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OLD RADIO

Bob Dennison, W2HBE, Designer, Builder and Writer

On my way home from school I always checked our mailbox. On this day the October 1955 *QST* had arrived, and I knew right then that I wouldn't be doing much homework that night. I loved the size of the early *QST*s because I could place them inside my history book so my Mother would think I was deeply engrossed in reading. I was; it just wasn't history.

It arrived during the period I was studying for my Novice test, so at that time I was really into reading magazine articles and dreaming over the advertisements. This issue I remember in particular; it had several articles a new ham would find most interesting. There was an article on antennas by Walter Salmon, VK2SA; "A Monitoring Oscillator and Keyer" called "Little Oskey," by E. Laird Campbell, W1CUT; an article by Lew McCoy, W1ICP, on "More Power with the AT-1," and one by Bob Dennison, W2HBE, called "A DeLuxe Amateur-Band Receiver." Oh, how I revered those authors in *QST*. Little did I know then that I would later meet W2HBE and one day would own some of his home-built radios.

W2HBE's 1955 *QST* receiver had 12 tubes, including the rectifier. It featured "Double Conversion and Mechanical Filters," and it looked good, very professional. The *QST* editors said this about the receiver, "Here is a home-built re-



Bob Dennison, W2HBE, selling one of his latest radios at the 2004 Gloucester County Hamfest in Mullica Hill, New Jersey. This hamfest is one of Bob's favorites; he'll be there on August 14. Check Hamfest Calendar in *QST* for information.

ceiver with most of the desirable features of a factory-built job and several of its own that can't be found in the manufactured products. If you have ever had the itch to put together your own receiver and experience the pleasure and pride that go with it, don't pass up this article."

I read the article even though it was way over my head. I studied the schematic and tried to figure out some of the circuits. And

I can remember wondering what a mechanical filter was, and why something mechanical was in an electronic circuit. I would learn, but it would be years later before I could appreciate his design.

This would not be W2HBE's last receiver. No, there would be many more. And there would be articles on transmitters and amplifiers and antenna tuners, and just about everything and anything a ham could use in the shack. Bob Dennison would go on to write four construction articles for *QST*, a dozen or so for the Antique Wireless Association's *Old Timer's Bulletin* and more than 50 articles for *Electric Radio* magazine. In a recent telephone call Bob says he's working on a one-tube radio that has a horn speaker. Bob's reliving his youth, he says, building the radios he couldn't afford back then.

Meeting a Legend

One day in the 1980s while attending the Gloucester County Hamfest in southern New Jersey, I met W2HBE. He was selling some excess parts and old radio books. I stopped to look, and then realized he was the creator of that 1955 receiver I so admired. I introduced myself to him and we have been friends ever since.

W2HBE sells his radios every so often. He enjoys seeing someone else having fun with them. Several years ago he called me



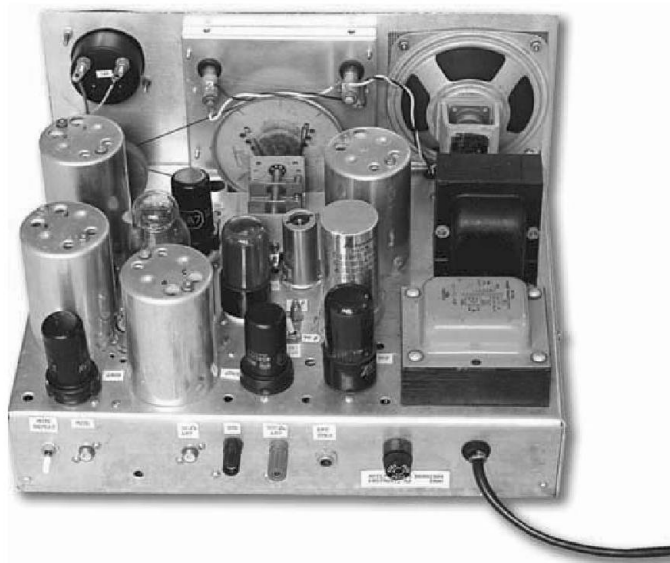
From left: 1936 Transmitter, Econodyne Four-Tube Superhet, T-807 A Compact 50 W Rig (above: Eco-Dyne, a VFO for the T-807), Superhet for 160-80 Meters, 160 Meter TNT; bottom row: 1927 TNT, 1927 Hartley Transmitter, Simplex Short Wave Radio.



