

VK7 REGIONAL NEWS BROADCAST

FOR SUNDAY 27 JUNE 2010

VK7 EVENTS CALENDAR

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

REAST – June 30 – ATV Experimenter’s Group – Queen’s Domain Clubrooms starts around 7:30pm.

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

REAST – July 7 – Constructors Night – Optical Transceiver starts 8pm in the Queen’s Domain Clubrooms.

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

NTARC – July 14 – Presentation on the Magic Band - 6 metres – 7:30pm at the Alanvale campus of the Tasmanian Skills Institute.

www.ntarc.net

WICEN South – July 16 and 17 – Endurance ride – Cliftonvale checkpoints and tracking for 20, 40 and 80km rides. Survey and set up Friday p.m. First riders away 0730 Saturday. Portable HF antenna trialling on Friday evening. Only a 40 minute drive from Hobart’s northern suburbs. Come and give it a go.

http://tas.wicen.org.au/Diary/coming_events_1.htm

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

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

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

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

NORTHERN NEWS

Northern Tasmanian Amateur Radio Club

www.ntarc.net

Now that winter is well and truly here, with rain, wind and generally cold weather being prevalent, indoor pursuits are the order of the day. So what shack projects do you have lined up to while away the winter evenings?

Do you have a few old Philips PRM80 radios kicking around the shack? Or perhaps you're looking to get your teeth into a project of converting an old and unloved two way radio onto 6 metres? Hams all over Australia have been making use of Philips PRM80 series radios for 2 metres & 70 centimetres for many years, but in that time no-one has managed to figure out the modifications to get them working on 6 metres.

Until now! Matt VK3VS has figured out a way to trick the PRM8030 down to 52 MHz, and other circuit modifications needed to make the radio perform at nearly half its original design frequencies. Matt has also figured out a way to get the PRM8030 to work on the FM segment of the 10 metre band as well, but hasn't pinned down the exact changes needed to make the power amplifier stage do its thing on 29 MHz. If you're interested, take a look at what Matt has put onto the internet and the address can be found on the email and internet editions of this broadcast.

<http://www.vk3smb.com/projects/ebandsix.shtml>

Speaking of all things 6 metres, the next NTARC meeting on Wednesday 14th July we plan to have a presentation focusing on that very band – the “Magic Band”. We'll announce more details in the coming weeks, but can confirm that the venue will be the usual place at Alanvale campus of the Tasmanian Skills Institute.

What better way to ward off the winter blues by having a hot coffee or hot chocolate with fellow amateur radio operators? This Monday, being the last Monday of the month, will see the informal coffee meeting at Lilydale, where David and Norma will be your hosts.

Hope to see you there!

Thanks from

(Jason VK7ZJA, NTARC Secretary)

NORTH WEST NEWS

Cradle Coast Amateur Radio Club (CCARC)

CCARC News

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

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/>

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.

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 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/>

VK100WIA REAST Operation

Over the UTC days of 22nd to 24th June 2010 REAST activated the Centenary callsign VK100WIA from the historic REAST clubrooms.

Over the three days the operators made 415 contacts from all around the world using CW, PSK31, SSB, ATV and FM modes.

We setup three stations connected to three different HF antennas each with logging computers to log to the WIA website.

Some of the contact highlights were Antarctica on the Palmer Base, Russia, Costa Rica, Durban/South Africa, Japan, Spain and many others along with every state around VK.

Early on the Thursday morning Justin VK7TW was interviewed by Michael Veitch on 936 local Breakfast program and we have a recording of the interview.

<audio file played>

We had a good half dozen people turned up at the Domain who were interested in what they heard that morning.

There was also going to be a segment on ABC Stateline however given the changes in Canberra on Thursday this didn't happen...HIHI.

Next week Justin will be interviewed by Chris Wisby on ABC local radio – Tasmania – stay tuned.

A great big thank you to all those amateurs who helped with the station including: VK7TW, VK7TBM, VK7RO, VK7FEET, VK7JGD, VK7ZGK, VK7FRRT, VK7FPJB and VK7HGO.

