

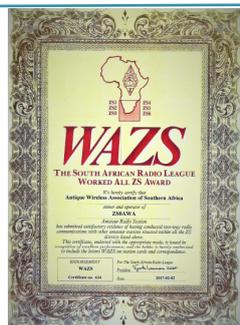


Newsletter

The Antique Wireless Association of Southern Africa

141

April 2018



Reflections:

On Thursday 22nd March the AWA was 15 years old since its inception in 2003. Not much when one thinks of how old some of the clubs are, but a milestone nevertheless in terms of what was started out with just a handful of people and a desire to get like minded people together.

With our membership standing at 294 as of the end of March, 20 of whom are international members, who would ever have imagined where we were going with this.

I am sure that Cliff ZS6BOX, as the founding president could never have imagined where it would all go as did the rest of the founding members.

Our Mission Statement, written by Rod now ZL1RK, was refined and changed ever so slightly a few years down the line but the basics are still the same.

The inception of a CW net, a newsletter and regular gatherings seemed to put it all together.

The best thing of all of course, is that it has drawn together so many fans of Valve and antique wireless who share a common goal, to restore, maintain and operate old equipment. I have yet to hear someone say they have restored an old boatanchor, got it operational, on the air and thought it was an absolute waste of time.

There is a large amount of satisfaction in bringing a 60 plus year old radio back to life and hearing a report back on how good the audio quality sounds.

The AWA has certainly made its mark in the Amateur Fraternity here in SA and is well recognised by all aspects of radio communication.

We have established ties

with the SAIEE (South African Institute of Electrical Engineers) And now share in maintaining the Museum which was established there some time ago. A ham station was setup at the SAIEE and uses the call Sign ZS6I-EE.

What better way to preserve a heritage than to interact with as many other groups as possible.

I think too this has been due to the diligence of many of the members and especially to those who have served on the committee, who have persevered in building and maintaining the AWA

Congratulations AWA , may your valves shine brightly for the next 15 years and your name be communicated with pride amongst those who cherish you.

Best 73

DE Andy ZS6ADY

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AWA Committee:

- * President and Western Cape—John ZS1WJ
- * VicePresident—Renato ZS6REN
- * Technical Advisor—Rad ZS6RAD
- * Secretary/PRO—Andy ZS6ADY
- * KZN—Don ZS5DR
- * Historian—Oliver ZS6OG
- * Member—Jacques ZS6JPS

WIKIPEDIA

Amateur radio: A reciprocal licensing agreement between two countries allows bearers of an amateur radio license in one country under certain conditions to legally operate an amateur radio station in the other country without having to obtain an amateur radio license from the country being visited, or the bearer of a valid license in one country can receive a separate license and a call sign in another country, both of which have a mutually-agreed reciprocal licensing approvals. Reciprocal licensing requirements vary from country to country. Some countries have bilateral or multilateral reciprocal operating agreements allowing hams to operate within their borders with a single set of requirements. Some countries lack reciprocal licensing systems.

When traveling abroad, visiting amateur operators must follow the rules of the country in which they wish to operate. Some countries have reciprocal [international operating](#) agreements allowing hams from other countries to operate within their borders with just their home country license. Other host countries require that the visiting ham apply for a formal permit, or even a new host country-issued license, in advance.

The reciprocal recognition of licenses frequently not only depends on the involved licensing authorities, but also on the nationality of the bearer. As an example, in the US, foreign licenses are recognized only if the bearer does not have US citizenship and holds no US license (which may differ in terms of operating privileges and restrictions). Conversely, a US citizen may operate under reciprocal agreements in Canada, but not a non-US citizen holding a US license.

HF Happenings:

Club Log

Effective 1 April, Club Log will no longer accept HTTP and all traffic will be redirected to HTTPS. Please check to make sure you refer to Club Log as <https://clublog.org> to avoid problems. This is especially pertinent for anyone developing software with Club Log API calls that still use HTTP. API features are used, for example, by logging software which connects to Club Log to integrate with uploads and real-time log-ging. If you are still using Windows XP, you can normally browse to the website, but you will be unable to use applications that make use of API features connecting via the operating system to Club Log.

