



*** QDG DIGIPEAT August 2017 ***

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

August QDG Meeting

The Next QDG general meeting will be held on Friday August 18 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

Change of meeting venue back to the NEW Chermside Library

Due to popular demand, the QDG meetings have moved to the new Chermside Library from the April meeting.

This means I will be looking for members to share picking up the access card and a supper person for each month.

Alan VK4NA

Remembrance Day Contest

12th & 13th August 2017 0300z to 0300z

This contest commemorates the Amateurs who died during World War II and is designed to encourage friendly participation and help improve the operating skills of participants. It is held on the weekend closest to the 15th August, the date on which hostilities ceased in the southwest Pacific area.

It is preceded by a short opening address by a Guest Speaker transmitted on various WIA frequencies during the few minutes prior to the contest. During this ceremony, a roll call of amateurs who paid the supreme sacrifice during WWII is read.

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



VK2RMB

VK2RMB 146.8750 MHz Manly-Warringah Radio Society Repeater
2m analogue voice repeater at Terrey Hills on Sydney's Northern Beaches in New South Wales, Australia. Maidenhead Locator: QF56OH More info: <http://www.mwrs.org.au/mwrs-landing/vk2rmb-repeater-systems/> WebSDR: <http://websdr.mwrs.org.au:8901/>
<http://www.broadcastify.com/listen/feed/26259>

Counterpoise Systems

"Counterpoise" has been used by radio amateurs since the very beginning of our hobby. When operators couldn't get a good earth ground, perhaps because they were on the second floor of a house, the common suggestion was to "use a counterpoise wire". A grid of conductors parallel to a dipole, laid on earth or suspended above earth, is often referred to as a counterpoise. After all, the word "radial" hardly fits a group of parallel wires with no real connection to the antenna's feed terminal. Counterpoise, in popular Ham radio conversation, has always described a conductor or group of conductors serving as an RF ground.

https://www.w8ji.com/counterpoise_systems.htm

Long wire antenna random wire

Technically a true "longwire" needs to be at least one wavelength long, but Hams commonly call any end-fed wire a longwire or random wire antenna.

Long wire or random wire antennas are very simple antennas. They can come close to half wave antennas in efficiency, although efficiency decreases as they are made very long or installed closer to earth. Like every antenna that exists, random or long wires have advantages and disadvantages.

https://www.w8ji.com/long_wire_antenna.htm

Wide-band WebSDR

On this page you can listen to and control a short-wave receiver located at the amateur radio club ETGD at the University of Twente. In contrast to other web-controlled receivers, this receiver can be tuned by multiple users simultaneously, thanks to the use of Software-Defined Radio.

<http://websdr.ewi.utwente.nl:8901/>

X Reflector Directory

For those of you interested in D-STAR

<http://xrefl.net/>



vertical-array.com

vertical antennas and rx systems

info@vertical-array.com

An inverted L DX antenna for the low bands 80/160

optional kit available 40 meters

Height 10 meters Wire 10m

5kw power

Elements diameter from 50 to 20 millimeters

Hardware full stainless steel

Coil of aluminum tube for a perfect mechanical seal.

Switch cw / rtty / SSB

<http://www.vertical-array.com/en/80-160-l.html>

AirVPN vs IVPN 2017

After comparing these VPNs, we have a winner!

