

VK7 REGIONAL NEWS BROADCAST

FOR SUNDAY 18 JULY 2010

CONGRATULATIONS

We start today's broadcast with a congratulations to Vince VK7VH who is the first VK7 recipient of the VK100WIA Centenary Award.

I know there are many amateurs out there who are all eagerly making contacts with the VK100WIA station which get them 10 points toward the Centenary Award.

Just to quickly recap the rules for the award – you need 100 points and this has to consist of at least two contacts with the VK100WIA station and then can be any combination of contacts with WIA members which gets you 5 points or non-WIA members which gets you one point or contacts with the VK100WIA station which of course gets you 10 points.

The VK100WIA callsign is only active from the 1st May to the 31st October 2010.

Once you have you log totalling 100points send AU\$5 to:

The Awards Manager

WIA Centenary Award

PO Box 2042

BAYSWATER VIC 3153

AUSTRALIA

For more information and a look at the award certificate go to the address on the email and internet editions of this broadcast.

<http://www.wia.org.au/newsevents/centenary/award/>

VK7 EVENTS CALENDAR

A summary of the events across VK7 over the coming months:

CCARC – July 24 – July Meeting starting 1.30pm at the Penguin Lions Club Rooms, 19 Ironcliff road, Penguin.

<http://www.my-x15.net/ccarc>

SMS – July 25 – Sorell Men's Shed Winter Ham Fest – Sorell Men's Shed – Station Lane – Sorell.

<http://www.sorellmensshed.org/>

WICEN Nth /NW – July 31 - Tasmanian Equine Endurance Riders - Beaconsfield Bash – 80 & 40km event - 6.30AM final briefing and start for the comms team and early checkpoints.

<http://groups.yahoo.com/group/wicennorth/>

REAST – August 4 – Homebrew/Construction - Show & Tell Night – starts 8pm in the Queen’s Domain Clubrooms.

<http://reast.asn.au/events.php#showandtell>

NWATVG – August 8 - General Meeting at QTH of VK7AX starting at 2.00PM.

<http://www2.vk7ax.id.au/atvgroup/>

WIA – August 14 & 15 – 2010 Remembrance Day Contest.

<http://www.wia.org.au/members/contests/rdcontest/>

ILLW – August 21 & 22 – International Lighthouse and Lightship Weekend.

<http://www.illw.net/>

NON-COMMERCIAL FOR SALES AND WANTED

For Sale

Brian VK7BW has returned from sunning himself in tropical Queensland, and is currently oiling up the lathe ready for the next batch of joining sleeves and mast fittings.

If you would like a hand with an aluminium mast project call Brian on 0429 120 176 or email brianwelch@netspace.net.au

For details of mast configuration, size and cost take a look at the email and internet editions of this broadcast.

Portable Aluminium Masts by VK7BW:

6m mast (50mm x 2mm) in 1 piece \$70

6m mast (50mm x 2mm) in 2 pieces \$80

6m mast (50mm x 2mm) in 3 pieces \$90

9m mast (60/50mm x 2mm) in 3 pieces \$125

12m mast (60/50mm x 2mm) in 2 pieces \$160

12m mast (60/50mm x 2mm) in 4 pieces \$200

12m permanent mast (60/50mm x 3mm) in 2 pieces \$220

Ullrich Delivery Charge (to me) \$22

Machined tops and extra joining sleeves \$10 each

(73, Brian, VK7BW)

For Sale

Neil VK7NT has a Uniden UBCD 996T scanner receiver in as new condition, with all accessories. Neil is asking \$470 for it, and will program some frequencies if the new owner would like. Neil can be contacted on VK7RAA, or via email: neilturner329@msn.com

73, Neil, VK7NT.

For Give Away to a Good Home

John VK7ZJJ is currently having a workshop cleanup and has some gear to give away which includes: One free standing Panasonic photo copier (does A3 copies), several good going computer monitors (CRT type), some old and very old computers/parts etc, old printers, monitor/tv circuit boards etc.

