STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

AN/GRA-6

CONTROL GROUP

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

#### NO PHOTOGRAPH AVAILABLE

Control Group AN/GRA-6 is a remote-control equipment used to operate one or two radio sets, either locally or from remote locations, and is used with radio communication equipment at battalion and regimental command levels.

This equipment consists of a remote-control unit, a local-control unit, and accessory components.

It enables push-to-talk control of radio equipment selected from either the local or remote point, and provides telephone facilities, including ringing or call lamp signaling, between operators up to distances of 2 miles over a conventional telephone pair.

## AN/GRA-6

**CONTROL GROUP** 

INSTRUCTION LITERATURE: TM 11-5038

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Remote Control C-433/GRC	$3\frac{1}{2} \times 7\frac{3}{32} \times 8\frac{1}{4}$	7.0
1	Local Control C-434/GRC	$3\frac{1}{2} \times 10\frac{1}{8} \times 8\frac{9}{6}$	10.5
1	Bag CW-189/GR	11 x 73/4 x 105/8	2.1
1	Handset H-33/PT	2%4 x 3 x 7%	1.1
	(For complete list of components, see	e appropriate supply manuals.)	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Battalion and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): 2.

#### TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice.

TYPE COMMUNICATION CIRCUITS: Duplex tel comm; push-to-talk; pwr cont.

CONTROLS: LOCAL, REMOTE, LINE, CALL LIGHT, AUDIO, SELECTOR.

POWER REQUIREMENTS: 3 v dc (ea mike, two Batteries BA-30); 45 v dc (remote cont, Battery

BA-414/U).

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		20.85	.94		
DO IC PACK					
EXPORT PACK:		61	3.32		1

STATUS:

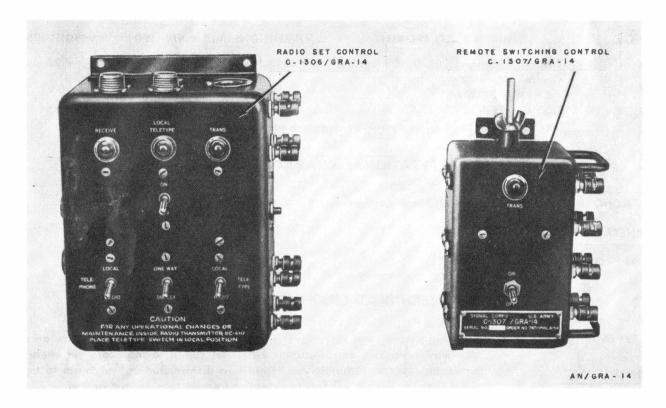
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

AN/GRA-14

RADIO SET CONTROL GROUP



Radio Set Control Group AN/GRA-14 is used with Radio Set AN/GRC-26A, AN/GRC-26B, or AN/GRC-26C to provide remote control of the radio set over distances up to 1 mile. It enables control of the following functions of the radio set: switching from send to receive; radio-telephone or radioteletype communication on a one-way or full-duplex basis.

This radio set control group consists of a local-control unit, a remote-control unit, and six cables for connecting the local-control unit to the radio set. The local-control unit is mounted in the radio-set shelter and connected to the radio set and the local telephone. The remote-control unit is located at the remote site and is connected to the remote teletypewriter or telephone, and to a 115-volt ac power source.

The teletypewriters and the perforator transmitter may be moved from the radio-set shelter and located at the remote site. However, for full use of the radio set with the control group, two additional perforator typewriters, a perforator transmitter or reperforator-transmitter teletypewriter, and a 115-volt ac power source are required.

## AN/GRA-14

RADIO SET CONTROL GROUP

INSTRUCTION LITERATURE: TM 11-264A, C4

USING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Radio Set C-1306/GRA-14	$12 \times 4\frac{3}{4} \times 8\frac{1}{2}$	7.25
1	Control, Remote Switching C-1307/GRA-14	9½ x 4 x 5¾	3
6	Special cable		2.15
	(For complete list of components, see a	ppropriate supply manuals.)	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): 1 (max).

#### TECHNICAL CHARACTERISTICS

TYPES OF OPERATION: Switching from send to receive; radiotel and/or radio-teletype comm on a

one-way reversible or full-duplex basis; tel comm to the radio set shelter simultaneously w/radioteletype comm to a distant station; tty comm to the

radio set shelter simultaneously w/radiotel comm to a distant station.

**CONTROLS:** 

Local Control Unit:

ON-OFF, TELEPHONE LOCAL-RADIO; ONE-WAY DUPLEX; LOCAL-RADIO

TELETYPE.

Remote Control Unit:

**ON-OFF** transmit-receive.

POWER REQUIREMENTS: 115 v ac (remote-cont unit); 115 v dc (local-cont unit).

#### PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	PACKAGES

NET:

12.75 .28

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: T/Std

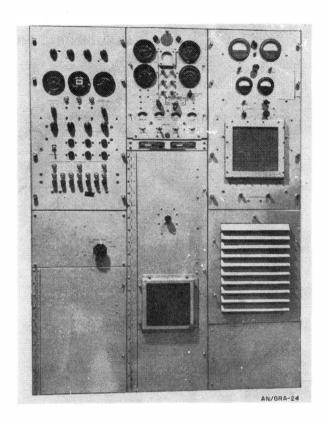
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

AN/GRA-24

AMPLIFIER-MODULATOR GROUP



Amplifier-Modulator Group AN/GRA-24 is a uhf, rf power amplifier designed to increase the useful operating range of radio communication with aircraft. It requires an exciter input of 80 watts obtained from either Radio Set AN/GRC-27 or Radio Transmitting Set AN/GRT-3.

This equipment is used where high-power ground-to-air communication is required; higher power reduces the susceptibility to enemy jamming and provides more effective line-of-sight coverage.

It is intended for single-channel, ground-to-air am transmission of voice or digital data. It may be switched easily to either a directional or omnidirectional antenna by means of a switch on the control unit.

Antennas AS-450/GR, AS-505/GR, and AT-197/GR, not supplied, may be used with this equipment.

## AN/GRA-24

**AMPLIFIER-MODULATOR GROUP** 

INSTRUCTION LITERATURE:

USING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

#### **MAJOR COMPONENTS**

QTY

NAME OF COMPONENT

**DIMENSIONS (in.) INSTALLED** 

WEIGHT (lb)

1

Amplifier-modulator group

48 x 36 x 60

1.825

1

Control unit

19 x 20 x 83/4

50

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Ground-to-air communication.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Line of sight.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 225 to 400.

TYPE MODULATION: Am (A2, A3, A9); fm (F1, F9; by modification of drivers).

TYPE OF SIGNAL: Tone, voice composite transmissions.

POWER OUTPUT: 1,000 w (min).

POWER REQUIREMENTS: 9 kva, 208 v  $\pm 10$  v, 50/60 cy, .9 pf, 4-wire, 3 ph ac.

#### PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	<b>PACKAGES</b>

NET:

48 x 36 x 60

1,875

62

1.6

DOMESTIC PACK:

**EXPORT PACK:** 

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

AN/GRA-TYPE

CY-751/GR

CONSOLE

#### NO PHOTOGRAPH AVAILABLE

Console CY-751/GR is a high-fidelity, audio amplifier and control system used in broadcasting am and fm radio programs.

This equipment consists of a power supply and a console. It provides facilities for mixing and amplifying the outputs of four microphones in one or two studios, a control-room microphone, an announce-booth microphone, two transcription turntables, and two of six remote lines.

The amplified output signals of the console are transmitted to a radio transmitter to modulate the broadcast carrier.

This console may also be used for auditioning, monitoring, talk-back from the control room to the studios or remote points, studio cuing, and remote cuing. In conjunction with an external recorder and a recording amplifier, it can be used for recording broadcast programs or auditions.

## AN/GRA-TYPE

CY-751/Gk

**CONSOLE** 

INSTRUCTION LITERATURE: TM 11-2647

USING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

#### **MAJOR COMPONENTS**

 QTY
 NAME OF COMPONENT
 DIMENSIONS (in.) INSTALLED
 WEIGHT (Ib)

 1
 Console
 10½ x 17 x 39
 135

 1
 Power supply
 15 x 8 x 15
 60

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

#### **TECHNICAL CHARACTERISTICS**

TYPE OF SIGNAL: Audio (30 to 15,000 cy).

CONTROLS: A-P (6 Audition-Program selector switches); REMOTE-LOCAL ANNOUNCE; REG.-EMG. LINE OUT; OVERRIDE-OFF-RECORD; PROGRAM-REMOTE PH MON; MIXER 5 INPUT (9 pushbutton selectors for connecting turn tables and any one of six remote lines to console); MIXER 6 INPUT (same as MIXER 5 INPUT); REMOTE CUE (8 pushbutton selector for remote line and remote talk-back); MONITOR INPUT (9 pushbutton selector for monitoring signals); TUBE CHECK (selects console tube stages to be checked on front panel volume meter); MONITOR (volume control for monitor amplifier); MASTER (volume control for program amplifier); VU CONTROL (zero adjust for volume-unit meter).

POWER REQUIREMENTS: 225 w, 100 to 130 v, 50/60 cy ac.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		195	5.07		
DOMESTIC PACK:					
EXPORT PACK:		385	22.6	.6	2

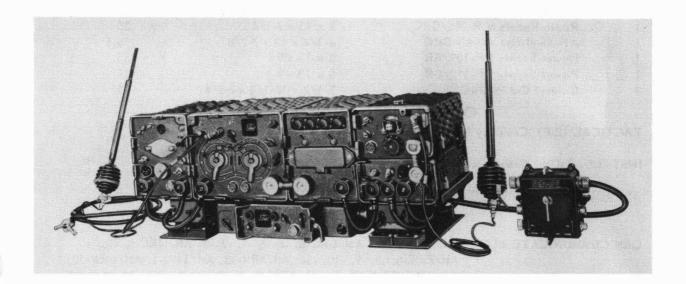
STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 5 Jan 52

AN/GRC-3

RADIO SET



Radio Set AN/GRC-3 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 units organic to an armored division.

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 interphone 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.

ANI/CDC O	INSTRUCTION LITERATURE: TM 11-284
AN/GRC-3	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE: Army, Navy
RADIO SET	DATE OF THIS SHEET: 5 Jan 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-66/GRC	9 × 13 × 11-1/4	35
1	Receiver-Transmitter RT-70/GRC	4-3/4 × 13 × 7-1/8	25
1	Radio Receiver R-108/GRC	9 × 13 × 7-1/4	35
1	AF Amplifier AM-65/GRC	4-1/4 × 13 × 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	$3-1/2 \times 10-1/2 \times 8-3/4$	12

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Company level and higher (armored division and corps).

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Set 1: stationary 15, moving 10.

Set 2: 2,000 yards.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-6, -8, -9, -10, -16; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-3, -5, -7, -8, -9, -10, -13, -14, -15, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; BC-787; R-137/GR; RBK; SCR-293, -294, -298, -300, -508, -509, -510, -528, -607, -608, -609,

#### TECHNICAL CHARACTERISTICS

-610, -619, -628, -808.

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-66/GRC (set 1) 20.0 \_ 27.9.

Receiver-Transmitter RT-70/GRC (set 2) 47.0 \_ 58.4.

Radio Receiver R-108/GRC (auxiliary receiver)

20.0 \_ 27.9.

TYPE MODULATION: Fm.

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

POWER OUTPUT: Transmitting		Receiving			
	Low	High	Phone	Speaker	Retransmission
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-3 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

STATUS: Standard

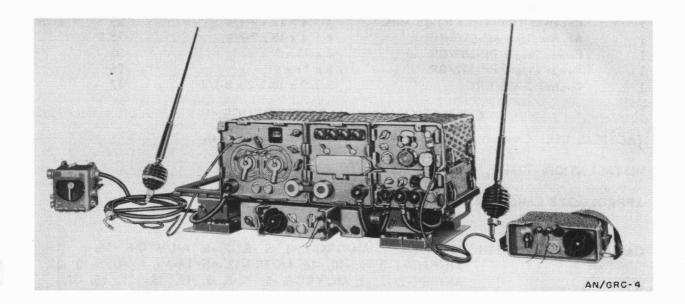
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 8 Jan 52

AN/GRC-4

**RADIO SET** 



Radio Set AN/GRC-4 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 units organic to an armored division.

It consists of a medium-power radio receiver-transmitter component, designated as set 1, which operates in the frequency range assigned to armored units, and a low-power receiver-transmitter, designated as set 2, which operates in a frequency band common to armored, artillery, and infantry units. Vehicular interphone 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 ground applications.

ANI/CDC A	INSTRUCTION LITERATURE: TM 11-284
AN/GRC-4	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE: Army, Navy
RADIO SET	DATE OF THIS SHEET: 8 Jan 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-66/GRC	9 × 13 × 11-1/4	35
1	Receiver-Transmitter RT-70/GRC	4-3/4 × 13 × 7-1/8	25
1	AF Amplifier AM-65/GRC	$4-1/4 \times 13 \times 7-7/8$	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	$3-1/2 \times 10-1/2 \times 8-3/4$	12

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Company level and higher (armored division and corps).

INSTALLATION: Ground, vehicular.

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

Set 2-- 2,000 yards.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16;

AN/PRC-6, -8, -9, -10, -16; AN/SRR-13, AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4; AN/VRC-3, -5, -7, -8, -9, -10, -13, -14, .15, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; BC-787; R-137/GR; RBK;

SCR-293, -294, -298, -300, -508, -509, -510, -528, -607, -608, -609, -610,

-619, -628, -808.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-66/GRC (set 1) -20.0 — 27.9.

Receiver-Transmitter RT-70/GRC (set 2) -47.0 — 58.4.

TYPE MODULATION: Fm.

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

**POWER OUTPUT:** Receiving **Transmitting** Speaker Low High Phone Retransmission 9 to 16 w 1 w Set 1: 1 to 2 w 50 mw 30 mw Set 2: .5 w 75 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-4 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

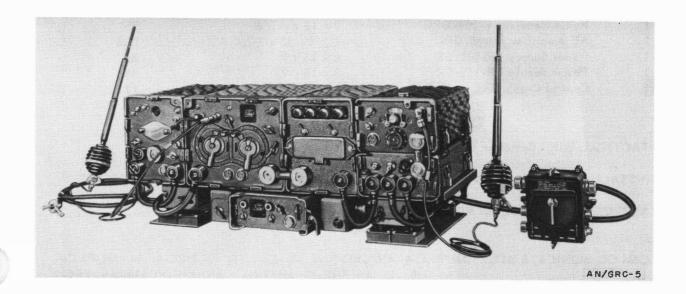
STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy DATE OF THIS SHEET: 9 Jan 52

AN/GRC-5

RADIO SET



Radio Set AN/GRC-5 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 used by field artillery units.

This equipment consists of a medium-power radio receiver-transmitter (set 1) operating on frequencies assigned to field artillery and a low-power receiver-transmitter (set 2) operating on frequencies common to artillery, armored, and infantry units for communication and liaison among all three types of organizations. It includes an auxiliary receiver, a vehicular interphone amplifying equipment, and control units for selecting desired modes of operation and service.

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 semipermanent field operation of set 1 or set 2 removed from the vehicle.

## AN/GRC-5 INSTRUCTION LITERATURE: TM 11-284 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 9 Jan 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-67/GRC	9 × 13 × 11-1/4	35
1	Receiver-Transmitter RT-70/GRC	$4-3/4 \times 13 \times 7-1/8$	25
1	Radio Receiver R-109/GRC	9 × 13 × 7-1/4	35
1	AF Amplifier AM-65/GRC	4-1/4 × 13 × 7-7/8	15.5
1	Power Supply PP-109/GR or	8 × 13 × 9	35
1	Power Supply PP-112/GR	8 × 13 × 9	35
1	Control C-435/GRC	$3-1/2 \times 10-1/2 \times 8-3/4$	12

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Battalion level and higher (armored division and corps).

INSTALLATION: Ground, vehicular.

CONFIDENTIAL

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

Set 2-- 2,000 yards.

CAN COMMUNICATE WITH: AN/FRC-6; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-6, -8, -9, -10, -16; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -300, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-67/GRC (set 1)-- 27.0 — 38.9.

Receiver-Transmitter RT-70/GRC (set 2)-- 47.0 — 58.4

Radio Receiver R-109/GRC (auxiliary)--27.0 — 38.9.

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

**POWER OUTPUT: Transmitting** Receiving Low High Phone Speaker Retransmission 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-5packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

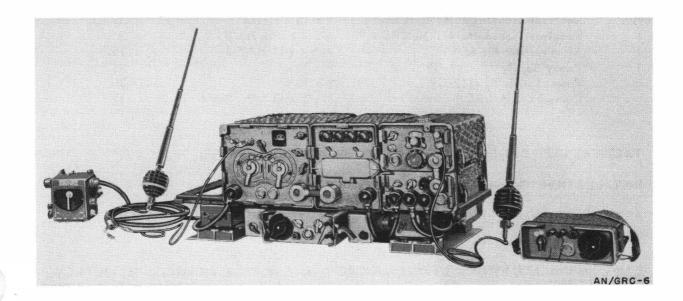
STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52

AN/GRC-6

RADIO SET



Radio Set AN/GRC-6 is a vehicular, short-range, f-m (voice), two-way radio 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 battalion and higher level artillery units.

This equipment consists of a medium-power receiver-transmitter, designated as set 1, and an auxiliary receiver, both of which operate in the frequency range assigned to an artillery unit. In addition, it includes a separate low-power, short-range, receiver-transmitter, designated as set 2, which operates in the frequency band common to armored, artillery, and infantry units. Vehicular interphone 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-6 INSTRUCTION LITERATURE: TM 11-284 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-67/GRC	9 x 13 x 11-1/4	35
1	Receiver-Transmitter RT-70/GRC	$4-3/4 \times 13 \times 7-1/8$	25
1	AF Amplifier AM-65/GRC	$4-1/4 \times 13 \times 7-7/8$	15.5
1	Power Supply PP -109/GR or	8 × 13 × 9	35
1	Power Supply PP-112/GR	8 × 13 × 9	35
1	Control C-435/GRC	$3-1/2 \times 10-1/2 \times 8-3/4$	12

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Battalion level and higher (armored division and corps).

INSTALLATION: Ground, vehicular

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

Set 2-- 2,000 yards.

CAN COMMUNICATE WITH: AN/FRC-6; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16; AN/PRC-6,

-8, -9, -10, -16; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2,

-3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293; -294, -298, -300, -508, -509, -510, -528, -607, -608, -609,

-610, -619, -628, -678, -808, -828.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: Receiver-Transmitter RT-67/GRC (set 1)-- 27.0 — 38.9.

Receiver-Transmitter RT-70/GRC (set 2)-- 47.0 - 58.4.

TYPE MODULATION: Fm.

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

**POWER OUTPUT:** Transmitting Receiving Low Phone High Speaker Retransmission Set 1: 1 to 2 w 9 to 16 w 50 mw 1 w 30 mw Set 2: .5 w 75 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-6 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

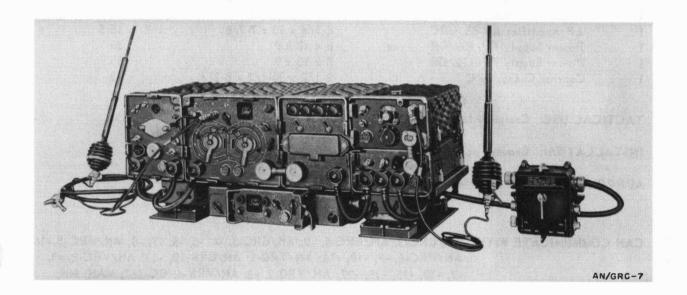
STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 5 Jan 52

AN/GRC-7

RADIO SET



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 interphone 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 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 5 Jan 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-68/GRC	9 × 13 × 11-1/4	35
1	Receiver-Transmitter RT-70/GRC	4-3/4 × 13 × 7-1/8	25
1	Radio Receiver R-110/GRC	9 × 13 × 7-1/4	35
1	AF Amplifier AM-65/GRC	4-1/4 × 13 × 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	$3-1/2 \times 10-1/2 \times 8-3/4$	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.

Aux Rec:

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

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

50 mw

1 w

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

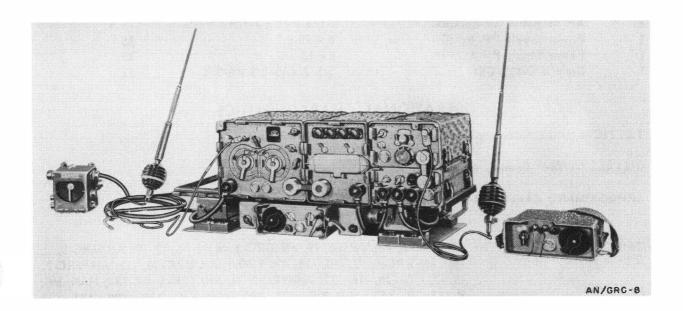
#### PHYSICAL CHARACTERISTICS

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

30 mw

CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

RADIO SET



Radio Set AN/GRC-8 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 used by units organic to an infantry division.

This equipment consists of a medium-power radio receiver-transmitter component, designated as set 1, operating in the frequency range assigned to infantry units, and a low-power receiver-transmitter, designated as set 2, which operates in a frequency band common to armored, artillery, and infantry units. It includes vehicular interphone amplifying equipment and control units for selecting desired modes of operation.

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 ground applications.

## AN/GRC-8 INSTRUCTION LITERATURE: TM 11-284 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 9 Jan 52

#### MAJOR COMPONENTS

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

TYPE MODULATION: Fm.

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

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

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-8 packed for export shipment: total weight 441 pounds, total volume 10.48 cu ft. Shipped in 4 packages.

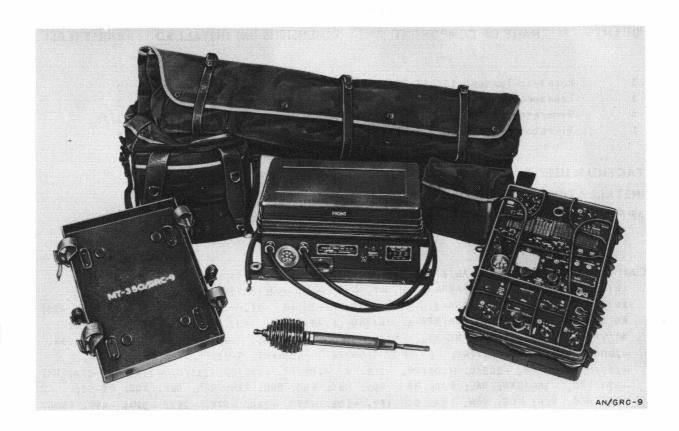
STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/GRC-9

**RADIO SET** 



Radio Set AN/GRC-9 is a light-weight portable or vehicular, 3-band, a\_m (voice, tone, cw, and mcw) equipment used by infantry and armored units for communication in the v-h-f band.

This equipment consists of a receiver-transmitter (which can be either crystal- or master-oscillator controlled), a power supply, and related accessories. Uses a vehicular whip-type or long-wire antenna, one or two sets of headphones, or a loudspeaker connected at either of the headphone jacks.

Power is derived from a storage battery through the vibrator power unit or from a hand Generator GN-58.

During stand-by, the receiver uses Battery BA-48, which can be used in conjunction with the hand generator when the transmitter is being operated.

WEIGHT (LBS)

AN/GRC-9

RADIO SET

QUANT

INSTRUCTION LITERATURE:TM 11-263

CLASSIFICATION OF EQUIPMENT: Unclossified

USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52

DIMENSIONS (IN) INSTALLED

#### **MAJOR COMPONENTS**

1	Receiver-Transmitter RT-77/GRC-9	16 × 13 × 8	32
1	Loudspeaker LS-7	7 × 4-3/4 × 3	3
1	Generator GN-59	$10-1/2 \times 7-1/2 \times 8$	22.75
1	Vibrator Power Supply PE-237	$20 \times 10-1/2 \times 10-3/4$	74

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Infantry, armored, and armored-cavalry motorized elements.

INSTALLATION: Ground, field and vehicular.

APPROXIMATE RANGE (IN MILES): Stationary	Moving
Voice • 15	10
Cw - 30	20
Mcw - 20	10

NAME OF COMPONENT

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; 0A-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, +208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBM; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 12 in three bands.

Band 1: 6.6 - 12 Band 2: 3.6 - 6.6

Band 3: 2.0 - 3.6.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, or mcw.

POWER OUTPUT: Transmitter: w/PE-237 - High, phones 7.0 w, cw 15 w. Low, phones 1.0 w, cw 5 w. w/GN-58 - High, phones 3.6 w, cw 10 w. Low, phones 1.2 w, cw 5 w.

POWER REQUIREMENTS: Vibrator Power Supply PE-237 and 6-, 12-, or 24-v vehicular storage battery or Generator GN-58 or Power Unit PE-162. Battery BA-48 (stand-by operation receiver only).

#### PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-9 packed for export shipment: total weight 359 pounds, total volume 15.9 cu ft. Shipped in 3 packages.

STATUS: Std

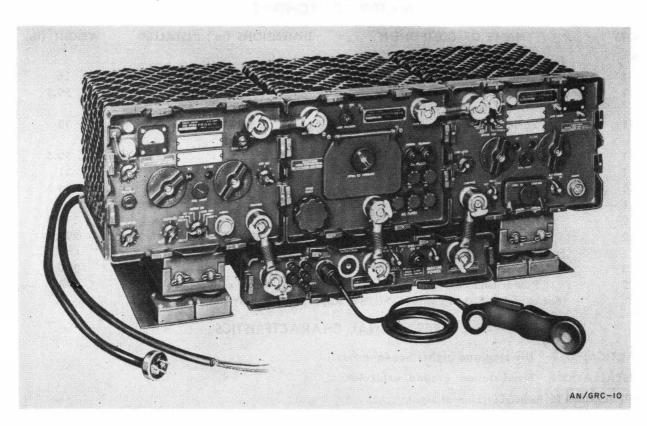
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

## AN/GRC-10, -39, -40

RADIO SET, RADIO TERMINAL SET, RADIO REPEATER SET



Radio Set AN/GRC-10 is a vhf, fm receiving and transmitting equipment that may be used in single-channel push-to-talk communication applications, as a terminal station of a single-channel radio relay system, as a major component of a multichannel radio terminal set, or as part of a radio relay (repeater) set of a multichannel system.

It consists essentially of an antenna system, a receiver, a transmitter, a power supply, a radio-set control, and an equipment rack.

Radio Terminal Set AN/GRC-39 consists essentially of one Radio Set AN/GRC-10, one spare, and two power units. When it is operated in conjunction with Telephone Terminal AN/TCC-3 and associated equipment, it can provide duplex facilities for four voice channels or combinations of voice, telegraph, and facsimile circuits.

Radio Repeater Set AN/GRC-40, consisting essentially of two Radio Sets AN/GRC-10, a spare, and two power units, is used as a multichannel (5) radio relay set.

## AN/GRC-10, -39, -40

RADIO SET, RADIO TERMINAL SET, RADIO REPEATER SET

INSTRUCTION LITERATURE: TM 11-614

USING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (1b)
	For AN/GRC-10:		
1	Control, Radio Set C-632/GRC-10	4 x 13 x 18	18
1	Dynamotor-Power Supply DY-94/GRC-10	9¼ x 13 x 11¼	59.5
1	Rack, Electrical Equipment MT-700/GRC-10	5 x 12½ x 33%	33
1	Antenna Group OA-249/GRC-10		90.5
1	Receiver, Radio R-125/GRC-10	9¼ x 13 x 11¼	31
1	Transmitter, Radio T-235/GRC-10	9¼ x 13 x 11¼	34.5
	For AN/GRC-39:		
2	Radio Set AN/GRC-10		390.8
2	Power Unit PE-75	24½ x 19 x 36	298
	For AN/GRC-40:		
3	Radio Set AN/GRC-10		390.8
2	Power Unit PE-75	24½ x 19 x 36	298
	(For complete list of components, see ap	propriate supply manuals.)	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters. INSTALLATION: Fixed station; ground, vehicular.

APPROXIMATE RANGE: Line of sight.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 54 to 70.9 (170 chan spaced .1 mc apart).

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice; multichan tel, tlg, or facsimile; or various combinations of these.

TRANSMITTER POWER OUTPUT: 10 w, 40 w.

POWER REQUIREMENTS: (ea DY-94/GRC-10) 292 w, 115/230 v, 50/65 cy ac; 326 w, 26 v dc.

#### PHYSICAL CHARACTERISTICS

		DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	AN/GRC-10		390.8			
	AN/GRC-39		1,406.1			
	AN/GRC-40		1,791.4			
DOMI	ESTIC PACK:					
EXPO	RT PACK: A	N/GRC-10	609.3	33	.83	4

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 9 May 52

AN/GRC-13

RADIO SET



Radio Set AN/GRC-13 is a general purpose low-power m-f, h-f, a-m (voice and cw) radio communication equipment. It is a complete transportable radio station, and is used in amphibious or field operations. Ten preset crystal-controlled channels are provided, and a remote control unit may be used at distances up to one mile. The remote operator cannot control operation of the radio set, but he can transmit or receive by code or voice, or communicate with the local operator.

The basic equipment employs a hand generator for power in transmission, and the hand generator or self-contained batteries for reception. The generator is suitable where transportation facilities are limited to man or pack carry.

The AN/GRC-13 may be installed in a vehicle by use of Installation Kit MX-1012/U, operated from 12- or 24-v d-c or 115-v a-c power sources by use of Power Supply Kit MX-1011/U, or operated with a gasoline driven power unit by use of Engine-Generator Kit MX-1010/U.

## AN/GRC-13

INSTRUCTION LITERATURE:
NavShips 91235
CLASSIFICATION OF FOULPMENT:

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE : Navy

DATE OF THIS SHEET: 9 May 52

RADIO SET

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIG	HT (LBS)
1	Radio Receiver-Transmitter	8-1/2 × 17-11/32 × 16-1/8	Not	Available
1	RT-136/GRC-13 Hand Generator G-28A/U	10 × 8-7/8 × 7-1/4		
1	Remote Control C-477/GRC-13	5-5/16 × 7-7/16 × 7-3/32	•	•
1	Crystal Unit Container NT-10527-A with Crystal Unit CR-18/U	2 × 10-1/2 × 5-1/2	•	•

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Field, shore stations, or advanced bases.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -349, -401, -447, -610, -779, -794, -1004; MBS; MQ; 0A-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -398/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -189, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18 S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 12.0 in 4 bands.

Band 1: 2.0 - 3.13 Band 2: 3.13 - 4.9 Band 3: 4.9 - 7.665

Band 4: 7.665 - 12.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw.

POWER OUTPUT: Transmitter: Voice, 4.5 w; cw, 12 w.

Receiver: 25 mw.

POWER REQUIREMENTS: Transmitter: Powered by Hand Generator G-28A/U.

Receiver: 3.15 w, 90 v dc; and 1.125 w, 1.5 v dc.

(Operates from Battery BA-48 or Hand Generator G-28A/U)

Remote Control Unit: 6 Batteries BA-30.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-13 measures  $8-1/2 \times 17-11/32 \times 16-1/8$  inches, net weight 257 pounds, volume 9 cu ft. Packed for domestic shipment: total weight 485 pounds, total volume 36 pounds.

