

ABOUT THE BOOK - "Recollections of a Radio Receiver - the HBR Adventure 1957 -2008"

This is an e-book about an unusual event in amateur radio that took place in the middle of the 20th century, and is based on the author's experience way-back-then as an HBR builder, supported by over 100 letters written by W6TC regarding his designs. The thousands who participated in the adventure built with their own hands and a very modest collection of hand tools a double conversion superheterodyne high frequency radio receiver that could match the performance of commercial equivalents offered for sale by National, Hallicrafters, Hammarlund and Collins. This is an astounding achievement, made even more so because hundreds of these hand-built vacuum tube Crosby HBR's still live on 50 years later, some of them actually on-the-air and used by amateur operators.

How did all this come about, and how was it possible that average people could successfully build all by themselves the most single complex piece of equipment then used by a radio amateur? These builders purchased parts, punched and drilled metal panels and chassis, mounted and wired the components, following schematic diagrams and the designer's "builders notes". These were not "do-it-yourself" kits. They were not partially constructed in a factory and simply assembled by the builder. They were literally created "from the ground up", one component at a time, then wired and aligned at an out-of-pocket cost to the builder of one third price for a top-line commercial receiver. They performed competitively with top-line commercial receivers of the day. Although fully factual, this appears to be impossible!

Ted Crosby, W6TC, commenced this adventure through his February 1957 QST article "Ham Band 14 Tube Double-Conversion Receiver". His opening words, a bold and prophetic statement, is quoted below exactly as he then wrote it -

"Over the years it seems there has developed a rather deep-seated conviction that the 'average ham' is completely incapable of constructing and aligning a receiver even remotely comparable to the best of the commercially built jobs. I, too, had gradually become accustomed to accepting this unmitigated myth as a fact. Fortunately for me, I decided some two years ago that, accepted opinions to the contrary, there must be some relatively simple and reasonably-priced method of getting 'out from under' my outdated receiver. A thorough scanning of all the available literature was of little help. Do-it-yourself articles on worthwhile receivers were few and far between. Even those invariably turned out to be so complicated one would have had to be a combination of graduate engineer and master mechanic to follow through successfully on them. Although neither engineer nor mechanic, during some 45 years of hamming I had managed to accumulate some slight knowledge and understanding of the inner workings of a good receiver. And I did possess the usual assortment of hand tools available to most of us. Receiver number one became a reality shortly thereafter. It worked rather well, too, believe it or not. A couple of months later, I came up with the present number, hereafter referred to as the 'HBR-14 Communications Receiver'."

My brief article on the W6TC(SK) series of HBR double conversion superheterodyne receivers was published in the February 2009 QST Vintage Radio column, pages 96 and 97.

You can find reader comments about "Recollections" (written by contemporary buyers and builders) at www.eham.net/review/detail/8659.

If you do not have access to those documents, and wish to view them, e-mail me to obtain a copy.

"Recollections" is particularly useful for those who wish to build one of the W6TC HBR designs but are not familiar with the many variants of the double-superheterodyne receivers Ted Crosby created between 1956 and 1969. Book contents include much original documentation never before published, and provide detailed insight into Ted's design goals and architecture over a 12-year design development cycle. This background knowledge is critical in choosing contemporary materials and components to replace the 20th Century parts no longer manufactured and near impossible to find.

You can visit the HBR Web Page at <http://www.qsl.net/k5bcq/HBR/hbr.html> (case sensitive).

If you have questions about the book, or wish to discuss the HBR adventure, e-mail me at w6hht@arrl.net.