

Zululand Amateur Radio Club News

The newsletter for the discerning Ham

September 2018

ZARC Committee

Chairman: Warren Snyders ZS5WOZ

Vice Chairman: Gerald Scrooby ZS5GS

Treasurer: Willie Axford ZS5WI

Secretary: Dawn Snyders ZS5ME

Editor: Jo Snyders ZS5PO

Webmaster: Chantel Pelser

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Club Repeaters

Ntumeni 145.675 MHz

Empangeni 145.700 (Off-line.)

Nets

SARL News

08h30 - Sundays - 145.650, 7.066 MHz

NEXT ZARC MEETING

DATE: **11 November (Sunday)**

TIME: 11:00 (Meals may be ordered after the meeting)

QTH: Eagles Nest Eshowe 28°53'28.44"S - 31°28'23.66"E

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 get-together/meeting will be 11th November. Venue will be Eagles Nest in Eshowe 28°53'28.44"S - 31°28'23.66"E
Please make a note in your day books and diaries.

**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:



August: Anne ZS5FAB, on 2nd, Melissa daughter of ZS5WOZ, on 17th, Bridget daughter of ZS5ME & ZS5PO on 20th
September: Ian, Partner of Chris ZS6RI, on 12th, Chris ZS6IR, on 17th.
Oktober : Willie ZS5WI, on 2nd. Kiana, daughter of John ZS5J, 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



Dawn ZS5ME, is in ICU in Stanger I have not heard of anyone who has been "Doctor Bothering" of late.

Club Membership

The AGM took place during, July, and subs were due by the 1st of July. We normally give members 2 months grace to either pay their subs, OR, to contact the Treasurer to make arrangements regarding payments.
Below is an excerpt from the club constitution.

All members fees shall be due and payable at the beginning of each financial year, which shall be from 1 July to 30 June annually.

• A member shall be deemed to have resigned from the Club if, by 31st August, the subscription has not been paid, unless he/she has indicated a willingness to pay the full amount by a set date, as arranged with, and agreed upon, by the treasurer.

If you no longer receive your ZARC monthly news letter, or any other e-mails from ZARC, it can be assumed that you have not paid your subs, and the 2 months grace has expired, and you are no longer a member of the ZARC.
PLEASE contact our Treasurer at zs5wi@telkomsa.net to sort it out.

Club Happenings



We Congratulate **Dirk Raave** who is seen on the left and lives in Richards Bay, who is now the proud owner of the call-sign **ZS5DI**



The second is **Gerhard Vos**, who also lives in Richards Bay, and who still has to write the RAE

Welcome to both of you, and we wish you both a long and happy membership.

APRS

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

Repeaters

145.675: This repeater has a problem with the RX antenna, and the antenna needs to be replaced. As we do not have any more members who are fit & able to climb up the tower to do this job, it will have to stay like this until we can find a volunteer who can climb the tower.

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.

Home Brewers Hoekie

Due to the length of this project, it will be serialised over 5 news letters

Part № 1 of 5

Simple Radio PTT To Computer Interface Circuits

SSTV, Packet, PSK31, RTTY, CW, EchoLink, eQSO etc.

By Peter EI4JR / G4KQU

Digital communication modes represent one of the fastest growing areas of interest in amateur radio, with the past decade seeing many developments. Over the past few years data modes like SSTV, Packet and PSK31 have become popular.

In digital transmissions such as SSTV, Packet, PSK31 or even RTTY, the ability of your own computer and radio to send and receive various digital modes is a real plus.

An interface unit allows one to transmit and receive these modes without the expense of purchasing a separate TNC or DSP device. A regular sound card, as found in most of today's computers, can easily handle DSP functions. Conveniently, these interfaces are designed to operate without an external power supply.

There are various circuits to enable you to build your own interface. I have included here some simple designs that I have built, tested and which work very well considering their simplicity and economy. These circuits will also perform well if you intend to run an Internet gateway using eQSO or EchoLink software. Software for these modes is freely available via the Internet, especially on the links page of www.ei4jr.com !

Other PTT techniques make use the vox for PTT - but don't forget to disconnect it or the inevitable Microsoft beep or late night mp3 might create a surprise or two. It is best to avoid VOX switching but Many new PCs have no RS232 either so I think we are soon going to have to find another way to drive our radios.

