



NERG NEWS

Incorporated 1985 in Victoria
Reg No A0006776V - <http://nerg.asn.au>

MAY 2005

**NERG Inc.
PO Box 270
Greensborough
Victoria 3088**

APRIL MEETING

Sorry we don't have a guest speaker for this month's meeting (we don't even have a meeting organiser for that matter - any volunteers?). Speakers are a bit lean at present but we have a few good ones scheduled for latter in the year.

Last month I didn't get round to demonstrating some equipment to test cable losses in coax so I'll bring it along again this month. Bring along some field day cables or shack patch cords and see how they perform in the range 5-1,000 MHz. We can connect to any 50 or 75 ohm cable fitted with BNC, N, F, and UHF (259) connectors. Mark, VK3BYY

The May meeting is on Thursday, 12th at 7:45pm, at the Briar Hill Primary School, Briar Hill.

REWIND

We were very fortunate to have Philip Adams, VK3JNI visit our April meeting and demonstrate 4WD outback radio and talk about the Australia wide VKS-737 HF radio network (www.vks737.on.net).

This network began when the flying doctor HF network became overwhelmed by "travellers" touring the outback in their 4WDs that were fitted with "flying doctor radios". The VKS-737 network offers its members exclusive use of 5 spot frequencies between 4 and 15 MHz. This range of frequencies handles differing propagation conditions and distances throughout the day. The net is used for a wide range of social and emergency purposes. Several base stations run regular skeds and monitor all channels around Australia, so you are never out of touch for long. The channels are:

- Channel 1: 5.455 MHz - USB
- Channel 2: 8.022 MHz - USB
- Channel 3: 11.612 MHz - USB
- Channel 4: 14.977 MHz - USB
- Channel 5: 3.995 MHz - USB

Mobile setups start with older crystal locked radios and tapped helical antennas, through to modern synthesised

Barrett and Codan HF transceiver with fully autotuned whip antennas. Most radios on the network are fitted with selective calling units, so calling a friend is almost as easy as using a mobile phone (easier in fact as the phone won't work in the outback!). Most emergency services and automobile clubs have a SELCALL number so it's possible to get directly in touch with them if the need arises.

Philip demonstrated an autotune antenna clamped to a metal drinking trough just outside the meeting room window and demonstrate calling the unit in his car out in the street.

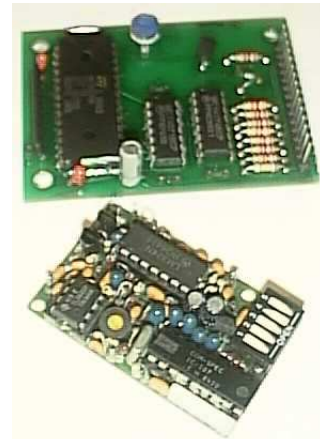
Many thanks to Philip for stepping in at the last moment and giving a very interesting presentation!

Greg's video of the John Moyle weekend was also shown and was so popular he is now busy burning copies for many in the audience. Perhaps it may even be shown on the Melbourne ATV repeater as a promotion for amateur radio?



NEXT MEETING:

7.45 pm, Thursday
12th May 2005
Briar Hill Primary School



CTCSS modules for repeater access

TUESDAY MORNING TEA GROUP

The NERG morning tea group got off to a good start at the April session with everyone arriving fairly early.

Dave and Carol, or Carol and Dave more correctly, supplied the six of us with hot drinks and an enormous range of eats including Smarties and Jaffas which I could not resist. Special thanks to Carol for the great variety of food and all the effort in preparing it. I really enjoyed the fruit cake. Those present were Gerhard, VK3EWM, Steve VK3JSE, Dave VK3JMB, Greg (VK3VT, BGW & now GG), Ernie (VK3FM & VK3CEW) and Jim VK3KE and VK3DBQ. Many topics covered in-depth but not all were radio related. The next meeting of the group will be Tuesday 24th May at the home of Greg, VK3VT from around 10 am onwards.

73 Jim, VK3KE

- Listen out on the NERG chat channel on 146.575 MHz

VK AMATEUR RADIO REFORMS DELAY

The Australian Communications Authority has put back by four months the introduction of a package of reforms for amateur radio.