John also has a selection of 1970's stereo audio equipment including Marantz gear for a small donation per item.

John can be contacted on ph: 6247 8600 or Mobile: 0418 127 841

(John VK7ZJJ)

For Sale

More goodies from Al, VK7AN:

One only MFJ-9410 10 Meter SSB & CW portable transceiver, 20 watts output, built-in speech processor, Mic, 13.8 volt-3 amp required, in excellent condition like new 2009 model.

A must for 10 meter DX-chasers. VFO type, analogue s-meter & VFO.

If interested then phone 0417354410.

(73, Allen, VK7AN)

EVENT NEWS

International Lighthouse and Lightship Weekend.

This year the ILLW happens on the weekend after the RD Contest weekend.

According to the 2010 entrant list there are currently five lighthouses entered for VK7 and these are:

VK7CL at the Point Home Lookout,

VK7KW at the Mersey Bluff lighthouse,

VK7FWAY at the Table Cape Lighthouse,

VK7MX, VK7FYMX & VK7FLAK at the Low Head Lighthouse and

VK7ZM at the Rocky Cape Lighthouse.

The basic objective of the event is to promote public awareness of lighthouses and lightships and their need for preservation and restoration, to promote amateur radio and to foster International goodwill.

So come and join in the fun of the weekend, establish a station at a lighthouse, lightship or maritime beacon. The more the merrier. If you decide to join in the fun just fill in the official online entry form with your details.

For more information take at the link on the email or internet editions of this broadcast.

<http://www.illw.net/>

NORTHERN NEWS

Northern Tasmanian Amateur Radio Club

www.ntarc.net

Tony VK7YBG reports that the hardware for a 70 centimetre VK7REC repeater is progressing well, with a little bit of fine tuning still needed for good performance and efficiency. Tony has put in a lot of time to this project, and the energy that Tony shows never fails to impress all NTARC members.

On Saturday the 31st of July, Beaconsfield will be the scene of the next horse endurance ride, and David VK7DC and Tony VK7YBG would love to hear from any potential volunteers who would be able to help out with radio communications for the event. Looking a bit further out, between 9th and 12th September, there will be another endurance ride at Pyengana. Contact David or Tony if you're available to assist with either event.

Ken VK7DY has asked if any NTARC members would like to contribute anything to the up coming Science & Technology winter hamfest at the Sorell Men's Shed on the 25th of July. If you've something that might be

of interest to your fellow hams, even if it isn't radio related, contact Ken directly at the shed.

NTARC's June meeting just gone saw a handful of enthusiastic amateurs gathering at Tas Skills Institute Alanvale campus to see Phil VK7JJ demonstrate Apple's latest gizmo, the iPad. Many marvelled at how much information the iPad could hold and organise, while others drooled at the prospect of being able to access live information via a wireless internet connection, in a completely portable and useable device. Joe VK7JG also talked about a few antennae that he's been using of late, and some photos from his latest holiday, including some absolutely immense HF antenna broadcasting arrays that he spotted while abroad. All in all, a quite entertaining night.

Lastly, its been a while since we put in a word about NTARC's website www.ntarc.net where you'll find information about the club, articles or presentations of interest, repeaters in the area, local skeds, membership application information, club contacts and even a great slideshow of members radio activities. We can't forget to thank Phil VK7JJ for the work he puts into maintaining this website... thanks Phil!

Thanks from

(Jason VK7ZJA, NTARC Secretary)

NORTH WEST NEWS

Cradle Coast Amateur Radio Club (CCARC)

CCARC News

<http://www.my-x15.net/ccarc>

Members are advised that the next meeting of the Cradle Coast Amateur Radio Club will be held next week on Saturday July 24th, which is one week earlier than normal. The start time will still be the same as usual, being 1.30pm at the Penguin lions club rooms, 19 Ironcliff road, Penguin.

