



**AUGUST 2004**

NERG Inc.  
PO Box 270  
Greensborough  
Victoria 3088

### WHAT'S ON THIS MONTH -

August is the month for our Annual General Meeting, Elections, and membership renewals.

Submit your good ideas and grievances at least a week before the meeting so they can be added to the **AGM agenda**. It's also time to get you nominations in for the election of the new committee!

Don't miss the news item "WANTED" below – especially the last paragraph....

**There will also be Awards!** Are you a recipient this year?

Once the formalities are dispatched (in usual NERG double quick time) there will be plenty of time for the traditional **NERG birthday party** with birthday cake, snacks and hot beverages.

As usual, NERG welcomes visitors. Hot drinks and bickies will be available for a gold coin donation.

### SUMMARY OF THE JUNE MEETING

David VK3THY was able to demonstrate his Packet Radio system connecting to the NERG Bulletin board, VK3CNE.

In particular he demonstrated the ability to send email to local users (eventually world wide), and to tap into the international DX-cluster – a system that announces the presence of valuable DX stations on the air at that time. Several OOH-AHH's were heard from the hard core Dixer's in the room as several interesting callsigns flashed past on the computer screen. Somehow they resisted the temptation to dash home and pick up a new country towards their next DXCC award.

Thanks for the demo David – none of us have any excuses now for not dragging out our dusty old packet terminals and firing them up!

Also a number of interesting items from Garry VK3KHB were snapped up on the night. Gary is well known for his involvement in ATV and is moving to a new shack – hence the big cleanup. Thanks Gary – those items will keep a few NERGs very busy :-)

### TUESDAY MORNING TEA GROUP

The July NERG Gainfully Unemployed Morning tea was held the QTH of Jim VK3DBQ and Marg VK3VOJ on Tuesday 27<sup>th</sup>. In attendance were Ian, VK3BGE, Greg VK3VT, Dave VK3JMB, Peter VK3DU, Ernie VK3CEW and Steve VK3JSE. A great time was had by all and many topics were explored. The catering was up at the usual NERG high standard with Marg doing the honours. It was all over by 4.00pm!!

The next NERG morning tea will be on the fourth Tuesday in August, i.e. the 24th at 10.00am in the QTH of Ernie VK3CEW.  
73 Jim VK3DBQ

# NERG NEWS

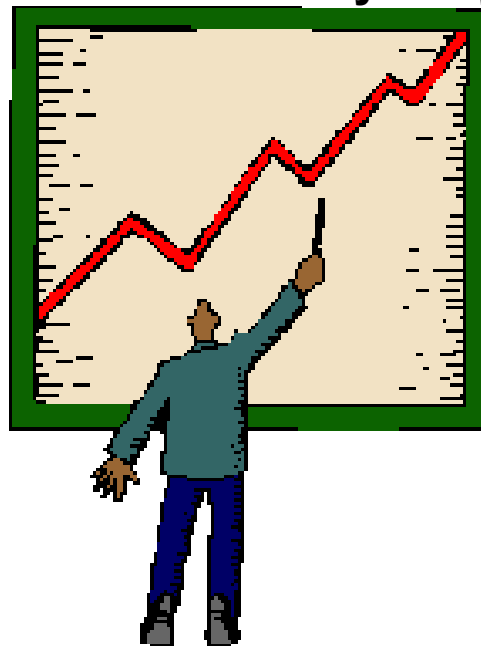
Incorporated 1985 in Victoria  
Reg No A0006776V - <http://nerg.asn.au>

**7.45 pm, Thursday**

**12<sup>th</sup> August 2004**

**Briar Hill Primary**

## NERG Annual General Meeting & NERG Birthday Party



**REMINDER: Help us point amateur radio in  
this direction - memberships due now!**  
(Fees and details on the back page)

### WANTED!

Wanted - a person that enjoys having fun and has a general interest in Amateur Radio. There is a position just for you right here in the NERG - you do not even have to go any further a field to claim your opportunity to this much sought after position!

What is it?? Well it is to join the NERG committee and **be the coordinator of our meetings**. This is not hard because a lot of help comes from all your mates from both within NERG and as you will quickly find, from many other places as well.