African DX

Contacts with stations on the African continent count towards the SARL's All Africa Award (www.sarl.org.za/public/awards/awards.asp)

Malawi, 7Q. By the time you read this, members of the EIDX Group will be active as 7Q7EI from the shores of Lake Malawi until 2 April. There will be a team of 13 operators. Activity will be on 160-10 meters using CW, SSB and RTTY. There are four ways to QSL. QSL via M00XO, direct or via his OQRS (direct or Bureau). The entire log will not be uploaded to LoTW for possibly up to 3 months. Visit the team's a Web page at <http://www.7q7ei.com>

Mozambique, C9. A large group (CS8ABG, CU2CO, DL8JJ, ON1DX, ON4ACP, ON4AMX, ON4CCV, ON4EI, ON4QX, ON5CD, ON6LY, ON7RU, ON7TQ and ON8KW) from the Lion DX Team (OT8T) will be active as C8T from Mozambique between 2 and 15 May. They will operate SSB, CW and RTTY on 160 to 10 metres with four stations; a fifth station will operate 2 m EME, 60 m and "extra digimodes on all bands". QSL via Club Log's OQRS, or via ON1DX. See <https://mozambique2018.wordpress.com> for more information.

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

Annobon Island, 3C0W. By the time you read this, operators Yuris, YL2GM, Kaspars, YL1ZF (ex-YL3AIW) and Girts, YL2KL will be preparing to leave Annobon Island. On their Web page it was reported on 20 March, "Yesterday set new QSO record – 5 748 QSOs a day. Over 39 700 QSOs in the 3C0W log in total so far. On Friday they will take down low band vertical, Spiderbeam and Folding antenna. Last night from Friday to Saturday they will be active on 40 m and 30 m bands. On Saturday morning they will end the operation, pack the remaining gear and fly back to Malabo. The flight home is on Tuesday. No more 3C3W activity is planned during the days in between."

On 21 March, it was reported: "Seeing the real situation of local kids in Annobon, the team decided to donate extra funds and extend time of fund-raising to support local pupils until Tuesday 27 March 2018. Here you will find how to donate http://www.lral.lv/3c0w_3c3w/hwh.html to this 'Hams with Hearts' activity.

On Friday they are visiting the local school and will forward school goods already bought for amount of €500. And additionally, they will have time when back in Malabo to buy more school goods for pupils and will send it to Annobon. School goods are not cheap here.

The 3C0W log will be uploaded Saturday evening after the return to Malabo (3C)."

QSL via YL2GN direct or ClubLog's OQRS (direct or Bureau). See their Web page for more details. Look for the logs to be uploaded to LoTW six months after their operations. For more details and updates, watch their Web page at http://www.lral.lv/3c0w_3c3w/index.html

Word to the Wise

Zepp Antenna - the original Zepp antenna is said to have consisted of a half-wave monopole fed with a quarter-wave open wire line. It was originally used by Graf Zeppelin hydrogen filled airships, where it was important to keep high voltage points of the antenna away from the body of the aircraft. The name is an abbreviation of 'Zeppelin'.

Calendar:

April

1 to 7 – Feast of Unleavened Bread
 2 – Family Day; World Autism Awareness Day
 5 – SARL 80 m QSO Party
 7 – RaDAR Challenge; United Nations World Health Day
 7 and 8 – SARL VHF/UHF Digital Contest
 10 – Provincial Schools open
 12 – International Day for Human Space Flight; closing date for 80 m QSO logs
 13 – Friggatriskaidekaphobia
 13 to 15 – SARL National Convention, Pre-toria
 14 – closing date for RaDAR logs
 16 – closing date for VHF/UHF digital logs
 18 – World Amateur Radio Day
 21 – Autumn QRP contest
 22 – ZS4 Sprint; May RAE registration closes; Earth Day
 24 – closing date for May Radio ZS
 27 – Freedom Day
 28 – Cape Town ARC meeting; closing date for QRP logs
 30 – closing date for ZS4 logs

May

01 – Workers Day
 05 – AWA A
 M Valve QSO Party
 06 – AWA SSB Valve QSO Party
 08 – Remembrance Day WWII
 10 – Ascension Day
 13 – Mothers Day



Operating Tip

Filter your Spots - When operating in a contest category and class that allows the use of spots, spending time on spots that your station has no chance of using is counter-productive to your rate. For example, a US-based operator is unlikely to hear the same 10 metre stations spotted by European stations. Most logging pro-grams that use spots or DX cluster client programs that display spots have provisions for setting up filters to ignore spots that are not relevant. If your logging computer seems to slow down during contests that have heavy spot traffic, it could be that the processing spot traffic is using up too much of your computer's CPU. One solution is to use a more powerful computer. Another is to filter spots *before* your computer receives them. Modern DX clusters support band and mode filtering, but you'll have to learn how to set these up, which is different de-pending on the type of DX Cluster you are using. The Yankee Clipper Contest Club provides this information for AR Cluster users www.yccc.org/Resources/DXCluster/net/filters.htm, while VE7CC users can refer to this web page for filtering information www.bcdxc.org/ve7cc/ccc/ccuserman.htm.