This was a great activation of the Centenary Station and a credit to the REAST Club.

July Presentation

Constructor's Night – Optical Transceivers

As heard on the WIA National News on Wednesday 7th July 2010 at 8:00pm we will be constructing simple light transceivers during the night and then testing and talking to each other via red LED light.

Please bring along your soldering iron, some solder and side cutters for a fun night of construction. Don't worry if you don't own a soldering iron there will be some spare irons, etc just in case you don't have one.

Thanks to all those people who have let us know they want a kit we are currently putting the kits together and will let you know an exact kit cost in next week's broadcast.

Even if you don't want to put a kit together then you are most welcome to come along and help the novice kit constructors and have some fun with the finished kits talking to each other.

See you there.

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

(73, Justin, VK7TW)

Special General Meeting

Please note there will be the quickest Special General Meeting in the history of the club just before the Constructor's night to present the audited 2009 accounts by the Treasurer.

Members who have supplied their email address will be receiving notification in the near future.

(REAST Committee)

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

During the activation of the VK100WIA callsign we did activate the ATV studio and had a great roll-up.

We started the night with a show and tell from Justin who went through the VK100WIA activation and the Optical Transceiver documentation for the July meeting.

We then re-tuned the 1250MHz transmitter for Steve VK7OO and we will be expecting a 1250MHz signal from Steve's place in the near future.

Our video presentation was the AMSAT videos from Dayton 2010 and these contained some very interesting information about where AMSAT is heading and updates on many of the satellites they are currently working on and planning.

Then we went inside for a hot cup of tea to get back to operating the VK100WIA station.

Next week will be the presentation from Dr. Graham Denyer VK7JN who gave us a fascinating talk on amateur radio and telemedicine in Antarctica which was given to REAST as our June presentation.

We get underway with the ATV night around 7:30pm with contacts from all over the place being.

Hope to see you along.

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

(73, Justin, VK7TW)

SATELLITE NEWS

Lunar Lander Cubesat Proposed

In a story first reported in the European EE Times, Vermont Technical College, Norwich University, St. Michael's College, and the University of Vermont are working together to land a CubeSat on the moon.

(EE Times <http://tinyurl.com/22vuz7q>)

The team is currently working on initial designs for the spacecraft, with the aim of achieving further NASA funding in June 2011. Primary funding for this effort is being provided by the Vermont Space Grant Consortium under NASA grant.

In the current phase of the program The Vermont CubeSat project, led by Professor Carl Brandon of Vermont Technical College aims to launch by 2015. It is developing the first CubeSat that can be launched from a geostationary orbit to successfully land on the moon. The CubeSat electronics are based on a Texas Instruments (TI) MSP430 processor and the software will control navigation, communications, scientific instruments, camera and the CubeSat's propulsion system.

SPARK, a new high level programming language and toolset designed to support the development of mission critical software will be used for the moonbound cubesat. SPARK was adopted for the CubeSat project because of Vermont Technical College's experience in using SPARK and the related Ada programming language in developing mission critical control systems for a project to create Arctic sea ice monitoring buoys.

Both the CubeSat and buoy systems face similar challenges in terms of coping with inhospitable conditions and the impossibility of fixing any software bugs when deployed.

The proposed lunar lander will be a single unit CubeSat (10*10*10 cm) with four mini-thrusters on the bottom to maximize control and manoeuvrability. Two potential options for propulsion are being examined - a bi-propellant booster or a Xenon powered ion drive booster. The Xenon thruster can also be used for a triple CubeSat that would go to and orbit the moon.

(AMSAT News Service)

TECHNOLOGY NEWS

Quantum memory stores light

The following information was release on Friday 25th June by the Australian National University.

An ANU-led team has developed the most efficient quantum memory for light in the world, taking us closer to a future of super-fast computers and communication secured by the laws of physics.

The team at the ANU Research School of Physics and Engineering used a technique they pioneered to stop and control light from a laser, manipulating electrons in a crystal cooled to a chilly -270 degrees Celsius. The unprecedented efficiency and accuracy of the system allows the delicate quantum nature of the light to be stored, manipulated, and recalled.