WIA President Michael Owen VK3KI has described as "very disappointing" the advice just received from the ACA that the reforms are now not able to be introduced until the third quarter of 2005.

In a public statement issued on 31 May 2004, the ACA Acting Chairman, Dr Bob Horton announced details of the new licence restructure including the introduction of the new entry level Foundation Licence.

Dr Horton said 12 months ago, "We expect the new arrangements to come into force early next year."

The reforms were part of the outcomes of the ACA's review of amateur service regulation that began in August 2003, involved extensive public consultation involving more than 1,300 submissions.

The amateur radio fraternity and those seeking to enter the hobby via the proposed new Foundation Licence will share the WIA's extreme disappointment.

The cause of the delay was not immediately known.

From Amateur Radio Victoria

BPL DECISIONS DELAYED

ACA Media release No. 19 - 29 April 2005,
'Managing interference from Broadband over Power Line'

The Australian Communications Authority (ACA) today called for public comment on possible ways to manage interference from Broadband over Power Line (BPL) communications.

BPL communications is an emerging technique that uses electricity networks to transmit data, voice and video.

Releasing a discussion paper on the issue, ACA Acting Chairman Dr Bob Horton said the challenge for the ACA was to establish arrangements that did not unnecessarily inhibit BPL deployments but protected radio-communications services from unacceptable interference.

"The paper contains a range of options that could be used to manage interference from BPL systems and will assist interested parties in preparing their submissions," Dr Horton said.

"Using the electricity network to carry BPL signals will result in leakage of radiofrequency emission into the surrounding environment. This could interfere with radio-communications services.

"Interference could potentially affect defence operations, shortwave broadcasting, maritime and aeronautical communications, radio astronomy, amateur radio and numerous short range applications."

Dr Horton said submissions and comments on the options in the discussion paper would assist the ACA to develop arrangements to manage interference from BPL communications systems.

The deadline for written submissions on the discussion paper is Friday 24 June. They should be sent to:

Manager BPL Project Team
Australian Communications Authority
PO Box 78
BELCONNEN ACT 2616

Submissions can also be emailed to bpl.issues@aca.gov.au or faxed to (02) 6219 5231.

The discussion paper can be found on the ACA website. Hard copies may be requested by email to bpl.issues@aca.gov.au or by calling 1300 850 115.

From the ACA website

41ST MT GAMBIER CONVENTION & AUST. FOX HUNT CHAMPIONSHIPS

Stalls, home brew and foxhunt competitions, talkfest.

Queen's Birthday long weekend, June 11-12

Mt Gambier Scout Hall, Margaret Street

For info and table bookings: Wayne Kilpatrick VK5ZX

08 87254335 or 0407 718908 email vk5zx@internode.on.net

Talk-in repeaters 146.600 / 438.325 MHz

HOW MANY HAMS DOES IT TAKE TO CHANGE A LIGHT GLOBE?

None -

they all glow in the dark!

Anon

WEB OF THE MONTH

www.qsl.net/ei8ic



This web site was suggested by Dave, VK3JMB. The web site owner, Tim Makins EI8IC in Ireland, was frustrated by the lack of amateur radio maps available on the internet so has set about rectifying the situation. He has generated some very nice maps showing callsign areas around the world as well as CQ zones, ITU regions, Grid locators, Russian and Chinese prefixes and many others. Available free for personal use, these maps are very useful for the DXer to find out where their contacts live!

Tim wrote what he calls overlay mapping software to generate these maps and has made the packages NAOMI (North American Overlay Mapper), and GOM (Global Overlay Mapper) available from his site as demo and pay-for versions. Essentially they allow you to build up maps with as much or as little information as required from different sources, and come with loads of maps. It will even plot APRS stations on the maps!

2005 Dayton Hamvention®

www.hamvention.org



They do things big in Ohio, USA! If you can't make it to the biggest hamfest in the world then you may as well be amazed and see what you will be missing out on this month - such as the 500 indoor exhibit spaces for exhibitors to show off their latest equipment or services, and the HUGE 2500+ space Flea Market area!

The hamfest web site has links to hundreds of photos of previous Dayton hamfests and there will be live webcam coverage for the event, including the roaming "helmet Cam".

