

## **VK7 REGIONAL NEWS BROADCAST**

**FOR SUNDAY 1 AUGUST 2010**

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### **NATIONAL SCIENCE WEEK**

*14-22 August 2010*

There are many events going on all over Tasmania and here is a sample of a just a few....

Well known science presenter Dr Karl Kruszelnicki will again be entertaining the masses and is that gravitational or inertial mass..HIHI, mathematical comedian Simon Pampena and explorer Tim Jarvis and the hilarious team from the Great Big Science Gig.

The inaugural Tasmanian Science Festival will engage and inform the wider community about scientific research in Tasmania, focussing on the theme areas of Environment, Marine Science and Frontier Technologies.

With a range of talks, workshops, science shows, exhibitions, tours, films, fairs and open days on offer, there is something for everyone and here is a hint of what is in store:

Guest Speaker Jan Herrmann who is a Nanoscientist is fascinated by the world of atoms and molecules. He leads the Nanometrology team at the National Measurement Institute (NMI), the body responsible for biological, chemical, legal and physical measurement in Australia. Nanometrology is the science of measurement at the nanoscale where objects are as small as a billionth of a metre and often exhibit unusual and surprising properties.

Guest Speaker: Tim Jarvis who is an Arctic Explorer and combines a love of adventure with a passion for environmental issues. Tim has a passion demonstrated through his work as an environmental scientist, public speaker and explorer of many of the planet's remotest places.

Guest Speaker - Simon Pampena presents Planet of the Primes. The fantastic adventures of a space hero who uses comedy to explore the Universe of Maths!

Tours of the Central Science Lab, Grote Reber Museum, Mt Pleasant Radio Observatory and Tasmanian Aquaculture & Fisheries Institute for high school students.

For more information about what is happening in your “neck of the woods” take a look at the links on the email and internet editions of this broadcast.

<http://fcms.its.utas.edu.au/scieng/scieng/newsdetail.asp?lNewsEventId=3231>

For a full listing of events go to [www.scienceweek.gov.au](http://www.scienceweek.gov.au)

(Sourced from the science week website and the UTAS website)

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## **VK7 EVENTS CALENDAR**

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

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 7 - General Meeting at QTH of VK7AX starting at 2.00PM. NOTE: Not the 8<sup>th</sup> as reported last week.

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

NTARC – August 11 – Dinner meeting at the Royal Oak on Brisbane Street, Launceston for a 7pm start.

[www.ntarc.net](http://www.ntarc.net)

REAST – August 11, 18 & 25 - ATV Experimenter’s Night - starts around 7:30pm in the Queen’s Domain Clubrooms.

<http://reast.asn.au/atv/index.php>

WIA – August 14 & 15 – 2010 Remembrance Day Contest – Note: No WIA or VK7 Regional News Broadcasts.

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

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

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

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## **2011 CALLBOOK**

### ***VK7 Repeater, Beacon and Packet Radio Listing***

Rex VK7MO is seeking additions or corrections to the Callbook in relation Repeaters, Beacons and Packet radio lists for VK7.

If you are responsible for one of these items please check the entry in the 2010 call book and email any corrections, deletions or additions to Rex at his email address in the email and internet editions of this broadcast.

[rmoncur@bigpond.net.au](mailto:rmoncur@bigpond.net.au)

(73 Rex VK7MO)

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**NON-COMMERCIAL FOR SALES AND WANTED**

***Wanted***

To purchase or borrow - a copy of Fred Swainston's Radio Theory for Amateur Operators.

Alex is keen to upgrade and as he travels would like to have the book to carry with him.

Alex can be contacted on mobile 0428216856 or by email to:  
alex.conchem@iinet.net.au

Regards

(Ray, VK7VKV)

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***For Sale***

Al VK7AN lets us know about a special sale for Bill Carter VK7AK in Deloraine and the following items are for sale:

1-only Western England UK Tri-Bander Yagi in good condition,

1-only Shure 444 Microphone,

1-only Electret microphone,

1-only Datong speech processor,

1-only Kenpro RF -speech processor,

1-only Clipsal morse key,

1-only Morse Sounder,

1-only C8MX Rola speaker in Blackwood cabinet, and

2-only Hewlett Packard Communication speakers.

