

# 'TECHNICAL SHORTS'

by Gerry O'Hara, G8GUH

'TECHNICAL SHORTS' is a series of (fairly) short articles written by Gerry O'Hara, a CVRS Director and vintage radio enthusiast, each focussing on a technical issue of relevance in repairing, restoring or using Eddystone valve radios. However, much of the content is also applicable to non-Eddystone valve receivers. The articles are the author's personal opinion, based on his experience and are meant to be of interest or help to the novice or hobbyist – they are not meant to be a definitive or exhaustive treatise on the topic under discussion.... References are provided for those wishing to explore the subjects discussed in more depth. The author encourages feedback and discussion on any topic covered through the CVRS forum.

## Radio Receiver Fault Finding

### Introduction



Much has been written on the subject of radio receiver fault finding – I own a small personal library on the subject – so heaven knows how much has actually been written on it over the years: even today, with the renewed interest in 'antique' radios, newly-written books on valve radio servicing, repair and restoration occasionally appear, reprints of 'classic' texts are produced and there are new posts on the web each day. Many useful articles appeared within the pages of 'Lighthouse' over the years, such as those by Graeme Wormald (eg. *'Duffers' Guide To Valve Set Fault Finding'*), Peter Lankshear (eg. *'Electronic Repairs To Eddystone Receivers'*), Ted Moore (many, many tidbits, tips and tricks), Tor Marthinsen and several other authors and contributors. This article is my attempt at distilling all this down into a fairly succinct and logical approach to fault finding in radios, based on my own experiences over the years, plus some sage advice garnered from various referenced texts, illustrated by some Eddystone and non-Eddystone examples. I have assumed a basic level of understanding of how a valve radio works, how it should perform, how to operate it and what its components and controls do (or should do) – if not, the reader should first read an introduction to these subjects, eg. the receiver sections of pre-1970 RSGB and ARRL handbooks and Graeme's *'Duffers' Guide'*.

I would note that 'fault finding' is a sub-set of 'repairing': fault finding is limited to the electronics of the set and, maybe the closely associated mechanical mechanisms (eg. tuning or band changing), whereas repairing could extend to woodwork/re-finishing and metal





We hope you have enjoyed reading this article sample.

Members of the Canadian Vintage Radio Society (CVRS) can download the entire article for free from the CVRS website at <http://canadianvintageradio.com/articles/>