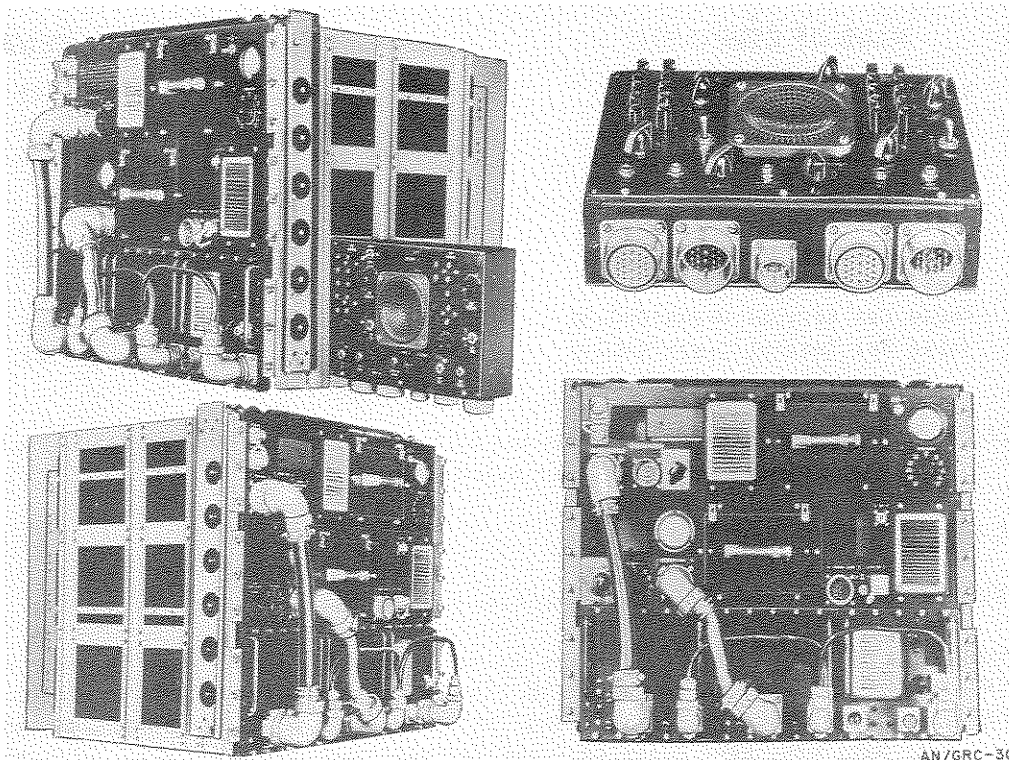


STATUS: Substitute Standard
 CLASSIFICATION OF EQUIPMENT: Restricted
 USING SERVICE: Air Force
 DATE OF THIS SHEET: 19 May 52

AN/GRC-30

RADIO SET



AN/GRC-30

Radio Set AN/GRC-30 is a ground-operated, two-way, dual-channel, v-h-f/u-h-f, voice-modulated, receiver-transmitter. It is normally used to provide communication between ground controlled approach (GCA) equipment and aircraft.

Two radio receiver-transmitter units and one monitor radio receiver R-420/GRC-30 provide 2,552 operating channels in the 100- to 180-mc, and 225.0 to 399.9-mc ranges

Operates on 20 crystal-controlled, preset channels; 10 channels in each receiver-transmitter unit, without resetting the units.

Radio Receiver RT-420/GRC-30 monitors one channel in both the v-h-f and u-h-f bands, and has provision for a 1,600-ohm balanced output for direction finding and navigation applications.

Disk-cone, Antenna Group OA-291/GRC-30 is normally used with this equipment, which can be remotely controlled up to 5 miles, over standard telephone lines.

It is normally used with Radar Sets AN/FPN-16, AN/CPN-4, AN/CPN-18, and Radio Set AN/MPN-1, and other GCA radar equipment.

AN/GRC-30	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Restricted
RADIO SET	USING SERVICE: Air Force
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MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-226/GRC-30	24-1/2 x 6-3/4 x 21	125
1	Radio Receiver-Transmitter RT-227/GRC-30	24-1/2 x 6-3/4 x 21	145
1	Radio Receiver R-420/GRC-30	7-7/8 x 7-3/4 x 21	45
1	Antenna Group OA-291/GRC-30 each 50 ohm	30 x 38-1/2 x 7-1/2	22
1	Radio Set Control C-896/GRC-30	12 x 7-3/4 x 21	45
1	Radio Set Control C-897/GRC-30	12 x 7-3/4 x 21	45

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to air fields and GCA sets such as AN/MPN-1, AN/CPN-18, AN/CPN-4, AN/FPN-16, and installed.

INSTALLATION: Ground, fixed.

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

CAN COMMUNICATE WITH: AN/ARC-1, -3, -12, -18, -19, -27, -28, -30, -33, -34, -36;
 AN/CRC-2; AN/FRC-7; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12;
 AN/PRC-14, -17; AN/TRC-7, -32; AN/URC-4; AN/URR-9, -13, -21; AN/UPT-7, -10; BC-639,
 -640, -737; MAR; MAW; MAY; R-137/GR, -278/GR; RBK; RBQ; RC-103, -256, -257; RCK;
 RCO; RDR; RDZ; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644;
 TDG; TDQ; TDT; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

Radio Receiver-Transmitter RT-226/GRC-30: 10 channels in 100 - 180.
 Radio Receiver-Transmitter RT-227/GRC-30: 10 channels in 225.0 - 399.9.
 Radio Receiver R-420/GRC-30: 2 channels in each range; 100 - 160 and 225.0 - 399.9.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: Transmitters: 12 w (each).
 Receivers: 1.2 w (each).

POWER REQUIREMENTS: 3,100 w, 115 to 230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-30 measures 24-1/2 x 30 x 21 inches, net weight 589 pounds, volume 8.9 cu ft.
 Packed for either domestic or export shipment: total weight 650 pounds, total volume 10 cu ft.