

Newsletter The Antique Wireless Association of Southern Africa 18th Anniversary



182

September 2021



The Model S-33 meets the demand for a truly competent communications receiver in the low-priced field. Styled in the postwar Hallicrafters pattern and incorporating many of the features found in its more expensive brothers, the S-33 offers performance and appearance far above anything heretofore available in its class. Four tuning hands, CW pitch control adjustable from the front panel, automatic noise limiter, self-contained PM dynamic speaker and "Airodized" steel grille, all mark the S-33 as the new leader among inexpensive communications receivers.

The S-33 is an especially fine receiver for younger people just beginning to find the unending fascination offered by radio as a hobby. In addition to being a good standby receiver for any amateur, the S-35 has unlimited uses. Its compact functional design, its high performance on both short waves and standard broadcast receiver for use in den or library, in college dormitory, at camp or cottage or in any room around the house wherever a good extra receiver at a low cost is desired.

FEATURES

Overall frequency range-510 kilocycles to 32 megacycles in 4 bands;

Band 1—540 to 1650 kc. Band 2—1.65 to 5 Mc. Band 3—5 to 14.5 Mc.

Band 4—13.5 to 32 Mc.
Adequate overlap is provided at ends of all bands.
Main tuning dial accurately calibrated.
Separate electrical bandspread dial.

Beat frequency oscillator, pitch adjustable from front

panel.

AM/CW switch. Also turns on automatic volume control in AM position.

Standby/receive switch.

Automatic noise limiter.

Maximum audio output—1.6 watts.

Internal PM dynamic speaker mounted in top.

Controls arranged for maximum case of operation.

165-125 volt AC/DC. Resister line cord for 210-250

olt operation available. Speaker/phones switch.

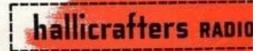
CONTROLS: SPEAKER/PHONES, AM/CW. NOISE LIMITER, TUNING, CW PITCH, BAND SELECTOR, VOLUME, BANDSPREAD, RECEIVE/STANDBY.

EXTERNAL CONNECTIONS: Antenna terminals for doublet or single wire antenna. Ground terminal. Tip jacks for headphones. Line cord and plug.

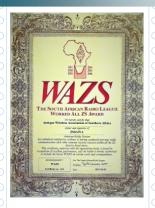
OPERATING DATA: The Model S-38 is designed to operate on 103-125 volts AC or DC. A special external resistance line cord can be supplied for operation on 210 to 250 volts AC or DC. Power consumption on 117 volts is 29 watts.

DIMENSIONS: Model S-28, Cabinet only, 127a inches wide by 67a inches high by 77a inches deep. Overall, 127a inches wide by 77a inches high by 87a inches deep.

WEIGHT: Model S-38. Receiver only, 11 pounds. Packed for shipmink, 1315 pounds.



Page 2 Newsletter





Inside this issue:

Personal	3-4
Opinions of	
Radio's	

HF Happen- 5-6 ings

Dec 11 1921 8

Notices 9-10

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:

At long last we are starting to see a change of weather. This year has certainly been a long cold winter like we have not seen in a few years.

I don't know about anyone else, maybe it's the age catching up on me, but I found this to be a rather cold winter.

Now, of course, that I do not have as many valve radio's in the shack, it takes quite a bit of effort from the single 12BY7 and two 6146's in the Yaesu to warm up the shack. It does help a bit when I turn on the Collins 30L-1 with it's four 811A's.

I have often wondered what kind of power consumption I used to take out of the grid in the days when I did a relay on 80m using the Collins S line and run piggy back on 20m using the Collins KWM2-A and monitor my signal on the KWM2.

That certainly put some joules into the air and warmed the shack up with muffin fans on each of them drawing out the hot air and distributing it in the shack.

In the summer of course, it became a different story. How to get rid of the hot air generated by the tubes. Windows open, door open and fans going, I survived and so did the radios. I am sure I managed to lose a bit of weight in the summer months.

Many years ago on my visit to Swaziland and the transmitters of Transworld Radio, I was amazed at the heat produced from a 30kw transmitter that was force fed enough air, which was by no means cool in the lowveld temperatures, but kept going with air circulation.

There were three such transmitters on the site which was about 50km from Ezulwini, where I stayed with Om Willie for a few days.

The transmitters fed each into some rather large directional wire antennas pointed at various parts of the world, to where they would transmit daily. I stood in awe at the size of these antenna's and transmitters. The problem with setting up something like that would be to get our power company to lay in some 11kv lines to feed the hungry beast.

I returned from there with a trailer load of valves, a few transmitters, AM of course, which were used as modulators for the final transmitters and very many odds and ends which were distributed in the AWA.

