



AWA Newsletter

Issue 38

February 2009

Antique Wireless Association of Southern Africa

Inside this issue:

CW Net	2
SSB Activity	2
AM	2
Just Who Did Invent Radio ?	3-4
Past Presidents	4
John ZS6JBJ Visit to USA	5-6
Technical Tip	6
Notices	7

AWA Committee:

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

Reflections:

Thinking back the other day, I reminded myself about the start of the AWA, and all those who have been connected with this fine organisation of collectors.

It seems as though it were just the other day that we sat discussing the founding of the AWA on 40m with Om Rod, Cliff, Bushy, Willem and a few others. The Collins Group had not really taken off as hoped in SA because I think there are not that many Collins collectors. But there were certainly enough collectors and restorers of old valve equipment to warrant pulling them in to a group of enthusiasts who had the same ideals. And so the formation of the AWA happened with a small group of "Like minded"

amateurs who took an interest in finding, purchasing and restoring valve radio's. (Sound Familiar—look at our Mission Statement).

On the 16th August 2003, my first recorded contact with the net under the call sign ZS0AWA took place and Om Bushy was the net controller. I know there were a few sessions before that, but that was when the official call sign was used.

Shortly after that, we had the AM net start, which was really just calling in on 40m before moving across to SSB. The CW net came along in 2005 and the newsletter in January of 2006.

The first AWA open day was in April of 2006 at Rand Airport at the

Transvaal Aviation Centre.

Our first QSO Party was held in May 2008 on AM and SSB and our first official AGM was held in November of 2008.

Past Presidents are:

Cliff ZS6BOX (Founding); Bushy ZS6M; Rod ZS5RK; Andy ZS6ADY; Gary ZS5NK; and Rad ZS6RAD.

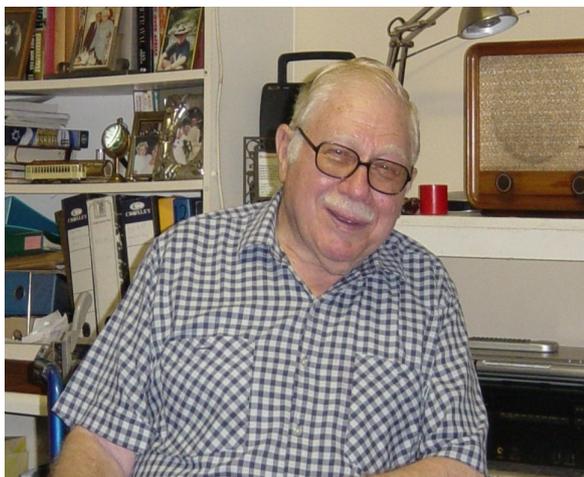
Now in our 7th year, I am sure you will all agree, we have grown to quite a sizeable group of collectors and interested parties of antique radio, and of course we have certainly cultivated a new interest in "the location, acquisition, repair and use of yesterdays radio transmitters and receivers".

Here's to a glowing future, we can only get better.

Best 73

De Andy ZS6ADY

Silent Key



In the last issue we featured a small article on Stan Zway ZS6SDZ, and some of the magnificent rigs he had restored.

This month it is with regret that we have to announce the key of Stan has gone silent.

Stan passed away in his sleep on the night of 23rd January 2009.

At the same time, we learned of the passing of Gerry Capper ZS6GMJ on 21st January 2009. Gerry called in regularly on the SSB net.

Our sincere condolences to the families.

CW Net:

Remember the AWA CW Activity day coming up on the 7th to the 8th February.

We want to encourage as many as possible to come up on the bands, but at the same time we don't want to prescribe to people how to do it. So if you can set up calling times for yourself and advertise them on the SARL Forum or if you just want to use the calling frequencies, then as Rad would say, "Whatever blows your hair back".

Just remember that the idea is to encourage CW activity on the bands. You have 24 hours in which to contact as many people as you can.

I would imagine the first one is probably not going to be that well attended, but hopefully, as time goes by, it will become known and there will be more people on frequency.

Of course good propagation might be helpful, but who knows what is going to happen as far as that is concerned.

I feel quite encouraged by the amount of comment and information flying around and am hopeful there will be a good turnout.

