



A Member of the SARL



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Newsletter

108

February 2015

Reflections:

A short article by Cliff ZS6BOX, which he sent to me, prompted me to think about how many of the people who I knew from my first operating days were still around and playing Amateur Radio.

When I was licensed in 1982, I spent the first few months playing around on 2m. There were no repeaters in the area where we stayed in the Northern Cape, with the closest being Kuruman, 110km, Kimberley 165km and Bloemfontein 300km.

The obvious thing was to build a 12 element ZL Special and put some grunt behind the 2m signal. But then I can remember getting in to the Bloem repeater and being called a DX station.

CW became the norm and my first 200 contacts, many

of whom I can't even remember their call signs, but some were very pertinent because of regular contacts made with them.

ZS1ADF, Om Tom was a regular contact as was Evert ZS6AQW, Bill ZS6KO (SK), all on CW and members of the CW interest group. I have no idea what happened to the rest of the group, but it faded into oblivion.

AM contacts with Munro then ZS6IN, ZS4PH Phillip (SK), ZS6CEG Andries, ZS6PRT Sherlock.

So many worked, but where are they today ?

I am sure there are many of you who will have QSO's that stand out as being something special ? That first DX contact, First CW contact, first contact made after building or installing

a new antenna, PSK contact with some distant station you never even thought existed ?

I must say, that I have had a few of these in all those areas I have mentioned. There have been some really memorable contacts made and these tend to cause the disappointments to sort of fade into some black hole never to be brought back to life again.

Surely this is what makes Amateur Radio such an awesome hobby. Its all the successes that we have and contacts and relationships that really make you want to do more. It's the jam on the scone with cream spread over it that makes it so enjoyable. (If you ever had fresh scones with strawberry jam and cream, you'll know what I mean).

Best 73
DE Andy ZS6ADY

WIKIPEDIA



Electrical Telegraphy

The first commercial electrical telegraph was co-developed by Sir William Fothergill Cooke and Charles Wheatstone. In May 1837 they patented the Cooke and Wheatstone system, which used a number of needles on a board that could be moved to point to letters of the alphabet. The patent recommended a five-needle system, but any number of needles could be used depending on the number of characters it was required to code. A four-needle system was installed between Euston and Camden Town in London on a rail line being constructed by Robert Stephenson between London and Birmingham. It was successfully demonstrated on 25 July 1837. Euston needed to signal to an engine house at Camden Town to start hauling the locomotive up the incline. As at Liverpool, the electric telegraph was in the end rejected in favour of a pneumatic system with whistles.

Cooke and Wheatstone had their first commercial success with a system installed on the Great Western Railway over the 13 miles (21 km) from Paddington station to West Drayton in 1838, the first commercial telegraph in the world. This was a five-needle, six-wire system. The cables were originally installed underground in a steel conduit. However, the cables soon began to fail as a result of deteriorating insulation and were replaced with uninsulated wires on poles. As an interim measure, a two-needle system was used with three of the remaining working underground wires, which despite using only two needles had a greater number of codes. But when the line was extended to Slough in 1843, a one-needle, two-wire system was installed. From this point the use of the electric telegraph started to grow on the new railways being built from London.

The Blackwall Tunnel Railway (another rope-hauled application) was equipped with the Cooke and Wheatstone telegraph when it opened in 1840, and many others followed. The one-needle telegraph proved highly successful on British railways, and 15,000 sets were still in use at the end of the nineteenth century. Some remained in service in the 1930s. In September 1845 the financier John Lewis Ricardo and Cooke formed the Electric Telegraph Company, the first public telegraphy company in the world. This company bought out the Cooke and Wheatstone patents and solidly established the telegraph business.

As well as the rapid expansion of the use of the telegraphs along the railways, they soon spread into the field of mass communication with the instruments being installed in post offices across the country. The era of mass personal communication had begun.

HF activity:

The following Items have been taken from Dennis Green's HF Happenings and will hopefully provide interesting information about stations on the air in various parts of the world.

African Islands IOTA frequencies



CW: 28 040 24
920 21 040 18 098 14 040 10
114 7 030 3 530 kHz
SSB: 28 560 28 460 24 950
21 260 18 128 14 260 7 055 3
760 kHz

Kerguelen Islands, FT5X. Gildas, TU5KG, is once again active as FT5XT/mm around the Kerguelen area. Most of the time he is active as a Maritime Mobile, but can be occasionally be active from the Islands. QSL via F4DXW (direct only please).

