



Hallicrafters SR-500 Tornado

From the full-page ad on the inside cover of the January 1966 issue of QST.

"hallicrafters has harnessed 500 watts of brute power for only \$395."

The Hallicrafters SR-500 Tornado is a ham radio transceiver designed for 500 watts input PEP on SSB and 300 watts input for CW on 20, 40 and 80 meters. Introduced in 1965 at a price of \$395 plus \$119.95 for the AC power supply. It is essentially a beefed-up SR-160 using a matched pair of 8236 power output tubes in place of the 12DQ6B pair in the SR-160. The 8236 is a heavy-duty carbon-plate tube and is not that common. The PS-500AC power supply (on the right) is specifically designed for the greater power requirements of the SR-500. A matching mobile supply, PS-500DC, was available at \$149.95. The 12AU6 tube and the 100KHz crystal for the crystal calibrator were extra-cost options (installed in this set).

In comparing the schematics for the SR-500 and the SR-160, only a few differences are noted. R92 is 220K ohm in the SR-500 and 180K in the SR-160. R96 is 56K in the SR-160 but removed from the SR-500. These resistors are in the grid bias line, shown as -55 volts on the SR-160 schematic and -85 for the SR-500. The external bias power supply input requirement for both sets is -100 volts. The 12DQ6B pair operates at 575 volts on the plate and the 8236 pair is supplied with 800 volts from its external power supply (750 under load). The 8236 requires more filament current (and more plate current!). Nearly all other requirements and specifications appear to be similar in the two sets. There is a zener diode switched in between the filaments of V4 and V6 for use when in mobile service. That variation is shown on the SR-500 schematic but not on the SR-160. It may be of value to the SR-160 also.

