

May 2012

Volume 12, Issue 11

ANODE

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Anode Editor's Comments

Volume 12, Issue 11 May 2012

National Amateur Radio Day

The South Africa Radio League has named 16 June as National Amateur Radio Day, celebrating Amateur Radio as a National Resource and its diversity as the most exciting of all scientific hobbies

Museums Day

National Museums Day is held annually in May. To recognise this event the Zululand Amateur Radio Club will be operating as ZS5ZLB from the Nongqayi Fort in Eshowe on Sunday, 20th May 2012

Digifest 2012

The annual 'Digifest' will be held as usual on the 1st full weekend of June

(2012 dates are June 2nd and 3rd). This is going to be Digifest's 5th year, and its popularity is growing with last year's received LOGs number of more than 200.

The peculiarity of this Contest is the great variety of different categories of the participants in 5 digital modes: RTTY 75, BPSK 63, MFSK 16, HELL-SCHREIBER, OLIVIA and the most fair points calculation based on the distance between the stations.

The Contest consists of 3 convenient periods (8 hours each) during the weekend. To add more adrenalin into this competition a special feature will be offered to those who like competing in real time - online results will be presented on a server. And, of course, a lot

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VHF/UHF - Town houses and beyond

(Part 1) 50MHz

Special points of interest:

- **Contact details on back page UPDATED 2011-11-14**
- **Ham - Comp Latest on web site. Still under construction..**

By: ZS6RBJ, Rory Crouch

During the past year I have started to experiment and become more interested in VHF/UHF. Living in a town house presents a few challenges for the radio ham, the main one been antennas and body corporate restrictions. This should not deter you however, and VHF is a great choice as the antennas on the bands can be made small and compact.

(50MHz). During the past couple of months many Tropo openings have been reported with contacts made up to and beyond 8000km. Most of the openings are towards Europe, and can last from a few minutes to many hours. Of course this depends largely on the time of year, sun spot activity etc. Hearing of these openings and the challenges presented in making a 6m contact inspired me to build an antenna for this so called "magic band" and give it a go.

Lets have a look at 6 Metres

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Editor's comments - Club News

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of real nice prizes, mostly RigExpert AA-230 and AA-30 Antenna Analyzers and RigExpert USB Interfaces. All prizes sponsored by RigExpert Ukraine Ltd.

Since the number of the participants is relatively small and the most populated competing area is Europe, the "far away" stations from NA, SA, Africa, Asia and Australia are at great advantage. From the last year's experience those stations were the most prize winners. Considering this and also to support growing participation from Europe, the sponsors "double" the prizes. I.e. separate main prizes are now available both for Europe and for the "rest of the World".

But wait, that's not all! For those of you who won't be able to win "main prize" in respected category, there will be a lot of small gifts, like T-shirts and paper awards. All the prizes will be mailed to participant's home addresses.

The results are usually available just 2 weeks after the end of the Contest, So, let's just meet on the 1st weekend of June and have fun! Complete rules can be found at:

<http://www.mixw.net/misc/DigiFest/index.html>

<http://www.rigexpert.com/index?s=main&f=digifest>

<http://ut7fp.kiev.ua>

SA AMSAT Space Symposium in Durban on Saturday

If you have not yet booked for the SA AMSAT Space Symposium to be held at the University of KwaZulu Natal this Saturday, 12 May, do it now.

The programme is packed with presentations and demonstrations covering a wide range of subjects of interest to radio amateurs and persons who have an interest in science and technology.

Telkom is the lead sponsor making it possible to

have speakers from all over South Africa. The SA National Space Agency is sponsoring the attendance of students and learners and a number of companies have come on board with attendance prizes. From RF Design there are four Tiny track APRS boards to be won, Comtest and RS are donating multi meters.

Visit www.amsatsa.org.za for the programme, list of attendance prizes which is growing everyday and registration form

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GCHQ man: Powerline networks do interfere with radio

Spook not a bearded radio ham, but is moustachioed

By Bill Ray [Stolen from theRegister.]