Alternatively you can work the Special Event Station, W8BI during the week of Hamvention around 20-22 May. Frequencies to be used are:

3.870/3.650, 7.270/7.050, 10.110,
14.270/14.050 18.130/18.090, 21.370/21.050,
28.670/28.050 & 147.55 Simplex (all freq's +/- QRM).

Address for QSL's and certificates:

DARA, W8BI

PO Box 44

Dayton, Ohio 45401

CTCSS TONE SQUELCH

The concept of tone squelch is simple. A low frequency audio tone, typically between 67 and 254 Hz, is added to the transmitted audio signal. The receiver's loudspeaker is then only enabled when a designated low frequency tone is received. This keeps out interference from other sources that would open a regular signal level based squelch system. It also allows several groups to use a common channel without overhearing each others conversations.

The tones are generally chosen to fall below 300 Hz because those frequencies are not necessary for speech communications and do not interfere with it. They can be filtered out before reaching the receiver's speaker and since the listener doesn't hear the tone it is sometimes called sub-audible tone squelch.

There are many tone encoded squelch systems used in commercial FM radio systems, however CTCSS is the most commonly used standard in amateur radio. The Continuous Tone Coded Squelch System also goes by trade names such as Motorola's "Private Line" or PL system introduced in the early 1960s. Others include GE/Ericsson's "Channel Guard", E.F. Johnson's "Call Guard", and RCA's "Quiet Channel".

In the early days the US military initially adopted 150 Hz as their tone. Commercial users soon realised that several groups of users could share a single radio channel if each group used a different audio tone. The receivers in each group would open squelch for transmissions from others in their group but remain closed when other groups used the frequency. This cuts down the amount of "chatter" that other users have to listen too, as well as keeping conversations relatively private.

Since users in other groups aren't aware of when someone else is using the channel, a method is required to block transmission until the channel becomes free. A method called "Transmit Inhibit on Busy" is often used where a regular squelch circuit detects when the channel is busy and if the tone does not match the user's group it will inhibit transmissions. Transmission is allowed only after the channel goes quiet for at least 5 seconds or so, indicating an end of the other conversation. The radio may emit a warning sound to inform the user that they are trying to talk over an already busy channel. Some radios will even automatically look for an alternate clear channel when the user wants to talk to a multi-channel base station.

About 38 different tones are commonly used, with additional tones added by various manufacturers. These tones were designed to avoid common interference frequencies such as 60 Hz hum and its harmonics. In Australia/NZ we need to be careful not to choose tones that are related to 50 Hz. Also consider that low tones take longer to decode than high tones and may introduce unacceptable lags in opening and closing the squelch. On the other hand, high tone frequencies may be triggered falsely by the low frequency components of speech signals or become clearly audible in the receiver.

Unfortunately CTCSS comes at a price - it doesn't work well on the very weak signals amateurs are accustomed to hearing, needing a reasonably good signal to noise ratio before opening reliably. Despite this drawback many repeaters are using CTCSS to block out LIPD and inter-mod interference, or to activate special crossband or IRLP links.

CTCSS encoders and decoders come in various forms. Early tuning fork or "reed" methods are now obsolete. Oscillators and detectors can be built with discrete components, however the frequency must remain very stable (less than 0.5%) - a difficult job in a mobile! Analog ICs like the NE566 & NE567 tone generator and detector can be used with care. Modern integrated circuits offer a wide selection of frequencies, are physically small, and offer high stability by deriving the tone frequencies from a single crystal reference. Manufacturers of such chips include CML Microcircuit (UK), SIGTEC (Signal Technology, Australia), and COMM-SPEC (Communications Specialists, USA). Current generation radios often use a digital signal processor to handle CTCSS as well as many other squelch and signalling techniques.

After market modules are available to retro-fit old radios. A CTCSS tone generator by VK5AH based on a PIC micro-processor was printed in NERG News in July 2002.

