



**February 2010**

**NERG Inc.**  
PO Box 270  
Greensborough  
Victoria 3088  
[news@nerg.asn.au](mailto:news@nerg.asn.au)

### WHAT'S ON IN FEBRUARY

For the first meeting of the year we have guest speaker Michael Ampt VK3CH showing us how easy it is to receive the new Digital TV transmissions and what you need to transmit DATV.

Receiving DATV is pretty straight forward although there are some receivers that won't tune to the amateur band.

Transmitting is a different story. This is real amateur radio – you can't yet buy a DATV transmitter off the shelf, and some soldering is required!

73, Mark Harrison

VK3BYY, NERG NEWS Editor

### THE GAINFULLY UNEMPLOYED GROUP

The group snuck in an unscheduled gathering on Australia Day. We haven't heard from them since so it must have been a good one ☺ The next gainfully unemployed lunch will be held on Tuesday 25<sup>th</sup> February. Keep an ear on the radio or watch the nerg web site for the location.

### THE NEXT NERG MEETING

Next months regular NERG meeting is on **Thursday 11<sup>th</sup> March 2010**, starting 7:45pm at the Briar Hill Community Hall, 126 Mountain View Rd, Briar Hill, MELWAY 21 C3.

### A MONTH OF HAMFESTS!

Its summer hamfest season again, with the events at Kyneton, Healesville, Wyong and Heathmont within a month.

#### Centre Victoria Radiofest (No 3) - A WIA 100 Event

Sunday Feb 14th, 2010 Sunday. KYNETON Racecourse, only one hour from Melbourne, Ballarat and Bendigo. Tickets \$10 on sale from 9am; entry from 10am

Organised by Amateur Radio Victoria and local radio groups. The major commercial suppliers will be there giving strong support. Many activities and displays by these groups:

Amateur Radio Victoria

Australian Ladies Amateur Radio Association ALARA

Australian Vintage Radio Society Inc

Bendigo Astronomical Society

CQ Magazine Awards

CW Operators' QRP Club

Frankston and Mornington Peninsula Amateur Radio Club

Historical Radio Society of Australia

Macedon Ranges ARC

RECOM

Scout Radio Electronics Service Unit (SRESU)

The Royal Australian Corp of Signals Museum

Wireless Institute of Australia

Talk-in via the Mt Macedon 2m repeater VK3RMM on 147.250MHz from 9am to 10.30am.

More info [www.radiofest.amateurradio.com.au](http://www.radiofest.amateurradio.com.au)

# NERG NEWS

Incorporated 1985 in Victoria, Australia  
Reg No A0006776V - <http://nerg.asn.au>  
Affiliated with the Wireless Institute of Australia

**NEXT MEETING:**  
**11<sup>th</sup> February 2010**  
**Getting on the air with**  
**Digital Amateur TV**  
with Mick VK3CH



*Things have come a long way since this 1950's OB van!*

**Coffee Night Thursday 25 Feb**

#### Yarra Valley Amateur Radio Group Inc. Hamfest Sale

Sunday Feb 28th, 2010, open 10am- 2pm  
Healesville Memorial Hall, Maroondah Hwy, Healesville.

Pre-loved Radio & Electronic Equipment. Free Tea & Coffee. Ample parking. \$5 entry. Table booking and more info call Gavin VK3GH 5968 8482 or Laurie VK3LD on 0414 759 812. More at: [www.yarravalley.ar.org.au](http://www.yarravalley.ar.org.au)

**Centenary Field Day, Wyong Central Coast Amateur Radio Club**, VK2, Wyong race course, New South Wales. Sunday Feb 28th, 2010 9am \$10 entry [www.ccarc.org.au](http://www.ccarc.org.au)

The biggest Field Day in Australia. Major retailers and wholesalers with the usual flea market and other events. Plenty to interest the amateur radio enthusiasts and their family. Centenary Dinner to be held on Saturday night.