Posted in Wireless, 17th May 2011 12:02 GMT

D Notice A document prepared by the spectrum manager of secret UK listening agency GCHQ, though disavowed by the organisation, has drawn more attention to the interference kicked out by powerline networking kit.

The letter was prepared by [a government employee we have been asked not to name], of government-spy outfit GCHQ, and suggests that powerline networking kit is already interfering with GCHQ's clandestine listening operations. But, after being leaked to the radio-ham community in March, the letter was officially renounced by the organisation as never being an official document and containing various inaccuracies.

The letter was prepared in May, leaked in March, and posted on the Ban PLT web site. At first glance it appears quite damning, stating that GCHQ is "already measuring an increase in the HF noise floor in the vicinity of our HF receiving stations, with wide variations between day time and night time lev-

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Editor's comments - Club News

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els", though it goes on to state that seasonal and meteorological factors also impact signal strengths.

If power line networking is causing headaches for our spies then that's a serious issue, and PLT kit certainly operates right in the bands used by the Numbers Stations.

Numbers Stations are mysterious radio broadcasts that have been around since the 1950s. They transmit what appear to be random numbers, spoken aloud, and are assumed to be broadcast instructions for operating spies. The stations are plainly important to the UK intelligence services in their own right, and there are other uses of long-range HF that GCHQ needs to listen in on: HF is still commonly used in naval communications, for instance, even if it no longer carries much international phone traffic.

So it would appear that it's not just the bearded-radio-ham community which objects to PLT, except that [the person we have been asked not to name] is a fully-paid up member of that community. He doesn't have a beard, just a moustache, but he is a keen radio amateur as well as working for GCHQ.

That doesn't invalidate his opinion, as expressed in the letter, but in distancing itself from that opinion GCHQ has stated that PLT kit isn't impacting its operations. It is possible that GCHQ is lying, one should expect a certain amount of deception from one's spies, but it's more likely the organisation places its listening stations well away from anywhere people might be using power line kit.

The subject of PLT interference will get into the houses of Parliament again on Wednesday as Mark Lancaster, MP for Milton Keynes North, has raised it as an adjournment debate (a 30-minute conversation) following a request from one of his (radio ham) constituents.

Which is another way that the ham community is fighting hard to raise the profile of interference generated by PLT kit, while the regulator (Ofcom) still denies there is any interference and points out that it couldn't do anything even if there was.

Most end users of radio, just trying to get their fix of Chris Evans in the morning, will just buy a bigger aerial, or complain that DAB isn't as good as FM used to be, never knowing that it's their home networking kit which is causing the problems: unless the hams keep telling them.

Updated to Add

Having been contacted by a GCHQ representative under the provisions of the DA Notice system (formerly D-Notice) we have removed the name of the GCHQ spook in question and are no longer linking to the document. Not everyone is as patriotic as us, though, so if you're interested you can almost certainly find out both.

VHF/UHF - Town houses and beyond (Part 1) 50MHz

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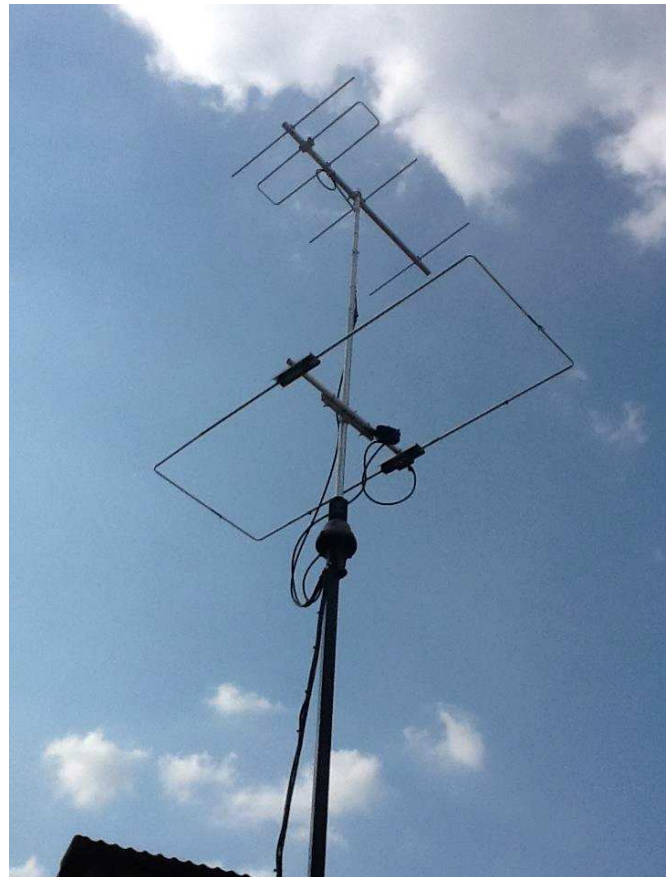
I could not build the 3 element LFA yagi which I had originally intended as I felt it was a little too large for a town house. I did however find a design for a Moxon antenna. It proved cheap and easy to build. The overall dimensions made it possible to put it up on a home brew crank up mast without attracting too much attention. Of course the fact that my mast is crank up also helps. This allows the antennas to be lowered to roof height when not in use, and remain out of sight.