I write this piece, once again reminded of the many AM stations that have disappeared from the bands, because of the introduction of FM and Digital radio, as well as streaming of radio stations via the internet.

Gone are the days of these power consuming stations that were used to convey music, messages and news around the globe, to only be remembered by those who have heard worked or operated them.

Best 73 DE Andy ZS6ADY

Wikipedia

Sunspots:

Sunspots have two parts: its centre umbra, the darkest part, where the magnetic field is approximately vertical (normal to the Sun's surface) and the surrounding penumbra, which is lighter, where the magnetic field is more inclined.

The temperature of the umbra is roughly 3,000–4,500 K (2,700–4,200 °C), in contrast to the penumbra at about 5,780 K (5,500 °C) leaving sunspots clearly visible as dark spots, occasionally visible even to the naked eye. This is because the luminance (which is essentially "brightness" in visible light) of a heated black body (closely approximated by the photosphere) at these temperatures varies greatly with temperature. Isolated from the surrounding photosphere, a single sunspot would shine brighter than the full moon, with a crimson-orange colour.

Page 3 Newsletter

Personal Opinions of Radio's I have Had Andy ZS6ADY

After the Collins all disappeared and a few strategic moves around the Benoni area while waiting for the sale of our plot to be approved, I was left with a few Yaesu radio's which had survived the trauma. A yaesu FT101ZD Mk1, a Yaesu FT102 and an FT736 quad band VHF/UHF. These were the main radio's that I would use for the next few years to give me my daily fix and do the AWA relays.

At one stage we lived in amongst all the noise that one could think of finding in an enclosed area in the built up section of Benoni. It was there that I gained a lot of knowledge about noise and how much there really was in the built up areas. I tried all sorts of antenna to limit the amount of noise, noise squashers, DSP speakers. You name it, I tried it.

Fortunately it was not too long and we moved again to a plot where we rented a small cottage and my appreciation of living in the agricultural areas was strengthened and made whole again. I had my radio's back again and could dispose of all the antinoise devices.



The FT101ZD Mk1 is a hybrid operating with a 12BY7 driver and two 6146B in the finals. Operating in ham band only, there is no WARC bands on the Mk1.

When I received the rig, there was a problem with the frequency readout and I was soon to discover this was not one of the strong points on the model. There was a change made in the construction in the Mk2, which improved the accuracy of the readout and there was later a modification that one could plug in direct to give an even better life span.

On 40m the first digit was missing and ten on 80m, the ladt two digits were missing.

I soon became used to this and used the analogue setting, which was fairly accurate. Of course there was the usual drift at start up, but if you left the rig on for an half an hour before using it, it was quite stable after that. I used the 101zd as my CW rig most of the time as CW'ers would normally not complain about the slight drift that was experienced while doing a QSO. So it served it's purpose well.

For the rest, this rig worked flawlessly until one morning before the AWA net, I had switched the rig on with the FT102. The FC103 antenna tuner had automatically changed the antenna relay over to the FT102 and the noise from the FT102 had put the FT101zd into Tx because I used the Vox for CW semi Break in.

The result was inevitable. I had walked out of the shack to go make a cup of tea. Upon returning was greeted with a shack full of smoke. I immediately switched off the mains, but als was too late. The mains transformer had overheated and burnt out, taking with it the final stage, burning a nice round hole in both of the 6146's, burning the PA stage out totally and a few other parts with it. I was devastated.

A few months before this happened, I had a Kenwood TS520 given to me, and this would have to suffice as a replacement for the 101ZD. I had heard so much about the TS520 so at that stage I was not too concerned about using it, but mourned the loss o my 101ZD. The TS520 was put into use in place of the 101ZD, also as a CW rig mostly, but for me it was lacking in several areas in comparison to 101ZD. The CW filtering was nowhere near as good as the 101 and I found myself getting quite frustrated with hearing another CW station operating a good few Kc's away from where I was operating and not being able to have a decent QSO.

As my frustration grew, I took to using the FT102 for CW operation as well as being used mostly for SSB.

The FT102 had been purchased a few years prior and had come in a not too healthy condition. The band switch had been burned quite badly by the previous owner trying to change bands while in the Tx mode and it would only work on 40m.

This of course was passed into the hands of one trusty 102 mechanic, who shall remain un-named at this stage, as he does not

Page 4 Newslette

like the attention. But let it be said, that it was probably the third FT102 that he was working on, that had been revived from the ashes

After trying to rebuild the band switch, wafer for wafer, my trusty 102 mechanic decided it would save him a lot of frustration and buts of high blood pressure, if we searched for another band switch. This was obtained from a parts specialist in the UK and once installed, the FT102 was restored to it's former glory.



