



AWA Newsletter

Issue 31

July 2008

Antique Wireless Association of Southern Africa

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- * President—Rad ZS6RAD
- * Treasurer—Willie ZS5WI
- * Technical—Don ZS5DR
- * Net Controller—Willem ZS6ALL
- * Newsletter/PRO—Andy ZS6ADY

VOIP and Internet QSO's :

Something not quite Antique Wireless, but let it never be said that we are against progress in any type or form.

Echolink, CQ100 and all the latest internet means of communication that have become available to Radio Hams are certainly not to be sneered at.

I have certainly made good use of Echolink and more recently of CQ100 for communicating with hams that one would ordinarily not hear on the ham bands for various reasons. Be it band conditions or the fact they have downsized their living conditions to retirement homes or Townhouse complexes, the fact is there are plenty of hams using this new mode of commu-

nication.

I was most pleasantly surprised to hear a G station calling CQ on CQ100 in CW during the last week. Those of you who may be familiar with CQ100 will certainly know that sending CW is really quite easy using the keyboard, but one has to keep your wits about what you are typing and if you make a mistake, you cannot backspace. It sends whatever you type in.

Anyway, Ray G0EML was calling CQ and I went back to him using the keyboard, and it seems that he has wired his paddle in to his system to use it to send CW. This was most intriguing to me and we



Ray G0EML collection

had a 30 min QSO at about 14wpm, which was quite comfortable for me.

Later I received some photo's from him showing his collection of keys and paddles, which was enough to make me quite envious, but also make me realise, that we cannot throw away any means of communication, we can always combine the old with the new though.

Andy ZS6ADY

Fox Tango International History



What is Fox Tango? , Founded in 1972 by Amateur Radio operator Milton Lowens (N4ML) as a Yaesu users group for the purpose of interchanging information, ideas, experiences and problems of the FT- 101 owner, "By and for owners of Yaesu amateur radio equipment." Milton was the editor of the Fox Tango News Letter which ran for nearly 14 years. Many modifications and contributions to the newsletter where sent in to the editor by the Fox Tango membership and printed 10 months out of the year. So valuable were these newsletters and suggestions that even the Yaesu factory engineers had them translated into Japanese and acted upon the suggestions from the club membership which resulted in significant improvements to the FT-101 during its production. Current Yaesu equipment owners still consider the newsletters to be of value even now in the 21st century. Much enthusiasm continues even to this day to keep Milton's efforts alive with a Yaesu users group he started over a quarter century ago. The quality of the first year newsletter was not the best as it was originally printed on a Mimeo Machine, subsequent years newsletters were greatly improved.

Visit— <http://foxtango.org>

CW Net:

Another month with not too much activity on CW. I often wonder to myself, what has happened to all the ardent CW operators that one used to hear on the bands.

I am quite sure they have not all gone S/K, so that means that somewhere out there, lurking in the shadows, there are a whole bunch of CW operators who can do CW, but for some unknown reason, don't want to.

Perhaps we could find out what it would take to entice these guys back on to the bands again? Phone is always so much easier isn't it? But yet, CW has that certain magic about it that you can't really describe to

anyone, unless they have tried it.

I will never forget my first CW contact after getting my ZS licence. We lived in Lime Acres in the Northern Cape and as it was, it was about 35 deg C outside.

I had been practicing my CW with a little "squawker", run off a 9 volt battery and was now ready to do this. I tuned up the HT37 and SX100, retuned them and then just to make sure, tuned it again. I called CQ with my call sign, nothing. I called again and ZS1ADF Tom, came back to me with a 599 report. I immediately broke out into a sweat, that by the time I was finished, left me



Hallicrafter HT37

drenched, right down to my underpants. I was absolutely elated, but totally exhausted. And so began the first of my 200 contacts towards my full ZS, with the then CWIG from the Cape.

De ZS0AWA/CW—SK

SSB activity:

It seems that we are continually moving the goalposts when it comes to the next solar cycle as it really has the boffins quite confused as to when we are actually going to see some improvement on the bands. Every time one of the proposed time spans passes us without any improvement, a next one is proposed, but yet it seems like we are standing still on this one.

My choice of bands is still 80m as it

seems to me that is the only band showing some kind of stability at the moment.

Whichever way it goes, there has to come some improvement some time and I am sure that we are all waiting patiently for that to happen. The days when we could give a call on any of the bands and you were bound to hear someone coming back to the call, are sure to come again. The days when 40m was so crowded it

was quite difficult to find a frequency to work on without getting some kind of QRM. May they come quickly.



