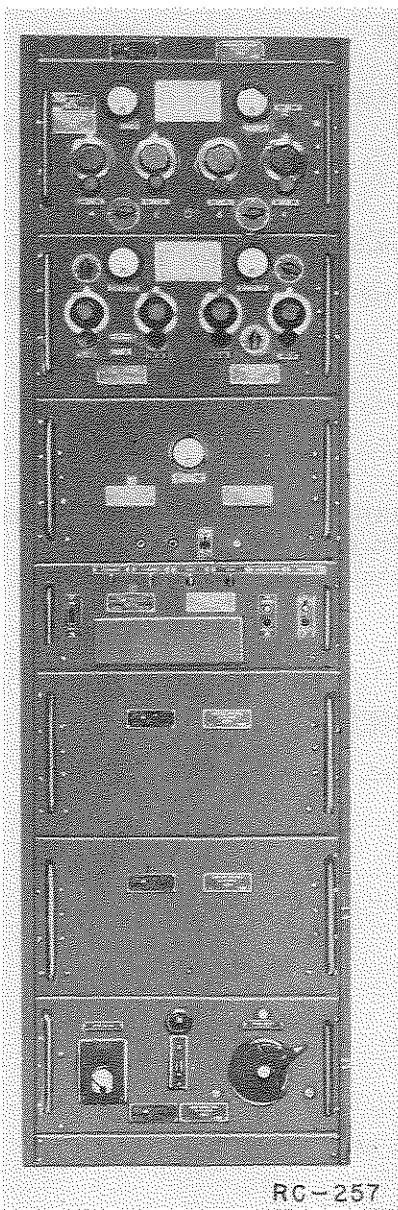


STATUS: Substitute Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Air Force
 DATE OF THIS SHEET: 26 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: RC-257
 RADIO TRANSMITTING EQUIPMENT



RC-257

Radio Transmitting Equipment RC-257 includes all components necessary to set up a complete radio transmitting station, except for an external source of a-c power. It is used for ground-to-air and point-to-point a-m operation in the v-h-f range, usually in conjunction with Radio Receiving Equipment RC-256 to provide a single-channel, radio-link, terminal station for voice or tone-modulated communication.

This equipment consists primarily of a Radio Transmitter BC-640, Antenna Equipment RC-81, Antenna Mast MA-6, Junction Box JB-132, and necessary connecting cables, relay rack, and microphone.

It may be operated locally, or, under average conditions, from remote positions up to eight miles away.

Radio Transmitting Equipment RC-257-A is similar to Radio Transmitting Equipment RC-257-C except that RC-257-A uses Radio Transmitter BC-640-A and Antenna Equipment RC-81-A.

Power requirements are: 1,200 w of 115/220-v, single-phase, 50/60 cyc, ac.

AN/FRT-TYPEINSTRUCTION LITERATURE:
TO 16-1A-10 & 16-40BC640-2
CLASSIFICATION OF EQUIPMENT: UnclassifiedRC-257 :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENTUSING SERVICE : Air Force
DATE OF THIS SHEET : 26 May 52**MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-640-D	21-1/4 x 72 x 20	601
1	Mast MA-6	90 feet erected	883
1	Junction Box JB-132	12-3/16 x 17-13/32 x 7-11/16	16
1	Antenna Equipment RC-81-C	(Not Available)	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -19, -29, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/VRC-1; BC-639, -787; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 single channel, crystal-controlled (crystals not furnished).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: 50 w (Nominal).

POWER REQUIREMENTS: 1,200 w, 115/220 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment RC-257 measures 24 x 84 x 24 inches, net weight 1,500 pounds, volume 17.5 cu ft. Packed for either domestic or export shipment: total weight 1,700 pounds, total volume 17.5 cu ft, 0.5 ship ton. Shipped in 5 packages both domestic and export.