African DX

Malawi, 7Q. Karl, DK2WV will be active again as 7Q7VW from Radio Dinosaur FM - Karonga Museum (WW Loc. KI60xb), Malawi, from 26 January to 6 February. He plans to be active on 160 to 6 metres. Some suggested frequencies: 50,105 MHz - 1,827 (1,817 only JA) - 3,507 - 7,007 SSB (QRM permitting). QSL via DK2WV. Website www.qrz.com/db/7Q7VW

Namibia, V5. Mario, DL4MFM, plans to activate several WWFF, WCA, and GMA references as V5/DL4MFM between 30 January and 4 February. Depending on weather conditions, possible locations may include the dune "Big Daddy", Naukluft Mountains Zebra Park (V5FF-0008), or Francois Fort (WCA V5-00005). QSL via DL4MFM, Bureau or direct.

South Africa, ZS. Right after his stay in Namibia, Mario, DL4MFM, moves on to South

Africa and gets on the air as ZS6/DL4MFM on 7 and 8 February. He hopes to activate Highest Point (GMA ZT/GP-001) on the 7th and Magaliesberg (SOTA ZS/GP-008) on the 8th together with Eddie, ZS6BNE, Andries, ZS6VL, Cliriska, ZU6BV, and Mario, ZU6M. QSL via DL4MFM, direct or the bureau.

Note: GMA = German Mountain Award. SOTA = Summits on the Air. The SOTA HQ in the UK takes extremely long to register new summits - a ZS update was sent in September 2014, hopefully they will become available on 1 February 2015! GMA is easier and faster!

Namibia, V5. Werner, DC8QT, Georg, DD8ZX, and Klaus, DJ9KM, return to Namibia for a third time between 10 and 19 February. They will be active home calls on 160 to 10 m on CW, SSB, RTTY and PSK. The group plans to join the CQ WPX RTTY Contest as V55V.

Botswana, A2. Schalk, A22LL, has been active on 20 metres SSB around 17:00 to 18:00 UTC. QSL direct to home call.

Morocco, 5E. Jim, W7EJ, and a team will be active as 5E5E from the CN2R Casablanca contest station in Morocco during the CQ WW WPX SSB Contest (28 and 29 March) as a Multi-2 entry. Operators mentioned are Juan, EA8RM, Jorge, EA9LZ, Mark, MODXR, Mark, LU8EOT, Manu, LU9ESD, Olli, OH0XX, and Jim, W7EJ. QSL via W7EJ. Visit the CN2R web page at <http://cn2r.net>

History this Week

Week starting 26 January 2015

1788 - A patent for a steamboat was issued by the state of Georgia to Isaac Briggs and William Longstreet

1807 - London's Pall Mall became the first street of any city to be lit by gaslight

1838 - A US patent was issued for the screw propeller to John Ericsson (No 588), a Swedish American

1839 - Fox Talbot read a paper before the Royal Society, London, describing his photographic process using solar light

1879 - The first practical, usable incandescent filament electric light bulb was demonstrated to an audience of 700 by its inventor

J.W. Swan

1880 - Thomas Edison received a patent (No 223 898) for his electric incandescent lamp

1893 - Thomas Edison received a patent (No 490 954) concerning the "Manufacture of Carbon Filaments for Electric Lamps"

January 1896 - The first speeding fine of one shilling was handed out to a British motorist driving 8 mph (12,8 km/h) in a 2 mph (3 km/h) zone.

1901 - The world's tallest geyser was discovered by Dr Humphrey Haines on the North Island of New Zealand

1906 - The world's steam car land speed record was set at 205,5 km/h

1907 - Dr Lee de Forest is issued with a US patent for the three-element vacuum tube

1913 - A patent for a "demountable tire-carrying rim" was issued to Louis Henry Perlman of New York City

CW Corner

“What God Hath Wrought”

When OM Andy, ZS6 ADY asked me to write a small article on CW I had no clue on what to write about.

I am not technical, nor even a proficient CW operator, only claim I can make is the increasing pleasure I get from operating CW mode over the past 18 years coupled with a reduction in speed to send with no mistakes. Any comments in this article are mine alone.

