



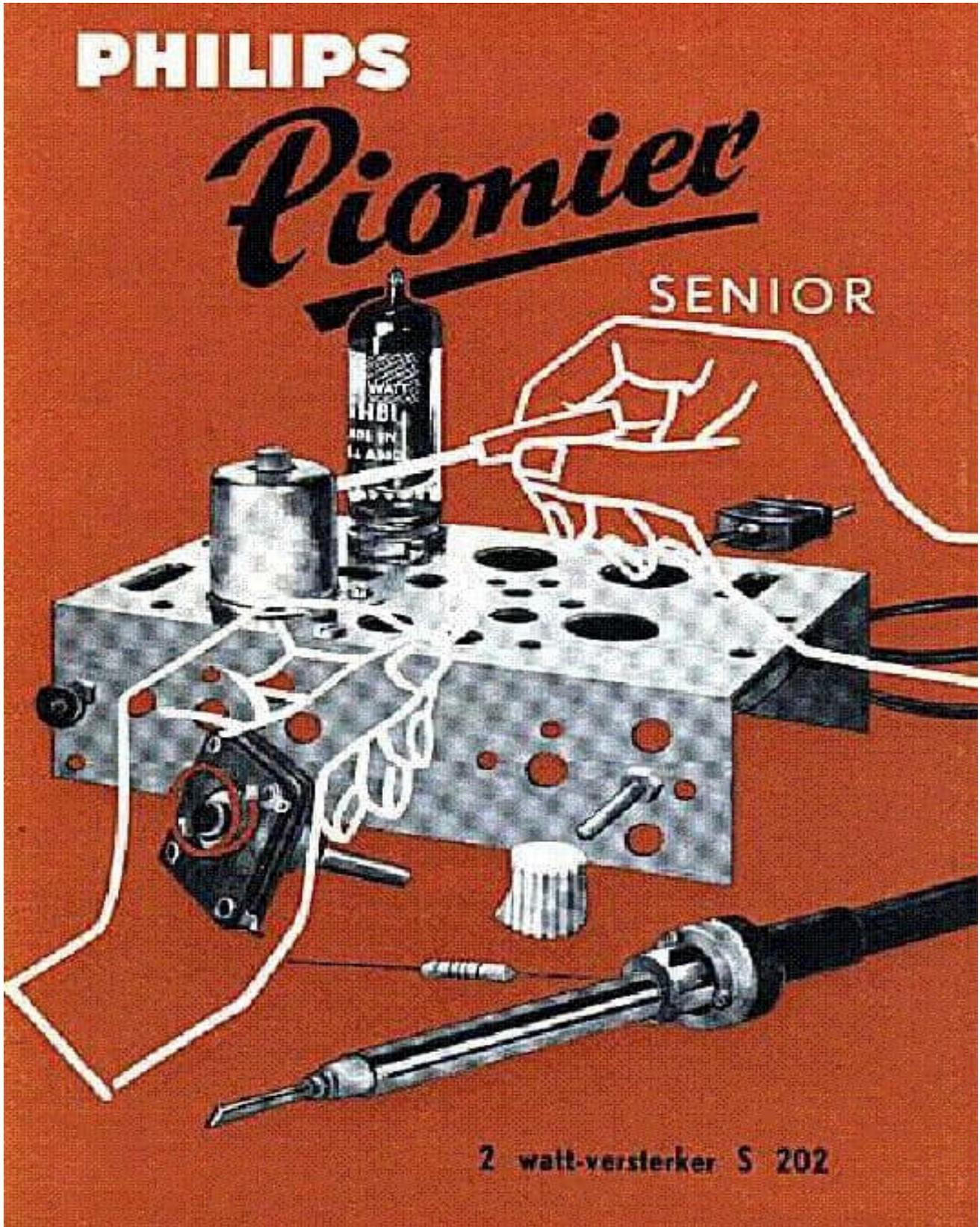
# Newsletter

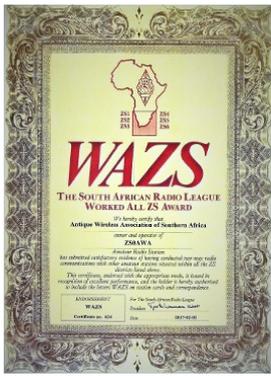
The Antique Wireless Association of Southern Africa



# 165

April 2020





### Inside this issue:

HF Happen-ings	3-4
AWA at Hobby -X	5-7
SMPS Interference	8
Notices	9

### AWA Committee:

- \* President—Renato ZS6REN
- \* Acting Vice President—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](http://www.awasa.org.za)

## Reflections:

So we are in to the first week of lockdown and all of a sudden the bands have come alive because people are at home and now realise they have radios packed away somewhere. I'm being cynical of course, but its wonderful to see how many people are playing radio again.

