



SHACKNEWS

HIGHVELD AMATEUR RADIO CLUB

Member of the SARL

APRIL 2010

COMMUNICATION IS THE NAME OF THE GAME

Meeting The meeting took the form of feedback from the Hobbytech exhibition and a general round table discussion. Frank, ZS6MER, read out a letter received from Howard Ware, ZS6ZS, the Assistant Director ND-DMSCV who stated (part only) “ *I can only congratulate the members of the Highveld Amateur Radio Club and Hamnet. It would seem to me that between the two groups, you put on a ‘hell’ of a show. I would like to think that this is the first of many combined efforts to play ‘radio radio’ live and thus showing the average Joe, what is it all about*”.

Michael from RoBo Science will give us a demo on simple robots. /see: www.skippyrobot.co.za

SSC Meeting The next meeting is to be held at the home Rex & Ingrid on Sunday 20 June 2010. This will be a bring and braai. Fires will be ready for 13:00

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Frank TMV took this pictures at Hobbytech



Finding due North in JHB

This info was sent to Frank ZS6MER from Dennis Wells ZS1AU. (Editors note:- Text unedited)

Hi Frank ZS6MER >>>>THIS ONLY WORKS A FEW DAYS EITHER SIDE OF 22 DECEMBER OR 21 JUNE OF EVERY YEAR<<<<<

Well Frank it is so simple & so accurate that once you have the position of true SOUTH where the shadow of the tower is pointing (this in the Southern Hemisphere) just make a mark or put a peg in the ground for future reference. THIS IS SOUTH, FROM THE VERTICAL POLE or TOWER !!! You will notice that the shadow is short in Summer & long in Winter, but they still point SOUTH. !!! The higher the pole or tower the longer the shadow too. !!

All you have to do is remember the date & the time & you have to be there, providing the SUN is shining. !!!

As JHB is on approximately 28 degrees WEST & we take our time from 30degrees WEST, the SUN travels at 4 minutes per degree.

Therefore at NOON the SUN will be over the 30 degree W (approximate to Durban)

In 8 minutes time the SUN will be overhead in JHB., & the SHADOW cast, will be due SOUTH exactly.

You will be surprised how fast the shadow moves so you have to keep your wits about you. If you miss it for some reason you have a few days (2 days either side of the date.) to try again.

If you want to be perfectly spot on as you were in the Trig survey then remember to deduct the degrees of JHB from 30 degrees & multiply it by 4 minutes per degree.

The answer will be those minutes past NOON.

In Cape Town I take 18 1/2 degrees West, for Durbanville & subtract it from 30 degrees, giving me 11 1/2 degrees times 4 minutes per degree = 46 minutes

That is why the SUN is over head in Durbanville at 14 minutes to 1PM or 12,46 pm.

Now remember that our direction control boxes have the meter needle pointing NORTH, in the middle at 1/2 scale, so that you turn your beam from SOUTH on the left hand side of the scale through NORTH to the right hand side of the scale, to SOUTH again. !!! In the Northern Hemisphere the meter plate is turned around & you will see that SOUTH is in the top middle. !!!

It has been as accurate as I need it considering the rotary beam has a fairly broad front beam so you will hit any spot on the planet when using a Great Circle Map centred on you QTH.

If unclear I'm sure that Frank Mer will be able to assist-Ed.

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Here are some facts about the1500s:

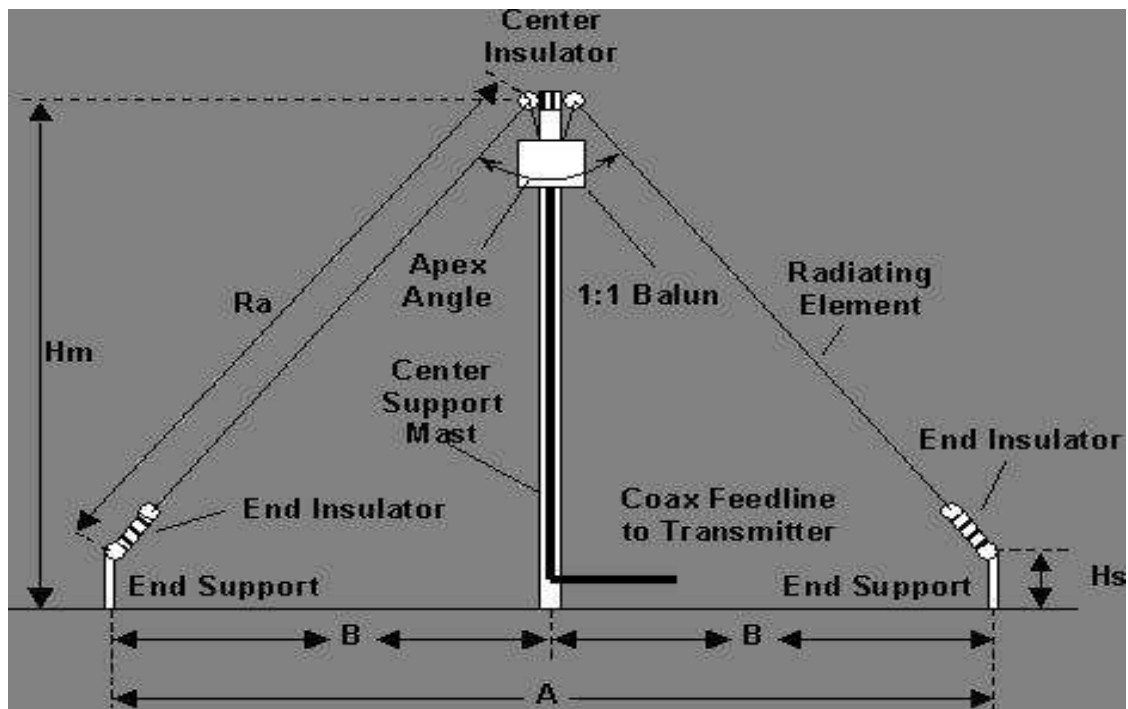
These are interesting...

