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# HAMS Waywite News

MIDLANDS AMATEUR RADIO CLUB  
P.O.Box 1076, HILTON, 3245

June 2008



AFFILIATED TO  
THE SARL & IN  
ASSOCIATION  
WITH THE NATAL  
CARBINEERS

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## The Chairman's Fax

After a busy Royal Show which had the most perfect weather for many years Winter has arrived with a vengeance and what with fuel prices expected to reach R16 a litre by the end of the year, I think that we are all in for a hard time, just as well ham radio is fairly cheap to run.

This is going to be a busy month for those who are involved with our club, what with the Walter Reid competition looming and then the AGM in July with all the prize giving, etc. to arrange. We certainly hope that there will be some interest shown at this years competition.

The Gilboa project has been completed and appears to be working well with the linking of the Estcourt repeater through to our 750 repeater in the city. Thanks must go to those who enabled the system at great time expense to themselves.

The club has a roll of LMR 400 low loss co-ax which is suitable for use up UHF and is offering the same to members only at R25.00 per metre, talk to me if you need a length.

Over the past weeks it has become apparent that no one has time to spare on Thursday evenings at 19:30 hours so as from today the net is cancelled. This net was for you the members but so many excuses have been brought forward viz. I forgot, there is too much QRN, etc.

You will find the notice of the July AGM in this issue giving members all ample time to arrange your attendance on the 19/07/2008. If you cannot attend the meeting please make use of the proxy slip provided!!

Don't forget your Walter Reid project!

Cu at the meeting

73 DE ZS5MQ

**PLEASE NOTE THE NEW CLUB HOUSE HOURS.**

**Saturday from 08:30 to 10:30**

The club meets on the third Saturday of every month, except December at 13:00 at the Natal Carbineers Conference Center, Geere Street, PMB.

Sunday Morning Bulletins (MARC and SARL) as well as the Club Net from 07:45 on 3620 kHz and the 145.750 MHz repeater.

## From the Editor

I was in the "town in the hollow" a couple of days ago. For once I took the handheld along and called a couple of times on the 750 repeater - no response! This was repeated during the day with the same results. Well, maybe it was market day and everybody was away from home.

Over the past couple of months the Club has spent a fair amount of money on the expansion and upgrading of our communications infrastructure and a number of members have given freely of their time (and money!) to accomplish this expansion. Please make use of these facilities and help to place MARC on the map. Remember, if you don't use it, you loose it.

Apart from applying the finishing touches, it may be a bit late for your Walter Reid entry but still enough time to think about the coming AGM. What about trying to bring one of our "subs paid only" members to this event?

73,  
Wessel, ZS5BLY.

### CLUB BANKING DETAILS

<b>Bank:</b> First National Bank	<b>Branch:</b> Bank Street	<b>Branch code:</b> 220-825
<b>Account holder:</b> Midlands Amateur Radio Club	<b>Account Number:</b> 625057756507	
<b>Type of account:</b> Current	<i>Reference to use is your call sign</i>	

## News and Views

### ① RTA report.- ZR5S

The 10'th of May saw myself and ZR5SEM representing the Midlands Amateur Radio Club at the University of KZN, Durban to attend the Radio Technology in Action (RTA) seminar. We also took this opportunity to upgrade the firmware on the ZS0DBN APRS digi housed in this same building.

The head of the Howard College Campus officially opened the day with his welcomes and encouraged us in our hobby to experiment with new developments.

Then the representatives of the different KZN clubs where called up front in an open panel discussion about wether the modern HAM was suffering from "technophobia" and where Amateur Radio will be in 5 years time.

I spoke about embracing voip technologies into Ham Radio like Echo-Link, E-QSO and IRLP but NOT to become a computer operator using your PC mic and PC speakers. Interface your node onto your local repeater or simplex frequency. At least in this way we still have a real radio to use and real RF is used.

ZS6EF then spoke about SPREAD SPECTRUM. This was very interesting and basically involves our current spectrum but using the part below the noise floor!! . And just when we thought we had run out of the conventional rf spectrum.....

ZS2LAW spoke then about Space Weather and how this affects our HF Propagation. She also spoke about their efforts in monitoring the space weather and the importance of predicting propagation for the commercial sector. She then had to stand in for ZS1LGM and gave a lovely breakdown of the HMO Beacon Project on 7.023 MHz in CW mode.