Manufacturers use different schemes to identify their tones even though many are common. Some use number and letter codes, others using the actual tone frequency. The table below shows some of the more common numbering systems used:

Freq	38	39	47	38	32	EIA	Phil	RT85	Alin	Mot
67.0	1	1	1	1	1	A1	Q/17	63	A00	XZ/L1
69.3		2	2	2		X			C00	WZ
71.9	2	3	3	3	2	B1	R/18	31	B00	XA/L2
74.4	3	4	4	4		C1	S/19	61	C01	WA
77.0	4	5	5	5	3	A2	T/20	30	A01	XB/L3
79.7	5	6	6	6		C2	U/21	59	C02	WB/SP
82.5	6	7	7	7	4	B2	I/9	29	B01	YZ/L4
85.4	7	8	8	8		C3	V/22	57	C03	YA
88.5	8	9	9	9	5	A3	A/1	28	A02	YB/L4 A
91.5	9	10	10	10		C4	W/2 3	55	C04	ZZ
94.8	10	11	11	11	6	B3	J/10	27	B02	ZA/L5
97.4	11	12	12	12		X	=38	53	C05	ZB
100.0	12	13	13	13		A4	B/1	26	A03	1Z
103.5	13	14	14	14	7	B4	K/11	25	B03	1A
107.2	14	15	15	15	8	A5	C/3	24	A04	1B
110.9	15	16	16	16	9	B5	L/12	23	B04	2Z
114.8	16	17	17	17	10	A6	D/4	22	A05	2A
118.8	17	18	18	18	11	B6	M/13	21	B05	2B
123.0	18	19	19	19	12	A7	E/5	20	A06	3Z
127.3	19	20	20	20	13	B7	N/14	19	B06	3A
131.8	20	21	21	21	14	A8	F/6	18	A07	3B
136.5	21	22	22	22	15	B8	O/15	17	B07	4Z
141.3	22	23	23	23	16	A9	G/7	16	A08	4A
146.2	23	24	24	24	17	B9	P/16	15	B08	4B
151.4	24	25	25	25	18	A10	H/8	14	A09	5Z
156.7	25	26	26	26	19	B10	X/24	13	B09	5A
159.8			27	27						
162.2	26	27	28	28	20	A11	Y/25	12	A10	5B
165.5				29						
167.9	27	28	29	30	21	B11	O/26	11	B10	6Z
171.3				31						
173.8	28	29	30	32	22	A12	1/27	10	A11	6A
177.3				33						
179.9	29	30	31	34	23	B12	2/27	9	B11	6B
183.5			32	35						
186.2	30	31	33	36	24	A13	3/29	8	A12	7Z
189.9			34	37						
192.8	31	32	35	38	25	B13	4/30	7	B12	7A
196.6			36							
199.5			37							
203.5	32	33	38		26	A14	5/31	6	A13	M1
206.5			39							8Z
210.7	33	34	40		27	B14	6/23	5	B13	M2
218.1	34	35	41		28	A15	7/33	4	A14	M3
225.7	35	36	42		29	B15	8/34	3	B14	M4
229.1			43							9Z
233.6	36	37	44		30	A16	9/35	2	A15	M5
241.8	37	38	45		31	B16	*/36	1	B15	M6
250.3	38	39	46		32	A17	#/37		A16	M7
254.1			47							0Z

Notes:

38 = Standard CTCSS 38 tone set (67,71.9-250.3)

39 = CTCSS (67,69.3-250.3) Standard + 69.3

47 = CTCSS (67,69.3-254.1) Standard + 69.3 + 8 more

38 = CTCSS (67,69.3-192.8) First 38 of all tones

Misses 7 standard tones but includes 3 unique ones

32 = CTCSS (67,71.9-250.3) UK MPT1306 standard,

misses 6 standard tones

EIA = EIA standards, groups A/B/C, x=non-standard

Phil = Philips (FM900 series) SA code / User selectable code

RT85 = AWA RT85/85A

Ali = Alinco tone codes - 39

Mot = Motorola have another 38 tones between 281.8 - 1161.4 Hz that are not listed here.

For more see: www.n8lhg.com/gmrssub.htm ,
www.geocities.com/euro446/ctcss.html , and
<http://keycom.d2.net.au/ctcss-codes.pdf>

CTCSS IN THE FM900

Rising levels of interference to amateur repeaters from nearby paging transmitters and LIPDs means that CTCSS is slowly becoming necessary to work many repeaters on the 2m and 70cm bands. Many amateur transceivers can handle this with built in CTCSS encoders along with some of the ex-commercial mobile radios beings used for amateur service.