The beauty of this whole scenario is that there are projects that have been shelved for a long time that will get done now and things we never really had time for will now move up on the priority list.

In no way am I trying to play down the seriousness of the situation we find ourselves in at the moment, but rather that we cant find any excuses now to not do the things we can do.

Of course I know there are three fingers pointing back at me right now and that I am very much included in this. For that reason, I wont say too much. Who knows, I may even get this Newsletter out on time.

One has to admit however that it was so good to hear so many on the various frequencies on our Saturday morning SSB net. I think that was the largest call in we have had in a while.

The discussion topic brought out some rather amusing comments ranging from compost heaps to Zen, and was well discussed from all angles. If you aren't there to join in, you will never know what you're missing.

The discussion topics still seem to be our main drawcard and we get a lot of listeners who are not part of AWA listening in to the discussions.

I have of course discovered in this time, as I think many of you have, how many unfinished or unstarted projects I have that have been lying around crying out for some attention. I'm actually starting to wonder if 21 days is going to be long enough to get many of them, never mind all of them, finished.

But we have made a

good start and seem to be going along quite nicely. At this rate I should manage to get at least 50% of them finished if I am lucky, but the ease with which I am drawn to my radios during this time serve as quite a distraction.

I am wondering where all these unfinished projects came from ? Surely it cant be just me that has brought this on myself . There has to be some external force at play here. Maybe I have a boatanchor fairy who thinks I don't have enough on my plate ?

As long as by the end of this stint I am not having arguments with myself and talking to the computer waiting for it to give me some long awaited advice, then I am sure I should be alright.

That of course is a matter of opinion, that I shall keep to myself.

Keep safe out there.

Best 73

DE Andy ZS6ADY

## Wikipedia

### Radio Propagation:

#### Auroral backscatter

Intense columns of [Auroral](#) ionization at 100 km altitudes within the auroral oval [backscatter](#) radio waves, including those on HF and VHF. Backscatter is angle-sensitive—incident ray vs. magnetic field line of the column must be very close to right-angle. Random motions of electrons spiraling around the field lines create a Doppler-spread that broadens the spectra of the emission to more or less noise-like—depending on how high radio frequency is used. The radio-auroras are observed mostly at high latitudes and rarely extend down to middle latitudes. The occurrence of radio-auroras depends on solar activity ([flares](#), [coronal holes](#), [CMEs](#)) and annually the events are more numerous during solar cycle maxima. Radio aurora includes the so-called afternoon radio aurora which produces stronger but more distorted signals and after the Harang-minima, the late-night radio aurora (sub-storming phase) returns with variable signal strength and lesser doppler spread. The propagation range for this predominantly back-scatter mode extends up to about 2000 km in east-west plane, but strongest signals are observed most frequently from the north at nearby sites on same latitudes. Rarely, a strong radio-aurora is followed by Auroral-E, which resembles both propagation types in some ways.

## HF Happenings:

### Due Date for the Renewal of Radio Frequency Spectrum Licences Extended

Pretoria, 30 March 2020 – In view of the state of national disaster and the current 21-day lockdown to curb the spread of the COVID-19 pandemic, ICASA has taken a decision to extend the validity period of existing radio frequency spectrum licences in line with regulation 10 of the Radio Frequency Spectrum Regulations.

In terms of the Regulations, the due date for the renewal of radio frequency spectrum licences is 31 March annually. The Regulations further provide that failure to pay the prescribed licence renewal fee by the due date (i.e. 31 March annually), will result in expiry of the radio frequency spectrum licence immediately on the next calendar day that marks the beginning of the new financial year.

In this regard, ICASA has resolved to grant all radio frequency spectrum licence holders an extension to renew their licences by no later than the 30th of June 2020.

<https://www.icasa.org.za/news/2020/due-date-for-the-renewal-of-radio-frequency-spectrum-licences-extended>

### SARL 80 m QSO Party

The first leg of the popular SARL 80 m QSO Party is on the air from 17:00 to 20:00 UTC on Thursday 2nd April 2020 with phone activity between 3 603 and 3 650 kHz and between 3 700 and 3 800 kHz. The exchange is a RS report, your call sign and your name. You earn 10 points for each QSO with a South African station and 15 points for a QSO with a station outside South Africa. Log sheets in MS Excel format ONLY must be submitted by 9th April 2020 to [zs5lp@vodamail.co.za](mailto:zs5lp@vodamail.co.za). The rules are on page 30 of the Blue Book.