Tasmanian Equine Endurance Riders

I have a reminder for CCARC members that we have been asked to provide comms support for the Tasmanian Equine Endurance Riders Association, Beaconsfield Bash, on Saturday July 31st.

Being an 80/40km event, the event start time is 7AM and it will be a 6.30AM final briefing and start for the comms team and early checkpoints.

International Lighthouse and Lightship Weekend

Also coming up soon is the International Lighthouse weekend on August 21st & 22nd. In the North-West we have Keith VK7KW activating Mersey Bluff Lighthouse, and Eric VK7FEJE and Wayne VK7FWAY activating Table Cape lighthouse.

Just after that, early in September we have the use of the VK100WIA callsign for three days and will be operating from the Devonport Maritime Museum. More details about this will be provided closer to the time

Amateur Radio Assessments

Prospective amateurs and amateurs wishing to upgrade can contact the learning facilitator Keith Winkler VK7KW who can help you along the path to a new licence. Contact details are available on the Cradle Coast Amateur Radio Club website, which is easily found by a Google search for CCARC Tasmania

Regards from

(David, VK7DC, Secretary, CCARC)

North West Tasmania Amateur Television Group

<http://www2.vk7ax.id.au/atvgroup/>

Next Club General Meeting

The next General Meeting of the North West Tasmania Amateur TV Group is scheduled for Saturday the 8th August.

Anticipated venue at this time is the QTH of VK7AX and starting time will be around 2.00PM. As usual all persons are welcome and invited to attend.

Home coming.

A BIG welcome home to Steve VK7ZSJ, who has returned following substantial treatment in a Launceston Hospital. Steve will still travel to Launceston on a regular basis, for continuing treatment. However he said it was great to be home. The Club members and your amateur friends, wish you a speedy recovery Steve.

Amateur Radio Licence Assessments and Training

Persons in the N/West Area of VK7 interested in Training and Assessments for all classes of Amateur Radio are advised that the Club can provide all these requirements and in addition provision of Facilitators via the Radio and Electronics School if candidates so desire.

Potential candidates and interested persons in the North West and Central Coast Areas should note that it is NOT necessary to have to travel relatively long distances (such as Launceston) to attend assessments or training, as all these facilities can and are handled at a central location within the North West.

For more information regarding these facilities, please contact the Club's Learning Organizer Tony VK7AX, or the Club. Contact details can be found on the Club Web Site or the WIA site under VK7 Clubs.

73's until next time

(Tony VK7AX, News Officer – NWTATVG)

SOUTHERN NEWS

Sorell Men's Shed Winter Ham Fest

The Sorell Men's Shed will be holding a winter Ham Fest Science and Technology day on Sunday the 25th of July.

There will be:

- Science and Technology displays,
- Wind turbines and charging systems,
- Home Brew competition,
- Antenna Construction workshops,
- VK7SMS Station will be on air,
- Show and Tell Table,
- Pre loved items for sale- Swap or Trade,
- Trade Table.
- Fresh Sausage making demonstration with Cabana Sausages, and Bratwurst. Why not try your hand at linking sausages. There will be a smoking sausages at home demonstration with tasting after the demonstration.

Gold coin donation with all proceeds going to Sorell Men's Shed.

Enquiries for the great day call or email ken@sorellmensshed.org

<http://www.sorellmensshed.org/>

(Ken, VK7DY)

Radio and Electronics Association of Southern Tasmania

<http://reast.asn.au/>

Trial Broadcasts

Gavin VK7HGO, lets us know that the Monday night broadcasts from Tony VK7AX will be run on repeaters 2 & 5 as a trial and feedback is welcome.

(Gavin, VK7HGO, President)

August Presentation Night - Show and Tell

The format of the night is a show and tell of homebrewed or home constructed/ assembled equipment.

