

# WANSARC NEWS



Wansarc is an affiliated club of the Wireless Institute of Australia

Volume 41 Issue 1—February 2010



Western and Northern Suburbs Amateur Radio Club VK3AWS  
Incorporated in Victoria A7611S



Pray tell what is that new fangled looking rig sitting on the bench amongst the authentic “homebrew” equipment in the shack of Dallas, VK3EB?

It's the Elecraft K2, a full featured HF transceiver with two VFO's, split TX/RX operation, RIT/XIT, full break in CW and narrow IF filtering, just to name a few of the features. The basic K2 only draws around 150mA on receive, with provisioning available for an internal gel-sel battery for portable operations. For those requiring more than QRP, a 100W amplifier module is able to also fit into the box.

But best of all, this is a “homebrew” box!! Dallas VK3EB shares his story with readers—see Page 3 of this edition of WANSARC news.

## Inside this issue:

Webtrack—aircraft tracking website	2
Hooray for the K2—Dallas VK3EB	3
WANSARC Family Day—John VK3FMPB and Mick VK3CH	4
Restoration of a morse practice key—Bob VK3EL	6
A bit of humour—Matthew James and Martin VK3FMJP	7

## Calendar for FEBRUARY 2010

- **Friday February 5 2009**—It's the first meeting for 2010—come along and have a natter. Catch up on the latest club news.
- **Tuesday February 9,16,23** - CLUB VHF NET Come on and join in and catch up with the latest member projects and news. 146.450MHz is the club net frequency on FM and we look forward to hearing from members and visitors.

## FIRST MEETING—2010

**FRIDAY FEBRUARY 5, 2010** — A reminder to club members that the first club meeting of the year will be held at the clubrooms, Seaver Grove, Reservoir, commencing at 1930 hours. It is time to catch up with other club members and share in news and views.

One agenda item to be discussed in the formal component of the meeting is the John Moyle Field Day, scheduled for late March. Time to reaffirm the club's participation in this event and to determine our level of participation, noting that the club has won this field day contest in the 6 hour event for the past three years.

Time also to remind members that the March 2010 meeting will be the Annual General Meeting, at which the club will elect office bearers for the following 12 month duration. Please don't be backward in coming forward if you are available to assist in managing club affairs and represent members in the 2010-2011 club year. Nomination forms for positions will be available at the February 2010 meeting.

## BROWSING THE WEB—WEBTRAK



If you have an interest in aircraft, mapping and web information, you may find the following, provided by **Martin VK3FMJP**, as useful.

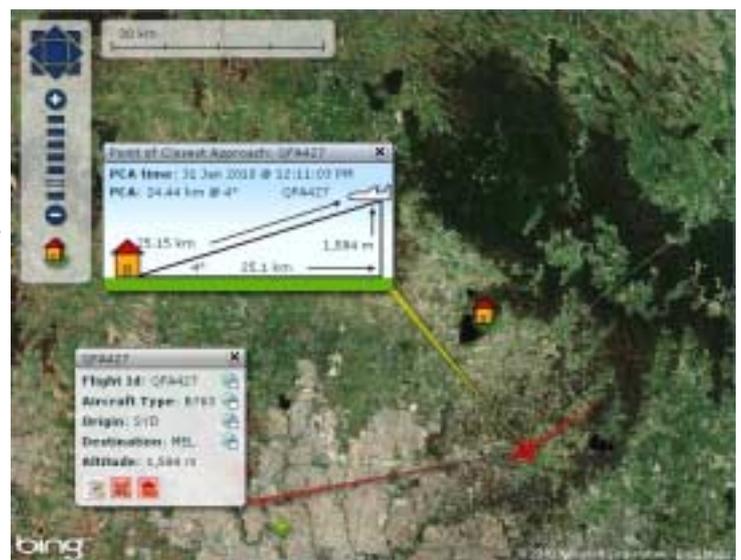
Webtrak provides aircraft tracking information, inbound and outbound, around Melbourne's airports. An example screen shot at left shows a jet aircraft icon, in red and an aircraft information panel able to be accessed by positioning your mouse over the aircraft icon. The user is able to zoom the map in and out, or in any direction, using the control panel at the top left corner of the map. The map at left shows an aircraft landing at Melbourne Airport with the threshold of Runway 34 visible.

