

## Valve Technical History.

As these magazines are being found and scanned, we have discovered that there were originally two versions of Radiotronics commenced probably before 1935, we now have Technical Bulletin No. 70, issued 25<sup>th</sup> November 1936, and Experimenters Bulletins Nos. 8 & 9 issued Feb & May 1936, both Bulletin versions using the same page heading and page layout. The Technical Bulletin No. 70 and those following, incorporate an experimenters section, so we presume that those replaced the earlier Experimenters Bulletins. As more are found, this should become clear.

They were published by Amalgamated Wireless Valve Company Pty. Ltd., Sydney, Australia until 1969, with some gaps during WW2, recommencing in 1946. AWV, through its parent company Amalgamated Wireless Australasia, had licence agreements with RCA, Marconi, and Telefunken, so Radiotronics had access to an interesting mix of technologies from around the world.

For many years the editor was Fritz Langford-Smith, the AWV Applications Engineer, who became famous for editing/writing the "Ratotron Designers Handbook", originally published by AWV, and later re-printed by RCA in the US and by a technical book publisher in England. No other book printed by RCA ever mentioned "valves", or type numbers made by other manufacturers! The development of this volume was reported in Radiotronics from time to time, for example see December 1939 page 59.

Distributed by subscription only, to the technical community, Radiotronics contained a great deal of non copyright technical information about Valve technology, most of which wasn't published anywhere else in the world, and a few reprints of other material, as noted. Several times during its life, Radiotronics changed the method of numbering issues and pages also the number of copies per year.

This gives most libraries some difficulty cataloguing them. So far the ones shown here have been scanned to image files, and it is intended they would be OCR'ed to give searchable text, any volunteers? We have just added most of the years 1937 to 39. More will be added to fill in the gaps, does anyone have others? There is now a missing copies list too. Most of these were scanned to PDF 1.7 (compact) files.

An example of its value is the article, "History of the Receiving Valve", from December 1957, page 183. It is hoped to scan and make available the whole collection of Radiotronics, as they are located, because of their historic importance. One object being to counteract the large amount of highly inaccurate information on the subject of valve technology, that is currently on the web.

The term "Valve" was coined in the original patent filed by Prof. Ambrose Fleming of London University, in 1904, to indicate the flow of current in one direction only, similar to a water valve. When his British patent was challenged across the Atlantic, the (rather meaningless) term "tube" was coined by DeForrest and others for the same device. The patent challenges went on for many years.

In the mean time, several circuit diagrams from the Circuit Design Laboratory, of the AWV Factory, published in Radiotronics, have been re-drawn, using Eagle 6.4, with historically accurate circuits and symbols. Downloadable are the ".png" image files and the Eagle 6.4 ".sch" schematic files. Some do not include packages intended to be used for printed circuits. As the Eagle 6 valve library files are developed and checked for accuracy, they will be made available too.

We have now 223, and a list of at least 105 missing copies is attached, and a complete index if the whole collection is being prepared, and will be made available as an ongoing project.

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