I feel that it is time for us to have a fresh persons input on our meetings, perhaps one of our newer members, so please just jump in and give it a go, you will enjoy it. If you are thinking about it but unsure, give me a call and I shall try to answer your concerns.

Cheers,  
Don VK3KDT

**P.S. All members not attending this months AGM may end up with their names being drawn out of a hat and being volunteered to join in the fun,..... see you at the meeting!**

## VK3RMH TOWER UNSUSTAINABLE

For several years the NERG committee has struggled to justify the operation of the Wattle Glen tower and it's VK3RMH beacons and repeaters. Rising costs have far outstripped NERG's income and it can no longer justify the considerable cost to the membership. Last year the tower was kept going with the help of a large donation and although some other offers could keep it alive for a few more months it not a long term solution. Plans over the years to offset costs by sub-letting tower space have never eventuated.

It is likely that equipment will be gradually removed from the tower up until December, when the current lease expires. The IRLP node can probably be moved to a high spot in Montmorency, where it is likely to have a much wider coverage (though perhaps not as a full repeater, depending on WIA and ACA approvals). The NERG will be investigating alternative locations for the other repeaters and beacon/s (let us know if you have a block on a outer-metro hill somewhere !...).

On the positive side, there are many new activities and services that can be funded with the savings.

We may even get some adult sized chairs for the meetings!

## LIGHTHOUSE ACTIVATION WEEKEND 21-22 AUGUST

This year the Lighthouse weekend will not fall on the RD weekend but will be held a week later, on 21-22 August.

This very popular annual event attracts hundreds of amateur radio stations which are set up in or beside lighthouses and lightships around the world. Last year the contest attracted 369 entrants spread across 48 countries. All lighthouse operators should contact Kevin, VK2CE, Oceania Coordinator. See [www.illw.net](http://www.illw.net) for a full list of participating lighthouses.

## RD CONTEST – 14/15 AUGUST

The 2004 Remembrance Day Contest will be held on 14<sup>th</sup> & - 15<sup>th</sup> August starting 0800z Sat to 0759z Sun

This contest commemorates the amateurs who died during WWII and is designed to encourage friendly participation and help improve the operating skills of participants. It is held close to 15 August, the date when hostilities ceased in the south-west Pacific area.

It is preceded by a short opening address by a notable personality transmitted on various WIA frequencies during the 15 minutes prior to the contest. During this ceremony, a roll call of amateurs who paid the supreme sacrifice is read.

A perpetual trophy is awarded annually to the WIA State with the best performance. The name of the winning State is inscribed on the trophy, and that State then holds the trophy for 12 months. The State also is given a certificate, as are leading entrants.

**Objective:** Amateurs in each VK call area will endeavour to contact amateurs in other VK call areas, ZL and P2.

**HF Bands** 1.8 - 30 MHz (no WARC).

**VHF bands** 50 MHz and above.

**Categories:** Open, Phone, CW and SWL. Stations may be single or multi operator.

No repeaters or cross band. No digital modes (other than CW).

As a mark of respect, stations are asked to observe 15 minutes' silence prior to the start of the contest, during which the opening ceremony will be broadcast.

A full set of contest rules can be found in July AR magazine and on the WIA (National) web site [www.wia.org.au](http://www.wia.org.au)

## 80M DASH FOR THE WADDA CUP 8-9PM 23 OCTOBER

The Central Highlands Amateur Radio Club of Tasmania (CHARCT) has announced the 2004 80m Dash for the Wadda Cup. This is the third running of the Wadda Cup Contest, and is open to all VK amateurs. The event is on Saturday 23 October 2004, starting at 1000 UTC (8.00pm EST, 9.00pm Tasmania). As the name implies, the contest will be a dash to make as many contacts as possible, during a 60-minute period, on the 80m band.

This year there are a number of rule changes at the request of testers and the contest moves to October, avoiding conflicts with the large number of contests held from May to September. Also, the sequential number exchange is not required. Instead you just give your callsign and your Christian name. Your name is the contest exchange. This should encourage more people to participate in the call back as no one will know the score of the other participants. A very cheeky move!