STATUS: Experimental

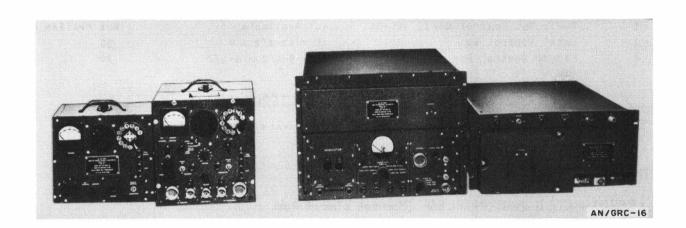
CLASSIFICATION OF EQUIPMENT : Restricted

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.

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

## AN/GRC-16 INSTRUCTION LITERATURE: Not Available CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-231/GRC-16	19 × 17-1/2 × 19	200
1	Radio Receiver R-317/GRC-16	$19 \times 8 - 1/2 \times 21 - 1/2$	30
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	$11 \times 9 - 1/2 \times 6 - 1/2$	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; RDR; RDR; 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 x 21-1/2 x 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.

STATUS: Std

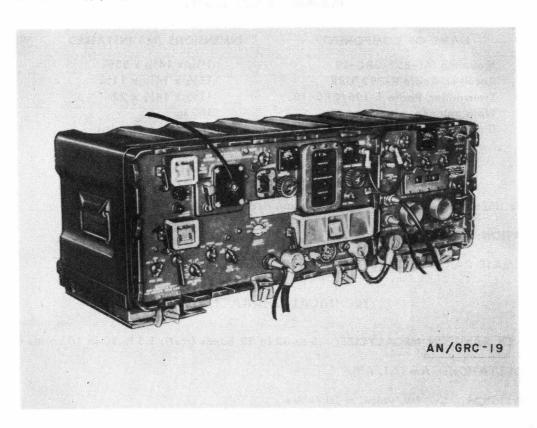
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/GRC-19

RADIO SET



Radio Set AN/GRC-19 is a medium-power, mobile or portable, hf fixed station equipment used for transmitting and receiving voice, radiotelegraph, and, in conjunction with suitable associated equipment, for radioteletype communication. Its transmitter may be remotely controlled at a maximum distance of 75 feet from the operating site by means of an appropriate control unit.

This equipment consists essentially of a transmitter, receiver, and whip antenna but requires an installation unit suited to the vehicle in which it is used for mobile operation. Both a 28-volt power source and a half-wave, center-fed Hertz array (Antenna Group AN/GRA-12) are required for fixed station operation.

This radio set has provision for simultaneous voice and radioteletype service, and it can operate on a simplex or duplex basis or in radio relay applications.

## AN/GRC-19

**RADIO SET** 

INSTRUCTION LITERATURE: TM 11-274

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 25 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Mounting MT-851/GRC-19	111/16 x 14/32 x 33/8	45
1	Receiver, Radio R-392/URR	$11\frac{1}{2} \times 14\frac{3}{6} \times 11\frac{1}{4}$	52.3
1	Transmitter, Radio T-195/GRC-19	$11\frac{1}{2} \times 14\frac{1}{8} \times 22$	125
1	Whip antenna	180 lg	
	(For complete list of components, see	appropriate supply manuals.)	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Mobile; fixed-portable.

APPROXIMATE RANGE (IN MILES): 50 (voice); 75 (cw); 150 to 1,500 (sky wave).

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32 in 32 bands (rcvr); 1.5 to 20 in 10 bands (xmtr).

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, fsk, voice, or fsk/voice.

POWER OUTPUT: 200 mw (rcvr to 600-ohm headset); 100 w (xmtr).

POWER REQUIREMENTS: 28.5 v dc.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	13½ x 14¼ x 33%	253.5			
DOMESTIC PACK:					
EXPORT PACK:		351	31.7	.79	4

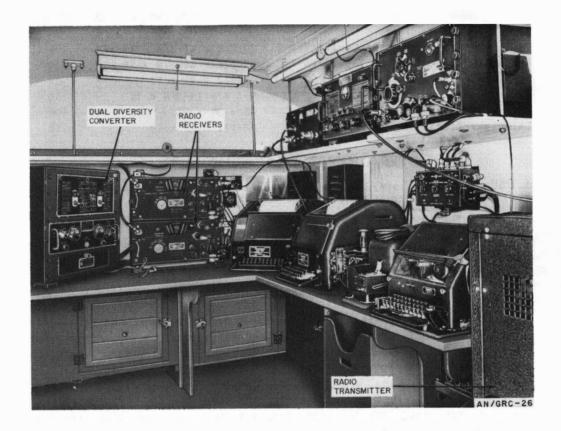
STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

AN/GRC-26

RADIO SET



Radio Set AN/GRC-26 is a mobile, medium-power, long range, a-m (voice, tone, cw, or frequency-shift-keying teletypewriter) transmitting and receiving equipment used for point-to-point and ground-to-air communication at division and higher headquarters.

This equipment consists of radio, teletypewriter, and associated items installed in a field-type shelter mounted on a 2-1/2-ton,  $6 \times 6$ , cargo truck, with a 1-ton trailer on which a portable, field power unit is installed. Whip-type and doublet antenna components are included.

This set usually is used for radioteletype operation on a full-duplex basis and uses dual-diversity reception. It can be operated on a half-duplex basis and includes a voice channel which is used as an "order wire". The equipment normally is operated at the halt but can provide voice or c-w communication while in motion. The voice channel can be used as a voice-patching facility, simultaneously with radioteletype operation in emergencies or when otherwise required.

The entire equipment can be transported by a C-82 type aircraft.

## AN/GRC-26

RADIO SET

INSTRUCTION LITERATURE: TM 11-264

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Dual Diversity Converter CV-31B/TRA-7	7 20-7/8 × 17-5/6 × 19-1/4	200
1	Frequency Shift Exciter 0-39B/TRA-7	$12-5/8 \times 16-3/8 \times 19$	110
1	Perforator-Transmitter TT-56/MGC	13-1/2 × 21 × 25	85
2	Radio Receiver R-336/GRC-26	9-1/4 × 10-3/4 × 18	65
1	Radio Transmitter T-213/GRC-26	45 × 30 × 31	400
2	Teletypewriter TT-55/MGC	15-1/2 × 18 × 18	60

#### OPERATIONAL CHARACTERISTICS

TACTICAL USE: At division, army, and corps level, used in radio and message center operations company, signal battalion, corps (corps level). Used by special teams.

INSTALLATION: Ground, mobile

APPROXIMATE RANGE (IN MILES): (Nominal) 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-12, -13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, .22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -R-96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC; -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Receiver: Band A: 1.5-3.0, Band B: 3.0 - 5.0, Band C: 5.0 - 8.0, Band D: 8.0 - 11.0, Band E: 11.0 - 14.0, Band F: 14.0 - 18.0. Transmitter: 2.0 - 18.0.

TYPE MODULATION: Am and frequency shift keying.

TYPE OF SIGNAL: Voice, tone, cw, and frequency shift keying.

POWER OUTPUT: Voice - 300 w; cw - 400 w; frequency shift keying - 400 w.

POWER REQUIREMENTS: Transmitter: 2,000 w, Exciter: 185 w, Receiver: 80 w, Converter: 175 w, 115 v, 60 cyc, ac.

#### PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-26 weighs 8,881.6 pounds net, volume 586.5 cu ft, 14.66 ship tons. Packed for domestic shipment: total weight, 11,950 pounds, total volume 926 cu ft, 23.15 ship tons. Packed for export shipment: total weight 15,400 pounds, total volume 1,150 cu ft, 28.75 ship tons. Shipped in 2 packages both domestic and export.

STATUS: Substitute Standard

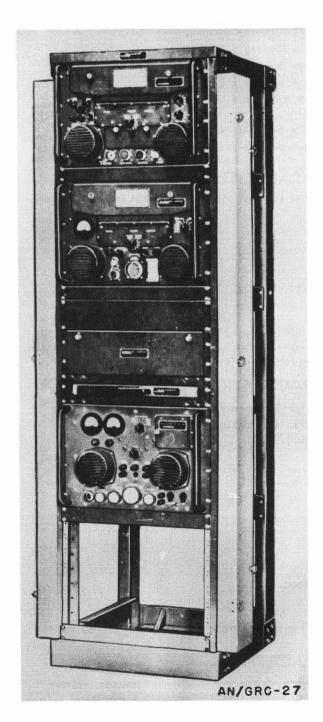
CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 10 Jun 52

## AN/GRC-27

RADIO SET



Radio Set AN/GRC-27 is the basic family of communication units for two-way, fixed station, ground, u-h-f, a-m (voice or mcw) air base traffic control, or point-to-point, communication. It is comprised of an indefinite quantity of each of the following: radio transmitter, modulator-power supply, radio receiver, distribution panel components, and 19-inch relay racks, antennas, and the necessary interconnecting cables.

This equipment is designed to operate in any 10 preset crystal-controlled channels (of a total of 1,750 channels) spaced 100 kc apart in the 225.0 to 399.9 mc range.

Radio Receiver R-278/GR also monitors either one of two crystal-controlled, preset, stand-by, guard channels from 238 to 248 mc.

Modulator-Power Supply MD-129/GR supplies power for Radio Transmitter T-217/GR in cycles of one minute ON and five minutes OFF.

Equipment can be requisitioned as required on an individual project, or installation basis.

Requires 2,310 w, 115 to 230-v, 60-cyc, ac for a typical installation of one transmitter, one modulator, one receiver plus ancillary items.

### AN/GRC-27

RADIO SET

INSTRUCTION LITERATURE:
TO 16-30GRC27-1 & 16-35A104
CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
*	Radio Transmitter T-217/GR	19 × 12-1/4 × 20	130.0
*	Radio Receiver R-278/GR	19 × 12-1/4 × 20	115.0
*	Modulator-Power Supply MD-129/GR	19 × 12-1/4 × 20	140.0
*	Antenna AT-197/GR	Not available	7.0
*	Antenna AS-505/GR	W es	50.5
*	Distribution Panel J-390/GR	19 × 5-1/4 × 3-1/4	5. 5
*	Rack MT-686/GR	22-5/8 × 72-1/2 × 21-3/8	96.0
	# 1		· ·

\* Issued as required

#### **OPERATIONAL CHARACTERISTICS**

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

with AFR 100-17.

INSTALLATION: Ground, fixed.

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, spaced 100 kc apart, in the frequency range 225.0 to 399.9 mc are available. It is designed to operate on 10 preset channels and one guard channel (238 to 248 mc).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: Transmitter: 100 w (Nominal).

Receiver: 3 w into 600 ohm load.

POWER REQUIREMENTS: Minimum installation 2,310 w (approximate) 115 / 230 v, 50/60 cyc, 1 phase, ac.

#### PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-27 measures 22-5/8 x 72-1/2 x 21-3/8 inches, net weight 544 pounds, volume 20.1 cu ft, 1 ship ton. Packed for domestic or export shipment: total weight 600 pounds, total volume 24 cu ft, 1.2 ship tons. Shipped in 7 packages.

(Minimum installation requirements; one transmitter, one receiver, one modulator, and ancillary items.)

STATUS: Substitute Standard

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force, Navy

DATE OF THIS SHEET: 10 Jun 52

## AN/GRC-29

RADIO SET



Radio Set AN/GRC-29 is a two-way, u-h-f, (am, voice or tone) communication equipment for advanced Air Base Traffic Control ground-to-air or point-to-point communication. It is an adaptation of the AN/GRC-27, for amphibious use; having water tight container, and an adaptable mobile power unit.

This equipment consists of a radio transmitter, modulator-power supply, radio receiver, radio set controls, two antennas, power units, and related items.

It operates in the frequency range 225.0 to 399.9 mc, and Radio Receiver R-278/GR (illustrated above) also monitors either one of two crystal-controlled, preset, stand-by guard channels from 238 to 248 mc.

Modulator Power Supply MD-129/GR supplies power for Radio Transmitter T-217/GR in cycles of one minute ON and five minutes OFF.

This set can be operated from a distance up to 10 miles away by means of Radio Set Control C-566/GR, over two telephone pairs.

The antenna system uses low impedance 52-ohm transmission lines and has switching facilities for selecting directional, or omni-directional, broadband operation.

Power requirements (2.5 kw) are supplied by Power Unit 5JB, or an equivalent power source.

## AN/GRC-29

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 10 Jun 52

**RADIO SET** 

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-217/GR	19 × 12-1/4 × 22-5/8	150.0
1	Modulator Power Supply MD-129/GR	19 × 12-1/4 × 22-5/8	180.0
1	Radio Receiver R-278/GR	19 × 12-1/4 × 22-5/8	145.0
1	Radio Set Control C-565/GR	19 × 12-1/4 × 11-1/2	85.0
1	Radio Set Control C-566/GR	19 × 8-3/4 × 11-1/2	45.0
1	Antenna AS-450/GR	23 × 17 × 29	65.0
1	Antenna AT-197/GR	19 × 26 × 19	7.5
1	Antenna Mast AB-159/GR	50 to 90 feet long	650.0
1	Power Unit Type 5JB	73 × 39 × 27	1,400.0
8	Cases CY-722/GR and CY-724/GR to CY-73/MRQ-2 inclusive	23 × 17 × 29	70.0 each

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Normally issued to advanced air bases for air field traffic control and for airways communication.

INSTALLATION: Ground, semi-fixed.

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: 1,750 channels, spaced 100 kc apart, in the frequency range 225.0 - 399.9.

Operates on 10 preset channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 100 w.

Receiver: 3 w into 600 ohm resistive load.

POWER REQUIREMENTS: 2.5 kw, 115 or 230 v, 50/60 cyc, 1 phase, ac. (Supplied by Power Unit Type 5JB.)

#### PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-29 measures  $39 \times 29 \times 233$  inches, net weight 3,042 pounds, volume 73.3 cu ft. Packed for domestic or export shipment: total weight 3,954 pounds, total volume 87.9 cu ft, 2.1 ship tons. Shipped in 21 packages.

STATUS: Substitute Standard

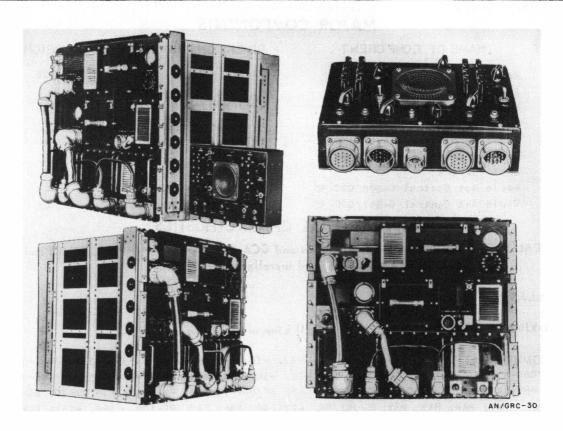
CLASSIFICATION OF EQUIPMENT : Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 19 May 52

## AN/GRC-30

RADIO SET



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

RADIO SET

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 19 May 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter	24-1/2 × 6-3/4 × 21	125
	RT-226/GRC-30		
1	Radio Receiver-Transmitter	24-1/2 × 6-3/4 × 21	145
	RT-227/GRC-30		
1	Radio Receiver R-420/GRC-30	$7-7/8 \times 7-3/4 \times 21$	45
1	Antenna Group 0A-291/GRC-30	30 × 38-1/2 × 7-1/2	22
	each 50 ohm		
1	Radio Set Control C-896/GRC-30	$12 \times 7 - 3/4 \times 21$	45
1	Radio Set Control C-897/GRC-30	12 × 7-3/4 × 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 WLTH: 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/URT-7, -10; BC-639, -640, -787; 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  $24 \cdot 1/2 \times 30 \times 21$  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.

STATUS: Substitute Standard

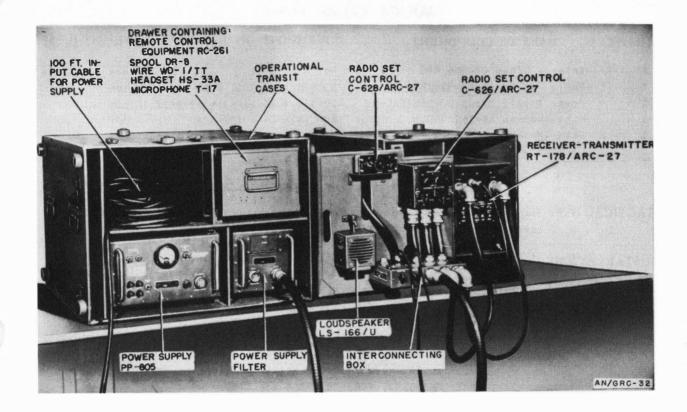
CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 19 May 52

## AN/GRC-32

**RADIO SET** 



Radio Set AN/GRC-32 is a ground-operated, two-way, u-h-f, a-m, receiver-transmitter, normally used for ground-to-air communication. It can be used wherever a low-power u-h-f communication system is needed for tactical control of aircraft at moderate ranges. The set can also form the ground radio terminal of air-ground radio circuits for flight safety, as well as short range tactical control of aircraft.

The transmitter and receiver both operate on any one of 18 preset, crystal-controlled channels (of a total of 1,750) which are spaced 100 kc apart.

Remote control facilities are provided by means of Remote Control Equipment RC-261 which provides remote operation of, and voice communication over, voice-operated radio sets on a preset frequency, (with a preset adjustment of the volume control) for distances up to 1/2 mile from the radio set.

This radio set consists of components of Radio Set AN/ARC-27, modified to operate from 115/230-v, 60-cyc, single phase, ac, in lieu of 26.5 v, dc, used in aircraft.

Radio Set AN/GRC-32 is housed in operational, transit cases to permit easy transportation.

RADIO SET

# AN/GRC-32

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 19 May 52

## MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Antenna Group OA-306/GRC	Not Available	Not Available
1	Radio Set Group OA-394/GRC	29-5/8 × 22-3/16 × 30-1/4	156
1	Power Supply Group 0A-385/GRC-32	29-3/4 × 25-15/32 × 32-9/32	3 27
1	Mast Antenna AB-282/GRC	10-1/4 × 10 × 133-1/4	170
1	Case (Mast Erection Equip.) CY-1186/GRC	21-27/32 × 14-1/2 × 26-9/16	160

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Normally issued for air-ground communications at advanced air bases or forward

areas.

INSTALLATION: Ground, temporary installations in tents, covered vehicles, portable shelter or

permanent buildings.

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, spaced 100 kc apart, in the frequency range 225.0 - 399.9 mc are available. It is designed to operate on any 18 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: 10 w (Nominal).

POWER REQUIREMENTS: 1,000 w, 115/230 v, 60 cyc, 1 phase, ac.

#### PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-32 measures  $39-7/8 \times 15 \times 21-3/4$  inches, net weight 813 pounds, volume 7.6 cu ft. Packed for either domestic or export shipment: total weight 894 pounds, total volume 8 cu ft.

STATUS: Std

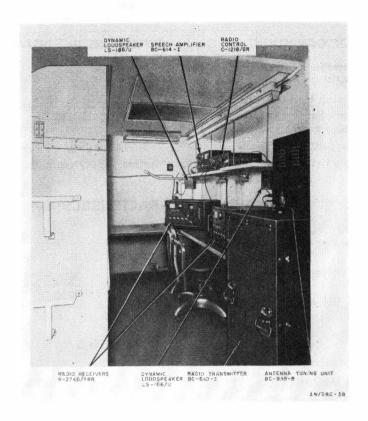
CLASSIFICATION OF EQUIPMENT: Unclassified

AN/GRC-38

RADIO SET

PREPARING SERVICE: USA

DATE OF THIS SHEET: 3 July 1956



Radio Set AN/GRC-38 is a mobile or fixed transmitting and receiving station used for ground-to-ground and ground-to-air communication applications.

It consists of a transmitter, two receivers, a speech amplifier, an antenna tuning unit, and a radio set control. All operating components are housed in a shelter, which is transportable in a  $2\frac{1}{2}$ -ton, 6 by 6 cargo truck.

This equipment requires a 115-volt ac commercial power source for fixed station operation, but includes a trailer-mounted generator for mobile use.

## AN/GRC-38

**RADIO SET** 

INSTRUCTION LITERATURE: TM 11-281B

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 3 July 1956

## **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Radio Transmitter BC-610-I		
1	Speech Amplifier BC-614-I		
1	Antenna Tuning Unit BC-939-B		
1	Control, Radio Set C-1218/GR		
2	Radio Receiver R-274D/FRR		
1	Shelter S-69/GRC	142 x 83½ x 79½	
	(For complete list of components, see	e appropriate supply manuals.)	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station; mobile.

APPROXIMATE RANGE (IN MILES): 1,000.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 54 in six bands (rcvr); 2 to 18 (xmtr).

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

TRANSMITTER POWER OUTPUT: 300 w (voice); 400 w (cw).

POWER REQUIREMENTS: 5.4 kw, 115 v, 60 cy, 1 ph ac (coml); 10 kw, 120/240 v, 60 cy, 1 ph ac

(PE-95-G).

## PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	PACKAGES

NET:

142 x 83½ x 79½ (shelter)

**DOMESTIC PACK:** 

EXPORT PACK: 12,365 1,130.75 28.3 2

496b Change No. 1

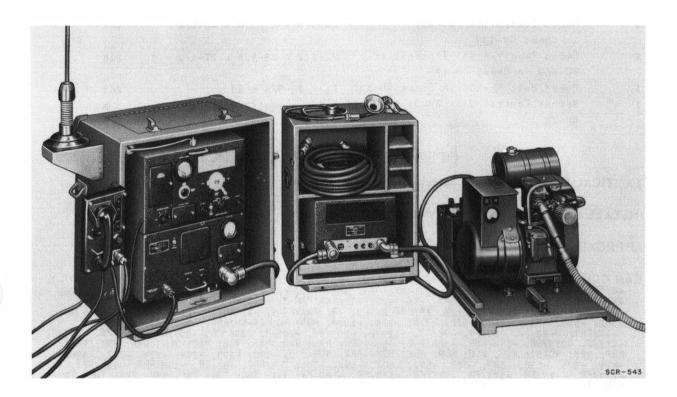
CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 31 Jan 52

SERVICE TYPE NUMBER:

AN/GRC-TYPI

RADIO SET



Radio Set SCR-543 is a medium range, medium- and high-frequency, a-m (voice), radiotelephone equipment for mobile or fixed station use by antiaircraft artillery units.

This equipment consists of a radio receiver and transmitter component, power supply, and associated accessories, and may be installed and operated in a light truck or from a permanent location as a field radiotelephone station. Can be operated with a whip-type, or straight-wire antenna.

This equipment may be operated from a remote point by use of Remote Control Unit RM-21.

## $\mathsf{GRC} extsf{-}\mathsf{TYPE}$

**SCR-543** RADIO SET

SERVICE TYPE NUMBER

INSTRUCTION LITERATURE: TM 11-625

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 31 Jan 52

### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-699 in Chest CH-133	20-3/8 × 29-3/4 × 28-1/2	182
1	Radio Receiver and Transmitter BC-669 in Chest CH-133	22-1/2 × 28-3/4 × 27-1/2	216
1	Power Unit PE-108 in Chest CH-131	24 × 23-3/4 × 28	265
1	Remote Control Unit RM-21 in Chest CH-73	4-1/2 × 10-1/2 × 16-1/2	5

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Antiaircraft detachment, special teams.

INSTALLATION: Mobile or fixed station.

APPROXIMATE RANGE (IN MILES): 15 to 30.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.68 - 4.45

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and cw.

POWER OUTPUT: 45 w.

POWER REQUIREMENTS: Power Unit PE-108, or storage battery.

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-543 packed for domestic or export shipment: total weight 1,253 pounds, total volume 54 cu ft, 1.4 ship tons.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

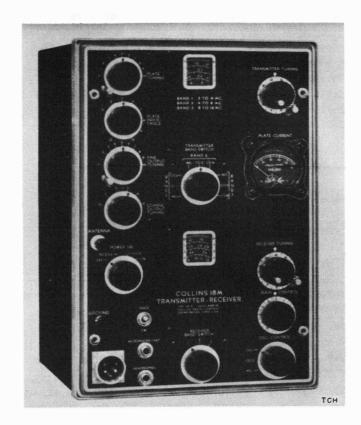
DATE OF THIS SHEET: 23 May 52

AN/GRC-TYPE

SERVICE TYPE NUMBER:

TCH

TRANSMITTER AND RECEIVER EQUIPMENT



Transmitter and Receiver Equipment TCH is a-m (cw, voice) h-f, field and vehicular radiotelephone and radiotelegraph set. The transmitter may be keyed at speeds up to 30 wpm on cw.

This equipment covers its frequency range in three bands, using a master oscillator for continuously variable frequency operation over the entire range; crystal control on any two preset frequencies in the three bands. Crystal operation over the 8 to 16 mc band is not generally satisfactory.

The transmitter will operate into a wide range of antenna lengths. In temporary field installations various counterpoise arrangements are possible; an 8 to 10 foot rod (with suitable loading coil) is recommended for vehicular installation.

Collins Type 415E-3 Power Unit operates from a 12-v storage battery.

## AN/GRC-TYPE

TCH :SERVIC

:SERVICE TYPE NUMBER

TRANSMITTER AND RECEIVER EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 23 May 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit Collins Type 18M-5	14-1/4 × 9-5/8 × 9-3/4	25.5
1	Power Unit Collins Type 4138-1	9-1/2 × 22-1/4 × 12	95.0
1	Power Unit Collins Type 415E-3	6-3/8 × 6-5/8 × 3-1/2	8.5
1	Power Unit Collins Type 416 <sup>T</sup> -1	$6-1/4 \times 6-1/2 \times 7-1/2$	18.0
1	Power Unit Collins Type 416T-2	$6-1/4 \times 6-1/2 \times 7-1/2$	18.0

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Field units or vehicles.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR. -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBH; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 16 in 3 bands.

Band 1: 2 - 4

Band 2: 4 - B

Band 3: 8 - 16.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw.

POWER OUTPUT: Transmitter: Cw, 15w; voice, 5w.

Receiver: 200 mw maximum into 500 ohm load.

.POWER REQUIREMENTS: 102 w, 12 v, dc; or 160 w, 24 v, dc; or 150 w, 32 v, dc;

or 115 v, dc or ac.

#### PHYSICAL CHARACTERISTICS

Information on TCH Transmitter and Receiver Equipment not available.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT :Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 20 Dec 51

AN/GRR-2

RADIO SET



Radio Set AN/GRR-2 is a crystal-controlled, medium-weight radio receiver for the reception of a-m (voice) and cw signals in the m-f, h-f, and v-h-f bands. It con be used in permanent or semipermanent stations.

This equipment is essentially a commercial (Hallicrafters SX-28) table-model receiver which may be either cabinet or rack and panel mounted. It has a phonograph jack and three output impedances for headphones and an external 500-ohm or 5,000-ohm permanent magnet speaker. Can be operated in a conventional inverted L or doublet antenna system.

It has a built-in power supply, and it operates from ac with provision for emergency use of either battery or power pack.

## AN/GRR-2

RADIO SET

INSTRUCTION LITERATURE: TM 11-874

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 20 Dec 51

### MAJOR COMPONENTS

QUANT

NAME OF COMPONENT

**DIMENSIONS (IN) INSTALLED** 

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Fixed plant; also used by special teams, such as D/F intercept team.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5. -6, -15, -17, -18, -19, AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAU; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.55 - 42 in six bands.

Band 1: 0.55 - 1.6 Band 2: 1.60 - 3.0 Band 3: 3.0 - 5.8 Band 4: 5.8 - 11.0 Band 5: 11.0 - 21.0

Band 6: 21.0 - 42.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, keyed cw.

POWER OUT PUT: 8 w undistorted.

POWER REQUIREMENTS: 138 w, 117 v, 60 cyc, ac

or
6 v, 4.8 amp heater supply
and 270 v, 150 ma high voltage.
Dc power consumption is 108 w,

#### PHYSICAL CHARACTERISTICS

Radio Set AN/GRR-2 measures  $16-1/2 \times 20-3/4 \times 10-3/4$  inches, net weight 78 pounds, volume 2.1 cu ft. Packed for domestic shipment: total weight 135 pounds, total volume 5.5 cu ft. Shipped in 1 package.

STATUS: Limited Standard

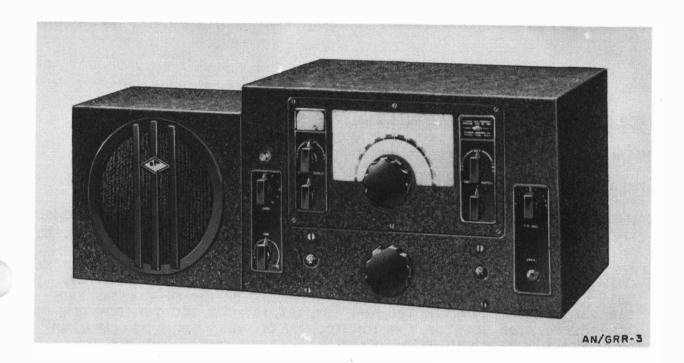
CLASSIFICATION OF EQUIPMENT : Unclassified

AN/GRR-3

USING SERVICE: Army

DATE OF THIS SHEET: 8 Jan 52

**RADIO SET** 



Radio Set AN/GRR-3 is a transportable, a-m (voice, cw, and mcw) receiving equipment which operates in the 1-f and m-f bands for air-ground, ground, and weather data communication at division and higher headquarters in fixed station applications.

This equipment consists essentially of a commercial (National NC-100 ASC) communications type receiver and associated 8-inch inclosed loudspeaker. It has a built-in power supply.

This set can be used with conventional inverted L or T type antennas or with a doublet antenna system.

## AN/GRR-3

INSTRUCTION LITERATURE: None

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 8 Jan 52

RADIO SET

## **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

**DIMENSIONS (IN) INSTALLED** 

WEIGHT (LBS)

1

National Receiver NC-100 ASC

12 x 19 x 15

65

1 8" PM

8" PM Loudspeaker in cabinet

Not Available

Not Available

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed or mobile.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -10, -15, -17, -18, -19, AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-3, -4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR; -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.4 and 1.3 - 30.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER REQUIREMENTS: 110 v, 60 cyc.

## PHYSICAL CHARACTERISTICS

Radio Set AN/GRR-3 measures 12 x 19 x 15 inches, net weight 65 pounds, volume 1.8 cu ft.

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 20 Dec 51

AN/GRR-5

RADIO SET



Radio Set AN/GRR-5 is a low-power, a-m (voice, cw, and mcw) radio receiving equipment which operates over four frequency bands in the m-f and h-f ranges. It is a general purpose set used in infantry divisions and is intended to replace Radio Set SCR-593.

This equipment consists essentially of a superheterodyne radio receiver having an integral loudspeaker and a shock mount. It is provided with a protective canvas carrying case.

Three types of antennas (whip-type, doublet, and straight wire) and an integral power supply are included. Operates from 110-v a-c power or from 6-, 12-, or 24-v storage batteries. Can be operated for 48 hours on Battery BA-48, which can be mounted on top of the equipment.

ANI/CDD 5	INSTRUCTION LITERATURE: None
AN/GRR-5	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army
RADIO SET	DATE OF THIS SHEET: 20 Dec 51

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLE	ED WEIGHT (LBS)
1	Radio Receiver R-174/URR	Not Available	Not Available
1	Power Supply PP-308/URR	п п	77 17
1	Case CY-615/URR	п п	п п
1	Rack MT-678/FMQ-2	п п	п п

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Signal company in infantry division antiaircraft artillery gun batteries, field artillery replacement for SCR-593 on T/O&E's and T/A's.

