**Tube of the Month**

# 8072 – 8121 - 8122

In the 1960s, transistors were replacing many vacuum tubes in communication equipment. For a time, low power transmitter stages and the receivers of communication transceivers were all transistor and the driver and final amplifier were tubes. RCA developed a series of small beam tetrodes incorporating ceramic/metal construction and the use of new base configurations. Low filament current requirements didn't need much base cooling, so special vented bases weren't necessary. The 8072, 8121 and 8122 were electrically the same tube with different cooling methods. They could be used to 500 MHz. The most popular was the 8072 which used conduction cooling and was rated at 100 watts. General Electric used it in their Master Professional series of VHF/UHF transceivers for mobile and base station/repeater use. The tube was small and the anode clamping fixture added to the heat dissipation and became part of the output cavity. The Signal One CX-7 transceiver also used one.

The 8121 used transverse forced air cooling and was rated at 150 watts. The 8122 uses axial flow forced air cooling similar to the 4CX250 family and was rated at 400 watts. The 8122 was used in TV translators, the National NCX-1000 transceiver, the National NCL-2000 amplifier and the Hallicrafters SR-2000 amplifier.

In 1971, Eimac upgraded the tubes to the 8072W etc. making them more rugged and rated them to withstand 50Gs.

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