



A Member
of the
SARL



**Antique
Wireless Association
of Southern Africa**

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AWA Committee:

- * President—Don ZS5DR
- * Technical Advisor—Rad ZS6RAD
- * Net Controller—Willem ZS6ALL
- * Secretary/PRO—Andy ZS6ADY

#61

January 2011

Reflections:

So the hype and build up to another holiday season has almost passed us by. I'm sure there were many happy smiling faces as presents were unwrapped, "To dad, with love from Dad", and then there were many unhappy faces as another pair of socks were unwrapped and placed in the drawer with the rest of them.

Whichever way you did it this year, I hope it has been a pleasant and relaxing one.

Once again we stayed at home and kept ourselves busy with small projects around the house. Visits by the rest of the family and long slow days, which of course go by far too quickly. As the New Year approaches, we are already getting ourselves

geared up for the pressures of having to deliver whatever service it is that you provide. When we wipe the dust out of our eyes, it will be another year gone and all the hype of Happy Holidays again.

So the cycle continues and goes round and round, without too much change.

Let us hope this year will be a good one. May the bands open up and give us unbelievable communications, may the antenna's be cut to frequency never to change again. May the rigs blast away at full power never skipping a hertz or dropping a cycle. May the valves in your rig glow ever brighter. May the transistors transist and the resistors resist. May the capacitors cap and the diodes not die.

May your CW blink in the wink of an eye. May your voice never falter as you call out CQ and wait for an answer to come back to you. May it be a year packed with interest and many QSO's.

Hey, almost I got carried away here. Whatever it is that you do to enjoy the hobby, do it to your very best and we look forward to hearing many of you on frequency again during the year.

The AWA is looking forward to hearing so many more antique rigs on the air and we can only wish each and every one of you success with your restoration projects and good Dx.

Best 73

De Andy ZS6ADY

Wikipedia—The Resistor

Like every part, resistors can fail in normal use. Thermal and mechanical stress, humidity, etc., can play a part. Carbon composition resistors and metal film resistors typically fail as open circuits. Carbon-film resistors may decrease or increase in resistance. Carbon film and composition resistors can open if running close to their maximum dissipation. This is also possible but less likely with metal film and wirewound resistors. If not enclosed, wirewound resistors can corrode. The resistance of carbon composition resistors are prone to drift over time and are easily damaged by excessive heat in soldering (the binder evaporates). Variable resistors become electrically noisy as they wear.

All resistors can be destroyed, usually by going open-circuit, if the power dissipation rating (watts) of the resistor is exceeded. Resistors that are operated near their power dissipation rating may have shorter lifespans and resistance can vary dramatically from what is expected. Thus an ideal design uses resistors with power dissipation ratings 2x or more of what is required

CW Activity:

This year is going to kick off in high gear and the very first AWA activity will be the CW activity day which takes place in February. It is the first weekend of February and runs from midday on Saturday The 5th February to midday of Sunday the 6th.

I am sure conditions are going to be as good as we have experienced them in the latter part of this year, which could mean some interesting contacts. Bands to be used are 20, 40 and 80 meters.

From reading on the SARL forum, there seems to be a fair amount of CW activity taking place, so this could be the ideal time to brush up on your CW and get back into the swing of things.

Eddie ZS6BNE started a thread about a bit of CW every evening and he has had some good contacts, both Dx on the 40m band and locally.

Contacts with ZS1DDK and a few other

Western Cape stations have taken place, as well as with other division stations.

CW continues to be a popular mode of communication and all you have to do to realise this is go to the Dx bands and listen out there. You will hear CW from 40 wpm to 12 wpm and many many different call signs being used.

Om Pierre, now ZS6A, has proved one can still make magic with CW in SA by achieving a first WAGS on CW. Well done Pierre.

I think he must have had some sleepless nights trying to figure out how to get them all, but he has finally reached that goal.

The AWA CW net continues to plod along on Saturday afternoons at 14:00 SAST, with band conditions turning out to be fair to excellent at that time of day.

News from Barrie ZS6AJY is that the QRP group also still meet at 06:00 in the



Monarch KY1

mornings on 3579 and conditions still seem to be good then.

