

Section VII. High Frequency Radio

AN/GRC-122, AN/GRC-142, AN/VSC-2 and AN/VSC-3 Radio Teletypewriter Sets

NSN: 5815-00-401-9270 (AN/GRC-142)
 5815-00-168-1556 (AN/GRC-142A)
 5815-00-443-5511 (AN/GRC-142B)
 5815-01-100-6815 (AN/GRC-142C)
 5815-01-104-7264 (AN/GRC-142D)
 5815-01-095-6258 (AN/GRC-142E)
 5815-00-401-9719 (AN/GRC-122)
 5815-00-401-9719 (AN/GRC-122A)
 5815-00-937-5295 (AN/GRC-122B)
 5815-01-095-1211 (AN/GRC-122C)
 5815-01-096-0428 (AN/GRC-122D)
 5815-01-095-1212 (AN/GRC-122E)
 5815-00-069-8914 (AN/VSC-2)
 5815-00-224-8130 (AN/VSC-3)

Reference: TM 11-5815-334-10 (AN/GRC-122/142 Series)
 TM 11-5815-331-14 (AN/VSC-2)
 TM 11-5815-332-15 (AN/VSC-3)

General Information

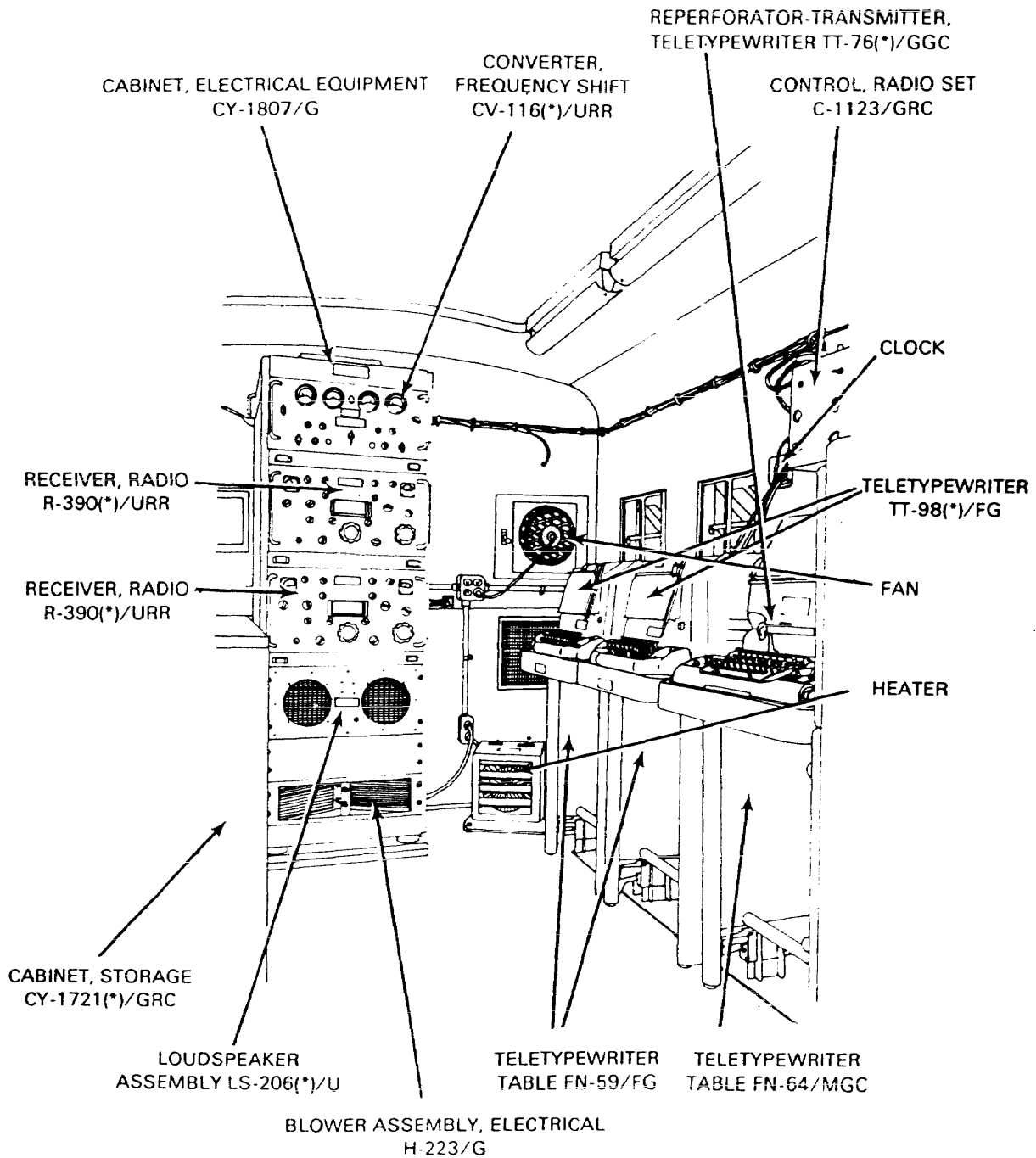
The AN/GRC-122 family consists of medium-power, vehicular-mounted HF-SSB radio sets used primarily for RATT operations; however, they are capable of AM and SSB voice and CW operation. With the addition of a Navy standard one kW Radio Frequency Amplifier AM-3924/URT and Antenna Coupler AN/URA-38A, the AN/GRC-122 becomes an AN/GRC-122(V)2. This modified version provides the capability for long-range communications of 3,862 km (2,400 mi). The AN/GRC-122 and the AN/GRC-142 are both shelter mounted. The AN/VSC-2 is mounted in a jeep and the AN/VSC-3 in an armored personnel carrier, The TSEC/KY-65 (Parkhill) and the ANDVT (minimum term KY-99) will be used for secure-voice operation with the AN/GRC-106.