#### Eastern and Mountain District Radio Club

##### White Elephant Sale

Sunday Mar 14<sup>th</sup>, 10:30am – 3pm. \$6 entry.  
Great Ryrie Primary School, Great Ryrie St, Heathmont.  
Melbourne's most popular suburban hamfest for new and second hand Amateur gear and component sales with major commercial vendors, retailers and the regular 'hard to get component' suppliers in attendance.

Enjoy the club BBQ with free tea and coffee. For details: [www.emdrc.com.au/wes\\_2010.html](http://www.emdrc.com.au/wes_2010.html)

## BUSHFIRE SPECIAL EVENT STATION

The Yarra Valley Amateur Radio Group is running a Special Event Station, with callsign **VI3KAIH**, on Sunday 7th February 2010 between 2pm and 8pm as a **Bushfire Radio Operator Recognition Day**.

A schedule for HF, 6m, 2m & 70cm frequencies appears on the YVARG web site at [www.yarravalley.ar.org.au](http://www.yarravalley.ar.org.au)

The first 173 contacts earn a very special "from the Black" QSL card. All other contacts receive a special event QSL card (on receipt by the club of a self addressed envelope at PO Box 346 Healesville Victoria Australia 3777. Only one special QSL card per callsign/operator.)

The station will be operating from the Frank Thomson Reserve, Kinglake, Victoria, Australia.

Visitors to the station are welcome.

## DIGITAL RADIO BROADCASTING UP AND RUNNING

Digital radio broadcasting is up and running in many Australian capital cities, including Melbourne.

### Receivers:

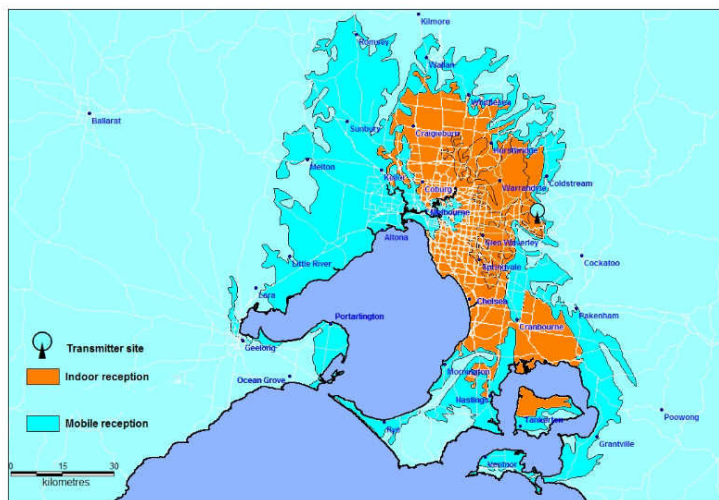
A DAB+ receiver is required to listen to these broadcasts. Portable receivers can be found on special for as little as \$76, ranging upwards to \$600 for a fancy stereo clock radio with built-in iPod dock or a HiFi tuner.

### Reception Areas:

Portable receivers usually have an FM-like rod type antenna that is often needed, especially if you are in a fringe coverage area. Don't expect portable DAB+ receivers to work in an area where there is poor TV coverage. An external vertically mounted TV Band-3 antenna (covering the old TV channel 9A, 202-206MHz) may be required in such areas. The map below shows ABC and SBS's DAB+ coverage. It's not as good as ABC's FM and AM coverage, with Geelong and Philip Island being on the edge of DAB's coverage area. The commercial stations have similar coverage areas.

Performance of receivers inside retail shops can be misleading – some stores are using in-store DAB repeaters (which may explain why receivers didn't work in a new suburban store, but were perfect a week later!).

Most DAB+ receivers can also receive regular FM broadcasts, both as a fall back in fringe areas and to receive the many community stations not yet available on DAB.



DAB+ coverage area map for ABC stations

### Tuning:

Tuning a DAB+ receiver is interesting. A receiver must scan for available transmitters before it can be used, just like a digital TV receiver. Scanning is initiated through a menu function, and takes about a minute to scan all the band-III and

L-Band TV channels where DAB+ transmitters might reside. If you are mobile you will need to do this whenever moving to a new service area, although that's not really a problem at present with service areas more than 600km apart!