So there is plenty of CW activity to gain your interest. Choose an area where you would like to become active and get involved.

Best 73,

De ZS0AWA ... :-)

SSB Activity:

Band conditions are still quite favourable from the early mornings through to late afternoon/early evening. 80m still works well in the early part of the morning but tends to fade as D layer absorption takes place. This of course will now start to happen later and later as we head downhill towards the winter solstice and the days become shorter.

I don't know what this is going to mean to 40 m propagation which has been really good over the last few months. The band seems to open quite some time after fading on the 80m band, but once open, conditions are quite stable with good Q5 contacts taking place right across the country. Late afternoons/

early evenings seems to bring in the DX stations on 40m with plenty of different call signs being heard from around the globe.

I have heard Dave Z6AVM talk about his regular sked with New Zealand on 17m in the mornings and reports of good Q5 signals on 15 and 20m during the day.

I don't think band conditions are as good as what we have had in the past, but they are certainly nothing to complain about.

Overall, it would seem that SSB contacts are readily available if you take the time to work your favourite bands at the right times. Don't let it be said there is nobody out there

because of poor conditions. The bands are quite alive and the happy sounds of radio contacts taking place can be heard right across the spectrum.



Bletcheley Park AR88's

AM:

The 80m band has not been in such great shape because of the Highveld storms continuously stirring up the layers and causing much QRN. Because of this, the Wednesday night AM sessions have become almost impossible.

Don ZS5DR and myself have tried on several occasions to use AM on a Wednesday evening only to find the QRN running so high that we can hardly hear each other.

The Saturday morning nets have been workable and mostly on a quiet band. The only problem there being the D layer starts to fade before we can really get going with the early sunrise being presented.

Nevertheless, we have had good turn outs on

the Saturday morning net with at least 5 to 6 stations all wanting their share of a chance at doing an MF, which makes for an interesting start to the day.

The competition for the FR50B with people either reporting in on the AM net or sending a report about the AM net drew 26 entries and was won by Johan ZS6AF in Nelspruit. His number was drawn out of the hat by Rad on Saturday 18th December and Johan was duly notified.

We would like to express our thanks to Barrie ZS2H who did a fantastic job of refurbishing the FR50B. We really do appreciate the time and effort he put in to making this rig look new again.

So we will be back to normal in a week or two time and look forward to winter months getting closer and 80m improving as this happens. The days will get shorter and the possibilities of Wednesday evening AM sessions will get better. Now we need to find a new incentive for 2011.



Yaesu FR50B Rx

AWA Committee 2011

At an on air meeting on the 18th December 2010, a proposal was put forward to retain the present AWA committee for another year.

This proposal was seconded and approved by a majority vote over the air and was so accepted by the majority of those present on air.

So the committee is as follows:

President for 2011—Don ZS5DR



Technical Advisor—Rad ZS6RAD:



Net Controller—Willem ZS6ALL



Secretary/PRO —Andy ZS6ADY



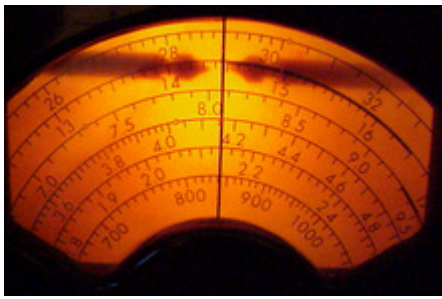
We trust they will serve the AWA well over the coming year.

Vintage Amateur Radio As Described on Wikipedia

Vintage amateur radio is a subset of the amateur radio hobby, considered a form of nostalgia much like antique car collecting, where enthusiasts collect, restore, preserve, build, and operate amateur radio equipment from bygone years, most notably those using vacuum tube technology.

Popular modes of operation include voice communications using amplitude modulation, and Morse code contact using continuous wave. Among enthusiasts, there is considerable interest in owning, restoring and operating vintage military and commercial radio equipment, much of it more than 40 years old. Some undertake to construct their own gear, known in ham slang as homebrewing, using vintage parts and designs. A number of amateur radio clubs and organizations sponsor contests, events, and swap meets that cater to this specialized aspect of the hobby.