internet in a chat room setting. This is great for setting up scheds, seeing the current DX cluster spots for 6m and above as well as other useful info. I was also connected to a VHF alert group using the popular BBM (Blackberry messaging) service for the Blackberry smart phones. This is not essential but it must be noted that using these different resources will greatly increase your chance of making the contacts when the band does open, as you can be alerted even if not near your radio.



The antenna took a day or so to build and when installed at a height of roughly 4m above ground, was perfectly tuned for the lower portion of the 6m band(50.000 – 50.400).

I waited patiently for a few weeks, hoping to hear one of these illusive 6m openings. Monitoring the ON4KST web chat is also highly recommended. This facility is free to register and allows users to communicate over the



Finally when all was said and done I made my first contact using my home brew Moxon and 100watts from the Icom IC706MKiiG. EB7HAF from Spain came through 5-7 giving me the same report. A distance of 7819km's covered for my first 6m contact. That afternoon I managed over 20 contacts between 15h00 CAT and 19h00CAT. All using modest equipment. It is

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VHF/UHF - Town houses and beyond (Part 1) 50MHz

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possible and it is extremely rewarding. Of course using 3 element beams or bigger, and having more power will greatly improve the contacts in your log book, however there is nothing stopping you from enjoying this band without them. My station is by no means the best, yet it has proved to be very rewarding time and time again.

Websites

Moxon antenna:

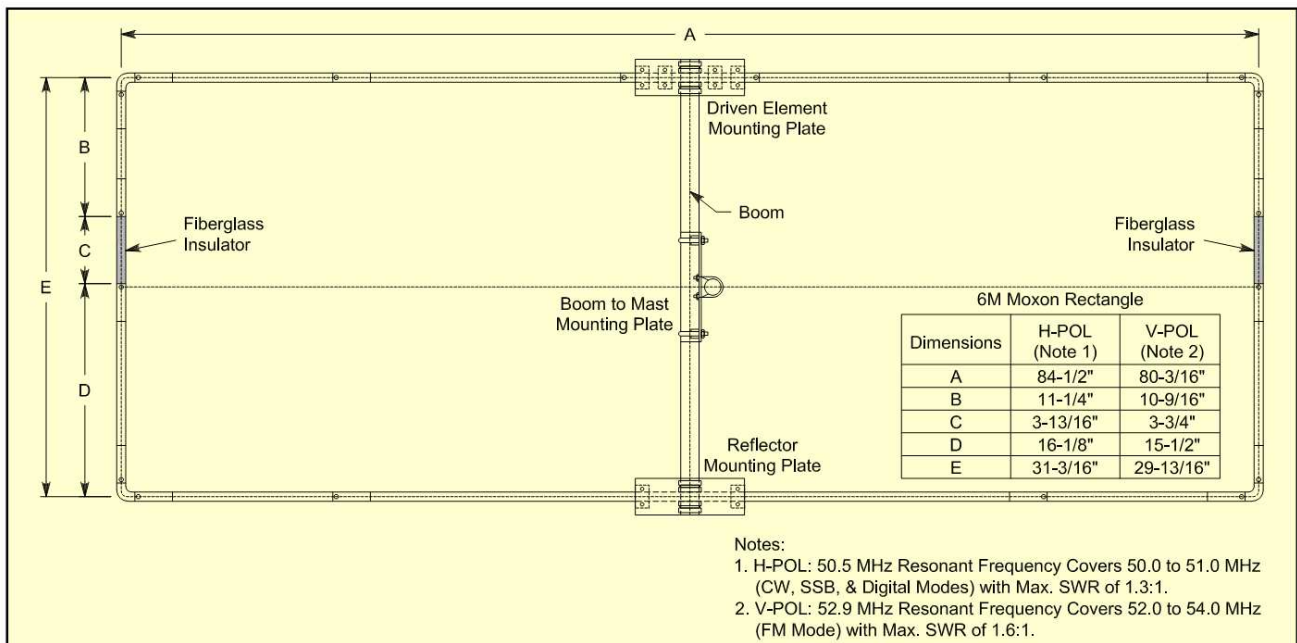
<http://www.kg4jjh.com/pdf/6m%20Moxon.pdf>
[remember to save as a copy.]