Webtrak has been primarily developed to allow the public to investigate and report noise complaints from aircraft in their location and where necessary submit a

noise complaint based on information extracted from this site.

To this end a tool is available which calculates the point of closest approach (PCA) based on your location. The picture at right shows a reference location, depicted by a house icon, and two information boxes. The box at bottom left shows aircraft details, in this case Qantas Flight 427, a Boeing 767 from Sydney for Melbourne and currently at an altitude of 1584 metres. The box above it provides a PCA for this aircraft relative to the reference location. It can be seen that the PCA is 24.4km at 4 degrees.

Incidentally the information displayed at any given time is delayed by around 40 minutes (suggest for security reasons) however despite this the site does provide an interesting insight into aircraft traffic patterns around Melbourne. The site also allows you to input retrospective time and date information for periods of interest.

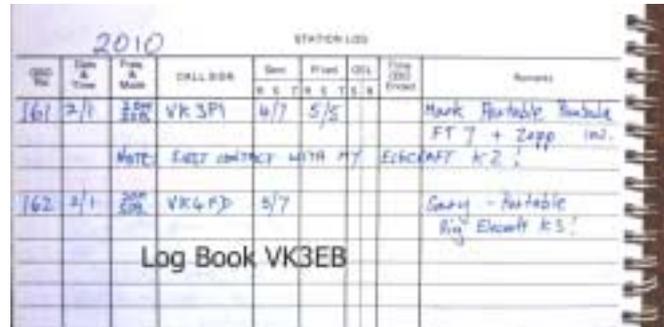


Refer to <http://mel.webtrak-lochard.com/template/index.html>

## HOORAY FOR THE "K2" by Dallas VK3EB

**Dallas, VK3EB**, is delighted to report that after many hours of sorting, bending and soldering electronic parts for his DIY all band HF radio he's happy to announce that **IT WORKS!!** (what a relief, no smoke)

Not only does it work, when conducting his first SSB on-air test he makes contact with **Mark, VK3PI**, portable in Pambula NSW ! This is weird stuff. I wanted to check how the radio sounded on SSB, my favourite band 40m was full of noise so I moved to 20m. My main HF antenna is an 80m dipole so I don't spend a lot of time on 20m but when I do what happens ? I hear DX from a WANSARC member on holidays ?



Overall the project was very enjoyable but still somewhat of a challenge. ( Beware not a beginners project!) The kit is very well designed and the instruction manual is excellent. I recommend this project but only if you consider yourself experienced at soldering. It can be built and tested in stages and this helps if problems develop. One of the great things about this kit is the help you can obtain from other builders. I must thank **Wayne, VK3VCL**, who put me in contact with **Kevin, VK3DAP**, who has built 2 of the kits. His help and tips were extremely valuable. The Elecraft web site also has a forum.

The basic unit is 10 watts only, but I decided to add the 100w RF amplifier and most of the options. There's not much space in the box after you include the RF amp and all add-ons.

One thing about this project, I have become very good at winding toroids. I decided to wind all the toroids first only to discover you can get sore fingers, so I made myself a little toroid holder out of two thin wooden clamps.

I'm still learning my way around the various menus and configuration settings, its a compact little radio and I'm looking forward to using it portable away from all my local QRM.

All I need to do now is a final test of the 100w RF amplifier, but silly me has just worked out I need a 20 amp, 12V DC supply to provide power. Not another project ! – I can see a car battery being added to the shack in the short term.



For more information check [www.elecraft.com](http://www.elecraft.com) - 73 Dallas VK3EB

## WANSARC FAMILY DAY (1) by John VK3FMPB

This is the big day on the WANSARC Calendar. The day we all get together and play radio, socialize, and to talk a lot, eat a lot and just hang around enjoying each other's company.