INSTALLATION: Vehicle or semifixed.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 18.0, in 4 bands.

Band 1: 1.5 \_ 2.7.

Band 3: 5.0 - 9.5.

Band 2: 2.7 - 5.0.

Band 4: 9.5 - 18.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 20 - 90 mw.

POWER REQUIREMENTS: Dry battery

350 to 450 ma at 1.4 v and

20 to 27 ma at 90 v.

Using Power Supply PP-308/URR

5.0 amp at 6 v dc or 2.5 amp at 12 v dc or

1.75 amp at 24 v dc or

0.5 amp at 110 v ac.

#### PHYSICAL CHARACTERISTICS

Information on Radio Set AN/GRR-5 not available.

CLASSIFICATION OF EQUIPMENT : Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 12 May 52

AN/GRR-7

RADIO RECEIVING SET



Radio Receiving Set AN/GRR-7 may be used for reception of a-m (voice or tone) signals in the u-h-f range 225 to 399.9 mc for general ground operation for air-to-ground and point-to-point communication. It is used primarily for control tower, and airway station operation, and has sufficient output to operate a loudspeaker.

This receiver is a crystal-controlled, single-channel, double conversion superheterodyne, having individual channels spaced 100 kc apart throughout the tuning range.

The second intermediate frequency is 6 mc and this equipment is thus subject to interference from h-f radio transmitters operating on or near this frequency.

The r-f input circuit is designed to operate from the following antennas: AT-197/GR; AS-505/GR; AS-450/GR. Normally used with, but not part of, Radio Transmitter Set AN/GRT-3.

## AN/GRR-7

**RADIO RECEIVING SET** 

INSTRUCTION LITERATURE:

TO AN 16-30 GRR-7-1 13 Feb. 52 CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE : Air Force

DATE OF THIS SHEET: 12 May 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-361/GR	19 × 12-1/4 × 19	50
1*	Relay Rack	Standard 19"	Not Available
1*	Terminal Panel	Not Available	
1*	Desk Shelf MX-1058/U	n n	
1*	Interconnecting cables	* *	

<sup>\*</sup> Required but not supplied.

### **OPERATIONAL CHARACTERISTICS**

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

INSTALLATION: Designed for mounting in standard 19" relay rack for fixed ground installation.

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/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URT-10; MAR; MAY; TDZ; TED.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Crystal controlled for operation on channels spaced 100 kc apart in the u-h-f band 225 \_ 399.9 mc.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: 1 w into 600 ohm load.

POWER REQUIREMENTS: 200 w, 115/230 v, 60 cyc, 1 phase, ac.

#### PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/GRR-7 measures  $19 \times 12 \cdot 1/4 \times 19$  inches, net weight 50 pounds, volume 2.1 cu ft. Packed for either domestic or export shipment: total weight 62 pounds, total volume 2.5 cu ft. Shipped in 1 package.

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 8 Jan 52

AN/GRR-TYPE

SERVICE TYPE NUMBER:

**BC-312** 

RADIO RECEIVER



Radio Receiver BC-312 is an m-f and h-f, a-m (voice, tone, and cw) general utility radio receiving equipment which is widely used as part of such radio sets as AN/GRC-26 and SCR-399. It can be used in mobile, vehicular, fixed plant, or airborne radio communication applications.

This equipment consists of a single primary operating component. It can be used with a loudspeaker or headphones.

Most models operate from a 12/14-v vehicular storage battery; BC-312-HX and BC-312-NX require 24/28-v.

**BC-312** RADIO RECEIVER :SERVICE TYPE NUMBER USING SERVICE : Army

INSTRUCTION LITERATURE: TM 11-850

CLASSIFICATION OF EQUIPMENT: Unclassified

DATE OF THIS SHEET: 8 Jan 52

## MAJOR COMPONENTS

QUANT

NAME OF COMPONENT

**DIMENSIONS (IN) INSTALLED** 

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Company level.

INSTALLATION: Ground, vehicular or fixed.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5,-8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20: AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5- 18.0 (over-all).

Band A: 1.5 \_ 3.0

Band D: 8.0 - 11.0 Band E: 11.0 - 14.0

Band B: 3.0 - 5.0 Band C: 5.0 \_ 8.0

Band F: 14.0 \_ 18.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: Radio Receiver BC-312 (most models): 12/14 v dc (storage battery).

Radio Receivers BC-312-HX and BC-312-NX: 24/28 v dc (storage battery).

#### PHYSICAL CHARACTERISTICS

Radio Receiver BC-312 measures 10 x 9-1/16 x 18-1/16 inches, net weight 58 pounds, volume 1 cu ft. Packed for domestic shipment: total weight 120 pounds, total volume 4.7 cu ft. Shipped in 1 package.

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 8 Jan 52

AN/GRR-TYPE

SERVICE TYPE NUMBER:

BC-314

RADIO RECEIVER



Radio Receiver BC-314 is a lightweight, portable, battery-operated, a-m radio receiving equipment used for voice, c-w, and tone signal communication in the l-f and m-f bands. It is a general purpose equipment which can be used in fixed station, mobile, or vehicular applications.

This equipment consists of a single cabinet-inclosed superheterodyne radio receiver, which is the battery-operated version of Radio Receiver BC-344, and is used as a component of such equipment as Radio Set SCR-177-B.

Uses a conventional straight wire or a vehicular whip-type antenna.

## RR-TYPE

**BC-314** RADIO RECEIVER **:SERVICE TYPE NUMBER** 

INSTRUCTION LITERATURE: TM 11-850

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 8 Jan 52

### MAJOR COMPONENTS

QUANT

NAME OF COMPONENT

**DIMENSIONS (IN) INSTALLED** 

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: European Theater, special teams.

INSTALLATION: Ground, vehicular or fixed.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-6, -16, -20, -22; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; MBS; RC-52; SCR-177, -188, -193; T-5/FRC, -159/FRT; -171/FR; TAB, TAJ; TAQ; TBL; TBN; TBU; TCB; TCC; TCS; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.15- 1.5 (over-all).

Band A: 0.15 - 0.26

Band C: 0.45 - 0.82

Band B: 0.26 - 0.45

Band D: 0.82 \_ 1.50.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: 12- to 14-v storage battery.

### PHYSICAL CHARACTERISTICS

Radio Receiver BC-314 measures 10 x 9-1/16 x 18-1/16 inches, net weight 58 pounds, volume 1.0 cu ft. Packed for domestic shipment: total weight 120 pounds, total volume 4.7 cu ft. Shipped in 1 package.

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/ GRR

BC 242

RADIO RECEIVER



Radio Receiver BC-342 is a lightweight, a-m (voice, tone, and cw) receiving equipment which operates in the m-f and h-f bands and is the a-c operated equivalent of Radio Receiver BC-312. It is designed for general purpose ground, mobile, or fixed station use at division or higher headquarters.

This equipment is a highly sensitive and selective self-contained radio receiver inclosed in a metal cabinet. It is used as a component of Radio Set SCR-399 and similar equipment.

It uses a whip type or straight wire antenna and operates from a conventional a-c power source.

CONFIDENTIAL

GRR-TYPE

**RADIO RECEIVER** 

INSTRUCTION LITERATURE: TM 11-850

CLASSIFICATION OF EQUIPMENT: Unclassified

:SERVICE TYPE NUMBER USING SERVICE : Army, Navy

DATE OF THIS SHEET: 8 Jan 52

## MAJOR COMPONENTS

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Corps, division, and company levels; USAF squadron and groups.

INSTALLATION: Ground, mobile or fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/\$R, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 18.0 (over-all).

Band A: 1.5 \_ 3.0

Band D: 8.0 - 11.0

Band B: 3.0 - 5.0 Band C: 5.0 - 8.0

Band E: 11.0 - 14.0 Band F: 14.0 - 18.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: 75 w, 115 v, 50/60 cyc ac.

#### PHYSICAL CHARACTERISTICS

Radio Receiver BC-342 measures 10 x 9-1/16 x 18-1/16 inches, net weight 61.5 pounds, volume 1 cu ft. Packed for domestic shipment: total weight 120 pounds, total volume 4.7 cu ft. Shipped in 1 package.

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 8 Jan 52

AN/GRR-TYPE

SERVICE TYPE NUMBER:

BC-344

RADIO RECEIVER



Radio Receiver BC-344 is a lightweight, portable, a-c operated, a-m radio receiving equipment used for voice, c-w, and tone signal communication in the low-and medium-frequency bands. It is a general purpose equipment which is widely used in fixed plant applications at higher headquarters and for special purposes.

This equipment consists of a single, cabinet-inclosed radio receiver which is the a-c version of battery-operated Radio Receiver BC-314. It is used as a component of such equipment as Radio Set AN/MRQ-2 and Radio Control Central AN/TRQ-1.

Can be operated with straight wire or rhombic types of antennas, doublet antenna systems, and antennas of special design as may be required.

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JANAP 161

## AN/GRR-TYPE

BC-344

:SERVICE TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-850

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 8 Jan 52

## **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Corps, company level, special teams, Army Security Agency.

INSTALLATION: Ground, mobile or fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-2, -13; AN/CRT-3, -5; AN/FRT-4, -10, -19;

AN/MRC-6, -16, -20, -22; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; MBS; RC-52; SCR-177, -188, -193; T-5/FRC, -159/FR, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCB; TCE; TCG; TCS; TCY; TCZ; TDD; TDE;

TDK; Marconi TH-41-B; Wilcox 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.15- 1.5 (over-all).

Band A: 0.15 - 0.26

Band C: 0.45 \_ 0.82

Band B: 0.26 - 0.45

Band D: 0.82 - 1.50.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: 75 w, 115 v, 50/60 cyc ac.

#### PHYSICAL CHARACTERISTICS

Radio Receiver BC-344 measures  $10 \times 9-1/16 \times 18-1/16$  inches, net weight 61.5 pounds, volume 1.0 cu ft. Packed for domestic shipment: total weight 120 pounds, total volume 4.7 cu ft. Shipped in 1 package.

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET:8 Jan 52

AN/ GRR-TYPE

SERVICE TYPE NUMBER:

BC-779

RADIO RECEIVER



Radio Receiver BC-779 is a long-range, m-f and h-f, a-m (voice, tone, and cw) equipment which operates in five frequency bands. Used at division and higher headquarters for fixed station, monitoring, and similar communication applications.

This equipment consists of a table model commercial type (Hammerlund Super-Pro) communication receiver which can be operated in its metal cabinet or mounted on a standard relay rack. Can be provided with shock mounts for use in a vehicle.

Operates on a single long wire or doublet antenna system and uses an external power supply unit. Can also be operated from storage and dry batteries. CONFIDENTIAL

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AN/GRR-TYPE

3C-779 :SERVICE TYPE NUMBER

**RADIO RECEIVER** 

INSTRUCTION LITERATURE: TM 11-866
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52

### MAJOR COMPONENTS

**QUANT** 

NAME OF COMPONENT

**DIMENSIONS (IN) INSTALLED** 

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Special teams of 2d Signal Service Battalion, and 1st and 9th Detachment Fixed

Stations.

APPROXIMATE RANGE (IN MILES): Long.

INSTALLATION: Ground, fixed station or vehicular.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4, -8; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 185-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: From 0.1 - 0.4 and from 2.5 - 20.0, in 5bands.

Band 1: 0.1 - 0.2

Band 4: 5.0 - 10.0 Band 5: 10.0 - 20.0.

Band 2: 0.2 — 0.4 Band 3: 2.5 — 5.0

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone voice.

POWER REQUIREMENTS: Power Supply Unit RA-74, -84, or -94 (a-c power) or one 6-v storage

battery, five 45-v B batteries, and one 45-v C battery.

#### PHYSICAL CHARACTERISTICS

Radio Receiver BC-779 measures  $10-1/2 \times 15-3/8 \times 19$  inches, net weight 55 pounds, volume 1.8 cu ft. Packed for domestic shipment: total weight 57 pounds, total volume 2.6 cu ft. Packed for export shipment: total weight 90 pounds, total volume 4.3 cu ft. Shipped in 1 package both domestic and export.

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 22 Jan 52

AN/GRR-TYPE

AN/COMP TYPE NUMBER:

R-137/GR

RADIO RECEIVER



Radio Receiver R-137/GR is a transportable, a-m (voice, cw) and f-m (voice) receiving equipment used for intercept, monitoring, ground-to-air, and air warning applications in the h-f and v-h-f bands.

This equipment consists essentially of a commercial (Hallicrafter S-36) communications type receiver that is inclosed in a table model cabinet and which requires an external loudspeaker. It is provided with a jack for a headset and an output terminal for loudspeaker operation. It also has manual and automatic volume control and a beat-frequency oscillator.

This set can be operated on 115/230 v ac or from a 6-v battery plus 270 v (at 145 ma) of B battery.

May be used as a component of Radio Control Central AN/TRQ-1.

RADIO RECEIVER

: AN/COMP TYPE NUMBER

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 22 Jan 52

INSTRUCTION LITERATURE: None

## **MAJOR COMPONENTS**

GUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Intercept and air warning.

APPROXIMATE RANGE (IN MILES): Long.

INSTALLATION: Ground, mobile or fixed station.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2, -3; AN/FRC-6, -7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -30; AN/MRC-5, -16; -22; AN/PRC-6, -8, -9, -10, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12; AN/TRQ-1; AN/URC-4; AN/URT-7, -10, AN/VRC-1, -2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640: MAN; MAW; MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -508, -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; Collins 32v-2; Wilcox 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.8 - 143.0 in three bands.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Voice, cw.

POWER REQUIREMENTS: 115/230 v, 50/60 cyc ac or A battery, 6 v at (4.5 amp) and B battery,

270 v at 145 ma.

#### PHYSICAL CHARACTERISTICS

Radio Receiver R-137/GR measures 19 x 9 x 14 inches, net weight 66 pounds, volume 1.5 cu ft.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

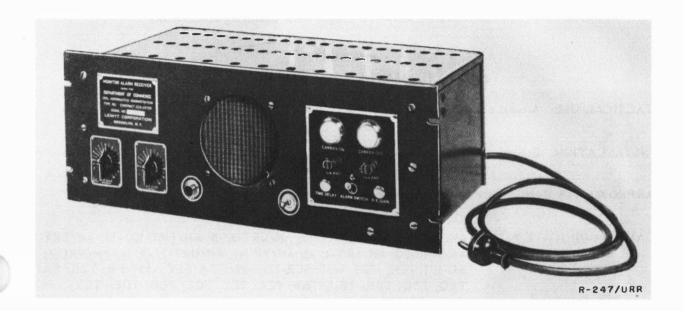
DATE OF THIS SHEET: 29 Apr 52

AN/GRR-TYPE

AN/COMP TYPE NUMBER:

R-247/URR

RADIO RECEIVER



Radio Receiver R-247/URR is a rack-mounted, a-c operated, fixed-tuned, radio range, tuned-radio-frequency receiver designed for the monitoring of compass locator station transmitters. An alarm buzzer and signal lamps operate whenever the received signal drops below a predetermined level.

This equipment provides instantaneous or time delay alarm operation. The time delay circuit delays operation of the alarm system for 10 to 15 seconds to prevent undesired operation of the alarm, caused by the absence of a signal during normal short-time transmission interruptions.

Has three r-f stages individually adjustable from the back of the receiver but does not provide automatic volume control.

Can use a single vertical wire antenna.

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## GRR-TYPE

:AN/COMP TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: NavShips 91084
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 29 Apr 52

### MAJOR COMPONENTS

**QUANT** 

NAME OF COMPONENT

**DIMENSIONS (IN) INSTALLED** 

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Airport control or aeronautical ground stations.

INSTALLATION: Ground, rack-mounted.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH:

AN/ARC-5, -8; AN/ART-13; AN/CRT-3, -5; AN/FRT-10, -19; AN/GRT-2; AN/MRC-20; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-4; BC-191, -329, -365; MBS; SCR-177, -274; T-5/FRC, -171/FR; TAB; TAJ;

TAQ; TBL; TBN; TBU; TBW; TCE; TCY; TCZ; TDD; TDE; TDK;

Marconi TH-41-B; Wilcox 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: Built-in loudspeaker: 0.5 w. Auxiliary output terminals: 0.2 w.

POWER REQUIREMENTS: 48 w, 115 v, 60 cyc, 1 phase.

#### PHYSICAL CHARACTERISTICS

Radio Receiver R-247/URR measures 6-31/32 x 19 x 10 inches. Packed for domestic shipment: total weight 40 pounds.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 9 May 52

## AN/GRR-TYPE

SERVICE TYPE NUMBER:

RCF, RCF-1

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RCF and RCF-1 are highly selective and sensitive general purpose, receivers of telegraph or telephone signals within the medium- and high-frequency ranges.

RCF and RCF-1 include reradiation suppressors which make their use safe in combat areas.

RCF includes the vibrator power unit and loudspeaker, and is identical to Radio Set AN/GRR-2.

It is normally intended for table installation, but is provided with a 19-inch front panel which is suitable for relay rack mounting.

A phone-output jack is provided, but the headset is not supplied. A phono-input jack accommodates the audio amplifier for sound reproduction. Controls include a send-receiver switch, and a special socket for receiver disabling purposes.

The receiver poser supply includes an octal socket for use when dc instead of the usual ac is used.

A receiving antenna is required but not supplied.

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:SERVICE TYPE NUMBER USING SERVICE : Navy

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95284

CLASSIFICATION OF EQUIPMENT: Unclassified

DATE OF THIS SHEET: 9 May 52

### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHL-46202	10 × 20-1/2 × 14-3/4	75
*1	Vibrator Power Unit CMA-20164	$5-3/8 \times 8-1/2 \times 6-9/16$	Not Available
*1	Loudspeaker CJS-49172	10-7/8 × 16 × 11	* *
1	Reradiation Suppressor CM-50174-A	4-17/32 × 5-1/2 × 2	* *

<sup>\*</sup>Supplied with RCF only.

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Advanced bases, shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AM/ARC-2, -5, -8, -21, -25; AM/ART-13; AM/CRT-3; AM/FRC-10; AM/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4: AN/TRQ-1: AN/URT-2, -3, -4, -10; AN/VRC-1, -4: AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MO; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBY; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type HW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.550 - 43.0 mc in 6 bands.

Band 3: 2.9 - 5.9 Band 5: 10.3 - 21.5 Band 1: 0.550 - 1.620 Band 2: 1.5 - 3.1 Band 4: 5.75 - 11.5 Band 6: 20.4 - 43.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

POWER OUTPUT: 8 w, into 500 or 5,000 ohm load.

POWER REQUIREMENTS: RCF: 207 w, 117 v, 60 cyc, 1 phase, ac; or 199 w, 6.3 v, dc.

RCF-1: 207 w, 115/230 v, 25/60 cyc, 1 phase, ac.

#### PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RCF, RCF-1 measure 15-3/8 x 20-1/2 x 14-3/4 inches. Packed for domestic shipment: total weight 213 pounds, total volume 9.1 cu ft.

STATUS: Substitute Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 3 Jan 52

## AN/GRR-TYPE

SERVICE TYPE NUMBER:

SCR-607

RADIO SET



Radio Set SCR-607 is a 3-band, voice and c-w a-m and f-m, medium- and high-frequency, general purpose radio receiving equipment for fixed station or mobile use in intercept, monitoring, or communication applications.

It consists of a commercial type (Hallicrafter S-36) table model communication receiver which can also be mounted on a standard relay rack. It is designed to operate with a special dipole array (Antenna Equipment RC-154) and can be controlled at "stand-by" from a remote location by means of auxiliary equipment.

This equipment is operated from 115/230 v ac or from a 6-v vehicular storage battery plus 270 volts of B battery supply. A shock mount is provided for use when this set is installed and operated in a vehicle.

## AN/GRR-TYPE

SCR-607 RADIO SET : SERVICE TYPE NUMBER

INSTRUCTION LITERATURE: TM 11-867

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 3 Jan 52

### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-787	9-5/16 × 21-1/4 × 14-1/2	78
1	Mounting FT-377	$4-7/8 \times 21-1/4 \times 14-1/2$	12
1	Antenna Equipment RC-154	Not Available	200

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Army Security Agency headquarters, Army Security Agency mobile teams.

INSTALLATION: Fixed station or mobile.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2, -3; AN/FRC-6, -7, -9;

AN/GRC-3, -4, -5, -6, -7, -8, -30; AN/MRC-5, -16, -22; AN/PRC-6,

-8, -9, -10, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12;

AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1, -2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640; MAN; MAW; MBF; MBS; MN; RC-257; SCR-177,

-293, -298, -300, -508, -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG;

TDQ; TDT; Collins 32V-2; Wilcox 99A.

## TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.8 - 143, in 3 bands.

Band 1: 27.8 - 47.0. Band 2: 46 - 82.

Band 3: 82 ... 143.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Voice, cw.

POWER OUTPUT: 3 w.

POWER REQUIREMENTS: 110 w, 115/230 v, 50/60 cyc ac or A battery, 6 v at(4.5 amp) B battery,

270 v at 145 ma.

#### PHYSICAL CHARACTERISTICS

Information on Radio Set SCR-607 not available.

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**ORIGINAL** 

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

AN/GRT-1

RADIO SET

PREPARING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

#### NO PHOTOGRAPH AVAILABLE

Radio Set AN/GRT-1 is a portable broadcasting station consisting of a broadcast transmitter, power supply, pressure-cooling unit, control console mixer, and a phonograph turntable. It is packed in five armored trunks that serve as carrying cases.

Antenna supports, as well as suitable control room and studio facilities, are required.

### AN/GRT-1

**RADIO SET** 

INSTRUCTION LITERATURE:

USING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Pressure Cooling and Voltage Selector Unit Type B2	11% x 9 x 17%	54.3
1	Transmitter Power Supply Type PB-50	10½ x 12½ x 16	89.3
1	Radio Broadcast Transmitter TWT PB-50A	11¼ x 18¾ x 17%	49.5
1	Phonograph Turntable Type T2, two-speed	6¾ x 20¼ x 18	20
1	Control Console Mixer Type 2C4	11 x 18 x 93/8	35

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Psychological warfare services.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE: Short.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 1.1 to 1.5.

TYPE MODULATION: Am (A3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 285 w, 90/240 v, 50/60 cy ac.

#### PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	<b>PACKAGES</b>

**NET:** 

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: Substitute Standard

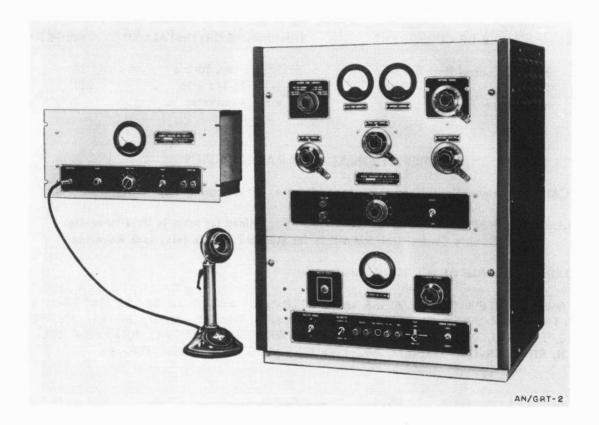
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force

DATE OF THIS SHEET: 28 Apr 52

AN/GRT-2

RADIO TRANSMITTING SET



Radio Transmitting Set AN/GRT-2 is a fixed, ground a-m (voice) transmitter for short-range, airport traffic control communication in the l-f and m-f range. Can be operated from a distance of 5 miles by Remote Control Unit RM-6.

The frequency is crystal-controlled (with a master oscillator for emergency operation).

Nominal power output is 25 w. The 500-ohm impedance audio input circuit is designed for a low-impedance microphone or telephone line.

The antenna output is designed for operation into a long wire antenna.

Input power required is 105/125 v ac, 50/60 cyc, single-phase, at 560 w for transmitter; requires an added 28-w input for remote control operation.

### AN/GRT-2

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE:

TO 16-30GRT2-2, TO 16-30GRT2-3 CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force

DATE OF THIS SHEET: 28 Apr 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Remote Control Unit RM-6-K	8-23/32 × 19 × 10-1/4	36
1	Radio Transmitter BC-329-N	$30-1/2 \times 24-1/4 \times 20$	240
1	Microphone T-27-P	11 × 5-1/4 diameter	2.75

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Normally utilized at advance air bases for emergency airport traffic control.

INSTALLATION: Radio Transmitter BC-329-N is self-contained for table in floor mounting.

Remote Control Unit RM-6-K is for standard 19-inch relay rack mounting.

APPROXIMATE RANGE (IN MILES): (Nominal) short.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ -1; AN/VRC-4; BC-344, -348, -453, -779; MBS; R-96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR; RAK; RAL; RAS; RBA; RBH; RBL; RBM; RCH; RDF; SCR-177, -274, -614; ARC Type 12; FisherTS25.3; National HRO-50.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.41.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 25 w.

POWER REQUIREMENTS: 560 w, 105-125 v, 1 phase, 50/60 cyc ac. An additional 28 w is required

for remote control.

#### PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/GRT-2 measures 20 x 25 x 31 inches, net weight 279 pounds, volume 24 cu ft. Packed for domestic or export shipment: total weight 512 pounds, total volume 25.6 cu ft (approximate). Shipped in 2 packages.

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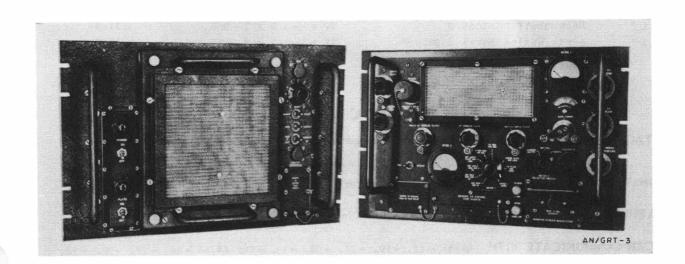
STATUS: Substitute Standard

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force
DATE OF THIS SHEET: 9 Jun 52

AN/GRT-3

RADIO TRANSMITTING SET



Radio Transmitting Set AN/GRT-3 is a ground-fixed station u-h-f voice transmitter for single-channel, ground-to-air, and point-to-point radio communication. It is normally used with Radio Receiving Set AN/GRR-7 to form a two-way communications facility.

This set consists of a radio transmitter and modulator-power supply plus interconnecting cables. A relay rack, desk shelf and distribution panel are used with this equipment but are not supplied.

Operates on preset, crystal-controlled channels in the u-h-f band 225 to 400 mc.

The transmitter output circuit is designed to match a 52-ohm coaxial low-impedance transmission line RG-8/U or equivalent.

Recommended antennas are: Antenna AT-197/GR, Antenna AS-505/GR and Antenna AS-450/GR. On control tower frequencies Antenna AT-197/GR is used. On airway frequencies Antenna AS-505/GR is recommended. No remote control facilities are provided.

CONFIDENTIAL JANAP 161

## AN/GRT-3

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force
DATE OF THIS SHEET: 9 Jun 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-282/GR	19 × 12-1/4 × 21	175.0
1	Modulator-Power Supply MD-141/GR	10 × 12-1/4 × 21	200.0
1 *	Rack MT-686/GR	$22-5/8 \times 72-1/2 \times 21-3/8$	96.0
1 *	Desk Shelf MX-1059/U	19 × 3-1/2 × 20-3/8	11.3
1 *	Distribution Panel J-390/GR	19 × 5-1/2 × 3	15.0

<sup>\*</sup> Required but not supplied.

#### **OPERATIONAL CHARACTERISTICS**

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

with AFR 100-17.

INSTALLATION: Ground, fixed (Standard relay rack).

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/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; MAR; MAY; R-278/GR;

RDR; RDZ; SCR-616.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: (Uhf) 225 - 400, single channel, preset, crystal-controlled.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 100 w (Nominal).

POWER REQUIREMENTS: 750 w of 105 \_ 125 or 210 \_ 250 v, 60 cyc, 1 phase, ac.

#### PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/GRT-3 measures 22-5/8 x 72-1/2 x 21-3/8 inches, net weight 500 pounds, volume 20.40 cu ft. Packed for either domestic or export shipment: total weight 600 pounds, total volume 22.44 cu ft, 0.51 ship ton. Shipped in 4 packages.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/GRT-TYPE

SERVICE TYPE NUMBER:

BC-191

RADIO TRANSMITTER



Radio Transmitter BC-191 is a general utility, medium-range, low-frequency, a-m (voice and cw) radio transmitting equipment which is widely used as part of Radio Sets SCR-177, SCR-188, SCR-193, and AN/VRC-1 and similar equipment. It can be used on the ground, in vehicles, and in aircraft and is used for ground-to-ground or ground-to-air communication.

This equipment consists of a radio transmitter, and appropriate tuning units for the frequency channels in which it is desired to operate it, a dynamotor and related accessories. Normally, when issued as part of a complete radio set, this equipment is provided with tuning units for the frequencies in which the radio set is to be operated.

May be operated from a storage battery, through the dynamotor component, or from a portable field power unit such as Power Units PE-75 and PE-49 and similar equipment.

CONFIDENTIAL

RADIO TRANSMITTER

**:SERVICE TYPE NUMBER** 

INSTRUCTION LITERATURE: TM 11-4017

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Antenna Tuning Unit BC-306	17-3/4 × 9-1/2 × 9-1/8	9.75
1	Dynamotor Unit BD-77	10-29/32 × 11-1/16 × 7-1/2	38.7
1	Radio Control Box BC-309	3-9/16 × 3 1/2 × 2-7/32	0.418
8	Transmitter Tuning Units .	7-5/8 × 16-3/4 × 8-3/4 (each)	11.437

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Used in training artillery units.

INSTALLATION: Aircraft, ground, vehicle.

APPROXIMATE RANGE (IN MILES): 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/UR, -209/UR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -288/URR, -320/FRC; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -614, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.8 and 1.5 - 12.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, and cw.

POWER OUTPUT: 40 - 75 w.

POWER REQUIREMENTS: 12-v storage battery, gasoline engine generator for supplying 12 v and high

voltage, or 110/220 v ac.

#### PHYSICAL CHARACTERISTICS

Radio Transmitter BC-191 measures 22 x 21-21/32 x 9-5/16 inches, net weight 52 pounds.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

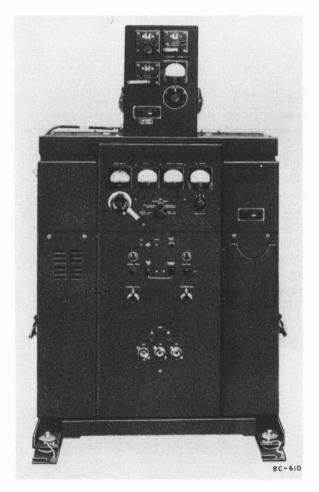
DATE OF THIS SHEET: 8 Jan 52

AN/GRT-TYPE

SERVICE TYPE NUMBER:

**BC-610** 

RADIO TRANSMITTER



Radio Transmitter BC-610 is the widely used radio transmitting component of such equipments as Radio Sets SCR-399, SCR-499, and similar radio sets. It is a crystal-controlled or master oscillator a-m (voice or cw), medium- and high-frequency, radiotelephone and radiotelegraph equipment used in intermediate and long distance communication at division and higher headquarters.

