

<b>Radio</b>	<b>Homebrew</b>	and	<b>Experimenter's</b>	<b>Group</b>
--------------	-----------------	-----	-----------------------	--------------

An official function of

Amateur Radio New South Wales  
63 Quarry Rd Dural NSW 2158  
PO Box 6044 Dural Delivery Centre NSW 2158  
Ph. 02 9651 1490 Free Call. 1800 817 644 (for NSW Country callers)  
Email: [vk2wi@ozemail.com.au](mailto:vk2wi@ozemail.com.au) ARNSW Web site. [www.arnsw.org.au](http://www.arnsw.org.au)

**Introduction to the Group and Index of Technical Articles to date..... February 2008**

Group Co-Ordinator	Peter O'Connell VK2EMU	<a href="mailto:vk2emu@wia.org.au">vk2emu@wia.org.au</a>
Honorary Engineer	Mark Blackmore VK2XOF	
Honorary Parts Person	Seppo Ahlstedt VK2SMA	
Newsletter Editor	Brian Keegan VK2TOX	<a href="mailto:vk2tox@wia.org.au">vk2tox@wia.org.au</a>

The Radio Homebrew and Experimenter's Group workshop meetings are free to Amateur Radio NSW (WIA NSW) members. A \$5 cover charge **may** apply to non-members. Currently we have two "meetings" a month with an extra one on the Trash and Treasure Sundays as follows :

**First Tuesday** of each month 7 - 9 pm at McDonalds, cnr Church St and Victoria Rd, Parramatta (upstairs dining room) Buses stop outside and plenty of parking. We usually arrive around 6:30 and have something to eat before the meeting.

**Third Tuesday** of each month a Radio Net on 2m using the VK2WI Dural Repeater (147.00) duplex at 7:30pm. We get together on-air and discuss our latest projects, antennas and radio gear. All welcome.

**Technical/Presentation Meeting** after the Trash and Treasure Meets which are usually on the last Sunday of each odd-numbered month. The meetings starts about one hour after the Trash and Treasure and runs from around 1:00pm to 4:30pm, they are at our VK2WI site at 63 Quarry Rd, Dural (first right turn after the round-about at Dural and follow your nose, look for the tower on your left hand side, plenty of parking on site.

These meetings are informal get-togethers of amateurs interested in building, or repairing their own radio equipment, there is usually a "show and tell" segment, where Amateurs can bring along their latest project (or even an old one)] and show others what they have been up to. This is usually held before the demonstration or lecture organized for that particular meeting. We are always interested to see how others get a circuit working or sort out various hardware problems.

The groups test equipment is still in storage after the move from Wigram St. However there is plenty of test gear available within the membership, if you need something tested or calibrated **please contact Peter O'Connell VK2EMU by email or leave a message for him at the office** and he will endeavor to have the appropriate piece of equipment available.

Check out the "Homebrew" page on [www.arnsw.org.au](http://www.arnsw.org.au) for the latest news on the Homebrew Group. If you would like an extra copy of this newsletter, you will find a PDF version also on this page. Suggest you visit this site regularly to keep up to date with what is happening at ARNSW and for lots more information of interests to Hams. Some of our members recently activated a Special Interest Group on Yahoo! which is starting to become popular, go to <http://au.groups.yahoo.com/group/ARNSWHomebrewgroup/> to look around the site, join it if you would like to participate.

Join ARNSW and its Homebrew and Experimenters Group and help us to help you enjoy many aspects of this fantastic hobby.

**This Brochure is online at Amateur Radio NSW** <http://www.arnsw.org.au/> in the Homebrew Group pages.

The contents of this publication are © 2007 by Radio Homebrew and Experimenters Group whose meetings are an official function of Amateur Radio New South Wales. All rights reserved. Enquiries should be directed to:  
Group Co-Ordinator, Radio Homebrew and Experimenter's Group,  
Amateur Radio NSW , PO Box 6044 Dural Delivery Centre NSW 2158

Non-copyright material appearing in this publication may be reprinted in similar interest newsletters and non-profit publications if accompanied by the following notice:

"Reprinted from the Radio Homebrew and Experimenters Group Newsletter, this group is an official function of Amateur Radio New South Wales"  
Note: The views expressed within this publication are not necessarily those of Amateur Radio NSW or its officers

## Index of Technical articles that have appeared in issues of the Newsletter.

Issue	Item
1	70cm Antenna Project with Photos
2	Completed 70cm Antenna Project with Photos
2	Technical – Make your own Printed Circuit Boards (1)
3	Technical – Noise Bridge for measuring HF Impedance (1)
3	Where do I get Parts for Homebrew Projects ??
4	Technical – Make your own Printed Circuit Boards (2)
4	Quick Projects – Crystal Test Unit
4	Quick Projects – Constant Current Source for testing Zeners and LEDs
4	Where do I get Parts for Homebrew Projects (2)
5	Technical – Noise Bridge for measuring HF Impedance (2) – Testing and Calibration
5	Technical – (Comments and Corrections to “Make your own Printed Circuit Boards (2)”)
5	Quick Projects – Signal Tracer – Audio Signals
5	Technical – Conversion of Wagner HF Transceivers (Peter VK2EMU)
5	Technical – HF/VHF Signal Sniffer with audible output (Max VK2ARZ)
5	Group Project – 10GHz Transceiver (1) Case and Control Panel (Peter VK2EMU)
5	Technical – HV Power Supplies for Homebrew projects
5	Quick Project – Transistor Tester – DC Gain
6	Technical – Re-cycling older PC Power Supplies
6	Project – Wein Bridge Audio Signal Generator (in AT PSU Case)
6	Project – Easily constructed Metal Bender (Stephen VK2BLQ)
6	Tech and Practical Hints – Holes in soft Panels /mobile benches/fans for HD boxes
6	Project – LV PSU Tester Circuits
6	Project – HV MOSFET PSU (in AT PSU Case)
6	Project – LV PSU based on Miniature PSU in AR Jul 2005 (in AT PSU Case)
7	Quick Project – Transistor Sorter for RF Gain (Mike VK2KMB)
7	Technical - “PIC” + LCD Frequency Counter (1) (Brian VK2TOX)
7	Compact HF Antennae for QRP and Bushwalking (Owen VK2AEJ)
7	Project - 6BM8 Single Valve TX for 80m and 40m (Stephen VK2BLQ)
8	“Metal Bashing” Pt 01 (Stephen VK2BLQ)
8	Project – Xtal Calibrator Pt 01 (Stephen VK2BLQ)
9	Enclosures for small projects ( Stephen VK2BLQ and Brian VK2TOX)
9	Project – Xtal Calibrator Pt 02 – 4001/4518 chips and Xtal Osc “Blocks” (Stephen VK2BLQ)
9	“Metal Bashing” Pt 02 - Aluminum Finishing (Stephen VK2BLQ)

These Newsletter issues are available as “PDF” files for download on the Amateur Radio NSW web site at [www.arnsw.org.au](http://www.arnsw.org.au) . in the “Homebrew” pages. Also available on this site are ARNSW membership applications and details of how to obtain an Amateur Radio Operators Licences. ARNSW and other Ham Clubs run regulars courses for qualification to the various Ham Licences, including the new Foundation Licence and the newly designated Standard and Advanced Licences. This information is also available directly from our office at Dural on open days (also phone, FAX or email us) or have a chat to members and Club officials at our Dural meetings. Many of ARNSW members are also members of other Ham clubs and organizations, we are happy to direct you to a club near your home that holds licence exams and meetings.

We are always on the look out for homebrew projects, if you have something even only partially built send us some information, circuits and hopefully some photos of it so that we can feature it in the pages of the Newsletter. Solid state, valve, DC, HF or microwave, it doesn’t matter as we are in to it all. For our members we develop kits of parts, often with pre-cut or partially assembled components to assist those who have limited workshop facilities. Items such as “Radio Interface Kits”, “HF Balun Kit” and various antennae kits will be on display at Wyong Field Day. For popular projects such as power supplies we can often arrange printed circuit boards at a very reasonable price.

The Homebrew and Experimenter’s Group had a very successful table at the last Blue Mountains Hamfest, now we are at Wyong and ARNSW Field Days, we are making progress !.