

## **VK7 REGIONAL NEWS BROADCAST**

**FOR SUNDAY 11TH MAY 2008**

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### **DATACALL TELEMETRY SYSTEM LAUNCH**

On the second of May 2008 the Minister for Primary Industries and Water, David Llewellyn, launched Powercom's high-tech Datacall Telemetry System.

"The Datacall Telemetry System is a Tasmanian-made tool for the agricultural sector. It allows individual farmers to manage resources more effectively using an integrated system of information collection and use," Mr Llewellyn said, speaking at Agfest.

The system, which won the 2007 Engineering Excellence Award in the Tasmanian division of Engineers Australia, and was a national finalist, enables farmers to monitor and control remote watering equipment, and then to analyse important data via mobile phone or internet connections.

Mr Llewellyn said that it is a system allowing easier and more timely management of irrigation equipment and water use. It also allows monitoring of local weather conditions and other production parameters like soil moisture and salinity.

"In the past, collecting and processing information was often costly and difficult, and sometimes not accessible when most needed," he said.

"The Automation and remote access features of the Datacall system address many of these issues, and therefore help with that other precious resource, time.

"This technology lets farmers undertake specific tasks and monitor what's going on without physically being in the paddock, or even in the same country, and also incorporates robust features such as a purpose-built casing, large backup memory, and network failure alerts."

Mr Llewellyn said "In an increasingly complex and changing farming environment, new ways of managing our agricultural production systems need to be sought and embraced in order to make them more robust, and to sustain their vital economic contribution to our State."

(Tasmanian Government Media Release)

For those who don't know Powercomm is run by Phil Tompson VK7SS down at Kingston and congratulation to Phil for the Engineering Excellence Award.

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

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

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## **VK7 REGULAR EVENTS AND BROADCASTS**

And a quick reminder of the regular events and broadcasts:

NTARC – Wednesday 14<sup>th</sup> May – Allenvale TAFE Block B - Greg VK7YAD demonstrating ATV.

And a quick reminder of the regular events and broadcasts:

Sewing Circle Net – Every day from 5pm on 3.59MHz

<http://reast.asn.au/awards.php#sewingnet>

CHARCT Quiz Net – Every Thursday night from 8:30pm on 3.585MHz.

<http://www.qsl.net/charct/>

NWTARIG broadcasts in the NW and Launceston during the week. Check the website for details.

<http://www.vk7ax.ausport.net/>

REAST – Winter Project Saturday Afternoons – 2-4pm at Queen Domain Clubrooms. Interested in amateur radio and getting your licence then come along and see what it's all about and you may even be able to do some of the activities toward getting your licence along with a great information session presented by a range of REAST members.

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

REAST – Every Wednesday evening from 7:30pm is the ATV Experimenter's Night and is running throughout the holiday period so, why not come up and see what we get up to. Check the website for details.

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

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## **NON-COMMERCIAL FOR SALES**

### ***For Sale:***

Ian VK7KIH has one only 40foot tower which is motorised up and down in good condition.

If interested contact Ian Hart, VK7KIH on mobile 0419-331574

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Kevin VK7BK, has for sale a Gap Titan DX Antenna which is complete with Assembly instruction booklet and Assembly diagram.

Pictures and information can be sited at [www.gapantenna.com](http://www.gapantenna.com). Kevin is asking \$250 or near offer. If interested contact – Kevin on 6272 6902.

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## **NORTH WEST TASMANIAN AMATEUR RADIO INTEREST GROUP**

### *Nightly Broadcasts In The N/West*

Nightly broadcasts in the NW have been re introduced on the 2M. Repeater VK7RMD at Lonah, commencing 1930 Hours Local.

Current program schedule as follows:

Monday - Q5 Education Hour

Tuesday - Solder Smoke OR Sceptical Sunday (Are We Alone?)

Wednesday - This Week In Amateur Radio (Highlights)

Thursday - Digital Planet (from the BBC)

Friday - Tech Talk Radio

They can also be heard on the Echo Linked Network by VK7HBR on 145.425 MHz. in the Launceston area and VK7AX On 145.350 MHz. in Ulverstone on the Central Coast.

In addition they are also available on 70CM ATV in Ulverstone by VK7AX.

73's until next time...