To the stalwarts who motivated me and suffered in silence a very big thank you. To the AWA CW net so regularly run by OM Andy a very special thank you. Trying to keep CW alive with so little interest or support deserves recognition. You do so much for us, the least I can do is try to give something in return.

Here is a challenge to those who talk so much about CW or perhaps come out of the woodwork once or twice a year for contests – make Andy’s day by just reporting in to the AWA CW net on Saturday at 2pm even if just to say hello.

Samuel Morse is generally recognised to be the inventor of Morse Code so named after him. What is less known is he initially tried to create a code for every word which proved time consuming and unsuccessful. It was not until he teamed up with Alfred Vail that things started to come right. Vail had been working on a code for every letter. Their combined efforts brought about the present day morse code.

Alfred Vail’s family initially funded the project, in 1837 Vail sold the rights of his invention to Morse for a share of money gained from its commercial use. It was Morse who took out the patent.

In 1838 they together tested the electrical telegraph. First telegraphic message for benefit of congress was made in 1844. The congress was so impressed they gave \$30,000 to develop it.

Vail whose contribution was so important profited very little from his work terminated in partnership with Morse.

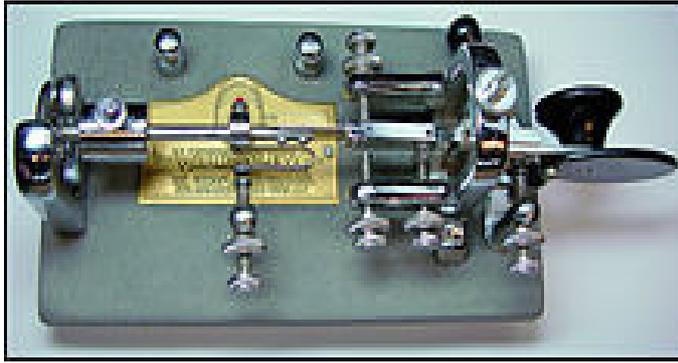
Morse Code could be referred to as the “Victorian Internet” as its use had such a great impact on worldwide communications.



Straight Key

Although simple and reliable, speed is limited. The biggest issue was the up and down movement of the hand when operating at fast speeds which Old time telegraphists often did using straight keys. This led to RSI which means Repetitive Stress Injury, better known as glass fist or telegraphist’s paralysis.

Many comments have been made about sending at speed. The main thing to consider, does the other station understand what you sent. That is the one and only priority. With time speed will increase. Never let your slow sending speed prevent you from coming on air.



Side swiper

The side swiper was developed to make operation from side to side.

In the very near future CW sadly will have gone in South Africa. No new blood coming into the hobby, very few responding to CQ's. Is it going to reach a stage where to operate in CW mode ZS stations will ignore local bands and rely on DX contacts as quite a few normally do now?

So is it the same situation with CW elsewhere in the world? One of the fastest growing CW clubs in the world is SKCC, (Straight Key Century Club). Founded in January 2006 in USA its membership has grown tremendously to present 13043 with members all over the globe.

In SKCC events only mechanical keys like the straight key, side swipers or bug can be used in QSO's. Speeds are relatively slow. Ideal for beginners to read what is being transmitted, Membership is free. They do have so many various events monthly which are well supported. These events are not contests as such, merely name, RST, QTH and SKCC number. The intention is to get members communicating with each other. Each member is allocated a membership number.

For example, an event was run recently where veterans were honoured, bonus points were awarded by adding veterans years of service to the point made for the QSO.

There are numerous awards issued by SKCC, far too many to include in this small article. Best to google SKCC and see what they do to keep interest in CW going successfully.

A ZS calling CQ on their frequencies is sure to create a lot of interest, although there are 5 or 6 SKCC members in S Africa only one is active. The comment always arises why there are so few ZS stations around. ?

What are the advantages of using CW!!! One of the latest is if you know CW you can tell the woodpecker to take a hike.

John
ZS6JBJ
SKCC 3808 T

AWA visit to the Bloemendal short wave transmitting station. by Richard ZS6TF AWA Historian

On Saturday 17th January 2015, 50 radio amateurs, and a few XYL's converged on Meyerton and drove in convoy to the site. It was a beautiful clear Highveld morning, which set the scene for a fabulous visit, ably organised by our VP and webmaster Jacques ZS6JPS.