Vintage radio enthusiasts contend that while modern, state-of-the-art, microprocessor based amateur radios are extremely good at what they are designed to do, they lack the aesthetic appeal and "soul" of amateur electronic gear from the vacuum tube era. Additionally, many find satisfaction in taking commercially-made amateur equipment from the 1930s-1970s (affectionately called boat anchors by US amateurs because of their large size and weight) and carefully restoring it back to health.



Hallicrafters SX-28 tuning dial

Enthusiasts feel that the simple, roomy electrical and mechanical designs of boat anchor radios are more easily worked on, modified, and tinkered with than their modern Japanese counterparts. In an age where fixing a transceiver is accomplished by boxing it up to send to the manufacturer for a custom VLSI chip replacement, devotees think of boat anchors as "real radio". According to these hobbyists, a hot soldering iron is almost a requirement for operating a vintage station. Other enthusiasts claim that boat anchors sound better than their silicon descendants, saying that the tube audio from vintage gear is "warmer" and more aesthetically pleasing than the audio produced by the typical modern transceiver. Some hobbyists see vintage radio operation as a valuable asset to help preserve the history and heritage of radio for future generations, and may assist in the restoration and operation of vintage radio equipment for historical exhibits, museums and museum ships.

Amplitude modulation (AM) was once the main voice mode in amateur radio before being superseded by Single-sideband modulation (SSB). But AM has recently become a nostalgic specialty interest on the shortwave ham bands. Vintage radio operation has drawn a wide range of amateur radio enthusiasts from rock star Joe Walsh, WB6ACU, to former Federal Communications Commission attorney Riley Hollingsworth, K4ZDH.

A majority of "AM'ers" stations consist of vintage transmitters and receivers housed in separate cabinets. Some operators have even obtained retired AM broadcast transmitters, donated or sold cheaply to hobbyists by radio stations with no further need for them. Others build their equipment from scratch (called home brewing) using combinations of modern and vintage-era parts. In the United States, shortwave HF frequencies (in MHz) on which amateur radio AM activity can be found include 1.885, 1.930, 1.985, 3.870-3.885, 7.285, 14.286, 21.425, and 29.010, and sometimes feature "special event" stations using unique call signs. In the United Kingdom, AM activity can be found almost every day on frequencies between 3.615 and 3.625 MHz.

Conversations (QSO's in ham slang) are typically configured as "roundtables" where several participants take turns developing and presenting their thoughts in a storytelling fashion. Often the conversation revolves around do-it-yourself experimentation, repairs, and restoration of vintage vacuum-tube equipment, which has been rising in value because of nostalgic demand. Interested newcomers are usually encouraged to switch their modern transceivers to AM mode, introduce themselves, and join the conversation.

Vintage operating activity is not limited to the AM mode. Many devotees use their "classic" amateur gear from vintage-era American manufacturers like Eico, EF Johnson, National, Heathkit, Hammarlund, Drake, Collins, WRL, Swan, Signal/One, Lafayette and Hallicrafters, to make radiotelegraphy (CW), SSB, FM and RTTY two-way contacts. Although 1930s through 1970s gear is considered "vintage", collectors may differ on the cutoff dates.



Atlas 215X solid state transceiver circa 1977

Some even sub-specialize in military radio collecting and undertake to restore and operate surplus communications equipment, much of it dating back to World War II, from the ubiquitous US Signal Corps SCR-300 and SCR-536 walkie talkies to exotic gear like the British Paraset, a small espionage transceiver supplied to Resistance forces in France, Belgium and the Netherlands.



Eddystone EC10 shortwave receiver circa 1967

There is considerable interest in vintage military and commercial radio equipment among EU amateur radio operators, especially gear from British manufacturers such as Marconi, Racal, Eddystone, Pye, and a variety of Russian, German, Canadian, British RAF and British Army equipment, such as the well known Wireless Set No. 19.

