

Official Bulletin



MHz to GHz

The West Australian VHF Group Bulletin

NOVEMBER 2015

THE WEST AUSTRALIAN VHF GROUP (INC)
PO BOX 189 APPLECROSS 6953

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Secretary. Graeme VK6LV

Vice- President Denis VK6FADF

Treasurer Graeme VK6LV

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Councillor Phil VK6ZKO

Councillor Graham VK6FGMC

Trustee # 1 Wally VK6KZ

Trustee # 2 Bob VK6PO

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1. Editor's Comments – Apologies for the late publishing date but due unfortunately to circumstances beyond my control, like visits to hospitals and family commitments, such that the publishing date seemed to have slipped further behind. However, at last the words are flowing. You may have observed from the front sheet that TY VK6HTY has taken over one of my former jobs that being that of publicity officer. TY has taken over the job with gusto. Well Done Ty

2. From the President's Desk With the assistance of our two intrepid web masters that is Denis VK6FADF & Ty VK6HTY a successful revamping of the Club website including the he email addresses on the WIA members website. Upgrading will be ongoing.

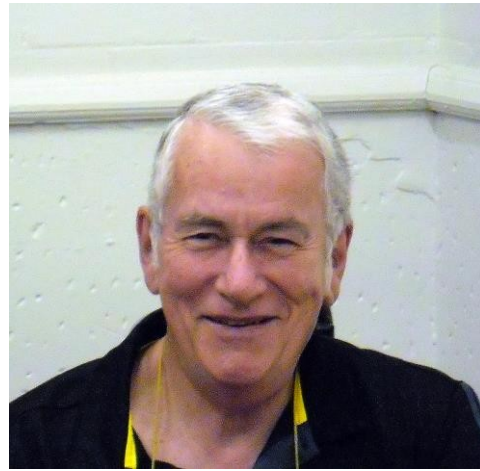
The club committee had a very successful meeting in early November, where as part of the discussion it was decided that the club activities would be widened to not only the include the usual 4th Monday of the month but also incorporate the first Saturday in the month following the club meeting. This would allow daytime projects to being completed and also allow some of our country members as well as members from north of the river to participate in club activities.

Activities of the club will be in the spotlight in 2016 so if any members could suggest, or organise a particular project feel free to send an email to committee (see front Page). All suggestions considered.

3. Latest committee from the 2015 AGM



President Terry VK6ZLT



Vice President Denis VK6FADF



Secretary/treasurer Graeme VK6LV



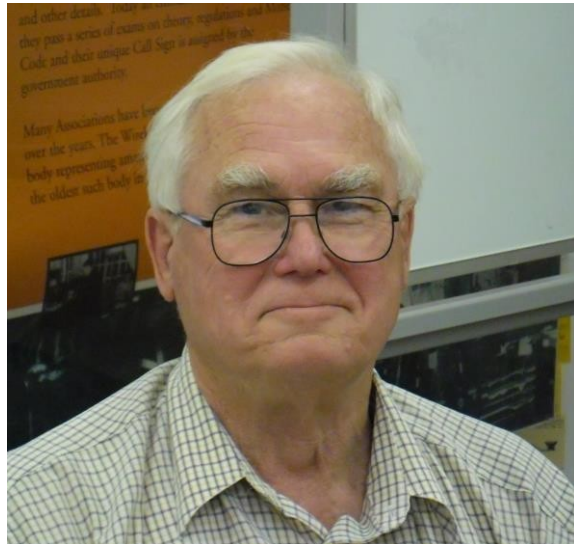
Councillor Tom VK6ZAF



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Councillor Phil VK6ZKO



Councillor Graham VK6FGMC



**Councillor/Museum Rep
Bob VK6KW**

4. Goals for 2016

These are all flexible in time scale.

