not safe to have our crews on elevated work platforms during lightning activity.

<https://www.energex.com.au/home/power-outages/lightning-tracker>

Become A Storm Spotter From Home

American based but this site has a lot of useful information.

<https://www.improvenet.com/a/become-a-storm-spotter-from-home>

Clients From Hell

You Think Your Job Sucks? Then Take A Look At These 20+ Real Conversations With Clients From Hell

https://www.boredpanda.com/customer-stories-clients-from-hell/?llid=WBJKY&utm_source=facebook&utm_medium=link&utm_campaign=liquidsocial&utm_content=EAgJ

Neural Network Learns SDR Ham Radio

Identifying ham radio signals used to be easy. Beeps were Morse code, voice was AM unless it sounded like Donald Duck in which case it was sideband. But there are dozens of modes in common use now including TV, digital data, digital voice, FM, and more coming on line every day. [Randaller] used CUDA to build a neural network that could interface with an RTL-SDR dongle and can classify the signals it hears.

<https://hackaday.com/2017/12/16/neural-network-learns-sdr-ham-radio/>

gr-paint VS spectrum_painter

<https://t.co/PDQW6XF8pS>



TX Factor Our Latest Show

TX Factor is our established flagship programme - a series of HD TV shows dedicated entirely to amateur radio. TX Factor was launched in February 2014 and since then our episodes have been viewed over 230,000 times.

Our presenters explore the history of amateur radio, rigs, antennas, operating modes, propagation, sport radio, training, club news, RSGB news, world news - in fact, anything and everything!

TX Factor is a professionally produced programme presented by radio amateurs for radio amateurs - and here you can watch our latest episodes and find out what TX Factor has to offer.

Don't forget to select 'HD' (if your broadband speed allows it) when viewing episodes!

<http://www.txfilms.co.uk/txfactor/current-show.html>

OpenSSH Client to Windows 10

Say Farewell to Putty as Microsoft adds an OpenSSH Client to Windows 10

Ask just about any *NIX admin using a Windows laptop and they will have come across Putty. For years, Apple MacBooks have been the go-to choice for many admins partly because getting to a ssh shell is so easy. The newly re-invigorated Microsoft is changing how easy it is to interface with Linux (and other *NIX flavors) significantly with features like Ubuntu on Windows. There is a new beta feature in Windows 10 that may just see the retirement of Putty from many users: an OpenSSH client and OpenSSH server application for Windows.

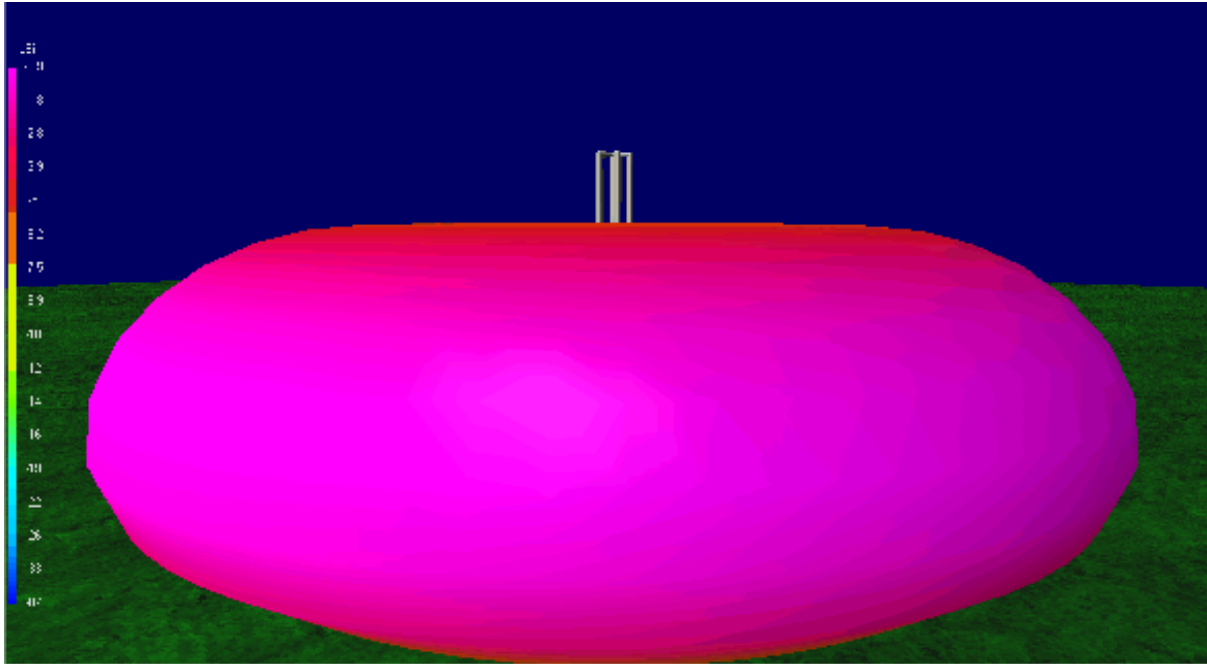
<https://news.ycombinator.com/item?id=15904265>

Downdetector

We like to see Downdetector as the weatherman for the digital world: we detect when technology fails. Just like the weather, service interruptions and outages can't be predicted, and just like a weatherman, we can tell you what is going on.