This equipment consists essentially of a single, cabinet-inclosed, compact unit which is fitted with shock mountings. It is designed for use in mobile applications, which can operate on the move, using whip-type antenna systems. It can also be used as a fixed station transmitter, used with rhombic, doublet, tower-supported or other more elaborate arrays.

As mobile equipment it is powered by a trailerdrawn power unit; as fixed station equipment it is operated on conventional power sources.

It requires 1,700 to 2,000 w of 115 v 50/60 cyc, ac.

CONFIDENTIAL JANAP 161

:SERVICE TYPE NUMBER

### AN/GRT-TYPE

BC-610

RADIO TRANSMITTER

INSTRUCTION LITERATURE:
TM 11-281, TM 11-4057

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

#### MAJOR COMPONENTS

QUANT

NAME OF COMPONENT

**DIMENSIONS (IN) INSTALLED** 

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Overseas theaters.

INSTALLATION: Ground: mobile or fixed station.

APPROXIMATE RANGE (IN MILES): Voice: 100 miles.

C-w: 250 miles.

(Ranges for both moving and stationary.)

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -9, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004: MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -595, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 18.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and voice.

POWER OUTPUT: Cw: 400 w.

Voice: 300 w.

Above 8 mc output is somewhat less.

POWER REQUIREMENTS: 1,700 to 2,000 w, 115 v, 50/60 cyc, ac.

#### PHYSICAL CHARACTERISTICS

Radio Transmitter BC-610 measures  $32-5/8 \times 21-3/8 \times 39-7/8$  inches, net weight 497 pounds, volume 16.8 cu ft. Packed for domestic shipment: total weight 755 pounds, total volume 35.1 cu ft, 0.88 ship ton.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Navy

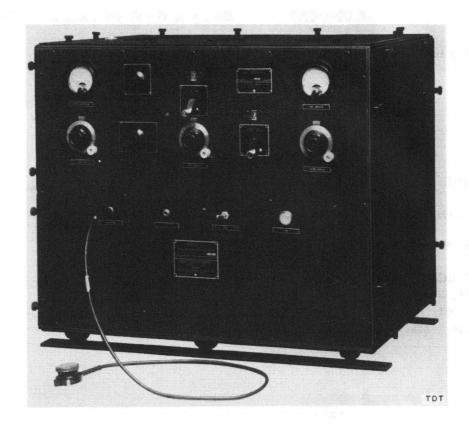
DATE OF THIS SHEET: 9 May 52

AN/GRT-TYPE

SERVICE TYPE NUMBER:

TOT

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TDT is a single-channel, general purpose, semiportable, v-h-f equipment designed for air-traffic control, and point-to-point use.

A crystal oscillator provides frequency control.

A quarter-wave vertical antenna, adjustable for various frequency ranges, is supplied. Relay keying speeds of 40 wpm are possible.

The equipment has shock mounts for table, or bench mounting.

### AN/GRT-TYPE

TDT

SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE:

NavShips 95337 CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET: 9 May 52

#### **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

**DIMENSIONS (IN) INSTALLED** 

WEIGHT (LBS)

1

Radio Transmitter CKV-52322

26-3/4 × 31-1/2 × 26-1/2

400.0

1

Antenna Assembly CKV-66091

28-3/8 × 49-1/2 × 49-1/2

16.5

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore stations, airport control towers, or aeranautical ground stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AM/ARC-1, -3, -5, -18, -28, -36; AM/CRC-2; AM/FRC-7; AM/GRC-30; AM/MRC-20, -22; AM/PRC-17, -20; AM/TRC-7; AM/TRC-1; AM/URC-4; AM/URR-12, -21; AM/VRC-1; BC-639, -787, MAR; MBS; R-137/GR; RBK; RBQ; RC-256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 115-156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: 35 w.

POWER REQUIREMENTS: 750 w, 110 - 120 v, 50/60 cyc, 1 phase, ac.

#### PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDT measures  $26-3/4 \times 31-1/2 \times 26-1/2$  inches, net weight 451.5 pounds. Packed for domestic shipment: total weight 640 pounds, total volume 33 cu ft, 0.83 ship ton. Shipped in 3 packages.

STATUS: Substitute Standard

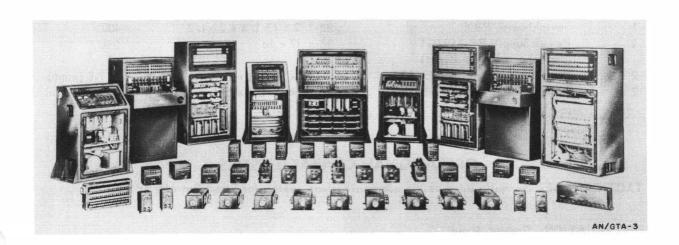
CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Air Force

DATE OF THIS SHEET: 10 Jun 52

### AN/GTA-3

TELEPHONE CENTRAL GROUP



Telephone Central Group AN/GTA-3 is a complete telephone communication system used with, but not part of, Radar Set AN/FPS-3. It provides telephone communication between radar set operating personnel and outside points, which include aircraft in flight, radio communication with 12 v-h-f and three h-f transmitters and receivers, and wire telephone communication through four trunk lines to commercial telephone systems, with provisions for either magneto ringing or dial calling.

Although this equipment is operated independently of Radar Set AN/FPS-3, except for the supply of 120 v, 60 cyc ac for charging the batteries and providing ringing power, a correct telephone installation cannot be made previous to the installation of the radar set.

The input supply from the radar power distribution cabinet is 24 v dc to the main frame and relay rack and the ringing supply is 80 v, 20 cyc ac.

Maximum d-c drain from the telephone power unit is 10 amp. Two Storage Batteries BB-53 are used, supplying 45 amp at 12 v dc for 20 hours at a discharge rate of 2.25 amp.

CONFIDENTIAL JANAP 161

# AN/GTA-3

TELEPHONE CENTRAL GROUP

INSTRUCTION LITERATURE:

TO 16-30 FPS-23
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force

DATE OF THIS SHEET: 10 Jun 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Telephone Switchboard SB-116/GT (Chief Controller's Telephone Unit)	27 × 48-1/2 × 18	240
1	Telephone Switchboard SB-115/GT	24-1/2 × 42-3/4 × 18	200
1	Switchboard, PBX	35-1/2 × 47-1/4 × 22-1/2	400
1	Power Supply PP-559/GT (Telephone Power Panel)	28 × 37 × 18	250
2	Distribution Panel SB-95/GT	9-7/8 × 18-1/8 × 5	17.5 (each)
2	Distribution Panel SB-136/GT	9-7/8 × 18-1/8 × 5	17.5 (each)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Normally used as the communications system for Radar Set AN/FPS-3.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Aircraft in flight; and ground telephone stations.

#### TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice.

TYPE COMMUNICATION CIRCUITS: Standard line telephone circuits.

CONTROLS: Manually operated switches, plugs, and microphones.

POWER REQUIREMENTS: 1,200 w (10 amp) 120 v, 60 cyc, 1 phase ac .

2 storage batteries (ea) 24 v, (45 amp 20 hr).

#### PHYSICAL CHARACTERISTICS

Telephone Central Group AN/GTA-3 weighs 3,820 pounds net, volume 602.177 cu ft. Packed for domestic or export shipment: total weight 7,636 pounds, total volume 602.177 cu ft, 15.05 ship tons. Shipped in 38 packages.

STATUS: A/Std

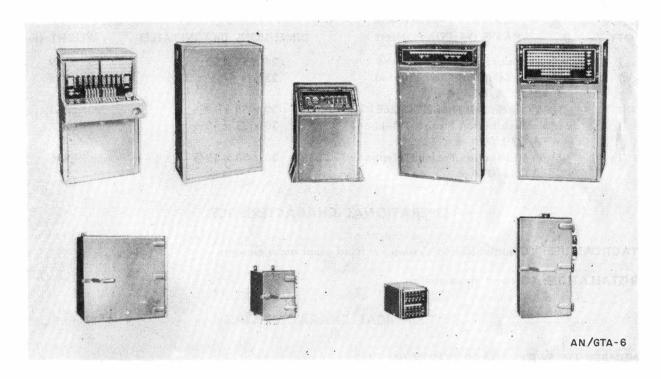
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

### AN/GTA-6

TELEPHONE CENTRAL OFFICE GROUP, MANUAL



Manual Telephone Central Office Group AN/GTA-6 is tactical fixed station equipment that furnishes communication facilities for radar stations and their related radar networks.

This system can be adapted to many uses, depending on the tactical situation. It is manufactured without cross-connections in the main frames, thus providing the flexibility needed to adapt it to the radar set being used and to the requirements of the local situation.

Communication with other stations in the radar network, civilian trunk lines, and aircraft in flight is limited by the number of outside lines and channels provided by the telephone communication system. This equipment provides 160 outside wire lines, including 20 radio channels; each requiring the use of three outside wire lines.

### AN/GTA-6

TELEPHONE CENTRAL OFFICE GROUP, MANUAL

INSTRUCTION LITERATURE: 31W1-2GTA6-Series

USING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Power Supply PP-706B/GTA-4	24 x 18 x 37	249
1	Manual Telephone Switchboard SB-202A/GTA-4	23% x 47½ x 31½	315
1	Relay Rack, Telephone TA-268/GTA-6	30 x 53 x 193/8	361
1	Main Distribution Frame, Telephone TA-270/GTA-6	30 x 53 x 193/8	277
1	Main Distribution Frame, Telephone	30 x 53 x 193/8	236

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Communication system for fixed plant radar stations.

INSTALLATION: Ground, fixed station.

#### **TECHNICAL CHARACTERISTICS**

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of cord circuits: 10
Number of line circuits: 40
Number of trunk circuits: 10

**PERCENT TRUNKING:** 

POWER REQUIREMENTS: 250 w, 115 v, 60 cy, 1 ph ac.

#### PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	PACKAGES

NET:

3 . .

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/GTA-TYPE

TA-126/GT

REPEATER, TELEPHONE

#### NO PHOTOGRAPH AVAILABLE

Telephone Repeater TA-126/GT is a portable, single-channel, terminal-type equipment that provides stable, low-loss, short-haul telephone circuits in point-to-point, loop, and local trunk circuits. It is used in field wire systems to improve transmission under all weather conditions.

This equipment uses 20-cycle or voice-frequency signaling. It may be used with field telephones, field switchboards, telephone and telegraph apparatus, multichannel telegraph terminals, and data transmission equipment. It consists of a single component with a self-contained power supply. It has two-wire and four-wire input and output terminals.

Power Unit PE-214-B or commercial 115-volt, 60-cycle ac power may be used.

### AN/GTA-TYPE

TA-126/GT

REPEATER, TELEPHONE

INSTRUCTION LITERATURE: TM 11-2135

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

#### MAJOR COMPONENTS

QTY

NAME OF COMPONENT

DIMENSIONS (in.) INSTALLED

WEIGHT (lb)

(Equipment consists of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Field wire systems.

INSTALLATION: Ground, transportable.

MAXIMUM SYSTEM LENGTH: 5 to 30 mi.

#### TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Two-wire or four-wire field tel lines.

FACILITIES AFFORDED: Two-wire and four-wire lines.

FREQUENCY: 200 to 6,500 cy.

TYPE OF MODULATION: Am (A3).

TYPE RINGING: 20 cy.

POWER REQUIREMENTS: 115 v  $\pm 10\%$ , 1 amp, 50 to 60 cy ac; 22 to 30 v, 4 amp dc or 24-v vehicular-

type battery.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	115% x 15% x 16½	65	2.5		
DOMESTIC PACK:		75	3.13		1

**EXPORT PACK:** 

STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army

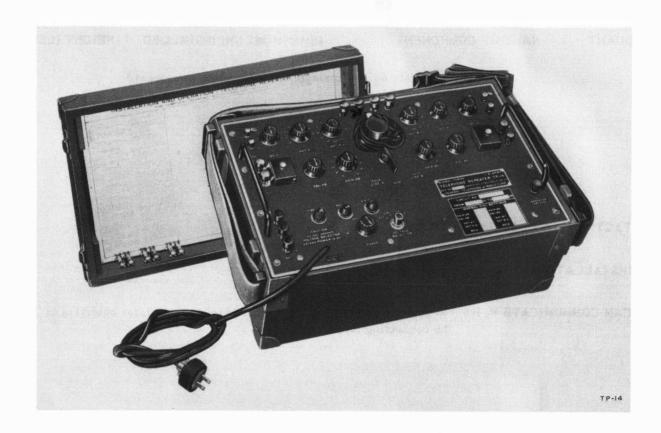
DATE OF THIS SHEET: 11 Jun 52

AN/GTC-TYPE

SERVICE TYPE NUMBER:

TP-14

TELEPHONE REPEATER



Telephone Repeater TP-14 is a portable, field, 22-type repeater equipment used to extend the range of two-wire (open wire or field cable) facilities which serve division or equivalent headquarters.

This equipment consists of a completely self-contained unit including the amplifier, filters, equalizers, line-balancing networks, and related items. It is a panel-mounted apparatus contained in a protective box or case. Can be removed from its housing for rack-and-panel mounted applications for fixed station use.

Two of these repeaters may be used in tandem to extend circuits where mixed facilities, such as open wire and field cable, are used, and can be installed at terminal or intermediate points of a system.

It operates from 110/130 or 220/250 v ac, from a 12-v storage battery, or from suitable dry batteries.

TELEPHONE REPEATER

: SERVICE TYPE NUMBER

INSTRUCTION LITERATURE: TM 11-2007,

TM 11-4412. CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 11 Jun 52

#### **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground; fixed or portable.

CAN COMMUNICATE WITH: Repeater, terminal, central office and related apparatus operating in

the connecting facility or system.

#### TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Four-wire.

Two-wire to four-wire.

POWER REQUIREMENTS: 110-130 v, 50/60 cyc ac,(11 w) or

220-250 v, 50/60 cyc ac, (11 w) or 12-v storage battery, (800-ma drain) or dry cells 135 v dc, (20-ma drain) and

12 v dc, 150-ma drain.

#### PHYSICAL CHARACTERISTICS

Telephone Repeater TP-14 measures  $17-1/2 \times 11 \times 8$  inches.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

AN/GTT-TYPE

OA-145/GT

TONE WARNING GENERATOR GROUP

PREPARING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

#### NO PHOTOGRAPH AVAILABLE

Tone Warning Generator Group OA-145/GT is used on a telephone line to indicate audibly when a telephone conversation is being recorded.

This equipment consists of a tone-warning generator, a tone-warning generator control, cables, and accessories.

Three special purpose cable assemblies are supplied so that the generator group can be connected to any suitable recorder.

The warning signal is applied to the line at intervals of 15 seconds.

### AN/GTT-TYPE

OA-145/GT

TONE WARNING GENERATOR GROUP

INSTRUCTION LITERATURE: TM 11-2088

USING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT DIM	NENSIONS (in.) INSTALLED	WEIGHT (lb)	)
1	Tone Warning Generator Control C-638/GT	$3^{15}/_{16} \times 4 \times 4\frac{1}{2}$	.5	
1	Tone Warning Generator O-93/GT	$9\frac{3}{4} \times 6\frac{5}{8} \times 4\frac{11}{32}$	1.5	
	(For complete list of components, see appropri	iate supply manuals.)		

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

#### **TECHNICAL CHARACTERISTICS**

TYPE OF SIGNAL: 1,400 cy tone (.2 sec duration, at intervals of 15 sec).

POWER REQUIREMENTS: 115 v, 50/60 cy ac.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	9¾ x 12 x 5	9	2		
DOMESTIC PACK:					
EXPORT PACK:		35	2		1

STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

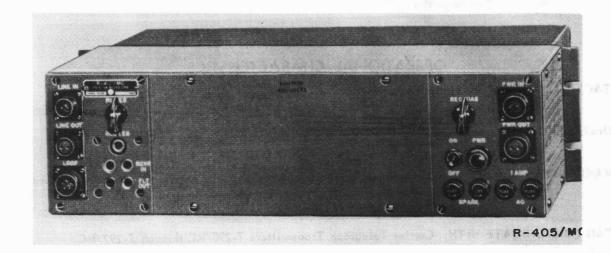
USING SERVICE: Navy

DATE OF THIS SHEET: 29 Mar 52

AN/MCR-TYPE

AN/COMP TYPE NUMBER: R-405/MC through R-412/MC

CARRIER TELEGRAPH RECEIVER



Carrier Telegraph Receivers R-405/MC through R-412/MC are used to form an eight-channel carrier-telegraph terminal at which a received f-m carrier signal is translated (by each of these eight carrier receiver components) into d-c, on-off-type telegraph signals to operate from one to eight teletype-writers (or similar signal recording devices).

These eight carrier-telegraph receivers are identical except for the characteristic center audio frequency of each.

Interconnections are made by means of short cables.

These eight operating units are installed in a relay rack console which is located in the signal path between radio receiver and teletypewriter (or other recording device).

Each unit has its own built-in power supply.

### AN/MCR-TYPE

R-405/MC through R-412/MC :AN/COMP TYPE NUMBER

CARRIER TELEGRAPH RECEIVER

INSTRUCTION LITERATURE: NavShips 91541

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET: 29 Mar 52

#### **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

**DIMENSIONS (IN) INSTALLED** 

WEIGHT (LBS)

8

Carrier Telegraph Receiver R-405/MC through R-412/MC

 $5-1/4 \times 19 \times 14-1/2$ 

27.0

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore stations, mobile.

INSTALLATION: Ground, mobile.

MAXIMUM SYSTEM LENGTH: Subject to input signal strength. The receiver is sensitive between

-40 dbm and +10 dbm, from a 600-ohm source.

CAN COMMUNICATE WITH: Carrier Telegraph Transmitters T-290/MC through T-297/MC.

#### TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: One wire, cable, or radio, v-f circuit.

FACILITIES AFFORDED: Eight receiving channels, 170 cps apart between 850 and 2210 cps.

(R--405/MC) 935 cps

(R-409/MC) 1615 cps

FREQUENCY:

(R-406/MC)1105 cps (R-407/MC)1275 cps (R-410/MC)1785 cps (R-411/MC)1955 cps

(R-408/MC)1445 cps

(R-412/MC)2125 cps

TYPE OF MODULATION: Fm.

POWER REQUIREMENTS: 280 w, 105/115/125v, 50/60 cyc, 1 phase.

#### PHYSICAL CHARACTERISTICS

Carrier Telegraph Receiver R-405/MC(through R-412/MC)measures  $42 \times 19 \times 14$ -1/2 inches, net weight 216 pounds, volume 6 cu ft. Packed for domestic shipment: total weight 252 pounds, total volume 14.48 cu ft. Shipped in 8 packages.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

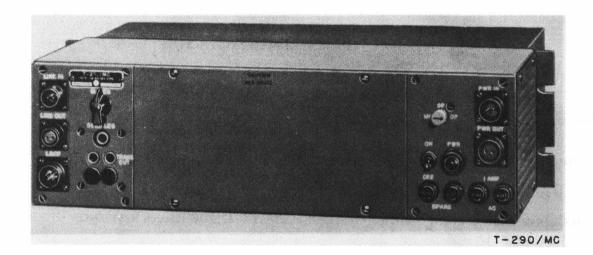
USING SERVICE : Navy

DATE OF THIS SHEET: 29 Mar 52

AN/MCT-TYPE

AN/COMP TYPE NUMBER: T-290/MC through T-297/MC

CARRIER TELEGRAPH TRANSMITTER



Carrier Telegraph Transmitters T-290/MC through T-297/MC are used to form an eight-channel carrier telegraph transmitting terminal, whereby mark and space signals from up to eight keyboard sending printers are translated into f-m audio signals which can be relayed to carrier receivers by wire, cable, or radio circuits.

The eight carrier telegraph transmitters are identical except for the characteristic center audio frequency to which each individual transmitter is adapted. Each unit is usually controlled by a keyboard sending printer, but hand keying or any other telegraph keying system may be used. The eight units are usually installed in a relay rack console. Each unit has its own built-in power supply and connections are made from unit to unit with short cables.

CONFIDENTIAL

JANAP 161

MCT-TYPE

T-290/MC through T-297/MC

:AN/COMP TYPE NUMBER USING SERVICE : Navy

CARRIER TELEGRAPH TRANSMITTER

INSTRUCTION LITERATURE: NavShips

91541
CLASSIFICATION OF EQUIPMENT: Unclassified

DATE OF THIS SHEET: 29 Mar 52

#### MAJOR COMPONENTS

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

WEIGHT (LBS)

8

Carrier Telegraph Transmitter T-290/MC through T-297/MC

 $5-1/4 \times 19 \times 14-1/2$ 

24.5

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore stations; mobile.

INSTALLATION: Ground, mobile.

MAXIMUM SYSTEM LENGTH: Subject to load impedance and transmission line losses.

Transmitter output between -20 dbm and +6 dbm into 600-ohm load.

CAN COMMUNICATE WITH: Carrier Telegraph Receivers R-405/MC through R-412/MC.

#### TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: One wire, cable, or radio v-f circuit.

FACILITIES AFFORDED: Eight transmitting channels, 170 cps apart between 850 and 2,210 cps.

FREQUENCY:

935 cps (T-290/MC)

1,615 cps (T-294/MC)

1,105 cps (T-291/MC)

1,785 cps (T-295/MC)

1,275cps (T-292/MC)

1,955 cps (T-296/MC)

1,445 cps (T-293/MC)

2,125 cps (T-297/MC)

TYPE OF MODULATION: Fm.

POWER REQUIREMENTS: 232 w, 105/115/125 v, 50/60 cyc, 1 phase, ac.

#### PHYSICAL CHARACTERISTICS

Carrier Telegraph Transmitters T-290/MC through T-297/MC measure 42 x 19 x 14-1/2 inches, net weight 196 pounds, volume 6 cu ft. Packed for domestic shipment: total weight 232 pounds, total volume 14.48 cu ft. Shipped in 8 packages.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 18 Feb 52

AN/MGC-TYPE

AN/COMP TYPE NUMBER:

TT-55/MGC

**TELETYPEWRITER** 



Teletypewriter TT-55/MGC is a field, page-printing, teletypewriter equipment designed for installation in field-type shelters or vans for mobile station use at regiment or higher headquarters in standard communication applications.

This equipment consists essentially of a modified commercial (Teletype Corp Model 15) teletypewriter station equipment, without the cases illustrated above. It has a standard communications keyboard and type pallets and includes a base, motor unit, keyboard transmitter and typing unit, and related accessories. It can be operated in one-way but not in full-duplex applications.

Can be operated on 115 v dc or 115 v, 25 cyc or 50/60 cyc, ac.

AN/MGC-TYPE

INSTRUCTION LITERATURE: TM 11-352

CLASSIFICATION OF EQUIPMENT: Unclassified

:AN/COMP TYPE NUMBER USING SERVICE : Army

DATE OF THIS SHEET: 18 Feb 52

TELETYPEWRITER

#### **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Regiment or higher headquarters.

INSTALLATION: Ground, mobile.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or

radioteletype standard communication facilities composing the system

in which it operates.

#### **TECHNICAL CHARACTERISTICS**

OPERATING FUNCTIONS: Standard keyboard, 72 characters per line, break-in key, remote motor

stop, bell, shift and unshift, space-repeat, carriage return, line feed.

OPERATING SPEED: 368.1 opm; 60 wpm.

MOTOR CHARACTERISTICS: Series-governed motor; 115 v dc or 25 or 50/60 cyc ac, 87.6 vps,

tuning fork frequency, 1,800 rpm.

POWER REQUIREMENTS: 110 w on 115 v dc, 140 va on 115 v, 25 cyc ac, or 115 v, 50/60 cyc ac.

#### PHYSICAL CHARACTERISTICS

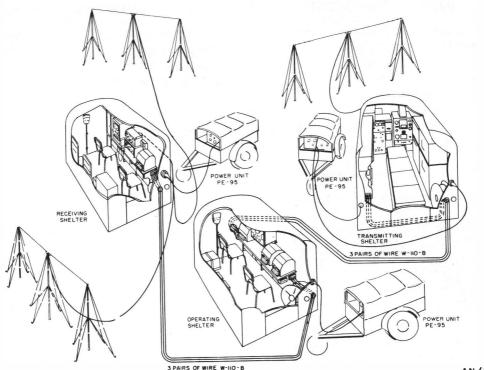
Teletypewriter TT-55/MGC packed for export shipment: total weight 557 pounds, total volume 42 cu ft, 1.1 ship tons. Shipped in 3 packages.

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

AN/MRC-2

DATE OF THIS SHEET: 20 Dec 51 RADIO SET



AN/MRC-2

Radio Set AN/MRC-2 is a 2-kw mobile radioteletype station designed to provide either net or long distance operation, with provision for 200/300 w a-m (voice) communication. It is used at field headquarters of large units for long range communication and for handling a heavy volume of traffic.

This equipment is installed and operated in three Shelters HO-17, each carried on a 2-1/2-ton,  $6 \times 6$  cargo truck. Each truck has a 5-kw trailer-drawn power unit. One shelter houses the transmitting equipment (a modified Radio Set SCR-399), another carries the receiving equipment, and the third carries the teletypewriter equipment. An additional truck may be provided to transport the transmitting antenna masts and accessories.

The transmitter operates into one coaxially-fed doublet antenna. The receiver operates with two coaxially-fed doublet antennas spaced three wavelengths apart for diversity reception.

In an emergency it is possible to transmit cw at 2-kw, and cw or voice at 300 w.

### AN/MRC-2

RADIO SET

INSTRUCTION LITERATURE: TM 11-624

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 20 Dec 51

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shelter HO-17, Transmitting	158 × 90-1/2 × 77	8,800
1	Shelter HO-17, Receiving	15B × 90-1/2 × 77	7,200
1	Shelter HO-17, Operating	158 × 90-1/2 × 77	7,200
3	Power Unit PE-95	76-1/2 × 108 × 76-1/2	4,965
1	Power Unit PE-75	56 × 44 × 39	491
1	Antenna Gear	21 × 46 × 20	280

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: For division, army, and corps levels.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 1,000 or more, dependent on frequency.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9. -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -B, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -38B/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -189, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBM; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2; 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 2 - 18.

Receiver: 1.5 - 18 in 6 bands.

Band A: 1.5 - 3.0 Band C: 5.0 - 8.0 Band E: 11.0 - 14.0 Band B: 3.0 - 5.0 Band D: 8.0 - 11.0 Band F: 14.0 - 18.0.

TYPE MODULATION: Transmitter: Frequency shift; am in emergency (for voice).

Receiver: Am.

TYPE OF SIGNAL: Transmitter: Frequency shift teletypewriter signals; emergency use: cw.

Receiver alone: cw, tone, and voice.

Receiver and converter: Frequency shift teletypewriter signals, dual space

diversity reception.

POWER OUTPUT: 2 kw.

POWER REQUIREMENTS: (3) Power Unit PE-95.

Transmitter: 6.5 kw; 115 v, 60 cyc.

Receiver: 115 v, 60 cyc.

Control Unit: 170 w; 115 v, 50 - 60 cyc.

#### PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-2 packed for export shipment: total weight 39,416 pounds, total volume 3,057 cu ft; ship tons 76.4. Shipped in 9 packages.

STATUS: Obs (-5); L/Std (-5A); S/Std (-5B); Std (-5C)

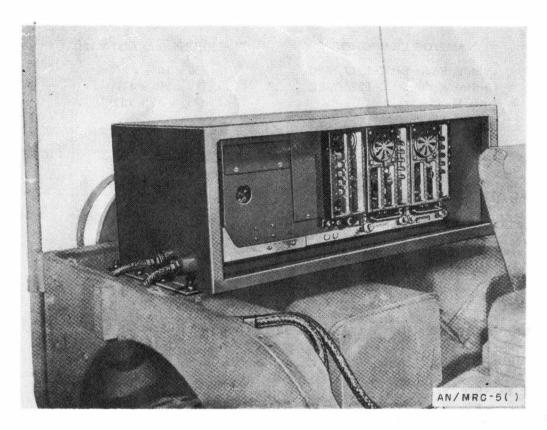
AN/MRC-5()

CLASSIFICATION OF EQUIPMENT: Unclassified

**RADIO SET** 

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1958



Radio Set AN/MRC-5( ) is a mobile, field, fm (voice) equipment used in internal security applications. It is mounted on a ¼-ton truck (jeep) and consists primarily of a radio set and a remote control unit. Under certain conditions, this equipment can be immediately operated after being submerged.

The AN/MRC-5, AN/MRC-5A, AN/MRC-5B, and AN/MRC-5C are functionally similar, although components and type numbers vary. The AN/MRC-5 and AN/MRC-5C use Radio Set SCR-608; the A and B models use Radio Transmitter-Receiver Assembly OA-25A/MRC-5. The AN/MRC-5B includes an additional power generator, which operates from the engine of the vehicle and two additional storage batteries. The AN/MRC-5C uses Dynamotor DM-36 for receiving and Dynamotor DM-37 for transmitting.

### AN/MRC-5()

**RADIO SET** 

INSTRUCTION LITERATURE: NAVSHIP .. 91811

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Radio Set C-1217/MRC	$7\frac{1}{4} \times 10\frac{5}{8} \times 8\frac{3}{4}$	
1	Control, Radio Set C-1226/MRC	1%6 x 3\%6 x 4\%	
1	Truck M-38	$67\frac{1}{4} \times 62 \times 132^{15}$ <sub>16</sub>	
1	Radio Set SCR-608		181

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore and field operations.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): 5 to 15.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 27 to 38.9.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 20 w (-5C); 35 w (-5, -5A, -5B).

POWER REQUIREMENTS: 24 v, 16 amp dc (from electrical sys of veh in which instl).

#### PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	PACKAGES

NET:

69 x 60 x 1341/4

500

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: Obs (-6); L/Std (-6A); S/Std (-6B); Std (-6C)

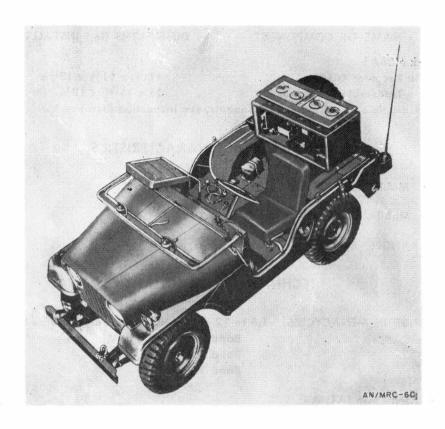
AN/MRC-6(

CLASSIFICATION OF EQUIPMENT Unclassified

RADIO SET

PREPARING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956



Radio Set AN/MRC-6( ) is a complete, vehicular radio station for short-range point-to-point communication in ground-to-ground tactical field use.

This equipment is so designed and constructed that operation is possible after submersion during deepwater fording or landing operations. Models A, B, and C are functionally similar. The AN/MRC-6B, in addition to the vehicle electrical source, includes two additional storage batteries.

### AN/MRC-6()

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 91811

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Truck M38A1		2,665
1	Radio Receiver 46159-A	$11^{11}/_{16} \times 11\frac{7}{8} \times 13^{13}/_{16}$	38.1
1	Radio Transmitter 52245—A	11 x 11 <sup>1</sup> 3% x 13 <sup>3</sup> / <sub>4</sub>	48
	(For complete list of major componer		

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Mobile shore facilities.

INSTALLATION: Mobile.

