STATUS: Experimental

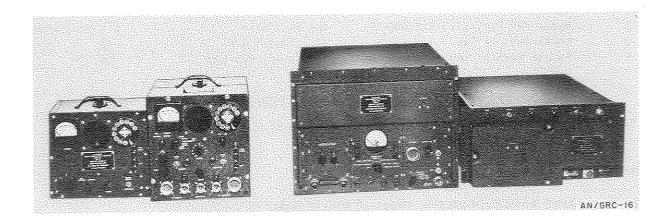
CLASSIFICATION OF EQUIPMENT : Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 10 Jun 52

# AN/GRC-16

RADIO SET



Radio Set AN/GRC-16 is a fixed or mobile, u-h-f, ground-to-air, or point-to-point, tactical radio equipment. 1,750 channels, 10 of which can be preset (but only one utilized at a time) are available in the frequency range band 225.0 to 399.9 mc.

This equipment consists of a radio transmitter, radio receiver and a radio set control. Both local and remote control, up to a distance of one mile, using Radio Set Control C-612/GRC-16, are available.

The operator at the local control unit can maintain full control of the set and, also allocate full control to the remote position. Press-to-talk, monitoring and channel selection facilities are available at both local and remote control points.

Indicator lights are provided to show the radio channel in operation at both local and remote positions.

Intercommunication and visual signaling facilities are provided at both the local and remote control positions.

For tactical field use, a loudspeaker is normally used. The loudspeaker is muted automatically during headset operation. Equipment is shock mounted and transportable in weather-proof carrying cases.

485

Recommended antenna (not supplied) is Antenna AT-197/GR, 52 ohm nominal impedance.

## AN/GRC-16

RADIO SET

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force
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#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALL ED	WEIGHT (LBS)
1	Radio Transmitter T-231/GRC-16	19 × 17-1/2 × 19	200
1	Radio Receiver R-317/GRC-16	19 × 8-1/2 × 21-1/2	80
1	Radio Set Control C-612/GRC-16	Not Available	Not Available
1.	Local Control Box	11 × 11-1/2 × 9	30
1	Remote Control Box	11 × 9-1/2 × 6-1/2	20

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Normally issued on any organizational level as project equipment in accordance

with AFR 100-17.

INSTALLATION: Ground, tactical.

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

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30,

-32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17,

-20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR;

MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: A total of 1,750 channels, 10 preset, spaced 100 kc apart, in the frequency range 225.0 to 399.9 mc are available, only one utilized at a time.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: Transmitter: 25 w.

Receiver: 3 w into 600 ohm resistive load.

POWER REQUIREMENTS: 2,500 w, 115 v, 50/60 cyc, 1 phase, ac.

## PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-16 measures  $19 \times 21$ - $1/2 \times 46$ -1/2 inches, net weight 330 pounds, volume 4.5 cu ft. Shipped for domestic or export shipment: total weight 409 pounds, total volume 5.4 cu ft. Shipped in 4 packages.

CONFIDENTIAL—Security Information

ORIGINAL