



Newsletter
The Antique Wireless Association of Southern Africa
18th Anniversary



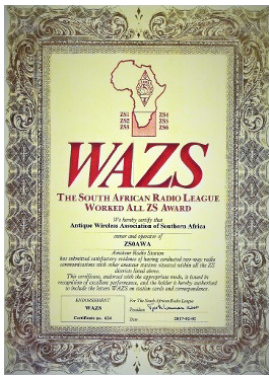
178

May 2021

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Inside this issue:

Personal Opinions of radio's	3-4
AWA Valve QSO Party	5
Aids in the Workshop	-8
SAA Museum	9
Notices	10

AWA Committee:

- * President—Renato ZS6REN
- * Acting VicePresident—John ZS1WJ
- * Technical Advisor—Rad ZS6RAD
- * Secretary/PRO—Andy ZS6ADY
- * KZN—Don ZS5DR
- * WC—John ZS1WJ
- * Historian—Oliver ZS6OG

Visit our website:

www.awasa.org.za

Reflections:

How best can one describe the feeling you get when something works out for you the first time without having to go back and re-do it over and over ?

I must admit, this is not a feeling I have had too often, but on the odd occasion I have experienced this.

I guess it's something that is kind of hard to explain to people who don't experiment or try to do something out of the ordinary. Having this hobby, is certainly not something for the ordinary person who just leads a mundane life and never has the opportunity of experiencing something out of the ordinary.

It's almost like giving life to a thing that was dead and I know that there are those of you who are going to agree with me.

Whether it be an old radio that has been lying in some dark dingy place for years and you have taken it and lovingly nurtured it back to life,

or be it some homebrew project that you have made from scratch, placing all the components either on a board you have etched yourself or on a board that has already been done for you. Maybe even a breadboard project where you must carefully lay joints and break connections. This is what I am talking about.

The ordinary person will never experience this. Even if you are not electronically minded and just clean and revamp an old radio, put some new valves in it and fire it up, and it works. What an experience.

People seem to think that answers lie in technology. If you can use a computer or smart phone, then one gets satisfaction to be able to send messages using the internet. Not the same !

Remember that video that did it's rounds of the two CW ops and the two cell phone fundi's. You could see the satisfaction on the faces of the CW ops when they

trashed the cell phones.

I will never forget the first CW QSO I had on my Hallicrafters HT37. I had rewired this rig by taking a wire off at one point, soldering it in place and following it through to its destination, where it would be soldered in place. I was and still am, no electronics genius. But it was what I had. It had been given to me after laying in a barn for years. I knew nothing about radio, never mind valve radio.

I switched it on very tentatively, waiting for something to go bang, and when it didn't, I apprehensively put it into Tx, tuned in the receiver and sent my first CQ. Great was my surprise when a station came back to me. I nearly fell off the chair, broke out in a sweat second to none, and had my first CW contact.

How do you explain that feeling to anyone but a fellow ham, and know that they will understand.

Best 73

DE Andy ZS6ADY

Wikipedia

Sunspots:

The first meaningful mention of a sunspot was in around 300 BCE, by the ancient Greek scholar Theophrastus, student of Plato and Aristotle and successor to the latter.^[7] The earliest surviving record of deliberate sunspot observation dates from 364 BCE, based on comments by Chinese astronomer Gan De in a star catalogue. By 28 BCE Chinese astronomers were regularly recording sunspot observations in official imperial records. The first drawings of sunspots were made by an English monk named John of Worcester in December 1128. Sunspots were first observed telescopically in late 1610 by English astronomer Thomas Harriot and Frisian astronomers Johannes and David Fabricius, who published a description in June 1611. After Johannes Fabricius' early death at the age of 29, the book remained obscure and was eclipsed by the independent discoveries of and publications about sunspots by Christoph Scheiner and Galileo Galilei, few months later.^[12] In the early 19th Century, William Herschel was one of the first to equate sunspots with the abundance of heating and cooling it was capable of causing on Earth. He believed that the "great shallows (sunspots' penumbrae) ridges (bright, elevated extended features resembling faculae) nodules (bright, elevated, yet smaller features resembling luculi) and corrugations (less luminous, rough, mottled, dark features) instead of small indentations (depressed, extended dark features) on the sun would let in large amounts of heat into Earth. On the other hand, "pores, small indentations -central regions of dark, depressed spots - and the nodules' and ridges' absence," meant less heat touching Earth.^[13] During his recognition of solar behavior and hypothesized solar structure, he inadvertently picked up the relative absence altogether of spots on the Sun from July, 1795 to January, 1800. He was perhaps the very first to construct a past record or observed or missing sunspots and found that, in England at least, the absence of sunspots coincided with high wheat prices. Herschel read his paper before the Royal Society. He was completely misinterpreted and heartily ridiculed before that body.