Soldering

Soldering is a basic skill, made more difficult by the decreasing size of modern components. Adafruit has published the "Adafruit Guide to Excellent Soldering" which details what good solder joints look like, as well as how to detect, diagnose and remedy bad solder joints <https://learn.adafruit.com/adafruit-guide-excellent-soldering/common-problems>.

Comparing ADIF Files

If you would like to compare two different ADIF log files, try the beta version of the Clublog service *adifdiff* at adifdiff.clublog.org.

Raspberry Pi

With nine million Raspberry Pi 3 computers sold since their release, many are finding adoption in a wide range of Amateur related projects and products for their inexpensive cost, reasonable capabilities and ever-expanding ecosystem. A new model of the Raspberry Pi, the 3B+, was released last week, featuring more com-puting power, faster network connectivity and better cooling www.raspberrypi.org/blog/raspberrypi-3-model-bplus-sale-now-35/.

A voice macro feature

N1MM Logger+ and other logging programs have a voice macro feature which allows the use of audio (WAV) files to transact a contact just by playing pre-recorded message files. Usually a human operator records CQ, Exchange and Thank You messages, as well as numbers and phonetics for each letter of the alphabet. The logging program sends the appropriate WAV file at the press of a key. N1MM has the additional capability to look for WAV files for arbitrary full call signs, which sounds much more fluid. Gerry, W1VE, has taken clever advantage of that feature and has combined it with today's cloud computing resources to make a Synthesized Digital Voice Keyer (DVK) <https://groups.io/g/N1MMLoggerPlus/message/33122> that uses entirely computer-generated speech. Joe, WB9SBD, took advantage of this feature in the Wisconsin QSO Party recently to make 400+ QSOs entirely by this method <https://groups.io/g/N1MMLoggerPlus/message/34077>. I asked Gerry what his motivation was for writing this program and where he wanted to go with it in the future, "I'm mostly a CW op. Phone is OK, but I do not like to talk for 24 - 48 hours in a contest. Of course, it can help you if you are sick, have an accent that makes you hard to understand, or otherwise are impeded from speaking. Why not make phone contesting as easy as CW? I've worked with speech synthesis in my career. A bunch of years ago, I experimented with another speech synthesizer for contesting. It used a different technology and was a "live" DVK, synthesizing the audio directly from the text at the time the call sign was entered. It was OK, but the "free" voices sounded pretty robotic. Amazon's cloud-based Polly offering <https://aws.amazon.com/polly/> is essentially free for our needs: You can have an account for a year with 5 000 000 characters synthesized per month! It offers 24 languages and 47 voices, all exposed via my application. Rather than a "live" DVK, it is designed to create WAV files that can be used by the N1MM Logger+. Since we have a continuously updated Super Check Partial (SCP) database online <http://www.supercheckpartial.com/>, my application can use the SCP database to generate full call sign WAV files for **all** the active contest calls. This is very important, as the intonation is perfect when you are playing a full call sign file: e.g. Whiskey-One-Victor-Echo.wav vs Whiskey.wav One.wav, Victor.wav, Echo.wav. When letters files are used to build the call, the intonation sounds robotic. Of course, my application creates files for both types of files. N1MM Logger+ will automatically use the full call sign files if they are found in the directory. The full US/Canada/Territory SCP file generates about 2 GB of audio files. Currently, my software generates files formatted to work in the appropriate directories for N1MM Log-ger+. Some Writelog users have asked for a version that fits that application. My application has only been around a few months. I'll see what people think. If there is enough interest, I'll generate other versions for the other loggers. It can be downloaded, free of charge, at <http://files.w1ve.com/W1VE-SYNDVK.zip>

History of the Yagi antenna

John ZS5JF

Many radio amateurs are aware of the directional beam antenna commonly known as the Yagi array. What most are unaware of is that Yagi had very little to do with the original research.

At Tohoku Imperial University in the 1920s in Japan a professor named Dr Shintaro Uda was investigating the properties of various antennas. His experimental research resulted in several papers written over a number of years as the study found new information. This eventually culminated in his final paper published in 1926 which concluded the research and combined all the earlier findings. Being of interest to mainly fellow Japanese scientists all of Professor Uda's paper were written in Japanese and only published in Japan. Hence, no English speaking scientists were aware of his work and its conclusions.