Digital modes can have a long transmitter duty cycle .Try to keep your output power to 10 - 20 % of the max rated power. Disable all the rig compressors, DSP noise reduction etc.

Isolated Interface

Circuit 1 incorporates two 600-ohm audio transformers (T1&T2) and an RS232 powered optocoupler IC1. Preferably use an IC socket for IC1, for possible quick replacement!

The purpose of the transformers and an optocoupler is to isolate the transceiver from the computer, keeping the interference from the PC to a minimum. Ensure that the screening on the radio and the screening on the PC are not connected together.

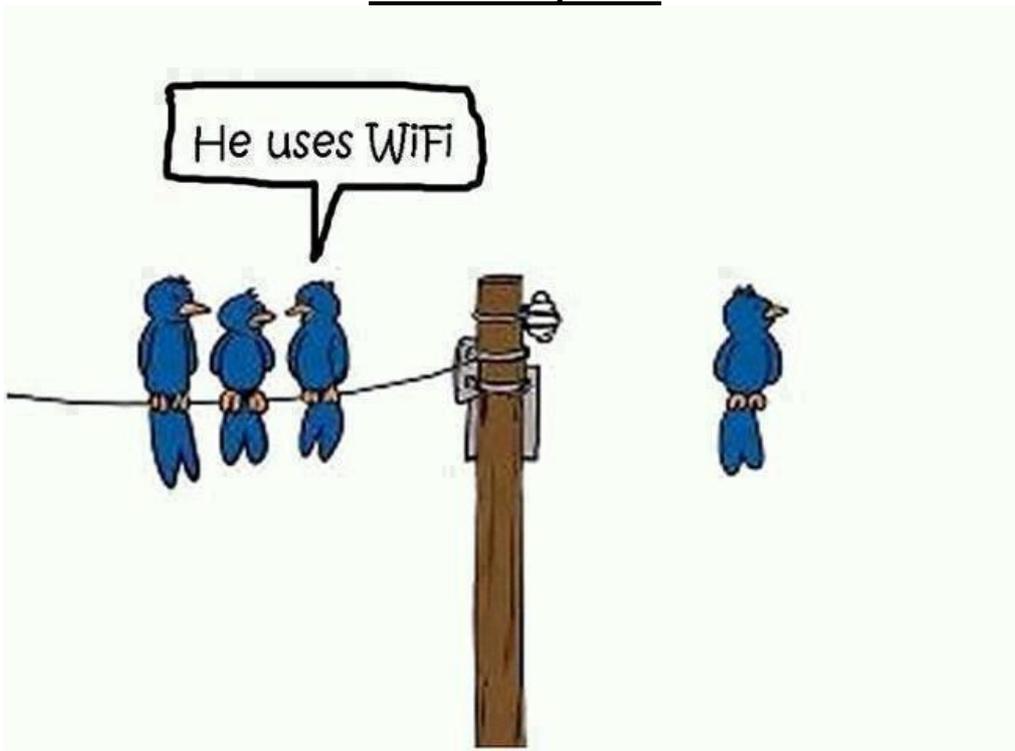
Stereo 3.5 mm plugs connect the line in and out on the computer soundcard. Use the tip and earth only as in this application the sleeve is not used.

- To control the radio PTT an isolated signal from the computers RS232 RTS line is used.
- If you have an available DB9 connector on your computer, use RTS, which is Pin 7 and ground, which is Pin 5.

- If you have a DB25 connector on your computer, use RTS, which is Pin 4 and ground, which is pin 7.
- VR1 is a 1K linear potentiometer used to control the amount of audio going to the mic and is adjusted for correct audio drive to the radio, usually converting line (0.5v) to mic (10mV) levels. The 1.2k resistor (from the Line Out) can be changed to a greater value if you are troubled by the pot always being at the bottom or top of the range or alternately by adjusting computers audio out slider till the correct level is achieved.
- Operationally, audio levels are adjusted by the computer level controls or are incorporated in the software you will be using.
- The LED (high sensitivity type) is used as an indicator when the interface is in the transmit mode.

End of Part № 1 of 5

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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