### The RaDAR Challenge

The first RaDAR Challenge of 2020 takes place from 00:00 UTC to 23:59 UTC on Saturday 4th April 2020 RaDAR operators define their own operating time schedule for the maximum, single period, four-hour session. CW, SSB, FM or any legal amateur radio digital mode can be used on all amateur bands including cross band contacts via amateur radio satellites. The exchange is your call sign, your name, a RS or RST report and your grid locator. Log sheets must be submitted by 11th April 2020 by e-mail to [edleighton@gmail.com](mailto:edleighton@gmail.com). Get all the information on page 27 of the Blue Book. With the lock down you will have to operate from your garden.

### IOTA Contest and additional contests

From the RSGB HFCC. We have reached a point with COVID-19 that it is inappropriate for us to run the IOTA Contest in July 2020 in its usual format. We cannot encourage our participants to operate in multi-operator groups nor to travel to island locations where visitors are not currently welcome. We would like your opinion on whether we should cancel outright or should retain a contest this year for single operator, home stations only.

We are also conscious that a large number of our members are going to be spending more time at home than normal. Unable to enjoy many of our favourite outdoor contests we are proposing a series of home-based day-time contests to entertain and support one another.

Both these issues are detailed in a survey which we invite you to complete. This is at ([https://www.surveymonkey.co.uk/r/RSGB\\_HFCC\\_2020](https://www.surveymonkey.co.uk/r/RSGB_HFCC_2020)). The survey is open until Friday 3 April after which the outcomes will be made public.

### ILLW 2020 and COVID-19

Hopefully by the time we get to August and the International Lighthouse Lightship Weekend 2020, things will have returned to some kind of normality. Please rest assured that whatever the situation the ILLW will still be op-

## Calendar:

### April

- 2 - World Autism Awareness Day; SARL 80 m QSO Party
- 3 and 4 - SARL National Convention
- 4 - RaDAR Challenge
- 5 - Palm Sunday
- 6 - Arrival of Jan van Riebeeck in the Cape - 1652
- 7 - World Health Day
- 10 - Good Friday
- 12 - Easter Sunday; International Day for Human Space Flight
- 13 - Family Day
- 16 – 23:59 CAT Lock down lifted (we hope)
- 18 - World Amateur Radio Day; Autumn QRP Sprint; ZS4SRK Balloon Contest
- 19 – ZS4 Sprint
- 21 - Lyrids meteor shower; Highway ARC meeting
- 22 - Lyrids meteor shower
- 25 - Ramadan; CTARC meeting; SARL 95 40 m Club Sprint
- 27 – Freedom Day

erational. The decision to participate will rest with each and every entrant depending on the circumstances in his or her country at that time.

In view of the fact that the 75<sup>th</sup> anniversary of Victory in the Pacific, or VP day, takes place on 15 August, the normal weekend for the ILLW, it was decided, out of respect for those wishing to commemorate that event, to move the ILLW to 22 and 23 August.

The move hasn't so far affected entries as 134 have registered so far. Numbers are expected to be down on previous years due to the closure of national parks and country borders, but rest assured there is no intention to close it down. One of the more interesting entries for this year involves an Englishman and his 14 year old daughter. They intend to ride their bicycles (pedal) from Lands' End in Cornwall to John O'Groats and then across to Cape Wrath Lighthouse at the top end of Scotland.

### 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](http://www.sarl.org.za/public/awards/awards.asp))

Future Djibouti DXpeditions by Col MM0NDX. I recently chatted with the Head of Radio and Frequencies in Djibouti. I had made acquaintance with this gentleman while organising and planning the ill-fated J20DX DXpedition in 2019. We also met while on the ground in that country as he tried (in vain) to help us with our local issues, so we struck up a fair rapport back then. Few days ago, I learned that the Head is now trying to create a new Association of Radio Amateurs in Djibouti in order to be of a service to local and international radio hams who may want to operate in his country. His main goal is to be able to create all possible links to facilitate radio amateurs and to have a good stay, but he must firstly finalise all the possible steps to develop the new association. <https://www.dx-world.net/future-djibouti-dxpeditions/>



Botswana, A2. David, VE7VR will be active as A25VR in 'holiday-style' between 1 and 22 May. Activity from 40 to 20 metres using low power. QSL via home call.

Uganda, 5X. Shabu, M0KRI (ex VU7RI, 9U4RI) will be active as 5X1RI from end-July to mid-August. More to follow.

Malawi, 7Q. Pista, HA5AO will be operating as 7Q7AO during the second half of September/begin October. Dates TBA. Operation from 80 to 10 metres using CW, RTTY, FT8 and some SSB.