When I read the kinds of turnout that the SK night in USA gets, it amazes me to think there are still so many guys out there actively involved in CW. Looking at the DXCC reports for 100 contacts and more, there are a number of SA hams listed there.

Local is Lekker, the saying goes. Lets get local and support the local guys too. There are so many out there who can truly support this activity day and make it the success that it should be.



Ray G0EML collection of keys.

Remember to submit all your logs before the end of February, even if you only had a few contacts, you may have made some that others didn't.

BTW welcome back to John ZS6BJJ, good to hear you back on frequency again

73

De ZS0AWA/CW-

SSB activity:

Who would have thought the bands could change the way they keep doing. Just when we thought things were on the mend, there would be such a change in conditions, one would wonder if we are ever going to get out of this trough we're in at the moment.

For some reason, that does not deter a lot of the members of AWA and we have had some pretty good average call in's during the last month. So lets keep it going and keep on calling in on the net.

40m still does seem to surprise us all by suddenly opening up and 5/9 signals can be heard. It's just those illusive Div 1 stations

that we are always battling to hear. So nice to hear them when they do call in, but never more than a few S points.

I find it strange that Div 2 from PE up always comes through with such great signals, but anything West of that seems to get weaker by the distance.

I've said it before, I'll say it again. We live in hope. One day things will improve and all of a sudden propagation will be there.

Until then, we will keep on trying.

Once again a word of recommendation to the local chaps (Div 6). If you can work 80m,

please make use of the 80m relay. It's sometimes extremely difficult to copy on 40m, so make use of the relay. It really does work well.



This HRO Rx was donated and is looking for a home.

AM:

Once again the Saturday morning AM net has proved to be pretty worthwhile with a good few guys calling in. I don't know exactly how many listeners we have tuned in, but it would be nice to get some reports from those who do tune in.

Conditions have not changed at all, but yet Saturday morning nets are normally quite good.

For a few mornings we have been pleasantly surprised by Rod ZL1RK (ex ZS5RK), joining us via CQ100, compliments of Don ZS5DR. Don Relays Rod

on to the freq and he comes through with as good a signal as Don can put out. So Rod, keep it up. Always nice to hear you on the band.

The MF's still go out with great gusto, and I must say that we are quite privileged here in SA to be able to Tx music for test purposes. Maybe one day someone will give us the history of MF Tx here in SA and how it is we are one of the few countries able to do it.

I have had a look at a few band plans, I must admit, I have not seen any of the

other countries that have an allocation for it.

Maybe someone could drop me a note on the history before we lose it. Munro ?



Inside view of the HRO

Just Who Did Invent Radio?
If you're sure you know, the answer may surprise you.
Glen E. Zook, K9STH
(Originally published in the July 1996, issue of 73 Magazine)
Copyright 1996 by author

There's a lot of interesting history in the realm of radio and its child, television. The players include inventors, businessmen, performers, and lots of other people. Unfortunately, the vast majority of this information has not been made available to the masses!

Marconi

First of all, ask the average American, "Who invented radio?" If they know at all, the reply will usually be "Marconi." For most of my life, and that of my parents and grandparents, the inventor of radio has been, according to all the history books, Guglielmo Marconi, born in Bologna, Italy, on April 25, 1874. Marconi was the son of a very successful Italian businessman with extensive business ties to Great Britain.

Marconi was interested in wireless telegraphy (radio) from an early age, and conducted experiments on his father's estate starting in June of 1895. Later that year he was able to send messages up to one-and-a-half miles.

Seeing the commercial potential of communications with ships, the 22-year-old Marconi went to England where, in 1896, he was granted his first patent on radio communications. Later, with the help of his father, Marconi contacted a number of influential British businessmen, and the Marconi Company was formed to develop wireless communications. Until about 1920, this company dominated the radio scene worldwide.

Lodge and Fessenden

However, several years before Marconi even started experimenting, as early as 1888, Oliver Lodge (later Sir Oliver), a professor at Liverpool University, was conducting experiments in wireless telegraphy. Lodge was granted a patent on his system (which, by the way, was the source of the receiving detector used by Marconi - the coherer) in May 1897. This patent was purchased by Marconi in 1911.

