



# HIGHVELD AMATEUR RADIO CLUB

## SHACKNEWS

PO Box 19937 Sunward Park 1470      **JULY 2007**

**Website**    <http://www.qsl.net/zs6hvb/>    **e-mail**    [zs6hvbinfo@zs6ro.co.za](mailto:zs6hvbinfo@zs6ro.co.za)  
<http://www.qsl.net/zs6ssc/>

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

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

**Meeting** OM Frank, ZS6TMV, gave a talk on the Magnetic Loop Antenna with a demo unit. This was most interesting and with the unit connected to a FT100 xcvr one was able to see and hear the effectiveness of this type of antenna. Thank you Frank. The id plenty of information with building plans available on the Internet. Try Google and see what you can find. Also thanks to Jimmy, ZS6OX, who cleared out his garage and brought along lots of freebees. The August meeting is to held at Wits Rifles Command HQ, Sigma Rd. Germiston on the 4<sup>th</sup>. Map on the last page.

**SSC Meeting** This was certainly a good get together held at the home of Doug and Merle. According to the register there were 23 present. A big thanks to Doug and Merle. The August get-together will be held at the home of Rex on SUNDAY 12<sup>th</sup>. Bring and Braai from 12:00 onwards.

---oooOOOooo---

Ya gotta love this principal

According to a news report, a certain private school in Cork was recently faced with a unique problem. A number of 12-year-old girls were beginning to use lipstick and would put it on in the bathroom. That was fine, but after they put on their lipstick they would press their lips to the mirror leaving dozens of little lip prints. Every night the maintenance man would remove them and the next day the girls would put them back. Finally the principal decided that something had to be done. She called all the girls to the bathroom and met them there with the maintenance man. She explained that all these lip prints were causing a major problem for the custodian who had to clean the mirrors every night. To demonstrate how difficult it had been to clean the mirrors, she asked the maintenance man to show the girls how much effort was required. He took out a long-handled squeegee, dipped it in the toilet, and cleaned the mirror with it.

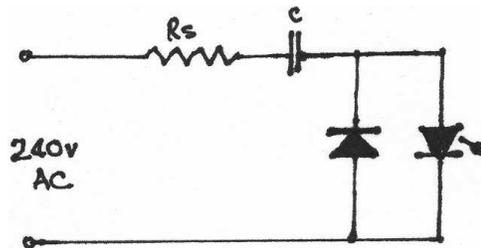
Since then, there have been no lip prints on the mirror.

Chairman:	Doug Wetton	ZS6BXU	011-680-4906
Vice Chairman	Frank van Wensveen	ZS6TMV	011-942-3657
Secretary / Treasurer:	Berridge Emmett	ZS6BFL	011-893-1291
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There are teachers.... and then there are educators.

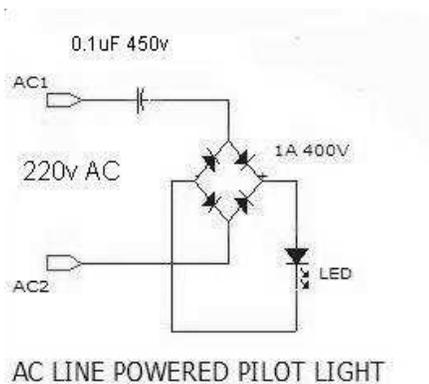
### Something technical

Requested – Operating a LED of the mains (1)



To operate a LED directly from 240v ac. A capacitor is used as a voltage-dropping element. A 1N4148 diode or similar across the LED provides the rectification required. As the voltage drop across the LED is negligible compared with the supply, capacitor current is almost exactly equal to mains voltage divided by capacitive reactance  $X_c$ . At 50Hz, 0.47  $\mu$ F will result in a LED current of about 16mA. Resistor  $R_s$  is to limit turn-on transients. A value of 270 ohms should be adequate.

Version 2



Good starting points for magnetic loop experiments and construction.

PA0CQR magnetic loop antenna page (Google)

"Miniature Magnetic Loops" by David Posthuma WD8PUO (PDF?) (Google: Elecraft [www.elecraft.com](http://www.elecraft.com))

"Practical experiments with magnetic loop antenna's" by David Reid PA3HBB/G0BZF <http://ourworld.compuserve.com/homepages/drpc/magloop2.htm>

"Magnetic loop antenna's" [http://www.qsl.net/mnqrp/Loop/Mag\\_Loops.htm](http://www.qsl.net/mnqrp/Loop/Mag_Loops.htm)

"Control through coax" by HB9ABX <http://home.datacomm.ch/hb9abx/loopsteu-e.htm>

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## • *New Apparatus*

### Megart Globe Plotter

To use a rotatable beam to its fullest advantage, it's necessary to point the antenna in the direction of the location to be worked. There are many ways to find the correct beam heading, a fact that is evidenced by the more than seven pages devoted to the subject in the *ARRL Antenna Book*. A direction-finding method not covered in this book, and one of the simplest we have seen, is used by the Megart Globe Plotter shown in the photograph.