Radio RSA: "The Voice of South Africa", the international broadcasting service of the Republic of South Africa, commenced broadcasting over the Bloemendal transmitters with programme material from Auckland park on 1 May 1966. Listeners in Africa, such as myself during the period 1967 to 1979, whilst living in Zambia, Botswana, and Zimbabwe (then Rhodesia), were aware of the propaganda content of the news and opinion programming, but we listened because of the other cultural and factual material which was professionally produced compared to the indigenous transmissions. In 1976, Radio RSA transmitted for 36 hours a week in 12 languages including English, French, Portuguese and Afrikaans. If you click on this hyperlink you can hear the [signature tune](#) featuring the call of the Bokmakierie in the background. As the column of guests arrived along the road leading to the facility, your historian was looking for signs of the previous "raison d'être" of the facility and was rewarded by sighting a Bokmakierie logo under an overgrown bush.



Once assembled, Jacques introduced our host OM "Jaap" Lourens ZS6SAI from Sentech and presented him with a bottle of RF. He kindly gave to the visiting through a rundown on the history and the current operations on the site run by Sentech since 1992.



He explained that the station had transmitters rated at 25kW, 100kW, 200kW, and 500 kW, the latter having been de-commissioned or mothballed due to cost constraints. The station transmits international programs for all of Africa over Channel Africa for the SABC, relays of BBC World Service, Radio France International, Voice of America, Deutsche Welle (Germany), Adventist World Radio, IBRA Radio (Sweden), NHK Radio Japan, and others. Also the Afrikaans service Radio Sonder Grense is transmitted from here, keeping in touch with the massive expatriate community in Africa and even the rebroadcast of The SARL bulletin Amateur Radio Today on 4895kHz and other frequencies. For more detailed information, click on the following hyperlink for the [transmissions schedule](#).

Jaap then took us to the spotless entrance of the transmitter building and introduced us to Andrew Le Roux who was presented with another bottle (bigger than an 813) of AWA logo'd RF by Jacques. Andrew was our most informative guide for the rest of the visit.



Sakkie ZS6BPA, acknowledged doyen of AM transmitter construction in the golden years of real homebrew radios and MF's, stayed close to the action for he had never seen a kit like this in his lifetime. From here on the captions to the pictures tell the story.



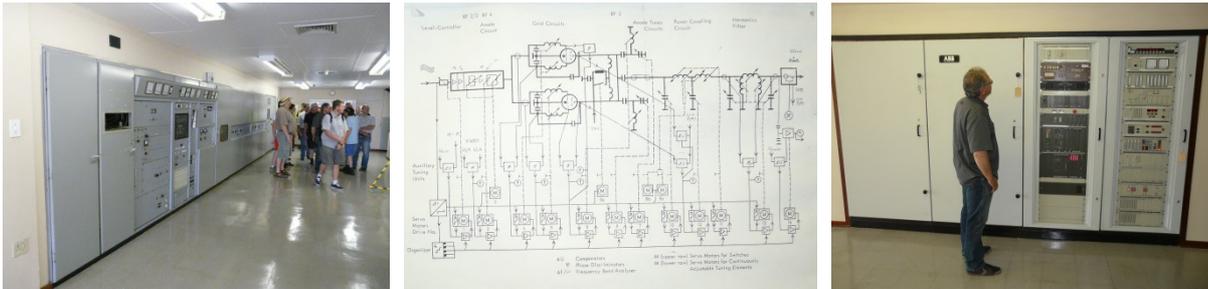
L to R: The ADSL links where the audio arrives, Kevin ZS6KAT adjacent to the audio patch board standing Guard over the Revox Tape recorder used for programme intermissions covered by Rad ZS6RAD, and the central monitoring desk for all outgoing transmissions.



L to R: The dedicated Eskom substation supplying 11kV to the transmitters which is directly rectified in mercury arc rectifiers for the transmitter plate supply. The artificial sun-tan potential of the reflections in the glass is obvious, and what a glow from the modulator tubes of the 200kW transmitters!



L to R: The Brown Boveri 200kW transmitter, its water cooled valves, and a rotary inductor to die for!