Personal Opinions of Radio's I have Had

Andy ZS6ADY

I am hoping that by starting off this column, I will get information from many of you on your personal opinions on radio's you have had and used. Your opinions on ease of use, stability, transmission, reception ease of maintaining etc. Send me your articles and I will spruce them up add photo's if necessary and post them in this Newsletter. This obviously your impressions of radio's you have owned and used.

To start off, I think I have mentioned on a few occasions my first radio was a Hallicrafters SX100 receiver and an

HT37 transmitter. These were separate rigs and when used, one would have to align the two so that your transmit and receive frequencies were zeroed to each other. Cumber-
some by no means, besides the fact that the transmitter weighed in at a hefty 35kg due to the transformers and power supply that were built in.



The HT 37 had a double sideband feature, which enabled one to transmit on AM quite successfully, as well as USB and LSB features and CW.

My first experience using the HT37 was on CW. I was recently licensed and in those days one had to do 200 CW contacts before being allocated your full licence and being able to go on to phone.

Of course in those days it was easy enough, when copying a CW station you got zero beat on the receiver, tuned in the transmitter to zero beat on your receiver and off you went. Compared to the transceiver, it was quite a laborious exercise, but then CW ops were never really in that much of a rush to get contacts. After calling CW, one would first wipe the sweat off your brow before waiting for the first reply to your call.

The HT 37 was well capable of a decent 80w output, although I think it was rated slightly higher. All valve it had a set of 6146 in the finals and was driven by a 12BY7. Manufactured from 1959 to 1962 and sold for a whopping \$450 dollars in it's heyday.

By the time I received mine it was already over twenty years old and radio's like the Kenwood TS820 830 and some of the Icoms were well into production.

Not being an electronics trained technician, loved fiddling with things like this and hence the interest in amateur radio developed more and more.

The transmitter and receiver were powered using a 220 to 110 bell and Howell projector transformer which carried it quite nicely. Of course it was not an isolations transformer so every now and then I would get bitten by the live chassis. Something I had to learn about and eventually put a 220 to 220 Isolation transformer ahead of it.

When I received this transmitter it was in a really poor condition as it had stood in a barn for about 10 years and had rats nest and was covered in bat poop. It was quite an exercise to restore.

The transmitter was paired with an SX100 receiver which had fortunately not been stored in the same conditions and all it took was a major wash and scrub to remove all the dust which had accumulated. All the original valves were used to fire up both rigs and the combination worked quite well.

The SX100 was a 14 tube 4 band dual conversion receiver and covered 538kHz to 1580kHz and 1.72MHz to 34 MHz manufactured from 1956 to 1961. The Hallicrafters combination carried me right through the CW into up until the time I went to phone.

By this time I had been listening to some of the AM Music transmissions that in those days could be heard right across the country on 80m. Stations at that stage were ZS6IN Om Munro, and the gang that transmitted on AM.

I joined on the odd occasion using the HT37 and found things a little more difficult to zero beat on the stations, but then AM was a lot wider than LSB and tuned in quite nicely.



The output on the HT37 in AM was around 25 to 30 watts where the big boys were running around 100w, in am terms (about 400w SSB)

It was about this time that we relocated from the Northern Cape to Transvaal. On a visit to Durban and Lima Electronics, I bought my FT200 which had been modified by Roger Davis to work on 6146 finals. My first transmitter.



The FT 200 proved to be a lot easier to operate than the HT/SX combination, and of course took up much less space. This was now modern compared to the Hallicrafters and of course setting up was a lot more simple.

How I delighted in simply moving to a frequency and being able to go straight to transmit after tuning up.

I think those of us who operated these old rigs knew what it was to tune up and load an antenna properly before being able to transmit.

