



ZS6HVB

Affiliated to the  
SARL

# SHACKNEWS

## HIGHVELD AMATEUR RADIO CLUB

**April - June 2015**

Published every 3 months

We're on



### **COMMUNICATION IS THE NAME OF THE GAME**

The two formal meetings, April and May, were informative and interesting.

The social do to be held on June 20 will be taking place at Rex's QTH. This event will also form part of Rex's 80<sup>th</sup> birthday. He says all are invited. There will braai fires available for a **Bring & Braai** . Fires ready for 13:30

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#### **LITTLE JOHNNY STRIKES AGAIN**

A grade school teacher asked her students to use the word "fascinate" in a sentence. Molly put up her hand and said, "My family went to my granddad's farm, and we all saw his pet sheep it was fascinating."

The teacher said, "That was good, but I wanted you to use the word "fascinate, not fascinating".

Sally raised her hand. She said, "My family went to see Rock City and I was fascinated."

The teacher said, "Well, that was good Sally, but I wanted you to use the word "fascinate. not fascinated"

Little Johnny raised his hand. The teacher hesitated because she had been burned by Little Johnny before.

She finally decided there was no way he could damage the word "fascinate", so she called on him.

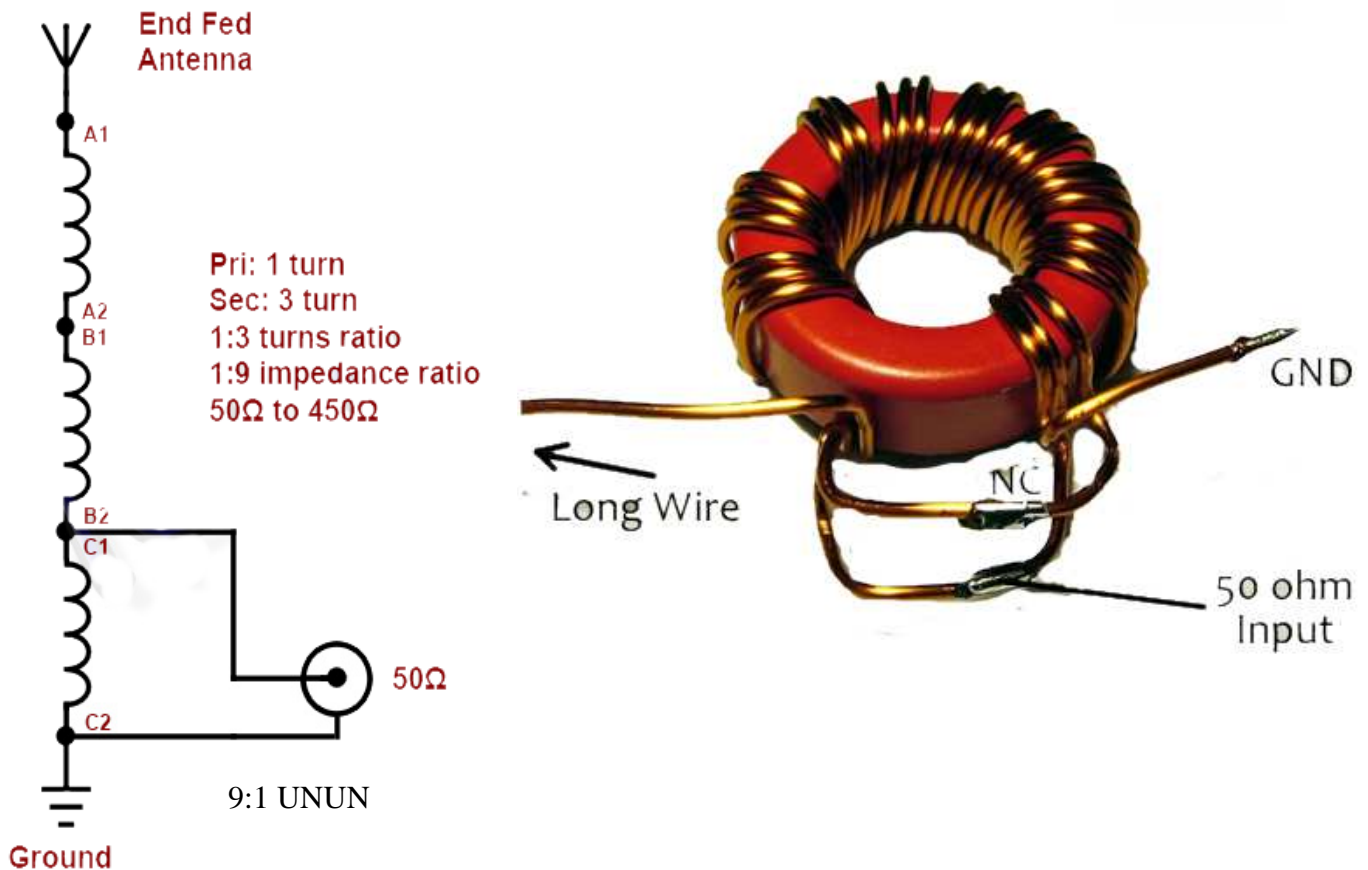
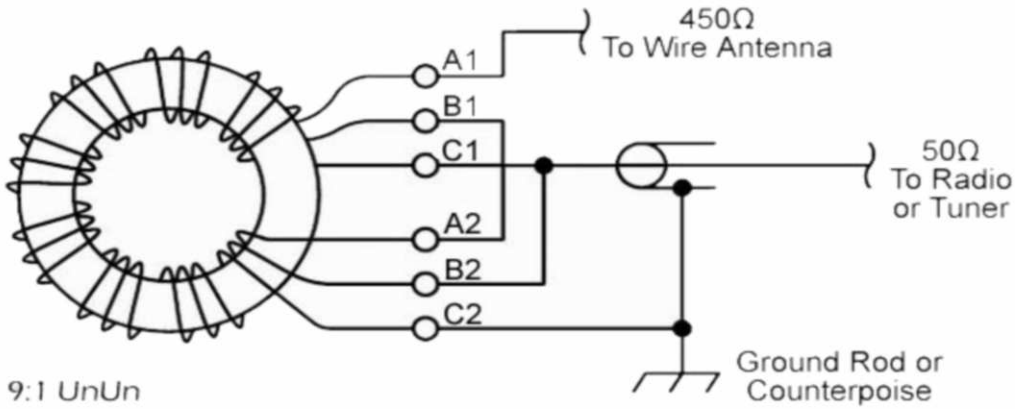
Johnny said, "My aunt Gina has a sweater with ten buttons, but her boobs are so big she can only fasten eight.