Johnson Viking Ranger II

AM:

As is with SSB, the AM nets are not without their problems. With the onset of winter and the cold fronts, the noise levels have remained pretty serious and the 80m band has been having it's ups and downs in the evenings.

I have unfortunately not been too active on the AM net on Wednesday evenings due to other commitments at the moment, but nevertheless am out in the shack on the cold winter

mornings from 06:00 waiting for the band to open as the D layer moves across the country with the rising sun.

Div 5 are always heard long before the Div 6 stations so it means that we can get something going from almost 06:15. Of course we never hear any of the Div 2 stations on AM, so we don't know if the band is even open towards them.

I had hoped we may have a had a

resurgence of some of the AM stations after the QSO party, but that has not happened either.



Hammurand HQ 120

RADIO AMATEUR NEWS

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AUGUST
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 By Major General Geo. O. Squier

LOOP ANTENNA AND DIRECTION FINDERS FOR AMATEURS
 By David S. Brown
 LOW POTENTIAL RADIO FREQUENCY ARC
 By Charles W. Noller

PUBLISHED BY EXPERIMENTER PUBLISHING CO. 233 FULTON

This picture sent to us by Mitch ZS2DK

Pye – The company Who Won the Second World War ?

John ZS5JF



Can you identify this Pye military radio ? It is not WS-19 but uses many of the parts.

The wireless you were asked to identify was a Wireless Set No 22, it was a portable transceiver developed in 1942. Use: general purpose low power vehicle and ground station with facilities for man pack. Frequency range 2-8MHz. MO control. RF output 1.5W. R/T, CW. Range up to 20 miles. General appearance resemble No. 19 Set. Standard WW2 set.

Well done to those who guessed it right.

The Radio Yaesu FT-101

The FT-101 series of transceivers appeared initially in the USA in small numbers in late 1971

Carol L. Maher *W4CLM*

President Fox Tango International 2004

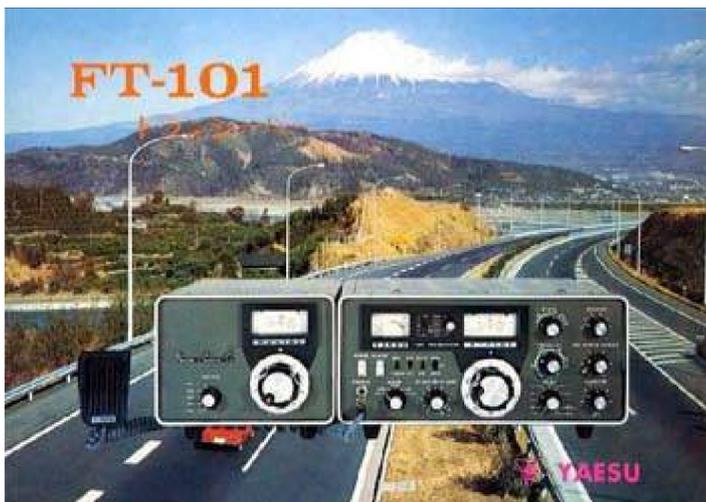
As Expected YAESU is No. 1

A Brief History showing the various models of the FT-101 Transceiver

The first FT-101 transceivers were in production by 1970 they later found their way to the United States in late 1971. At that time distributed in the United States was being handled by SPECTRONICS WEST in Lakewood California and SPECTRONICS EAST in Stow Ohio.

They were being sold at that time for \$559.95 U.S. dollars. The same transceiver was being sold in Europe a Swiss firm named [Sommerkamp](#) that sold all kind of communication equipment on the European market, mainly to Germany and Italy. The transceiver was hailed as a SOLID-STATE BREAK THROUGH, 10 FET's, 3 Integrated Circuits, 31 Silicon Transistors, 38 Silicon Diodes and Computer Type Plug-in Modules. Except for the transmitter final and driver stages, all circuits are transistorized. It was truly one of the first portable transceivers designed for mobile or portable use for car, camper, trailer, boat, air-

(Continued on page 5)



plane, suitcase or the home base, using 12 volt or 117 volt power source. The first FT-101's suffered from spurious signals, front end overload, inter-modulation distortion when strong signals were present during receive and image problems related to the front end. By 1972 many of these problems were being addressed by the Fox Tango Club which was started by Editor and founder Milton Lowens (WA2AOQ) who was in direct contact with the factory in Tokyo about the rig and it's problems. The factory went as far as reading the content of the FT Club Newsletter and translated it into Japanese then passed it on to their engineering department which resulted in many changes to this transceiver on behalf of suggestions being made from the Fox Tango Membership. By February 1974 many improvements to the existing circuit design and the problems of the earlier FT-101 were re-

solved with the introduction of the FT-101B. The factory responded with a major circuit modifications which significantly improved the receiver over that of the earlier FT-101's. Improvements were made by the factory such as an effective noise blanker circuit and the addition of the 160 meter band, then the FT-101B was released. Externally the 101B differs but little from the earlier models. By 1974 the price for an FT-101B was \$579 USD.

