



# SHACKNEWS

## HIGHVELD AMATEUR RADIO CLUB

### January 2014

We're on 

### COMMUNICATION IS THE NAME OF THE GAME

The club will start the monthly meetings as from the 18<sup>th</sup> January. The time and venue remains unchanged.

A calendar of the event dates which include the social gatherings (meetings at various members homes) is on the last page.

We will need to decide the way forward for this year.

Licence renewals. I trust that you all sent in your applications before the end of December 2013.

It was decided to apply for a **five** year licence for both the club call sign licence as well as the repeater licence.

Now we wait and see.

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### **This is the ideal definition of true justice!**

This is the best lawyer story of the year, decade, and probably the century!

A Charlotte, NC, lawyer purchased a box of very rare and expensive cigars, then insured them against fire among other things.

Within a month having smoked his entire stockpile of these great cigars and without yet having made even his first premium payment on the policy, the lawyer stated the cigars were lost "in a series of small fires."

The insurance company refused to pay, citing the obvious reason: the man had consumed the cigars in the normal fashion. The lawyer sued, and won!

In delivering the ruling, the judge agreed with the insurance company that the claim was frivolous. The Judge stated, nevertheless, that the lawyer held a policy from the company in which it had warranted that the cigars were insurable and also guaranteed that it would insure them against fire, without defining what is considered to be unacceptable fire, and was obligated to pay the claim. Rather than endure lengthy and costly appeal process, the insurance company accepted the ruling and paid \$15,000 to the lawyer for his loss of the rare cigars lost in the "fires."

### **NOW FOR THE BEST PART**

After the lawyer cashed the cheque the insurance company had him arrested on 24 counts of ARSON! With his own insurance claim and testimony from the previous case being used against him, the lawyer was convicted of intentionally burning his insured property and was sentenced to 24 months in jail and a \$24,000 fine.

## The Adjustable Voltage Regulator

Many amateurs have stopped by their local electronic supplier store and have noticed the famous LM317T adjustable voltage regulator. But, did you know that all voltage regulators are adjustable? Yes, any IC voltage regulator can be adjusted to a higher voltage than its fixed voltage by just adding a couple of resistors.

As an example, lets consider using the popular 7805 (5 volt) voltage regulator as a 12 volt regulator. In figure 1, lets assume 470 for R1 which means that a constant current of 10.6 mA will be seen between terminals 2 and 3. This constant current plus a regulator standby current of about 2.5mA will flow through R2 to ground regardless of its value. Because of this constant 13.1 mA, R2 can now be set to a value which will give us a constant 7 volts across this resistor. A resistor value of 533 ohms or 510 (standard value) will give us the necessary 7 volts. With 5 volts across R1 and 7 volts across R2, a total regulated value of about 12 volts will appear across terminal 2 and ground. If a variable resistor is used for R2, then the output voltage can be easily fine tuned to any value greater than 5 volts. The regulator standby current will vary slightly in the 7805 but 2.5mA will yield good results in the calculations. If an exact voltage (within .3 volts) is needed then R2 must be a variable resistor.

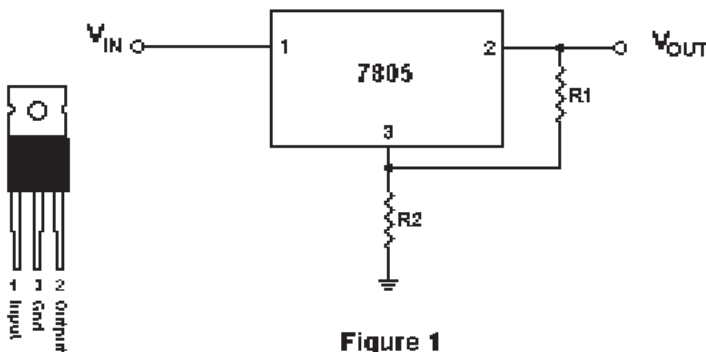


Figure 1

### Common Resistor Combinations for the 7805

Vout (Approx.)	R1	R2
6 Volts	470	100
8 Volts	470	220
9 Volts	470	330
12 Volts	470	510

To make any fixed regulator adjustable, use the following formula:

$$V_{out} = V_{fixed} + R_2(V_{fixed}/R_1 + I_{standby})$$

$V_{out}$  = Desired output voltage

$V_{fixed}$  = Fixed voltage of IC regulator (5 volts for 7805 or 1.25 volts for LM317T)

$R_1$  = Assume any value from about 470 to 1K for best results

$I_{standby}$  = Standby current of regulator (use 2.5mA for 7805 or zero for LM317T)

Common Resistor Combinations for the 7805 regulator:

Incidentally, the famous LM317T adjustable regulator is really nothing more than a fixed regulator with an minimum output voltage of 1.25 volts. Amateurs seldom need voltages below 5 volts so the 7805 regulator is a good choice and it even costs a little bit less than the LM317T.



1. Two antennas met on a roof, fell in love and got married. The ceremony wasn't much, but the reception was excellent.
2. A jumper cable walks into a bar. The bartender says, "I'll serve you, but don't start anything."
3. Two peanuts walk into a bar, and one was a salted.
4. A dyslexic man walks into a bra.
5. A man walks into a bar with a slab of asphalt under his arm and says: "A beer please, and one for the road."
6. Two cannibals are eating a clown. One says to the other: "Does this taste funny to you?"
7. "Doc, I can't stop singing 'The Green, Green Grass of Home.'"  
"That sounds like Tom Jones Syndrome."  
"Is it common?"  
"Well, It's Not Unusual."
8. Two cows are standing next to each other in a field. Daisy says to Dolly, "I was artificially inseminated this morning."  
"I don't believe you," says Dolly.  
"It's true, no bull!" exclaims Daisy.

### **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.  
Relay - 80M - 3662Khz (Winter) 30M - 10.132Mhz (Sum)

**Committee**

#### **Monthly meeting venue**

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

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

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

#### **Club bank details**

First National Bank - Current Account 62116557309. Branch Code for EFT 250655  
Branch Code 201209 - Sunward Park

# 2014

HVB meetings

## January 2014

Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## February 2014

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

HVB Social

## March 2014

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## April 2014

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

## May 2014

Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## June 2014

Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

## July 2014

Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

## August 2014

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

## September 2014

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

## October 2014

Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

## November 2014

Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## December 2014

Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			