A fellow professor at the same university was Professor Hidetsugu Yagi, who was also working on other antenna research projects. As with Uda, Yagi also published a number of papers describing his research and results over a time period. Professor Yagi was a senior member of the university and was ten years older than Uda. Uda was an assistant professor working under Yagi at the time. Yagi however was schooled in English and was able to publish papers to a far wider group of readers than Uda, who did not speak or write in English at the time. Apparently, Yagi suggested to his fellow junior professor that they should compile a new paper setting down the research of both of them and publish it in English.

So in 1926 a paper with the title "*Projector of the Sharpest Beam of Electric Waves*" was submitted to the Japanese scientific publishers for broadcasting to other international journals. This was by '*Hidetsugu Yagi and Shintaro Uda, Institute of Electrical Engineering, Tohoku Imperial University, Sendai*'. The paper was published initially in Japanese and then redrafted into English and published.

The priority of the names is common in academic papers, where the more senior persons name precedes others, either working under them or of lower rank. Also in research work of this type it was normal to have several people engaged in the work. Usually this was under-graduate students and other technical support staff who did the donkey work supervised and guided by the professor. It is also the case that a more senior person probably had papers of a similar nature already published and hence a better chance of the paper being accepted for publication then would be higher than an unknown, first time submission. There was a pecking order in the science, as the publication it was submitted to had a limited amount of space in each edition.

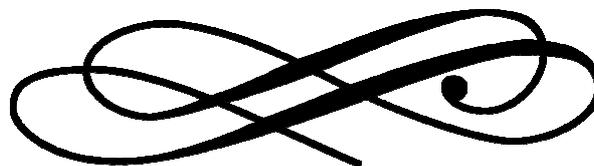
This paper was the first knowledge scientists and engineers in countries outside of Japan read that detailed the improved beam pattern and gain of directional beam antennas. What many failed to realise is that all the references in the paper are attributed to one person, S. Uda. Yagi did not add any significant matter to the paper apart from describing the work he had been involved with.

An historical discussion paper was written by a student working under Professor Uda and appeared in the recent publication "*IEEE Antennas and Propagation Magazine*" in February 2014 setting the matter straight. This was written by Yasuto Mushiake and gives some insight into the whole saga.

Mushiake relates that in 1944 he was Uda's student and he was assigned the task of reviewing the earlier work of Uda to refine the mathematics and record further experiments relating to element diameter and length versus wavelength. He discovered that after Yagi and Uda's paper was published Yagi apparently applied for a patent for the new beam antenna design, without Uda's knowledge, and in the patent application papers Uda's name had been removed from the list of inventors, leaving only Yagi's name. This patent was taken out in the USA. His U.S. Patent 1,860,123 ("*Variable Directional Electric Wave Generating Device*") was issued in May 1932 and assigned to the Radio Corporation of America.

Because of the English paper many wrongly assumed that as Yagi appears first on the title page that he was the originator of the work. Hence, it became known as the "*Yagi Antenna*". Sometime later after the legal wrangling over the patent the scientific community felt it better to refer to it as the "*Yagi-Uda Array*". Professor Uda apparently accepted this as in Mushiake's paper he refers to his work as being "*Practical Design Methods for Yagi-Uda Antennas*". Uda was his mentor and would have to supervise his work and subsequent paper.

Mushiake in his 2014 historical paper relates that along the way of his research the slot antenna was also investigated and his final paper on this and the Yagi-Uda array design work was compiled into a publication entitled '*Yagi-Uda Antennas*' published in 1954. In this publication a number of design charts with element length and element diameter are given which allows a simple method of deriving the optimum performance for an array. The data was used by several other people to further refine the optimum length/diameter ratios and element spacing and this work is still going on today as newer research continues.



Making (big) waves with a Yaesu FL-2100Z

The Yaesu FL-2100Z Linear Amplifier is still a good piece of equipment to have if you can get a working one.

– by Leon Uys ZR6LU (March 2018)



The Yaesu FL-2100Z is a classic HF amplifier. It sits near the end of a long life line of multiple variations and models of the basic 811A or 572B triode valve, all using exactly the same grounded-grid core design, and all of them making nice big waves in the ether.