L to R: A de-commissioned 500kW transmitter by Telefunken, QRO anyone? Here is the schematic but a word of caution, replacement valves cost R1.2 Million, and Henry ZS6MC was found contemplating whether this nifty ABB 100kW transmitter would fit in his apartment.



The outgoing feeders from the transmitters converge upon the antenna switch via four massive subterranean tunnels. The switch connects any transmitter to any antenna via open wire feeders (none of your 50 ohm nonsense! photo by Riaan ZR6VAN). The intrepid Kevin checks out the basement for any unattended spare parts.



The group followed the open wire feeders stretching into the veld as far as the eye could see, admiring the transposition and impedance transformation points on the way to the massive broadside curtain antenna arrays. When a group of AWA members was overheard speculating on what a fabulous retirement home this would make for our members, and another discussing where to put in an SO239 socket for the field day, it was clear that there would be no shortage of topics of conversation at lunch!

The group got into their transport somewhat wearily, spurred on by the prospect of cold beer and what turned out to be a stunning lunch at the Austrian restaurant at Dean's Log Inn in Meyerton recommended by Paul ZS6PMS.



President Ted ZS6TED, seen here in classic pose with his second 807 flanked by Paul, Paul's XYL Marianne, and Founder President Cliff ZS6BOX, delivered an erudite appreciation of Jacques, Jaap, Andrew and Sentech for the AWA's most successful outing yet. This was followed by a vote of thanks to the AWA committee by Paul with special mention of Andy ZS6ADY who stayed at home to run the AWA SSB net, conveying accolades from members of his club in the Netherlands to whom he forwards the AWA newsletter, the quality of which amazes them for a voluntary subscription free organisation.

AWA CW Activity Day

1. Aim

The aim of the CW Activity Day is for participants to contact as many amateurs as possible on the 20, 40 and 80m amateur bands.

2. Date and Time

From 13:00 – 15:00 UTC on Sunday 8 February 2015.

3. Frequencies

14 000 to 14 060 kHz; 7 000 to 7 040 kHz; 3 510 to 3 560 kHz

4. Categories

- a) Single Operator All Band, Low Power (maximum 100 W)
- b) Single operator All Band, QRP (maximum 5 W)
- c) Single Operator Single Band, Low Power (maximum 100 W)
- d) Single operator Single band, QRP (maximum 5 W)

5. Exchange

RST, operators name and Grid Square locator

6. Scoring

Contacts count 1 point for low power, 2 points for QRP.

7. Awards

Certificates are awarded to the first places and the highest single band score.

8. Log Sheets

Log sheets must be submitted by Monday 23 February 2015 to andyzs6ady@vodamail.co.za or posted to the AWA address at the back of the Newsletter.

WHERE ARE THEY NOW.

Many of you will remember Arthur Atkins ZS6AYA who now resides at Golden Harvest Retirement Village and spends most of his time flying rallies from a simulator, accompanied by worldwide friends. All of this from the comfort of his study. He is also a very good artist and paints with water colours.

But for us, as the photos bear witness, Arthur used to build his own transceivers, power supplies antenna tuners and linears with all the “bells and whistles” and wait for it, all the test equipment he needed. This was when he was an active member of the “Muddlers Group”

Needless to say he listens on Saturdays to our SSB Net.



The Johnson Viking Ranger:

Manufactured by: EF Johnson



Type:	Amateur HF transmitter
Frequency range:	10-160 m
Mode:	AM/CW
RF Power output:	40 W
Voltage:	Mains—110v
Final Tubes:	6146
Impedance:	50-500 ohms
Dimensions (W*H*D):	210x394x355 mm
Weight:	20 Kg
Manufactured:	USA, 1954-1961
Other:	XTAL and VFO New price 1961: \$329.50

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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 yesterdays radio's and associated equipment. 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. Join by logging in to our website: www.awasa.org.za

Notices:**Net Times and Frequencies:**

Saturday 06:00—AM Net—3615
Saturday 07:15—Western Cape SSB Net— 7140 (Alternate 3630)
Saturday 08:30— National SSB Net— 7140; relayed on 14140
Saturday 14:00— CW Net—7020
Wednesday 19:00— AM Net—3615, band conditions permitting.

For Disposal:

John ZS5JX has a G2DX receiver and transmitter for disposal.
He can be contacted by email : johnnormanzs5jx@gmail.com