In the case of the Philips FM900 series, CTCSS is fitted as an option. There were modules for encode only, decode only, and combined encode/decode. These modules were mainly based on the CML chips FX335 (encoder/decoder) and FX315 (encoder only). Other non-standard modules using SIGTEC chips (CED04, etc) may also be found. Unfortunately the VHF FM92's that came from the CFA into the local amateur 2m service a few years ago do not have a CTCSS option fitted.

A few original Philips modules were available at hamfests but sources have pretty well dried up. Occasionally a cheap low band (Band-E) '900 appears at a hamfest and are worth the money just to get the CTCSS kit. If you are lucky enough to acquire a CTCSS module then you also need an I/O expander kit. The kit consists of a couple of garden variety chips, a few resistors and a capacitor, a very rare National Semiconductor NSC810 chip, and a couple of changes to the main board.

The CTCSS option can be identified by the presence of a ceramic hybrid module mounted vertically on the main control board in socket position U405 (near the rear of the radio). Also all of the dual in line sockets near the EPROM will contain components, including the NSC810 chip.

Many after-market CTCSS encoders and decoders can easily be fitted in place of the real module since all the audio and mute connections are available at the U405 connector. It is simple enough to use such a module for encoding and decoding a single CTCSS tone across all channels. Making the module change tones on a per-channel basis is somewhat more difficult, but may be possible as many tone modules use similar digital interfaces for selecting the tone. Reprogramming the EPROM would be necessary to make the radio think it had an original module fitted and a different numbering scheme may be needed.

Mark VK3BYJ

CTCSS IN THE AWA RT85/A

The RT85 family came with several variations in signally and squelch options. The AWA RT-85A UHF radios obtained from the Victorian District Nursing service that were subsequently tuned to 70cm came fitted with CTCSS encoder only and SELCALL encoder/decoder modules, meaning they could be programmed to access amateur repeaters immediately.

It is a simple matter to enable tone encoding in the EPROM. Each channel can have a different tone or no tone at all. Unfortunately there is no simple way to select a different tone frequency from the front panel, meaning that if the radio is set up for, say, Melbourne repeaters then it may not work on interstate repeaters. This isn't much of a problem while most repeaters either don't use any CTCSS, and the ones that do generally use the old standard 123 Hz tone. However some require special tones to access cross-band links or special features, and the WIA plans to move to a new tone frequency over the next few years. At the moment the simplest option is to fit a larger EPROM and devise a switch to "bank-select" one of a number of channel sets from the EPROM, with different tones in each set.

Alternatively the CTCSS tone selection wiring could be connected to a multi position switch rather than the control board but fiddling with switches on the back of the radio is difficult while mobile!

I've started a project to modify the embedded programming code in the radio so that the CTCSS tone can be selected from the front panel (for radios with the 2764 EPROM - the 2716 version is a lot more difficult).

We have discovered that the Encoder Only module that is fitted to the nursing radios is relatively easy to modify into an encode/decode module. A few tracks on the encoder PCB need re-routing and some discrete components are needed to feed receive audio to the decoder section of the chip. Does anyone have any data on SIGTEC chips used in these modules? The SIGTEC series seem very common but little data is available on them, particular the CED03, CED04 and CED06.

Mark VK3BYJ

ANTENNA ANALYSER KITS

Micro908 "Antenna Analyst AA-908" is a re-usable control & computing platform for antenna measurement, PSK31 digital modems, audio filtering, signal source & VFO, memory keyer ... and more !

Several years ago, N2APB and N2CX embarked on a journey to develop a low-cost antenna analyser that would sweep the ham bands with a micro power transmitter and measure the resultant SWR of an antenna system. They presented the original design of the Analyser at various QRP forums circa 1998-2000 and evolved the hardware platform several more times in the Digital QRP Home brewing column of QQ magazine.

The hardware design is now called the Micro908 and consists of a microprocessor board with modules including a DDS signal source and a reflectometer. The whole lot is available as a kit and has been available from the AmQRP Club since August 2004.

Check out the homepage at: <http://www.amqrp.org/kits/micro908/>

Unfortunately the kits are so popular that they are often out of stock. In any case the project should provide some great inspiration to do a bit of homebrewing yourself!

MACEDON PINES ARDF REPORT

Eighteen runners took part in one of two styles of RadiO orienteering organised by the Vic ARDF group at Macedon Pines on April 24. The weather was perfect for it. The event was held in conjunction with the Bayside Kangaroos Orienteering Club Bush Score event and also as part of the Triple-O for the whole long weekend.