I was lucky enough to lay my hands on three of them over time. The first one came from an estate in Durban, KZN, in perfect working condition I might add, and I was stupid enough to sell it to a fellow ham that pleaded poverty. He still owes me money after selling it onwards immediately at a profit. The last two came my way in more fortuitous ways and have been a pleasure to own and make big waves with them while they were visiting my shack.

The one was nearly in original (i.e. unmodified) condition, the other lacked the row of input filters in the back. The original also had 572B lamps whereas the other was retro-fitted with 811A lamps. Both were sort-of working but not really, and over many evenings I painstakingly studied the details of what was working and what was failing. It was great to have two examples with two different faults, because I could compare faults and figure out their individual problems.

Just remember, I have never worked with valves before. I don't know them, I don't like the seriously high voltages around them, not the heat, and just to add injury to insult I once forgot to disable the HV interlock switch sending me running for cover as the whole thing exploded with loud noises and blown fuses. These things are like hot women: Pretty to look at but you will get burnt if you touch them.

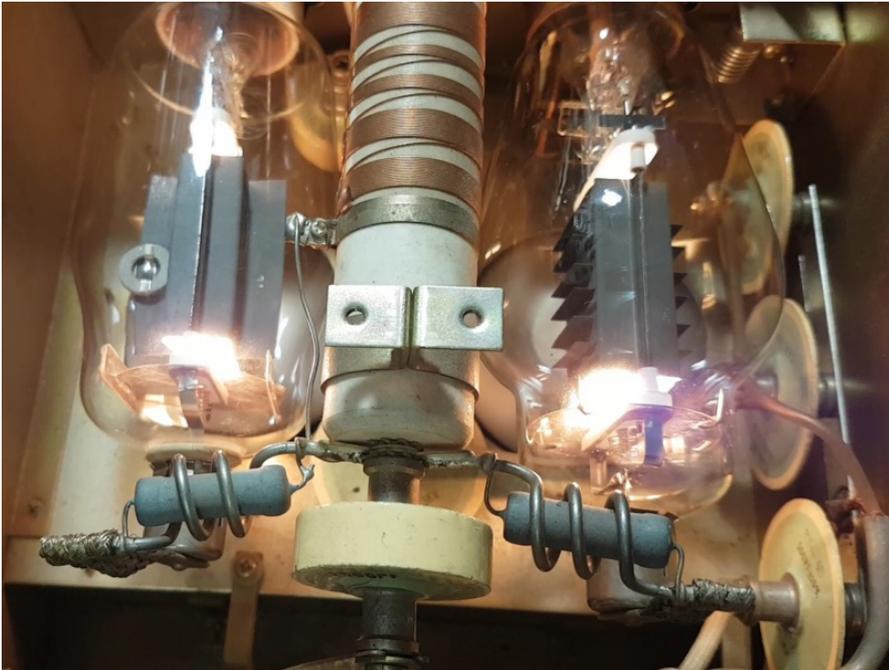
But we made peace and progress more or less at the same time and eventually both are working. My feeling is that the circuits are relatively simple and the resulting box robust. Once you have twiddled the all the knobs and read all the meters, they actually produce some nice power and can make nice big HF waves. For example, with an input of 25 watts the 572B valves (after tweaking for optimum output) spat out a good 500 watts key-down on 40m where I like to operate. The 811A valves were also willing but maybe a tad less capable at 450 watts. I must add that the 572B's were eager to give lots more with a little more drive, whereas the 811A's needed a slightly bigger push to give out more. Both worked very well.

I uploaded a short video of the testing of the first one to go live at <https://youtu.be/WrbrGFtqzeg> showing how easily it puts out 500W key-down even in a somewhat mismatched feed with high SWR.

Sadly I have to let them both go. I started another project to build a solid-state amplifier in the same output range, the so-called DM-600, and there isn't enough rack space in the shack for all of them. The Yaesu FC-902 tuner stays, though, as it has proven to be both accurate and useful. I compared the power it measures on its built-in meter with a scope-voltmeter into a dummy load and I'm satisfied that it tells the truth. Plus my only antenna that can handle that sort of power is my (unmodified) G5RV which, as you know, needs a little impedance matching. Having said that, when I use the G5RV for WSPR (QRP 200mW) I consistently get very good spots, so please don't come tell me it is rubbish and you lose power when you use a tuner - my experience is exactly the opposite.

