

Southern African Antique Wireless Association Newsletter



Flowers in Springbok area – ZS3OBE



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August 2006 Issue #8

This newsletter is sent out to all who have called in on the AWA net and who have email facility, and those who have paid for mail envelopes, with the hopes that it will encourage you to call in again and help to keep the AWA net alive and well.

Should you not want to receive any further publications of this newsletter, drop me a note and I will take you off the mailing list. Should you prefer to receive a hard copy via snail mail, please send an SASE for the period you would like to receive these and I will process for you.

Happenings:

Top Picture was sent to me by Carel ZS3OBE, of the flowers in the Springbok area at the moment. Comment from Carel: "This is the best they have been in years".

Anyone still interested in having a lapel badge, same as the logo at the top of this page, can get hold of Cliff by email at csmyth@altron.co.za to place an order with him. The cost involved is R22 per badge, PLUS R6.00 postage. The bag used for postage can take up to 12 badges, so order a few and save on postage.

Cliff's banking details are as follows:

ABSA branch code 515-205 (Northgate) account C.J. Smyth. Number 0711107967. Use your call sign as a reference number.

The RTA days have been and gone and the last one is due to be held in Johannesburg on Saturday 19 August. John, ZS6ABJ and myself will be setting up a static display again at the venue. Should you want to put your antique rig on display, bring it along, with a brief explanation and history of the rig. Look forward to seeing you all there.

ZS0AWA/CW.



The CW net has been stumbling along with very little activity over the past month. Regulars have been Barrie ZS6AJY and Ben ZS5SIB. I don't know whether people have been put off by band conditions, but we still keep the air waves warm with a bit of RF on Saturday afternoons at 14:00 SAST. The net is run at 12 wpm and so should meet the needs of all interested in CW. 7020 is the frequency.

AM Net:

AM call in at 09:15 on Saturday morning after the SSB net. Of course the problem has been that over the last few weeks, conditions have been so bad that we have actually abandoned the AM call in. But as Rod ZS5RK said the other day, this won't last forever. In a few years time we will have forgotten about the bad band conditions of 2006. So bear with us as we try to work our way through this one.

The AM group on Wednesday evenings has been plagued with the same problems. The band goes out sometimes before the net even has a chance to get going. This last Wednesday evening the band was out when we started out and came back after a short while with S9 signals on SSB. We were all so excited at the prospect that we forgot to try AM and when we realized this, the band was starting to fade again.

Please come up and join us if you have the time and the inclination. 19:30 Wednesday evenings on 3615.

SSB Net:

40m has also had it's fair share of problems during the course of the month. Div 5&6 not being able to hear each other, bands going out, div 6 not being able to hear div 6 and so the list goes on. Last Saturday we had quite a good net on 80m with the div 5 & 6 guys, but then div 2 and the rest, could not hear the guys on 80m. The result was two nets running, one on 40 and one on 80, which is not very good for our image. I am in the process of making up a patch box so that we will be able to relay 40 – 80 and vice versa, so hang in there while we try to get a relay up and going.

The list of call in's on freq continues to grow and welcome to the newcomers.

National Radio Company

"Tuned to Tomorrow," National had a lot of yesterdays. It started in 1914, as a toy company, and moved gradually into the radio business in the twenties. National started out making premium parts for other companies, an approach that led to their traditional emphasis on quality. National radios never looked very fancy. They were just good.

After selling advanced HF/VHF radios to airlines and the government, National entered the ham market with a popularly priced line of regenerative receivers. Then, in 1935, they introduced our third classic boat anchor, the mighty, wide-coverage HRO. This series survived, with circuit refinements, until 1964, and it was popular and respected

Classic BA #3: National HRO-60



the whole time. That's a long run for a radio that never really stopped looking like an orange crate! The HRO had a number of special parts, as designed by none other than James Millen, most apparent being the huge, steel, tuning dial that came to symbolize National radios. This dial had little windows. When you turned it, the 100-kc (no Hertz yet!) would increment inside the windows, in the dial, while you read off the individual kc on the dial's outside. This awesome mass of chrome and steel looked like an ash tray, and it was made like the Great Pyramids.

Even more remarkable was the band switch. Millen had a hand in here, as well. None of these crummy

wafer switches, or coil banks, or turrets to oxidize and go out of alignment. To change bands on any HRO, the operator opens two spring-loaded clamps that could go on a bank vault, and pulls out a coil array something like 3 inches by 6 inches by 4 inches deep. Basically, you disembowel your radio. The huge coils are slid into the shelf box that lives next to every HRO, the proper new ones are slid out of the box, at which point you stick the new assembly back into the radio, where it seats with a satisfying ker-THOK. The spring clamps are snapped shut, and away you go. Now *this* is a *radio*! Millen, a mechanical engineer, moved on to his own parts company, which ran its whole catalog in the *Radio Amateur's Handbook* until the ARRL dropped all the ads. His stuff always looked pretty dramatic; the kind of technology that won World War II. Not flashy; just immortal.