More concretely, Downdetector offers a realtime overview of status information and outages for all kinds of services. We aim to track any service that its users consider vital to their everyday lives, including (but not limited to) internet providers, mobile providers, airlines, public transport and online services.

<http://aussieoutages.com/>



TC2M ANTENNA

Terminated Coaxial Cage Monopole - © Martin Ehrenfried (G8JNJ)

With the evolution of modern High Frequency (HF) radio equipment and the increasing use of digital communication techniques, there is a requirement for an efficient, broadband antenna, which is capable of instantaneous operation over a very wide frequency range. This may be desirable in order to maximise the availability of a communication path between locations, or it could be to improve the security of a communication, by using techniques such as frequency hopping or spread spectrum.

The TC2M antenna is a very cost effective design which can be implemented in various formats. The ease of setup, convenience of operation & simple maintenance may also be important factors in Commercial or Military applications.

<http://www.tc2m.info/>

An Introduction to TCP/IP

For Embedded System Designers

[https://www.jameco.com/Jameco/Products/ProdDS/320733%20\(TCP%20IP\)%20Intro.pdf](https://www.jameco.com/Jameco/Products/ProdDS/320733%20(TCP%20IP)%20Intro.pdf)

IP Calculator

ipcalc takes an IP address and netmask and calculates the resulting broadcast, network, Cisco wildcard mask, and host range. By giving a second netmask, you can design subnets and supernets. It is also intended to be a teaching tool and presents the subnetting results as easy-to-understand binary values.

<http://jodies.de/ipcalc>

IP Addressing and Subnetting for New Users

<https://www.cisco.com/c/en/us/support/docs/ip/routing-information-protocol-rip/13788-3.html>

Amateur Radio Digital Communications

Since its allocation to Amateur Radio in 1981, Internet network 44 (44.0.0.0/8), known as the AMPRNet™, has been used by amateur radio operators to conduct scientific research and to experiment with digital communications over radio with a goal of advancing the state of the art of Amateur Radio networking, and to educate amateur radio operators in these techniques.

<https://www.ampr.org/>

Amateur Radio Digital Communications

Internet service provider (ISP) of the ip address 44.136.138.0 is Amateur Radio Digital Communications, which is operating in the region Brisbane, Queensland, Australia. The Link provided in the bottom of the page to look exact ISP of each IP Address between the series 44.136.138.0 to 44.136.138.255. Last Data updated on 15 Dec 17.

<http://www.ispinfo.net/isp/44.136.138.html>

IP subnetting

IP subnetting is a fundamental subject that's critical for any IP network engineer to understand, yet students have traditionally had a difficult time grasping it. Over the years, I've watched students needlessly struggle through school and in practice when dealing with subnetting because it was never explained to them in an easy-to-understand way. I've helped countless individuals learn what subnetting is all about using my own graphical approach and calculator shortcuts, and I've put all that experience into this article

<https://www.techrepublic.com/blog/data-center/ip-subnetting-made-easy-125343/>

Subnetting Made Easy

<http://www.techexams.net/forums/ccna-ccent/38772-subnetting-made-easy.html>

Radio Mobile Prediction Software

A nifty freeware bit of (windows) software for hams and other radio people is called "[Radio Mobile](#)". This tool allows you to simulate and map predicted coverage of your location using terrain and clutter data and maps expected coverage into Google maps.

<http://www.vk3bq.com/2013/12/01/radio-mobile-prediction-software/>

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.

Brisbane 160m net

Monday nights at 7:30pm local 1.848 MHz. LSB

SEQATV Club Net

Wednesday nights

8:00 PM EST on VK4RRC 146.925MHz repeater

2018 dates

September 8, SUNFEST at Woombye, <http://www.vk4wis.org>

November 10, GCARS Hamfest, Albert Waterways Community Hall, <http://www.gcars.com.au>

VK & ZL Ham Fests & Events for 2018 <http://www.vk4ice.com/hamfests.htm>

Contests 2017

VHF-UHF Field Days

Summer 2018 – Saturday 13 and Sunday 14 January.

Winter 2018 – Saturday 23 and Sunday 24 June.

Spring 2018 – Saturday 24 and Sunday 25 November.

Summer 2019 – Saturday 12 and Sunday 13 January.

Winter 2019 – Saturday 22 and Sunday 23 June.

Spring 2019 – Saturday 23 and Sunday 24 November.

Summer 2020 – Saturday 18 and Sunday 19 January.

Winter 2020 – Saturday 20 and Sunday 21 June.

Spring 2020 – Saturday 28 and Sunday 29 November.

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

QDG information

QDG meeting dates 2018

January 19
February 16
March 16
April 20
May 18
June 15
July 20
August 17
September 21
October 19
November 16
December 21

Unless otherwise noted, QDG group general meetings are held on the third Friday of the month at the **Chermside Library**, Brisbane.

Doors will open at 7:00pm for a meeting start of 7:30pm.

QDG Membership

QDG Membership is presently free.

As of June 2017 the QDG has 71 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.

Alan Simpson memorial home brew competition

August QDG general meeting <http://www.qdg.org.au/qdgmemb.htm>

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: John VK4CJO
Phone: Alan Wills VK4NA 61 07 3491 8032
Mobile: 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 2017

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://www.google.com.au/maps/place/MacFarlane+Park,+Kippa-Ring+QLD+4021/@-27.2214151,153.0882619,17z/data=!4m2!3m1!1s0x6b93e5f47d867511:0xe926a70030364326>

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 2016

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 643 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 ****