



SHACKNEWS

HIGHVELD AMATEUR RADIO CLUB

OCTOBER 2011

COMMUNICATION IS THE NAME OF THE GAME

Meeting Frank, ZS6TMV, gave a talk on the home brewing of beer. He has done a lot of research on the matter which made the presentation very interesting. He also brought along three samples to taste. Next meeting will be held on Saturday 19 November. Please don't forget to pay your subs.

ZS6SSC Social Club There was no meeting this month.

---oooOOOooo---

The word UP

Lovers of the English language might enjoy this. It is yet another example of why people learning English have trouble with the language. Learning the nuances of English makes it a difficult language. (But then, that's probably true of many languages)

There is a two-letter word in English that perhaps has more meanings than any other two-letter word, and that word is 'UP'. It is listed in the dictionary as being used as an [adv], [prep], [adj], [n] or [v].

It's easy to understand UP, meaning toward the sky or at the top of the list, but when we awaken in the morning, why do we wake UP?

At a meeting, why does a topic come UP? Why do we speak UP, and why are the officers UP for election and why is it UP to the secretary to write UP a report? We call UP our friends and we use it to brighten UP a room, polish UP the silver, we warm UP the leftovers and clean UP the kitchen. We lock UP the house and some guys fix UP the old car.

At other times the little word has a real special meaning. People stir UP trouble, line UP for tickets, work UP an appetite, and think UP excuses.

To be dressed is one thing but to be dressed UP is special.

And this up is confusing: A drain must be opened UP because it is stopped UP.

We open UP a store in the morning but we close it UP at night. We seem to be pretty mixed UP about UP!

To be knowledgeable about the proper uses of UP, look the word UP in the dictionary. In a desk-sized dictionary, it takes UP almost 1/4 of the page and can add UP to about thirty definitions

If you are UP to it, you might try building UP a list of the many ways UP is used. It will take UP a lot of your time, but if you don't give UP, you may wind UP with a hundred or more.

When it threatens to rain, we say it is clouding UP. When the sun comes out we say it is clearing UP. When it rains, it wets UP the earth. When it does not rain for awhile, things dry UP.

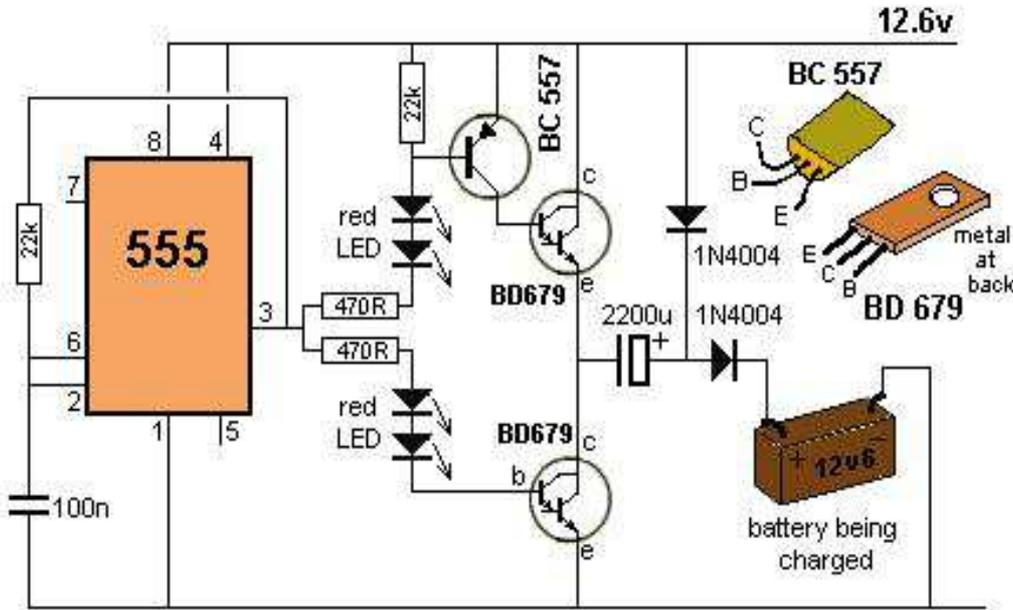
One could go on & on, but I'll wrap it UP, for nowmy time is UP, so time to shut UP!

Oh....one more thing:

What is the first thing you do in the morning & the last thing you do at night?

U P

12v DC to 12v DC BATTERY CHARGER



You cannot charge a 12v battery from a 12v battery. The battery being charged creates a "floating charge" or "floating voltage" that is higher than the charging voltage and the charging stops.