I will be remiss if I don't mention the three gentlemen who assisted me in this project. Firstly Jacques Scholtz ZS6JPS who introduced me to the AWA (Antique Wireless Association) and was always willing to give advice. Secondly Renato Bordin ZS6REN who kindly donated a second hand 811A which came in very handy, thank you. Finally Adi Loupo ZS6CNC for setting up the valve tester and helping me test all my motley collection of good and bad lamps, and helping me to get two pairs of lamps that worked together. Thank you guys, you were demonstrating the true amateur radio spirit.

I'll publish some more details and photos of the work I did in the next few days, I just wanted the word to get out so long. Here is one more photo of the pair of 811A's running full steam to close off with:



73s de ZR6LU Leon Uys 0825735580

Its Not Real Ham Radio

A Pioneering Background

I was musing recently on the wonderful history of Amateur Radio, from the early pioneers with spark transmitters and the race to get the first signals across the Atlantic, up to the Microwave enthusiasts who developed the way forward for space communications and satellite technology (and, whisper this, mobile phone technology!)

The history of Ham Radio and RF technology is inextricably linked – there was even a time here in the UK where it was believed, anecdotally, that a Ham Radio callsign would help you to get a job with the BBC!

However change came very quickly, relatively speaking, in the early history of radio. From Marconi's experiments to the first Public Broadcast Stations was only 25 or so years. TV was only another 15 years or so behind that, and so on...

Resistance (or not feeling at "Ohm")

Yet the history of Ham Radio is also one of *resistance* to change – not from the pioneers, they were often instigators of it, but from the "everyday" Hams.

Let me see if I can give you some examples, with my tongue planted very firmly in my cheek...

"That's not Real Ham Radio!"

The early Hams used CW pretty much exclusively. So when AM arrived as one of the first of the voice modes, there was a bit of an uproar... "*It's not real Ham Radio! Real Ham Radio involves using a Morse Key! What in world is the hobby coming to, using voice to communicate over the airwaves? It's sacrilege!*"

But life went on, AM found acceptance and all was well in Hamland once again.

Then transistor technology arrived in the late 1940s and early 1950s, provoking quite a response. "*Hang on! That's not real Ham Radio. Real Ham Radios glow in the dark – we can't be having this miniature technology – they'll never last as long as valves or be as reliable*"

But life went on, solid state devices found acceptance and all was well in Hamland once again. Then SSB arrived and there was *more* discontent... *“That’s not real Ham Radio. Real Ham Radios don’t sound like Donald Duck! It’s a fad, it will soon fall away once people get fed up of hearing those silly voices”*
But life went on, SSB found acceptance and all was well in Hamland once again.

Then FM and repeaters arrived and there was polarisation within the hobby (and it wasn’t horizontal or vertical either!) *“That’s not real Ham Radio. Real Ham Radio doesn’t need to use that thing on top of the hill to help your signal get somewhere! Real Ham Radio is point to point!”*

But life went on, FM & repeaters found acceptance and all was well in Hamland once again. Then Packet Radio arrived and there was *real* trouble... *“That’s not real Ham Radio. Real Ham Radio doesn’t need one of those new-fangled computer thingies in order to work. Get your key or your mic out and start working other Hams properly!”*
But life went on, Packet Radio found acceptance and all was well in Hamland once again.

Then Digimodes arrived and there was yet more strife... *“That’s not real Ham Radio. Real Ham Radio doesn’t involve typing messages to other Hams – and those perishing computers again! What on Earth are they doing in the hobby?”*
But life went on, Digimodes found acceptance and all was well in Hamland once again.

Then Digital Voice modes arrived and there were some *very* serious disagreements... *“That’s not real Ham Radio. Real Ham Radios don’t sound like R2D2! Real radios don’t use the Internet to help them get round the world, they ABSOLUTELY HAVE to use atmospheric propagation. What is happening to this hobby???”*

But life went on, D-STAR and other Digital Voice modes found acceptance and all was well in Hamland once again. Then we arrive at today and Network Radios come onto the scene and all hell breaks loose! *“That’s not real Ham Radio. This is playing at Ham Radio – there’s no Amateur RF so it is simply not Ham Radio. What is more, I worked hard for my license, everyone else should have to too! How dare people enjoy communications in an incorrect manner!”*
So will life go on and will all ever be well in Hamland again?

The 21st Century Challenge

This is why the advent of Network Radios represents such a challenge to us as Hams – it is causing us to completely rethink what it means to be a Radio Amateur in 2018 and beyond.

And we will have to start facing up to questions similar to these...

