

Zululand Amateur Radio Club News

The newsletter for the discerning Ham

April 2017

ZARC Committee

Chairman: Warren Snyders ZS5WOZ

Vice Chairman: Gerald Scrooby ZS5GS

Treasurer: Willie Axford ZS5WI

Secretary: Dawn Snyders ZS5ME

Ham Net: Mike Kramer ZS5MB

Editor: Jo Snyders ZS5PO

Member: Vacant

Webmaster: Chantel Pelser

Club Repeaters

Ntumeni 145.675 MHz

Empangeni 145.700

Club Packet Digipeater/Mail-drop & APRS Digipeater

Ntumeni 144.625 (ZS5ZLB Mail, ZS5ZLB-2 Digipeat, ZS5ZLB-7 KA-Node) PBBS: ZS5AND

Club Nets

There is also a club discussion net on Tuesday evenings at 18:30 on the 145.675 repeater
ZS5PO & ZS6AE Have A Sched On Thursdays Between 17:30 and 18:45
On 7.175 Or 3.645 Depending on propagation
ALL are more than welcome to join us for a "rag chew"

SARL News

08h30 - Sundays - 145.650, 7.066 MHz

NEXT ZARC MEETING

DATE: 16th July 2017 (**Sunday**) **This will also be the AGM**

TIME: Meeting at ± 12:00, followed by the lunch at ± 12:30

QTH: Eagle's Nest Eshowe (**Directions will be circulated later**)

E-Mail: dawnjo@telkomsa.net (Secretary)

Club Web site: <http://zs5zlb.org.za/>

Editor, Q.R.L.



Greetings & Salutations fellow members, I trust that this news letter finds you all in good health. The date of the next club meeting will be on the **16th of July 2017**. The venue will be **Eagles Nest Eshowe**. The meeting will take place at **± 12:00**, and the lunch at around **12:30**. Please make a note in your day books and diaries. The time for the meeting will be at **12:00**, giving everybody a chance to get there after Sunday morning commitments.

**Have you bought insurance to continue enjoying your hobby yet? SARL membership IS that insurance!!!
Is your hobby worth R1.26 per day to you? YES?! Then join the SARL, it's the RIGHT thing to do!!!**

The radical opinions, and rantings of the Editor, are not necessarily the opinions of, or supported by, the ZARC Committee, or it's members.

Wots Potting In The ZARC

Birthday Greetings Go To:



April: Warren, ZS5WOZ on the 13th. Jan, ZS5G on the 15th. Brian, ZS6AE on the 26th.

May: Tinkie, SW of ZS5WI on the 13th. J-J, Son of Warren ZS5WOZ on the 23rd.

June: Sakkie, ZS5ID on the 09th. Gerald, ZS5GS on the 15th.

July: Dawn, ZS5ME on the 12th. John, ZS5J on the 20th. Rod, ZL1RK on the 31st.

Many happy returns to all of you, and may you be spared for many more happy, healthy, years.

(If your birthday wishes do not appear here, it is because you have not informed me of your birth date).

Get Well Soon



I have not heard of anybody who has been "doctor bothering" of late.

Club Happenings

Next Club Meeting

This will be the AGM. Taking place on **Sunday 16th of July** at The Eagle's Nest B/B & Restaurant in Eshowe. It has been decided to try a new venue for a change. I will be sending out a copy of their menu as soon as I can get one. Directions to the venue will be forwarded closer to the date.

On The Grapevine

Brian, ZS6AE, who had plans to resettle from Jo-Burg to the Cape, has had a change of heart, and will be staying in his present QTH for the moment.

Thys, ZS5ZS, who used to live in Matubatuba, has moved, and is now living in Piet Retief. This move was instigated by a promotion in rank, and the only vacancy for that rank being available in Piet Retief.

We all wish you well for the future.

Competitions



On the 23rd of April, Gerald ZS5GS, took part in the ZS4 40Mtr Sprint. He represented the ZARC using the ZS5ZLB call sign. He managed to make 38 contacts in the allocated 1Hour. Very well done Gerald, and a big thank you from all the members & committee.

Packet

On the packet Mail-Drop scene. The TNC is beaoning out. The coax on this set-up still has to be renewed, and the antenna moved to the east side of the tower

APRS

People in the Richards Bay/Empangeni area can get into the PMB I-Gate on 144.800.

For those of you Zululanders who have Internet, go and look on the www.aprs.fi web site, and type your call sign into the slot at the top of the column on the right, and press search, and see if your station appears on the map.

Repeaters

145.675: This repeater was replaced after the Xmas meeting & lunch in 2015, and the old Storno is working well.

145.700: This repeater is now a DEAD puppy, and needs to be recovered from this site. **STILL waiting for ESKOM to open up for us to get into this site.**

“SWAP SHOP”



If you have any items you want to get rid of, or if you are looking for something, Please let the Editor know and he will advertise it in the swap column for you.