Previously the winner became the contest manager for the following year but this can be a problem. CHARCT will now be manager every year. The winner will become the "on air contest coordinator" for the following year, operating as VK7CHT/P during the contest and conducting the call back at the end of the contest. All on air score recording, receiving of logs, rule changes, articles etc, will be managed by CHARCT.

The winner of the 2003 event, is Kevin Johnston, VK5KJ, operating the club call of VK5SR in 2003. Kevin will operate the CHARCT club callsign VK7CHT/portable VK5. Contact this station to earn bonus points!

When the contest has concluded, all contestants will gather on 3.585 MHz to join in a roll call to find out who is the provisional winner of the 2004 Wadda Cup contest. If there is a tie, a countback procedure will be used. The winner will have their name and callsign etched in glory on the Wadda Cup and retain the cup for 12 months. They will also receive the 1st place contest award certificate. The Wadda Cup is a classic silver cup and has become known as the "Old Mug". It will easily handle your favorite beverage! The contest winner will also receive a replica of the Wadda Cup. Contest award certificates will also be awarded to 2nd and 3rd places. The highest SWL score will receive a special award certificate.

The aims of the contest are to -

- Encourage on air activity in a short, friendly contest.
- Provide amateurs with the opportunity of accumulating contacts for the CHARCT Tassie Trout Award and the Tasmanian Division of the WIA Tasmanian Devil Award.
- Encourage first time testers and SWL's.
- Promote on air activity of VK7 amateurs, and maybe get back the old mug from VK5!

Full contest details are available on the CHARCT website [www.vk2ce.com/vk7cht](http://www.vk2ce.com/vk7cht) Also in September 2004 Amateur Radio Magazine. CHARCT holds a regular Thursday night Quiz net on 3.585 MHz, starting at 8.30pm (EST). So, if you want to have some fun in a quick friendly contest, have a go at the 80m Dash for the Wadda Cup.

73's, Vince Henderson, VK7VH,  
2004 Wadda Cup Contest Manager.

## SUPPORT YOUR NEW AMATEUR RADIO VICTORIA

Much of the former WIA Victorian Division has now been absorbed into the new National WIA. The National body now has to absorb losses from some other states and will inevitably mean a "normallisation" of WIA services across Australia. The National WIA has already said it won't support many of the services at the high level Victorians have come to expect.

Some quick work by the Vic Div councilors will allow many of the services to continue under a new WIA Victoria registered business name, Amateur Radio Victoria (ARVic?).

ARVic will essentially run as a state wide radio club and will be charged with providing many of the services previously run by WIA Vic. Funding for the services comes from a small membership fee. The services include QSL bureaus, Victorian repeater and broadcast networks, advice on masts and RFI problems, members website, disposal equipment, and other special interest groups.

All Victorian amateurs are encouraged to pay just \$15 per year to help maintain these essential services (\$12.50 concession). In the first instance, members will be asked for 2 years of membership to get ARVic going and to keep processing costs to a minimum.

**Remember – if you don't join ARV then the quality of amateur services in Victoria will very quickly fall zero!**

## SILENT KEY – DR. JOHN D. KRAUS, W8JK

from ARRL news:

NEWINGTON, CT, Jul 21, 2004--Well-known radio astronomer, antenna designer, cosmic explorer and author John D. Kraus, W8JK, of Delaware, Ohio, died Sunday, July 18. He was 94 and reportedly was in failing health but alert to the end. While he enjoyed a worldwide reputation, Kraus is perhaps best known within the Amateur Radio community for his bi-directional wire beam antenna design--often dubbed the '8JK array. The antenna has remained popular among radio amateurs for decades. Other important Kraus antenna designs include the corner reflector and the helix antenna, often used in amateur satellite antennas as well as in commercial communications applications. The Michigan native was a pioneer of radiotelescope design and the father of the so-called "Big Ear" telescope, which ceased operation in 1997 after almost 40 years of service.

Following an early fascination with radio, Kraus first became licensed as 8AFJ. He later requested and was granted the now-famous W8JK call sign. He obtained his bachelor's, master's and doctoral degrees from the University of Michigan in the 1930s, and, while working in the school's physics department, he helped construct and did research on the university's cyclotron.