- 1. Make Mt. Barker VK6RST & Esperance VK6REP fully operational.**
- 2. Find new site for VK6RBU.**
- 3. New antenna for VK6RBS.**

4. **Expand club facilities to incorporate the addition daytime meetings on the 1st Saturday in the month.**
5. **Welcome more input from members as to their needs in AR.**
6. **Promote more activity into the 23cm and 3cm microwave regions.**
7. **Investigate the production of suitable transverters for microwave bands.**
8. **Stimulate interclub co-operation to share experiences in various fields.**
9. **Provide facilities for country members to become more involved with the city experiences.**
10. **Increase club membership.**

5. RTL- SDR uses & Noise filters

<http://www.rtl-sdr.com/rtl-sdr-tutorial-measuring-filter-characteristics-and-antenna-vswr-with-an-rtl-sdr-and-noise-source/>

A comprehensive report for amateurs who have not got access to spectrum analyser.

6. Checking the Calibration of your SWR meter and constructing a dummy load.

Submitted by VK2XTT on Fri, 16/10/2009 - 10:21

There is a simple way to check if your SWR Bridge is working correctly.

You will need a 5 watt resistor, not wire wound, of 75 ohms and 100 ohms.

If you can't find a 5 watt carbon or metal film resistor, parallel up 3 x 390 ohm 1 watt units with 2 x 360ohm units to make a 75.4 ohm resistor and 5 x 500ohm resistors to make the 100 ohm unit.

Solder each resistor into a PL259 plug so you can attach either of them to the back of your meter. If your using paralleled units, solder a coax fly lead to your bundle keeping all leads short. Too much coax will also affect the readings. Or build it using the dummy load construction technique as described in the article linked at the end of this note.

Turn your rig to its lowest power setting, hopefully lower than 5 watts and key the transmitter.

A 75 ohm resistor will indicate 1.5:1 and a 100 Ohm resistor will indicate 2:1 - simple !

I stress the need for carbon or metal film resistors since a wire wound unit adds significant inductance that will skew the result.

For more detailed instructions on building multi resistor dummy load, read this excellent article by K4EAA...

<http://www.k4eaa.com/dummy.html>

7. 23cm & 10GHz operation

During the course of Wally VK6KZ excellent talk & demo of 10GHz development in West Australia, Wally mentioned that there still one long distance record that is up for grabs that has not been claimed and that is the 5GHZ SSB contact across the Great Australian Bight.

23cm

The complete high performance 1240 to 1300MHz Transverter is constructed using three separate Kits, and takes around 8 hours to construct and tune. A large number of SMD components are used to make the Transverter compact and predictable in performance. The design uses a low noise PHEMT amplifiers, high level +17dBm mixer for good strong signal handling and a cleaner transmit signal on the 23cm band. Mini-Kits designed tuneable filters have been used that provide high local oscillator rejection and low spurious output. Please refer to the [EME23-TRV Kit webpage](#) and the [23cm Block Diagram](#) for more information.

Intro to 10 GHz radio

<https://www.youtube.com/watch?v=3FR72wHHCeM>

Wave guide termination

<https://www.youtube.com/watch?v=whiywWiP3Vw>

Wave guides

<https://www.youtube.com/watch?v=iLNgL2Zj2UI>

Polarisation

https://www.youtube.com/watch?v=BqTy-T_jpzA

Electromagnetic demo old style

<https://www.youtube.com/watch?v=j2gOh39IyPM>

Working satellites with a hand held

<https://www.youtube.com/watch?v=bT131WBHKxc>

Microwave handbook

<http://n5dux.com/ham/files/pdf/Microwave%20Know%20How.pdf>

RF Components <http://www.rf-microwave.com/en/home.html>

**TO: THE TREASURER
THE WEST AUSTRALIAN VHF GROUP INCORPORATED
PO BOX 189 APPLECROSS 6953**



I VK6 _____ NAME _____ |

ADDRESS _____ |

Are you a WIA member Y/N POSTCODE _____ |

Email address. _____

ENCLOSE my ANNUAL SUBSCRIPTION \$ _____ +DONATION \$ _____

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