During the lunch-break, ZS5FR gave guided tours around the facility.

ZS2AW gave a nice presentation after lunch about how they have set up a computer networking infrastructure on 5.8Ghz in the Port Elizabeth region.

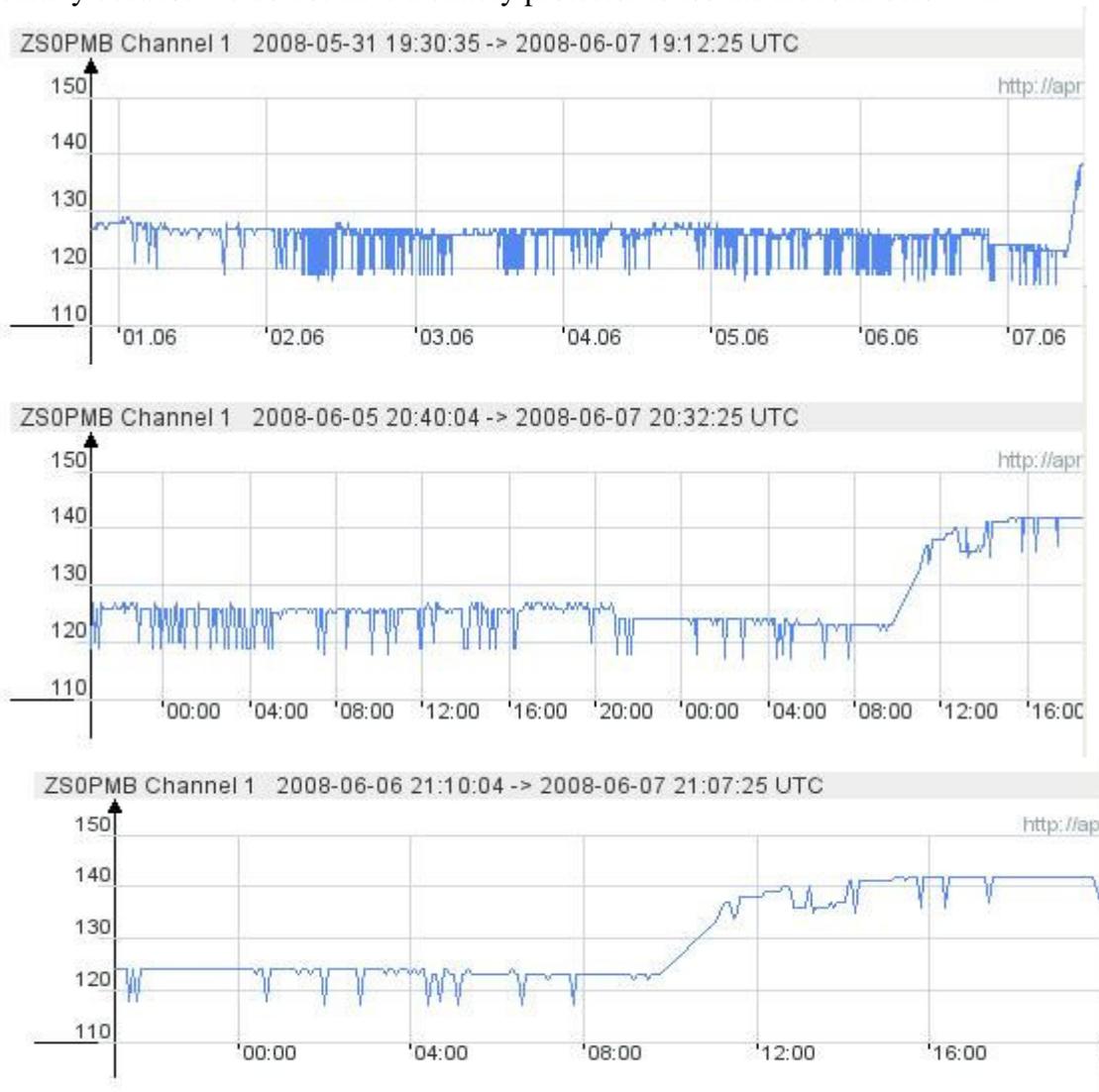
Peter Dreyer of the Astronomical Society of South Africa closed the day with a talk about using your GPS to participate in a family activity that is enormously popular world wide, called Geo-Cache'ing. Look it up in Google. Basically, you get a gps co-ordinate from the website near your QTH where a treasure is hidden. Your goal is to find the hidden treasure, and then replace the item with something of equal value for the next hunter to find. Don't forget to sign the register.