<https://www.vpnmentor.com/vpn-comparison/airvpn-vs-ivpn/>

Amateur Radio Nets

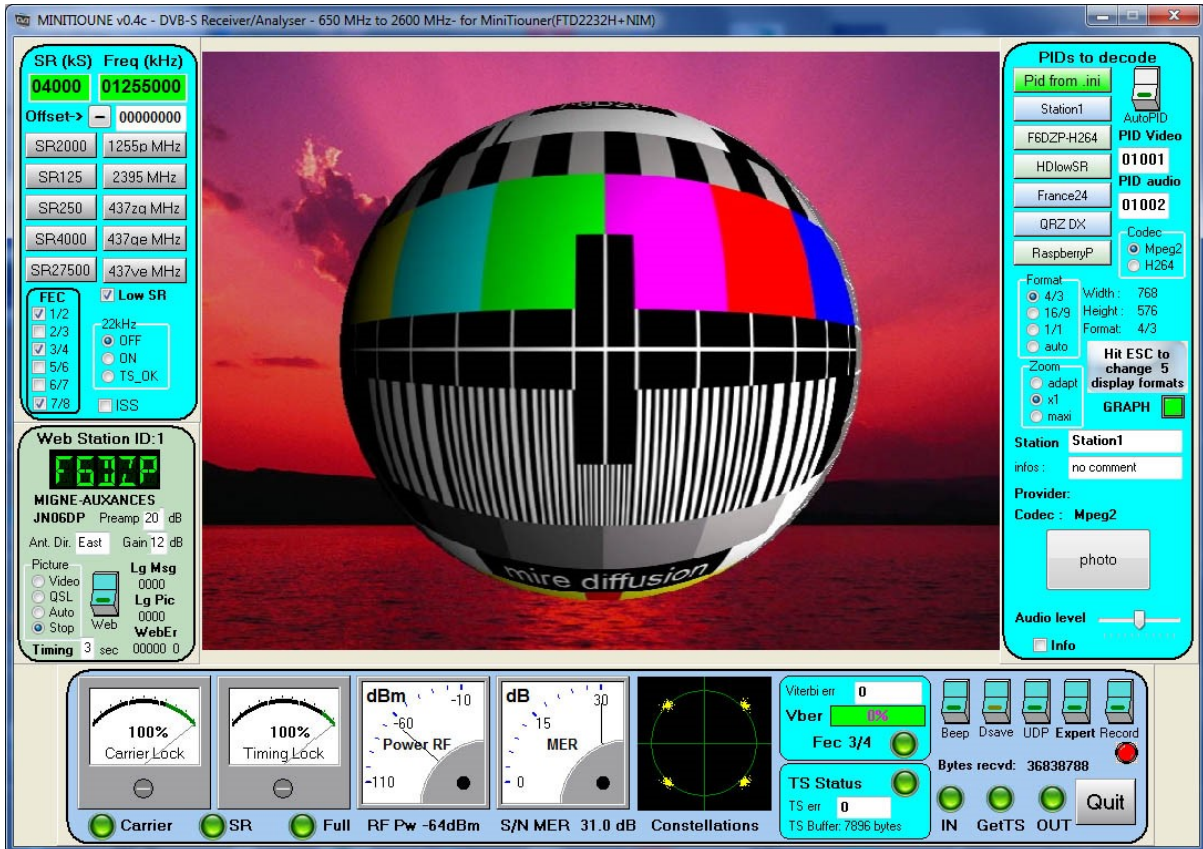
<http://www.amateur-radio-wiki.net/index.php?title=Nets>

Multus SDR, LLC

The Proficio is the next generation of Transceivers. It is an all band version (160M - 10M) of the Basic. It has all the features of the current Basic:

- 96kHz digital I/Q interface. No additional sound card needed.
- Two tone, 2 kHz spacing, third-order dynamic range: 99 dB.
- Support for Elecraft T1 automatic antenna tuner.
- External Amplifier control via AMP port.
- CW Key Jack.
- DG8SAQ/PE0FKO/SoftRock control interface.
- Open Source firmware.
- Firmware Field Updates via on board USB bootloader.

http://www.multus-sdr.com/index.php?main_page=product_info&cPath=65&products_id=190



Minitioune Software

Minitioune Software by Jean-Pierre Courjaud F6DZP

<http://www.amsat-on.be/hamtv-summary/minitiouner-software/>

BATC CAT16 - MiniTioune and SuperTioune - Jean-Pierre Courjaud F6DZP

<https://www.youtube.com/watch?v=qMSwRDpAsc0>

Receiver and software for HamTV

http://www.ariss-eu.org/documents/presentations/HamTV_receiver_F6DZP.pdf



437 MHz Sprite satellites deployed

On June 23, 2017 six tiny satellites were sent into low-Earth orbit as secondary payloads on the Venta and Max Valier satellites that were launched on the Indian PSLV-C38 rocket. These six satellites are comparatively dainty, but punch far above their weight. Called "Sprites," each is a 4-gram flake of circuit-board just 3.5 centimeters on a side, packing solar panels, computers, sensors and communications equipment into an area equal to a U.S. postage stamp.

<https://amsat-uk.org/tag/sprite/>

Jota 2017

The QDG through the Redcliffe & District Amateur radio club will set up a Jota station at BP Park once again this year, please contact: John VK4CJO

BP Park Samford

<https://www.google.com.au/maps/place/Baden+Powell+Park/@-27.3750462,152.8926444,15z/data=!4m5!3m4!1s0x0:0xf02a35bd721a0c0!8m2!3d-27.3750462!4d152.8926444>

Jamboree on the Air - Jamboree on the Internet

JOTA-JOTI is the largest Scouting event in the world with over 1 million Scouts participating across 150+ countries.