Competitors could choose a learning/beginners style Fox-Or event where large circles on the map guide them towards a low powered 2m continuous transmitter that they narrow down with the 2m antenna and sniffer.

More experienced competitors, especially those training for the upcoming Region 3 champs in Japan, compete in a full or shorter ARDF course where the 5 higher powered 2m transmitters take turns transmitting on the 1 frequency for 1 minute each. This is much more difficult to master, considering you can get reflections from nearby Mt Macedon and you have to carefully navigate on the map at the same time, always knowing exactly where you are.

Name	TX	TIME	CLUB	TRIPLE-O
Fox-Or (Approx 3km.)				
Martin Rowe	3	00:25:40	Scot	
Peter Moloney	3	00:26:40	NE	
Max Neve	3	00:41:29	MFR	300
Pam King	3	01:02:01	DR	300
Jun Okabe	3	01:11:00	VOA	300
Sue Gurman	4	02:03:46	BK	300
Dianne Shalders	4	02:03:46	BK	
Wally Cavill	1	00:38:10	DR	100
ARDF Run (approx 8.5km best route/order)	5	90 min		
Adam Scammell	5	1:17:15	AR	750
Bryan Ackerly	4	1:22:43	AR	600
Ian Stirling	0	-	AR	0
ARDF Walk (approx 8.5km best route/order)	5	120 min		
Greg Williams	3	1:59:45	AR	
ARDF Short (approx 4.5km best route/order)	3	90 min		
Mike Hubbert	3	1:06:50	BK	450
Barry Hart	2	1:01:15	YV	300
Mark Diggins	2	1:30:00	AR	

From Bruce, VK3TJN, ARDF Vic.

AR COURSE FOR ADVANCED SCOUTS

The Scouts Radio and Electronics Service Unit (SRESU) is running Novice Operator Training Course for Scouts, beginning Wednesday 18th of May 2005. Sessions run from 7:30 pm to ~9:45 pm.

Cost of Course (Including Novice Operators Theory Handbook and Novice Operators Study Program) is \$70.00

Examination papers will be at WIA Exam Service Current costs and these charges are not included in the above and are to be advised.

For further information email Philip .Adams @ nec. com. au

If you are interested in Amateur Radio but you can not do the Training Course offered may we suggest that you consider the training material offered by Ron Bertrand

<http://www.radioelectronicschool.com/index.html>

The SRESU has a number of WIA accredited examiners and conduct amateur radio examinations on behalf of the Australian Communications Authority.

BOOK A TABLE AT THE GGREC HAMFEST

Gippsland Gates hamfest will be on 16th July 2005 at the Cranbourne Community Hall, Cranbourne. 40 tables are available, \$20 each. Book now. Contact Dianne Jackson on (03) 5625 2545 or email to hamfest@ggrec.org.au

BALLOON HUNT - SUNDAY 15TH MAY

Brian VK3YNG and Co. are planning to launch a balloon over Melbourne carrying beacons and cameras this coming Sunday morning.

The tracking beacon is complete and has been tested. It is a relatively simple beacon that operates on 145.300 MHz and sends out a pulsed transmission (similar to the fox-or transmitters) at about 10 milliwatts. For 5 seconds out of every 30 it transmits at 1 watt. This is to give it a "head up" if it comes down in thick bush. The high power and low power modes use different batteries. That way the low power beacon can operate for weeks once the high power batteries are depleted. The payload may even be tracked by a UAV for some part of its flight. (Unmanned Aerial Vehicle).

Subscribe to the ardf-fox list for more details on launch location, time and other details as they come to hand. You can subscribe to the list by going to the web page: <http://lists.id.oz.au/www/info/melb-fox>
Or listen out on the usual liaison frequency 146.575 MHz

ARDF EVENTS

The local and international ARDF Radio Orienteering calendar is filling up. Here are some activities and tentative dates.

3rd IARU Region 2 ARDF Championships & USA Champs, USA 1-5 Aug, Albuquerque Amateur Radio Club. See: <http://www.ardf.us> or Reg-2 site: <http://www.ardf-r2.org>

World Orienteering Champs, Japan, 3-15 August, 2005 (comp 7-14)

World ARDF Champs, Japan 19-24 September.