LFA Yagi :

<http://www.g0ksc.co.uk/>

ON4KST chat:

<http://www.on4kst.com/index.php>



Moxon diagram from the pdf

[remember to translate from American to SA English also to metricate...]

I am learning everyday when it comes to the higher bands. 6M SSB is just the beginning. There is 2m, 70cm, 23cm, digital communications, EME, meteor scatter, and many other possibilities in the exciting world of VHF and above. Start by getting your HF set that can also do 6m fired up on the magic band. Or get that dusty 2m all mode rig switched on to 144.300 SSB and give a shout. Set up a schedule with some local hams and start promoting activity in your area. Take up the challenge and enjoy the rewards.

Birthdays in May

03-May	ZS6CAA	Viv	Wells		
03-May		Pat		Spouse of	ZS6BHH Ronald
04-May	ZU-105	Jeremy	Miller		
12-May		Rina		Spouse of	ZS6AU Dirk
19-May	ZS6ACC	Dave	Lloyd		
21-May		Anita		Spouse of	ZS1CON Phillip
21-May		Charmane		Spouse of	ZR6SJK Stephen
23-May	ZR6WVZ	Willem	Van Zyl		
24-May	ZS6GDP	Gysbert	Du Plessis		

The West Rand Amateur Radio Club
Established in 1938
KG33XU 26.14122 South - 27.91870 East

P.O. Box 5344
 Weltevreden Park
 1715

Phone: 083 267 3835 (Chairman)
Email: zs6wr.club@gmail.com
Web page: www.zs6wr.co.za

Bulletins (Sundays at ...)

11h15 Start of call in of stations
 11h30 Main bulletin start

Frequencies

Output: 439.000 MHz 7.6 MHz split
 Input: 431.4 MHz (West Rand Repeater)
 145,625 MHz (West Rand Repeater)
 (HF Relay when possible)

Radio Amateurs do it with more frequency!

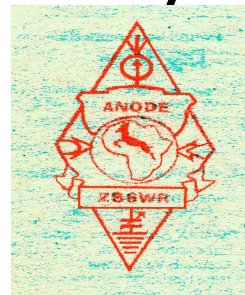
Chairman (technical)	Phillip van Tonder	ZS6PVT	083 267 3835	zs6wr.club@gmail.com OR zs6pvt@gmail.com
Vice Chairman	Geoff Levey	ZS6GRL	082 546 5546	glevey@gmail.com
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West Rand members - we need your input!

To make this the best ham radio magazine in South Africa we need your input. Please submit articles, comments, suggestions etc.

Please send plain text with no formatting to the email address below.

See Club website at www.zs6wr.co.za for all ANODE back issues.



We need your input! Email us articles, comments and suggestions please.
zs6wr.club@gmail.com