At the same time, a Canadian university professor (Western University) named Reginald Fessenden was experimenting not only with wireless telegraphy, but with voice and music transmission as well. Also, he was interested in the radio control of boats. By the mid 1890s Fessenden was transmitting voice and music from the shore to people aboard pleasure boats on the St. Lawrence River.

Dolbear

As you can easily see, both Lodge and Fessenden predate the experiments of Marconi but they were late-comers, for, in 1885, United States patent 350,299 had been issued to Amos Dolbear, a physics teacher at Tufts College. In fact, for a time, Dolbear was able to keep the Marconi Company from operating in the United States because of his patent for a wireless telegraphy system (which, by the way, was virtually identical to the system used by Marconi)! Later, the Dolbear patent was purchased by the Marconi Company, thus allowing them to use wireless in the United States.

Loomis

Dolbear was also late on the scene, for, as early as August 15, 1858, an American dentist name Mahlon Loomis was beginning a series of experiments in wireless telegraphy within the state of Ohio! With the interruption of the American Civil War, Loomis continued his work. In October of 1866 he sent signals between two mountaintops, about 15 miles apart, in the Blue Ridge Mountains. Senator Samuel Pomeroy of Kansas and Representative John Bingham of Ohio were present at this demonstration. Both men later gave much support on Loomis' behalf in the U.S. Congress.

In January of 1869, Senator Charles Sumner of Massachusetts introduced a bill into Congress to appropriate \$50,000 (well over a million dollars in present-day purchasing power) for development of Loomis' system. This bill languished in commit-

tee for two years, at which time Rep. Bingham introduced a bill to incorporate the Loomis Aerial Telegraph Company, giving it the right to issue up to two million dollars worth of stock. This bill stated that no money was to come from the U.S. Government (one of the reasons the original bill was stalled in committee).

In early 1873, President Grant signed the bill into law, and a few months later, on July 20, 1873, Loomis was granted U.S. Patent 129,971 for the invention of his system. Unfortunately, Loomis' company had gone bankrupt during the stock market panic of 1869, and he was never able to garner enough financial support to put the system into operation. Although Loomis died in 1886, he left his mark in other areas. He was not only an inventor in the area of radio, but he also held a number of patents in the field of dentistry, including methods of making false teeth and specialized filling materials and methods. Some of his ideas are still being used today!

Patent Disputes

There are certain things to be noted about these early inventors. The first is that during this time period, patent offices would issue patents on working items only, either full-sized or models. Thus, Loomis, Dolbear, and the others had to actually demonstrate that their equipment worked! There was not patenting of ideas at that time.

Next, although most of the people involved were university types, they did not publish papers to the extent that papers are published today. Also, there was a lot of nationalism involved with something of such possible importance as communicating without wires. Marconi had established a consortium of powerful British investors. Several of these were members of Parliament, and the rest were in a position to command the ear of that governing body. Because of this, both Lodge and Fessenden (Canada being a member of the British Commonwealth) were effectively silenced by governmental actions. The Marconi Company soon dominated the wireless (radio) scene.

From about 1900 until 1943, there were a large number of patent rights battles in the courts of the United States and Great Britain. Little by little, Marconi's patent empire was voided until, just before his death in 1943, his latest patent was vacated in favor of Nikola Tesla. In fact, Marconi's list of patent fights included almost all of the inventors and pioneers of radio communications. People like deForest, Fleming, and others were in an almost constant fight with Marconi and his company. Because of these lengthy patent battles, the British Government did not wish to aid those fighting against the British-based Marconi Company. Therefore, they insisted that Marconi was the inventor of radio. It is unfortunate that this misconception is still being taught today.

Marconi, through the efforts of his British company, did more than anyone else to commercialized radio. However, he really did nothing himself in the actual invention of the systems. Everything he used was invented by someone else, and was actually used in two-way radio communications before Marconi. In Loomis' case, the patent was issued before Marconi was even born!

Because the history books of the early 20th Century taught that Marconi was the inventor of radio, it is still being taught today. This is unfortunate, for there were, in reality, several true inventors (each with a different system type) who were communicating before him. But such is the work of the history text writer.