May Wed 11 th	StreetO		Waterford Lakes	
May Sun 22 nd	All	2m	Endeavour Greens	Micro & Fox-or
June Sat 11 th	ARDF	80m	Mt Gambier	Part of SERG events
June Sun 26 th	Fox-or	2& 80m	Westgate Park	Specialty Fox-or Event
July Sun 24 th	Fox-or	80m	Darebin Park	
July/Aug	SnowDF	80m	Lake Mountain	When Ski-O scheduled
Aug Sun 7 th	Fox-or	2m	Gellibrand	
Aug Wed 31 st	StreetO		Blind Creek	
Sept Sat 3 rd	ARDF	2m	Glenluce	Australian ARDF Championships!
Sept 19 th -24 th	ARDF	2& 80m	Japan	Region 3 Champs
Oct Sun 23 rd	Fox-or	80m	Latrobe University	Final event: Series Cup

From Vic ARDF Group newsgroup

VK/TRANS-TASMAN CONTEST

The series of VK/Trans-Tasman contests starts on the **Saturday night of May 21st** with the **80-meter SSB event**. CW and 160m events follow in June and July. The contest manager Bruce Renn, VK3JWZ, encourages everyone to have a go. This is a friendly little contest especially suited to newcomers and those without big stations. Novices and clubs are encouraged to join in, especially they haven't contested before.

Running only 6 hours, in 1 hour segments, it's long enough to be interesting without being arduous, and providing constant activity with stations being able to be reworked each hour. The emphasis is on contacts between VK and ZL stations, with the scoring structured to give all stations an equal chance, regardless of their geographical location. Bonus points can be earned each hour, and are awarded to encourage trans-Tasman contacts and participation by VK5, 8 & 6's.

The only thing asked is that you take the time to submit your log (even if you don't think you will win). **Log keeping software** is available to help keep score - a notoriously difficult task for this contest in the past!

See <http://home.iprimus.com.au/vktasman> for rules and software.

Rules are also published in the WIA AR and NZART magazines.

Contact the Contest Manager at: vktasman@hotmail.com

2005 AMATEUR RADIO EVENTS

2005 all year - Special callsign prefix OO may be used by radio amateurs in Belgium may be to celebrate to celebrate the 175th anniversary of the independence of their nation.

- May 2-19 DXpedition to Vanuatu YJ IOTA OC-035 by YLs Elizabeth VE3YL and Gwen VK3DYL. CW & SSB.
- May 21 VK/trans Tasman Contest - 80m Phone
Info: <http://home.iprimus.com.au/vktasman>
- May 20-22 Dayton (Ohio USA) Hamvention
The world's largest amateur radio gathering and trade show. Info: www.hamvention.org
- May 23-June 8 DXpedition to Tonga A3 IOTA OC-064 by YLs Elizabeth VE3YL and Gwen VK3DYL, CW & SSB.
- May 25 WIA Victoria (Amateur Radio Victoria) 2004 AGM - St Michael's Hall corner High St Rd and Victory Boulevard, Ashburton, 8pm.
- May 29 George Fowler Memorial Auction - in the Ballarat Amateur Radio Club Rooms, Hut 31, Ballarat Airport, starts at 12:00
Info: vk3aig@barg.org.au
- June 4 VK/trans Tasman Contest - 80m CW (see above)
- June 11-12 41st annual South East Radio Group's Mt Gambier Amateur Radio Convention and Australian Fox Hunting Championship. Venue: Mt Gambier Scout Hall, Margaret Street. Info and table bookings, Wayne Kilpatrick VK5ZX 08 87254335 or 0407 718908 email vk5zx@internode.on.net
- July 9 VK/trans Tasman Contest - 160m Phone (see above)
- July 9-10 GippsTech 2005 Technical Conference specialising upon VHF, UHF and microwave weak signal communications. WIA Eastern Zone Amateur Radio Club. At Monash University Gippsland Campus, Churchill.
Info: <http://www.qsl.net/vk3bez/>
- July 16 Gippsland Gate Radio and Electronics Club annual Hamfest, Cranbourne
- July 23 VK/trans Tasman Contest - 160m CW (see above)
- August 6-7 2nd Asia-Pacific Air-Internet Jamboree - involving amateur radio and the Internet. National JOTA/JOTI Coordinator, Scouts Australia, Stephen Watson VK4SGW jota.joti@scouts.com.au
- Aug 13-14 Remembrance Day Contest - 0800z Sat. - 0759z Sun.
- August 20-21 International Lighthouse/Lightship Weekend
Info: www.vk2ce.com/illw
- Oct 15-16 48th Annual Jamboree on the Air (JOTA)