Our favourite venue, better known as "The Park", is once again the place to be on Sunday the 17th of January, 2010. Some have been here since 6am, namely Mick (CH) and Johnno (FMPB) an hour or so later. Here early to set up 6m, 2m, 70cm and 23cm. Mick even has his ATV set up ready to go.

Mick's equipment included Diamond X7000 triband verticals, ATV TX 23 element 23cm loop yagi, ATV RX 19 element 70cm beam into digital TV ATV DVB-S TX – Homebrew Digital ATV 1255 / 1276 MHz - 20 watts (Using SR-Systems MOD & MUX Boards). Add to this the ATV stuff on the table and all the leads and coax cables to Power this and you have a rather large commitment from Mick to the family day. Thanks Mate.

The council rangers, lovely ladies they are even helped out by bringing us firewood for the BBQ in the morning.

So, who has turned up for the annual WANSARC family day this year? Everybody who is anybody is here. it seems.

Attendees included Greg (CN), Mark (PI) & XYL Gayle, Gordon (YOD) & daughter Megan, Pam (NK) & Graeme (NE), Chris (FY) Norman & Nick (FNIK), Bob (EL), Mick (CH), Michelle VK3 FAME and Janice VK3FIRE and a couple of their mates Gemma, Sarah and Lucy too, Ian (IV), Rod (MRT), David (DTS), Trevor (FTDX), Victor (DKM) & family, Dallas (EB), Frank, (OP), Johnno (FMPB), Alex VK3XLC and John VK3XD (with batteries for Mick).

The world has come to Bundoora and to WANSARC to party today and to play radios. We had a great day I would say, We ate, chatted to each other and to our radios, we chatted to people in the club and out of the club on all manner of bands



How to make tripods stable and save water!!



Mick VK3CH checking ATV

We ate and ate and ate. Our cooks **Mark (VK3PI)** and **Trevor (VK3FTDX)** had a good meal ready for us. We were fed, watered, entertained and rained on all at the same time today. A good day had by all

While the day's focus was mainly on the BBQ/family activities, there was a fair amount of radio stuff done too.

Johnno ran an impromptu raffle to bolster club accounts which raised \$65. The prize, a small DVD player was won by **Greg VK3CN**

Johnno brought his ICOM 706 MKII-G inc. GP3 antenna to run 2 and 70 cm. and his ICOM IC-V-82 portable radio which was well used at the start of the day giving directions to a couple of people in cars who were not lost but somewhat confused as to where the event was being held. After all not every body goes to the park every day to play radios do they? Unlike a couple of club members who shall remain nameless. We know who you are.

**73 John VK3FMPB**

## WANSARC FAMILY DAY (2) by Mick VK3CH

In its fifth year, the annual Family Day BBQ get together was held at Bundoora Park, Melbourne on Sunday 17<sup>th</sup>. With cloudy weather predicted it was a welcome change from the string of hot weather experienced recently.

Outside the park gates at 5.20am the ranger opened up at 5.45am, driving straight to Rotunda 6 and by 8am the table of gear and antennas were setup and club station VK3AWS was on air on 2/70/23cm with two sets of radios with X7000 Triband verticals fed via Triplexers.

The past years problems of antennas being toppled over in strong gusts of winds was solved successfully this year by hanging **buckets of water** on each leg of the surveyors tripod stands, which really dug the legs into the ground.

Graeme VK3NE (left) checks out the ATV picture with John VK3XD.



This year Amateur Digital Television of the day's events in the park was successfully produced by Mick VK3CH.

As portable generators are no longer allowed in the park an alternate source of 240 volts was used, supplied by a 1000 watt inverter fed from the VK3CH van, which was left on idle to cope with an expected high current draw. But disappointment struck when it was found that the 24 volt switch mode supply feeding the DVB-S ATV Transmitter did not like the "simulated" sine wave output of the inverter and refused to switch on, dragging everything else down with it. It looked like that was the end of Digital ATV from the park. On air later to Don VK3HDX in Sydney via trusty IRLP via VK3RMH I was relaying my tales of woe regarding the 24 volt supply's refusal to work.