APPROXIMATE RANGE: Medium.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 to 12 continuously variable, in three bands:

Band 1: 1.5 to 3 Band 2: 3 to 6 Band 3: 6 to 12

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw or voice.

POWER OUTPUT: 25 w (cw); 10 w (voice).

POWER REQUIREMENTS: 24 v dc (obtained from veh electrical sys).

#### PHYSICAL CHARACTERISTICS

TOTAL TOTAL

DIMENSIONS (IN INCHES) OF WEIGHT VOLUME SHIP TOTAL NO.

EQUIPMENT (INSTALLED) (Ib) (cu ft) TONS PACKAGES

NET: The equipment is shipped uncrated and fully equipped.

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: Std

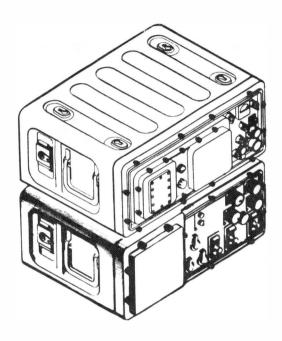
CLASSIFICATION OF EQUIPMENT: Unclassified

AN/MRC-13()

**RADIO SET** 

PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956



AN/MRC-13()

Radio Set AN/MRC-13( ) is a general service, mobile, medium-range, am (mcw and voice) equipment used for uhf communication with aircraft, ships, and mobile field units.

This equipment consists essentially of VHF Radio Transmitting and Receiving Equipment MAR, which is mounted in a truck. It is similar to Radio Set AN/MRC-12( ) except that the latter includes a standby receiver (Portable Radio Receiving Equipment RDR).

The AN/MRC-13 and AN/MRC-13A operate from 13-volt, self-contained batteries; and the AN/MRC-13B, from a 24-volt vehicular battery.

### AN/MRC-13( )

RADIO SET

INSTRUCTION LITERATURE:

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

#### MAJOR COMPONENTS

QTY NAME OF COMPONENT DIMENSIONS (in.) INSTALLED WEIGHT (Ib)

1 Truck M38A1(-13B), V-35/U(-13A), or
Reconnaissance Car 10182-D(-13)
containing:
1 Transmitter-Receiver 43067 9½ x 21¼ x 16¼ 45
1 Modulator-Dynamotor Unit 50248 9½ x 21¼ x 16¼ 45
1 Installation kit

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Mobile field units.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Short.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 225 to 390 (10 preset freq).

TYPE MODULATION: Am (A2, A3).

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 8 w.

POWER REQUIREMENTS: 430 w, 115/230 v, 50/60 cy, 1 ph ac; 430 w, 13 to 24/115/230 v dc.

#### PHYSICAL CHARACTERISTICS

TOTAL TOTAL

DIMENSIONS (IN INCHES) OF WEIGHT VOLUME SHIP TOTAL NO.

EQUIPMENT (INSTALLED) (Ib) (cu ft) TONS PACKAGES

NET:

DOMESTIC PACK:

**EXPORT PACK:** 

CONFIDENTIAL JANAP 161

STATUS: Standard

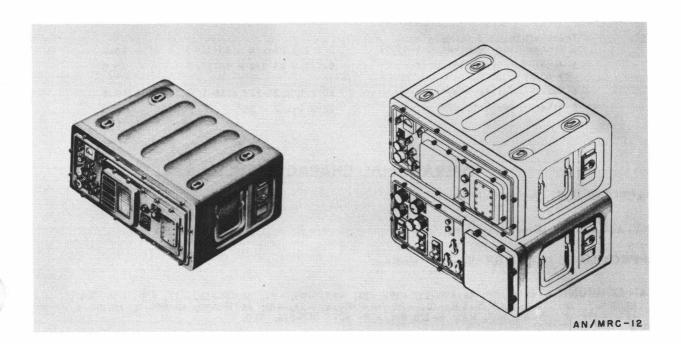
CLASSIFICATION OF EQUIPMENT : Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 9 Jun 52

AN/MRC-12

RADIO SET



Radio Set AN/MRC-12 is a general service, mobile, medium-range a-m (mcw, voice) equipment for u-h-f communications with aircraft, ships, and field units.

This set consists of Truck 10182D (1/4 ton), UHF Radio Transmitting and Receiving Equipment MAR (less a-c/d-c power supply), Portable Radio Receiving Equipment RDR (less power supply), Installation Kit MX-802/MRC and two antennas.

Automatic rapid selection of any one of 10 preset crystal-controlled channels is possible in either the RDR or MAR equipments.

The receiver circuits include automatic volume control, a noise-peak limiter for blocking interference, and a silencer circuit for operation during no-signal periods.

RADIO SET

# AN/MRC-12

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 9 Jun 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Truck NT-10192-D Containing: 1 Transmitter-Receiver CRV-43067	9-1/2 × 21-1/4 × 16-1/4	45.0
	1 Modulator-Dynamotor Unit CRV-50248	9-1/2 × 21-1/4 × 16-1/4	45.0
	1 Radio Receiver CRV-46233	10-7/8 × 21-1/4 × 16-1/4	100.0
	2 Antenna Assembly CRV-66147	22 × 2-1/2 × 25	3.5

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Mobile field units.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): Medium.

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: 225-390.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Transmitter: 8 w.

Receivers: 1 w into 600 ohm load.

POWER REQUIREMENTS: 12 v dc from 2 batteries BB-221/U.

#### PHYSICAL CHARACTERISTICS

Information on Radio Set AN/MRC-12 not available.

STATUS: Standard

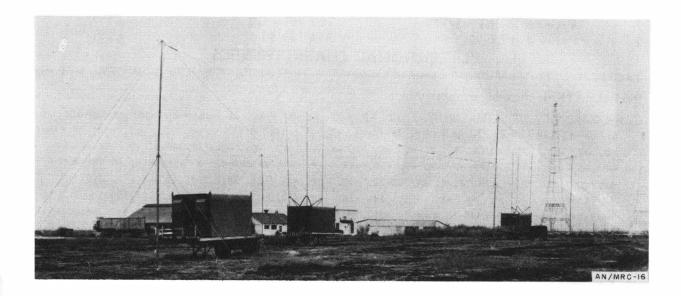
**CLASSIFICATION OF EQUIPMENT: Restricted** 

USING SERVICE: Navy

DATE OF THIS SHEET: 14 May 52

AN/MRC-16

RADIO SET



Radio Set AN/MRC-16 is a mobile, m-f, h-f, and v-h-f receiving and transmitting equipment used as a ground radio command center in two-way communication with aircraft or with other ground radio stations. It has provision for a-m (voice, mcw, and cw) operation in general air warning, fighter air defense applications and in general air-to-ground and short-range ground-to-ground communication. An f-m radio set is included for communication with tactical ground elements.

This equipment consists of a receiver shelter, a transmitter shelter, a power shelter, 10 remote control stations, two trailer-drawn power units, and associated components and accessories. The transmitter shelter contains the following Radio Transmitting Equipments: two TCK's, one TBM, two TCS's, and three TDQ's.

The receiver shelter contains five Radio Receiving Equipments RAO and RCK and one Radio Set SCR-608.

In the power shelter are Power Unit PE-85-M, for supplying power to the transmitting shelter, and a motor generator for supplying power to Radio Transmitting Equipment TBM, which alone draws 5,000 w.

The receiver shelter is powered by one of the trailer-drawn Power Units PE-95, and the other serves as an auxiliary power supply for the transmitter shelter.

The remote control stations, which are not designed to be operated more than 1/2 mile distant from the main station equipment, consist essentially of a telephone set and a hand telegraph key, which are connected to any of the radio transmitting or receiving components by means of an adapter.

# AN/MRC-16

**RADIO SET** 

INSTRUCTION LITERATURE: NavShips 91607

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 14 May 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shelter S-1/FM	98 × 100 × 173	9,700
1	Shelter S-2/MRN-3	98 × 100 × 173	9,950
1	Receiver Shelter S-3/TPS-1	98 × 100 × 173	8,150
2	Power Unit PE-95	75 × 74 × 95	4,200

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore aircraft command centers. APPROXIMATE RANGE (IN MILES): Medium.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -28, -36; AN/ARR-15; AN/ART-13; AN/CRC-2, -3; AN/CRT-3; AN/FRC-6, -7, -9, -10; AN/FRT-5, -6, -15, -17, -18; AN/FRR-3, -4, -7, -12, -28; AN/GRC-3, -4, -5, -6, -7, -8, -9, -13, -26, -30; AN/GRR-2, -3, -5; AN/MRC-2, -5, -6, -16, -22; AM/PRC-7, -8, -9, -10, -17, -19, -20; AM/SRR-3, -8, -12, -13; AM/SRT-40; AN/TRC-7; AN/TRO-1; AN/URC-4: AN/URR-10, -12, -22, -23, -28; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-2, -3, -4; AN/VRT-1; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -639, -640, -779, -787, -794, -1004; MAN; MBF; MBS; MN; MQ; 0A-58/FRC, -59/FRC, -60/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/U, -274/FR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBQ; RBS; RCF; RCG; RCH; RCO; RDA; RDE; RDM; RC-52, -103, -256, -257; SCR-177, -188, -193, -244, -274, -281, -293, -294, -298, -399, -499, -506, -508, -509, -510, -522, -528, -536, -542, -543, -573, -574, -575, -585, -593, -607, -608, -609, -610, -616, -619, -624, -628, -641, -643, -644, -678, -694, -704, -808, -828; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FRT, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO: TBS; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDG; TDN; TDN; TDO; TDQ; TDT; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 1.5 - 18.0, 27.0 - 38.9 (fm), and 115 - 156.

Receiving: 0.54 -30, 27.0 - 38.9 (fm), and 115 - 156.

TYPE MODULATION: Am, Fm.

TYPE OF SIGNAL: Am: Voice, mcw, cw.

Fm: Voice.

**POWER OUTPUT:** 

**Transmitters** 

Receivers

TCK: 400 w on cw, 100 w on voice.

RAO: 0.3 w into 600 ohms.

TBM: 500 w on cw, 350 w on mcw and voice.

RCK: 15 mw into 600 ohms.

TDQ: 45w on cw, 25w on mcw and voice.

TCS: 6 mw.

TCS: 40 w on cw, 20 w on voice.

SCR-608: 2 w to loudspeaker, 200 mw to headset.

SCR-608: 20 w.

#### POWER REQUIREMENTS:

Transmitting: 13.6 kw, 220 v, 50/60 cyc, 3 phase. (Including TBM, which draws 5 kw.)

Receiving: (5kw, 220 v, 50/60 cyc, 1 phase.

#### PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-16 weighs 36,200 pounds net, volume 3,550 cu ft, 88.6 ship tons. Packed for domestic shipment: total weight 36,200 pounds, total volume 3,550 cu ft, 88.6 ship tons.

ORIGINAL

STATUS: Std

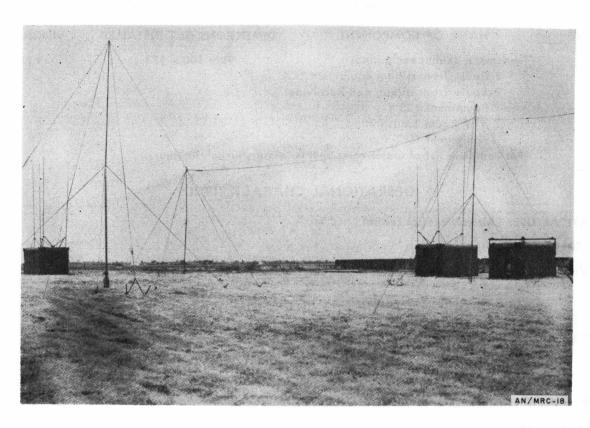
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/MRC-18

**RADIO SET** 



Radio Set AN/MRC-18 is used for communication between aircraft in flight and ground command centers, and can also be used in ground, point-to-point communication applications.

This equipment has a receiver shelter, a transmitter shelter, a power shelter, 3 power trailers, and 10 remote-control stations. A remote station consists of a telephone set and a hand telegraph key, but remote operation is limited to  $\frac{1}{2}$  mile from the equipment.

### AN/MRC-18

**RADIO SET** 

INSTRUCTION LITERATURE: NAVSHIPS 91487

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

#### **MAJOR COMPONENTS**

QTY

NAME OF COMPONENT

**DIMENSIONS (in.) INSTALLED** 

WEIGHT (lb)

1

Transmitter shelter containing:

98 x 100 x 173

9,700

3 Radio Transmitting Equipment TCK

2 Radio Transmitting and Receiving

**Equipment TCS** 

2 VHF Radio Transmitting

**Equipment TDQ** 

(For complete list of major components, see instruction literature.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Aircraft control central.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Medium.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 30 (rcvg); 1.5 to 18 (xmtg); 27 to 38.9, 115 to 156

(xmtg and rcvg).

TYPE MODULATION: Am (A1, A2, A3); fm (F3).

TYPE OF SIGNAL: Cw, mcw, voice.

**POWER OUTPUT:** 

SCR-608: 20 w

TCK: 100 w (A3); 400 w (A1)

TCS: 20 w (A3); 40 w (A1)

TDQ: 25 w (A2, A3); 45 w (A1)

**POWER REQUIREMENTS:** 

PE-85M: 10 kw, 220 v, 60 cy, 3 ph ac (for xmtr shelter).

PE-95: 5 kw, 220 v, 60 cy, 1 ph ac (for rcvr shelter).

#### PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	<b>PACKAGES</b>

556b

**NET:** 

DOMESTIC PACK: 32,000 3,245 81

**EXPORT PACK:** 

STATUS: Substitute Standard

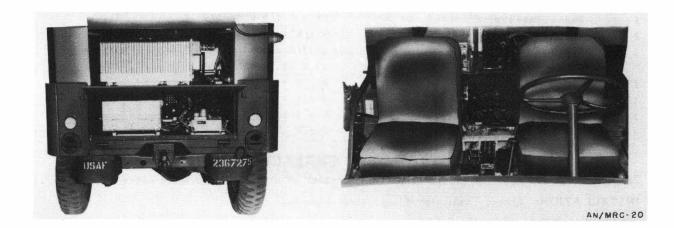
CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 10 Jun 52

### AN/MRC-20

**RADIO SET** 



Radio Set AN/MRC-20 is a ground, mobile, two-way voice and tone-modulated communication equipment which operates over one of 11 preset (auto-tuned) channels in the 200 to 500 kc, and 2 to 18 mc range.

It provides eight crystal-controlled, preset channels in the 100 to 156 mc range, and any one of 18 preset, crystal-controlled frequency channels (from 1,750 available) spaced 100 kc apart in the 225 to 399.9 mc range.

All equipment, including power supply and antennas, is normally mounted in a 1/4-ton command reconnaissance vehicle (jeep). Facilities are provided for remote operation up to 1/2-mile.

Equipment consists of two radio transmitters, two radio receivers, and a radio receiver-transmitter plus associated accessory components.

Three antennas supplied are h-f antenna, 18 foot whip-type, u-h-f Antenna AT-208/URC-5 with mast, and a v-h-f antenna and mast.

Power is supplied by Power Unit PE-246. Power required is 1,700 w of 28.5 v dc. For emergency use, a 28-v,35-amp hour storage battery will operate the equipment for approximately 30 minutes under normal conditions.

# N/MRC-20

RADIO SET

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 10 Jun 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-47A/ART-13	23-1/2 × 11-1/2 × 14-1/2	103.6
1	Radio Receiver-Transmitter RT-178/ARC-27	12-3/8 × 11-1/4 × 27-7/8	71.0
1	Radio Transmitter T-67/ARC-3	12-1/4 × 7-1/2 × 15	17.5
1	Radio Receiver R-77/ARC-3	11 × 6 × 15-1/2	17.0
1	Radio Receiver BC-349-Q, or R	18 × 9-1/2 × 10-1/2	41.0
2	Remote Control RC-261	4-1/4 × 4-1/4 × 8-1/2	21.0
1	Power Unit PE-246	16-7/8 × 20-1/2 × 24-3/8	113.0
3	Antenna Groups (HE VHE UHF)	30 x 18 (Approx.)	25. 0
1	Radio Set Control C-626/ARC-27	6-3/8 × 9-9/16 × 5-1/4	11.2
1	Radio Set Control C-628/ARC-27	3-1/4 × 8-1/2 × 3	1.3
1	Control Unit C-87/ART-13	8 × 3-1/2 × 3-3/8	2.1
1	Control Box C-118/ARC-3	2-5/8 × 6 × 6-7/8	2. 1

#### OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used for ground support and control of aircraft at advanced bases.

INSTALLATION: Ground, vehicular (jeep) shock-mounted.

APPROXIMATE RANGE (IN MILES): Line of sight.

APPROXIMATE RANGE (IN MILES): Line of signt.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -9, -9, -12, -18, -19, -21, -25, -27, -28, -30, -33, -34, -36; AN/ARR-15; AN/ART-13; AN/CRC-2; AN/CRT-3, -5; AN/FRC-7, -10; AN/FRR-3, -4, -7, -12, -29; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -16, -26, -27, -29, -30, -32; AN/GRR-2, -3, -5, -7; AN/GRT-2, -3; AN/MRC-2, -6, -12, -16, -20, -22; AN/PRC-7, -14, -17, -19, -20; AN/SRC-3; AN/SRR-3, -9, -11, -12, -13; AN/SRT-1, -3, -4; AN/TRC-7, -32; AN/TRC-1; AN/URC-4; AN/URR-9, -10, -13, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -4; AN/VRR-2; BCC-191, -312, -329, -339, -342, -342, -348, -365, -401, -447, -453, -610, -639, -640-D, -779, -787, -794, -1004; MAR; MAW; MAY; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -209/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -279/GR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBK; RBL; RBM; RBO; RBP; RB Q; RBS; RC-52, -103-D, -256-C, -257-C; RCF; RCG; RCH; RCK; RCO; RDE; RDF; RDM; RDR; RDZ; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -573-A, -574-A, -575, -585, -593, -607, -616, -624, -641, -643-A, -644, -694, -704; T-4/FRC, -5/FRC, -93/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAB; TAJ; TAQ; TBA; TBC; TBK; TBM; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDG; TDH; TDK; TDN; TD0; TDQ; TDT; TDZ; TEB; TEC; TED; TEF; AR-B8 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmission: 0.2 - 0.5, 2 - 18, 100 - 156, 225 - 299.9.

Reception: 0.2 - 0.5, 1.5 - 18, 100 - 156, 225 - 299.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone (in the h-f and 1-f ranges cw may be used).

POWER OUTPUT: Transmitters: 10 w (Nominal).

Receivers: 0.5 to 3 w (nominal).

**POWER REQUIREMENTS:** 

28 v, dc, at(60 amp) 1.7 kw using Power Unit PE-246 (supplied). 28.5 v, dc, (35 amp hour) battery, (supplied) will operate set 1/2 hour for

#### PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-20 measures 45-3/4 x 50-1/2 x 28", net weight 415.8 pounds, volume 10.4 cu ft. Packed for domestic or export shipment: total weight 498 pounds, total volume 11.5 cu ft. Shipped in 8 packages.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 9 Jun 52

AN/MRC-22

RADIO SET



Radio Set AN/MRC-22 is a mobile multichannel a-m (cw, mcw, voice) two-way communication equipment for u-h-f/v-h-f ground-to-air or point-to-point communication.

This equipment consists of three transceivers, a motor generator assembly, and a gasoline-driven motor generator installed in a two wheel trailer; composing a complete, self-powered, radio communication station which can be quickly moved to any ground location.

This set provides four preset crystal-controlled channels in the 1.5 to 12 mc range, 10 preset crystal-controlled channels in the 100 to 156 mc range, and 18 preset crystal-controlled channels in the 225 to 400 mc range.

Manual adjustment of the 18 u-h-f channels makes possible the use of 1,751 frequency channels.

Remote control up to 25 feet is possible.

### AN/MRC-22

RADIO SET

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE : Navy

DATE OF THIS SHEET: 9 Jun 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALL ED	WEIGHT (LBS)
1	Transmitter-Receiver RT-18/ARC-1	9-1/32 × 10-19/32 × 24-3/16	47
1	Radio Receiver-Transmitter	12-3/8 × 11-1/4 × 27-7/8	72
	RT- 178 / ARC- 27		
1	Radio Transmitting and Receiving	11-1/2 × 23 × 17-1/2	143
	Equipment TCS including Motor		
	Generator Assembly, COL-21826		
1	Gasoline Engine Generator,	Not Available	Not Available
	Homelite 24D28-23		

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Mobile command stations.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -12, -18, -19, -21, -25, -26, -27, -30, -33, -34, -36; AN/ARR-15; AN/ART-13; AN/CRC-2; AN/CRT-3; AN/FRC-7, -10; AN/FRR-3, -4, -7, -12, -29, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -16, -26, -27, -29, -30, -32; AN/GRR-2, -3, -5, -7; AN/GRT-3; AN/MRC-2, -6, -12, -16, -20, -22; AN/PRC-7, -14, -17, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRC-7, -32; AN/TRQ-1; AN/URC-4; AN/URR-9, -10, -12, -13, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -4; AN/VRC-2; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -639, -640, -779, -794, -1004; MAR; MAW; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -209/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -278/GR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBQ; RBS; RC-52, -103, -256, -257; RCF; RCG; RCH; RCK; RCO; RDE; RDM; RDR; RDZ; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -549, -573, -574, -575, -585, -593, -607, -616, -624, -641, -643, -644, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBM; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCZ; TDE; TDF; TDG; TDH; TDN; TDO; TDU; TDT; TEB; TEC; TED; TEF; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: TCS: 1.5- 12.0.

AN/ARC-1: 100 - 156. AN/ARC-27: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw: 25 w.

Mcw, voice: 10 w.

POWER REQUIREMENTS: Incorporates its own gasoline engine generator and motor-generator

assembly.

#### PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-22 packed for domestic shipment: total weight 1,630 pounds, total volume 295 cu ft, 70.3 ship tons.

STATUS: Std

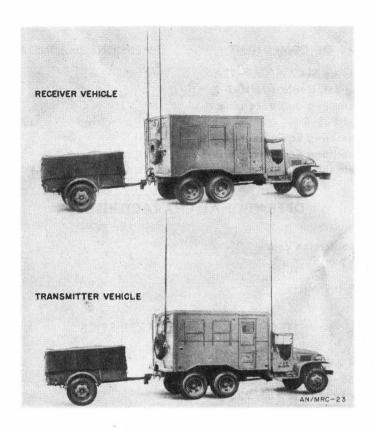
CLASSIFICATION OF EQUIPMENT: Unclassified

AN/MRC-23

**RADIO SET** 

PREPARING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956



Radio Set AN/MRC-23 is a self-contained mobile radio communication center capable of operation in ground-to-air tactical radio nets.

This equipment includes a transmitter truck and receiver truck. Each truck derives its primary power from an associated trailer-mounted gasoline engine generator (Power Unit PE-95-G). The receiver truck has two antenna masts; the transmitter truck, one. Antennas, cables, ground rack, and mast and guy assemblies are stored in the trucks during transit.

### AN/MRC-23

**RADIO SET** 

INSTRUCTION LITERATURE: NAVSHIPS 91962

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Radio Receiving Set AN/URR-13A		
1	Transmitting Set, Radio AN/URT-7		
1	Radio Transmitting and Receiving Equipment TCS-8		
1	Radio Transmitting Equipment TDE-1		
1	Radio Transmitting Equipment TED-1		
	(For complete list of major components,	see instruction literature.)	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Communication center.

INSTALLATION: Ground, mobile.

**APPROXIMATE RANGE (IN MILES):** 

#### **TECHNICAL CHARACTERISTICS**

#### FREQUENCY RANGE IN MEGACYCLES:

Receiving: .08 to .56; 1.9 to 24; 115 to 156; 225 to 400

Transmitting: 1.5 to 18; 115 to 156; 225 to 400

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT:

AN/URT-7: 45 w (A2, A3)

TCS-8: 20 w (A3); 40 w (A1)

TDE-1: 30 w (A3); 35 w (A2); 125 w (A1)

TED-1: 15 w (A2)

**POWER REQUIREMENTS:** 

PE-95-G: 12.5 w (output), 115 v, 60 cy, 1 ph ac.

#### PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
<b>EQUIPMENT (INSTALLED)</b>	(lb)	(cu ft)	TONS	<b>PACKAGES</b>

NET:

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: T/Std

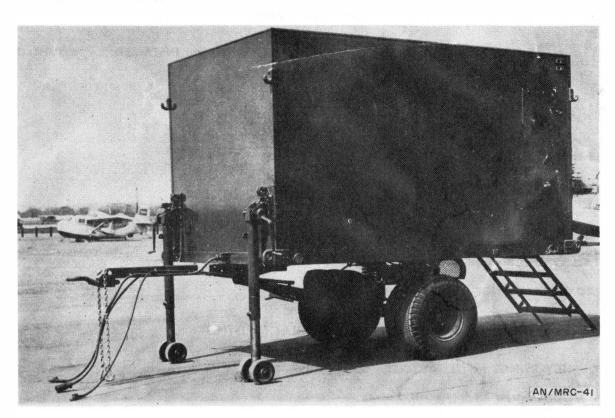
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARINE SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

### AN/MRC-41

RADIO SET



Radio Set AN/MRC-41 is a highly mobile, air-transportable, radio relay set capable of independent operation, or with other mobile or permanent comcenter facilities to provide ground-to-ground, point-to-point communication.

This equipment is used either as a relay or terminal station in cw, voice, and diversity radioteletype communication and is normally operated with Teletypewriter Central Office AN/MGC-2, Radio Receiving Set AN/MRR-5, and Radio Transmitting Set AN/MRT-6 (Project Four Wheels).

All operating components are installed in and operated from Van Trailer V-83/M.

Power is supplied by Trailer Mounted Diesel Engine Generator Set Type MB-5 (not supplied as part of this set).

### AN/MRC-41

RADIO SET

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC:

DATE OF THIS SHEET: 12 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Terminal, Telephone AN/TCC-3		
1	Radio Relay Set AN/TRC-12B		
8	Converter, Signal TA-182/U		
4	Converter, vf carrier		
4	Keyer, vf carrier		
4 sets	Network (2 ea ±120 cy)		

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Operated by AACS at such commands as TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Line of sight.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 230 to 250.

TYPE MODULATION: Fm (F3, F9).

TYPE OF SIGNAL: Cw, voice, fsk.

POWER OUTPUT: .5 w (rcvr); 5 w (xmtr, w/o ampl).

POWER REQUIREMENTS: 20 to 30 kw, 120/240 v, 50/60 cy, 1 ph ac.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	150 × 96 × 138		1,150	28.75	
DOMESTIC PACK:			1,150	28.75	1
EXPORT PACK:		8,000	1,150	28.75	1

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

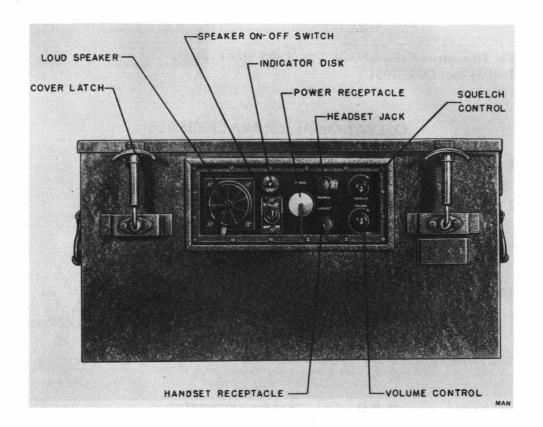
DATE OF THIS SHEET: 9 May 52

### AN/MRC-TYPE

SERVICE TYPE NUMBER:

MAN

PORTABLE FM RADIO TRANS & REC EQUIP



Portable FM Radio Transmitting and Receiving Equipment MAN is a single-frequency, medium-power, v-h-f (voice), general purpose radio set designed primarily for mobile use.

Crystal oscillator frequency control is employed in both the transmitter and receiver. The equipment, supplied complete, is alined with proper crystals for operation on 36.5 mc. Crystals for operating on 10 other frequencies within the 30- to 40-mc range are provided.

### AN/MRC-TYPE

MAN :SERVICE TYPE NUMBER

PORTABLE FM RADIO TRANS & REC EQUIP

INSTRUCTION LITERATURE:
NavShips 95124
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy

DATE OF THIS SHEET: 9 May 52

#### **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

I FM T

FM Transmitter-Receiver Unit CGG-43057 Not Available

Not Available

Battery Unit CGG-19051

**OPERATIONAL CHARACTERISTICS** 

TACTICAL USE: Military police.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): 10

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: 30 - 40.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 15 to 20 w.

POWER REQUIREMENTS: 6-v storage battery, 3 to 4 hours continuous service.

#### PHYSICAL CHARACTERISTICS

Information on Portable FM Radio Transmitting and Receiving Equipment MAN not available.

CONFIDENTIAL

ORIGINAL

STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Restricted

USING SERVICE: Navy

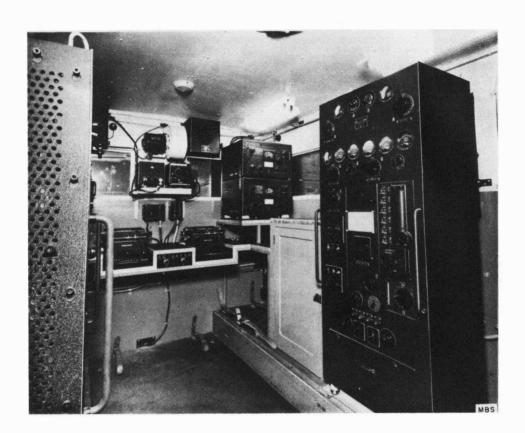
DATE OF THIS SHEET: 23 May 52

AN/MRC-TYPE

SERVICE TYPE NUMBER:

MBS

MOBILE RADIO TRANS & REC EQUIP



Mobile Radio Transmitting and Receiving Equipment MBS is a-m (cw, mcw, voice) equipment, operating as an air command center on shore for m-f, h-f, and v-h-f two-way communication with aircraft. It is used for fighter air defense, and general air-to-ground communications.

A 2-1/2 ton truck contains one Radio Transmitting and Receiving Equipment TCS (series), one Radio Transmitting Equipment TCK-4, three Radio Receiving Equipments RCH, Radio Receiver BC-639, and Radio Transmitter BC-640.

A trailer houses a gasoline-engine-driven generator set (PE-99, or equal).

Provision is made for remote control of the equipment.