The FT102 has been an absolutely fantastic rig to operate and work with. Having also a 12BY7 driver, it has three 6146B's in the finals and is quite capable of operating at an out of 120w key down.

It has proved itself. To me, of being an outstanding SSB rig and also quite capable of working as well on CW. Reports from many of the QSO's I have had with it is that it has a good, even audio, well balanced and easy on the ear.

Cw was also well modulated, good signal reports and the filtering of course was much better than that of the TS520.

This radio has worked flawlessly and has been used on many occasions to relay the AWA net on either 40m or 80m.

It comes standard with the WARC bands and can operate CW/AM/FM/USB and LSB. Coupled to the FL2100Z Linear, one can turn down the output power and operate comfortably at 50w with a 400w out on the Linear.

Of course the saga with the FT101ZD did not end as badly as it started. After a lot of frustration with the operation of the TS520, I looked around for a transformer for the rig and lo and behold, a fellow ham had an FT101ZD that had a different problem and he had stripped the radio for spares. He passed on the transformer, the necessary parts for the final PA stage as well as whole lot of other bits and pieces, including the digital readout.

After wangling a wheel and deal with another mechanic, which involved the trading out of the TS520, my FT101ZD had life breathed back into it and sits proudly on my desk, still in operation, not only as a CW rig, but also very much used on SSB.

Let me at this stage also say, that by no means am I trying to downgrade the TS520 at all. It is also a fine example of analogue radio and has served many people well. The model I had was in no way poor in transmission or audio quality when operated on SSB. For me it was just not suitable as a CW rig, for which I wanted it to be. (Plus of course I'm biased).



The TS520 is also a fine example of a hybrid transceiver, operating on the ham band only also using two 6146B's in the final stage being driven by a 12BY7 driver.

The beauty of the TS520 is that it can be operated on 13,8v using the DC-DC module which comes as an option. Other than that it can be operated on 120/220v.

Being part of the AWA has it's advantages and I have had many radio's, too many to mention pass through my hands on their way to restoration and

operation. It is such a privilege for me to see how many of these fine old radios are still in operation giving good reports and lots of pleasure to the many members of the AWA. Sometimes I wish I could have kept them all, but that would not be fair to the many that now have them in their collections.

Long may the valves in your radio's glow brightly.

Andy ZS6ADY

Page 5 Newsletter

HF Happenings:

The IARU SSB Field Day

The IARU SSB Field Day takes place on 4 and 5 September, it runs for 24 hours from 13:00 UTC on Saturday to 13:00 UTC on Sunday. There are separate 24-hour Open and Restricted sections, as well as a 6-hour restricted section. The restricted sections have a 100 watt power limit and just one single-element antenna may be used. The Namibian Amateur Radio League will be on the air for the Field Day.

The Early Morning Coffee Sprint

To create an interest and activity on 80 m and to try and contact as many of the early morning pensioners as possible. It is a phone only contest.

A Pensioner will be classed as any valid licensed amateur who is on permanent pension and 55 and above.

The second leg will run from 03:00 to 05:00 UTC (05:00 to 07:00 CAT) on Wednesday 8 September 2021 with activity between 3 603 to 3 650 and 3 700 to 3 800 kHz. Remember, the segment from 3 651 to 3 699 kHz is contest free.

The QSY rules for Sprints apply.

The exchange is your call sign, a realistic RS report and your age.

A QSO with a pensioner counts 2 points and a QSO with a non-pensioner counts 1 point.

Log Sheets in MS Excel format must be submitted by 23:59 CAT on Monday 13 September 2021 by e-mail to zs3vdk@webmail.co.za .When submitting your log, your call sign must appear in the file name, e.g., ZS2B 2021 Early Morning Coffee Sprint Log and Summary Sheet.xlsx

The SARL National Field Day

The second leg of the SARL National Field Day runs from 08:00 UTC (10:00 CAT) on Saturday 11 September to 06:00 UTC (08:00 CAT) on Sunday 12 September 2021.

The aim of the Field Day is to work as many stations in Southern Africa as possible on all the HF amateur bands (excluding the 60, 30, 17 and 12 m bands). In doing so, to learn to operate in abnormal situations in less than optimal conditions.

A premium is placed on developing skills to meet the challenges of emergency pre-

paredness as well as to acquaint the public with the capabilities of Amateur Radio. Phone, CW and any digital mode that can send the full exchange may be used on the HF amateur bands, excluding the 2 200, 630, 30, 17 and 12 metre bands. Phone, CW and Digital modes on a band are considered as separate bands and a station may be worked only once per band under this rule. The exchange is the number of transmitters at your station, the Field Day operating class and your Provincial or country abbreviation. The sending of a RS or RST is optional – it has nothing to do with the scoring.