Before and during World War II, Kraus worked for the US Naval Ordnance Laboratory on a project to protect ships from magnetic mines. He's also credited with developing an early "walkie-talkie" that used UHF frequencies. At Harvard University's Radio Research Laboratory he worked on radar countermeasures, and following the war he helped write a book on the lab's achievements.

In 1946, he joined the faculty of the Ohio State University. He served as a professor of electrical engineering and astronomy at OSU, where he founded and directed the OSU Radio Observatory (OSURO)--designing and overseeing construction of the "Big Ear" radiotelescope on the land owned by Ohio Wesleyan University in Delaware.

Kraus's classic textbook *Antennas*, now in its third edition, has been an engineering school staple for about four decades and can be found in virtually every antenna engineer's library. Among his other titles are *Electromagnetics*, *Radio Astronomy*, *Big Ear*, *Big Ear Two* and *Our Cosmic Universe*.

In addition to his many technical publications, Kraus also wrote several articles for QST over a period of nearly five decades. He did a "recap and update" of his W8JK antenna in the June 1982 issue.

An article in the journal's July 1970 edition describes a "W8JK 5-Band Rotary Beam Antenna." A 1934 QST article by Kraus highlights "Amateur Radio in the Soviet Union."

Kraus received many honors over his long career. He became a fellow of the IEEE in 1954 and a member of the National Academy of Engineering in 1972. During the 1950s, he served on President Dwight D. Eisenhower's Science Advisory Committee and on the committee that established the National Radio Astronomy Observatory. In 1996, Dayton Hamvention honored Kraus as the recipient of its Special Achievement Award for his contributions to antenna design. In 2001, CQ named Kraus to the inaugural class of its Amateur Radio Hall of Fame.

Other honors include the OSU Joseph Sullivant Medal--one of the university's highest awards, the Outstanding Achievement Award of the University of Michigan as well as the Centennial Medal and the IEEE Edison Medal "for a sustained career as an innovator, discoverer and educator in the fields of antennas and radio astronomy."



The "Big Ear" radiotelescope on the campus of Ohio Wesleyan University. It was demolished in 1998 to make way for development.

Construction of the "Big Ear" radiotelescope--which subsequently recorded the so-called "Wow!" signal--was completed in 1961. Much of the construction was done by students. The "Big Ear" undertook extensive mapping of the sky, earning itself a solid reputation in the astronomy community.

In late 1973, an OSURO program began to search for narrowband signals--natural or artificially generated by extraterrestrial intelligence. On August 15, 1977, Jerry Ehman, who had taken on responsibility for reviewing the telescope's computer printout, was astonished to see the strongest narrowband signal ever recorded from the telescope.

Ehman describes that the sequence of numbers and letters (6, E, Q, U, J, 5) that appeared only in one channel of the 50-channel filter "reproduced the antenna pattern for a small-angular diameter radio source emitting a narrowband signal, just what would be expected for a signal from an intelligent civilization."

Ehman wrote "Wow!" in red in the computer printout's margin. Although the telescope was kept at the same declination to see if the signal would return, it never did. As Ehman says, "a definitive explanation has not been found."

The following year, Kraus launched *Cosmic Search*, a magazine devoted to various aspects of the search for extraterrestrial intelligence. It was discontinued after three years and 13 issues.

The Big Ear fell victim to development pressures and was torn down in 1998. Kraus spoke at a November 2000 dedication of a site marker.

Kraus and his wife, Alice, have two sons--Jack and Nelson--and several grandchildren. The Rodman Bennett Brown Funeral Home in Delaware, Ohio, is handling arrangements.

## LATEST SATELLITE ALMOST READY

The latest amateur radio satellite in the OSCAR series was launched on 29 June from Baikonur Cosmodrome in Kazakhstan and has been undergoing final testing.

Amsat-OSCAR 51 or "Echo" as it is more commonly known is a FM satellite carrying 4 VHF receivers, 2 UHF transmitters, a multimode receiver and a 2400MHz transmitter. It can handle voice and FSK data up to 76.8Kbps.