NOTE: The only difference between the AN/GRC-122 and the AN/GRC-142 is that the AN/GRC-122 has an additional receiver-transmitter and teletypewriter set allowing duplex operation.

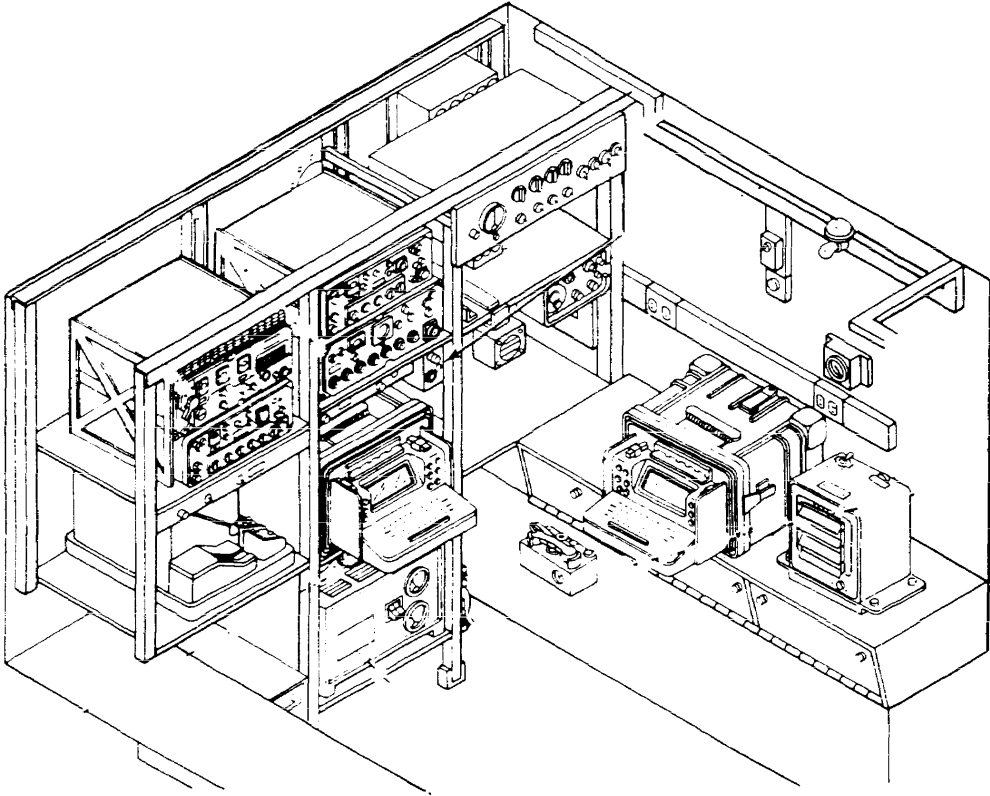
Technical Characteristics

Frequency Range	2 to 29.999 MHz
Planning Range	Use short and intermediate distance groundwave and sky wave propagation charts (FM, 11-486-6)
Number of Channels	RT-662, 28,000 with a channel every 1 kHz RT-834, 280,000 with a channel every 100 Hz
Power Input	28.5 V DC (115 V AC for TT-4, TT-76, TT-98, and UGC-74 is supplied through the control box and inverter)
Power Source	AN/GRC-122/142, vehicle power system or Generator PU-620 AN/VSC-2, vehicle power system or Generator PU-675() AN/VSC-3, vehicle power system or auxiliary power unit
Power Output	3A3A, 3A3J, 400 W peak-envelope power 0.1A1, 1.1A1, 200 W
Antenna	4.57 m (15 ft) whip, or doublet AN/GRA-50
Tuning	Digital
Squelch	Noise
Type of Service	3K00J3E (USB), 3K00R3E (USB), 100HA1A, 1K10A1A, and double-sideband AM (receive only)