How to participate? Class A – Field Station, Multi operator; Class B – Field Station, Multi operator, QRP; Class C – Field Station, Single Operator; Class B – Field Station, Single Operator, QRP; Class E – Ultra Light Portable; Class F - Backyard Stations or Class G - General Stations.

Only one call sign per station is permitted. In the case of multi-operator stations using more than one transmitter, all operators shall use the same call sign.

Each QSO with a station from one of the South African provinces and six neighbouring countries counts five points.

Each DX contact counts for one point. Power multipliers for Class A to F): Power 5 watts or less x 6; Power 50 watts or less x 4; Power 100 watts or less x 2 or Power greater than 100 watts x 1 A multiplier of two (2) for each one of the 9 South African provinces worked (regardless of band) and six neighbouring countries.

EC – The Eastern Cape (including Marion Island); FS – The Free State; GP – Gauteng; KZN – KwaZulu-Natal; LP – Limpopo; MP – Mpumalanga; NC – The Northern Cape; NW – North West; WC – The Western Cape (including Sanae Base and Gough island); NAM – Namibia; BOT – Botswana; LES – Lesotho; ESW – eSwatini; ZIM – Zimbabwe and MOZ – Mozambique. Class multiplier: General stations, class multiplier of 1 and Field stations single and multi, class multiplier of 3. 50 bonus points for submitting photographs of the station in action.

Logs in ADIF, Cabrillo with a summary sheet or MS Excel format (http://www.sarl.org.za/public/contests/contestrules.asp) must be submitted by 23:59 CAT on Friday 17 September 2021 by e-mail to zs4bfn@mweb.co.za.

When submitting your log, your call sign must appear in the file name, e.g., 7P8DG SARL National Field Day.xlsx /.adi / .cbr

DX from Africa

Guinea, 3X. Jean-Philippe, F1TMY (J28PJ), will be active as 3X2021 (interesting and correct call sign) from Conakry, Guinea, starting mid September. He states that his activity will be on HF (160 to 6 m) and on the QO-100 (Grid IJ39) satellite. He also states that there will be portable activities from the Los Islands (AF-051). Length of stay was not mentioned. QSL via ClubLog.

September

1 - Namibia schools open; National Arbor Week

4 - West Rand Flea Market; Durban ARC meeting

4 and 5 – IARU Region 1 Field Day; Namibian Field Day

6 and 7 - Rosh Hashanah

8 - Early Morning Coffee Sprint 11 and 12 - SARL National Field Day; WAE SSB contest

13 – West Rand ARC meeting; International Chocolate Day

15 - SARL 80 m Club Sprint

15 and 16 - Yom Kippur

16 - World Ozone Day

18 - Magalies and Highway ARCs meeting

18 and 19 - SARL VHF/UHF Digital contest

20 – Full Moon

21 - PEARS and Border ARC meetings

22 - Spring Equinox (21:21 CAT)

24 - Heritage /National Braai Day; ZS SOTA Spring Activity Day; registration for the October RAE closes

25 - CTARC meeting

25 and 26 - CQ WW RTTY contest

26 – the ZS1 Sprint

27 - World Tourism Day

28 - Secunda ARC meeting



Page 6 Newsletter



Twenty-four Hour Vigilance ... the SUPER-PRO "SERIES · 200"

TWENTY-FOUR HOURS every day HAMMARLUND radio receivers aid in defending the United Nations against air attack. Sound electrical and mechanical design, together with accurate workmanship, make the "SUPER-PRO" superior in performance under the most adverse operating conditions.





Page 7 Newslette

Tanzania, 5H. Maurizio, IK2GZU, will once again returned to "Mission Ilembula" to do some volunteer work at the Ikelu hospital and orphanage between 25 September and 20 November. He plans to be active during his spare time as 5H3MB on various HF bands using CW, SSB, RTTY and FD8. Maurizio will use his FT-891 and dipoles GP for 10 MHz. QSL via IK2GZU, direct, by the Bureau and ClubLog. Also, QSL via LoTW (after his return home) and eQSL. For more details, updates and an online log, visit his Web pages at http://www.buffoli-pm.it/5h/

Tanzania 202011.htm and http://www.buffoli-pm.it/5h/qsl 20request.htm Niger, 5U. Reports indicate that Adrien, F4IHM, will be back on the air again as 5UAIHM from Niamey between 11 September and 22 October. Activity is usually very limited, but watch 40/20 meters CW between 18:00 – 20:30 UTC. QSL via F4IHM, direct or by the Bureau.