NERG member **John Weir VK3XD** was listening in and said he had two 12 volt batteries that could be strung together, even offering to deliver them to the park RACV style! So about an hour later John arrived and the ATV transmitter was on air with battery supplied power. On screen text ID was also the WANSARC club call sign of VK3AWS.

Initial reports from stations watching VK3RTV 1 on 446.500MHz said pictures were dropping in and out, so park signals were on the edge, but lowering the 23cm beam a meter gave perfect results. At 23cm even small movements either up, down or sideways to nearby objects can yield all sorts of affects. Once reports of "glass hard" pictures and sound were given it was decided to leave the beam well alone, only about two meters above the ground! Trying to watch signals back the portable TV was not very

reliable, the RX beam gain was blamed but as good reports came in on the ATV liaison frequency of 147.400FM, it was decided to not worry too much about our TV not getting pictures.

Later the next day unpacking the gear it was found the rear socket lead was loose, so that was probably the culprit all along, a job to sort out for next year!

**VK3AWS** may be the first fixed portable station using a digital DVB-S uplink into the newly commissioned DVB-T digital ATV Melbourne repeater VK3RTV at Mount Dandenong.

WANSARC member **Bill VK3KBL** a long time experimenter on ATV, was home and offered to record the proceedings which he did. A couple of other stations also said they were recording parts of the transmissions. **Tony VK3AAZ** a long time ATV station also said he had a perfect picture once the beam was lowered.

By midday approximately 30 persons, hams, wives, girlfriends and kids were chatting and dining on snags, burgers, salads and cakes in sometimes sunny / cloudy / rainy weather. The rain did not bother anyone too much; the rotunda just became more crowded! A good day was had by all with plenty of catching up and exercise by kids of all ages. The radio / ATV setup was another handy trial of lessons learnt and practice for ATV demos planned for the upcoming ARV Centre Victoria RadioFest. Now it's time to go through the notes made and start planning next year's radio setup. Better go and fix that pesky antenna socket on the TV as well



Mark VK3PI gets the BBQ going.

## Restoration of a Morse Practice Set —by Bob VK3EL

The following pictures show work in progress on the restoration of a 1942/43 Morse practice set, originally manufactured for use by PMG but then made available to the Department of Defence.

Practice sets were used to assist in teaching morse code to Armed Services personnel.



Original condition of practice key.



2

Bottom of the mounting base with wiring set in routed grooves and sealed with bees wax—perhaps an early version of a printed circuit board?



3

Starting to expose the original cloth covered wire connections after removing the bees wax.



4

The bottom is looking much better



5

Looking a million dollars.

Thanks for sharing this with members, Bob. It is always interesting to hear of the work being done by members on various projects.

Have you been working on a project and would like to share your experiences with members of the club and our broader WANSARC audience??

If so, a word document with photographs imbedded in the document is the best way to compile your information.

Send your completed article, be it a paragraph or multiple pages to the WANSARC producer at

[vk3pi@optusnet.com.au](mailto:vk3pi@optusnet.com.au)

## DOG FOR SALE from Matthew James

A guy is driving around the back blocks of Bendigo and he sees a sign in front of a broken down shanty-style house: 'Talking Dog For Sale ' He rings the bell and the owner appears and tells him the dog is in the backyard.

The guy goes into the backyard and sees a nice looking Labrador retriever sitting there.

'You talk?' he asks.

'Yep,' the Lab replies.

After the guy recovers from the shock of hearing a dog talk, he says 'So, what's your story?'

The Lab looks up and says, 'Well, I discovered that I could talk when I was pretty young. I wanted to help the government, so I told the CIA. In no time at all they had me jetting from country to country, sitting in rooms with spies and world leaders, because no one figured a dog would be eavesdropping.'