The newest and best of the tube HROs are the HRO-50 and HRO-60. Either one is made like a locomotive, and either will make yet another fine addition to the boat anchor collection, though it might also get you a divorce. They're rectangular boxes, heavy, heavy, heavy, with ominous slits along the top for the sliderule dial scale, and that redoubtable HRO tuner just below. There's an S-meter on the left, and the usual plethora of dials and knobs. Do get the matching speaker, if you can.

The HRO made the solid state transition with the fully synthesized HRO-500. It still had the classic HRO dial, and very wide coverage from a dizzying 5 kHz to 30 MHz. It is reputed to be a very good radio, in fact a classic, but I've never seen one. It came along too late to save National's general-coverage line, and not that many were sold.

Less well known is the last model with an HRO prefix, the rare HRO-600. This is a solid state, very high-end (\$5500!) military-grade receiver aimed more at the surveillance and maritime markets.

One of National's few transmitters was the NTX-30, made right before the war. It's supposed to be a nice rig, but I've never seen one. Power output was 30 watts plus, on four bands, from a single-ended pair of 6L6GCs in parallel. Doubler/driver stages are also 6L6s. CW only, but there was an input for a modulator. It's all rather beefy looking, in one of those black boxes that says "old transmitter" at a glance.

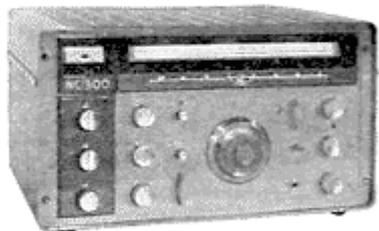
In the 60s, National made a highly regarded NCX-5 transceiver with a mechanical digital dial, and its companion NCL-2000, a 2000W PEP desktop linear. Both units had a nice, purposeful look.

The linear ran National's patented class AB2 circuit, and it quickly became known for a lot of punch given its compact size and relatively affordable price just under \$600. PA tubes were ceramic 8122 tetrodes, costing only \$31 each at the time. Here was an honest, full-power amp that you could re-tube without taking out a second mortgage.

National sold something like 5000 of these linears, many of which are still in use today. It is said that component life is very good if the amp is run at "only" a kW out, maybe saving the full 1300 watts for pile ups.

*YES HENRY HAS ALL THE
NEW EQUIPMENT FIRST!*


NC
300



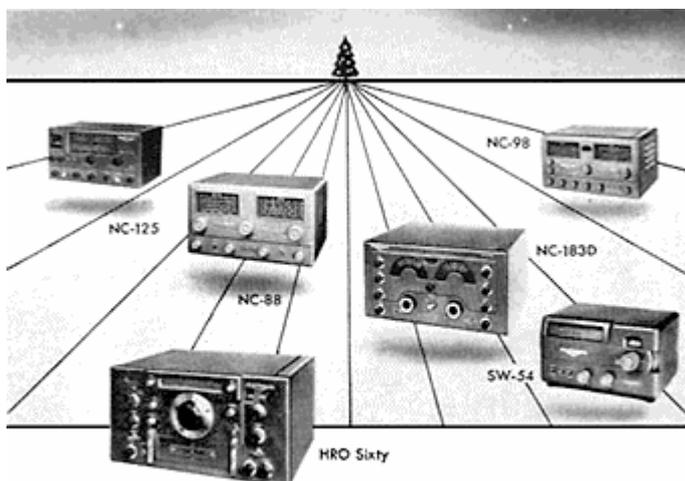
Receiver Features greatest sensitivity of any ham receiver at any price. 20 monthly payments \$18.31. \$37.00 down. Cash price \$369.95

Like Hallicrafters, National hit the ground running after WWII with a whole line of short-wave receivers for the consumer market. Smallest and cheapest, at fifty bucks, was the "Mighty Midget" SW-54, an 11" by 7" by 7" general coverage box with built-in speaker and obviously aimed at the same low-end market as the Hallicrafters S-38 series. In the 60s, about when the S-38 was restyled into the sleeker S-120, National did similar with their \$60 consumer-market NC-60.

Over on the amateur side, National came out in the mid 50s with the NC-300, another whopping BIG radio (64 pounds), with good

mechanics, and a band switch that went CLUNK into place. Its design followed a well-publicized "dream receiver" promotion, and it was definitely a high-end (\$400) unit that the operator wouldn't get tired of. While sliderule dials were sometimes woefully inadequate on ham band radios, this one was huge, and extremely usable.

The NC-300 was extremely sensitive, and generally a real good radio for its time. It had a matching speaker, the NC-300TS, with a very cool thunderbolt "N." There was also a similar-looking case that held up to three accessory VHF convertors, for 6, 2, and (believe it or not) 220 MHz. These were switched in from the receiver, and had their own scales on the big dial. Electrically, all three downconverted to a 30 MHz top band on the main set, which served as a tunable IF.