AO-Echo's sun-synchronous orbit is some 850 km above Earth. Among other capabilities, the 10-inch-square microsat equipped with a transmitter capable of up to 7 W output will allow voice communication using handheld FM transceivers. Echo will feature FM voice and various digital modes including PSK31. A 10-meter SSB uplink also will be available.



A telemetry decoding program, TLMEcho, is available for those who would like to view and report data from Echo. It may be downloaded at [web.infoave.net/~mkmk518/echo.htm](http://web.infoave.net/~mkmk518/echo.htm).

AO-51 cost \$110,000 to launch and still needs funds to complete payment. Donations can be sent to AMSAT – see the web site mentioned above.

### Status: AMSAT-OSCAR 51 (Echo or AO-51)

Analog Uplink	145.920 MHz FM
Analog Downlink	435.225 MHz FM
Digital Uplink	145.860 MHz 9600 bps, AX.25
Digital Downlink	435.150 MHz 9600 bps, AX.25

AO-51 (AMSAT-Echo) will be turned on for general use in FM repeat mode on 30 July 2004 at about 0215 UTC. This will be for a trial period of about three weeks during which the command stations will be watching the power budget and adjusting the UHF transmitter B power as needed for good management of the battery. Initially, the transmitter will be running at about 1W. If power allows, it will be slowly increased during the trial period. We will also be adjusting settings on the satellite, so if the signal changes slightly from time to time, do not be alarmed. The TXB transmitter will be on 435.300 MHz, which is also a trial frequency. The original frequency of 435.225 MHz is now in regular use by GO-32, so the alternate is being tested to see if it can be used long term.

To work Echo in this mode you need the following information:

Uplink: 145.920 MHz FM voice with 67 Hz PL.

Downlink: 435.300 MHz FM voice.

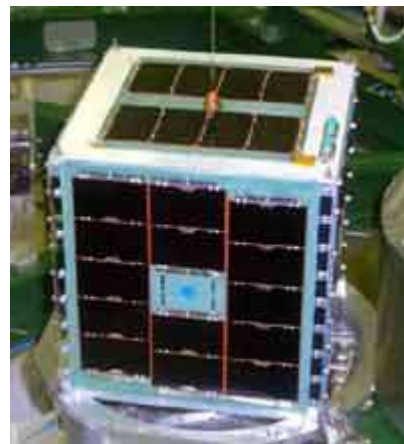
The downlink transmitter will come on when it hears an uplink signal with a 67 Hz PL tone for about 1 second. It stays on for 10 seconds after that signal goes away.

This operation is just like a terrestrial FM repeater with a 1 second kerchunk filter and a 10 second hang time.

The command stations will be watching the AMSAT-BB email reflector for report of how Echo is working. Please post your results there. We are most interested in hearing about how well Echo hears you and how well you hear it.

Note that Echo is still wobbling a great deal and the polarization sense of the downlink will vary. The B UHF TX is nominally RHCP in the northern hemisphere but this will change over the duration of a pass due to wobble and orientation relative to the ground station.

Transmitter A will generally continue to operate on 435.150 but may be at reduced power at times, or may be at about 1W only when the command stations are gathering Whole Orbit Data (WOD) telemetry. We will be analyzing the WOD for information about how much TX B is on and how the power system is behaving. Please note that the digital transponder and the store and forward BBS, are NOT yet open for general use. TX A may also switch to 38k4 from time to time to facilitate downloading large files.



The ECHO satellite ready for launch

We expect Echo will be heavily used in these first few days. Many stations will be trying to make a contact through Echo. It is good amateur practice and common courtesy to let everyone have a chance. Echo will hear you as well as or better than any previous amateur FM repeater satellite. With the downlink transmitter at 1W you will need a small directional antenna to hear it. Especially in these first few days, always listen first. Even though the downlink will only come on when it hears an uplink signal, with hundreds of stations trying it out we expect the transmitter to be on continuously when over populated areas. So again, listen first, and be courteous to let everyone have a chance at making a contact via AO-51.

And a reminder, this is a trial period of the FM voice repeat function. The digital portion of Echo is NOT yet open for use.