- What exactly defines a Radio Amateur?
- What do we mean by “Amateur RF”?
- Is it RF generated by someone who is an Amateur?
- Or is it RF generated on a particular band allocated to us by the government?
- If so, does it absolutely HAVE to be that?
- Can it be nothing else?
- Does any of this really matter?

What about our bands?

As Hams we are very “attached” to our bands. Whether it be 160m or 2m, we almost have a psychological sense of “ownership” of them.

We have “favourite” bands, we have bands we *never* frequent.

We even have “our” spot frequencies and some Hams will get somewhat “assertive” if a fellow amateur who is not in their “group” *dares* to use “their” frequency!

And yet in the 21st Century, I believe that the whole concept of bands & frequencies is becoming ever more fluid. Why would this be?

An example from Broadcast Radio

Not that long ago, we could tune into broadcast stations on Long Wave (LF), Medium Wave (MF), Short Wave (HF) and FM (VHF Band II). Stations frequently referred to themselves by frequency: “247 metres Radio 1” or “1152 AM” for example. It was seen part of the station’s identity – many had the frequency in their station names!

But today, we increasingly hear less of this. When you listen to broadcast stations these days, they seem to be eschewing giving out frequencies, instead they just announce that they are on “FM, DAB and Digital” or something similar to that.

Why? Because radio is something you probably increasingly consume in one of two ways – either digitally (via DAB or Satellite or similar means) or by streaming via the Internet. Frequencies and by extension, bands, are not as relevant as they once were.

Moving Out!

The large broadcasters are also increasingly moving away from “traditional” radio.

On Short Wave – only a few countries & various religious groups seem to operate there now. The big guys are moving out of Long and Medium Wave too. If commercial broadcasters are moving away, we need to ask why.

Do Bands matter?

I have a suspicion that this is, in part at least, because bands and frequencies don't matter so much these days. Domestic radio appliances are more about push buttons and screens that get you to your station instantly, rather than tuning dials with frequencies. It's the end product that is important, not necessarily the manner in which it gets to you.

Who tunes a modern broadcast radio in these days with a manual tuning dial? Anyone? It was the main knob on all radios not that many years ago! I can even remember tuning old VHF TV in with a dial in my early days on this planet – that *really* seems odd now!

Going one step further, many broadcast stations are not even using direct RF at all these days! We still refer to them as “radio stations” (or occasionally “Internet radio stations”)

Is there any reason to think Ham Radio as a hobby will not invariably move in a similar kind of direction? One of our strengths historically as Hams has been that we are good at embracing new technologies and adapting them for our own uses.

The point I am leading up to is this – I suspect “bands” and “frequencies” are not really as big an issue in the digital age as we might *like* them to be.

In essence, bands only exist because of propagation.

Propagation again

160, 40m, 20m, 10m, 2m etc. are all, in reality, “line-of-sight” bands. To over-simplify the subject, it is the ionospheric or tropospheric layers that enhance this line-of-sight propagation and turn it into something else.

Each band has differing propagation qualities as a result, giving each band its “character” and for some, the study of propagation in itself is a fascinating part of the hobby.

Man-made propagation is just different

When we think of (and use) the *Internet* as a man-made propagating medium (which is what it is – it propagates signals around the world) then the concept of bands becomes redundant.

The Internet is like one, almost infinitely wide, worldwide “band”, constantly open S9+40 to all countries 24/7 with few vagaries – and not just for voice, but for vision and other digital modes as well.

Put like that, who wouldn't want to use it? Would it actually matter what “band” you were (or were not) on, if there even were one?

So the concept of “bands”, by which so many of us define our activities, may be crumbling in front of us in this digital age and we may not even realise it yet! That is not to say our bands don't still exist, by the way – clearly they do. It is just that, to many people these days, bands are a foreign concept.

And then what?

As the hobby starts to come to terms with some of the implications of this, other issues then start to arise, such as...

- Do we need an exam any more to get a licence?
- Do we even need a licence?
- What form or forms should it take, if so?
- Might we see an influx of new people coming into the hobby because the entry to it is more straightforward?
- How would we cope with that?
- Do we even *want* new people coming in, especially if their views differ from ours?
- What will the hobby even look like in 20 years time?
- What happens to our “traditional” bands?

I expect to see a lot of discussion in the future about this – it's actually quite exciting!

Out of the Comfort Zone...

However it will make many of us feel extremely uncomfortable – the ground is shifting beneath our feet and the traditional *raison d'être* of Ham Radio is waiting to be challenged to change and adapt...