The event is held the third weekend of October – 20th, 21st & 22nd October 2017 – Celebrating 60 Years Connecting Scouts.

<http://jotajoti.info/>

Redcliffe & District Amateur radio club Jota information

www.redclifferadioclub.org.au



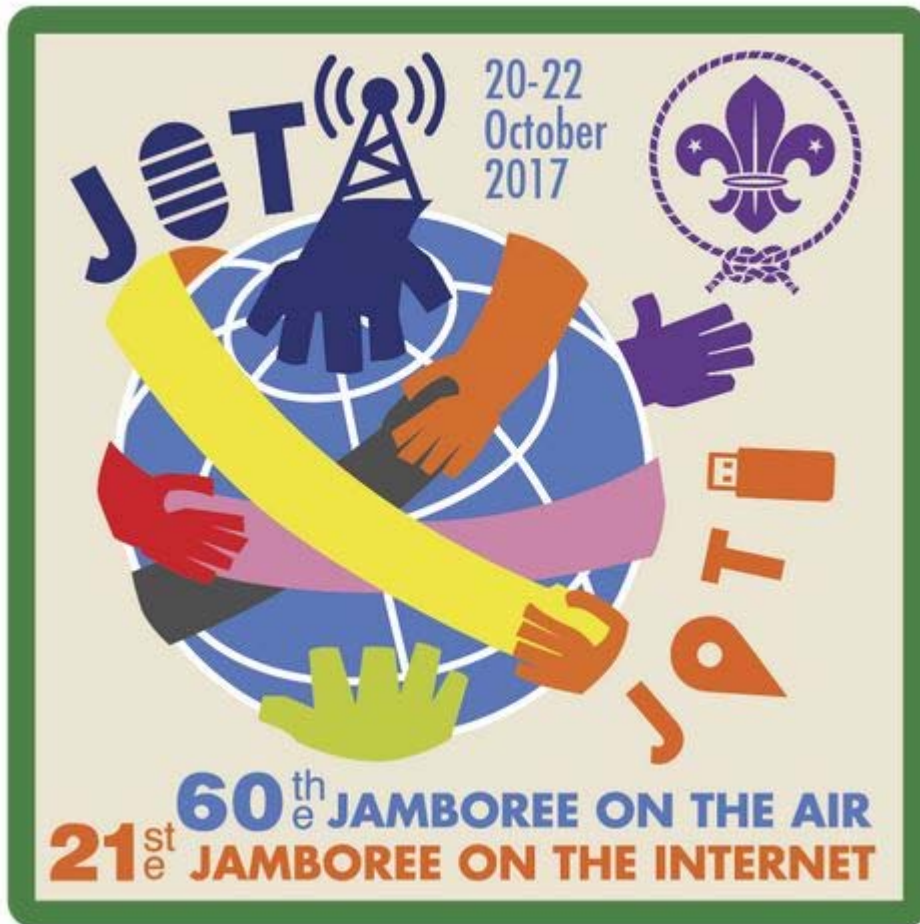
APRS Meteor Scatter Email System

50.62 MHz and 147.585 MHz

METEOR SHOWERS: Anytime, and especially during meteor showers tune to these frequencies and if you have a beam point to distance population densities about 600 to

12000 miles away, set your beacon to a HIGH rate and capture any packets you receive. Overnight is the best time for meteors. Check your log and see what you got.

<http://www.aprs.org/meteors.html>



JOTA-JOTI

GET READY TO PARTICIPATE IN JOTA-JOTI BETWEEN 20-22 OCTOBER 2017!
60th Jamboree On The Air / 21 st Jamboree On The Internet

Jamboree On The Air (JOTA) and Jamboree On The Internet (JOTI) is an annual virtual global camp in which around 500,000 Scouts and Guides from all over the world make contact with each other by means of amateur radio and the internet.

Normal JOTI Through JOTA-JOTI every Member of Scouts Australia can make friends, exchange stories, experience different cultures and have fun as part of the largest activity in world Scouting. JOTA-JOTI also gives Youth Members an awareness that they belong to a worldwide Movement.