Echo Command Team

Jim White, WD0E & Mike Kingery, KE4AZN

Visit the AMSAT AO-Echo Web page for more details:

[www.amsat.org/amsat-new/echo/](http://www.amsat.org/amsat-new/echo/)

## EMPTY SPACES!

Not much room for jokes this month but if you know any really good ones, send them to NERG NEWS at [vk3by@nerg.asn.au](mailto:vk3by@nerg.asn.au) ! Otherwise we may have to debate the speed of darkness in a vacuum....

## FREE ELEVATION DATA FOR OZ

Last month free elevation data covering Australia was made available by NASA. The Shuttle Radar Topography Mission (SRTM) data was gathered by the Space Shuttle Endeavour during an 11-day mission in February of 2000. A special radar was used to scan at a resolution of 3 arcseconds (or about 90 metres). The data is available for downloading as files each representing one degree squares from:

<ftp://edcs9.cr.usgs.gov/pub/data/SRTM>

Data of this resolution is ideal for use with RF prediction mapping software such as the excellent "Radio Mobile" by VE2DBE ( see: <http://www.qsl.net/ve2dbe/english1.html> but more on that next month!). This data is a lot better than the free GTOPO30 and Auslig 9 second data previously available.

## RFID TAGS TO TRACK YOUR EVERY MOVE?

RFID tags are a rapidly emerging technology. Originally designed for warehouse stock control, security, and point of sale use, they could also become a huge invasion on your privacy. Industry groups say measures will be in place to stop their misuse (yeah – like they are able to stop SPAM!!!!).

So how does it work? RFID tags replace the old barcode system used universally by manufacturers and retailers. An RFID tag costing only a few cents consists of a tiny chip and a printed circuit antenna. They may be attached to or be built into products. An electromagnetic field interrogates the tag up to 18 meters away, which in turn sends back information contained in it's internal memory chip (typically using frequencies around 13.56 & 14.4 MHz, but also 134kHz, 433, 869, 903, 915 MHz and 2.4GHz).

The technology is about to make every shopkeeper's dream come true - shoppers will simply push a trolley load of goods through a checkout and have every item debited from the shoppers bank account automatically. They are already being used to track warehouse pallets by Coles in Australia. A few American products on our shelves already have tags builtin.

The downside of the RFID tag is that it can contain a unique serial number, as well as the product code, and in the case of RFID credit cards could even contain personal. The tag can be identified wherever there is a RFID scanner – in other shops, restaurants, airports, transport systems, the list will be endless.. And since the tag can be identified then it can theoretically be tracked across computer networks.

For instance big brother could theoretically know what you purchased for dinner, what videos you hired, and even who took a taxi to your house that night (and what flavor pizza you had afterwards!).

Or perhaps you'll be accosted by eager mobile phone salespeople whenever you pass their shop because they know from the RFID tag embedded in your phone that it's last months model and that you really do need a new one NOW!

Another problem with RFID tags is that you won't always know you are carrying them, and that they can keep working long after leaving the point of sale. Mechanical damage is about the only means to stop them as they are immune to magnetic fields, drowning in washing machines and even survive the clothes dryer! **Short of X-raying everything**, it's virtually impossible to identify products containing built-in RFID tags.

**Radio amateurs won't need too long to think of ways to shield RFID tags from scanners though.**

A more novel means of disabling the tag is to stick them in the **Microwave oven** for a few moment (beware as there is a risk it will catch fire along with the item it's attached to!).

## ARDF EVENTS CALENDAR

- Aug 22<sup>nd</sup> Sunday - ARDF, Bayside Kangaroos 35<sup>th</sup> Anniversary event at Ballan, Mike Hubbert
- Aug 22<sup>nd</sup>-2<sup>nd</sup> Sept Hungarian Training Camp prior to World Championships.
- Aug 27<sup>th</sup>-29<sup>th</sup> International Czech Championship
- Sept 4<sup>th</sup> Saturday - Snow DF if July 31st did not occur (due no snow) TBA
- Sept 7<sup>th</sup>-11<sup>th</sup> World ARDF Championships - Czech Republic Details <http://www.wch2004ardf.com>
- Sept 26<sup>th</sup> Sunday - ARDF/Fox-Oring combined with MetrO /MicrO, Graeme VK3ZEO
- Oct 2<sup>nd</sup> - 3<sup>rd</sup> Australian ARDF Championships Bruce Paterson VK3TJN
- Oct 13<sup>th</sup> Wednesday night Street-O, Dingley Village Night series, start: Pethybridge Close Dingley Village, Melways: 88 F6
- Oct 31<sup>st</sup> Sunday Fox-oring combined with MicrO Championships, Mark Diggins VK3JMD
- Nov 14<sup>th</sup> Sunday - ARDF/Fox-oring combined with MicrO Relays Darebin Parklands, Bryan Ackerly VK3YNG
- Late November End of year social gathering, meal and results presentations, Adam Scammell VK3YDF