“Light entering the crystal is slowed all the way to a stop, where it remains until we let it go again,” explains lead researcher Morgan Hedges. “When we do let it go, we get out essentially everything that went in as a three-dimensional hologram, accurate right down to the last photon.

“Because of the inherent uncertainty in quantum mechanics, some of the information in this light will be lost the moment it is measured, making it a read-once hologram. Quantum mechanics guarantees this information can only be read once, making it perfect for secure communication.”

The same efficient and accurate qualities make the memory a leading prospect for quantum computing, which has the potential to be many times faster and more powerful than contemporary computing.

Dr Matthew Sellars team has previously performed an experiment that 'stopped' light in a crystal for over a second, more than 1000 times longer than was previously possible. He said that the team is now bringing together systems that combine the high efficiency with storage times of hours.

The research team includes Dr Jevon Longdell from the University of Otago and Dr Yongmin Li from Shanxi University. The findings are published in Nature this week.

<http://news.anu.edu.au/?p=2216>

http://www.sciencealert.com.au/news/20102506-21088.html?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+sciencealert-latestnews+%28ScienceAlert-Latest+Stories%29

(Sourced from the Science-News Mailing List)

WEB & EMAIL EDITION EXTRA BITS! !

TI MSP 430 eval/ play kit - Free shipping - Each kit is US\$4.30 each
(Thanks to VK7BEN)

http://processors.wiki.ti.com/index.php/MSP430_LaunchPad_%28MSP-EXP430G2%29?DCMP=launchpad&HQS=Other+OT+launchpadwiki

Non-Linear Optics Articles

<http://www.optoiq.com/etc/medialib/platform-7/optoiq-2/editorial-digests.Par.58722.File.pdf>

Adelaide Amateur Radio Experimenter's Group

<http://www.areg.org.au/>

Reverse GeoCaching Puzzle (thanks to Ben VK7BEN)

<http://hackaday.com/2010/06/20/reverse-geocache-puzzle-gets-downsized/>

Funnies (thanks to Ben VK7BEN)

<http://wondermark.com/>

How to build you own spot welder

<http://hackaday.com/2009/06/23/how-to-build-your-own-spot-welder/>

Scientists Read Minds!!!

<http://www.reuters.com/article/idUSN2214937420100622>

SP1 for Windows 7 in Beta

http://arstechnica.com/microsoft/news/2010/06/testers-get-first-windows-7-sp1-beta-build.ars?utm_source=rss&utm_medium=rss&utm_campaign=rss

Ice Cube Telescope in Antarctica

<http://www.eetimes.com/showArticle.jhtml?articleID=225701176&pgno=1>

Morse Key USB Keyboard

<http://us.cactii.net/~bb/morsekey/>

50 Years of Space Exploration Image (this is cool)

http://hotimg23.fotki.com/a/213_88/4_2/rw2924.jpg

ISS captures the Aurora Australis – Southern Lights

http://gizmodo.com/5568809/the-iss-captures-the-southern-lights-zapping-across-the-atmosphere?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:+gizmodo/full+%28Gizmodo%29&utm_content=Google+Reader

Use this chart to set your work priorities

<http://www.lifehacker.com.au/2010/06/use-this-chart-to-set-your-work-priorities/>

Did you miss that Telstra/NBN move?

http://arstechnica.com/tech-policy/news/2010/06/telstra-joins-aussie-fiber-plan-no-more-copper-wires-ever.ars?utm_source=rss&utm_medium=rss&utm_campaign=rss

Another step toward organic electronics

http://www.ektor.com/news/researchers-take-another-step-towards-organic.1399886.lynkx?utm_source=UK&utm_medium=email&utm_campaign=news

Do you have some interesting internet sites you have come 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@yahooogroups.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: VK7IR

80m: VK7TW

40m: VK7RO

20m: VK7IL

10m: VK7ZGK

UHF CB: VK7ZCR

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.