<http://international.scouts.com.au/programs-in-australia/jotajoti>

Scouts Australia International

<http://international.scouts.com.au/>

JOTA Calling Frequencies

Please QSY off the Calling Frequency once you have established a contact

World Scout Calling Frequencies

| Band | SSB (phone) | CW (morse) |
|------|-------------------|------------|
| 80 m | 3.690 MHz | 3.570 MHz |
| 40 m | 7.090 & 7.190 MHz | 7.030 MHz |
| 20 m | 14.290 MHz | 14.060 MHz |
| 17 m | 18.140 MHz | 18.080 MHz |
| 15 m | 21.360 MHz | 21.140 MHz |
| 12 m | 24.960 MHz | 24.910 MHz |
| 10 m | 28.390 MHz | 28.180 MHz |
| 6 m | 50.160 MHz | 50.160 MHz |

Australian Scout Calling Frequencies

| Band | SSB (phone) | CW (morse) |
|------|-------------|------------|
| 80 m | 3.650 MHz | 3.570 MHz |
| 40 m | 7.090 MHz | 7.030 MHz |
| 20 m | 14.190 MHz | 14.060 MHz |
| 15 m | 21.190 MHz | 21.140 MHz |
| 10 m | 28.590 MHz | 28.180 MHz |
| 6 m | 52.160 MHz | 50.160 MHz |

<http://www.sresu.asn.au/jota/jota-calling-frequencies>



DSTAR kicks off in Rockhampton QLD

Big welcome to Rockhampton DSTAR users

<http://www.dstar.org.au/dstar-kicks-off-in-rockhampton-qld/>

Good SWR and Antenna Resonance

Standing Wave Ratio (SWR) is an important concept that describes how good of a match exists between a transceiver and antenna system. Recall that a perfect match corresponds to an SWR of 1.0, with higher values indicating some degree of mismatch.

<http://www.hamradioschool.com/good-swr-and-antenna-resonance/>

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/>



1296MHz EME Update

Over the last 6 months I have been building up my 1296MHz equipment. My plans have changed somewhat from my initial ideas, not only as equipment and funds have become available but also as my knowledge and understanding of the requirements of this particular band has grown.

Here is my equipment for 1296MHz, as it currently stands.

<http://www.mancuso.net.au/23cm.html>

Rugged Portable Telescopic Aluminum Mast Assemblies

We can supply a range of professional quality telescopic masts for radio communications, field lighting and surveillance applications.

These mast's are constructed from anodized aluminum tubing sections of various lengths and diameters, all with a wall thickness of 2mm. These mast's are ideal for both temporary and permanent installations. These mast's are manufactured by Spiderbeam GmbH.

<http://www.ttssystem.com.au/products/spiderbeam-aluminium-masts/>



HF Antennas Compared Using WSPR

Using the WSPR SINAD reports to compare two HF antennas – one being a magnetic loop and the second an inverted V half wave dipole.

<http://www.eham.net/articles/28124>



VK DX Group

Christmas Island VK9XI (OC-002) & Cocos Keeling Island VK9CI (OC-003) October 2017

This expedition began planning in early 2017 as the brainchild of Chris VK3FY, Lee VK3GK and Tony VK3TZ. The idea was to activate each island as part of the Oceania DX Contest in either the SSB or CW divisions.

Both Christmas Island (OC-002) as VK9XI and Cocos Keeling Island (OC-003) as VK9CI will be active each for a week.

Christmas Island from October 2nd – 10th
(coincides with Oceania SSB Contest weekend)
Cocos Keeling Island from October 10th -17th
(coincides with Oceania CW Contest weekend)



<http://christmascocos2017.vkdxg.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/>



Masts Products

Available in anodized and non-anodized finish.

Anodized finish gives excellent weather protection and is recommended in coastal and harsh environments.

Non-Anodized mill finish masts are suitable for use as a transmitting aerial when used with a NBS ground insulator and nylon guy kits.

All NBS Masts come with guy plates that fit on top of guy rings that are welded in place unless a special order is requested. This allows the mast to rotate, without the guys being adjusted, to align directional antennas.

<http://www.nbsantennas.com.au/masts-products.html>



9M TELESCOPIC TELEMASTSANTENNA MAST POLE HILLS
Efficient, drop-in locking pins simplifies extending mast.

