

STATUS: Standard

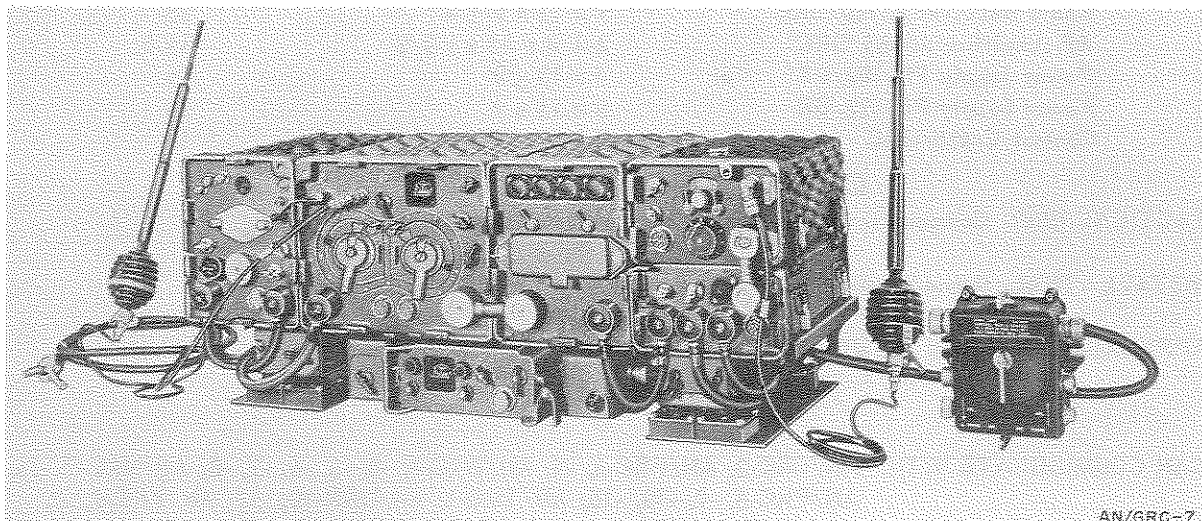
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 5 Jan 52

AN/GRC-7

RADIO SET



AN/GRC-7

Radio Set AN/GRC-7 is a short-range, f-m (voice), two-way communication equipment having provision for retransmission, duplex, and remote control operation. It is one of the integrated series of radio equipment and is used by infantry units.

It consists of a medium-power radio receiver-transmitter component, designated as set 1, and an auxiliary radio receiver, both of which operate in the frequency range assigned to armored units. In addition, it includes a separate low-power, short-range receiver-transmitter, designated as set 2, which operates in a frequency band common to armored, artillery, and infantry units. Vehicular inter-phone amplifier and control units for selecting desired modes of operation and service are included.

Operates in a vehicle from the 12- or 24-v vehicular storage battery. A hand generator and associated components (Modification Kit MX-898/GR) provide for operation in semipermanent locations.

AN/GRC-7	INSTRUCTION LITERATURE: TM 11-284
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MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-68/GRC	9 x 13 x 11-1/4	35
1	Receiver-Transmitter RT-70/GRC	4-3/4 x 13 x 7-1/8	25
1	Radio Receiver R-110/GRC	9 x 13 x 7-1/4	35
1	AF Amplifier AM-65/GRC	4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GR or	8 x 13 x 9	35
1	Power Supply PP-112/GR	8 x 13 x 9	35
1	Control C-435/GRC	3-1/2 x 10-1/2 x 8-3/4	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level, organic units of infantry division.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Set 1-- stationary 15, moving 10.
Set 2-- 2,000 yards.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-6, -9, -10, -16; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -7, -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: Receiver-Transmitter RT-68/GRC (set 1) -38.0 — 54.9.
Receiver-Transmitter RT-70/GRC (set 2) -47.0 — 58.4.
Radio Receiver R-110/GRC (auxiliary receiver) - 38.0 — 54.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice and 1,600-cyc f-m signals.

POWER OUTPUT:	Transmitting		Phone	Receiving	Retransmission
	Low	High		Speaker	
Set 1:	1 to 2 w	9 to 16 w	50 mw	1 w	30 mw
Set 2:	.5 w			75 mw	
Aux Rec:			50 mw	1 w	30 mw

POWER REQUIREMENTS: 110 to 280 w (depending upon mode of operation) from 12- or 24-v vehicular storage battery.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-7 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.