<https://www.ha5ao.com/index.php/news>

Chad, TT. The Italian DXpedition Team will be active as TT8RR (CW, SSB and RTTY) and as TT8XX (FT8) between 29 September and 12 October from Ndjamena. Nine operators (I1FQH, I1HJT, I2PJA, I2YSB, IK2CIO, IK2CKR, IK2DIA, IK2HKT and IK2RZP) will be active with four stations on all bands. QSL via I2YSB (direct only). <http://www.i2ysb.com/idt/>

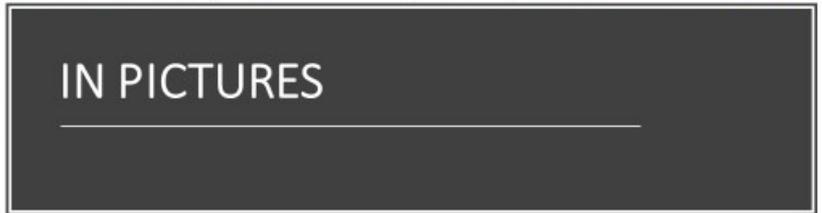
### African Islands

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

Nothing happening this week!



## AWA At Hobby-X



The AWA received an invitation to go to Hobby-X from the SARL and to partner in setting up a stand and putting on a display of old radios. At the time we struggled frantically to get some guys together to help put up a display which we thought was going to be something like a stand at one of the big shows.

As it turned out, we were pulling ourselves in all different directions up until our first meeting at SARL with Nico ZS6QL (SARL President) and the crew who were doing the rest of the stand. We then breathed a sigh of relief realising we did not have to cart a whole bunch of antique boatanchors on to a stand, it would only be a few, to fill a table.

Our banner and stall was paid for by the SARL and it turned out to be a great success for the SARL and for the AWA. It was amazing how many people came along to the stand and said how their fathers or grandfathers had operated radios like the ones on display and were awed that valve radios of the era were still in use.

Many pamphlets were distributed giving the AWA details and already we have seen a few new members come along since being there. At first we were worried about being able to man the stand for the four days required but thanks to the efforts of Cliff ZS6BOX, Oliver ZS6OG, Renato ZS6REN, and Andy ZS6ADY we managed quite well.

# Westinghouse Radio Receiving Equipment



Type RA Short Wave  
Tuner, Style 307189,  
180-700 Meters

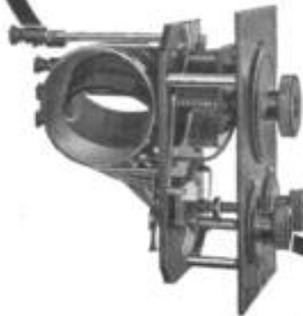


Type DA Detector Am-  
plifier, Style 307100, 2-  
stage, 3 tubes, Audio  
Frequency

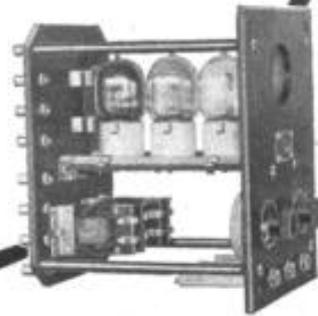
**T**HIS high-grade Westinghouse regenerative tuner, and tube detector-amplifier embody the last ideas of two noted radio engineers, Edwin H. Armstrong and Frank Conrad.

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# Westinghouse

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Cliff brought along a Straight key with a sounder and it was amazing how many people would try their hand at sending some dots and dashes. It was a great PRO exercise for the SARL and one that turned out be the same for the AWA.

Our thanks to Nico, Graham and Phillip who helped out quite a bit too and to the SARL for the opportunity to show the AWA.

*(For interest, the picture of the shack on our poster was the shack of Om Gary ZS5NK)*

## SMPS Interference

Following on from our pretty informative AWA net on Saturday, I forward the following for the news letter

SMPS interference is a big problem to radio hams. The following articles/URLs will show the causes of the problem and the ways to mitigate the level of interference

<http://ka7oei.blogspot.com/2013/09/quieting-high-current-switching-power.html>

<http://ka7oei.blogspot.com/2014/08/completely-containing-switching-power.html>

<http://ka7oei.blogspot.com/2012/12/reducing-switching-supply-racket-rf.html>

<https://www.rs-online.com/designspark/pros-and-cons-of-switch-mode-power-supplies-smps>

<https://www.ukqrm.org.uk/smps.php>

The best would be to go to these websites and check out the failures and fixings of many different types of interference as a result of the power supplies we use in our everyday households. Simply copy and paste the links that are given here into your browser.

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1. Antenna Matching Unit
2. Forward-Reflected Power Wattmeter
3. R. F. Wattmeter
4. Dummy Load



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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 06:00 (04:00 UTC) —AM Net—3615  
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 3615 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—3615, band conditions permitting.

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