Offers to Bill VK7AK @ 03 6362 2479

(73, Allen, VK7AN)

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***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.

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***For Sale***

Brian VK7BW has returned from sunning himself in tropical Queensland, and is 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](mailto: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)

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**NORTHERN NEWS**

***Northern Tasmanian Amateur Radio Club***

[www.ntarc.net](http://www.ntarc.net)

Plans for the dinner meeting on Wednesday the 11th are gathering pace.

The Royal Oak on Brisbane Street will have an a la carte menu on offer, so there will be something to please everyone, and we've got tables booked for a 7pm start.

When you arrive, just ask for the tables booked under the name "NTARC".

We hope to see you all there.

Thanks from

(Jason VK7ZJA, NTARC Secretary)

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## **NORTH WEST NEWS**

### ***Cradle Coast Amateur Radio Club (CCARC)***

#### ***CCARC News***

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

#### ***International Lighthouse and Lightship Weekend***

This month sees 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)

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### ***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 7th. August. 2010. (NOT the 8th. as reported last week)

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.

## ***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)

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## **SOUTHERN NEWS**

### ***Repeater Update***

Hayden VK7HAY lets us know that the 70cm repeater VK7RCH has moved to Grey Mountain in the Huon Valley covering the Huon and Channel areas

It is also permanently linked to VK7RAA at the moment, but this still requires a bit of fine tuning as we are getting interference from nearby services, which wipe out the signal from Mt.Barrow, namely a pager!

We intend to go back in the warmer months to install some filtering, yagi and readjust some levels.

A big thank you to Tasmanet for the space for the repeater.

Frequencies are Tx: 438.575 and Rx: 433.575.

Regards from

(Hayden, VK7HAY)

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## ***Radio and Electronics Association of Southern Tasmania***

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

### ***Centenary Awards Flowing into VK7***

We heard a few weeks ago that Vince VK7VH was the first VK7 to receive the WIA Centenary Award. Well, they continue to come in with Warren VK7FEET receiving his last week. Congratulation Warren and if you come along to the show and tell night on Wednesday, you will be able to see one “up close and personal”.

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### ***August Presentation Night - Show and Tell***

The format of this Wednesday 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 about 10-15 minutes to describe to the group the item and take questions.

You can bring along anything so long as you made it or assembled it and it relates loosely to amateur radio and this can mean that it was made or assembled by a ham.

We have had some great responses already from people who will be bringing along homebrew gear.

If you need further information contact Justin VK7TW.

See you this Wednesday night at 8pm and that's August 4<sup>th</sup>.

Justin VK7TW says – “I hope to see some of those Optical Transceivers fitted in boxes with lenses....HIHI.”

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

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### ***October Expressions of Interest***

#### ***Grote Reber Museum and 3D Virtual Reality Cinema***

For the October REAST presentation we are looking at going on a visit to the Grote Reber Museum at the Mt Pleasant Radio Observatory at Cambridge.

The museum has many wonderful artefacts and information about Grote Reber and his experiments mapping the Milky Way using HF from his square kilometre array at Bothwell.

As we wanting to visit the museum out of normal business hours there will be a charge to cover the Universities costs and this will be \$150.

Therefore, we are looking to find out how many people would be willing to pay between \$5 and \$10 to visit the museum and 3D virtual reality cinema and the charge would be dependent on how many come along.

Given it will be at night visit I am sure we can organise vehicle pick-ups for those amateurs who do not like or cannot drive at night.

Please let me know if you are interested in attending the visit over the next few months and if we get enough interest then I'll let the University know.


I can be contacted on email: [VK7TW@wia.org.au](mailto:VK7TW@wia.org.au) or phone: 0439 016 622.

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

(73, Justin, VK7TW)

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### ***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](mailto:Vice.President@reast.asn.au)

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

(73, Justin, VK7TW)

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### ***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](mailto:regemm@ozemail.com.au).

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

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### ***ATV Experimenters Night***

Another great roll-up last Wednesday night with standing room only in the ATV studio and a big thank you to Tom VK7TL who was our vision and audio switcher for the night.

It was also great to see Geoff VK7HAL along with his many stories from his mining past. I am hoping to get Geoff in front of the camera to tell some of these stories as they were hilarious.