Kit includes guy ring plates thimbles etc. for mounting the mast

Accessory pack (normally \$31.50) is included free

9 metre Telescopic 3 x 3m lengths

Pole diameter / circumference:

Base pole: 45mm / 141mm

Top pole: 33mm / 105mm

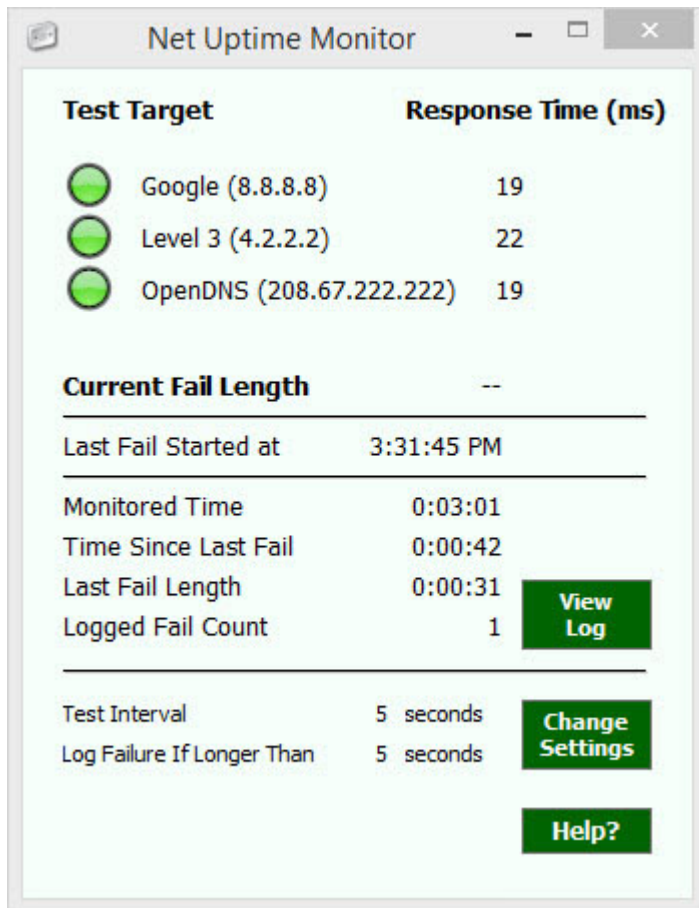
http://www.radioparts.com.au/product/00902472/fc172-9m-telescopic-telemasts-antenna-mast-pole-hills#.WXiCqR_XqB

LINDENBLAD

LINDENBLAD CONSTRUCTION SEMINAR FOLDED-DIPOLE LINDENBLAD VERSION By Ron Herring
W7HD Version dated 23-Oct-2016.

Presentation on theme: "LINDENBLAD CONSTRUCTION SEMINAR FOLDED-DIPOLE LINDENBLAD
VERSION By Ron Herring W7HD Version dated 23-Oct-2016."— Presentation transcript:

<http://slideplayer.com/slide/11745450>



NetUptimeMonitor

I'll alert you to failures in your internet connection and record their exact time and length. This info will help your internet provider troubleshoot the problem – after it helps you convince them it's not your imagination!

<https://netuptimemonitor.com/>



The EEVblog is the world's largest and most popular Youtube Engineering channel with over 450,000 subscribers, and hosts one of the most popular engineering community forums The EEVblog Forum. The EEVblog is hosted by David L. Jones, an electronics design engineer based in Sydney Australia. In each episode he shares some of his 25+ years experience in the electronics design industry in his unique non-scripted naturally enthusiastic and passionate style.

David J. Ledger is the much younger, better looking, equally enthusiastic but less jaded sidekick.

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

FT897 Software und Hints

FT897 Controller Software

<http://www.dl4cu.isa-geek.net/ft897-e.html>

Hackaday

Rapidly Prototyping RF Filters

RF filters are really just a handful of strategically placed inductors and capacitors. Yes, you can make a 1 GHz filter out of through-hole components, but the leads on the parts turn into inductors at those frequencies, completely ruining the expected results in a design.

<http://hackaday.com/2017/07/25/rapidly-prototyping-rf-filters/>

zl2bkc

Waynes World of Amateur Radio

Sequencer

Interface to single coil or 2 coil relays

Latching or Failsafe relays

4 sequencer events (PA Supply, RX, TX, TX Drive)