1 X **Neutec SM-1645** 16 channel 2Mtr VHF radio for sale.
Service, user and reprogramming instruction manuals available.
Reason for selling: Surplus to requirements



If anyone has an Icom **OPC-581** or **OPC-587** separation cable for the **Icom IC 706** to swap or sell. They can contact me, **Willie ZS5WI**, via **078 351 9597**, or email me at zs5wi@telkomsa.net. Thank you.

Home Brewers Hoekie



A SUPER - GAIN ANTENNA PROJECT FOR 40 METERS

**Submitted by K5AXN, JERRY BARRY,
San Antonio, Tx**

Taken from original plans published 1969 in 73 Magazine

by

Ed Dusina, W4NVK, Melbourne, Fl

This project gives enough information to build a 40 meter Super- Gain antenna designed to help hams compete somewhat better with the foreign broadcast stations which practically take over the band in the evening and night time. It is based on the theory of super gain NVIS arrays, which reject QRM from low angles.

The final design....still under testing by many hams....is extremely simple, uncritical and offers large gain and QRM rejection. The propagation studies and design work was done at Dusina Enterprises in Melbourne, Florida. The antenna is described as having approximately 9 db forward gain and an average of 15db rejection against low angle QRM. The antenna is useful up to about 200 miles radial distance from the transmitter in the daytime and up to around 1,000 miles at night.

DESCRIPTION

The antenna consists of a single dipole antenna placed very close to the ground and above a reflecting "screen" so as to limit the radiation to 90 degrees + or - 35 degrees approximately. It is nothing more than a simple folded dipole made from 300 ohm TV type twin lead cut to the length of 63 feet 2 inches plus or minus 1 inch and is fed in the centre with RG58 coax or some other 50 ohm coaxial cable.

It is suspended tightly between 3 supports (non-conductive) exactly 7 feet + or - 3 inches. If metallic supports are used, it is suggested that nylon cord, about 3 - 4 feet on each side between ends and supports to reduce the effect of capacitance on the ends of the antenna.

On the ground directly below and parallel to the antenna, lay three reflecting wires of a non-critical length 65 to 80 feet long. One of these is laid directly below the dipole. The other two are spaced 6 feet from the centre or dipole portion of the arrangement and again parallel to the dipole.

The reflecting wires can be laid on top of the ground for slightly better efficiency and secured at ground level using nails bent into a U shape or any other method you desire.

Feed with about 100 feet RG58, 50 ohm coax.

Using the exact directions above should yield about 1.05 swr at 7.250mhz and increasing towards band edges. Some tuning may be required as with most any antenna projects for your favourite frequency.

Quote.W4NVK, "Due to the extreme simplicity of this antenna and to its significant improvement in communications of this particular band, plus its small size, I believe that if amateurs erect such an antenna and test it for themselves, they will be quick to see the value of it and by this means more use can be obtained from the 40 meter band in the daytime, since it not only greatly increases the signal strength of the stations communicating, but significantly reduces the QRM leaving the state and rejects any QRM coming in from outside the state."

THE USE OF THE REFLECTING SCREEN IS VERY IMPORTANT FOR THREE REASONS!

1. ANTENNA IMPEDANCE WILL BE 50 OHMS only when elements are cut as described with reflecting elements installed.
2. LESS THAN 50 PERCENT EFFICIENCY without reflectors.
3. VERY UNPREDICTABLE PATTERNS, GAIN, REJECTION AND OTHER FACTORS due to variations of ground conductivity at each amateur's location.

The performance of this antenna depends entirely on the reflectors!

DO NOT CHANGE SPACING.....MUST BE 7 FEET + or - 3 INCHES.

DO NOT TRY TO ADD A DIRECTOR!

YOU WILL LOSE RANGE.....10db IS A LOT ON 40 METERS!

I have a metal roof 12 feet away and power lines parallel about 30 feet away so you may need more length than I did.

Check SWR and tune for your frequency. You can scale this antenna for 160 meters or 75/80 meters but NVIS will not work above 40 meters.

The drawing below represents Jerry's installation.

