

## AN/TRC-80B Radio Terminal Set

Status:     STD-A; NSN: 5820-00-443-1041

Reference: TM 11-5820-469-10

### General Information

The AN/TRC-80B is an air- or vehicular-transportable radio communication facility capable of transmitting and receiving radio signals. It transmits and receives radio signals by use of tropospheric scatter method of radio propagation. The equipment provides full duplex transmission and reception of four voice channels and one orderwire channel. The orderwire channel contains one voice frequency circuit and one radio teletypewriter circuit. Tactical speech security equipment is not compatible, but the FSK channel can be secured by using Electronic Teletypewriter Security Equipment TSEC/KW-7. The AN/TRC-80B contains an air-inflatable parabolic antenna and an engine generator for primary power.

### Technical Characteristics

Frequency Range-----4.4 to 5.0 GHz  
Frequency Separation  
  Transmit to Receive-----110 MHz  
Planning Range-----Nondiversity, 112 km (70 mi);  
  diversity, 160 km (100 mi)  
Number of Channels-----NA (continuous tuning)  
Power Input-----120/208 V AC, 4-wire, 3-phase, 400 Hz  
Power Source-----Power unit is an integral part of Shelter  
  S-254/TRC-80  
Power Output-----1 kw  
Antenna-----AS-1270/TRC-80, 2.44 m (8 ft) air-  
  inflatable parabolic mounted on top of  
  Shelter S-254/TRC-80  
Tuning-----Continuous  
Receiver Threshold-----93 dBm  
Receiver Noise Figure-----10 dB  
IF Bandpass Noise-----123 dBm  
Antenna Gain-----41 dB  
Type of Service-----120KF9W (five voice channels and one  
  teletypewriter channel)  
Weight-----2,179 kg (4,794 lb)

**AN/TRC-80B  
Radio Terminal Set**