MOSFET switch for upto 5 Amps PA Supply

LCD Front Panel interface

Hardwired PTT or via IF Interface

8V or 9V supply for transverter

28V DC DC converter option for 28V relays or 28V bias supplies

Monitor Power Supply Voltage, PA Voltage and current

Monitor FWD and REV power

Monitor PA Temperature

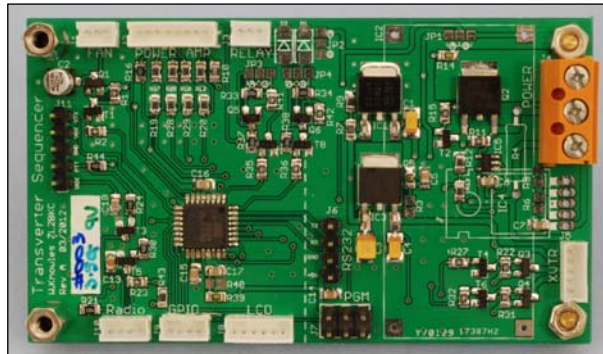
Monitor Drive level

Temperature controlled Fan supply (12V)

RS232 interface for setup

4 pins of General Purpose I/O for I2C expansion

<https://zl2bkc.com/projects/sequencer/>



SDR USB stick

R820T, RTL2832U SDR USB stick – sensitivity, dynamic range

After looking around in the web, there doesn't seem to be a whole lot of information out there on the sensitivity and dynamic range of the SDR USB devices, at least not for the type I'm using here.

Even the R820T datasheet isn't all that clear – there are various versions of the R820T, also using different clock frequencies, with 28.8 MHz, being the most popular lately.

<http://www.simonsdialogs.com/2014/09/r820t-rtl2832u-sdr-usb-stick-sensitivity-dynamic-range/>

5 of the Best Google Maps Alternatives You Should Try

Google Maps is good. Let's just get that out of the way first. Google's ever-updating, ever-improving navigation is popular and robust enough to have more or less brought on the death of the paper map, and it feels like it's getting more and more accessible by the day.

<https://www.maketecheasier.com/google-map-alternatives/>

NooElec NESDR Nano 3 – Premium Tiny

Say goodbye to blocked USB ports! The tiny NESDR Nano 3 is the ideal SDR for portable and embedded applications. Quad SDRs on a Raspberry Pi? USB OTG? Not a problem for the NESDR Nano 3!

The Nano 3 is built into a high-quality brushed aluminum enclosure. In conjunction with the 2 internal silicone heat pads, this ensures that heat is removed from board-level and to the exterior where it belongs. The aluminum enclosure ensures that EMI is kept out of the sensitive SDR circuitry, and emissions from the digital circuitry are contained within the SDR enclosure. The latter is especially important in EMI sensitive environments like automotive and flight applications!

<http://qrznow.com/nooelec-nesdr-nano-3-premium-tiny/>

Parasitic Lindenblad Antenna

A Parasitic Lindenblad Antenna for 70cm & An EZ-Lindenblad Antenna for 2 Meters

Lindenblad is the name of a type of antenna that is circularly polarized yet has an omnidirectional radiation pattern. With most of its gain at low elevation angles, it is ideal for accessing low earth orbit (LEO) Amateur Radio satellites.

<http://www.amsat.org/wordpress/wp-content/uploads/2015/08/An-EZ-Lindenblad-Antenna-for-2-Meters2.pdf>

A Parasitic Lindenblad Antenna for 70cm

A traditional Lindenblad antenna uses four, dipole, driven-elements to create a circularly-polarized, omni-directional radiation pattern. This pattern is ideal for accessing LEO satellites and can often eliminate the need for beam antennas and Az/El rotator systems.

<http://www.amsat.org/wordpress/wp-content/uploads/2014/01/70ParaLindy.pdf>

How to Set Up and Optimize Your Wireless Router

Looking to get the best possible Wi-Fi performance in your home? Follow these simple steps for setting up your router.

<http://au.pcmag.com/networking/10051/feature/how-to-set-up-and-optimize-your-wireless-router>

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

2017 dates

9th September 2017 SUNFEST, Woombye <http://vk4wis.org/>

11th November 2017 Gold Coast Hamfest, Broadbeach Qld <http://www.gcars.com.au/hamfest-2017>

VK & ZL Ham Fests & Events for 2017 <http://www.vk4ice.com/hamfests.htm>

Contests 2017

12th & 13th August Remembrance Day Contest

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

19 August to 2400 UTC 20 August 2017 (48 hours) International Lighthouse Lightship Weekend

<https://illw.net/>

VHF-UHF Field Days

Summer 2017 – Saturday 14 and Sunday 15 January.

Winter 2017 – Saturday 24 and Sunday 25 June.

Spring 2017 – Saturday 25 and Sunday 26 November.

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 2017

January 20

February 17

March 17

April 21

May 19

June 16

July 21

August 18

September 15

October 20

November 17

December 15

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.html>

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 ****