Each person who comes along with something they have made, will get 15 minutes to describe to the group the item and take question from the group.

You can bring along anything so long as you made it or assembled it and it relates loosely to amateur radio.

If you need further information contact Justin VK7TW.

See you on the Show and Tell night which starts at 8pm on August 4th.

I hope to see some of those Optical Transceivers fitted in boxes with lenses....HIHI.

<http://reast.asn.au/events.php#showandtell>

(73, Justin, VK7TW)

RD Contest – Club Station

VK7OTC will be operating as a club station over the 24 hours of the RD. 

We are looking to run a multi-operator station on multi-frequencies and the activation of VK100WIA was a great test of this capability.

If you are interested in being involved then let Justin VK7TW know by emailing him at: Vice.President@reast.asn.au

Also it was great to see that Graham VK7FGAA was involved in last Tuesday's National VK AMSAT Net.

<http://reast.asn.au/events.php#RDContest>

(73, Justin, VK7TW)

Licence Examinations

If you are interested in sitting an amateur radio assessment and this can be for any of the assessments then contact Reg VK7KK on 0417 391 607, or email on regemm@ozemail.com.au.

(73, Reg VK7KK, REAST Education Officer and Assessor)

ATV Experimenters Night

We had a great roll-up again last Wednesday night and it was great to see Dale VK7DG along.

We started the night with a description of the GippsTech conference that occurred last weekend then into a show and tell of the radio items that Justin VK7TW picked up at GippsTech.

This included a 1700W 13.8V PSU, a 1296MHz PA and assorted items. We then went into our video presentation by Dave Brown ZL3FJ and his comprehensive talk on Time and Frequency given at a recent NZART conference.

We get back underway with our ATV nights next Wednesday night with some VERY interesting show and tell and for the video presentation we will have the talk given by Dick Smith on the Sunday afternoon on the WIA Centenary AGM weekend at his property Bowylie Flying Club about his adventure landing on a container ship in a helicopter when flying around the world.

So, for those interested we get underway on Wednesday the 21st around 7:30pm and we broadcast on 444.25MHz analog ATV which is just below SBS on the UHF TV band.

Hope to see you along.

<http://reast.asn.au/events.php#ATVnights>

(73, Justin, VK7TW)

TECHNOLOGY NEWS

Wake-up receiver uses 51 μ W

The following article is sourced to Radio Comms E-Zine.

Imec and the Holst Centre have developed an ultra-low-power 2.4 GHz/915 MHz receiver with good sensitivity. The receiver runs on a record low power consumption of 51 μ W when on continuously. It occupies 0.36 mm² in 90 nm CMOS, and for 10 Kbps on-off keying

reception it achieves -69 dBm and -80 dBm sensitivity at 2.4 GHz and 915 MHz.

The receiver can be used in one of two ways: as a wake-up receiver, or as an ultra-low-power component in a very asymmetric radio link.

When used as a wake-up receiver, it monitors the communication channel and wakes up the main receiver when it is needed. Today's battery-operated wireless communication systems - such as Wi-Fi or Bluetooth - consume a lot of power, even at times when there is no data transmitted or received.

A first step to reduce the power budget of these radios is through duty cycling - activating the radio at regular intervals and deactivating it in between.

But this is a minor role. The radio will still be active when there is no data to receive or transmit. Adding a wake-up receiver such as this, allows keeping the main receiver inactive when it is not needed.

A second use is as an ultra-low-power receiver in an asymmetric radio link, where one side is a highly sensitive transceiver and the other side an ultra-low-power node. An example of use is in smart buildings, where construction elements could be tagged with cheap, low-power wireless sensors driven by energy harvesters.

Other uses are in long-range radio-frequency identification (RFID), wireless sensor nodes for logistics, smart buildings, motor vehicles, health care etc. In this scenario, the ultra-low-power receiver can be further duty cycled, bringing its power budget down to a level that can be handled with energy harvesters.

