

Nomination for SARL Amateur Radio Hall of Fame: W E Dixon Bennett, ZS5EG

Brief Biography of Nominee

On 1st February 1902 William Edward Dixon Bennett was appointed in the Department of Public Works of the Transvaal Colony and stationed in the office of the district engineer in Johannesburg. While temporarily stationed in Pretoria in 1904 he became the first licenced radio amateur and spark pioneer in South Africa. In time Dixon Bennett had risen to first grade clerical assistant. In 1925, he was one of the founding executive members of the SARRL, representing the Free State as A3V. He passed away in 1968 as ZS5EG (ex FO-A3V, ZS4F, ZS4W).

Nominee's Contribution to Amateur Radio

Dixon Bennett, an electrically-minded enthusiast saw an article describing the construction of a coherer used in the receiving equipment by Marconi who bridged the Atlantic with spark transmission. Dixon Bennett decided to build a coherer receiver and a spark transmitter from scratch. He first started to construct the coherer detector, but had to make several attempts before it worked properly. Then he looked for a suitable spark coil and settled for a Watson coil from an X-ray machine (reportedly surplus from the second Anglo-Boer War) and built a spark transmitter around it. It was impossible to test the system over a distance as there were no other enthusiasts around.

Another enthusiast in Pretoria, named Mr. Ensor, became licenced too and constructed his own spark transmitter. They met and started to conduct tests with each other and communicated in Morse code on a wavelength around 550 m using large antennas. Unfortunately, these tests came to an end a year later when Dixon Bennett had to return to Johannesburg. The distance between Johannesburg and Pretoria was too great for communication with their low power.

Dixon Bennett improved his receiver sensitivity by replacing the coherer detector with a more sensitive galena crystal. Later he was joined in Johannesburg by three new spark enthusiasts, namely Raymond Coombes, the Honorary Organizing Secretary (HOS) of the future SARRL, George Newman and George Lowe. They constructed their spark transmitters around Model T-Ford ignition coils.

In 1912, he visited the Marconi works in London, and brought back a 1 kW transformer for his new spark transmitter, hopefully to increase his power and range. One evening just before World War I broke out, he picked up two German ships communicating with spark near the coast of German South West Africa, which almost got him into serious trouble as the authorities thought he was a spy. Soon afterwards war was declared and amateur radio came to a dead stop - the end of the spark era!

Nominee's Other Achievements

Dixon Bennett had no training in electrical engineering but wrote two papers. The first, "*Radiotelegraphy in modern practice*", as published in the Transactions of the South African Institute of Electrical Engineers in 1911, when he was elected Associate member of the SAIEE and IRE of America. The second paper, "*The effect of meteorological conditions on wireless transmission*", was delivered at the annual congress of the South African Association for the Advancement of Science, held at Kimberley in 1914.

Word Count

496

Links to Source Material

http://www.s2a3.org.za/bio/Biograph_final.php?serial=1929

<http://www.sarl.org.za/public/History/SARL1925-1950.asp>

http://www.ee.co.za/wp-content/uploads/legacy/AmRadio_May%2008.pdf

W E Dixon Bennett, "*Amateur Radio in Retrospect*", RadioZS, which commenced with Chapter 1 in August 1949.

Details of Proposer

Mike Bosch, ZS2FM.

I am a member of the SARL in good standing since ##.

Date submitted: 2016-02-23

Seconded by Hans van de Groenendaal ZS6AKV.

Editorial

Edited for style by ZS6EZ.