I was lucky to win a sim-card backup device in a lucky draw. Various other prizes where given away. This was a truly worthwhile trip and I will be going to the next one. Please make an effort to attend these meetings. If attendance is poor, they will discontinue these seminars.

*(Thanks to Shaun,ZR5S)*

### ① Gilboa report. - ZR5S

Well, the failing battery charger at Gilboa finally gave up last night (06 June) at 23h00. This can be seen clearly by the telemetry graphs shown below. The top graph is over 1 week, the middle graph is over 48hours and the last graph is over 24hours. One can see at 23h00 where the unsteady 12.6v dropped to 12.5v then to 12.4v. ZR5ML and myself rushed up the next morning with the new 10amp/3-stage charger to prevent any damage to the new battery due to low voltages and the fact that the load would have completely drained the battery because we do not have a battery protector to isolate the load below 12v.



We can also see when the new charger (R700.00) was connected and how it took 3 hours to bring the battery up to 100%, even with a full load connected. (We spoke non-stop on the repeater for an hour and the aprs digi was tx'ing during this time) So it looks like 10amps is enough to power this site comfortably. We are now sitting at the correct voltage of 14.2v for a deep cycle battery. And it is a very stable 13.8v to 14.2v. This is the variance between the boost and float cycles. We should get about 24hours of mains fail operation from this battery if we keep our conversations limited.

The GE Master II power unit had a faulty fuse holder. It was cracked and caused a loose connection. We have recovered this psu for repairs. After connecting up the new psu, we checked the voltage/telemetry sensor for accuracy. It was 0.05v too low. This is very accurate and we can reliably depend on this telemetry for accurate battery monitoring.

We then connected the 2 lighting arrester kits to the 2 co-axial feed lines, and earthed it. A surge arrester (R43.00) was connected to the power supply mains plug for protection. Then we gave the Gilboa box one final coat of silver paint. (looking good) The silver should hopefully bounce away the terrible summer heat rays and keep the box reasonably cool. We lastly calibrated the box temperature sensor and left for home.

Gilboa needs one more task to be completed before this site is 100% to our standards. And that is to fit a battery protector (R300.00) to isolate the load when volts drop below 12v.

One other possible feature to add to this site, would be an early warning mains fail cw transmitter. Something to warn us of battery operation so that we can limit our overs until mains is restored. I am thinking of a simple transmitter to tx cw onto the repeater freq. at 5min intervals. Any volunteers?



"Many hands make antennas go up!"



Soldering by Torchlight

*(Report and photos from Shaun, ZR5S. Thanks Shaun)*

① We have had a short e-mail from Rod and Rose from ZL land. They have got a car, sorted out the banks and medical aid, had coffee with OM Des and are trying to find a house. Their container arrives some time after the 19th June and OM Rod cannot wait to lay his hands on his radio gear! Comment from Rose: " Rod has tried CQ100 but the sound from my computer does not suit him and he needs his own computer which is still in the container."



**Standard Resonators**  
Power Rating 400 Watts

Part Number	Description	Approximate Bandwidth
		2:1 SWR or better
RM-10	10 Meter	150-250 kHz
RM-12	12 Meter	90-120 kHz
RM-15	15 Meter	100-150 kHz
RM-17	17 Meter	120-150 kHz
RM-20	20 Meter	80-100 kHz
RM-30	30 Meter	50-60 kHz
RM-40	40 Meter	40-50 kHz
RM-75	75 Meter	25-30 kHz
RM-80	80 Meter	25-30 kHz



Ameritron's SDA-100 is without a doubt the best built, best looking, best performing HF Mobile Screwdriver Antenna in the world! When properly installed on your vehicle this antenna will provide continuous coverage from 10 Meters through 80 Meters with a 6 foot whip. Remove the whip to get 6 Meters through 40 Meters coverage.



**Stop tuning, start talking.**

The SG-230 Smartuner was the first product in the HF market to offer fast, flexible tuning without any user interface. This unit works with ANY radio and ANY antenna without any special interface, making it the most versatile tuning product available. The SG-230 can be used in base station, mobile, marine and aviation and has been the "Gold Standard" of automatic antenna tuning for nearly twenty years. The SG-230 is built in a rugged ABS plastic enclosure which is sealed to protect it, and allows ultimate versatility in installation.