Glowbugs



Glowbug transmitter hand built by AI2Q

"Glowbugs" are a related aspect of vintage radio and harken back to the early days of amateur radio, when the majority of hams hand-crafted their own equipment. Smaller in size than "boat anchors", "glowbug" is a term used by US amateurs to describe a simple home-made tube-type radio set, reminiscent of the shortwave radio-building craze of the 1920s and 30s. Classic glowbug designs from that era include the famous twin triode Doerle regenerative receiver and single-tube Hartley, TNT and TPTG transmitters. "Glow" refers to the glow of the vacuum tubes and "bug" to the gear's relatively diminutive size. Generally, any small, home-built tube-type transmitter or receiver may be referred to as a glowbug. The majority of glowbug transmitters are designed to be used in the CW radiotelegraphy mode.

As late as the 1960s, glowbugs were part of many beginner ham stations, and the ARRL Radio Amateur Handbook for those years exhibited a number of such simple, tube-based designs. Today, glowbugs are enjoying a resurgence of interest among QRP enthusiasts and others with a penchant for constructing their own equipment. A growing number of hams are "getting back to their roots" by assembling glowbugs on steel chassis, tin cakepans, and wooden boards, and putting them on the air. Amateur radio glowbug enthusiasts can often be heard communicating on the shortwave bands via CW using Morse code. A popular fre-

quency to hear glowbug contacts is 3.579.5 MHz, chosen because crystals for this frequency can be salvaged from discarded color TV sets, along with other transmitter components.

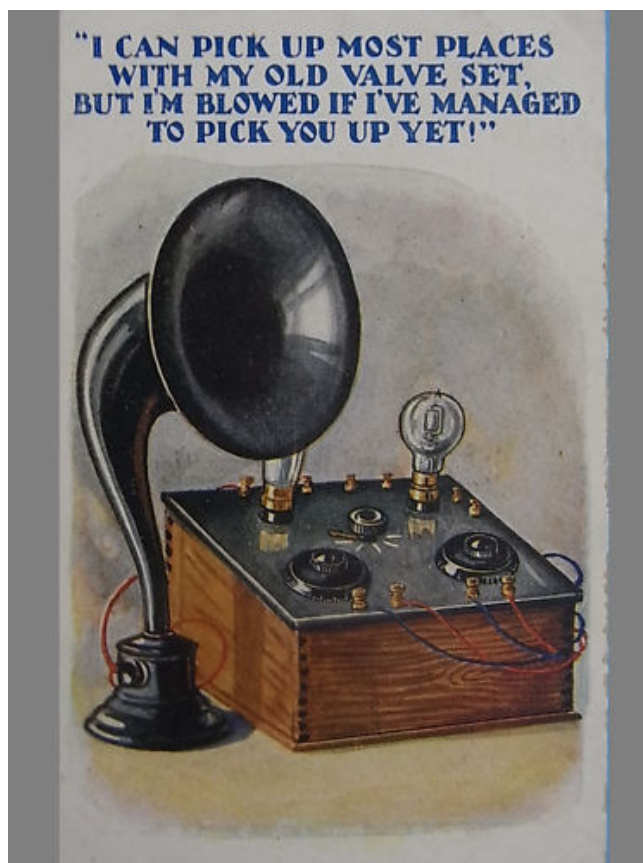
Many vintage radio clubs sponsor special events and contests, such as the "AM QSO Party" sponsored by the *Antique Wireless Association*, the "Heavy Metal Rally" sponsored by *Electric Radio Magazine*, and the "Classic Radio Exchange". Such operating events are not traditional ham radio contests inasmuch as they are a night of friendly QSO's using home-built, restored commercial ham, broadcast or military equipment.

The Amateur Radio Lighthouse Society and *The AM Radio Network's* "Expedition to Thomas Point Shoal Lighthouse" in Chesapeake Bay, MD honored the heritage of lighthouses. The call sign K3L was issued by the Federal Communications Commission for a vintage special event station that helped commemorate the 100 year anniversary of radio's first voice communications mode, AM.