Malawi, 7Q. Vasco, 7Q7CT, a Portuguese operator that has been living in Lilongwe, Malawi, since 1992, announced on QRZ.com that he uses the following frequencies (suggested times were not provided): 40 metres - between 7 090 - 7 098 kHz; 20 metres - between 14 180 - 14 200 kHz and 15 metres - between 21 350 - 21 360 kHz. A list of his equipment (multiple transceivers and antennas) is listed on QRZ.com. QSL via JH1AJT. He states that he uses EchoLink (SM-G965F/DS) and FaceBook: https://www.facebook.com/7Q7CT-Ham-radio-page-103780338402810. There are plenty of pictures on FaceBook.

The Gambia, C5. Luc, F5RAV; Gerard, F5NVF and Abdel, M0NPT will be active as C5C from The Gambia between 24 October and 19 November. Activity will be on various HF bands using CW, SSB, Digital and the QO-100 satellite. They are also planning to be active in CQ WW DX SSB Contest on 30 and 31 October. QSL via F5RAV.

Central African Republic, TL. Getting ready for their next DXpedition to Bubaque Island (AF-020), Guinea Bissau, as J5T for CW, SSB and RTTY and J5HKT for FD8 between 9 and 22 October, the members of the Italian DX Team have announced their plans for a DXpedition to Central African Republic as TL8AA for CW, SSB and RTTY and TL8ZZ for FD8 during the Spring of 2022. Plans are to have 7 operators and 4 stations to be active on 160 - 6 meters. Look for more details to be forthcoming. Also, watch for updates at http://www.i2ysb.com/idt



Page 8 Newslette

Commemorating December 11, 1921

2021 marks the 100th year anniversary of the historic Transatlantic Tests.

On December 11, 2021 the American Radio Relay League, The Radio Club of America and the Antique Wireless Association will recreate these historic transmissions on 160 meters near the same location that was used in 1921, using a replica transmitter constructed by volunteers at the Antique Wireless Association.

This special event is your opportunity to relive a historic moment in amateur radio history.

The date is December 11, 1921. The event was the test of amateur operations across the Atlantic Ocean. This page commemorates that significant test.

Until 1921 transatlantic radio communications were utilizing very long wave frequencies in the area of 500 meters and technologies such as Alexanderson Alternators and 200 kilohertz transmitters. Meanwhile, amateurs were utilizing the shorter wavelength of 200 meters and crystal detector-based receivers and spark transmitter, usually limited to relatively short distances, except for the rare high power rotary spark transmitters.

During World War I, amateur operations were banned, while high power tube-based receivers and transmitters were developed as part of the war efforts. At the end of 1919, amateur broadcasting was again permitted and advanced amateurs began to adopt and experiment with tube-based solutions.

In 1921 members of the Radio Club of America coordinated the development of an experiment to test long distance operations utilizing a tube based transmitter. The video story created by Bruce Kelley, describes this effort and the validation of the ability to utilize 200-meter bands to communicate across the Atlantic Ocean.

The story of this era is documented in this Bruce Kelley video from the : (1) AWA Classics - The Trans-Atlantic Test of 1921 - YouTube (copy and paste the link to watch the introductory video.)

On December 11, 2021 the American Radio Relay League, The Radio Club of America and the Antique Wireless Association will recreate these historic transmissions on 160 meters near the same location that was used in 1921, using a replica transmitter constructed by volunteers at the Antique Wireless Association. This special event is your opportunity to relive a historic moment in amateur radio history.



AWA Member Joel Kosoff, W3ZT tests the 1BCG replica transmitter

Page 9 Newsletter

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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.

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— 7125; Sandton repeater 145.700

Echolink—ZS0AWA-L; ZS6STN-R Relay on 10.135, 5,430 and 3615

Saturday 14:00 (12:00 UTC)— CW Net—7025

AWASA Telegram group:

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

Barlow Wadley for sale R750

Was last in working order. Contact Felicity, widow of Om Barney ZS6BLL. Please WhatsApp, as she does not hear too well anymore. 071 238 5333

SK Estate Items:



KENWOOD TS 820S



EDDYSTONE EC10MKII

Page 10 Newsletter







YAESU FT221R

KENWOOD TS120S

KENWOOD SP230







YAESU YO301

KENWOOD SP820

EDDYSTONE MODEL 770R



NAD 613 TAPE DECK



RUARK SPK (1 OF 2)

Contact Cliff ZS6BOX 0828989772, to make a bid on the equipment.