

# Zululand Amateur Radio Club News

The newsletter for the discerning Ham

October 2015

ZARC Committee

Chairman: Mike Kramer ZS5MB

Vice Chairman: Warren Snyders ZS5WOZ

Treasurer: Willie Axford ZS5WI

Secretary: Dawn Snyders ZS5ME

Ham Net: Mike Kramer ZS5MB

Editor: Jo Snyders ZS5PO

Member: Gerald Scrooby ZS5GS

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

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: 21<sup>st</sup> Feb 2016 (**Sunday**)

TIME: Meeting will take place ± 11:30, Before the Lunch at 12:00

QTH: **Adams Outpost Eshowe**

E-Mail: [dawnjo@telkomsa.net](mailto: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 **21<sup>st</sup> of February 2016**. The venue will be Adams Outpost. The meeting will take place at **± 11:30**, and the Club Christmas lunch at around **12:00**. Please make a note in your day books and diaries. The time for the meeting will be at **11:30**, 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:



**Oct:** Willie ZS5WI, on the 2<sup>nd</sup>. Mike ZS5MB, on the 6<sup>th</sup>. Kiana, daughter of ZS5J, on the 31<sup>st</sup>.  
**Dec:** Belinda, SW of ZS5WOZ, on the 17<sup>th</sup>.

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



Our Secretary, Dawn ZS5ME, was rushed to the ICU at Umhlanga hospital on the 14<sup>th</sup>, but is back home again, we wish her a speedy recovery.

## Club Happenings

### 80Mtr QSO Party

On Thursday 01<sup>st</sup> October, Dawn ZS5ME took part in the 80Mtr QSO Party, and despite very poor WX & propagation conditions, managed to make nine (9) contacts, which netted her 10<sup>th</sup> position in the Compo.

### ZARC Meeting

The last club meeting for 2015, took place on Sunday 18<sup>th</sup> October at Tattenham Resort. This was supposed to take place in the Lapa, but due the people who were supposed to vacate the Lapa at 10:00, only moved out at after 12:00, we decided to have our meeting in the "al fresco" bar. As can be seen below, it was much more convenient than the Lapa. Unfortunately the bar was not open on Sunday!!

In the photo on the left is Jan ZS5G, Gerald ZS5GS, Willie ZS5WI & Warren ZS5WOZ. In the next photo is, Jan ZS5G, Gerald, ZS5GS, Willie ZS5WI & Jo ZS5PO. The next photo depicts the best part of the meeting, and in the background you can see what Gerald looks like from the back 😊



At this meeting, a discussion took place regarding setting up a special event field station on Sunday 21<sup>st</sup> Feb 2016, at the Fort Museum in Eshowe, and combine this with the club's "Christmas Lunch", and the first 2016 club meeting.

\*\*\*\*\*

## Club Birthday & Web Site

Next year on **Friday 15<sup>th</sup> February 2016**, **OUR** club turns **21 years old**. We have started adding a Photo Album page on our web site, depicting a selection of photographs taken during various club functions eg. meetings, field stations, and other interesting occasions that have taken place during those 21 years. If any one has any photos that were taken by them at any of the club functions, and you think they would look good on the site, please send them along with names and call signs of the people in the photographs, and also the occasion and the date taken.

---

### Packet

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

### APRS

Your path to any stations in RSA, (or anywhere in the world via the I-Gate on 144.625) will be **ZS5ZLB-2, RELAY4-4**. The I-Gate should be available between the hours of about **09:00** and **22:00**, **WHEN I AM AT HOME**. 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](http://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, and the old Storno is working well.

**145.700:** This repeater is now a DEAD puppy, and needs LOTS of TLC. **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**  
Please contact Gerald, ZS5GS on: **071-143 5433**



**NB** This picture of the radio was found on the internet, and is NOT a picture taken of the actual radio that is for sale

Please contact me if you are looking for a **Hy-Gain TH-MK4** beam antenna, The price being asked is **R4500**, and this one is in very good condition. Brand new they go for around **R9500**.

---

## Home Brewers Hoekie



### **The First of Three Episodes**

### How to Solder

by noahw

This guide focuses on soldering for the beginner and explains how you can solder a variety of components using a few different techniques - from the classy to the downright caveman. Although soldering can seem daunting at first, once you give it a try you will see that in most applications it's quite simple to do.

**Please note: this instruction is written for beginners, and contains lots of very basic information.**



As with many skills, having the right tools for the job affects the quality of the work being done. When it comes to soldering you can end up using a lot of fancy tools, or just a few simple items you can pick up at the hardware store for a couple of bucks. I am going to use a couple of different soldering tools in this

**Instruction;** there are many ways to solder, and you should use what works for you.

At the very minimum you will need the solder and a heat source to melt it - preferably something small which can get to 360-427 °C. If you've got that, you're

ready to make a connection. That being said, there are a wide range of soldering tools and accessories that can be really helpful if you're going to be soldering frequently. I got together a solid supply of soldering tools by raiding the Squid Labs soldering station. Here is the complete list of what I used...