There are other such tales about grossly wrong history texts, but these can wait for another time

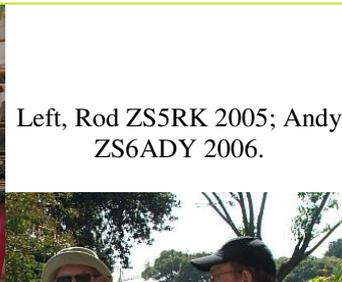
Past Presidents of the AWA



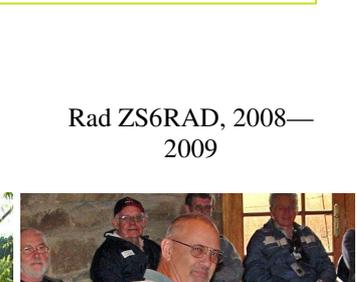
Left—Cliff ZS6BOX
2003; Next to him,
right, Gary ZS5NK
2007



Bushy Roode ZS6M (SK)
2004



Left, Rod ZS5RK 2005; Andy
ZS6ADY 2006.



Rad ZS6RAD, 2008—
2009

An Article By John ZS6JBJ On His Visit to The USA

As requested have made up something for the newsletter. In addition on the home page of OM John WD7F under "rogues gallery" there is a small write up and photos. On same home page under K7UAZ there is more info.

Holiday Duration - 10th December to 8th January, visiting my son and his family in Tucson, Arizona .

Flights - Outward J'burg -Dakar - Atlanta - Salt Lake City - Tucson.

Return Tucson - Atlanta (overnight) - Dakar - J'burg

Long soul destroying flights both ways.

Prior to Departure - AARL Arizona representative confirmed reciprocal agreement allowed **prefix** W7 to be used with my call sign. (Now if intending to operate a station in another country contact SARL)

Day of Departure - Registered all electronic equipment for re-importation on form DA65 obtainable at Customs help desk near international departures . They wanted description of item and its serial number plus look at passport. Process only takes a few minutes. Proves you did not buy overseas.

Amateur Equipment Taken Out - Yaesu FT857 - wire antenna for 40 metres - straight key by hi-mound - MFJ 564B paddle - Coax , log book, QSL cards and licence.

Station Set Up at Tucson - Apex of Inverted Vee antenna was secured on roof of 1st floor balcony about 8 metres high.

With an inquisitive 18 month old grandson around, for safety reasons the rig was operated from table outside at sheltered ground level under balcony. It was taken in each night.

The MFJ - 4225MV MIGHTYLITE switching 25 amp power supply, an early Christmas present purchased in USA, weighs just under 1.5 Kg, is 15 cm long, 14 cm wide and 11 cm high . It never got hot and was problem free.

Very surprising to find 40 metre band was very quiet during the day but livened up after sunset, whereas the 20 metre band was busy during daylight hours only. Tucson is 9 hours behind RSA. Operating at night outside in cold weather was a no no, The inverted vee antenna was trimmed for 20 metre operation and it was A for away.

I have only been licensed since 1995 and use CW mode 95% of the time. When not operating QRP I limit power to 50 watts.

Right from the first CQ almost immediately there were 3 or 4 stations coming back each call . This was the case all the way through. As so often said in the various qso's DX ZS stations on CW are a rarity, many were happy with their first contact with a ZS station even if it had a W7 prefix. Lots of questions asked about how amateur radio is faring in S Africa.

What a pleasure to hear so many USA and Canadian stations operating on CW mode, its alive and kicking over there for sure. Sad to mention getting a station to come back to your CW CQ here at home is "challenging". OM Andy ZS6ADY is to be congratulated for trying to keep CW alive with his AWA CW net, which is more than can be said for those only heard in contests once or twice a year. .

Most of the my contacts were made on or around 14.050 which is the calling frequency for the Straight Key Century Club, as a member of that club it was fantastic being able to have a rag chew with so many fellow members. They do have an award for a real rag chew lasting more than an hour, hard work but made it a few times.

The first of January was SKN (*Straight Key Night—ed*) event and exciting to be able to take part, I logged 22 different contacts for that event alone. Very noticeable was the slow and easy speed of the CW.