WORTH MORE WHEN YOU BUY THEM . . .
WORTH MORE WHEN YOU SELL THEM

The NC-300 was followed in 1958 by the NC-303 (\$450), an improved version of the 300 which still shows up on a lot of all-time favorite lists right next to such legendary iron as the R-390, 75A-4, and SP-600! It had more filters, two different noise limiters, and a built-in Q-multiplier/ notch filter. The NC-303 lasted until the end of the boat anchor era in 1962.

The last National tube box that I know much about is the later NC-270. Advertised in the mid-60s as "the red-hot set with the cool blue look," it was decidedly slimmed-down and

"modernized." It had a multi-band sliderule dial a la Hallicrafters and a "cosmic blue" case that tilted up on a "flip foot" for ergonomics. I got to use one of these. It's a good enough set, once again with nice big controls that click satisfyingly into place, but otherwise as a mid-price box it can't compete with the 300 series. National left the ham business soon after, surviving on government contracts until going chapter 11 in the 80s. It hung on, barely, until 1991, when the last vestiges were sold off in an IRS foreclosure.

With thanks to the Ominous Valve Company website for the article.

Promotions:

Things have quietened down now and perhaps this may be a good time to talk about having a swap meet somewhere, with workshops on refurbishing some of the old rigs, flea market for the hard to find bits and pieces, as well as rigs that have been gathering dust, and a chance to destroy some of the ozone by burning some meat on the fire and talking nonsense and propagation.

Would be interested hear the response to this suggestion.

Should you feel so inclined, send us pictures of your shack that we could have them included in this newsletter.

Restoration News:

Remember the KW Viceroy of Rad – ZS6RAD, well here's the final product.



Danny ZS6AW sent me some pics of restored rigs that he has. Of course it wouldn't be Danny if he did not offer these rigs for swap, either for coupons or what have you.



Yaesu FTDX100



Swan 300B



Trio TS510

Danny also has a Swan 350 and Drake 2B Receiver excess to his requirements.

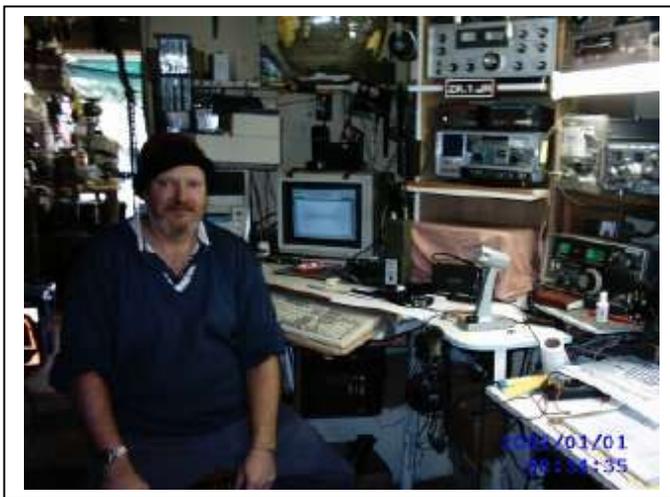
Contact: **Danny 083 401 4000 or 011 794 4505**

I am busy compiling a list of valves that we purchased for the AWA and as soon as it is finished, will circulate it to all on the mailing list. John ZS2J has also sent me a list of valves that he has in stock to add to our list. Should you have any valves you want to donate to the AWA, let me know and we will make arrangements to collect them and add them to the growing list.

The two Heathkits were sold and the money gained, covered the cost of purchasing the valves. My thanks to all those who have helped in setting this up.

Shack News:

Hennie, ZR1JR, sent us these pics of his shack and some of the equipment in it



Swap Column:

There is an online swap shop on the website of the Highway Amateur Radio Club for ALL amateurs and interested parties to use - it is not restricted to members only. We have been invited to make use of this facility too. Should you want to, use the link to the HARC at the end of the page to take you to their website.

Antique Web Sites:

<http://www.armyradio.com/arsc/customer/home.php?cat=113>

If you would like to forward this newsletter to any other interested parties, please feel free to do so. Print it out and put in on your club notice board, or give it to someone interested in valve radios. If you know of any who report in on the net but don't have email, print it out and give them a copy.

Net days and times:

Saturday 08:30 SSB net - frequency – 7070Mhz
Saturday 09:15 AM net – frequency 7070Mhz
Saturday 14:00 CW net – frequency 7020Mhz
Wednesday 19:30 AM net – frequency 3615 (-5 for QRM)

This, and past copies of the AWA Newsletter can be downloaded from <http://members.harc.org.za/newsletters/AWA/>. Our thanks to the Highway Amateur Radio Club in Durban (<http://www.harc.org.za>) for providing this service to our members and other interested parties.

Thanks for the bandwidth.

DE ZS6ADY FOR ZS0AWA