Britain's *Vintage and Military Amateur Radio Society* (affiliated with the Radio Society of Great Britain) coordinates regular on-air "nets" where enthusiasts gather as well as massive technical files for the benefit of members. *The Surplus Radio Society*, a Dutch society of collectors of old ex-military radio equipment and other nostalgic receivers and transmitters holds weekly radio activity nets every Sunday on 3.575 MHz CW / 3.705 MHz AM and sponsors several flea markets and exchange fairs each year. The Canada-based *The Wireless Set No. 19 Group*, with members virtually world-wide, caters to those who collect, restore and/or operate vintage military communications equipment, with emphasis on the World War II Wireless Set No. 19 radio. Many members are Amateur Radio operators who use the equipment for on-air contacts with others.

The ARRL publishes "Vintage Radio", a collection of articles from QST magazine describing vintage equipment and restoration, and CQ Amateur Radio magazine releases a yearly "Classic Radio Calendar" featuring full-color vintage radio images.

Those accustomed to making repairs on solid state equipment are cautioned that vacuum tube gear contain *lethal voltages*. The practice of discharging power-supply capacitors and keeping one hand in your pocket when working on powered-up gear are essential safety measures. Some older equipment directly connects the metal chassis to one side of the incoming AC line, a practice which results in the entire unit becoming electrified if the wall plug is inserted backwards. Many older radios, such as vintage receivers, are not safety-fused. Restorers generally replace the AC line cord with a more modern 3 wire plug and install an in-line or chassis mount fuseholder. The use of a common station ground connection to all equipment is encouraged. Those who collect, restore or otherwise use vintage radio equipment should also be aware of possible radioactive substances.



AWA News

This year, 2011, we are hoping to move in to the Western Cape with a bit more activity.

John, ZS1WJ out in Kleinmond, has offered to be an official liaison officer for the AWA in the Western Cape. John has extensive knowledge around valve rigs and has been playing with various rebuilds and restoration projects for a long time. He also has a whole heap of spare valves.

So, for you guys needing to get a bit more activity going on the Antique side, get hold of John on his mobile phone at 0826735337 or send him an email zs1wj@mweb.co.za and see what you can set up. We know there are quite a few ardent valve set operators in the Western Cape and John will be able to help get things going down there.



Now we need someone to be able to do the same thing for us in the Eastern Cape. So if you are willing to get involved with the AWA and organise get togethers, swop meets etc, then let Don ZS5DR know either by email at irs@absamail.co.za or you can call him at 0824168880 and make arrangements with him.

The Division 5 and 6 guys are fairly well taken care of and of course the annual get together here in Gauteng is normally well attended by people from both areas. But if someone from div 5 would like to do a similar thing with organising swop meets or get togethers there, they can also let Don know.

The objective is to get more activity going for those who have an interest in restoration and use of the old valve rigs.

**THE AWA COMMITTEE
WISHES YOU ALL THE BEST FOR THE
FORTHCOMING YEAR
MAY IT BE A YEAR FILLED WITH
PLEASANT QSO'S
AND GOOD BAND CONDITIONS**

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**Antique Wireless Association
of Southern Africa**

Mission Statement

Our aim is to facilitate, generate and maintain an interest in the location, acquisition, repair and use of yester-days radio transmitters and receivers. To encourage all like minded amateurs to do the same thus ensuring the maintenance and preservation of our amateur heritage.

Membership of this group is free and by association.

Notices:**For Disposal:**

I still have in my possession a Trio model JR60 receiver which was donated to the AWA. It is in need of some TLC as the dial indication is completely wiped off the glass front. Anyone wanting a good challenge of restoration or spares can contact me and I will send photo's etc.

Andy ZS6ADY—0824484368 or email

WANTED:

I am looking for a Ten Tec or Elecraft radio to be used for CW, preferably with built in keyer, but not necessity, but must have CW filters. Please contact me either by email or on above number. I have some interesting goodies to swop or willing buyer.
Andy ZS6ADY

NET TIMES AND FREQUENCIES:

The following are times and frequencies for the AWA nets:

AM Net—Wednesday evenings from around 18:30: Saturday mornings from around 06:00 or when band conditions allow. Frequency—3615.

SSB Net—Saturday mornings from 08:30. Frequencies—7070 with a relay on 3615.

CW Net—Saturday afternoon from 14:00. Frequency—7020.
(Times given are CAT or SAST)