### MRC-TYPE

MOBILE RADIO TRANS & REC EQUIP

MBS

SERVICE TYPE NUMBER

CLASSIFICATION OF EQUIPMENT: Restricted

INSTRUCTION LITERATURE: Not Available

USING SERVICE: Navy

DATE OF THIS SHEET: 23 May 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-639-A	19 × 10-15/32 × 13-9/16	38.0
1	Radio Transmitter BC-640-B	$72-3/8 \times 21-1/4 \times 20$	601-5
1	Radio Transmitter COL-52245	11-11/16 × 13-3/4 × 11-13/16	41.75
1	Radio Transmitter CG-52299	52-5/16 × 25 × 18-1/4	290.0
3	Radio Receiver CZC-46209	13-7/8 × 21 × 20-13/16	106.0
1	Radio Receiver COL-46159	11-11/16 × 13-3/4 × 11-13/16	36.75

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore-based air command stations.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -36; AN/ARR-15; AN/ART-13; AN/CRC-2; AN/CRT-3, -5; AN/FRC-7, -10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-4, -5, -6, -10, -15, -17, -19, -19; AN/GRC-9, -13, -26, -30; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -17, -19, -20; AN/SRC-3; AN/SRC-3, -8, -12, -13; AN/SRT-1, -3, -4; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URC-10, -12, -21, -22, -23; AN/URT, -2, -3, -4, -7, -10; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -329, -339, -342, -348, -365, -401, -447, -610, -639, -640, -779, -794, -1004; 0A-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; MAR; MBS; MQ; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC: RBG; RBH; RBK; RBM; RBO; RBP; RBQ; RBS; RC-52, -103, -256, -257; RCF: RCG: RCH: RCK: RCO: RDE: RDM: REA: SCR-177, -188, -193, -244, -274, -256, -257; RCF; RCG; RCH; RCK; RCO; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -573, -573, -575, -585, -593, -607, -616, -624, -641, -643, -644, -694, -704; T-4/FRC, -5/FRC, -8/SRC, -159/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/FR; TAB; TAQ; TBA; TBL;TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCG; TCH; TCK; TCO; TCP; TCS; TCY; TDD; TDE; TDF; TDG; TDH; TDK; TDN; TDO; TDQ; TDT; TEB; TEC; TEF; AR-88 (RCA]; ARC Type 12; Collins 185-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A. TCS; TCY; TCZ;

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 1.5 - 18.1 and 100 - 156.

Receiving: 0.08 - 0.56 and 1.9 - 24.0, and 100 - 156.

TYPE MODULATION: Am. TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: Transmitters: Receivers:

> TCS: 40 w on cw. RCH: 100 mw for 600 ohm, or 20,000 ohm headset

20 w on voice. 2 w for 600 ohm loudspeaker TCK-4: 400 w, on cw, BC-639-A; 1 mw into 600 ohms

TCS: 2.5 w maximum. 100 w on voice.

BC-640: 50 w.

POWER REQUIREMENTS: Self-contained, 100 - 120 v, 60 cyc, 1 phase and 3 phase, ac.

#### PHYSICAL CHARACTERISTICS

Information on Mobile Radio Transmitting and Receiving Equipment MBS not available.

STATUS: Standard

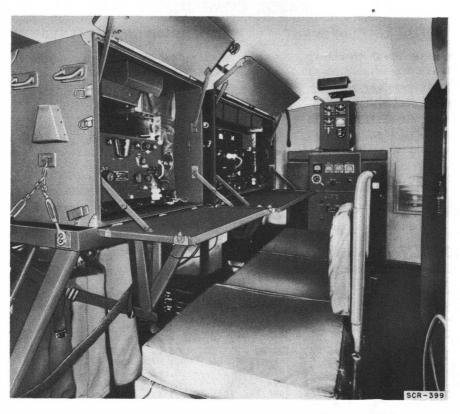
CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 22 Jan 52

AN/MRC-TYPE

SERVICE TYPE NUMBER:

SCR-399 RADIO SET



Radio Set SCR-399 is a field, mobile, transmitting and receiving station used for a-m (voice, tone, or cw) communication, to medium or long distances, in the medium- and high-frequency ranges, at division and equivalent headquarters.

This equipment consists of transmitting, receiving, control, and related components installed within a field Shelter HO-17, which is carried on a 2-1/2-ton  $6 \times 6$  cargo truck, and can operate on the move or at the halt.

It includes remote-control components by means of which the equipment can be operated from locations up to two miles away, over a telephone pair, in conjunction with Telephone EE-8.

It can be used in the 1-mc range by means of Frequency Conversion Kit MC-509, and uses a vehicular whip-type antenna system. At the halt, when the operating range must be extended, it can be used in conjunction with more elaborate arrays, such as doublet systems.

A trailer-drawn, 5 kw power unit is included to provide power for this set.

Radio Set SCR-499 is the air-transportable version of this equipment.

### AN/MRC-TYPE

SCR-399 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-283

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy DATE OF THIS SHEET: 22 Jan 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shelter HO-17 (Mobile)	159 × 92 × 80	7,255.0
1	Radio Transmitter BC-610	32-5/3 × 21-3/3 × 39-7/3	4520
1	Radio Receiver BC-342	10 × 9-1/16 × 19-1/16	61.5
1	Radio Receiver BC-312	10 × 9-1/16 × 19-1/16	58.0
1	Speech Amplifier BC-614	16 × 9-1/4 × 11	Not Available
1	Power Unit PE-95	75-1/2 × 28-1/2 × 38-1/2	1,545.0
1	Antenna Tuning Unit BC-939	Not Available	Not Available

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Engineer battalion, antiaircraft battalion, army security agency, signal operation company, signal operation battalion, signal-air, ground training company.

INSTALLATION: Ground, vehicular, operates on APPROXIMATE RANGE (IN MILES): 100 to 250. the move or at the halt.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -209/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -189, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -93/SR, -159/FRT, -159/FRT, -172/FR, -173/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-98 (RCA); Collins 18S-4 (AF Model); Collins 324-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MM; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 2 - 18 (in 3 bands)

Receiving: 1.5-18 (in 6 bands).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, or cw.

POWER OUTPUT: Cw: 400 w

Voice: 300 w.

POWER REQUIREMENTS: 2,500 w, 115 v, 60 cyc, ac (supplied by PE-95 or equivalent source)

and 12-v storage battery.

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-399 weighs 6,595 pounds net. Packed for export shipment: total weight 10,025 pounds, total volume 895 cu ft, 22.4 ship tons. Shipped in 2 packages both domestic and export.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

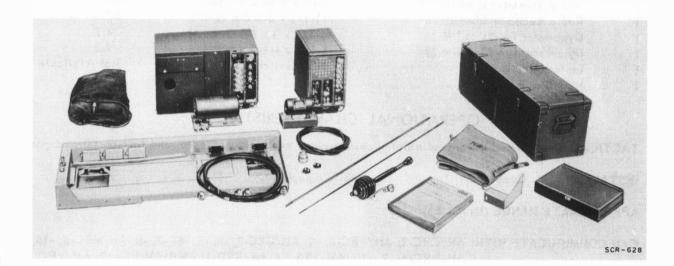
USING SERVICE: Army Navy

DATE OF THIS SHEET: 29 Jan 52

AN/MRC-TYPE

SERVICE TYPE NUMBER:

SCR-628 RADIO SET



Radio Set SCR-628 is a crystal-controlled, vehicular, short-range, low-power radiotelephone equipment used for f-m (voice) communication in the frequency range assigned field artillery units.

This equipment consists essentially of one receiver and one transmitter, appropriate dynamotors, antenna components, and accessories.

The transmitter and the receiver provide 120 channel frequencies, 10 of which may be preset, in each case. Each of these components are equipped with 10 push buttons for selecting frequency channels. There are thus provided 10 transmitting and 10 receiving channels.

The SCR-628 provides for operation of the interphone equipment of the vehicle in which it is installed.

Operates from 12- or 24-v vehicular storage batteries through selection of appropriate dynamotors.

### MRC-TYPE

**SCR-628 RADIO SET** 

INSTRUCTION LITERATURE: TM 11-620

CLASSIFICATION OF EQUIPMENT: Unclassified

SERVICE TYPE NUMBER USING SERVICE : Army, Navy DATE OF THIS SHEET: 29 Jan 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-684-BM	11-1/2 × 10-1/4 × 18	67
1	Radio Receiver BC-683-BM	11-1/2 × 6-3/4 × 12-1/2	35
1	Dynamotor DM-34 or DM-36	$4-1/2 \times 3 \times 6-1/2$	4.7
1	Dynamotor DM-35 or DM-37	5-1/2 × 4-1/2 × 8-1/4	9.2
1	Installation Unit	Not Available	Not Available
i	Mounting FT-284	ir ir	n n

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Signal air-ground training company and engineer, ordnance, and transportation depots.

INSTALLATION: Combat vehicles and other mobile equipment.

APPROXIMATE RANGE (IN MILES): 15.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16;

AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 20 w.

POWER REQUIREMENTS: 12 v at(20 amp)or 24 v at(12 amp)dc.

Transmitter: 12-v vehicular battery through Dynamotor DM-35,

24-v vehicular battery through Dynamotor DM-37.

Receiver: 12-v vehicular battery through Dynamotor DM-34,

24-v vehicular battery through Dynamotor DM-36.

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-628 weighs 349.5 pounds net, volume 14.5 cu ft. Packed for domestic shipment: total weight 595 pounds, total volume 29.5 cu ft, 0.75 ship ton. Packed for export shipment: total weight 660 pounds, total volume 31.5 cu ft, 0.75 ship ton.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy

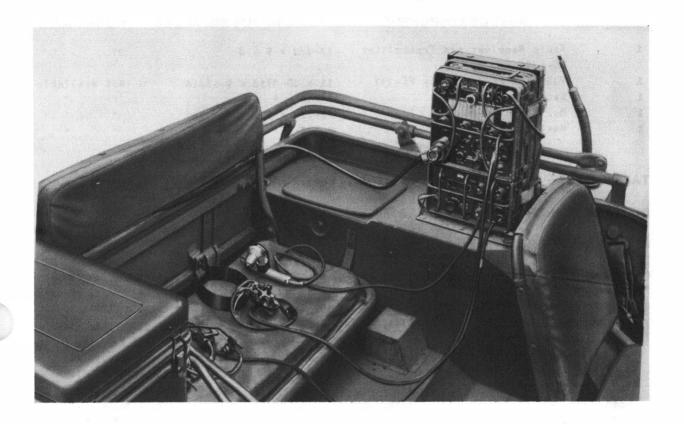
DATE OF THIS SHEET: 29 Jan 52

AN/MRC-TYPE

SERVICE TYPE NUMBER:

SCR-694

RADIO SET



Radio Set SCR-694 is a lightweight, portable, crystal-controlled, medium-frequency, a-m (voice, tene, and cw) equipment used for front-line communication, and as a command set which can be installed on the ground, or in vehicles, at company, battery, and equivalent levels.

This equipment consists of a radio transmitter-receiver, power supply, hand operated generator, and related accessories. The water tight case and waterproof metal cover permit floating this set ashore as in amphibious operations.

It uses a whip-type or half-wave horizontal antenna and has a 3-position frequency-band switch. It can be powered by a 6, 12, or 24-v storage battery, or by its hand generator component.

### MRC-TYPE

RADIO SET

**:SERVICE TYPE NUMBER** 

INSTRUCTION LITERATURE:

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy 29 Jan 52 DATE OF THIS SHEET:

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-1306	14-1/2 × 9 × 5	27
1	Vibrator Power Supply PE-237	$11 \times 20 - 3/16 \times 9 - 15/16$	Not Available
1	Generator GN-58	8 × 6 × 6	
1	Mast Base MP-65	16-1/2 × 3	
1	Mast Bracket MP-50	8 x 5 x 5	* *

#### OPERATIONAL CHARACTERISTICS

TACTICAL USE: Engineer company, field artillery battery, military police Special 11-500 Teams.

INSTALLATION: Ground, portable or vehicular.

APPROXIMATE RANGE (IN MILES): 30.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR; -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -308/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDH; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB: TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HR0-50; Westinghouse Type MW; Wilcox 96D; 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 3.8 - 6.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and voice.

POWER OUTPUT: 8.5, 14, and 17 w.

POWER REQUIREMENTS: 6/12/24-v storage battery, (or Generator GN-58).

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-694 weighs 191.5 pounds net, volume 3 cu ft. Packed for domestic shipment: total weight 250 pounds, total volume 7.5 cu ft.

STATUS: Commercial

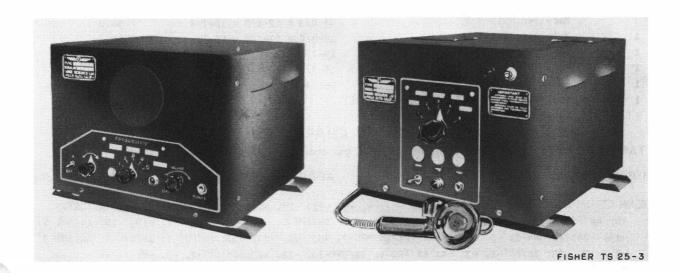
CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

AN/MRC-TYPE

COMMERCIAL TYPE NUMBER:

FISHER TS25-3 RADIO SET



Radio Set Fisher TS25-3 is composed of Radio Transmitter TS25-3, Radio Receivers RS25-3 and RS25-4, power supplies and other ancillary items to make up a complete two-way radio communication set. This equipment is designed for a-m vehicular or mobile operation, for point-to-point and ground-to-air communication. It is to be replaced by Radio Set AN/VRC-19.

Both radio receivers operate in four crystal-controlled channels in the 0.2 to 0.8 m-c range, and in one variable frequency band (channel 5). Channel 5 in Radio Receiver R\$25-3 covers the 3.0 to 4.5 m-c band; channel 5 in Radio Receiver R\$25-4 covers the range 0.19 to 0.51 mc.

The radio transmitter also operates in four crystal-controlled channels (0.02 to 0.08 mc) plus the variable frequency channel 5 (3.0 to 4.5 mc).

Power Units Fisher PS25-3 (6-v dc), PS25-3 (12-v dc), and PS25-3 (110-v ac) supply all the power requirements of the transmitter component plus one, but not both, receiver components. Receiver power unit Fisher PRDC-6 may be used to operate either one of the receiver components from a standard 6-v storage battery.

This equipment can be normally operated into a whip-type antenna 15 to 35 feet long such as Antenna Assembly AS-170/VRC-4. Antenna Coil L35-6, located in the transmitter, is tapped so that it can be adjusted for a satisfactory antenna impedance match.

Power requirements are 252 w, from either a 6- or 12-v storage battery, or 110 v, 60 cyc, 1 phase, ac.

### AN/MRC-TYPE

FISHER TS25-3

:COMMERCIAL TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE:
TM 11-829 & TO 16-55-248
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter TS25-3	16-5/8 × 12-1/2 × 15-7/8	39.0
1	Receiver RS25-3	16-5/8 × 12-1/8 × 15-7/8	34.5
1	Receiver RS25-4	16-5/8 × 12-1/8 × 15-7/8	34.5
1	Power Unit PS25-3 6 v, dc	13-7/8 × 9-13/16 × 10-5/8	32.0
1	Power Unit PS25-3 12 v, dc	13-7/8 × 9-13/16 × 10-5/8	30.0
1	Power Unit PS25-3 110 v, ac	Not Available	Not Available
1	Receiver Power Unit PRDC-6 (6 v, dc)	w w	W W
1	Antenna Assembly AS-170/VRC-4	й и	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Issued on a basis of one each per crash vehicle and/or ambulance, per Air Base.

INSTALLATION: Ground mobile, vehicular.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRC-3; AN/SRR-3, -8, -12, -13; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -314, -329, -339, -342, -344, -348, -365, -401, -447, -610, -779, -794, -1004; MBS; MQ; 0A-58/FRC, 0A-59/FRC; 0A-60A/FRT; 0A-60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBH; RBO; R8P; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -704; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBN; TBN; TBO; TBU; TBX; TC8; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 183-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

#### FREQUENCY RANGE IN MEGACYCLES:

Transmitter TS25-3: 2 - 8 crystal-controlled; 3 - 4.5, variable frequency oscillator.

Receiver RS25-3: 2 - 8, crystal-controlled; 3 - 4.5, continuous tuning.

Receiver RS25-4: 2 - 8, crystal-controlled; 0.19 - 0.51, continuous tuning.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, tone.

POWER OUTPUT: Transmitter 25 w (maximum).

POWER REQUIREMENTS: 252 w, (42 amp) 6 v, dc;

252 w, (21 amp) 12 v, dc;

252 w, 110 v, 60 cyc, 1 phase, ac-

#### PHYSICAL CHARACTERISTICS

Radio Set Fisher TS25-3 measures  $64 \times 47 \times 15-7/8$  inches, net weight 180.75 pounds, volume 30 cu ft, 0.75 ship ton. Packed for domestic or export shipment: total weight 195 pounds, total volume 33 cu ft, 0.82 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force

DATE OF THIS SHEET: 26 May 52

AN/MRN-TYPE

SERVICE TYPE NUMBER:

SCR -575

RADIO SET



Radio Set SCR-575 is a complete v-h-f, ground, mobile direction finding, and two-way radio communication set for a-m (voice, cw, and icw) operation in the frequency range of 100 to 156 mc. It is normally used in v-h-f Fighter Control Net Systems for ground-to-air and point-to-point communication.

This radio set operates on four crystal-controlled, preset, push-button selected channels for reception or transmission. In addition to the BC-624 receiver component (part of Radio Set SCR-522-A) there are two Radio Receivers BC-639 which are manually tuned and provide for direction finding as well as for regular communication. One receiver is normally used for stand-by operation.

Antenna Equipment RC-153 is a large manually rotatable, azimuth-calibrated equipment used for communication, and for direction finding by either visual, or aural-null methods. This is mounted on Truck K-53 which carries all the equipment necessary for operation of the radio set (except the power unit which is trailer-drawn).

Relay Unit BC-687 is used for remote control operation over telephone lines.

The power unit normally supplies 4,080 w for all apparatus including heating of the operating compartment in Truck K-53.

For limited emergency operation of the radio equipment only, batteries are available.

### AN/MRN-TYPE

SCR-575 RADIO SET SERVICE TYPE NUMBER

INSTRUCTION LITERATURE: TM 11-227 TO 16-40SCR 575-3

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Air Force

DATE OF THIS SHEET : 26 May 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Truck K-53(with Antenna Equipment RC-153-A)	130 × 96 × 256	13.385.0
1	Trailer K-63 (with Power Unit PE-99, or equal)	72 × 72 × 144	2,860.0
2	Radio Receiver BC-639-A	10-1/2 × 19 × 13-1/2 ×	36.0 each
1	Radio Receiver BC-624-A	$6 \times 15 - 1/2 \times 9$	14.5
1	Radio Transmitter BC-625-A	6 × 15-1/2 × 9	16.25

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: In a Fighter Control Net System at advanced air bases.

INSTALLATION: Ground, mobile.

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

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644; TDQ; TDQ; TDT; ARC Type 12; Wilcox 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.

Transmitter: BC-624-A, 4 preset crystal-controlled channels (Part of SCR-522-A).
BC-625-A, 4 preset crystal-controlled channels (Part of SCR-522-A).
2 BC-639-A continuous tuning.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Transmitter: Voice.

Receiver: Voice, tone, cw.

POWER OUTPUT: Transmitter: 6 w.

Receiver: Maximum 1 w into 600 ohm impedance.

POWER REQUIREMENTS: 4,080 w with heaters ) 110 v, 60 cyc, 3 phase, ac (from PE-99) or

1,080 w without heaters ) 110-120 v, 50/60 cyc, 1 phase, ac (from

commercial source).

Emergency Use: Four 12-v plus two 6-v storage batteries (two 12 v plus one 6 v in use,

two 12 v plus one 6 v in reserve).

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-575 installed in truck weighs 16,312 pounds net, volume 2,272 cu ft, 56.8 ship tons. Packed for either domestic or export shipment: total weight 16,312 pounds, total volume 2,272 cu ft, 56.8 ship tons. Shipped in 1 package both domestic and export.

STATUS: S/Std

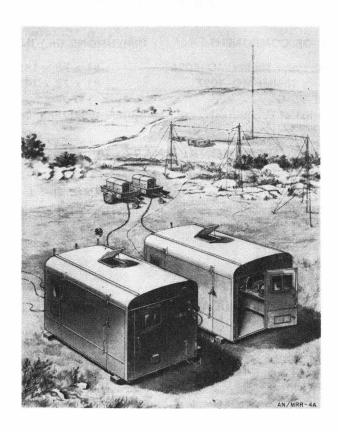
CLASSIFICATION OF EQUIPMENT: Unclassified

AN/MRR-4(

RADIO RECEIVING SET

PREPARING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956



Radio Receiving Set AN/MRR-4( ) is a transportable, voice, cw, and radioteletype receiving station for (1) aural monitoring, (2) magnetic tape recording of broadcasts, either picked up by radio receivers or transmitted over landline, (3) receiving programs of remote origin for direct rebroadcast, (4) receiving programs, or other information by radioteletype circuits, and (5) sending and receiving information by a landline teletypewriter system.

This equipment, consisting of a radio receiving and a radioteletype shelter, normally functions as the receiving terminus for Radio Transmitting Set AN/MRT-5. It includes pushbutton and patch-board facilities that enable rapid connection of system components to the AN/MRT-5 or similar radio stations. The shelters, which house all of the operating components except the power units, include panoramic indicators, a teletypewriter, a perforator transmitter, radio receivers, magnetic tape recorders, telephones, and accessories.

The two shelters are powered by trailer-drawn, 10-kw power units and are readily transported by standard  $6 \times 6$  trucks.

The AN/MRR-4 and AN/MRR-4A are functionally identical and all components are interchangeable.

## AN/MRR-4()

RADIO RECEIVING SET

INSTRUCTION LITERATURE: TM 11-646

USING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

#### MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)	
1	Radio Teletypewriter Shelter MO-4026	81 × 78 × 145	4,863	
1	Radio Receiving Shelter MO-4027	81 × 78 × 145	4,215	
2	Power Unit PE-95-G			
	(For complete list of components, see appropriate supply manuals.)			

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Normally used with Radio Transmitting Set AN/MRT-5 to form a complete receiving

and transmitting station.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Extended.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: .1 to .4, 1.35 to 29.4 in six bands (Hammarlund rcvr Mod SP-600-JLX); .54 to 54 in six bands (R-274A/FRR).

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, tone, voice, radioteletype.

**POWER OUTPUT:** 

POWER REQUIREMENTS: 130 w, 115 v, 60 cy ac (except for int bat.-operated tel sys).

#### PHYSICAL CHARACTERISTICS

DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
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8.898

DOMESTIC PACK:

NET:

EXPORT PACK: 8,898

81 x 78 x 145 (ea shelter)

STATUS: T/Std

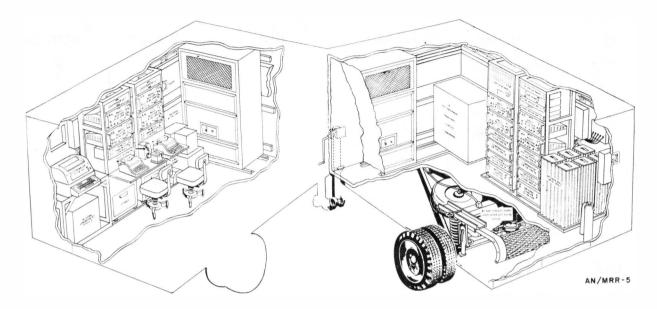
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

### AN/MRR-5

RECEIVING SET, RADIO



Radio Receiving Set AN/MRR-5 is a highly mobile, air-transportable equipment capable of operating with other mobile or permanent, comcenters as a portion of a cw, voice, and diversity radioteletype, point-to-point, and ground-to-air communication system.

It is equipped with remote controls for operating Radio Transmitting Set AN/MRT-6, and is capable of operating with Radio Beacon AN/URN-5, Radio Transmitting Set AN/URT-7, and Radio Transmitting Equipment TED-2. It normally is used with Teletypewriter Central Office AN/MGC-2, Radio Set AN/MRC-41, and Radio Transmitting Set AN/MRT-6 (Project Four wheels).

All operating components are installed in and operated from Van Trailer V-83/M.

Power is supplied by Trailer-Mounted Diesel Engine Generator Set Type MB-5 (not supplied as part of this set).

### AN/MRR-5

**RECEIVING SET, RADIO** 

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
3	Antenna Group AN/GRA-4		
2	Antenna Coupler CU-168/FRR		
8	Radio Receiver R-388/URR		
1	Teletypewriter TT-70A/UG		
2	Frequency Shift Converter-Comparator NR-174		
2	Remote transmitter controls		

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Operated by AACS at such commands as TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

**APPROXIMATE RANGE (IN MILES):** 

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: .5 to 30.5 (continuous coverage in 30 tuning steps).

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, tone, voice, fsk.

POWER OUTPUT: 1.5 w (4 or 600 ohms).

POWER REQUIREMENTS: 20 to 30 kw, 120/240 v, 50/60 cy, 1 ph ac.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES	
NET:	150 × 96 × 138		1,150	28.75		
DOMESTIC PACK:			1,150	28.75	1	
EXPORT PACK:		8,000	1,150	28.75	1	

STATUS: T/Std

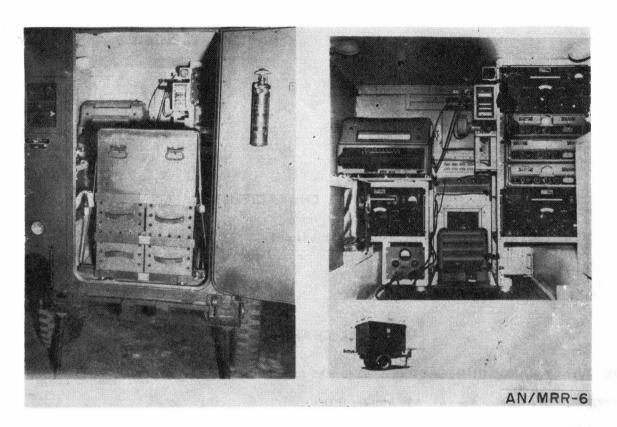
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

### AN/MRR-6

RECEIVING SET, RADIO



Radio Receiving Set AN/MRR-6 is a highly mobile, air-transportable set used for reception and printing of radioteletype signals transmitted by the frequency-shift method, as well as voice and cw signals. It is used in short duration (up to 3 months) emergency support of AACS air operations.

This equipment includes remote controls for operation of Radio Transmitting Set AN/MRT-7 and can receive radioteletype signals through Frequency Shift Converter-Comparator, Northern Radio Type 174 operating with Teletypewriter TT-70/UG.

It is usually operated with Air Traffic Control Set AN/MRN-15, Radio Transmitting Set AN/MRT-7, and Facsimile Set AN/MXR-1 (when part of Project Two Wheels).

All operating components are installed in and operated from a trailer van.

Power is supplied by Trailer Mounted Diesel Engine Generator Set MB-6 (not supplied as part of this set).

### AN/MRR-6

**RECEIVING SET, RADIO** 

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

#### MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (!b)
4	Mast AB-86/GRA-4		
3	Radio Receiver R-388/URR		
1	Rectifier Power Unit RA-133		
1	Teletypewriter TT-70/UG		
1	Frequency Shift Converter-Comparator NR-174		
1	Shelter w/trailer mounting chassis		

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Emergency use for AACS operations at TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Long range.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 30.5 (continuous coverage in 30 tuning steps).

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, tone, voice, fsk.

POWER OUTPUT: 1.5 w, 600 ohms.

POWER REQUIREMENTS: 5 kw, 240 v, 50/63 cy, 3-wire, 1 ph ac.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) C EQUIPMENT (INSTALLED)	TOTAL DF WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	120 × 80 × 82	3,000 (approx)	341.6	8.54	
DOMESTIC PACK:			341.6	8.54	1
EXPORT PACK:		3,200 (approx)	341.6	8.54	1

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STATUS: Standard

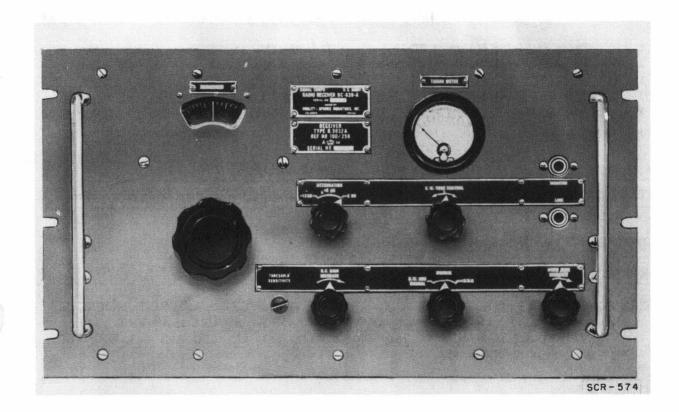
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 7 Jun 52 AN/MRR-TYPE

SERVICE TYPE NUMBER:

SCR-574

RADIO SET



Radio Set SCR-574 is a mobile, v-h-f (voice or tone) radio receiving equipment for ground-to-air and point-to-point communication built into Truck K-53 and Truck K-69.

Two Radio Receivers BC-639, (illustrated above) provide dual reception on any frequency from 100 to 156 mc.

This equipment can be used with Radio Set SCR-573 to comprise a two-way v-h-f, Fighter Control Net System.

The Antenna system consists of Antenna AN-86, Antenna Equipment RC-81, and associated 72-ohm coaxial cable.

It operates on power furnished by Power Unit PE-99, or from a 115 v 50/60-cyc source of commercial ac. Requires 4.5 kva with electric heaters in operation, 1.4 kva without these heaters.

# AN/MRR-TYPE

SCR-574
RADIO SET

:SERVICE TYPE NUMBER

INSTRUCTION LITERATURE: TM-11-227 TO 16-40SCR574-2

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 7 Jun 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiving Equipment RC-72-A	72 × 20-1/2 × 13-1/4	302
1	Radio Receiving Equipment RC-155-A	72 × 20-1/4 × 13-1/4	258
1	Truck K-53	130 × 96 × 256	13. 385
1	Trailer K-63 with PE-99-A	72 × 72 × 114	2,860
1	Antenna AN-86	25 cu ft (Packaged)	711.3

#### **OPERATIONAL CHARACTERISTICS**

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

with AFR 100-17.

INSTALLATION: Ground, mobile, vehicular.

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

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36: AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 (continuously tuneable).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone or cw.

POWER OUTPUT: 3 w (maximum) into 600 ohm impedance, however, satisfactory output can be had

at any impedance between 200 and 20,000 ohm.

POWER REQUIREMENTS: 4.5 kva with heaters ) 100 v, 50/60 cyc, 3 phase, ac,

1.5 kva without heaters ) (from PE-99).

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-574-A, installed in truck weighs 17,548 pounds net, volume 2,275 cu ft, 8.75 ship tons. Packed for either domestic or export shipment: total weight 17,548 pounds, total volume 2,275 cu ft, 8.75 ship tons. Shipped in 2 packages both domestic and export.

STATUS: S/Std

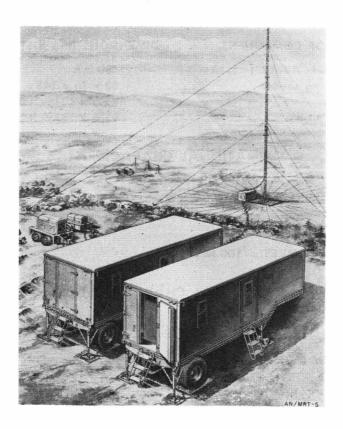
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 21 June 1958

# AN/MRT-5()

**RADIO TRANSMITTING SET** 



Radio Transmitting Set AN/MRT-5( ) is a transportable radio station that provides complete radio transmission facilities in the standard am broadcast band. This equipment, when used with Radio Receiving Set AN/MRR-4( ), is a complete radio station for dissemination of information for entertainment and psychological warfare services.

All operating components, with the exception of the two power units and the antennas, are housed in the transmitting trailer, the studio trailer, and the antenna tuning shelter. The transmitting trailer supplies facilities for generating, amplifying, and transmitting the rf carrier; and the studio trailer, for all local programming. The antenna tuning shelter provides for tuning the antenna and feeding the modulated rf to the mast antenna or the balloon-carried antenna. Provisions are made for transmitting programs originated at a remote point.