**X200**  
144/430MHz(2m /70cmz)  
Gain:6.0dB (144MHz) ,8.0dB(430MHz)  
Max. power rating:200W  
Impedance:50ohm s  
VSWR:Less than 1.5:1  
Length:2.5m  
Radial length:approx.52cm  
Weight:1.2kg  
Rated wind velocity: 50m/sec.  
Mast diameter accepted:30mm to 62mm  
Type:2 x 5/8wave(144MHz),4 x 5/8wave(430MHz),FRP outershell



## Radio Accessories & Data Modems

9 Carnation Street,  
Gallo Manor,  
Rep. of South Africa,  
Tel: +27 11 802-2976  
Fax: 086-615-3597  
Email: radioacc@telkomsa.net  
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## ADVERT



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Solar Panels, 10w @ **R298.00** each,  
120W switch-mode inverters @ **R290.00** each,  
12v energy saving lamps @ **R49.00** each,

Contact: - Shaun Rudling (ZR5S) on 082-676 1488 or  
[shaun@pmbnet.co.za](mailto:shaun@pmbnet.co.za)

## Bulletin Readers

15th June	Bert	ZS5MQ
22nd June	Wessel	ZS5BLY
29th June	Mickey	ZS5QB
6th July	Robin	ZS6MRS
13th July	Bert	ZS5MQ
20th July	[ Reserved for our new chairman]	

*(There has been a slight change in the pattern due to the absence of Mike, ZS5BVG and the pending changes to the committee.)*

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## On the Giggle-Hertz bands

*It seems that the guys in the court rooms have almost as much fun as those manning computer call centers. This is what they sometimes have to listen to.*

1. You say the stairs went down to the basement?  
*Yes.*  
And these stairs, did they go up also?
2. Can you describe the individual?  
*He was about medium height and had a beard.*  
Was this a male, or a female?

\*\*\*\*\*

## They said it

Now is no time to think of what you do not have.  
Think of what you can do with what there is.

Ernest Hemmingway

If you propose to speak, always ask yourself -  
is it true, is it necessary, is it kind?

Gautama Buddha

You can't solve a problem? Well, get down and investigate  
the present facts and its past history.

Mao Tse-Tung

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## NEXT MEETING

The next meeting of the Club will take place on Saturday, 21st June, 2008 at the usual venue starting at 13:00. Committee meeting will start at 12:00. This is the annual Walter Reid constructors competition and our normal stay-away members are invited to come and see what has been brewing on the construction scene during the past year. (weeks?).

# MIDLANDS AMATEUR RADIO CLUB

## NOTICE OF ANNUAL GENERAL MEETING

Notice is hereby given that, in terms of Rule 10.2 of the Constitution of the Midlands Amateur Radio Club, an Annual General Meeting of the club will be convened at the Conference Center, Natal Carbineers, Geere Street Pietermaritzburg, on Saturday, 19 July 2008 commencing at 13:00 CAT.

### AGENDA

1. Welcome. Declaration of quorum and proxies.
2. Minutes of the previous Annual General Meeting.
3. Matters arising therefrom.
4. Chairman's report.
5. Adoption of Chairman's report.
6. Treasurer's report.
7. Adoption of Treasurer's report and audited accounts.
8. Election of Committee.
9. Election of Chairman.
10. Appointment of Auditor.
11. Any other business [subject to prior notification of the subject thereof to the secretary.]  
[ *Rule 10.4.10* ]
12. The annual awards and prize giving.

Any member who is not able to personally attend the AGM is entitled to appoint any paid-up member of the club who is entitled to vote, to attend the AGM and vote on his/her behalf. Any vote so cast shall be binding as if cast by the member. The provisions of Rule 6.5 shall apply to any person selected as a proxy holder.

PROXY FORM \_ ANNUAL GENERAL MEETING \_ 19 JULY 2008

MAIL TO: P.O.Box 1076, HILTON, 3245

OR

Hand in to the Secretary at the AGM before the start of the meeting.

SURNAME and INITIALS: ..... (Please print)

CALL SIGN: .....

I appoint the following person to hold my proxy and to vote on all matters on my behalf:

Name and Call sign of Appointee: .....

SIGNATURE of MEMBER: ..... DATE: ...../...../.....