The teacher sat down and cried.

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## A 9:1 BALUN

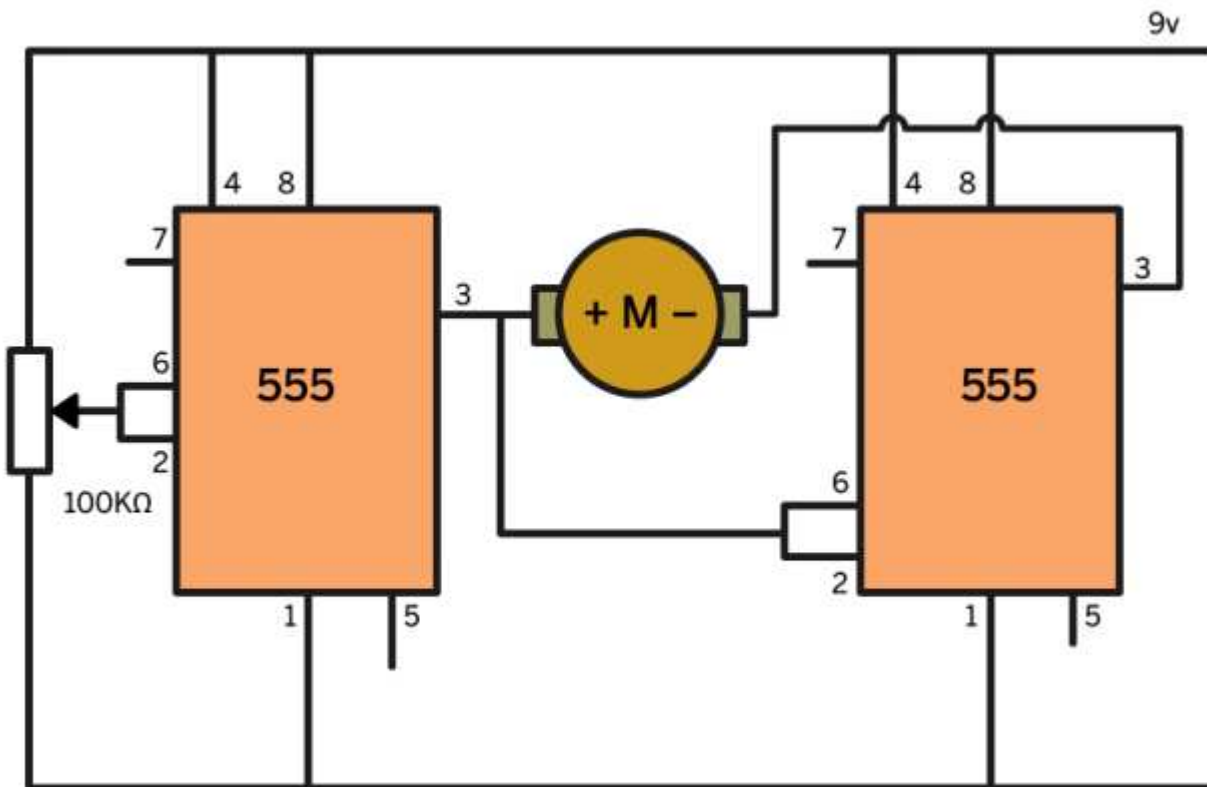
These are sometimes known as a *Magnetic Longwire Balun*. It's really an impedance transformer (9:1) to feed a high impedance, end fed (unbalanced) random wire which is likely to be a few hundred ohms, and transform it into something closer to a 50Ω (unbalanced) coaxial input, hence UnUn. It can however also be used as a balun by not grounding the other half of the balanced output. The toroid is a T130-2 Iron Powder core, with 3 x 9 turns of 18SWG enameled copper wire



## Engineering Fact

An opinion without 3.14 is an onion. I'm sure you will understand.

## H-bridge motor driver



This is a clever idea: using two 555 timers, you can create a simple H-bridge motor driver for controlling DC motors. An H-bridge is the basis of many robotic drive systems, as it lets you easily control the direction of a motor. Twisting the potentiometer will turn the DC motor one direction and then twisting it the other way will turn the motor in the other direction.

The circuit works by getting the output to source and then sinking the current. 555 timers can do this with up to 200ma, more than enough to drive a small DC motor. The two 555 timers work in an opposite configuration: when one sources, the other sinks, and vice versa.

This particular circuit has a very small component count too - just two 555 timers, a potentiometer, and hook-up wire. Once completed, hook up 5v to the power rails and have fun.



### HOW DO YOU DECIDE WHO TO MARRY? (written by kids)

- (1) You got to find somebody who likes the same stuff. Like, if you like sports, she should like it that you like sports, and she should keep the chips and dip coming.  
- Alan, age 10
- (2) No person really decides before they grow up who they're going to marry. God decides it all way before, and you get to find out later who you're stuck with.  
- Kristen, age 10
- (3) Twenty-three is the best age because you know the person FOREVER by then.  
- Camille, age 10
- (4) No age is good to get married at. You got to be a fool to get married.  
- Freddie, age 6 (very wise for his age)



## Club Information

**Postal address** PO Box 19937 Sunward Park 1470

**Website** <http://www.zs6hvb.za.net>

**Back Issues of Shacknews available on the club website**

**e-mail** [zs6hvb@zs6hvb.za.net](mailto:zs6hvb@zs6hvb.za.net)

**Repeater** 145.1875 MHz input - 145.7875 MHz output

**Bulletins** Sunday morning - 145.7875 MHz & 7062 KHz @ 08h45.

### Monthly meeting venue

Germiston Methodist Church  
Room at back of the offices  
Lady Duncan Rd  
Germiston

*3rd Saturday of the month at 14:30*

### Committee

Chairman	Vacant		
Secretary/Treasurer	Berridge Emmett	ZS6BFL	011-893-1291
Shacknews Editor	Berridge Emmett	ZS6BFL	011-893-1291
Shacknews Printing	Harry Lautenbach	ZS6LT	011-888-5362