Main power for the transmitting trailer and the antenna tuning shelter is furnished by Power Unit PE-85-M; and for the studio trailer, by Power Unit PE-95-G.

The AN/MRT-5 and AN/MRT-5A differ somewhat; a variable-frequency oscillator and Radio Receiver R-388/URR are added to the transmitting trailer of the A model.

# AN/MRT-5()

**RADIO TRANSMITTING SET** 

INSTRUCTION LITERATURE: TM 11-643

USING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna Tower AB-127( )/FR	180 ft h	
1	Antenna tuning shelter	82 x 78 x 145	
1	Studio trailer	95½ × 131¾ × 318	
1	Transmitting trailer	95½ x 131¾ x 318	

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Psychological warfare services.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 100 to 250.

### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 1.6.

TYPE MODULATION: Am (A3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 5 kw.

POWER REQUIREMENTS: 30 w, 115 v, 60 cy ac (R-274/FRR); 85 w, 115/230 v, 45/70 cy ac (R-388/

URR); 15.5 kw, 230 v, 60 cy, 3 ph ac (xmtr).

# PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	<b>PACKAGES</b>

**NET:** 

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: T/Std

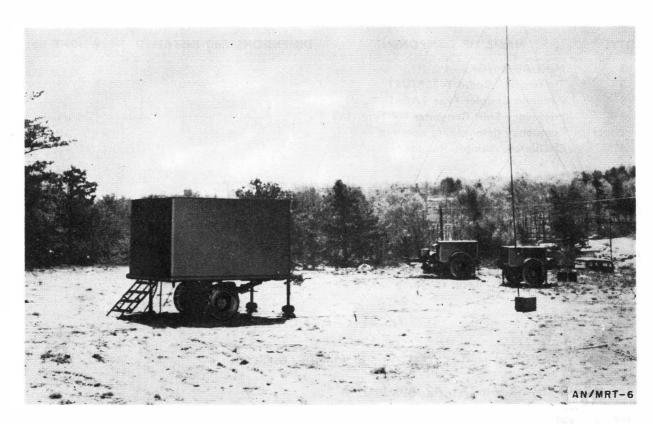
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 11 June 1956

# AN/MRT-6

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/MRT-6 is a mobile, air-transportable, long-range, hf equipment capable of operating in conjunction with other mobile or permanent comcenters in a portion of a cw, voice, and diversity radioteletype, point-to-point, worldwide communication system.

Various components of this equipment may be remotely controlled by Radio Receiving Set AN/MRR-5.

It is normally operated with Teletypewriter Central Office AN/MGC-2, Radio Set AN/MRC-41, and Radio Receiving Set AN/MRR-5 (as part of Project Four Wheels) and is installed in and operated from Van Trailer V-83/M.

Power is supplied by Trailer Mounted Diesel Engine Generator Set Type MB-5 (not supplied as part of this set).

# AN/MRT-6

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 11 June 1956

## **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
3	Mast AB-86/GRA-4		
3	Transmitter, Radio T-368/URT		
3	Antenna Coupler Type TAC-1		
2	Frequency Shift Converter NR Type 152		
2 sets	Frequency determining network		
3	Oscillator, variable-frequency		

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Operated by AACS at such commands as TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Long range.

### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 1.5 to 20 in five bands.

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, tone, voice, fsk.

POWER OUTPUT: 375 w (voice); 475 w (cw).

POWER REQUIREMENTS: 20 to 30 kw, 120/240 v, 50/60 cy, 1 ph ac.

## PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	150 × 96 × 138		1,150	28.75	
DOMESTIC PACK:			1,150	28.75	1
EXPORT PACK:	8,	000 (approx)	1,150	28.75	1

STATUS: T/Std

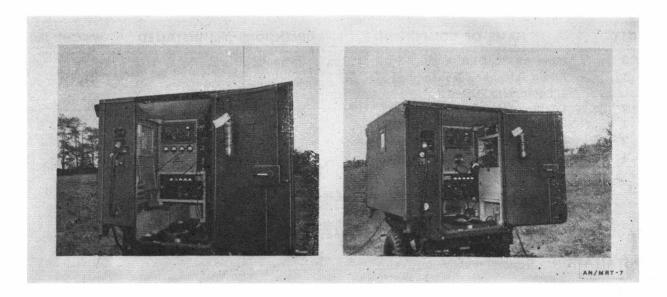
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

# AN/MRT-7

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/MRT-7 is air-transportable, mobile, hf equipment used to transmit voice, frequency-shift telegraph, and If beacon signals. It is suitable for worldwide communication use and in short-duration (3 months) emergency support applications of AACS operations.

This equipment can be operated by remote control from Radio Receiving Set AN/MRR-6. It is used with Air Traffic Control Set AN/MRN-15, Radio Receiving Set AN/MRR-6, and Facsimile Set AN/MXR-1 when part of Project *Two Wheels*.

All operating components are installed in and operated from a trailer van. Power for operation is derived from Trailer-Mounted Diesel Engine Generator Type MB-6 (not a component of this equipment).

# AN/MRT-7

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

### MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
3	Mast AB-86/GRA-4		
1	Radio Telephone Transmitting		
	Equipment TDD-4		
2	Oscillator, Model PMO		
1	Frequency Shift Keyer, Model XFK		
2	Radio Transmitter, CR Model 32–BA–9		
1	Shelter w/trailer mounting chassis		

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Emergency use for AACS operations at TAC, SAC, or ADC.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Long range.

### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .2 to .4; 1.5 to 15.

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, tone, voice, fsk.

POWER OUTPUT: 15 w (A2, A3); 50 w (A2, A3); 75 w (A1, F1).

POWER REQUIREMENTS: 5 kw, 240 v, 50/63 cy, 3-wire, 1 ph ac.

### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) C EQUIPMENT (INSTALLED)	TOTAL OF WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	120 × 80 × 82	3,000 (approx)	341.6	8.54	
DOMESTIC PACK:			341.6	8.54	1
EXPORT PACK:		3,200 (approx)	341.6	8.54	1

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 9 Jun 52 SERVICE TYPE NUMBER:

AN/MRT-TYPE

SCR-573 RADIO SET



Radio Set SCR-573 is a-m or tone-modulated, v-h-f, transmitting equipment for ground-to-air, and point-to-point communication. It is normally operated as mobile equipment from Truck K-53, and Trailer K-63, both of which are supplied. Radio Set SCR-573-A (transmitting station) when used with Radio Set SCR-574-A (receiving station) comprises a two-way, v-h-f Fighter Control Net System.

Two BC-640 transmitters, each operating on one preset, crystal-controlled frequency, provide dual channel transmission.

Equipment can be controlled locally, or by remote control over standard telephone lines from a distance of 60 to 120 miles. The distance between transmitters and receivers should be at least 1/4 mile and not more than two miles, because the transmitters can block out receivers operating in adjacent channels.

Recommended antenna system consists of Antenna AN-86 (76 feet), two Antenna Equipments RC-81, and associated coaxial cable.

Power is normally furnished by Power Unit PE-99 (part of Radio Set SCR-573), or an equivalent source.

Power requirements are 5.5 kva of 110-v, 50/60-cyc, single phase ac (with electric heaters), 2.2 kva (without the electric heaters).

# MRT-TYPE

**SCR-573** RADIO SET **:SERVICE TYPE NUMBER** 

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 9 Jun 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Truck K-53	130 × 96 × 256	13,385
1	Trailer K-63 (with PE-99)	72 × 72 × 144	2,860
2	Radio Transmitter BC-640	72 × 21 × 20	515
1	Control Unit RM-27	$11-3/8 \times 19 \times 10-1/2$	29
1	Antenna AN-86-A	25 cu ft	743
2	Antenna Equipment RC-81-A	12 × 28 × 38	4

### OPERATIONAL CHARACTERISTICS

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

with AFR 100-17.

INSTALLATION: Ground, mobile.

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

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -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: 150 - 156.

2 preset crystal-controlled frequencies (one for each transmitter) providing simultaneous transmission on 2 channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: 50 w, per transmitter.

POWER REQUIREMENTS: 2.5 kva, 110 v, 50/60 cyc, 1 phase, ac, or

7.5 kva, 120 v, 50/60 cyc, 3 phase, ac (from PE-99).

### PHYSICAL CHARACTERISTICS

Radio Set SCR-573-A, installed in truck net weight 17,760 pounds, volume 2,275 cu ft, 8.75 ship tons. Packed for either domestic or export shipment: total weight 17,760 pounds, total volume 2,275 cu ft, 8.75 ship tons. Shipped in 2 packages both domestic and export.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

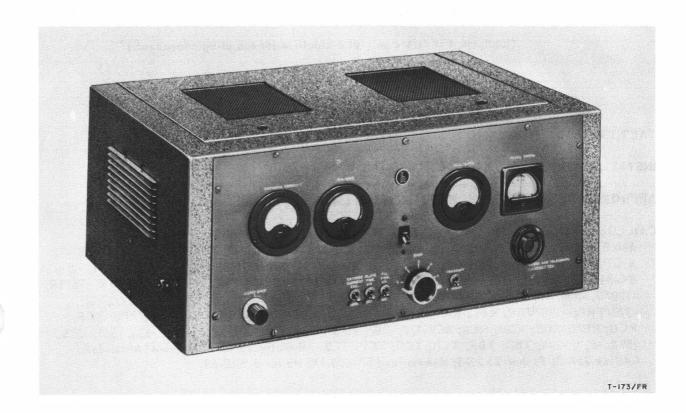
DATE OF THIS SHEET: 31 Jan 52

AN/MRT-TYPE

AN/COMP TYPE NUMBER:

T-173/FR

RADIO TRANSMITTER



Radio Transmitter T-173/FR is a medium power, high-frequency, a-m (voice and cw), transmitting equipment used in point-to-point, long distance communication in fixed plant applications.

This equipment consists essentially of a commercial (Hallicrafter HT 9) table-model transmitter, a microphone, telegraph hand key, and antenna components. It includes a set of crystals by means of which five channels can be preset; there is an individual crystal for each channel. Band switching is accomplished by means of interchangeable plug-in coils and the band switch on the front panel.

This transmitter can be operated with conventional antenna systems.

Operates on 105-125-v ac only.

# MRT-TYPE

T-173/FR

RADIO TRANSMITTER

:AN/COMP TYPE NUMBER

INSTRUCTION LITERATURE: None

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 31 Jan 52

# MAJOR COMPONENTS

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed ground, or mobile.

APPROXIMATE RANGE (IN MILES): Medium and long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2: Fisher TS 25-3: Hammarlund SP-600-JX: National HRO-50.

# TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.7 - 30.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw.

POWER OUTPUT: 100 w cw.

75 w PHONE.

POWER REQUIREMENTS: 500 va, 105 - 125 v, 50/60 cyc, ac.

### PHYSICAL CHARACTERISTICS

Radio Transmitter T-173/FR measures29-1/8 x 12-1/2 x 20-1/2 inches, net weight 120 pounds. Packed for domestic shipment: total weight 125 pounds.

STATUS: Standard

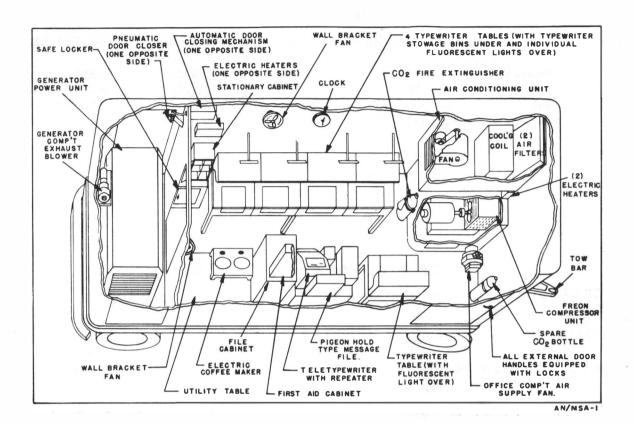
CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 9 May 52

# AN/MSA-1

COMMUNICATIONS CENTRAL OFFICE GROUP



Communications Central Office Group AN/MSA-1 is a fully equipped trailer type van which provides a mobile office that may be towed on land or transported by ship or rail. Its principal function is to provide working facilities for personnel on continuous duty in the coding and decoding of communications.

This equipment consists essentially of a van with built-in wooden furniture, fixed light and heating equipment, air conditioning, power generator systems, and office and communication equipment. Terminals are installed for two teletypewriter and six telephone circuits.

It is equipped with a CO-2 fire protection system.

The electrical power system is designed to furnish an independent source of power for the air conditioning system and for lighting and miscellaneous office use. Wiring is provided for receiving power from an external source or furnishing power to an external load.

INSTRUCTION LITERATURE:

NavShips 91498
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET: 9 May 52

COMMUNICATIONS CENTRAL OFFICE GROUP

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Power Unit PE-95- G	67-1/2 × 38-1/2 × 28-1/4	1,556
1	Teletypewriter Model 19	34-3/8 × 41-5/8 × 23-1/2	Not Available
1	Safe Locker No. 6	Not Available	n n
2	Communication handset	пп	н н
5	Typewriter	ппп	н н

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore communication controls.

INSTALLATION: Ground, mobile.

CAN COMMUNICATE WITH: This is a shelter used to house primary and related communication

apparatus.

## TECHNICAL CHARACTERISTICS

POWER REQUIREMENTS: 10 kw, 120 v, 60 cyc, 1 or 3 phase ac (supplied by Power Unit PE-95-G when external power source is not available).

### PHYSICAL CHARACTERISTICS

Communications Central Office Group AN/MSA-1 measures 245 x 95 x 129 inches, net weight 17,000 pounds, volume 1,500 cu ft, 38 ship tons.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT : Restricted

USING SERVICE: Navy

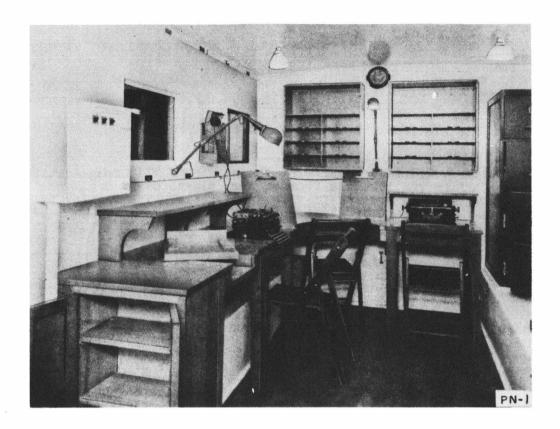
DATE OF THIS SHEET: 9 Jun 52

# AN/MSQ-TYPE

SERVICE TYPE NUMBER:

PN-1 and -2

MOBILE CODING VAN



Mobile Coding Vans PN-1 and -2 are mobile operating shelters used at advanced-base cryptographic, radio receiving, or teletypewriter stations. These vans contain required office furniture, plus telewriter equipment. Provision is made for the installation of desired radio equipment.

In addition to general office equipment these vans are equipped with the following:

PN-1: 5 teletypewriters, 2 Telephones EE-8, 6 coding boards, 2 telephone line terminals, and 1 Power Unit PE-95.

PN-2: 3 Model 15 and 3 Model 19 teletypewriters, 2 Model 14 Typing Reperforators, 2 Telephones EE-8, 3 Teletype Panels TT-23/SG, and 2 Power Units PE-95.

The power units provided are sufficient to operate two Mobile Radio Transmitting and Receiving Equipments MBB (series) as well as the equipment normally installed to these vans.

# AN/MSQ-TYPE

PN-1 and -2

**:SERVICE TYPE NUMBER** 

MOBILE CODING YAN

INSTRUCTION LITERATURE: NavShips 900,099

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE : Navy

DATE OF THIS SHEET: 9 Jun 52

# **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

WEIGHT (LBS)

1

Trailer K-35G\* or

116 x 96 x 309

10.800\*\*\*

Trailer K-32\*\*

124-1/2 x 108 x 318

14,500\*\*\*

\*PN-1.

\*\*PN-2.

\*\*\*Trailer loaded.

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Advanced bases.

INSTALLATION: Ground, mobile.

CAN COMMUNICATE WITH: These are shelters used to house primary and related communication

apparatus.

### TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Af, voice and start-stop d-c (teletypewriter).

TYPE COMMUNICATION CIRCUITS: Teletypewriter, telephone.

POWER REQUIREMENTS: 10 kw, 115 v, 60 cyc, 1 phase. (Normally supplied by the

PE-95 Power Units).

### PHYSICAL CHARACTERISTICS

Mobile Coding Van PN-2 measures  $124-1/2 \times 108 \times 318$  inches, net weight 14,500 pounds, volume 2,428 cu ft, 60.7 ship tons. (See list of Major Components above).

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

AN/MTC-TYPE

SB-100/MTC

CONTROL SWITCHBOARD

PREPARING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

### NO PHOTOGRAPH AVAILABLE

Control Switchboard SB-100/MTC is semiautomatic equipment used for quickly grouping field telephones of a network for alerts, conferences, and instructions. It is usually mounted atop the administrative switchboard.

This equipment, consisting of the switchboard component and a handset, has no means for ringing and signaling.

# AN/MTC-TYPE

SB-100/MTC

CONTROL SWITCHBOARD

INSTRUCTION LITERATURE: TM 11-2133

USING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

### **MAJOR COMPONENTS**

QTY

NAME OF COMPONENT

DIMENSIONS (in.) INSTALLED

WEIGHT (lb)

1

Handset TS-9

9 x 3 x 3

1.75

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

### **TECHNICAL CHARACTERISTICS**

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

**Manually Operated Equipment:** 

Number of line circuits: 14.

POWER REQUIREMENTS: 3 v dc; 24 v, .5 amp dc.

## PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	8 × 17 × 9 <sup>3</sup> / <sub>16</sub>	20	.72		
DOMESTIC PACK:					
EXPORT PACK:		57	3.20		1

STATUS: Std

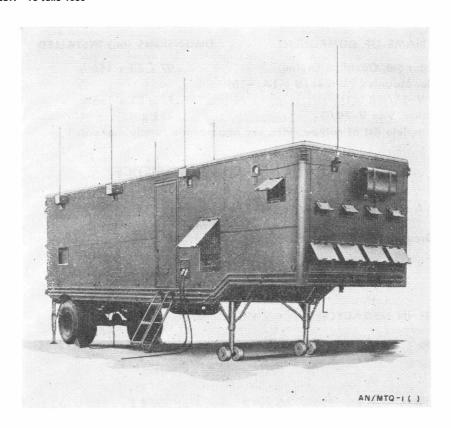
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956



**OPERATIONS CENTER** 



Operations Center AN/MTQ-1( ) is a mobile operations center used as the tactical or battle headquarters of an antiaircraft defense command to collect, evaluate, and disseminate intelligence, and to direct firing when necessary.

This equipment, consisting of three trailers (an equipment trailer and two power trailers), is not designed to operate on the move.

The equipment van contains telephone, teletypewriter, radar repeater, and radio equipment, display boards, air conditioning equipment, and accessory items. Communication equipment is not supplied but facilities for mounting such equipment are provided.

The AN/MTQ-1, AN/MTQ-1A, and AN/MTQ-1B are functionally identical. Each operations center normally requires 220-volt, three-wire, single-phase ac power, but can be operated on 110 volts if the air conditioning equipment is not connected. Power is normally supplied by a trailer-mounted Power Unit PE-95-( ) but commercial power may be substituted, if available.

# AN/MTQ-1(

**OPERATIONS CENTER** 

INSTRUCTION LITERATURE: TM 11-5550

USING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
2	Generator Set, Gasoline Engine, Trailer-Mounted PU-248/U (-1A, -1B)	97 x 83 x 156½	4,500
2	Trailer V-55/MR (-1)	97 x 83 x 165½	4,500
1	Semitrailer, Van V-79/G	$135 \times 95\frac{1}{2} \times 363$	10,500
	(For complete list of components, see ap	propriate supply manuals.)	

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: AA defense (tac or battle hq).

INSTALLATION: Ground, mobile.

### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES:

TYPE MODULATION:

TYPE OF SIGNAL:

POWER REQUIREMENTS: 10 kw, 220 v, 60 cy, 3 wire, 1 ph ac; 4 kw, 110 v, 60 cy, 2 wire, 1 ph ac (w/o air conditioning equip.).

## PHYSICAL CHARACTERISTICS

TOTAL TOTAL

DIMENSIONS (IN INCHES) OF WEIGHT VOLUME SHIP TOTAL NO.

EQUIPMENT (INSTALLED) (Ib) (cu ft) TONS PACKAGES

NET:

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: Standard

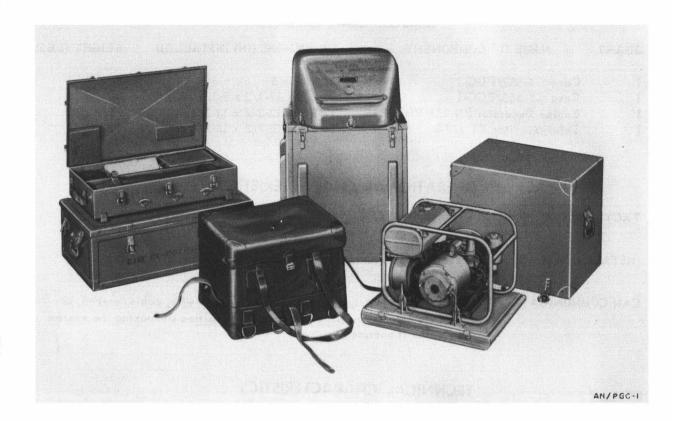
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 17 Jan 52

AN/PGC-1

TELETYPEWRITER SET



Teletypewriter Set AN/PGC-1 is a portable, field teletypewriter station for use at division and higher headquarters.

The equipment consists of a lightweight teletypewriter, a gasoline engine-driven electrical generator, carrying cases, and accessories. The cases are used to mount the equipment during operation in the field. The entire equipment can be transported on QM packboards.

This set is designed to operate in neutral circuits but can be adapted to receive and transmit polar signals. It is usually connected to the remote teletypewriter through a d-c telegraph line, tactical carrier facilities, or a radio channel. Can be arranged for half-duplex, full-duplex, or sending or receiving only operation. Two or more of these sets can be interconnected for operation with each other without using intermediate line modifying equipment.

This teletypewriter is powered by its power unit component or from a conventional power source and operates on 105/125 v dc or 50/60 cyc ac.

CONFIDENTIAL JANAP 161

# AN/PGC-1

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-2235

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 17 Jan 52

### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Case CY-552/PGC-1	27 × 16 × 6	24
1	Case CY-553/PGC-1	$30-1/2 \times 19-1/2 \times 9-1/2$	30
1	Engine-Generator PU-181/PGC-1	$17-1/2 \times 12-3/4 \times 14-3/4$	95
1	Teletypewriter TT-4/TG	24-3/8 × 20-7/8 × 16-3/8	94-1/2

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher units.

INSTALLATION: Ground, airborne, or shipborne.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or

radioteletype standard communication facilities composing the system

in which it operates.

## TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Keyboard operation, remote motor stop, break-in facilities.

OPERATING SPEED: 368.1 opm (60 wpm), gears furnished for 600 opm (100 wpm).

72 characters per line (no weather keyboard available).

MOTOR CHARACTERISTICS: Universal (ac or dc) series type, tuning fork speed adjusting

frequency--180 vps, 3,600 rpm.

POWER REQUIREMENTS: The teletypewriter motor requires approximately 150 w from a 105-125-v

dc or 50/60 cyc source. Power obtained from the power unit supplied or from conventional commercial source. Complete system requires a

115-v d-c source for line current.

## PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/PGC-1 weighs 135 pounds net. Packed for domestic shipment: total weight 243 pounds, total volume 11.45 cu ft. Packed for export shipment: total weight 285 pounds, total volume 19.5 cu ft. Shipped in 3 packages both domestic and export.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

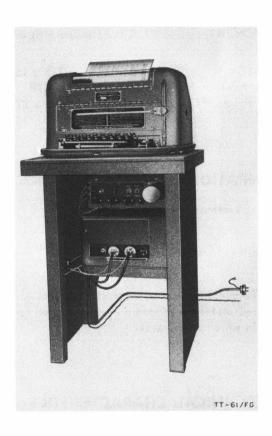
DATE OF THIS SHEET: 12 Feb 52

AN/PGC-TYPE

AN/COMP TYPE NUMBER:

TT-61/FG

TELETYPEWRITER



Teletypewriter TT-61/FG is a transportable, page-printing, standard communication, sending and receiving teletypewriter station equipment used at permanent or semipermanent camps, posts, and stations.

This equipment consists essentially of tactical Teletypewriter TT-4/TG adapted to fixed plant applications. It includes an operating table which contains an adapter unit and a power supply.

It is primarily intended for neutral sending and neutral or polar receiving and can operate on a 60-ma d-c line or a 20-ma d-c v-f facility.

Can be operated on 95/125 v or 190/250 v ac supplied by the power supply component.

# PGC-TYPE

:AN/COMP TYPE NUMBER USING SERVICE : Army

CLASSIFICATION OF EQUIPMENT: Unclassified

INSTRUCTION LITERATURE: TM 11-2236

DATE OF THIS SHEET: 12 Feb 52

TELETYPEWRITER

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter TT-4/TG	24-3/8 × 20-7/8 × 16-3/8	94.50
1	Power Supply PP-604/FG	12 × 8-7/8 × 7-1/8	29.25
1	Teletypewriter Table FN-45/FG	18-5/8 × 21-1/4 × 27	24.75

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Posts, camps, stations, depots.

INSTALLATION: Fixed or semifixed station.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or

radioteletype standard communication facilities composing the system

in which it operates.

## TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Remote motor stop, break-in key, bell, carriage return, line feed, space-repeat.

OPERATING SPEED: 368.1 opm convertible to 404 opm or 600 opm.

MOTOR CHARACTERISTICS: Universal, series-governed motor; 3,600 rpm. 150 w, 115 v, 50 to 60 cyc, one phase, ac or 150 w, 115 v dc.

POWER REQUIREMENTS: For Power Supply PP-604/FG, 95-125 v or 190-250 v ac, 25 to 60 cyc, single phase, maximum demand 45 w with no a-c load.

### PHYSICAL CHARACTERISTICS

Teletypewriter TT-61/FG weighs 99.5 pounds net, volume 11.03 cu ft. Packed for domestic or export shipment: total weight 260 pounds, total volume 23.7 cu ft. Shipped in 3 packages.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Air Force DATE OF THIS SHEET: 8 Jan 52

AN/PIQ-1

**PUBLIC ADDRESS SET** 



Public Address Set AN/PIQ-1 is a portable (man-carried), low-power, short-range, voice amplifying and projecting equipment used by tactical or training units to control or brief groups of personnel within 200 yards.

This equipment consists of an amplifier contained in a carrying case which holds the batteries, loudspeaker and microphone assembly, tripod, and accessories. It can be arranged for operation with the loudspeaker mounted on a handle supporting a lip microphone or it may be mounted on a tripod for stationary use. By means of auxiliary equipment this set can be modified to allow the operator's hand to remain free while using the equipment.

This set can be installed and operated in a vehicle and connected to a larger loudspeaker and can also be operated by a d-c power supply.

Earlier models are designed to hold three rechargeable wet cells in the battery tray; later models can accommodate either wet or dry cells.

# AN/PIQ-1 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Air Force PUBLIC ADDRESS SET INSTRUCTION LITERATURE: TM 11-2566 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Air Force DATE OF THIS SHEET: 8 Jan 52

# MAJOR COMPONENTS

QUANT	HAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Loudspeaker LS-110/PIQ-1	5 × 10-3/4	1.75
1	Microphone M-8/PIQ-1	3-1/8 × 3-1/2 × 10-1/4	0.90
1	Battery Tray MT-352/PIQ-1	$4-3/8 \times 3-1/4 \times 9-1/2$	5.0
1	Amplifier AM-74/PIQ-1	2-1/4 × 8-1/4 × 4	3.4
1	Tripod MT-353/PIQ-1	1-5/8 × 18 × 58	2.25

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Used by oversea theater commands, army field force boards, and school instructors.

INSTALLATION: Portable or vehicular.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound

to groups of personnel.

# **TECHNICAL CHARACTERISTICS**

FACILITIES AFFORDED: Single-channel public address, voices.

TYPE CONTROLS: Volume, push-to-talk switch.

POWER OUT PUT: 1-1/2 w.

POWER REQUIREMENTS: Three Batteries BB-206/U (storage)

10

Three Batteries BA-56 and four Batteries BA-41 (in emergency, BA-30 may be substituted for BA-41).

### PHYSICAL CHARACTERISTICS

Public Address Set AN/PIQ-1 packed for domestic or export shipment: total weight 70 pounds, total volume 2.58 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard

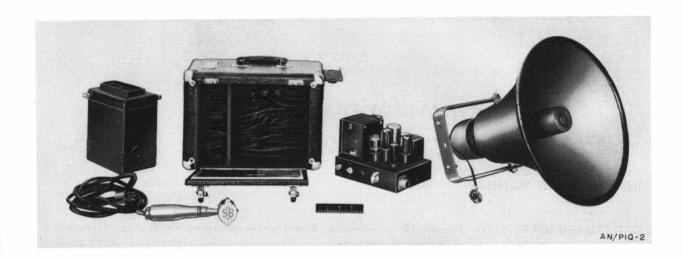
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 8 Jan 52

AN/PIQ-2

PUBLIC ADDRESS SET



Public Address Set AN/PIQ-2 is a portable, medium-power, general purpose sound amplifying and projecting equipment used for beach control purposes during amphibious operations, for control of groups of personnel, and similar tactical applications.

This equipment consists of an audio amplifier, a coaxial type loudspeaker, a hand microphone, and associated accessories.

Operating range is approximately 300 to 400 yards.

It is designed for use primarily where 110 v a-c power is not available. It includes a 6-v storage battery in a specially designed container as a power source.

CONFIDENTIAL

JANAP 161

AN/PIQ-2

INSTRUCTION LITERATURE: None

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 8 Jan 52

PUBLIC ADDRESS SET

# **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

WEIGHT (LBS)

(Information not available).

# OPERATIONAL CHARACTERISTICS

TACTICAL USE: Amphibious operations, controlling crowds, etc.

INSTALLATION: Portable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound

to groups of personnel.

# TECHNICAL CHARACTERISTICS

TYPE CONTROLS: On-off switch and volume control.

POWER OUTPUT: 10 - 14 w.

POWER REQUIREMENTS: 6 v dc.

# PHYSICAL CHARACTERISTICS

Public Address Set AN/PIQ-2 measures  $13-1/4 \times 10-1/8 \times 7-7/8$  inches, net weight 39.5 pounds. Packed for domestic shipment: total weight 50 pounds. Packed for export shipment: total weight 87 pounds.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

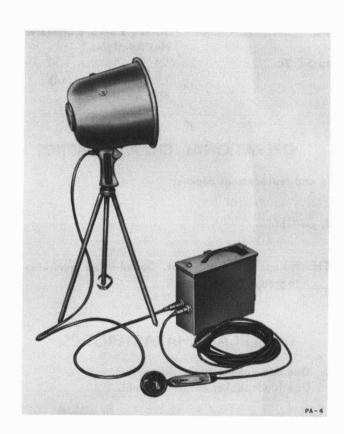
DATE OF THIS SHEET: 30 Jan 52

AN/PIQ-TYPE

SERVICE TYPE NUMBER:

PA-4

PUBLIC ADDRESS EQUIPMENT



Public Address Equipment PA-4 is a portable, field, sound amplifying and projecting equipment used for briefing, training, and morale purposes at schools, posts, camps, and stations or for traffic control and similar applications.