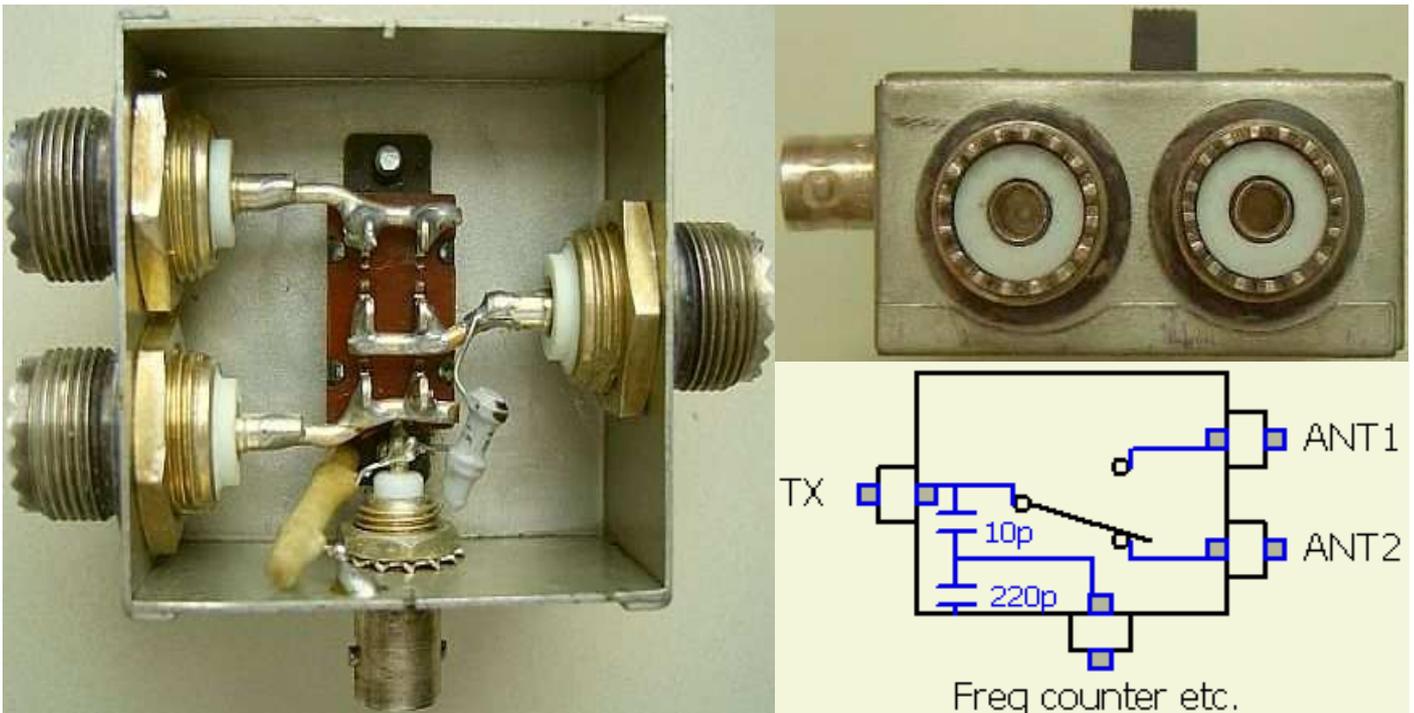
The following circuit produces a voltage higher than 12v via a CHARGE PUMP arrangement in which the energy in an electrolytic is fed to a battery to charge it.

The circuit produces about 900mA "charge current" and the diodes and transistors must be fitted with heat sinks. The LEDs are designed to prevent the two output transistors turning ON at the same time. The lower output transistor does not start to turn on until the voltage is above 5v and the top transistor does not turn on until the voltage drops 4v from the positive rail. This means both transistors will be turned on ONLY when the voltage passes a mid-point-gap of 4v. In this circuit, this time is very short and the transition is so fast that no current (short-circuit current) flows via the two output transistors.

The electrolytic charges to about 10v via the lower transistor and top diode. The top BD679 then pulls the negative of the 2200u electrolytic towards the 12v6 rail and the positive is higher than 12v6 by a theoretical 10v, (about 9v in our case) however we need the ENERGY IN THE ELECTROLYTIC and in our circuit it is capable of delivering a current flow of about 900mA. This energy is passed to the battery via the lower diode. Most batteries should not be charged faster than the "14-hour-rate." This basically means a flat battery will be charged in 14 hours. To do this, divide the AHr capacity by 14 to get the charge-rate. For example, a 17AHr battery should be charged at 1.2A or less. For lower-capacity batteries, the 2200u can be reduced to 1,000u.

Charging is about 80% efficient. In other words, delivering 120% of the AHr capacity of a battery is needed to fully charge it.

A Coax Switch



The figure above shows a proven inexpensive home-made antenna selection switch. If you question the use of a cheap slide switch and SO239 coax sockets, read on.