(Tony, VK7AX, NWTARIG President)

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## **NORTHERN NEWS**

### *Northern Tasmanian Amateur Radio Club News*

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

The next NTARC meeting will be at Alanvale TAFE on Wednesday the 14th of May, where our special guest presenter will be honorary life member Greg VK7YAD. Greg will have a demonstration and discussion on his ATV project. For those of you who remember Gregs last presentation on his compact HF loop antenna will know the depth of knowledge and expertise he has, and this ATV project will be an example of ham radio at its finest.

Over the last few weeks you've heard about the LED scrolling message badges. These nifty little devices come in either yellow or red LED versions, and can be programmed with your own 256 letter scrolling text

message from buttons on the back. They come with a leather holder, neck lanyard and clip so you can wear the badge and make a bold statement to the world. Well, we only need another 3 more takers to make up our minimum order, so if you'd like one, please call Jason after the broadcast or email [vk7zja@wia.org.au](mailto:vk7zja@wia.org.au). The anticipated price will be \$18 if you are interested.

Thanks from

(Jason VK7ZJA, NTARC Secretary)

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## **SOUTHERN NEWS**

### ***Triple Whiskey on the Air!***

Brian VK7BW is proud to announce his son Andrew's upgrade to the AOCPL Advanced Licence.

Brian comments that Andrew couldn't get VK7ALW, so he is now **VK7WWW**

Here after known as Triple Scotch!

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

### ***REAST Meetings and Events***

#### ***May Presentation Summary***

Last Wednesday night we had a great roll-up for the running of the professionally produced video and audio presentation of the BS7H Scarborough Reef DXpedition.

We worked out it was only one year and one week that the BS7H DXpedition got underway on Scarborough Reef in the South China sea.

The presentation was professionally produced by James Brooks 9V1YC who also operated on the DXpedition.

For those who don't know, Scarborough Reef is a bunch of rocks that occasionally stick out of the ocean located in the South China sea just West of the Philippines. It is a sunken volcanic atoll and it is the rarest and most controversial entity on the DXCC list.

The presentation went through the four platforms constructed on the rocks and the 16 person multi-national team that operated the multi-station for 24 hours a day for a week.

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

(Justin VK7TW)

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### ***REAST Education & Training***

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

We've established an alternative methods of training for the Foundation Amateur Radio Licence. At the moment a single candidate may be forced to wait some time until sufficient candidates are available for a training class.

Rather than hold a whole Saturday training exercise we aim to incorporate it into our existing Saturday afternoon Winter Project Group programme.

Candidates will be given a check sheet to guide them into completing experiences that will assist in understanding areas in which they will be later examined. It may be that other participants are willing to help them with some of the activities.

In addition they will be encouraged to attend information sessions held as part of this afternoon programme. While these are pitched at a higher level than that required for a Foundation candidate it is felt they would help.

Further the onus will be on the candidate to become familiar with the Foundation Training Manual.

Candidates will then book an examination session for a convenient time.

This would include both the practical and theory aspects.

The traditional Training session would still be available if a minimum of 5 candidates are available.

And remember, Foundation Licence Manuals and CD's are available for purchase at McCann's Model World in Elizabeth St. Hobart at \$20. (Only the first edition is available at this stage)

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

(Reg, VK7KK, REAST Education Officer and Assessor)

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### ***Winter Project***

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

As heard above and in the WIA National News our Winter project session continue next Saturday afternoon and over the next few weeks there will be other guests tutors and a focus on a range of topics required for your amateur radio licence.

So if you would like to come along you will need to be there by 2pm Saturday in the Domain Clubrooms for the informal information section.

(Regards from Ken VK7XDY)

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### *ATV Experimenters Night*

And a reminder that the ATV nights start again this Wednesday 14<sup>th</sup> May starting around 7:30pm and ATV goes out on 444.25MHz – just below SBS on the UHF TV Band.

If you have an antenna pointed somewhere toward the Domain why not try tuning down the low end of the UHF TV band on a Wednesday night and give us a call on what you are seeing and hearing.

If you haven't already, checkout the professional produced ATV promotional and amateur interview video streams on YouTube. The address can be found on the email and internet editions of this broadcast.