The NERG Inc. RegNo A0006776V <http://nerg.asn.au>

The North Eastern Radio Group, Inc. is an amateur radio club devoted to encouraging members and others to enjoy the hobby of amateur radio. It tries not to hang on ceremony and endless reporting but rather participate in the fun aspects of this fascinating hobby.

Membership Fees (due each August):

Full: \$30 Family: \$40 Concession: \$20

Send to: NERG Treasurer, PO box 270, Greensborough, Vic., 3088

Committee

President	Greg Williams	VK3VT	9432 0563
Secretary	John Weir	VK3ZRV	9431 0667
Treasurer	Marg Baxter	VK3VOJ	9467 1253
Committee	Betsy King	VK3HBK	
	David Aston	VK3THY	
	Peter Cosway	VK3DU	9379 3626
Repeaters	Mark Harrison	VK3BYY	9435 3043

Meetings

2nd Thursday of each month at 7.45 PM (excepting Dec. & Jan.)
Briar Hill Primary School, Gladstone Rd, Briar Hill (off Sherbourne)
(Melway map ref 21-B1)

Classes

NERG occasionally runs classes and exams for Amateur license candidates.

Callsigns and Repeaters (25km North East of Melbourne)

Club call - VK3CNE <http://www.qsl.net/vk3cne>

6m rpt VK3RMH FM 52.550 MHz in 53.550 MHz out

70cm rpt VK3RMH FM 433.325 MHz in 438.325 MHz out

IRLP node 6350, EchoLink node 140587

6m beacon VK3RMH CW 10 Watts 50.295 MHz -Off air

10m bec'n VK3RMH CW 20Watts 28.2565 MHz

Occasionally home to the Scout Radio & Electronics Group repeater:

2m VK3RSR FM 146.375 MHz in 146.975 MHz out

NETS

NERG NETS run on 146.575 MHz FM Simplex (8.30 – 9.30 pm Thursdays). Please join the discussions. NERGs often monitor this frequency and the 70cm VK3RMH repeater.

WEB Sites: <http://nerg.asn.au> and <http://www.qsl.net/vk3rmh>

NERG NEWS submissions and comments invited:

editor: Mark Harrison VK3BYY

ph: 9435-3043 hm

post: 266 Nell Street West, Watsonia, 3087

email: vk3byy@nerg.asn.au



NERG

North-East Radio Group VK3CNE

NERG Incorporated 1985
BOX 270 GREENSBOROUGH VIC 3088

STAMP

**NEXT MEETING:
7:45 PM Thursday 12th May 2005**

2005 CALENDAR (NERG ACTIVITIES IN BOLD TYPE)

May 12 NERG MEETING

May 21 VK/trans Tasman Contest - 80m Phone 6pm-midnight - Info: <http://home.iprimus.com.au/vktasman>

May 20-22 Dayton (Ohio USA) Hamvention - world's largest amateur radio gathering and trade show.

May 23-June 8 DXpedition to Tonga A3 IOTA OC-064 by Elizabeth VE3YL and Gwen VK3DYL, CW & SSB.

May 25 Amateur Radio Victoria 2005 AGM - St Michael's Hall cnr High St Rd & Victory Bvd, Ashburton, 8pm.

June 4 VK/trans Tasman Contest - 80m CW (as above)

June 9 NERG MEETING

June 11-12 SERG Mt Gambier AR Convention and Aust. Fox Hunting Championship. Mt Gambier Scout Hall

July 9 VK/trans Tasman Contest - 160m Phone (as above)

July 9-10 GippsTech 2005 Technical Conference, Gippsland Campus, Churchill. <http://www.qsl.net/vk3bez/>

July 14 NERG MEETING

July 16 Gippsland Gate Radio & Electronics Club Hamfest, Sat. @10, Cranbourne Public Hall, Melway 133 K4

July 23 VK/trans Tasman Contest - 160m CW (as above)