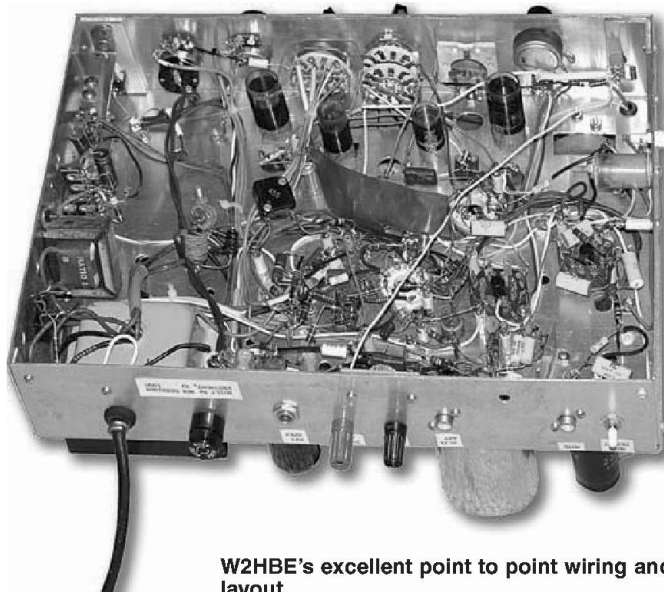
This is W2HBE's 1955 receiver. It included advanced features such as double conversion and mechanical filters. The article is from the October 1955 issue of *QST*.



W2HBE's Superhet for 160-80 meters.



Crowded, but well-laid-out chassis.



W2HBE's excellent point to point wiring and layout.

on the telephone and offered to sell me several of his radios. I jumped into my car and drove over to his home that very day. (An offer like that doesn't come along very often.) Most of the radios I picked up that day are shown in the large photograph. I plan to feature one of them every so often in future Old Radio columns.

A Superhet for 160 and 80 Meters

This radio first appeared in the November 1993 *Electric Radio*, issue number 55. When I first saw it at Bob's home, I thought it was the 1955 receiver. Then I realized it was the dial that was the same. I was disappointed, but at the same time thrilled.

In his article Bob mentions that this is a revised version of his original pre-war design. In the original he found that the BFO was poor, and SSB reception using the VFO was difficult. Also, there was no AVC, S-meter or noise limiter on CW and SSB.

Using miniature tubes to update the circuit, he carefully added a stable product detector for CW/SSB reception. He added crystal control for the product de-

tector to eliminate the pitch control, and added a superior noise limiter that works on AM and CW/SSB.

Bob's construction skills are excellent. He starts building at the beginning; he made his own chassis from sheet aluminum. Then, carefully laying out the circuits, he drilled and punched all the holes. His wiring skills are also superb, as can be seen in the under-chassis photo. This is a first-class radio.

A Short Bio

Robert Dennison was born July 31, 1921 in Salina, Kansas. His father died the same month in 1929 that the Depression hit the nation. His mother ran a small grocery store and Bob helped out. He was lucky to have friends who were interested in radio, and who helped him scrounge enough parts to try and build one that worked. Eventually he and his friends were successful. Then one day he tuned to the top of the broadcast band and heard some local ham radio operators talking. (They were on 160 meters.) Bob searched one of them out, and made new

friends. Now he would start reading library books on radio and electricity. He studied the Morse code and one day while still in high school he received his ham license, W9YRQ.

Bob continued in radio, working and saving money for more parts, to build more radios. He was befriended by a well-to-do local ham who insisted he attend college and helped him financially.

World War II interrupted Bob's college education. He joined the Navy and became a Radar Officer on a Navy destroyer (DD775). After the war he returned to college and graduated as an engineer. He was hired directly from college by RCA and he moved to Camden, New Jersey, where he would work for over 30 years.

If you would like to read more about Bob's early days, I recommend "W2HBE Reminisces" in the August and September 1999 *Electric Radio*, numbers 124 and 125. Part 1 is especially interesting. In it are details on how he became interested in radio, how hard it was to get parts and how resourceful he and his friends were. It's good reading.—K2TQN

QST