## 1. Soldering iron

Most people opt for using a soldering iron to solder. It's a great heat source that heats up and cools down quickly and can maintain a pretty constant temperature. Soldering irons can be purchased from a variety of places. I have picked up some at Radioshack - evil yes, but convenient, some from the hardware store, some from garage sales and a bunch more from retailers online. Low wattage (15-40 watt) soldering irons work best for soldering components on circuit boards while more powerful (60-140 watt) soldering irons work well joining thicker materials like braided speaker wire. If you use too powerful a soldering iron on a circuit board you might damage the components you are trying to join. I like to keep a low-wattage iron around for detail work, and a high-wattage iron that I can use when I am not too concerned about exposing the material I am working with to high temperatures. It's a real pain to solder thick wires without a powerful soldering iron.

The soldering iron in most of the pictures is made by Weller, and has a variable temperature control. This is the best of both worlds since you can set the heat exactly where you want it, but it's significantly more expensive than fixed-temperature irons. If you're just going to do some occasional soldering it isn't a must have by any means. Anyone interested in modding a soldering iron should check out [DIY Hot Air Soldering Iron](#) by [charper](#).

## 2. Solder

There are lots of kinds of solder available. They come in different thicknesses from around .02" to some really thick stuff you would only use on copper pipe with a butane torch. You use thin solder for detailed work like putting resistors onto circuit boards and thicker solder for joining larger materials like speaker wire. I use solder around .025" for most jobs. Most solder is made from a combination of tin and lead - it's about a 60% tin, 40% lead mix depending on what solder your using. [Recent international health codes](#) from Japan and the EU (California and New York have adopted similar policies as well) mandate that lead solder be phased out of certain commercial products and substituted with a lead-free alternative. The manufacturing deadline was this past July so we should be seeing the changes now. Even if you don't live in California or New York its still worth staying away from lead solder since lead has been known to cause all kinds of nasty health effects from birth defects to severe developmental and neurological damage. Plus it's pretty easy to find the lead-free stuff.

Some solder will contain a small amount of silver. This pushes the melting temperature up a bit, but the silver helps the solder to flow and makes a stronger joint. If you are worried about burning whatever your working with, try to stay away

from solder with silver in it, but it works very well if you're just joining wires or something that won't be easily damaged. The last thing to know about solder is that you want to use a solder that has a rosin core. The rosin acts as a flux when soldering and helps the connection - it's also the kind that's most readily available at the hardware store and from electronics suppliers.

### 3. Soldering iron tips

Soldering irons come with a tip, so you don't have to go out and get a special one, but it's important to know the differences between them and make sure you're using the right tip for the kind of soldering you're doing. Some small-wattage irons come with conical pointed tips for detail work, while most high-wattage irons come with a flatter screwdriver-style tip that works well on wires. You want your tip to be a little smaller than whatever you are soldering so you have good control of what you heat up and what you leave alone.

### 4. Soldering iron holder and cleaning sponge

It's nice to have a safe place to put the soldering iron down in between soldering. A soldering stand safely holds the iron and gives you a place to clean the tip. Some soldering irons come with their own holders. If yours doesn't have one, you can buy one or make one. [jaime9999](#) has a [Homemade nearly-free Soldering Iron Stand](#) that is pretty much identical to what you can buy. The stand isn't a necessity for learning how to solder, but it does help.

### 5. Tools to work with wires

I have a go-to stock of tools that I round up when working with wires or electrical components. They consist of wire cutters, a wire stripper, needle nose pliers, and an automatic wire stripper (courtesy of the Squid Labs soldering station.) The automatic wire stripper is really convenient if you're going to be stripping lots and lots of wire, but by no means necessary. I have stripped lots and lots of speaker wire using my teeth (not the best idea, I know I know.)

### 6. Clips to hold your work

Often called "third hands" or "helping hands," these little guys help a whole lot when soldering. You have to hold the soldering iron with one hand and the solder wire in the other, so it really helps to have something else to hold the components you're actually trying to join. You can use alligator clips, clamps, or even some tape to hold things in place if you need to. The third hand is generally a good investment if your going to be soldering regularly, and there are plenty of Instructions with ideas to modify them if you do happen to pick one up. Check out: [Make a 3 degree of freedom 'hand' to help with soldering / gluing work](#) and [make your 'helping hands' 100x more useful for soldering / gluing small parts](#) by [leevonk](#) to start.

If you would like to make a set of helping hands of your own there are already a number of good Instructions on that too. [Quick helper for surface-mount soldering](#)

by <http://www.instructables.com/member/bikeNomad/bikeNomad>, [QuickMods - Soldering Arms](#) by [Aeshir](#) and [Build a Pair of Helping Hands](#) by [john otto](#) should get things started.

### 7. Exhaust fan

**I do most of my soldering at a soldering station that is equipped with an exhaust fan. It's really not such a good idea to breathe in solder fumes, and soldering does produce fumes. Any kind of ventilation/fan you can rig up will help. Vent the fumes outside or use an indoor fan with a filter if you can't vent them outdoors. Here is a [Window-mounted solder fume extractor \(not just for RVs!\)](#) posted by [bikeNomad](#). Also check out [Dr. Solomon's low tech, but functional Solder Fume Extractor](#) if you're looking to build something that you can place right on your table.**

**If you're just doing a quick soldering job, the fumes won't kill you by any means. I have certainly done my fair share of soldering without a vent, but anyone doing repetitive soldering should definitely pick one up or make one.**

## To Be Continued



## 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.

Jo Snyders ZS5PO  
PO Box 98  
Mandini 4490

Telephone 032-456 2301

Mobile (Cell) 083-666 0709

Email [jodawn@telkomsa.net](mailto:jodawn@telkomsa.net)