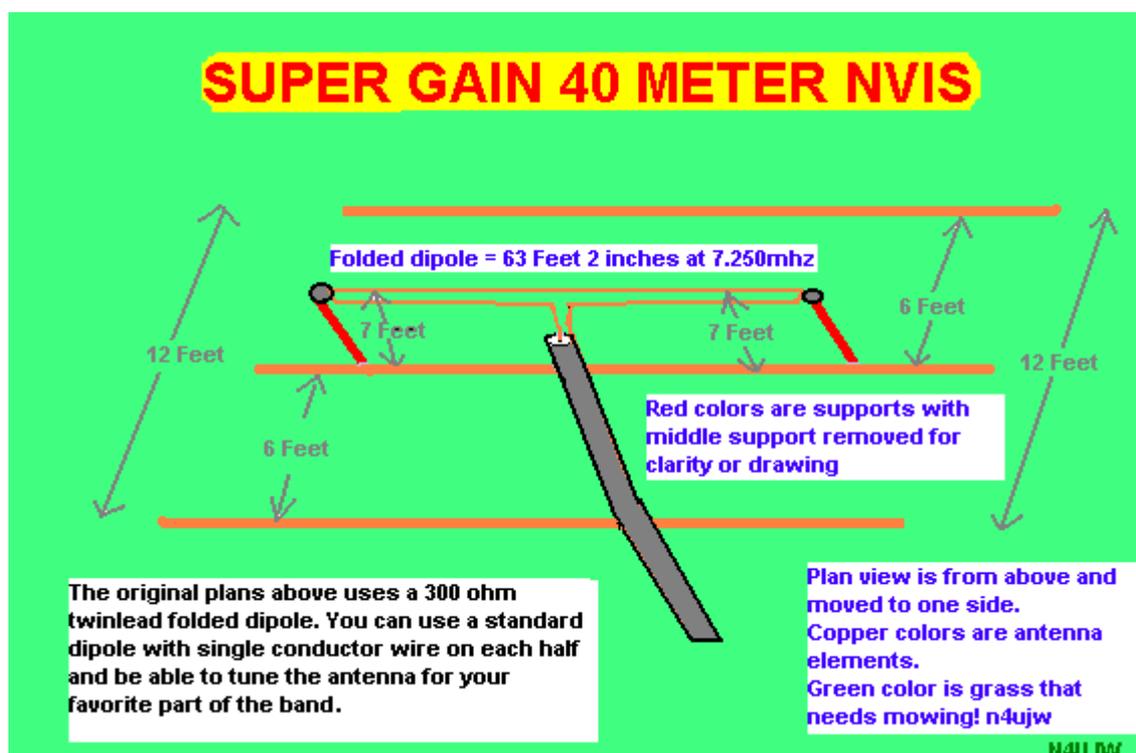
(He used a standard dipole instead of the folded dipole in his final installation).

He used 1 inch PVC for the supports and tied off at each end with rope to a tree and a fence with coax laying on the ground.

He used a plastic wire tie in the centre to attach the coax to the support. In his hand drawn picture sent to me via snail mail, he shows the coax going straight down the centre support and laying on the ground.

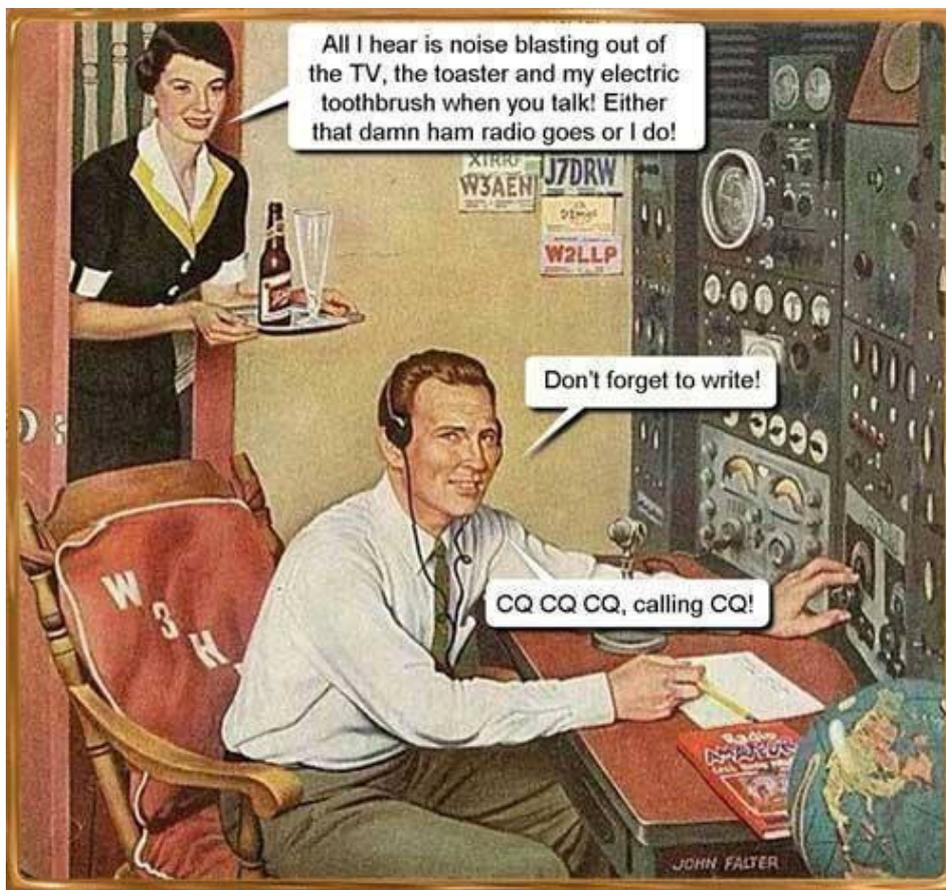
Using 29 feet 5 inches on each half of the standard wire dipole, he is tuned for 7.266mhz.

Here is the layout, of the antenna he uses below re-drawn from his letter.



As always, many thanks to Jerry, K5AXN, for sharing this project with the Ham community

On The Dry Side



If you would like to contribute to your Club newsletter, or to contact me for any reason, please use the address / Phone numbers below.

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