Once 'tuned', stations sharing the same transmitter can be selected in a second or two. If the selected station is on another transmitter then it takes a few more seconds to acquire that transmitter. Changing from ABC Jazz to ABC DIG takes about 2 seconds, while changing from ABC DIG to commercial station NOVA take about 4 seconds.

### Stations:

Melbourne currently has three transmitters broadcasting 41 programs. ABC has 10 'stations' including simulcasts of some of their regular AM and FM stations 774, Radio National and JJJ, and DIG Music and ABC Jazz that are also on ABC Digital TV. There are some new stations like ABC Country, Classic, 24-hour News Extra, Grandstand (for non-stop sports). There is also a special event station that's occasionally used to cover extra sports, news, festivals, conferences, etc. The name of this station, ABC Extra, changes to an appropriate name such as 'Grandstand 2' for a special sports coverage, or 'Moon Landing' for an anniversary broadcast.

SBS has 9 stations. There are 5 main foreign language stations with news, talk and music, with another 4 stations repeating the main stations with a 2 hour delay. The result is up to 9 programs in different languages on air at any time.

The remaining 22 stations are commercials simulcasting AM and FM stations with some new stations targeted at narrower audiences. Some community stations will be re-broadcast on reserved channels of commercial transmitters later this year.

### Audio Quality:

Audio quality of DAB+ varies according to the bit rate the broadcasters choose for each station. ABC's Classic FM runs high quality stereo at 80kbps, which is far better than AM but a little more muffled than regular FM. It has some perceptible compression artefacts, typical of low bit rate MP3 type recordings. SBS programs on the other hand gets down to 32 kbps, because they are primarily used for talk shows, and have a fuzzy/buzzy sound to them – certainly no better than AM. On the other hand, none of the stations have any perceptible background noise or whistles, no phase distortions or any of the other problems usually heard on AM and FM broadcasts. In fringe areas the audio may stutter and echo a little as signals are lost and regained, but it's not nearly as bad as some of the loud squawks and crackles you get on some digital TV's!

Check your local DAB coverage and available stations at:

<http://www.digitalradioplus.com.au/>

## 2009/10 AMATEUR RADIO EVENTS

H = Hamfest, A = ARDF/Radio/Foxhunt, C = Contest, M = Meeting, S = Special event, G = General, W = WICEN

**FoxHunt** = Friday night or weekend daylight mobile hunt.

**RadiO** = a simplified direction finding competition usually held at an orienteering event. **BushO** = Bush orienteering event. Check the ARDF web site for updates and further details at: [www.ardf.org.au](http://www.ardf.org.au)

- February 2010**
- S Feb 7 Yarra Valley Amateur Radio Group is running a Special Event Station, with callsign VI3KAIH as a Bushfire Radio Operator Recognition Day. HF/6m/2m/70cm between 2pm-8pm. Special QSL cards available.
  - H Feb 14 Centre Victorian Radiofest #3, Kyneton Racecourse, 10am, \$10 entry. [www.AmateurRadio.com.au](http://www.AmateurRadio.com.au)
  - H Feb 28 Yarra Valley AR Group HAMFEST, Healesville Memorial Hall, Healesville. 10am-2pm, \$5 entry.
  - H Feb 28 Wyong Field Day, NSW, [www.ccarc.org.au](http://www.ccarc.org.au)

**March 2010**

H Mar 14 EMDRC White Elephant Sale, open 10am, Great Ryrie Primary School, Great Ryrie St. Heathmont

C Mar 20-21 John Moyle Field Day - NERGs @ Mt Macedon

**April 2010**

S Apr 2-5 WIA 100 Midland ARC Radio Electronic & Astronomy Expo. (Bendigo) Amateur and vintage radio & Astronomy. See [www.marc.org.au](http://www.marc.org.au)

C Apr 30-May 6 FM CQ Repeater Contest, open to all amateurs. Westlakes Amateur Radio Club

[www.westlakesarc.org.au](http://www.westlakesarc.org.au)

**July 2010**

H Jul 17 10am-2pm HAMFEST Gippsland Gate Radio & Electronics Club

**NOTE: always confirm details closer to the posted dates!**

UTC dates may be used for International events.

