

# HIGHVELD AMATEUR RADIO CLUB SHACKNEWS

PO Box 19937 Sunward Park 1470

**MAY 2007** 

Website

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http://www.qsl.net/zs6ssc/

Sunday morning BULLETINS - 145.7875 MHz & 7062 KHz @ ±08h45.

## COMMUNICATION IS THE NAME OF THE GAME

**Meeting** At the meeting held on 5<sup>th</sup> May various types of baluns were looked at and discussed. One type of air cored coaxial balun was discussed in depth and can be found at the following web address <a href="http://www.xs4all.nl/~pa0fri/Ant/Balun/balun.htm">http://www.xs4all.nl/~pa0fri/Ant/Balun/balun.htm</a>. The text is in Dutch but is easy enough to follow, as there are plenty of pictures and drawings. Thanks to Ton ZS6ANA and Frank ZS6TMV for their presentation on the above.

At the next meeting, 2nd June 2007, there will be a representative from Sentech's interference section who will give a talk and answer questions.

<u>New</u> The website manager (webmaster) Yvonne, ZR6TBL, has set up a SWOPSHOP link on the club's web page. Just fill in the form and your swop will be posted on the club web page.

**SSC Meeting** The May meeting was held at the QTH of Berridge and Sandra. Frank ZS6MER brought along his SNAKE antenna, which was connected to an HF rig set up in the garden where all the men adjourned. Band conditions were not good that afternoon probably due to most people watching the two rugby matches hi. See <a href="https://www.qsl.net/gm6men/index.htm">www.qsl.net/gm6men/index.htm</a> for more info on this type of antenna. Thanks to Sylvia, sister of ZS6MER, Yvonne ZS6WV and Sandra for all the eats. I don't think anyone had supper that evening, as there was plenty to eat.

The next meeting, 9<sup>th</sup> June 2007, will be held at the home of Errol and Betty.

#### ---oooOOooo---

After a hardy rainstorm filled all the potholes in the streets and alleys, a young mother watched her two little boys playing in the puddle through her kitchen window.

The older of the two, a five-year-old lad, grabbed his sibling by the back of his head and shoved his face into the water hole.

As the boy recovered and stood laughing and dripping, the mother runs to the yard in a panic. "Why on earth did you do that to your little brother?!" she asks as she shook the older boy in anger.

"We were just playing 'church' mommy," he said. And I was just baptizing him. ....in the name of the Father, the Son and in...the hole-he-goes."

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Hi Berridge.

At our visit to you I spoke about that AM transmitter I re-built just a few years ago. This is it for what it is worth.

Came across the picture. The valve at the top of the rack was a very popular one used 50 or more years ago!!

The anode glows bright orange. The modulator is near the bottom, two triode valves (those little white spots on the picture are the anode connectors). gives about 100 serious watts of audio power Hi.

73 Garnett.



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## Interesting websites

http://www.headcorn.org/echolink/intro.pdf

http://www.echolink.org/el/logins.asp

http://www.dxzone.com/cgi-bin/dir/jumps2.cgiID=14329

WWW.tonywakefield.com.au

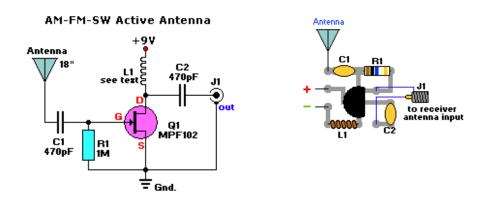
Thanks to ZS6BXU for these

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## http://www.hamuniverse.com/balun.html

#### Thanks to ZS6KED for this one

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## Active Antenna for AM/FM/SW:

This simple little circuit can be used for AM, FM, and Shortwave (SW). On the shortwave band this active antenna is comparable to a 20 to 30 foot wire antenna. It is further more designed to be used on receivers that use untuned wire antennas, such as inexpensive units and car radios.

#### **Parts List:**

R1 = 1M

C1 = 470pF

C2 = 470pF

L1 = see text

Q1 = MPF102

L1 can be selected for the application. A 470uH coil works on lower frequencies and lie in AM, for shortwave try a 20uH coil. A 9-volt alkaline battery can power this unit. If a power supply is used, bypass the power supply with a 0.04uF capacitor to prevent noise pickup. The antenna used on this circuit is a standard 18-inch telescoping type, but a thick piece of copper, bus bar, or piano wire will also work fine.

The heart of this circuit is Q1, a JFET-N-Channel, UHF/VHF amplifier in a TO-92 case.

### **High Voltage Capacitors and Inductors for Antennas**

(Submitted by Frank ZS6MER)

## High Voltage Capacitors & Inductors for Antennas

(By Marco Eleuteri KOVSV)

During antenna construction or design we may need to use high voltage, anti-inductive caps. These are virtually impossible to find in electronic shops or the surplus market. Solve this problem by making caps from short pieces of coax cable. The capacitance between the conductor and screen braiding will depend on the type of coax used. Here are the more common cables:

RG8 = 0.95pf cm RG11 = 0.70pf cm

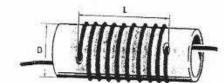
RG56 = 0.93pf cm RG213 = 1.00pf cm

So if we need a cap of 15pf, we can use a piece of RG213 15cm long.



But if the cap we require is higher, for example 50pf, we can't use a piece 50cm long. But we can use 5 short pieces of 10cm connected in parallel - as with normal capacitor addition.

## uH/turns on a coil



During antenna design it is useful to have some tabulation for micro Henry values.

The table given here gives values for a coil of 35mm diameter.

TURNS	LENGTH	uH	TURNS	LENGTH	uH
4	12cm	0.5	19	55cm	6.0
6	18	1.0	20	58	6.5
7	20	1.5	22	62	7.0
8	25	2.0	24	65	7.5
8 9	38	3.0	26	68	8.0
10	38	3.5	25	70	8.5
12	40	4.0	26	70	9.0
14	40	4.5	26	76	9.5
16	45	5.0	27	80	10
16	50	5.5	29	80	10.5
			30	85	11.0

eNATIS = eish Not Available Today I'm Sorry

## 73 Berridge ZS6BFL

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