We started with a demonstration of our latest addition to the studio which is a professional ELMO presentation projector. It was christened

“Giggles” by donator Ben VK7BEN as its comes from the fact it resembles a “Tickle me ELMO” puppet...HIHI!! This projector was destined for e-waste and rescued by Ben. Justin VK7TW located the problem as a cooked switch-mode power supply. This was replaced with an external linear supply and the unit came back to life. This now provides a great way of showing high resolution close-up, well lit pictures of what is being shown by the presenter. This a wonderful addition to the studio.

Justin VK7TW then showed the progress on the 70cm exciter that is being built for the Digital ATV transmitter using “Giggles” and the close up picture quality was the best we have ever seen.

We then moved to our main video presentation which was a NASA video on the International Space Station.

We go into recess for a fortnight as it is the monthly presentation night this Wednesday night.

We get back underway on Wednesday the 11<sup>th</sup> of August 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)

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## **SATELLITE NEWS**

### ***Interesting Insight into Satellite Operations***

The following provides an interesting insight into the operation of the AO-51 “Echo” satellite from comes from the AMSAT Mailing List.

Alan ZL2BX made the following observation:

I notice that when AO-51 comes over ZL/VK after coming out of eclipse (about 5 minutes since eclipse) that after some use the transponder drops out and will not retrigger for 10 to 15 seconds. This behaviour continues right through to LOS or Loss Of Signal. I presume this is caused by the batteries still being only lightly re-charged and with use they drop below some cut-off level. My question is to whether this is of concern and should usage in this part of the world be restricted for longer after eclipse.

Drew KO4MA who is one of the controllers of AO-51 made the following response:

Your presumption is correct. The power management software watches both eclipse state from the panel voltages, and battery voltages. Things

are currently arranged so that eclipse or battery voltage below a VERY conservative set point reduces downlink power to zero. A similar thing happens when a command station turns 435.150 on along with the regular downlink. As the battery sags, or the spacecraft turns and panel outputs fluctuate sometimes both transmitters will shut off for a few seconds.

Of course when this happens the battery quickly rebounds and they pop back on.

Thanks for asking, but it is perfectly fine to continue use when this happens. Especially with the case of ZL, there is plenty of open ocean with no use for things to finish charging up.

<http://au.groups.yahoo.com/group/amsatvk/>

(73, Drew KO4MA and Mal Pizzey VK2MAL via the AMSAT-VK Mailing List)

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## **TECHNOLOGY NEWS**

### ***Energy from Window Panes***

Earlier this year, New Energy Inc. researchers achieved a major ‘transparency’ breakthrough in the development of their SolarWindow™ technology, capable of generating electricity on see-thru glass.

For the first time ever, scientists successfully developed and integrated transparent, environmentally-friendly compounds onto glass in order to collect the electricity generated on SolarWindow™. To-date, the collection of electricity was possible only through the use of a metal contact, which blocked visibility and limited transparency.

Until this breakthrough, one of the biggest obstacles faced by researchers developing New Energy’s SolarWindow™ technology has been the presence of metal, an opaque material which blocks all visibility and prevents light from passing through glass.

The new SolarWindow™ coatings make use of the world’s smallest functional solar cells, which measure less than ¼ the size of a grain of rice, and have been shown to successfully produce electricity in a published peer-reviewed study in the Journal of Renewable and Sustainable Energy of the American Institute of Physics.

They are sprayed on to see-thru glass using a novel, patent-pending process.

The coatings do not require expensive high-temperature or high-vacuum production methods, but rather, can be sprayed on to glass at room temperature. They generate electricity from both natural and artificial light sources, reportedly outperforming today’s commercial solar and

thin-film technologies by as much as 10-fold, while measuring less than 1/10th the thickness of 'thin' films (only 1/1000th the thickness of human hair).

For the full story take a look at the links on the email and internet editions of this broadcast.

