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OLD RADIO

BC-625 Surplus 2-meter Transmitter

After World War II the VHF bands changed. Gone were 5 meters and 2½ meters. Replacing them were two new bands, 6 meters and 2 meters, both still popular today. One of the reasons 2 meters became popular was the availability of inexpensive war surplus radios such as the "SCR-522 VHF XMTR-RCVR" used in American and British planes.

For \$39.95 or less you could purchase the 100-pound SCR-522, consisting of a BC-624 receiver and a BC-625 transmitter in "excellent" condition, complete with conversion instructions. Various magazines published articles about using them, and included conversion instructions as well. Ham clubs around the country encouraged members to pool their funds and turn the conversions into club projects. Soon they were heard everywhere on 2-meters.

Conversion Details

According to the *Surplus Radio Conversion Manual, Volume 1*, (1948) one of the first things you would do is remove and discard the mechanical tuning arrangement. Mechanical modifications would include a new front panel designed to accommodate a new 4-position crystal switch, a panel meter and microphone and key jacks. Detailed drawings indicated where the panel holes were to be drilled for the new controls so that they would align with the existing transmitter metering and tuning controls. Extension shafts from the controls would allow tuning knobs to be added to the panel. The panel was attached using brackets mounted on either side of the transmitter chassis.

Individual options and designs were all different, due to different needs of the owners. The one pictured in this column has additional controls and switches: an audio gain control, an MCW/phone switch, a power switch, a **PLATE ON** switch and an external crystal jack instead of the 4-position switch.

Two BC-625 Gems

I own two modified BC-625s. The unit

SCR-522 VHF XMTR-RCVR for all-purpose work at 100-156 MC



Used on all AAF and RAF planes—now yours at a fraction of cost. Ten-tube crystal-controlled superhet has 3-microvolt sensitivity at 10 mw output. 7-tube temperature-stabilized xmtr delivers 15 watts. Remote push-button tuning on 4 crystal-controlled send-recv channels. 28 volt d-c dynamotor powers entire rig. Complete with tubes, plugs, instructions for conversion to 110 volt a-c operation. Excellent condition. Weight, about 100 lbs.

This advertisement for the SCR-522 appeared in May 1947 QST.

shown in this column is the best looking one I have ever seen. The unknown builder was extremely talented and attended to details such as the hand-drawn paper labels and tuning-control indicators. He placed the radio in a "Bud" manufactured cabinet; it must have really looked good in his station. The other BC-625 that I own is plain and functional without indicators or a cabinet. Both worked very well for the owners, I'm sure.

Power Supply

After the transmitter modifications were completed, the only other required item was a power supply. Three voltages were needed: +300 V, -150 V and 12 V (for filaments). This is an extremely simple power supply to construct, making the entire project an easy one for the new ham.

The SCR-522 could also be used mobile with a 28-V PE-94A dynamotor for high voltage, and by adding an extra 28-V battery and charging system to the car. The BC-625 itself would reside in the trunk with the BC-602 remote control box near the operator. Our modern miniaturized mobile rigs make BC-625 mobile installations look extraordinarily bulky and complicated by comparison! Visit my Web site at www.eht.com/oldradio/arrrl/index.html for more images of the BC-625.

SEE YOU AT THE HAMFESTS

Hamfest season is upon us. Check the Old Radio Museum schedule on my Web page to see where I'll be. Look for my call letters on my hat and say hello.—K2TQN **QST**



A close-up of the converted BC-625. Notice the intricate detailing of the paper labels.



A view of the entire converted BC-625 in its Bud cabinet.

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