ARDF links: <http://www.ardf.org.au>

Enquiries: Victorian ARDF Group, Bruce 9888 7509

## 2004 EVENTS

Updated July:

- Aug 6 QRP Day (CW/FM/SSB)**
- Aug 14-15 Remembrance Day Contest (CW/Phone)**
- Aug 21-22 Lighthouse Activation Weekend.**
- Aug 28-29 ALARA Contest (CW/SSB) [www.alara.org.au](http://www.alara.org.au)**
- Oct 2-3 Rally of Melbourne, Toolangi/Yarra Valley**  
WICEN event coordinator: Mark VK3XMU  
ph: 9849 0501
- Oct 2-3 Oceania DX Contest - SSB**
- Oct 9-10 Oceania DX Contest - CW**
- Oct 8-11 World Wide YL Meet**  
hosted by the Korea Ladies' Amateur Radio Club in Seoul, Korea. Info: Chae Do Sook HL2KDW  
[hl2kdw@hotmail.com](mailto:hl2kdw@hotmail.com)
- Nov 13 VHF/UHF Spring Field Day (CW/Phone)**
- Nov 27-28 Kona 24hr Mountain Bike Race, Redesdale**  
WICEN event coordinator: Gordon VK3FGC  
ph:5339 2427, [Gordon.cornell@bigpond.com](mailto:Gordon.cornell@bigpond.com)  
3 checkpoints & net control.  
[www.fullgaspromotions.com.au/24hour.html](http://www.fullgaspromotions.com.au/24hour.html)
- Dec 26 Ross Hull Memorial VHF Contest**  
(runs until January 10, 2005)
- For more international contests see: [www.arrl.org/contests](http://www.arrl.org/contests)
- Dates should be independently confirmed.**  
*Collected from AR magazine, WIA Vic, VKham website, Vic ARDF Group, & NERG. For more info:*  
<http://www.vkham.com/contest>, & <http://www.wiavic.org.au>

**The NERG Inc.** Reg No 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	
	Peter Cosway	VK3DU	9379 3626
	Mark Beacham	VK3XXX	0417-597399
Social Sec.	Don Haslam	VK3KDT	0409 024597
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 – Intermittent  
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](mailto:vk3byy@nerg.asn.au)



**NERG**

North-East Radio Group VK3CNE

NERG Incorporated 1985  
BOX 270 GREENSBOROUGH VIC 3088

STAMP

**NEXT MEETING:**

**7:30 PM Thursday 12<sup>th</sup> August 2004 – Using the NERG VK3CNE Packet System**

**2004 CALENDAR (NERG ACTIVITIES IN BOLD)**

**Aug 12 NERG MEETING – AGM, birthday party, Briar Hill Primary School 8pm**  
Aug 14-15 Remembrance Day Contest – CW/Phone, HF + VHF/UHF  
Aug 21-22 Lighthouse Activation Weekend.  
Aug 22<sup>nd</sup> Sunday ARDF, Bayside Kangaroos 35th Anniversary event at Ballan, Mike Hubbert  
Aug 28-29 ALARA Contest (CW/SSB) see: [www.alara.org.au](http://www.alara.org.au)  
**Sept 9 NERG MEETING – TBA - Briar Hill Primary School 8pm**  
Sep 26 Sunday ARDF/Fox-Oring combined with Metro /Micro, Graeme VK3ZEO  
**Oct 14 NERG MEETING – TBA - Briar Hill Primary School 8pm**