<http://www.newenergytechnologiesinc.com/>

[http://www.elektor.com/news/solar-energy-from-window-panes.1450076.lynkx?utm\\_source=UK&utm\\_medium=email&utm\\_campaign=news](http://www.elektor.com/news/solar-energy-from-window-panes.1450076.lynkx?utm_source=UK&utm_medium=email&utm_campaign=news)

(Sourced from Elektor E-Zine)

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## **WEB & EMAIL EDITION EXTRA BITS! !**

Young Tassie Scientists

<http://www.youngtassiescientists.com/2010/>

Comments Requested on Aurora Proposal to Change Tasmanian Electricity Code (thanks to Greg VK7YAD)

[http://www.economicregulator.tas.gov.au/domino/otter.nsf/LookupFiles/InvitationforSubmissions\\_AuroraProposal\\_July2010.pdf/\\$file/InvitationforSubmissions\\_AuroraProposal\\_July2010.pdf](http://www.economicregulator.tas.gov.au/domino/otter.nsf/LookupFiles/InvitationforSubmissions_AuroraProposal_July2010.pdf/$file/InvitationforSubmissions_AuroraProposal_July2010.pdf)

SMT Techniques

[http://www.amqrp.org/kits/micro908/smt\\_construction.pdf](http://www.amqrp.org/kits/micro908/smt_construction.pdf)

Neat device for holding SMT devices

<http://www.speleogroup.org/files/SMT-boards-sg.pdf>

SMT Soldering Tip Videos

<http://www.solder.net/technical/tips.asp>

SMT Soldering Techniques

[http://www.curiousinventor.com/guides/Surface\\_Mount\\_Soldering](http://www.curiousinventor.com/guides/Surface_Mount_Soldering)

Wheezy Waiter:

<http://www.youtube.com/watch?v=MVEd9P76n74&feature=popular>

<http://www.youtube.com/watch?v=N43qs79He2U&feature=channel>

<http://www.youtube.com/watch?v=C-gTMO39dzY&feature=channel>

Ouch – Not Again!

<http://www.bloomberg.com/news/2010-07-29/toyota-to-recall-400-000-avalon-sedans-to-fix-steering-locks-on-complaints.html>

Personal Cloud or Home Server?

[http://www.ehomeupgrade.com/2010/07/28/3-reasons-why-personal-cloud-services-need-to-be-home-server-based/?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed:+ehomeupgrade/entries+%28eHomeUpgrade+1%29&utm\\_content=Google+Reader](http://www.ehomeupgrade.com/2010/07/28/3-reasons-why-personal-cloud-services-need-to-be-home-server-based/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:+ehomeupgrade/entries+%28eHomeUpgrade+1%29&utm_content=Google+Reader)

Hawaii is an Island just like Tasmania!!!!

<http://www.geeknewscentral.com/2010/07/28/hawaii-internet-slow-down-could-last-a-month-or-more/>

Big Brother for your Aging Parents

[http://www.nytimes.com/2010/07/29/garden/29parents.html?\\_r=1](http://www.nytimes.com/2010/07/29/garden/29parents.html?_r=1)

Youtube Videos can now be 15minutes

<http://youtube-global.blogspot.com/2010/07/upload-limit-increases-to-15-minutes.html>

Do you have some interesting internet sites you have come across in the last week – send them in to [justingc@ozemail.com.au](mailto:justingc@ozemail.com.au)

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### ***VK7 Regional News Group Email Addresses***

Post message: [vk7regionalnews@yahoogroups.com](mailto:vk7regionalnews@yahoogroups.com)

Subscribe: [vk7regionalnews-subscribe@yahoogroups.com](mailto:vk7regionalnews-subscribe@yahoogroups.com)

Unsubscribe: [vk7regionalnews-unsubscribe@yahoogroups.com](mailto:vk7regionalnews-unsubscribe@yahoogroups.com)

List owner: [vk7regionalnews-owner@yahoogroups.com](mailto:vk7regionalnews-owner@yahoogroups.com)

### ***VK7 Virtual BPL Tours***

<http://www.youtube.com/watch?v=pcdY0Eetvsw> - Mt Nelson

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

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

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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](http://www.radioelectronicschool.com)

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

Newsreader: VK7FB

80m: VK7EM

40m: VK7JGD

20m: VK7AR

10m: VK7ZGK

UHF CB: VK7HGO

HF CB: VK7TED

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

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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](http://REAST.ASN.AU) AND THE DEADLINE FOR ITEMS IS 21:00 ON FRIDAY PRIOR TO THE SUNDAY OF THE BROADCAST.