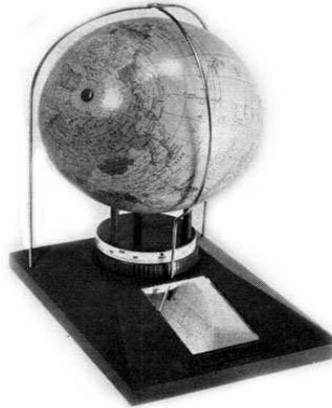
Referring to the photo, an unattached 6-inch diameter globe sits on top of three pillars which project upward from a movable circular platform that is marked off in degrees from zero to 360. A 6 × 8½-inch plastic base supports this platform and a three-legged metal structure on the outside of the globe. A 2 × 3-inch mirror is glued to the top of the base near the front of the unit.

To set up the Globe Plotter for the user's location, the degree dial (circular platform) is turned until the north bearing (360 degrees) is positioned exactly behind the metal leg (dubbed the "beam path indicator" by the manufacturer) attached to the center of the base. Then while the dial is held in place, the globe is moved about until the QTH of the user can be seen on the globe through a hole in a circular metal piece that joins the three metal legs together at the top of the device. At the same time a gray button at the north pole on the globe is lined up exactly behind the beam path indicator. Gluing the globe in this position to the three posts that extend upward from the dial completes the alignment of the Globe Plotter.

To use the device, it is only necessary to turn the dial until the location to be worked is directly behind the beam position indicator. (Areas on the

bottom of the globe can be found easily by looking at the small mirror on the base.) The number of degrees indicated on the dial at this time is the correct bearing for the antenna.

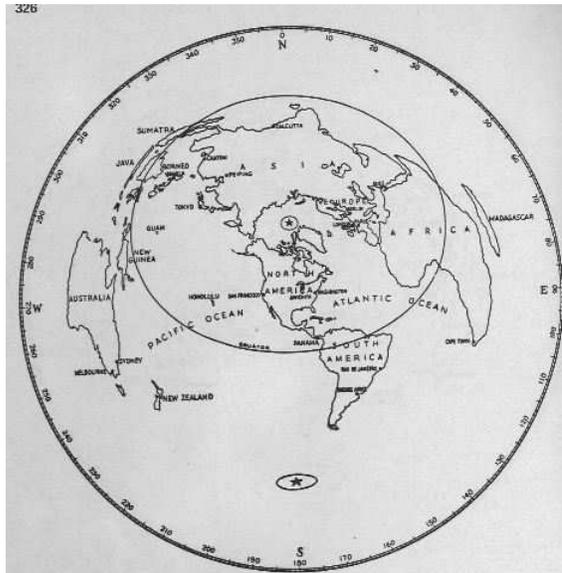
The Globe Plotter is available from the Megart Company, Box 2097, Des Moines, Iowa 50310, for \$17.95. — *WYDS*



September 1969

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Replaced by :-

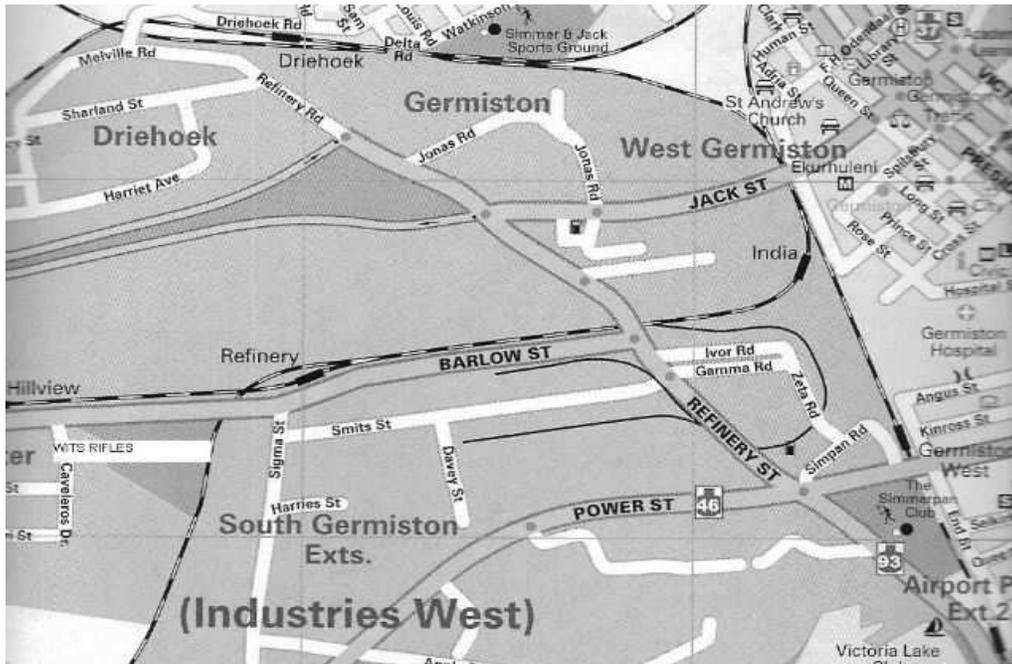


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Map to the next meeting



One for the record.



Berridge ZS6BFL

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