While the FT-101's external appearance remained unchanged over a period of years, it was almost impossible to tell an early model from a later one until Yaesu assigned the letter "B" to the transceiver in 1974. It wasn't until mid 1975 with the introduction of the FT-101E where one could notice a significant change on the FT-101 front panel with the addition of black flip style toggle power and heater switches. Also changed were five black flip switches including one new switch labelled PROCESS as the "E" model included a new "RF" speech processor similar to that of Harry Leeming's G3LLL's unit. The new toggle switches provided for increased operating convenience and keeps fingers from wearing away the panel paint as was usually the case with the early model FT-101 and FT-101B. There was also the addition of a red button near the clarifier to turn the clarifier on and off without altering the setting of the clarifier control, another modification suggested by a member in the Fox Tango Newsletters and a direct result of the Yaesu engineers listening to their customers requests.



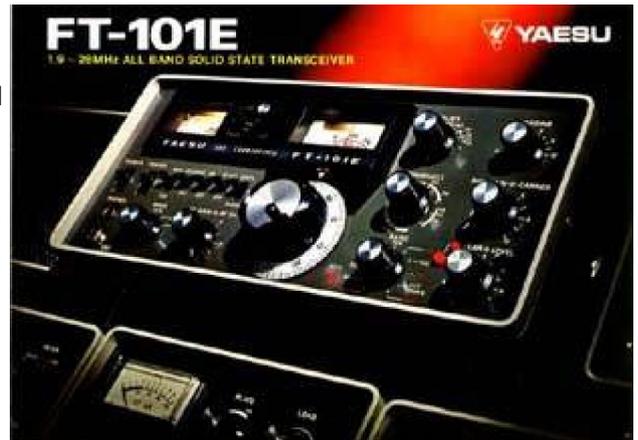
By the introduction of the FT-101E most all of the previous problems were worked out. There were three models of the "E" were released, with exception of the "ES" model made for Japan. The "E" model with all options at a cost of \$749 USD. For those who did not want the processor there was an "EE" (economy) model lacking the speech processor at a cost of \$659 USD and later the "EX" (extreme economy) model lacking speech processor, 160M crystal, DC options, and microphone at a cost of \$599 US dollars. There is little doubt that the FT-101 transceiver is one of the most popular amateur radio transceivers ever to have been manufactured and reached world-wide acceptance. With the possible exception of the [Yaesu FT-200](#) the FT-101 is the best known and most popular transceiver available on the used amateur market at the present time. The FT-101E was the most popular and most produced model by Yaesu of all the FT-101 series sold. There never was a "C" or "D" model produced. Matching accessories included a matching FL2100B Linear Amplifier, FTV-650 (6 meter) & FTV-250 (2 meter) transverters, FV-101 (FV-101B) external VFO, SP-101B speaker and SP-101PB speaker phone patch, YD-844 dynamic base microphone, YO-100 and later the model YO-101 monitor scopes, YC-601 and later the YC-601B digital display units. Other matching pieces of equipment for the amateur market matching the FT-101 design were the [FRG-7 communications receiver](#), [FT-220 two meter](#) and [FT-620B six meter](#) all mode transceivers.

The last of the series was the FT -101F

The FT-101F contained all of the latest updates and modifications which were made to the FT-101E throughout it's production. It included the RF Speech Processor, Hum Modifications due to AC picked up from the pilot lamp circuit, noise blanker modifications and more. However for all practical purposes the FT-101F, FE, FX were the same exact rig as the FT-101E, EE, EX. Only a few of the "F" models were made and released by 1978. They were still available until 1980, this included the "FE" (economy) "FX" (extreme economy) model. Sadly enough for those of us who loved the FT-101 series of transceiver, this was the end of the FT-101 as we knew it. By 1979 Yaesu had announced a

(Continued on page 6)

new version of the FT-101 called the "Z" and "ZD" digital models. The newer model "ZD" looked more like the FT-901 and was being called the FT-101ZD a 901 junior. The newer model "ZD" was reaching for the high technology features now more commonly found in today's amateur radio market. Including such things as IF shift, AF Notch/Peak, Memory features, Digital Readouts and the future WARC bands. However during the previous 10 years the FT-101 established an enviable record for durability and performance throughout the world, with its use of pluggable circuit boards that set a standard which few have been able to emulate as successfully or economically. With an estimated 250,000 units still in use, it will be a long time before they all disappear.