Measurements in a physics lab showed there to be practically no reflection on HF and even on 70 cm the SWR was below 1.3 : 1! That is explained as follows:

- 1- The contacts in the slide switch have larger contact surfaces than many a bought coaxial switch.
- 2- The wiring and switch contacts, between the top and bottom of the metal case, act as the centre conductor of a coax of near 50 Ω .

It is a standard box measuring 54 x 50 x 26 mm (l x w x h) and the wiring between the switch and the coax sockets is done in 2 mm silver plated wire.

POWER HANDLING CAPABILITY

If the switching is done with power off, the switch can stand 800 W.

Do Lipton employees take coffee breaks?

What hair colour do they put on the driver's licenses of bald men?

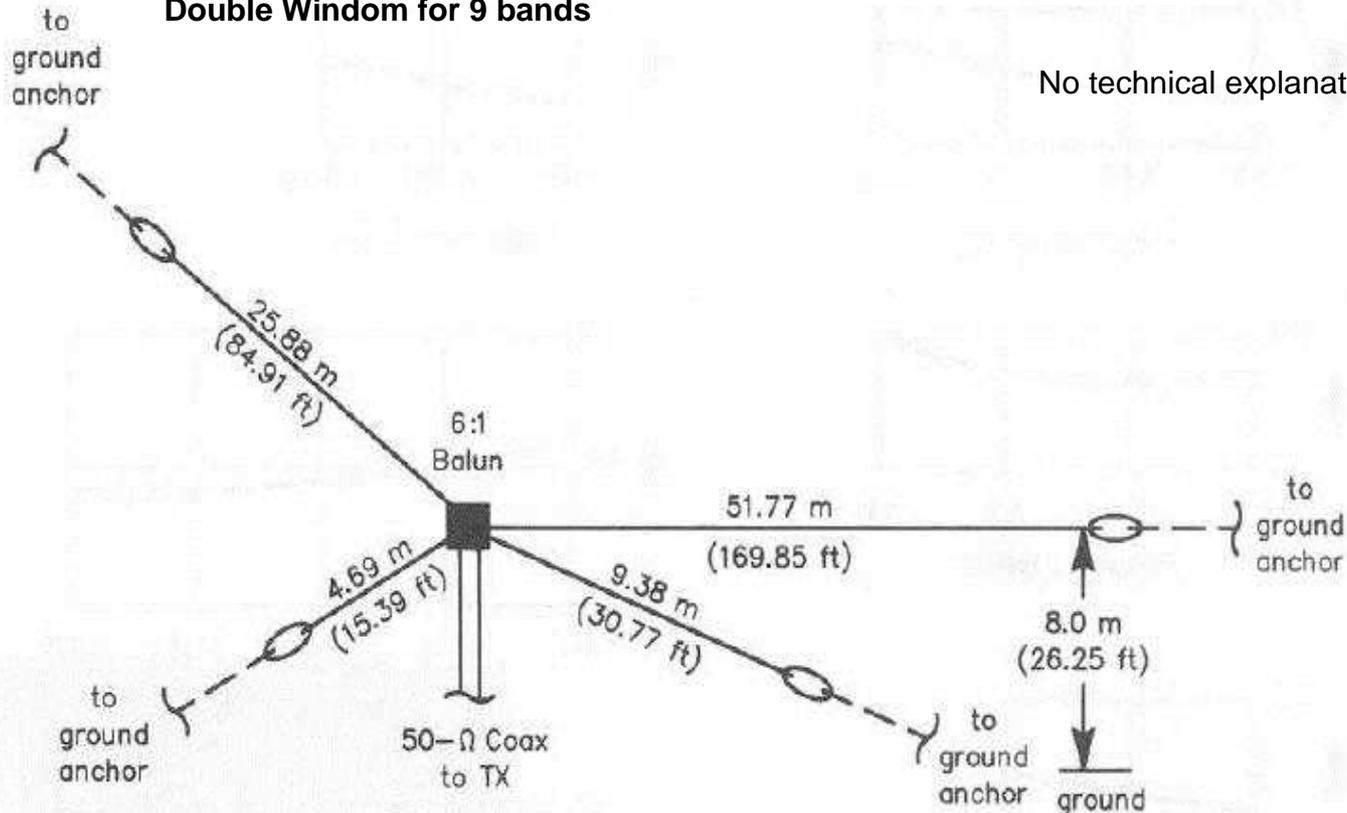
I was thinking that women should put pictures of missing husbands on beer cans.

How much deeper would oceans be if sponges didn't live there?

If it's true that we are here to help others, then what exactly are the OTHERS here for?

Double Windom for 9 bands

No technical explanation



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

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
Room at back of the offices
Lady Duncan Rd
Germiston

3rd Saturday of the month at 14:30

Committee

Chairman	Ton van Dijk	ZS6ANA	011-432-5494
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Club bank details

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Branch Code 201209 - Sunward Park