Dates gathered from WIA, AR Vic, ARRL, various clubs, VK Contest Club [www.vkcc.com](http://www.vkcc.com), and Banyule City calendars.



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**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 in 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	VK3XD	9431 0667
Treasurer	Marg Baxter	VK3VOJ	9467 1253
Assistant	Jim Baxter	VK3KE	
Committee	Betsy King	VK3HBK	
	David Aston	VK3UQ	0411-877-051
	Peter Cosway	VK3DU	9379 3626
	Don Haslam	VK3KDT	0409 024 597
News/Repeaters	Mark Harrison	VK3BYY	9435 3043

**Meetings**

Main Meeting: 2nd Thursday of each month at 7.45 PM (ex Dec & Jan)  
Coffee Shop nights: 4<sup>th</sup> Tuesday each month.  
Briar Hill Community Hall, 126 Mountain View Road, Briar Hill  
(Near Sherbourne Road intersection) Melway map ref 21-C3

**Classes & Exams**

NERG occasionally runs classes and exams for Amateur licences

**Callsigns and Repeaters (25km North East of Melbourne)**

Club call - VK3CNE <http://www.nerg.asn.au/vk3cne>

6m repeater VK3RMH FM 52.550 MHz in 53.550 MHz out

70cm rpt. VK3RMH FM 433.325 MHz in 438.325 MHz out

with 70cm IRLP node 6350, EchoLink node 140587

6m beacon VK3RMH CW 10 Watts H 50.2950 MHz

10m beacon VK3RMH CW 20 Watts V 28.2565 MHz

**Packet Radio VK3CNE 2m 144.700 MHz, 1200 bps**

**VK3CNE-1 for mail,BBS; VK3CNE-7 for the DX Cluster.**

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. Also used as a general Net frequency.

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

**NERG NEWS submissions and comments invited:**

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**NERG**

North-East Radio Group VK3CNE

NERG Incorporated 1985  
BOX 270 GREENSBOROUGH VIC 3088

STAMP

## Next Meeting: from 7.45 pm Thursday 11<sup>th</sup> February 2010 Getting into Digital Amateur TV

2010 CALENDAR (NERG ACTIVITIES IN BOLD TYPE)

- |                    |   |
|--------------------|---|
| <b>Feb 11</b>      | <b>NERG meeting</b> – 1 <sup>st</sup> meeting for 2010!   |
| Feb 14             | Centre Victorian Radiofest #3, Kyneton Racecourse, 10am, <a href="http://www.AmateurRadio.com.au">www.AmateurRadio.com.au</a> |
| <b>Feb 18</b>      | <b>NERG Net</b> – 146.575MHz FM 8.30-9.30pm   |
| <b>Feb 19</b>      | Friday Night Hidden Transmitter foxhunt   |
| <b>Feb 23</b>      | <b>NERG Tuesday Lunch Group</b>   |
| <b>Feb 25</b>      | <b>NERG coffee night meeting</b>  |
| Feb 28             | Yarra Valley AR Group HAMFEST, Healesville Memorial Hall, Healesville. 10am-2pm, \$5 entry.                                   |
| <b>March 4</b>     | <b>NERG NET</b> – 146.575MHz FM 8.30-9.30pm   |
| <b>March 11</b>    | <b>NERG Meeting</b>   |
| March 14           | EMDRC White Elephant Sale, open 10am, Great Ryrie Primary School, Great Ryrie St. Heathmont                                   |
| <b>March 18</b>    | <b>NERG NET</b> – 146.575MHz FM 8.30-9.30pm   |
| <b>March 19</b>    | <b>Friday Night Transmitter Hunt</b>  |
| <b>March 20-21</b> | <b>John Moyle Field Day - NERGs @ Mt Macedon</b>  |
| <b>March 23</b>    | <b>NERG Morning tea/lunch group 10am-2pm</b>  |
| <b>March 25</b>    | <b>NERG coffee shop</b>   |