AN/GRC-122 Radio Teletypewriter Set

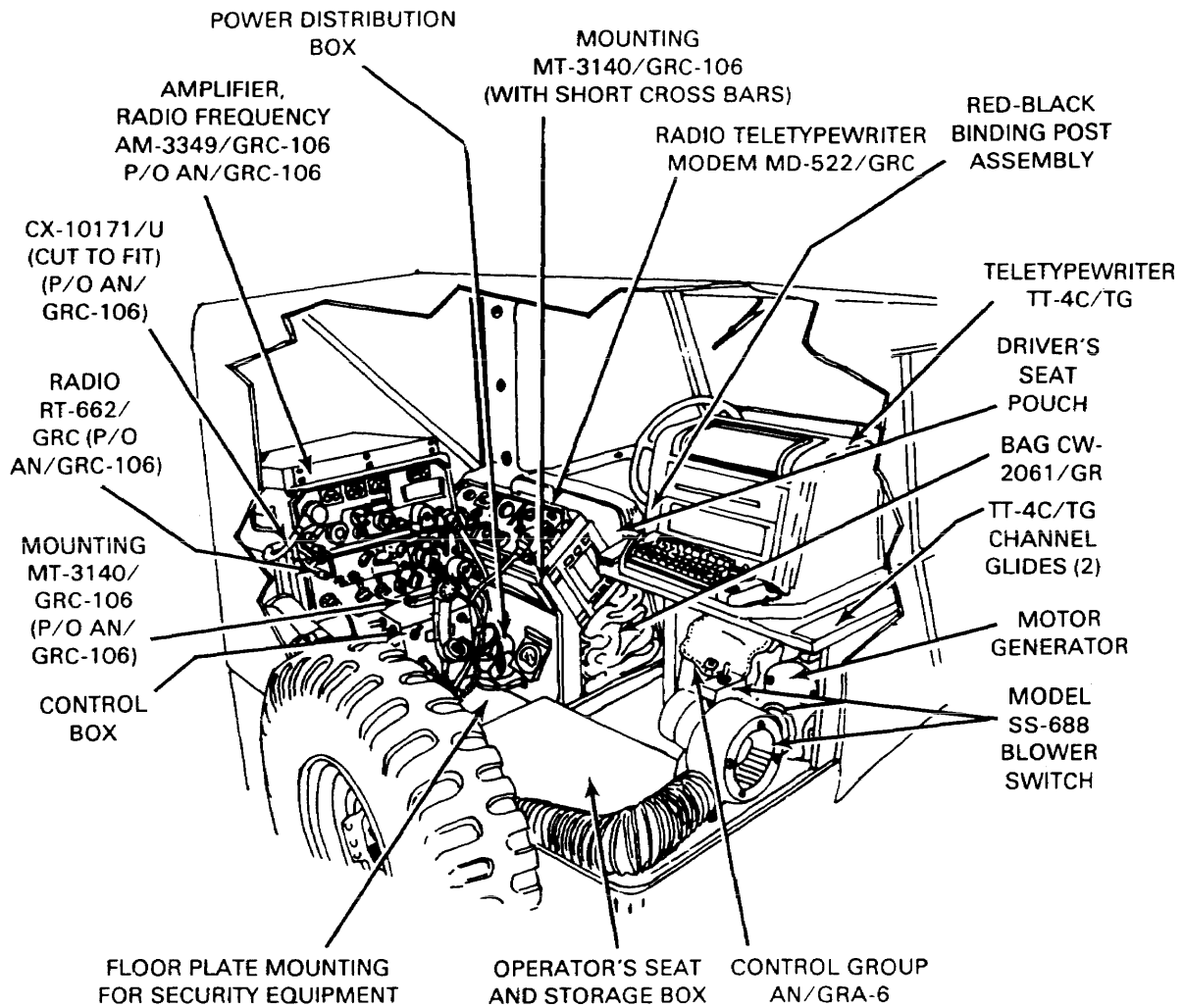


AN/GRC-122 Radio Teletypewriter Set (Cont.)



FRONT CURBSIDE VIEW

AN/VSC-2 Radio Teletypewriter Set



AN/VSC-3 Radio Teletypewriter Set