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

(Justin, VK7TW)

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## **TECHNOLOGY NEWS**

### *Hydro's Wave Power*

The following is a summary of a media release that appeared in the Hobart Mercury during the week:

In Sydney on May 6 ocean power company, BioPower Systems Pty Limited, signed a Memorandum of Understanding (MOU) with Hydro Tasmania to test and demonstrate its bioWAVE and bioSTREAM ocean power conversion systems in Tasmania.

BioPower Systems will conduct the pilot programs, which include deployments of the bioWAVE ocean wave power system at King Island and the bioSTREAM tidal-current power system at Flinders Island.

Each installation will have a capacity of 250kW and will feed power into each islands distribution grid, which are owned by Hydro Tasmania. The power generated should be sufficient to supply about 500 homes.

Hydro Tasmania will work with BioPower Systems to establish the electric power infrastructure to make the grid connections and to manage the supply of power from the offshore generators. Hydro Tasmania is also involved in gaining approvals and permits for the projects.

At present both King and Flinders Islands rely on imported diesel fuel and wind turbines for power generation. In order to meet rising demand,

Hydro Tasmania is seeking to develop new renewable energy supplies on the islands. The local councils, and residents of the islands, are also supportive of the development of renewable energy sources to offset the burning of fossil fuels.

The signing of the MOU with Hydro Tasmania formally marks the start of the pilot program, Dr Finnigan CEO of BioPower Systems said.

The funding is in place and with Hydro Tasmania's participation the project can now be ramped up towards implementation and connection next year, he added.

Following a period of performance testing, BioPower Systems intends to launch its first commercial products in 2010.

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

[http://www.biopowersystems.com/briefs/BPS\\_MEDIA%20RELEASE-06MAY2008.pdf](http://www.biopowersystems.com/briefs/BPS_MEDIA%20RELEASE-06MAY2008.pdf)

<http://www.news.com.au/mercury/story/0,22884,23653686-921,00.html>

(Sourced from the BioPowerSystems Website)

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## **SPACE NEWS**

### ***Planets by the Dozen***

The NASA Space News mailing on May 8<sup>th</sup> ran a story about some new technology that will enable NASA to map multiple areas of space.

This Autumn in the US, astronomers will start a massive search for new planets by observing about 11,000 nearby stars over 6 years. This number dwarfs the roughly 3,000 stars that astronomers have searched to date for the presence of planets. Scientists estimate that the NASA-funded project, called MARVELS (Multi-object Apache Point Observatory Radial Velocity Exoplanet Large-area Survey), will find at least 150 new planets perhaps many more.

"We're looking in particular for giant planets like Jupiter," says Jian Ge, principal investigator for MARVELS and an astronomer at the University of Florida in Gainesville. Ge likens big planets to "beacons of a lighthouse" signaling the presence of entire solar systems. "Once we find a big planet around a star, we know that smaller planets could be there, too."

To look at so many stars, MARVELS will use a telescope that can separately image 60 stars at a time, and this number will eventually be increased to 120 stars. The telescope, which will be housed at the Apache Point Observatory in the Sacramento Mountains of New Mexico, has a

2.5 meter primary mirror and a wide field of view that covers 7 square degrees of the sky area that would appear 35 times larger than the Moon.

An array of 60 fiber-optic threads will carry light from the telescope's focal plane to highly sensitive interferometers. These instruments can detect tiny changes in the frequency of a star's light. How does this help find planets? Ge explains: When a star is tugged to and fro by the gravity of an orbiting planet, the star's light is shifted to and fro in frequency--an effect called the Doppler shift. The powerful gravity of Jupiter-sized planets exerts a big tug on the parent star, making them relatively easy to find using the Doppler shift method.

Data from MARVELS will also shed light on other questions about planet formation, such as how often the orbits of gas giants migrate closer to their stars, and how planets sometimes end up with highly eccentric orbits instead of the nearly circular orbits predicted by theory. By surveying an unprecedented number of stars, MARVELS could deliver the data scientists need to find patterns about the conditions most favorable for planet creation, knowledge that can guide future, detailed observations of individual stars.

[http://science.nasa.gov/headlines/y2008/08may\\_marvels.htm?list1098418](http://science.nasa.gov/headlines/y2008/08may_marvels.htm?list1098418)

(Dr Tony Phillips from the NASA Space News Mailing List)

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## TECHNOLOGY NEWS

### *Weird electrons may shrink your laptop*

The following summary is sourced from the ABC Science website from an article written by Stephen Pincock on May 6.