'I was one of their most valuable spies for eight years running. But the jetting around really tired me out, and I knew I wasn't getting any younger so I decided to settle down. I signed up for a job at the airport to do some undercover security, wandering near suspicious characters and listening in. I uncovered some incredible dealings and was awarded a batch of medals.' 'I got married, had a mess of puppies, and now I'm just retired.'



The guy is amazed. He goes back in and asks the owner what he wants for the dog.

'Ten dollars,' the guy says.

'Ten dollars? This dog is amazing! Why on earth are you selling him so cheap?'

**'Because he's a liar. He never did any of that shit.'**

## Know your general knowledge from Martin VK3FMJP

**So you think our literacy and numeracy scores are going down, perhaps we need to compare our answers to questions given to a cross section of 16 year olds in Britain. Here are a selection of interesting (funny) answers.**

Q. Name the four seasons

A. Salt, pepper, mustard and vinegar

Q. What guarantees may a mortgage company insist on if you are buying a house

A. If you are buying a house they will insist that you are well endowed

Q. What happens to your body as you age

A. When you get old, so do your bowels and you get intercontinental

Q. What happens to a boy when he reaches puberty

A. He says goodbye to his boyhood and looks forward to his adultery (So true)

Q. How can you delay milk turning sour

A. Keep it in the cow (Simple, but brilliant)

Q. What is the most common form of birth control

A. Most people prevent contraception by wearing a condominium (That would work)

## WANSARC CLUB PROFILE

### History

The Western and Northern Suburbs Amateur Radio Club (WANSARC) was first formed in 1969 and since then has served the needs and interests of amateur radio operators, short wave listeners and those interested in hobby radio and electronics. The club is not gender specific, having both female and male members. Members come from all walks of life with a mix of experience, young and mature, novice and technical. The most important aspect of the club is the willingness of all members to share their knowledge for the benefit of others. Members mainly reside in the west and north of Melbourne; however membership is encouraged from all interested.

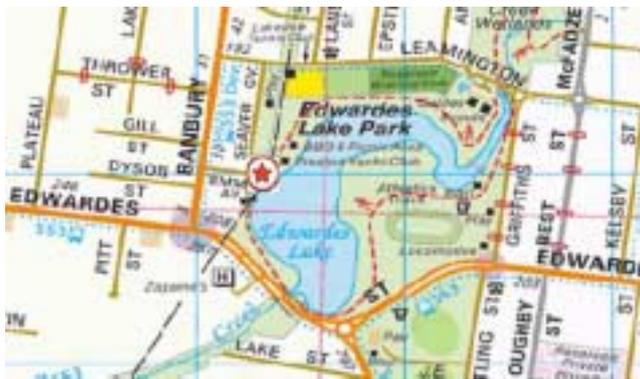
### Meetings

FIRST Friday of each month except January at the Ern Rose Memorial Pavilion, SEAVER GROVE, RESERVOIR. (See map). 7.30pm local time start.

Talk in on 146.450MHz FM—call club station VK3AWS.

### Benefits

Free technology and related presentations, sponsored construction activities, discounted (and sometimes free) equipment, network of like



minded radio and electronics enthusiasts, excellent club facilities and environment plus an informative monthly newsletter for members to post articles, news, classifieds for all radio, test equipment, etc, featuring Amateur Radio news from WANSARC, WIA, ACMA, Melbourne Clubs, VK and Worldwide.

### Club Nets

146.450MHz FM each Tuesday evening commencing 7.30pm local time. Also monitor 28.470MHz on 10 metres USB.

**More Information:** Website: [www.wansarc.org.au](http://www.wansarc.org.au)

Email: [wansarc@wia.org.au](mailto:wansarc@wia.org.au)



**Don't forget the "club"  
meets on air regularly on  
146.450MHz FM.**

**Next meeting Friday February 5, 2010 at the Clubrooms, Seaver Grove, Reservoir, commencing at 1930 hours SHARP.**

**If not delivered within 7 days, please return to WANSARC, PO Box 336, Reservoir, 3073**

**Australia Post stamp  
here**