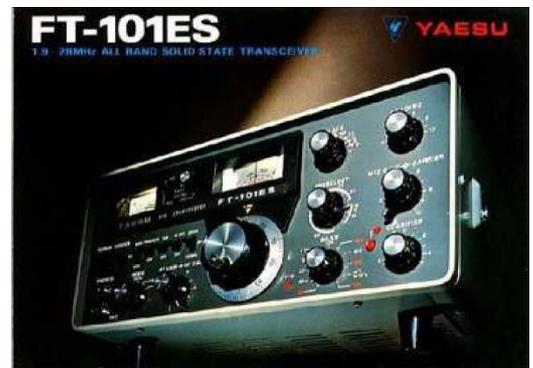


FT101ES 1.9 ~ 28MHz ALL BAND SOLID STATE TRANSCEIVER

Other Models of the FT-101 were sold in Japan for the limited power requirements of the Japanese licensee. To fill this need there was an FT-101S, FT-101BS, and FT-101ES. These rigs were sold with only one 6JS6C final amplifier tube, with a normal rated power of 10 watts, and 50 PEP. From the specifications I can read it appears as though the FT-101S/BS/ES models ran CW power of 20w (A1) and SSB Phone of 20w (A3J) with only 300 volts to the final amplifier stage as per JARL specifications.

The "ES" model is seldom ever found outside of Japan.

With the addition of the power up kit, power could be increased to an FT-101E *FT-101 vs. FT-101S (Japan low power version)*



Sommerkamp FT-277E

One can hardly tell any difference from an FT-101E Sold in Europe by the Swiss importers as the Sommerkamp FT-277E, along with the Yaesu FL-2100 amplifier sold as the Sommerkamp FT2277 linear amplifier.

Sommerkamp was a Swiss firm that sold all kind of communication equipment on the European market, mainly to Germany and Italy. Sommerkamp did not produced anything themselves, they bought big lots of equipment direct from Yaesu and other manufacturers, and sold them under their own brand, not unlike Radio Shack does in the USA. It started already with the FR-50 and FL-50 series. Normally they bought standard equipment, but now and then they had something produced on their own specifications, (FTDX series) or CB stuff, that where sold in big numbers. So: every Sommerkamp is in fact a Yaesu (or other brand). The only thing original, Sommerkamp, is the nameplate. Wim Penders PA0PGA



Carol L. Maher W4CLM

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Mission Statement

Our aim is to facilitate, generate and maintain an interest in the location, acquisition, repair and use of yester-days radio transmitters and receivers. 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.

Notices:

Visit to ZS6MUS

SATURDAY 5 JULY 2008 STARTING AT 10H00.

What better way to spend a Saturday with your family than to join members of the Southern African Antique Wireless Association in paying a visit to the SAAF Museum and its Amateur Radio Station ZS6MUS.

The Friends of the SAAF Museum have jumped at the opportunity to host just such an event and have agreed to the following programme :

- 10H00 Meet and Greet at the Friends of the SAAF Club House for coffee, tea, or cold drinks at "donation prices"
- 10H30 Visit ZS6MUS, the "Wireless Room"/Amateur Radio Station that OM Dave Gemmell ZS6AAW, has been operating for so many years and see all the WW11 and other Antique Radios that have been donated to the station
- 11H00 Join a guided tour of the museum's display hall, numerous hangers and static aircraft display on the airfields apron
- 13H00 Partake of a low cost lunch consisting of Borewors Rolls and Refreshments.

For those of us who are not in a hurry to leave, you are welcome to stay on for the rest of the afternoon. The museum only closes at 16H00.

Like the idea, well then here is the catch – we need to know who is coming and the registration of the vehicle you will be arriving in just to gear up for the catering and to let the gate guards know to allow you in .

Contact Dave Gemmell ZS6AAW on 073-158-4582 or davegemmell@bmknet.co.za or Cliff Smyth ZS6BOX on 082-898-9772 or csmyth@altron.co.za.