It put meaning to maximum smoke. Of course the original tubes were also sweep tubes as in the FT101 the 6JS6A in the finals.

The first of the hybrid range, I found the stability on the FT200 rock solid after a short warm up period. I don't know whether the 6146's had something to do with this as I have heard from several owners of FT200's about drifting even after a warm up period. I did not suffer with the same problems. Maybe the VFO was still in good condition.

Made from 1969 to mid 70's the FT200 was the forerunner to the FT101zd with a superhet on the receiver side and the transmitter operating in the ham band section only. Also capable of putting out 90 to 100w, I found operation of this rig quite good. Reception through an external speaker rather than the small built in speaker made quite a difference to audio quality.

It was also sold as the Sommerkamp FT250 and Henry Tempo One. The early models had a silver face and the later models had a black face and slightly changed functions.

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. No linear amplifiers may be used.

2. Date and Time

2.1 AM QSO Party

13:00 to 17:00 UTC (15:00 to 19:00 SAST) Saturday 1 May

2.2 SSB QSO Party

13:00 to 17:00 UTC (15:00 to 19:00 SAST) Sunday 2 May

3. Frequencies

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

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

5.2 Each QSO claimed for competition credit must include contemporaneous direct initiation by the operator on both sides of the contact. Initiation of a contact may be locally or by remote. Contemporaneous = existing at or occurring in the same period of time and the operator must be in control of all the processes. In plain English – a live, air breathing radio amateur must be at both ends of the QSO.

6. Scoring (Your radio)

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

7. Log Sheets

7.1 The log sheets must be submitted by Friday 7 May 2021 to andyzs6ady@vodamail.co.za.

7.2 Log sheets should be in Excel or ADIF format, not photo copies or pdf files.

7.2 Certificates will be awarded to the first three places in each category – AM and SSB



All Valve



Hybrid



Solid State

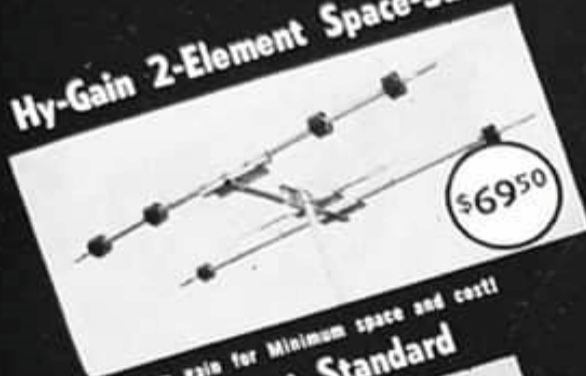
YOU PAY ONLY 10% DOWN ON THESE "IN-STOCK"

HY-GAIN Triple Spanner BEAMS

FROM

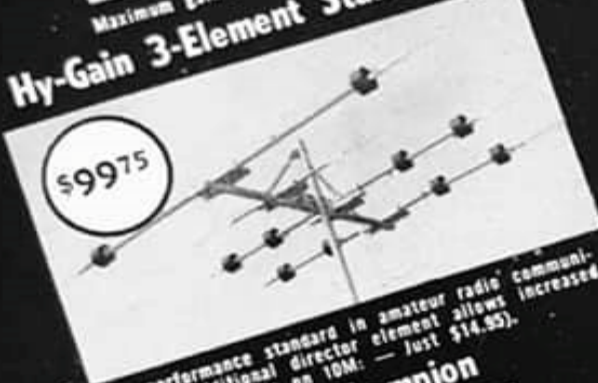
"The World's Largest Distributor of Amateur Radio Equipment!"

Hy-Gain 2-Element Space-Saver



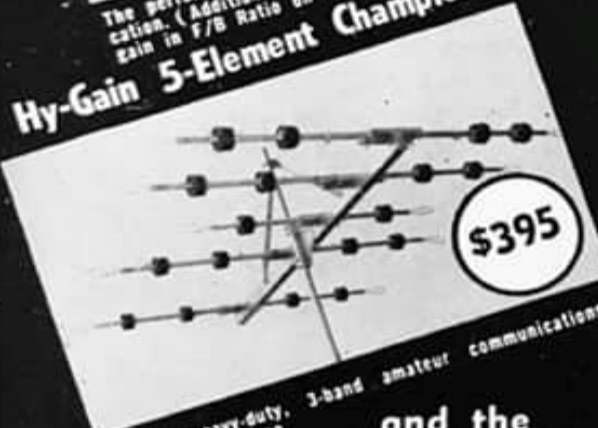
Maximum gain for Minimum space and cost!