Most people got married in June because they took their yearly bath in May, and still smelled pretty good by June. However, they were starting to smell, so brides carried a bouquet of flowers to hide the body odour. Hence the custom today of carrying a bouquet when getting married.

Baths consisted of a big tub filled with hot water. The man of the house had the privilege of the nice clean water, then all the other sons and men, then the women and finally the children Last of all the babies. By then the water was so dirty you could actually lose someone in it. Hence the saying, "Don't throw the baby out with the bath water."

Houses had thatched roofs-thick straw-piled high, with no wood underneath. It was the only place for animals to get warm, so all the cats and other small animals (mice, bugs) lived in the roof. When it rained it became slippery and sometimes the animals would slip and off the roof. Hence the saying "It's raining cats and dogs."

The Inverted V revisited



As you can see from the diagram above, this antenna gets its name from the shape. It's really just a dipole with the centre raised on a mast and the endpoints near ground. By raising the centre point, the horizontal space requirement is reduced and only one tall support is required. Although not the same as a dipole at the recommended height of 1/2 wavelength above ground, it is still very effective when space is a premium.

Another characteristic is that there is a shortening of the radiator element by 3 to 5 percent. This will cause an antenna, that was initially meant for another configuration, to require some pruning once installed.

Yet another characteristic is the radiation pattern. A standard dipole generates a horizontal radiation pattern in the shape of a figure 8, with maximum radiation broadside to the antenna. The Inverted-Vee tends to be more omni-directional and radiates equally in all directions.

For best results with this type of antenna, the Apex Angle should be kept between 70 and 110 Degrees. Below 70 Degrees the radiators start to become parallel to each other and signal canceling will start to occur. Above 110 Degrees the antenna starts looking like a standard dipole, minimizing any of the feed impedance and shortening effects. The optimum Apex Angle is 90 Degrees.

Using a Center Frequency of 7.1 MHz for the Dipole, yields a length of 10.07 M. Reducing this by 4.0 %, to account for the Inverted Vee configuration, we have a length of 9.668 M.

Radiating Element..... = 9.644 M
 End Insulator..... = 0.203 M
 Radiating Arm..... RA = 9.847 M
 Apex Angle (calculated) = 101.4 Degrees
 Horizontal Space..... A = 15.24 M
 Mast Height..... = 6.237 M

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Commandment 1.

Marriages are made in heaven. But so again, are thunder and lightning.

Commandment 2.

If you want your wife to listen and pay strict attention to every word you say, talk in your sleep.

Commandment 3.

Marriage is grand -- and divorce is at least 100 grand!

Checking traps

Hy-Gain traps (TH7/TH3 style) are pre-tuned at the factory. To check them, first visually inspect them for broken or missing trap-caps. These can allow water to enter the trap and detune it. Replacements are available from the factory. Also, look for breaks or cracks in the outer aluminum tubing where it is bent to connect to the smaller inner tubing. Also check the screw used to make this connection. Older (before 1985) traps used plated screws that may be rusty. Check this connection with an ohm-meter and replace the screw if necessary. Check inside the trap for insect and spider nests (especially if stored on the ground). Clean nests out by using a high-pressure air hose. DO NOT take the trap apart! If all connections and caps are good, then the trap may be checked with a grid-dip meter for the proper resonant frequency. **10 meter** traps are resonant approx. **27.6 MHz**, **15 meter** traps are resonant approx. **20.6 MHz**. Couple the grid dip coil to the outer end of the trap to obtain the resonance.

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Commandment 4.

Married life is very frustrating. In the first year of marriage, the man speaks and the woman listens. In the second year, the woman speaks and the man listens.

In the third year, they both speak and the neighbours listen.

Commandment 5.

When a man opens the door of his car for his wife, you can be sure of one thing:
Either the car is new or the wife is.

Commandment 6.

Marriage is when a man and woman become as one; The trouble starts when they try to decide which one.

CLUB INFORMATION

Postal address PO Box 19937 Sunward Park 1470

Website <http://www.qsl.net/zs6hvb/>

e-mail zs6hvb@gmail.com

Repeater 145.1875 MHz input - 145.7875 MHz output

Linked to 70 cm - 438.850 Mhz (Sunday bulletins)

Bulletins Sunday morning - 145.7875 MHz & 7062 KHz @ 08h45.
Relay - 80M - 3662KHz

Monthly meeting venue

Germiston Methodist Church
Coffee Bar
Lady Duncan Rd
Germiston

3rd Saturday of the month at 14:30

Committee

Chairman	Frank van Wensveen	ZS6TMV	082-294-2648
Vice Chairman	Frank Mercier	ZS6MER	011-845-1146
Secretary/Treasurer	Berridge Emmett	ZS6BFL	011-893-1291
Assistant Secretary	Marianne Treyvellan	ZR6JMT	084-403-3355
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Club bank details

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Branch Code 201209 - Sunward Park