In the USA they have amateurs who monitor the bands for any poor operating and infringements. They are termed double zero's which I think refers to James Bond type of secret service thing. In one qso a Canadian station sent ZS6JBJ / W7 instead of W7 / ZS6JBJ. After the QSO this double 00 came on and diplomatically pointed out its only Canadian stations who can use suffix when in USA, all others must use prefix on their call signs

Another very noticeable difference is call sign usage in qso's on VHF/UHF. Very refreshing with requirement only to

repeat your callsign once every ten minutes. Can anyone explain why the regulations require callsign repeats once per over?

I was invited to the breakfast get together of Tucson Amateur Radio Club and was made very welcome. They meet for breakfast every Saturday morning and have a good old chinwag. There were at least 30 people present when I went. I also went to the University Of Arizona Radio Club evening buffet, about 70 hams were present then. Again lots of questions asked about S Africa

On 26th December strange white stuff began falling from the sky, lots of photo's taken of the snow. Arizona is classed as desert but its more like the Karoo for bushes and vegetation, lots of cactus around every corner.

Went on a day visit to Tombstone where we were able to watch a replay of the gunfight at the OK Corral etc. Its a little shanty town and not much altered from the time of Wyatt Earp and Doc Holliday. Every second person was dressed in olden style clothing, lots of shops selling souvenirs. Nothing better to end the visit than lunch at Big Nose Kate's saloon. Whilst eating there the "Sheriff" came up to our table and started chatting to us in fluent Afrikaans, he had overheard my daughter talking. We had a good laugh at that, cannot be many places in the USA with people dressed up as Sheriff's that speak Afrikaans.

Don's Technical Tip

Article 2. Capacitors

Capacitors can be a big headache when working on Antique rigs.

As mentioned in last months resistors tip filter and coupling capacitors can go resistive or short circuit. With the power turned off check these capacitors to see if they have gone resistive and if you are not sure unsolder one end to do the measurement. If in doubt, compare the resistance against a new capacitor of the same value.

The other big problem with old rigs are Electrolytic capacitors blowing up, when switching power on after not using the rig for a while.

One way to solve this problem is to increase the voltage slowly to allow the capacitors to reform. Sadly in many cases this does not work and results in the dreaded white smoke.

In most cases now days the new Capacitors of equivalent value are much smaller and with a bit of work the old capacitor can be removed, the burnt out guts extracted and the new Capacitor fits snugly inside the old case. This only for the purists who would like the rig to keep its original look.

NB. Just remember that if you still have valve rectifiers in circuit you have to have enough voltage for them to start working. I will do some practical tests and revert with more details in a future tip.



Some more of the display from the Latsky Museum

Antique Wireless Association
of Southern Africa

P.O. Box 12320
Benoryn
1504
South Africa

Phone: 27 11 969 5619
Fax: 27 86 620 3291
Mobile: 082 448 4368
Email: andy.cairns@xsinet.co.za

Get your backdated issues at

[http://harc.org.za/
newsletters/AWA/](http://harc.org.za/newsletters/AWA/)

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:

KWM2-A Raffle:

This fine rig is still up for grabs and we have decided to do the draw at the Open Day in April at the Rand Airport. Donations for this draw are R50 and should you want a chance to own this 100% valve rig made by Collins, then you need to send your money, either wrapped in a plain piece of paper via snail mail, address at top of this page, (this works well and I have never lost any money yet, but do wrap it in a plain piece of A4 paper) or deposit it to my Savings account using the reference area for your "call sign" and "KWM" :

Andy Cairns
Standard Bank Benoni
Branch code 01 30 42 40
Savings Account
Acc #: 225334119



We will acknowledge receipt of all donations either by email or snail mail.

Looking for a Home:

We have had a HRO Receiver with speaker cabinet and power supply donated by Om Barrie ZS6AJY. (Photo's on Page 2). Anyone interested in acquiring this fine old piece of history for refurbishment, can contact any of the committee and make an offer. The rig is in Benoni at the QTH of Andy ZS6ADY.

Net Days And Times:

AM—Wednesday night 19:00 (QRN Permitting); Friday afternoons from 16:00 (QRN Permitting) 80m—3615
Saturday mornings from 05:30 80m—3615
SSB—Saturday mornings 08:30 40m—7070
CW—Saturday afternoon 14:00 40m—7020