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Hy-Gain 5-Element Champion



Finest, heavy-duty, array in existence. 3-band amateur communications

and the complete line of

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Three-Band performance at lowest cost!

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the only weatherproof, adjustable trap circuits in existence . . . used in all Triple Spanners, and acting as insulators for selected frequencies, isolating the various element sections at 10, 15 and 20M.

- ✓ One beam, one feedline, three bands (10, 15 & 20M), and low SWR.
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For further information, check number 16 on page 126.

Aids in the Workshop How to work on Boatanchors

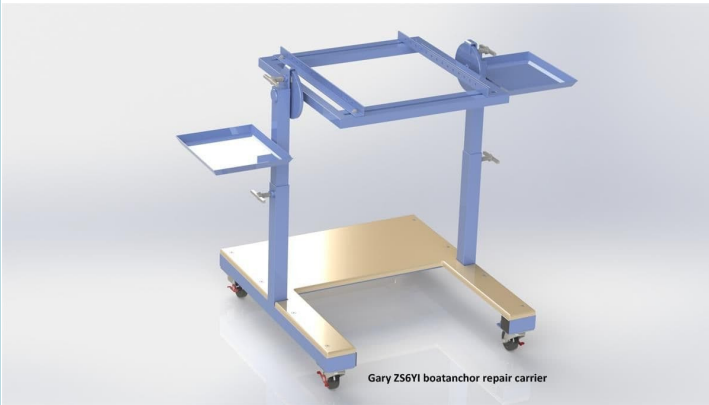
On Saturday 16th April, Renato introduced a topic on the net of Aids in the workshop, or things you have to make working on radio's easier. We had a fair turnout on the net that day, but the subject carried much further when people started posting on the Telegraph group all of the things they had.

I thought it may just be an idea to share some of these ideas with you all and I am sure we will get some more responses of things you have developed to help you in your endeavours to work on your radio's in the workshop.

Of course the standard items that were presented are things like Frequency counters, good multi meters, VOMS that could handle the high voltages, and things that one would expect to have in the workshop. Good soldering stations, decent solder (it sounded like most still preferred to use the proper solder and not the modern equivalent), I don't think the modern stuff works on boatanchors.

After all the standard stuff one would expect to find came the not so standard stuff that most of the ingenious types had thought about to prevent things like back injury, hernias and the other things associated with working on these heavy weights.

Something that Gary ZS6YI had thought of was the trolley that one could fit the rig to and be able to turn it upside down in order to work on the underside of the rig. I am sure this was created out of necessity as Gary has been instrumental in restoring a serious number of radios to their former glory.



Of course Gary always has had access to good workshops and the people to manufacture things he needed, hence the professionalism of this magic table/carrier to assist in holding the radio in place for you to do anything you want, including turning the rig upside down to work on the underside if need be.

If I remember when first seeing a picture of this, Gary would make one for you if you wanted to place an order.

This would certainly help in preventing hernias and back injury, the only problem would be to lift the rig once of onto the carrier.

Richard F4WCD (ex ZS5TF) of course has his own interpretation of a similar unit without the bells and whistles, but as a handy piece of equipment.

Richard says, made out of scrap found around the garage. And certainly a handy piece of equipment.

