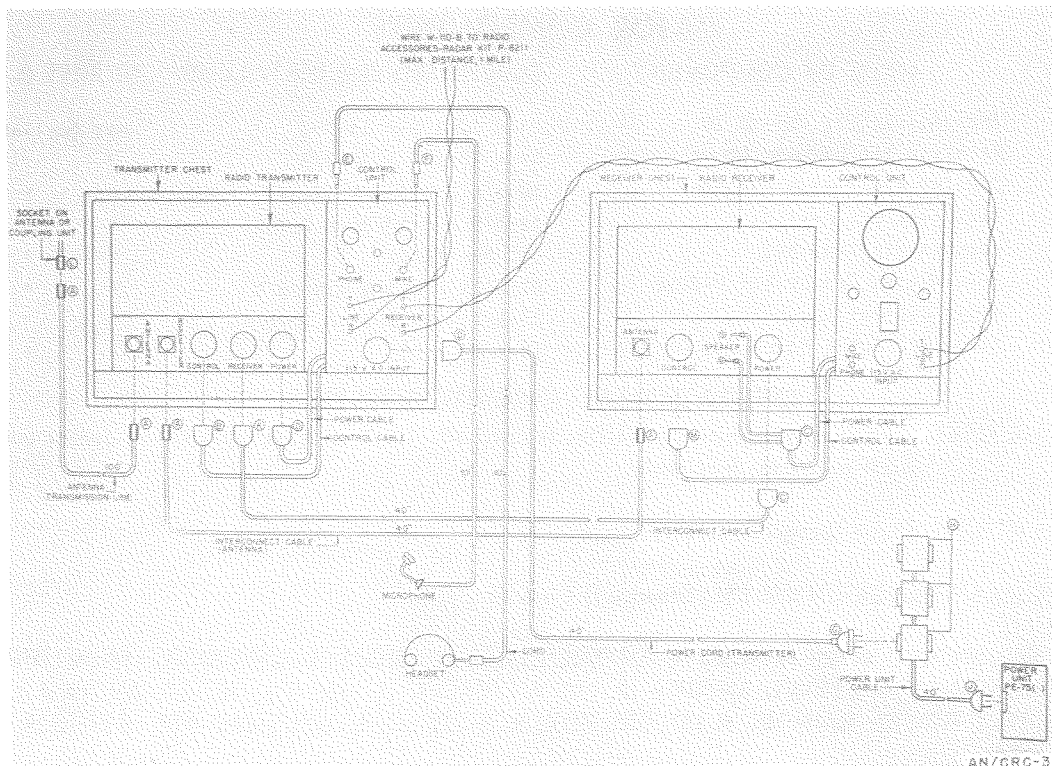


STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

AN/CRC-3A

RADIO SET



Radio Set AN/CRC-3A consists of a commercial type, Galvin Mfg. Co., Transmitter PA- 8244 (Motorola Transmitter Kit FMT-50 BD) and radio receiver, Galvin Mfg. Co., PA-8245 (Receiver Kit FSKR-15BD) plus control units, antenna components and accessory items as are required for two-way operation with other similar installations. It can be used for point-to-point communication from a fixed ground or mobile installation.

Several of these sets are normally used to form a single channel communications net in an Aircraft Warning System.

Necessary cables and connectors for local or remote operation over telephone lines up to a distance of two miles are included.

The receiver is a double conversion, crystal-controlled, superheterodyne, employing 4.3 mc and 455 kc for conversion. The transmitter is crystal-controlled on any one of 61 channels in the v-h-f frequency range 30 to 40 mc and capable of fm, voice transmission.

The squelch circuit of the receiver actuates a relay to turn the transmitter ON and OFF after it has been placed in "stand-by" operation. This mode of operation is used when transmitter and receiver are employed as an automatic relay station. The receiver will detect an incoming signal on one frequency and automatically place the transmitter on the air re-transmitting the original signal on another frequency.

AN/CRC-3A	INSTRUCTION LITERATURE: TO 16-30CRC3-2 Book 241 A
	CLASSIFICATION OF EQUIPMENT:Unclassified
	USING SERVICE : Air Force
RADIO SET	DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Kit FMT-50 BD	24 x 16-1/2 x 14-7/8	Not Available
1	Receiver Kit FSKR-15 BD	24 x 16-1/2 x 14-7/8	" "
1	Crystal Kit P-8214 P-8214-A	18-5/8 x 5-3/4 x 12-1/4	" "
1	Tank Coil Kit P-8215	12-3/8 x 5-13/16 x 9-7/8	" "
1	Antenna Kit P-8212-B	Not Available	" "
1	Information Center Kit P-8210	37-1/16 x 7-3/4 x 15-3/4	" "
1	Radar Kit P-8211	17-1/2 x 9-29/32 x 10-5/8	" "
1	Automatic Relay Power Kit P-8213	22 x 23 x 13	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Radio communications facility for point-to-point between operations center and auxiliary radar facilities.

INSTALLATION: Fixed ground or mobile.

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

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 61 crystal-controlled, preset channels in the frequency range 30 - 40.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 50 w.
Receiver: 500 mw into 600 ohm line.

POWER REQUIREMENTS: Transmitter: 290 w maximum, 105 - 125 v, 60 cyc, 1 phase, ac.
Receiver: 75 w maximum, 105 - 125 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/CRC-3A measures 24 x 52 x 15 inches, net weight 331 pounds, volume 18.5 cu ft. Packed for domestic or export shipment: total weight 400 pounds, total volume 20 cu ft, 0.5 ship ton. Shipped in 2 packages.