For truly autonomous sensor nodes, using energy scavenging, there is only around 50 μ W power available for a receiver. Receivers with such low-power budgets, normally make use of an envelope detector. However, such a detector will attenuate low-level input signal and add excessive noise, making the wake-up receiver less sensitive.

Imec and Holst's work has focused on achieving an improved sensitivity using an envelope detector. A first technique is to amplify the signal before the detector, improving the signal-to-noise ratio.

The new receiver chip was implemented in a 90 nm digital CMOS technology and occupies an area of 0.36 mm². Measurements on Si show a sensitivity of -75 dBm (SNR>12 dB) for the 915 MHz receiver at 100 kbps.

When scaling the data rate to 10 Kbps and filtering the out-of-band noise, the sensitivity is improved by 5 dB. For the 2.4 GHz receiver, the sensitivity is 64 dBm and -69 dBm for 100 Kbps and 10 Kbps data rate.

http://www.radiocomms.com.au/articles/42069?utm_medium=email&utm_source=Emailmarketingsoftware&utm_content=383943965&utm_campaign=rc_1007&utm_term=Wake-upreceiveruses51W

(Sourced from the Radio Comms E-Zine)

TECHNOLOGY NEWS

Long odds of finding ET, say researchers

The following article is written by Anna Salleh who is a science writer for the ABC.

The odds of successfully eavesdropping on the daily radio traffic of extraterrestrial life forms have been calculated by a pair of UK scientists to be astronomically small.

The calculation is presented in a paper accepted for publication in the International Journal of Astrobiology.

Duncan Forgan, from the University of Edinburgh and Professor Bob Nichol from the Institute of Cosmology and Gravitation, used a computer modelling technique, called Monte Carlo Realisation, to simulate the growth and evolution of intelligent life in our galaxy.

They combined this with previous research showing the next-generation Square Kilometre Array (SKA) telescope will be able to pick up radio traffic from ET up to distances of 300 light years from Earth.

They calculated that the probability of picking up such transmissions as being extremely low - 1 in 10 million, to be precise.

Forgan and Nichol assume that ET will only "leak" radio signals for about 100 years of its civilisation.

They say humans have been leaking signals from TV and military radar for that length of time, but are now becoming "radio quiet" as signals move to lower power.

Doubt about conclusions

Australian radio astronomer Dr Ray Norris of the Australia Telescope National Facility in Sydney is not so sure with Forgan and Nichol's conclusions.

While TV signals have been becoming quieter, military radar have been increasing in power, says the previous chair of the SETI Post-Detection Committee, which plans humankind's response to first contact.

"Missile defence warning systems actually need higher power," he says.

Also, Norris does not think it's legitimate to assume that ET will be radio loud for just 100 years just because humans have.

He thinks we have no idea what kind of technology ET will be using and what signals they might be making and for how long.

But SETI researcher Dr Ian Morrison of the Australian Centre for Astrobiology in Sydney welcomes the new research.

"It's a good attempt to put some numbers showing the difficulties of using the eavesdropping approach to SETI," says Morrison.

He says the authors' assumptions about how long ET will be radio loud for may not be defensible, but ultimately this is a minor issue, given the low levels of probability of making contact.

Beacons

Morrison emphasises Forgan and Nichol's calculations relate to eavesdropping on relatively low-powered daily radio traffic.

The probability of picking up such undirected signals is so low because there are so few stars close enough for us to pick these signals up, he says.

Morrison says SETI would have a much better chance of detecting ET if it scanned all the stars in the galaxy for powerful signals - or "beacons" - sent out to deliberately contact other life forms.

"We're talking about many orders of magnitude increase in the chances of finding something," he says.

He says the highest chance of a transmission would come from the centre of the galaxy, where most stars are, and a deliberately created beacon could be powerful enough to reach Earth from the far side of the galaxy.