I don't see this as a bad thing – intelligent honest debate is to be welcomed. The most important thing is to keep our minds and our thinking wide open. We shouldn't reject something just because it is new or because it challenges our preconceived ideas of where radio is going in general.

Equally, we shouldn't throw the baby out with the bathwater and reject traditional Ham Radio as it has been for years. The Ionosphere and the Internet are complementary, not in competition.

My own opinion?

If you have read this far and you really want my personal thoughts...

Why can we not have the best of both worlds? Surely we can.

Network radios (at this stage in their development at least) are not contest radios for example, and the Internet is not yet a contest-friendly mode of propagation. (That might change of course!) so contesting is still best on the traditional Ham bands. I'll see you on 80 metres – 59 001 OM...

However, regular reliable high-quality contacts around the world are but one thing Network Radios excel at, so why not just use that when you want to (or when the HF bands are full of noise or are otherwise dead)? I do! I don't see the expansion of choice in the hobby as a bad thing.

Enjoyment is the key

Does the fact that I am transmitting on cellular frequencies at 800MHz, 900MHz, 1800MHz, 2100MHz or on Wi-Fi on 2.4GHz or 5GHz matter? Is there something intrinsically evil about that? Is there more virtue in using 21 MHz or 432MHz, for exam-

ple? They are just “frequencies” after all.

I prefer to see myself following the motto of my local radio club, “Having fun with RF”. Whether I choose to use a Network Radio or a Yaecomwood super-duper base station is not as relevant to me. Enjoyment of the hobby is everything, otherwise why have a hobby?

Whichever way this debate goes and whichever direction this great hobby takes, my line would be to keep *all* the richness of *every* aspect of the hobby.

In other words, to go back to the title of this piece and change but one word, “*It’s ALL ‘real’ Ham Radio*”

© March 2018 – [Chris Rolinson G7DDN](#)

Antique Wireless Association Valve QSO Party

1. Aim

The aim of the AWA Valve QSO party is to create activity on the 40 and 80 metre bands. It is a phone only contest using AM and SSB. Preferably, valve radios or radios with valves in them may be used.

2. Date and Time

2.1 AM QSO Party

13:00 to 17:00 UTC Saturday 5 May

2.2 SSB QSO Party

13:00 to 17:00 UTC Sunday 6 May

3. Frequencies

3.1 40 metres: 7 063 to 7 100 kHz and 7 130 to 7 200 kHz

3.2 80 metres: 3 603 to 3 650 kHz

4. Power

The output power may not exceed 100 w, unless the rig itself has a higher output power (FTDX400, etc.)

5. Exchange

Call sign, RS report, a consecutive serial numbers starting at 001 and the type of radio used, e.g. HT37 TX.

6. Scoring

All valve radio: 3 points per contact Hybrid radio: 2 points per contact Solid State Radio: 1 point per contact

Multiplier: Your Radio— All valve radio: 3 points: Hybrid radio: 2 points: Solid State Radio: 1 point

7. Log Sheets

The log sheets must be submitted by Monday 21 May 2018 and Monday 22 October 2018 to andyzs6ady@vodamail.co.za. Certificates will be awarded to the first three places in each category – AM and SSB

Download an easy to use Log Sheet from the AWA Website.

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Get your backdated issues at
[http://www.awasa.org.za/
index.php/newsletters](http://www.awasa.org.za/index.php/newsletters)

Visit our Website:
www.awasa.org.za

**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.

Notices:**Net Times and Frequencies (SAST):**

Saturday 06:00 (04:00 UTC) —AM Net—3620
Saturday 07:00 (05:00 UTC) —Western Cape SSB Net— 3630
Saturday 08:30 (06:30 UTC)— National SSB Net— 7140; (Echolink, connect to Sandton repeater ZS6STN-R)
Experimental relay on 3620 for those having difficulty with local skip conditions.
Saturday 14:00 (12:00 UTC)— CW Net—7020; (3550 after 15 min if band conditions not good on 40)
Wednesday 19:00 (17:00 UTC) — AM Net—3620, band conditions permitting.

AWA At The SARL AGM:

The AWA have been invited to set up a stall at the SARL AGM on Saturday 14 April. Should you have any items you might like to put on display please contact Any ZS6ADY on 0824484368 or Jacques ZS6JPS 0617850972 for details. We will also have a spot at the fleamarket so if you have any items for disposal bring them along to the AWA stall.

Hope to see many of you there.