A new type of material with bizarre acting electrons could bring dramatic advances in the world of electronics, predicts an Australian researcher.

Because of the way its electrons spin, the material could be used for applications where information needs to be densely packed, says Associate Professor Xiaolin Wang from the University of Wollongong.

"Conventional electronics and devices use only the electron's charge for information processing. When both spin and charge are used simultaneously, astonishing and unusual physical phenomena occur," he says.

The new material is a "spin gapless semiconductor", Wang says.

The key to the difference lies in the properties of the electrons, tiny, negatively charged particles found within the new material, he says.

When an electric current is applied to a normal material like a standard metal or semiconductor, its electrons move in the opposite direction to the electric current.

As they do so, they also spin on their own axis, a bit like when a tennis ball spins as it is hit.

Under normal circumstances, half the electrons in a material spin in one direction and half in the other.

But in the new material, all the electrons are thought to spin in the same direction.

"This is the special feature of this material," Wang says. "All the electrons move forward with the spin pointing in the same direction."

The researchers have already discovered a special property of this material that relates to the spin of the electrons. They are working on a paper describing that work.

<http://www.abc.net.au/science/articles/2008/05/06/2237055.htm>

(Sourced from ABC Science Website)

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## **BPL NEWS**

### ***US BPL Subscribers Drop To Record Lows***

A Texas company's purchase of Current Group's BPL business, combined with downgrades in Australia, does not bode well for future use of utility powerlines for broadband transmission.

W. David Gardner in InformationWeek reported on May 8, 2008 reported the purchase by Oncor Electric Co. of Dallas of Current Group assets is the latest in a string of disappointments for the nascent BPL industry.

Just a few years ago, BPL was viewed by many as the exciting new technology that would challenge cable and DSL broadband and create a much-needed third broadband option for consumers.

There has been a string of companies move out of BPL including in Manassas which was once the pioneering test bed for the technology with the city's supplier, ComTek, being sold. Ham radio operators had waged a long and contentious battle, charging that BPL interfered with their signals. Amperion, has even left the BPL business and reinvented itself as a provider of hybrid networks.

In Australia, different utilities have either dropped BPL deployments altogether or are downsizing them to a point approaching demise, according to recent media reports.

In Dallas, Current Group and DirecTV had hopes of offering BPL service to 2 million consumers, but the now-familiar complaints, cited above, resurfaced and the project never got wheeling.

On the DSLReport website they reported that Associated Press notes that the latest FCC stats (for whatever they're worth) show that there's currently only 4,776 BPL subscribers in the U.S. and with the Current group take over this will certainly drop.

<http://www.informationweek.com/news/infrastructure/ethernet/showArticle.jhtml?articleID=207601040>

<http://www.dslreports.com/shownews/BPL-Only-4776-Subscribers-94226>

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

(BPL and Ham Radio Mailing List)

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

Mentoring For Science Students:

<http://abcmail.net.au/t/148534/957242/3184/0/>

VK7ARN APRS BakPack

[http://tas.wicen.org.au/APRS/aprs\\_bakpac.html](http://tas.wicen.org.au/APRS/aprs_bakpac.html)

Self Explanatory Really...

<http://spaceweather.com/>

WIFI Hacking Videos

<http://www.youtube.com/watch?v=T90o2NceAvQ&feature=related>

The following links and description are sourced to CG Communicator:

This music-video captures the essence of ham radio and will leave you feeling great -- a treat from Lissa Ladefoged and the gang down under courtesy of Amateur Radio Newline:

<http://www.youtube.com/watch?v=9s49tnxT8F8>

Galaxies in collision. New Hubble Space Telescope images. We are so small by comparison:

<http://hubblesite.org/newscenter/archive/releases/2008/16/image/a/>

An engineer's guide to cats:

<http://www.youtube.com/watch?v=mHXBL6bzAR4>

Qualcomm introduces the first-ever cell phone that is built into the human body, no batteries required. Spoof video:

<http://www.handsolomobile.com/?CMP=EMC-bdemail>

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

***VK7 Virtual BPL Tours Update***

<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?

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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: VK7JK

160m: VK7DM

80m: VK7TW

40m: VK7RO

20m: VK7PP

10m: VK7ZGK

UHF CB: VK7HGO

HF CB: VK7FTAZ

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.