"I think this paper helps explain why concentrating on beacons is preferable to concentrating on the eavesdropping approach," says Morrison.

<http://www.abc.net.au/science/articles/2010/07/13/2952471.htm>

(Sourced from the ABC Science Website)

WEB & EMAIL EDITION EXTRA BITS! !

PCB Motor Design

<http://www.pcbmotor.com/default.aspx?CMSID=125>

2.4GHz Reference Design for RC Application

http://www.elektor.com/news/2-4-ghz-reference-design-targets-remote.1414399.lynkx?utm_source=UK&utm_medium=email&utm_campaign=news

Zero Emission Silent Aircraft

http://www.elektor.com/news/zesar-zero-emission-silent-aircraft.1424747.lynkx?utm_source=UK&utm_medium=email&utm_campaign=news

Solar boat team sail 138 miles, win DONG Challenge

http://www.elektor.com/news/solar-boat-team-sail-138-miles-win-dong-challenge.1427431.lynkx?utm_source=UK&utm_medium=email&utm_campaign=news

Interesting Experimentation

www.hvllabs.com

Deaf Karaoke - Brilliant

<http://www.youtube.com/watch?v=F0hAUN4bYVk>

It's All About Duct Tape!!!!

<http://www.smh.com.au/digital-life/iphone/apple-knew-of-antenna-flaws-source-20100716-10d2z.html>

Sort of Makes You Appreciate What We Have

http://news.cnet.com/8301-13578_3-20010651-38.html?part=rss&subj=news&tag=2547-1_3-0-20

Aussie lasers stop satellite collisions, death

<http://www.zdnet.com.au/aussie-lasers-stop-satellite-collisions-death-339304574.htm>

Finger Print Protected Storage – for a price!!!

<http://www.engadget.com/2010/07/15/aegis-bio-grows-to-640gb-of-fingerprint-protected-storage/>

How do you get a job like this!!

<http://www.bbc.co.uk/news/uk-10648250>

Do you have some interesting internet sites you have some across in the last week – send them in to justingc@ozemail.com.au

VK7 Regional News Group Email Addresses

Post message: vk7regionalnews@yahoogroups.com

Subscribe: vk7regionalnews-subscribe@yahoogroups.com

Unsubscribe: vk7regionalnews-unsubscribe@yahoogroups.com

List owner: vk7regionalnews-owner@yahoogroups.com

VK7 Virtual BPL Tours

<http://www.youtube.com/watch?v=fdcY0Eetvsw> - Mt Nelson

<http://www.youtube.com/watch?v=1gsxpya3CnQ> - North Hobart

<http://www.youtube.com/watch?v=G7DfdxjRkpU> - RU ready for BPL?

If you are interested in becoming an amateur radio operator or upgrading your licence then we suggest you contact your local club for details and/or take a look at what the Radio and Electronics School has to offer. They have a range of courses that can be delivered through a variety of methods.

They can be found at: www.radioelectronicschool.com

Finally today, a reminder to those people rostered for next week's broadcasts:

Newsreader: VK7RS

80m: VK7ZK

40m: VK7TW

20m: VK7AR

10m: VK7ZGK

UHF CB: VK7HGO

HF CB: VK7TED

Thanks to all people and organisations who assisted with this broadcast.

THAT CONCLUDES OUR VK7 REGIONAL NEWS BROADCAST FOR THIS WEEK.

YOU HAVE BEEN LISTENING TO OR JUST MISSED VK7WI. NEXT WEEK THE NATIONAL WIA NEWS CAN BE HEARD AT 0900 FOLLOWED BY THE VK7 REGIONAL NEWS AT 0930 HOURS.

DETAILS TO SEND NEWS FOR THIS BROADCAST CAN BE FOUND AT REAST.ASN.AU AND THE DEADLINE FOR ITEMS IS 21:00 ON FRIDAY PRIOR TO THE SUNDAY OF THE BROADCAST.