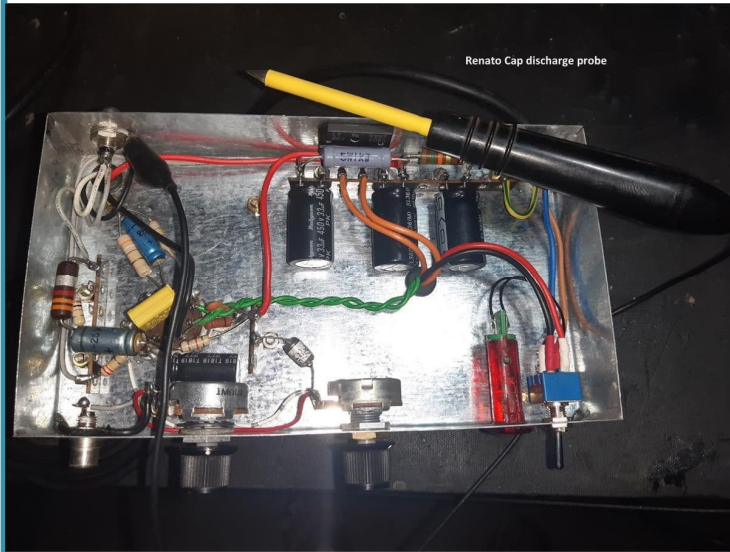
As long as I have known Richard, there have always been interesting little items put to use in his workshop to assist in many different things, including storage, packing, operating etc. Another useful idea from Richard was the cardboard box with bottoms of various milk cartons to store items in.



Of course one must not forget the usefulness of Ice cream containers. With a simple little separation unit made of cardboard one can get a good few components in there, as well as smaller valves.

Many different ideas about storage of components and bits and pieces ranging from old kitchen cupboards to shelving.

Then there was the capacitor discharge probe which Renato had built in order to make sure those deadly voltages were disposed of in a safe manner before sticking your fingers into small spaces.



As far as I could make out it was made from an old screwdriver where the point had been sharpened to get in at the cap leads with a crocodile clip and a short lead attached going down to ground. All encased with insulation material to make sure you did not discharge to yourself in the process.

Another handy piece of equipment to have is a TC1 tester . Tests all sorts of components, transistors, caps for value and esr, diodes, leds, fets etc etc even tells you the pinout of components.

The good old ESR meter made its appearance for testing caps while still in line. You can find one of these on our website with instructions for building your own.

Small vacuums, compressors or blowers for cleaning out dust that has gathered in storage or wherever the radio has been kept.

Geoff ZR1XZ gave details for those of you still wind your own coils, of a coil counter consisting of an old electric gate motor magnetic proximity switch taped to the drill body and a magnet to the drill chuck. The proximity switch is connected to the = solder pads in the calculator and ever pass of the magnet past the proximity switch adds 1 to the total. On a calculator. Ingenious. Geoff sent us a video of how it works.

Use the camera on your cell phone to take photo's of wiring connections before dismantling.

Headset magnifying glasses and small mirrors. Next time you visit the dentist, hijack one of his. No I'm sure you can buy those at a chemist or pharmaceutical shop.



The pincer sets, called second hand are always useful for holding things to be soldered when you could do with a third hand to hold things.



Another handy thing on the workbench is this modified plug that enables you to tap in to measure input current and to plug in a globe for short circuit detection.



I am sure there must be so many other things people have thought up to make life easier when working on radios on the work bench.

Lets not forget things like dremel tools, valve base extenders, diode RF probes and then leaky Land Rovers to transport the boatanchors.

Let us know of any aids you may have the help on your workbench and we'll share them with the rest of the family.



SAA MUSEUM

AIRLINE COLLECTIBLES FAIR

29 MAY 2021 09:00 TO 16:00

Book launch of the
“SAA Boeing 747 Fleet History”



BUY — SELL — TRADE
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E-Mail: info@saamuseum.co.za Website: www.saamuseum.co.za

Admission: Adults R40.00, Children R25.00

REFRESHMENTS AVAILABLE

Includes entrance into museum display hall, aircraft park
and Boeing 747 “LEBOMBO”

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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 yesterday's 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 07:00 (05:00 UTC) — Western Cape SSB Net— 3640
Saturday 08:30 (06:30 UTC) — National SSB Net— 7140; Sandton repeater 145.700
Echolink—ZS0AWA-L; ZS6STN-R
Relay on 10.135 and 3615
Saturday 14:00 (12:00 UTC) — CW Net—7020

AWASA Telegram group:

Note that we are no longer active on WhatsApp, but have migrated to Telegram.

Should you want to get on the AWA Telegram group where a lot of technical discussion takes place, send a message to Andy ZS6ADY asking to be placed on the group. This is a no-Nonsense group, only for AWA business.
+27824484368

For Disposal:

FT101ZD Mk I in good working condition with 101 matching external speaker and hand mic.

Contact Andy ZS6ADY 0824484368.