This equipment consists essentially of an audio amplifier, loudspeaker unit and microphone combined, a tripod, and accessories. It can be installed and operated on the ground, in a vehicle, or worn by the operator by means of a harness provided, while the amplifier component is hand-carried.

Uses four flashlight-type A Batteries BA-30 and two B Batteries BA-51.

SERVICE TYPE NUMBER USING SERVICE : Army

PUBLIC ADDRESS EQUIPMENT

INSTRUCTION LITERATURE: TM 11-435

CLASSIFICATION OF EQUIPMENT: Unclassified

DATE OF THIS SHEET: 30 Jan 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier BC-641	8-7/8 × 8-1/4 × 3-3/16	7.0
1	Loudspeaker LS-6	14-1/2 x 10-5/8 diameter	6.0
1	Microphone T-36	Not Available	0.5
1	Shoulder Harness ST-39	π π	0.75
1	Tripod M-230	15 (53-1/2 extended)	1.75
1	Case CS-91	Not Available	Not Available

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Schools and replacement depots.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound

to groups of personnel.

# TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: One microphone input channel.

One loudspeaker output channel.

TYPE CONTROLS: Loudspeaker LS-6: hold-to-talk trigger switch.

Microphone T-36: press-to-talk thumb switch.

Amplifier BC-641: volume control.

POWER OUTPUT: 2 w (normal).

POWER REQUIREMENTS: A batteries: four Batteries BA-30 or equal, plus eight spares.

B batteries: two Batteries BA-51 or equal, plus two spares.

(Batteries not included with PA-4.)

### PHYSICAL CHARACTERISTICS

Public Address Equipment PA-4 packed for export shipment: total weight 38.5 pounds, total volume 2.5 cu ft. Shipped in 1 package.

STATUS: Std

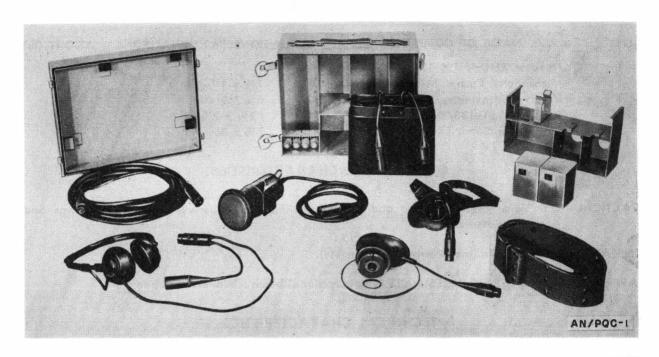
AN/PQC-1

CLASSIFICATION OF EQUIPMENT: Unclassified

UNDERWATER SOUND COMMUNICATION SET

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956



Underwater Sound Communication Set AN/PQC-1 is used by underwater demolition teams for underwater voice communication and vectoring through the water.

It provides for coordination of the various elements of underwater demolition teams during amphibious operations and assists swimmers and associated craft to reach their objectives and to return.

This equipment is a submersible, battery-operated, single-sideband, suppressed-carrier transceiver that includes a sonar receiver-transmitter, transducer, headset, microphone, and batteries.

# AN/PQC-1

**UNDERWATER SOUND COMMUNICATION SET** 

INSTRUCTION LITERATURE:

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Headset, Electrical H-120/PQC-1		
1	Microphone, Carbon M-64/PQC-1	1½ × 1½ dia	
1	Receiver-Transmitter, Sonar RT-352/PQC-	$-1   6 \times 7\frac{1}{2} \times 3$	
1	Belt, Pistol ST-133/U	$42\frac{1}{2} \times 2\frac{1}{4} \text{ w}$	
1	Transducer, Sonar TR-119/PQC-1	7½ x 3½ dia	

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Voice communication and homing facilities for underwater demolition teams and

associated craft.

INSTALLATION: Portable (man-carried, submersible).

APPROXIMATE RANGE (IN MILES): .25 (omnidirectional beam); 1 (directional beam).

### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 8.0875 kc (voice carrier); 9 kc (homing tone).

TYPE MODULATION: Am (ssb suppressed carrier).

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: .6 w (to transducer).

POWER REQUIREMENTS: 1.25 v dc (mercury cell A battery); 135 v dc (B battery w/-7.5-v C battery tap).

### PHYSICAL CHARACTERISTICS

	TOTAL	TOTAL		
DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	<b>PACKAGES</b>

**NET:** 

10.1

(unsubmerged)

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: Std

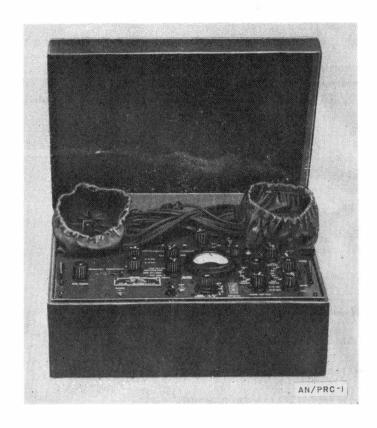
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/PRC-1

**RADIO SET** 



Radio Set AN/PRC-1 is a complete portable radio receiving and transmitting equipment.

It consists essentially of a receiver-transmitter and a rectifier power unit, both contained in one housing.

This equipment receives cw, voice, or tone-modulated signals; it transmits only cw signals.

# AN/PRC-1

**RADIO SET** 

INSTRUCTION LITERATURE: TM 11-638

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

### MAJOR COMPONENTS

QTY

NAME OF COMPONENT

**DIMENSIONS (in.) INSTALLED** 

WEIGHT (Ib)

1 1

Rectifier Power Unit PP-36/PRC-1

Receiver-Transmitter RT-30/PRC-1

 $18 \times 5\frac{1}{2} \times 12$ 

(For complete list of components, see appropriate supply manuals.)

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Special forces organization.

INSTALLATION: Portable.

APPROXIMATE RANGE (IN MILES): 50.

### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 12 in two bands.

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, tone, voice.

POWER OUTPUT: 25 mw (rcvr); 30 mw (min, xmtr).

**POWER REQUIREMENTS:** 

PP-36/PRC-1: 125 w (rcvr), 210 w (xmtr), 115/150/200/220/250 v, 50/60 cy ac.

### PHYSICAL CHARACTERISTICS

TOTAL TOTAL **DIMENSIONS (IN INCHES) OF** WEIGHT VOLUME SHIP TOTAL NO. **EQUIPMENT (INSTALLED)** (lb) (cu ft) TONS **PACKAGES** 

NET:

19 x 6½ x 16

35

**DOMESTIC PACK:** 

**EXPORT PACK:** 

76

1

STATUS: S/Std

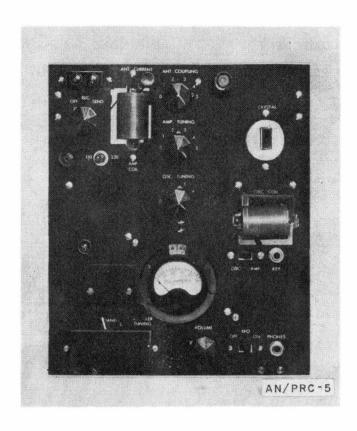
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956



**RADIO SET** 



Radio Set AN/PRC-5 is a portable cw receiving and transmitting equipment, mounted in a luggage-type carrying case, used for shortwave communication over medium distances.

It consists of a transceiver composed of a radiotelegraph receiver and transmitter unit with power supply and includes a telegraph key, headset, and auxiliary items.

# AN/PRC-5

RADIO SET

INSTRUCTION LITERATURE: TM 11-265

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

### **MAJOR COMPONENTS**

QTY NAME OF COMPONENT DIMENSIONS (in.) INSTALLED WEIGHT (Ib)

1 Case, portable luggage-type  $12\frac{1}{4} \times 10\frac{3}{4} \times 8\frac{1}{2}$ 1 Radio receiver and transmitter  $11 \times 10 \times 4\frac{1}{8}$  15 (For complete list of components, see appropriate supply manuals.)

### OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special forces organizations.

INSTALLATION: Portable.

APPROXIMATE RANGE (IN MILES): 100.

### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 16 in four bands (xmtr); 4.5 to 16 in two bands (rcvr).

TYPE MODULATION: Am (A1).

TYPE OF SIGNAL: Cw.

TRANSMITTER POWER OUTPUT: 10 w, 16 w.

POWER REQUIREMENTS: 110/220 v, 50/60 cy, 1 ph ac.

### PHYSICAL CHARACTERISTICS

TOTAL TOTAL

DIMENSIONS (IN INCHES) OF WEIGHT VOLUME SHIP TOTAL NO.

EQUIPMENT (INSTALLED) (Ib) (cu ft) TONS PACKAGES

NET:

 $12\frac{1}{4} \times 10\frac{3}{4} \times 5\frac{1}{2}$  (encased)

25

**DOMESTIC PACK:** 

**EXPORT PACK:** 

STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET:8 Jan 52

AN/PRC-6

**RADIO SET** 



Radio Set AN/PRC-6 is the f-m version of the 'handie-talkie' Radio Set SCR-536 and operates in a single, fixed-frequency channel selected-by use of the appropriate crystal. This is low-power, short-range equipment which operates in the v-h-f range for line-of-sight communication by forward elements of armored, infantry, and artillery units.

This equipment consists of a light, self-contained receiver-transmitter having a built-in microphone and earphone, and provision for a loop antenna which is used for homing applications. Includes provision for connecting a conventional handset.

The normal antenna is a built-in spring-steel ribbon which extends from or retracts into the housing.

Operates from Battery BA-270/U (which is not supplied as part of this set) and includes the necessary crystal unit for the frequency in which the equipment is to operate.

# /PRC-6

RADIO SET

INSTRUCTION LITERATURE: TM 11-296, TM 11-4069 CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52

## MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter, Radio RT-196/PRC-6	14-3/4 × 4-3/4 × 4-1/4	3.5
1	Crystal Unit CR-23/U	11/32 × 23/32 × 1-1/32	-031
1	Handset H-33C/PT	1-1/2 × 8-3/8 × 3-1/4	• 875

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Company and battery level, armored, airborne, and infantry divisions.

INSTALLATION: Portable.

APPROXIMATE RANGE (IN MILES): 1.

CAN COMMUNICATE WITH: AN/GRC-3, -4, -5, -6, -7, -8; AN/PRC-6, -10, -16; AN/URR-10, -12;

AN/VRC-3, -7, -10, -22; AN/VRQ-3; BC-787; MN; R-137/GR; RBK; SCR-300, -607.

### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 47.0 - 55.4 (43 channels).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 0.25 w.

POWER REQUIREMENTS: Battery BA-270/U

Transmitter: 1.5 w (1 amp) 1.5 v.

0.63 w (14 ma) 45 v. 2.52 w (28 ma) 90 v.

Receiver: 440 ma, 1.5 v.

13 ma, 45 v.

# PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-6 weighs 6.5 pounds net, volume 0.2 cu ft. Packed for domestic shipment: total weight 6 pounds (without battery), total volume 0.5 cu ft. Packed for export shipment: total weight 7 pounds, total volume 0.7 cu ft. Shipped in 1 package both domestic and export.

CONFIDENTIAL JANAP 161

STATUS: Standard

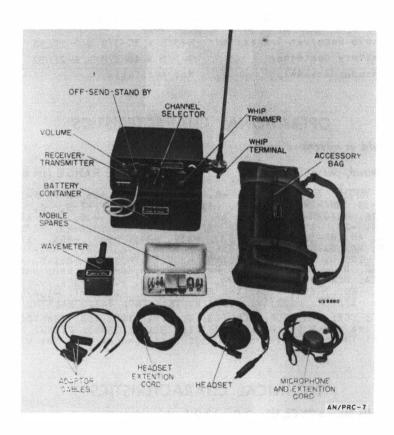
CLASSIFICATION OF EQUIPMENT : Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 9 May 52

AN/PRC-7

RADIO SET



Radio Set AN/PRC-7 is a portable, low-power, general purpose m-f/h-f transmitter-receiver which provides radiotelephone communication for amphibious or field operations.

It has interchangeable plug-in intermediate frequency stages, and five preset crystal-controlled channels.

Button controlled relays are used for instantaneous switching from reception to transmission.

A 10-foot, 10-inch whip-type antenna is supplied which mounts directly on the equipment housing.

# AN/PRC-7 INSTRUCTION LITERATURE: NavShips 91389 CLASSIFICATION OF EQUIPMENT: RESTREETED USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter	4-3/8 × 10-1/8 × 9-27/32	9
1	Battery Container	₩-3/8 × 10-1/8 × 9-27/32	3
1	Antenna Assembly	Not Available	Not Available

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Field or advanced bases.

INSTALLATION: Ground, portable. APPROXIMATE RANGE (IN MILES): 1 mile.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRC-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; 0A-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2; 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D; 99 A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 12.0 in 4 bands.

Band 1: 2.0 - 3.12 Band 3: 4.9 - 7.61 Band 2: 3.12 - 4.9 Band 4: 7.61 - 12.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 0.8 w.

Receiver: 75 mw (max) to headset.

POWER REQUIREMENTS: 10 w for 12 hours of continuous operation (at a ratio equivalent to 1/3 of the time transmitting to 2/3 of the time receiving). Supplied by: 6

Batteries BA-53, 1 Battery BA-54, and 2 Batteries BA-35.

#### PHYSICAL CHARACTERISTICS

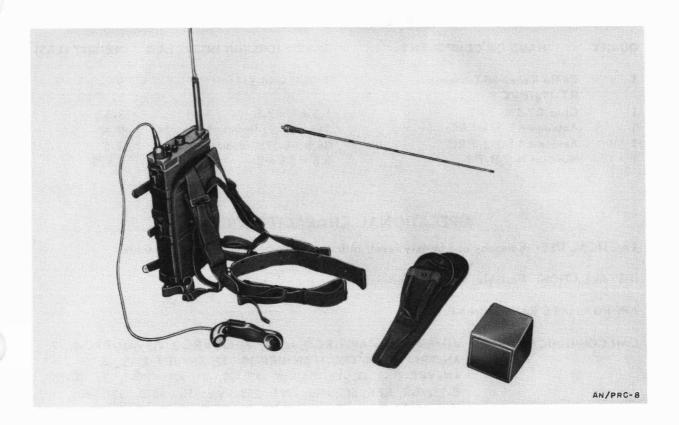
Radio Set AN/PRC-7 measures  $8-3/4 \times 10-1/8 \times 9-27/32$  inches, net weight 24 pounds, volume 5.7 cu ft.

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

AN/PRC-8

RADIO SET



Radio Set AN/PRC-8 is a portable (man-carried), low-power, f-m (voice), radio transmitting and receiving equipment used for v-h-f, short-range, point-to-point, or radio relay communication by company and battery level units operating in the frequency range assigned to armored divisions. It can also be installed in aircraft.

This equipment consists essentially of a radio transmitter-receiver equipped with a carrying harness, antenna components and related accessories.

It can be operated by remote control and adapted for homing use by the addition of appropriate auxiliary components. The set can also be operated in a vehicle.

Two of these sets can be operated back-to-back as an unattended radio relay station.

Power is supplied by one Battery BA-279/U, which is not supplied with the set.

**RADIO SET** 

INSTRUCTION LITERATURE: TM 11-612

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 9 Jan 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)	
1	Radio Receiver-Transmitter RT-174/PRC-8	9.5 × 3 × 10.5	9	
1	Case CY-744/PRC	9.5 × 3 × 9.5	1.5	
1	Antenna AT-271/PRC	$113 \times 0.75$ (diameter)	0.33	
1	Antenna AT-272/PRC	$36.5 \times 0.875$ (diameter)	0.5	
1	Handset H-33B/PT	3.5 × 3.5 × 8	0.875	

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Company and battery level, airborne, infantry, and armored divisions.

INSTALLATION: Portable, vehicular, aircraft.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/FRT-5, -6; AN/GRC-3, -4, -5, -6; AN/MRC-3, -16; AN/PRC-8, -9;

AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/URT-2, -3, -4;

AN/VRC-5, -8, -9, -13, -14, -16, -17, -20, -21; AN/VRQ-1, -2; BC-787,

R-137/GR; RBK; SCR-293, -294, -298, -508, -509, -510, -528, -607,

-608, -609, -610, -619, -628, -678, -808, -828.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 20.0 - 27.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter, 1.2 w.

POWER REQUIREMENTS: Battery BA-279/U (not supplied).

# PHYSICAL CHARACTERISTICS

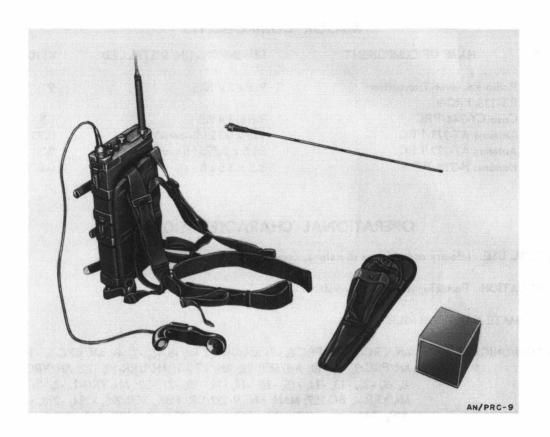
Radio Set AN/PRC-8 weighs 26 pounds net, volume 1.075 cu ft. Packed for domestic shipment: total weight 30 pounds, total volume 3.33 cu ft. Packed for export shipment: total weight 40 pounds, total volume 4.85 cu ft. Shipped in 1 package both domestic and export.

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/PRC-9

**RADIO SET** 



Radio Set AN/PRC-9 is a portable (man-carried), low-power, f-m (voice), radio transmitting and receiving equipment used for v-h-f, short-range, point-to-point, or radio relay communication by company and battery level units operating in the frequency range assigned to artillery units. It can also be installed and operated in aircraft.

This equipment consists essentially of a radio receiver-transmitter equipped with a carrying harness, antenna components, and related accessories.

It can be operated by remote control and adapted for homing use by the addition of appropriate auxiliary components. The set can also be operated in a vehicle.

Two of these sets can be operated back-to-back as an unattended radio relay station.

Power is supplied by one Battery BA-279/U, which is not supplied with the set.

RADIO SET

INSTRUCTION LITERATURE: TM 11-612

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)	
1	Radio Receiver-Transmitter	9.5 × 3 × 10.5	9	
	RT-175/PRC-9			
1	Case CY-744/PRC	9.5 x 3 x 9.5	1.5	
1	Antenna AT-271/PRC	113 × 0.75 (diameter)	0.33	
1	Antenna AT-272/PRC	$36.5 \times 0.875$ (diameter)	0.5	
1	Handset H-33B/PT	3.5 × 3.5× 8	0.875	

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Infantry and airborne divisions, company and battery level.

INSTALLATION: Portable, vehicular, aircraft.

APPROXIMATE RANGE (IN MILES): 5.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/MRC-5, -16;

AN/PRC-8, -9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -5,

-8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/YRQ-1, -2, -3; AN/YRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-293, -294, -298, -509, -510, -528, -607, -608, -609, -610, -619, -628, -678, -808, -828.

# TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter, 1.0 w.

POWER REQUIREMENTS: Battery BA-279/U (not supplied).

#### PHYSICAL CHARACTERISTICS

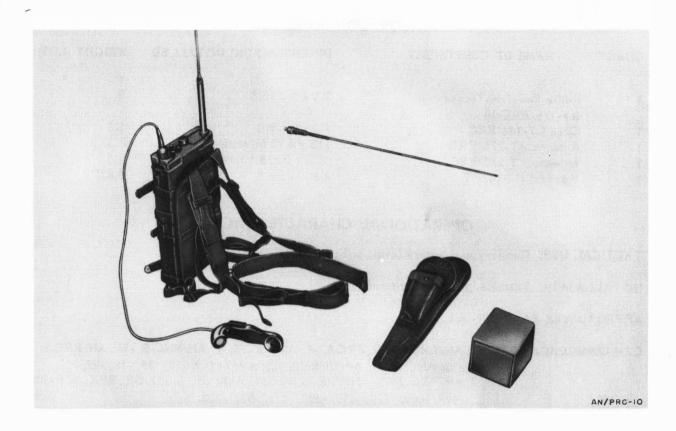
Radio Set AN/PRC-9 weighs 26 pounds net, volume 1.075 cu ft. Packed for domestic shipment: total weight 30 pounds, total volume 3.33 cu ft. Packed for export shipment: total weight 40 pounds, total volume 4.85 cu ft. Shipped in 1 package both domestic and export.

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/PRC-10

RADIO SET



Radio Set AN/PRC-10 is a portable (man-carried), low-power, f-m (voice), radio transmitting and receiving equipment used for v-h-f, short-range, point-to-point, or radio relay communication by company and battery level units operating in the frequency range assigned to infantry divisions. It can also be installed and operated in aircraft.

This equipment consists essentially of a radio receiver-transmitter equipped with a carrying harness, antenna components, and related accessories.

It can be operated by remote control and adapted for homing use by the addition of appropriate auxiliary components. The set can also be operated in a vehicle.

Two of these sets can be operated back-to-back as an unattended radio relay station.

Power is supplied by one Battery BA-279/U, which is not supplied with the set.

# INSTRUCTION LITERATURE: TM 11-612 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-176/PRC-10	9.5 × 3 × 10.5	9
1	Case CY-744/PRC	9.5 × 3 × 9.5	1.5
1	Antenna AT-271/PRC	113 × 0.75 (diameter)	0.33
1	Antenna AT-272/PRC	$36.5 \times 0.875$ (diameter)	0.5
1	Handset H-33B/PT	3.5 × 3.5 × 8	0.875

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Company and battery level, airborne and armored divisions.

INSTALLATION: Portable, vehicular, aircraft.

APPROXIMATE RANGE (IN MILES): 52

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9,

-10; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -10, -15, -18, -22;

AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-607,

-608, -609, -610, -619, -628, -678, -808, -828.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 38.0 - 54.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter, 0.9 w.

POWER REQUIREMENTS: Battery BA-279/U (not supplied).

# PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-10 weighs 26 pounds net, volume 1.075 cu ft. Packed for domestic shipment: total weight 30 pounds, total volume 3.33 cu ft. Packed for export shipment: total weight 40 pounds, total volume 4.85 cu ft. Shipped in 1 package both domestic and export.

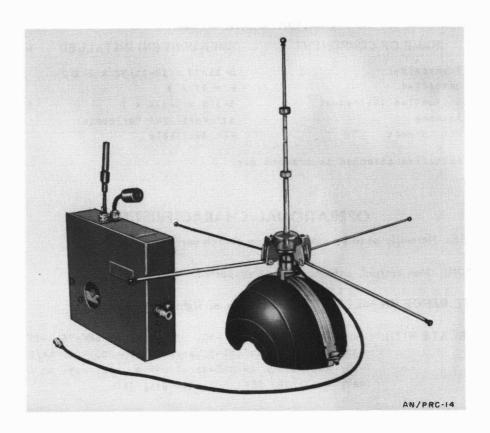
STATUS: Substitute Standard

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 12 May 52

AN/PRC-14

RADIO SET



Radio Set AN/PRC-14 is a portable, a-m and c-w transceiver for point-to-point and ground-to-air communication in the u-h-f range 225 to 400 mc. This equipment is designed to be man-carried and can be operated, while in motion.

A specially designed helmet supports a ground plane antenna.

All batteries, cables and the transceiver are strapped to the operator in such a way as not to impede his normal movements.

Radio Set AN/PRC-14 uses crystal control for transmission on any four preset channels (of 1,751) spaced 100 kc apart.

Equipment has special provisions for push-to-talk operation over field wire, up to a distance of one mile.

ANI/DDC 14	INSTRUCTION LITERATURE: Not Available
AN/PRC-14	CLASSIFICATION OF EQUIPMENT: Restricted
	USING SERVICE: Air Force, Navy
RADIO SET	DATE OF THIS SHEET: 12 May 52

## MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transceiver	8-11/32 × 10-11/32 × 2-1/2	12.50
*	Batteries	9 × 11 × 3	15.00
	Indicating Instrument	1-1/4 × 1-1/4 × 2	125.00
	Antenna	12" Vert. 24" Horizontal	• 37
	Web Harness	Not Available	. 62

<sup>\*</sup> Batteries attached to transceiver

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Normally used by ground rescue search parties.

INSTALLATION: Man carried, antenna, helmet supported.

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

CAN COMMUNICATE WITH: AM/ARC-12, -19, -27, -30, -33, -34; AM/GRC-16, -27, -29, -30, -32; AM/GRR-7; AM/GRT-3; AM/MRC-12, -20, -22; AM/PRC-14, -17, -20; AM/TRC-32; AM/URC-4; AM/URR-9, -12, -13; AM/URT-10; MAR;

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

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 400 mc, 1,751 channels, 4 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 1 w.

POWER REQUIREMENTS: 135 v, dc, 45 v, dc and 6.3 v, dc.

Normally supplied from special battery pack.

# PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-14 weighs 28.74 pounds net.

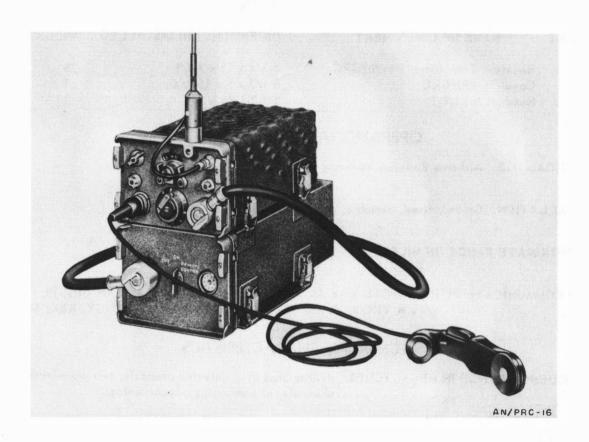
CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 8 Jan 52

AN/PRC-16

RADIO SET



Radio Set AN/PRC-16 is a portable, lightweight, low-power, short-range, battery-operated, f-m (voice) equipment for two-way ground-to-ground or ground-to-air communication in the v-h-f range.

This set consists of the separate, short-range, low-power receiver-transmitter component designated as set 2 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-3 through AN/GRC-8. Antenna system, battery box, handset, and accessories are included.

This equipment can be operated from a remote point over a telephone pair up to a distance of about 2 miles by means of Control Group AN/GRA-6.

# INSTRUCTION LITERATURE: TM 11-288 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army RADIO SET DATE OF THIS SHEET: 8 Jan 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT		DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-70/GRC Case CY-590/GRC	M	4-3/4 × 13 × 7-7/8 5-1/2 × 8 × 15-3/4	25 7
1	Handset H-33/PT		3 × 2-1/16 × 3	2

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Airborne division, company level.

INSTALLATION: Ground, fixed, portable, pack, airborne.

APPROXIMATE RANGE (IN MILES): 1.

CAN COMMUNICATE WITH: AN/GRC-3, -4, -5, -6, -7, -8; AN/PRC-6, -10, -16; AN/URR-10, -12;

AN/VRC-3, -7, -10, -22; AN/VRQ-3; BC-787; R-137/GR; RBK; SCR-607.

# **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 47.0 to 58.4 (115 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter (rf), 50 mw (approximately).

Receiver (af), 75 mw (approximately).

POWER REQUIREMENTS: Five 1.5-v Batteries BA-403/U, one 90-v Battery BA-419/U.

Power drain: 90 v at 80 ma - plates and screens.

6.3 v at 360 ma - filaments. 6.3 v at 160 ma - transmit relay.

### PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-16 measures  $10-1/4 \times 8 \times 15-3/4$  inches, net weight 45.85 pounds, volume 0.97 cut ft. Shipped in 1 package both domestic and export.

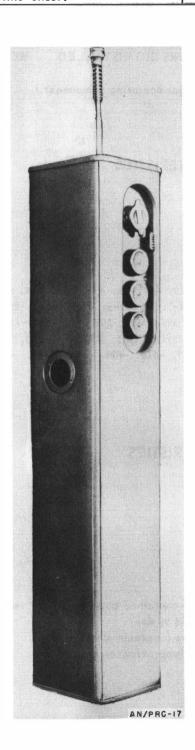
CLASSIFICATION OF EQUIPMENT : Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 23 Jun 52

# AN/PRC-17

**RADIO SET** 



Radio Set AN/PRC-17 is a hand-held, a-m (mcw and voice), emergency search and rescue transmitter-receiver for u-h-f/v-h-f communication between life-rafts and ships, or searching aircraft.

All components of this set are contained in a lightweight, watertight, metal case.

The transmitter operates on either of two crystalcontrolled channels.

The receiver is of the superregenerative type and operates at either of the two frequencies selected for the transmitter.

The equipment may transmit an audio tone which can be keyed at a slow rate, these signals have a slightly greater range than the voice signals.

The range over salt water to aircraft at 2,000-feet altitude is approximately, 15 miles, or 30 miles at an altitude of 5,000 feet or more. The range over land is approximately, half the range over salt water.

RADIO SET

INSTRUCTION LITERATURE:
Manuscript AN/PRC-1 (XN)
CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 23 Jun 52

# **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Life rafts afloat, surface craft or land.

INSTALLATION: Life rafts, ground portable.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -12, -18, -19, -27, -29, -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, -20, -22;
AN/PRC-14, -17, -20; AN/TRC-7, -32; AN/TRQ-1; AN/URC-4; AN/URR-9, -10, -12, -13, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MAY; MBS; R-137/GR, -279/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; ARC Type 12; Wilcox 99A.

# TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 121.5 - 243.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 50 mw.

POWER REQUIREMENTS: 1.575 w; 5.4 - 105 v, dc (from self-contained batteries) "B" voltage

135 v, dc. ''A'' voltage 1.1 → 1.34 v, dc.

Battery life: Transmitting 20 hours (approximate).

Receiving 15 hours (approximate).

#### PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-17 measures  $14-3/4 \times 2-5/8 \times 2-7/8$  inches.

STATUS: Development

CLASSIFICATION OF EQUIPMENT : Remitted

USING SERVICE: Air Force
DATE OF THIS SHEET: 12 May 52

AN/PRC-19

RADIO SET

#### NO PHOTOGRAPH AVAILABLE

Radio Set AN/PRC-19 provides voice communication for survivors, with aircraft in flight, advanced bases, mobile radio vehicles and ground-search parties. Equipment is used by ground-search parties (scouting) of any field service engaged in search for missing, or wrecked, aircraft, or in any other emergency which requires a lightweight, portable, emergency transceiver.

This equipment can be hand-carried, or stowed in aircraft for parachuting to survivors, para-rescue teams, or other ground-rescue parties. It is used where the nature of the terrain (such as mountains, jungle, and heavy snow) prevents the carrying of excess weight, and where the mission requires separation of the various members of the ground-search parties, or other groups.

Radio Set AN/PRC-19 is used in conjunction with h-f, v-h-f, u-h-f pack Radio Set AN/PRC-20, Portable Radio Direction Finder Set AN/PRD-4, and direction finding Radio Set SCR-291.

This set can be operated from batteries, a battery-vibrator combination, or a hand generator.

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# AN/PRC-19

RADIO SET

INSTRUCTION LITERATURE:

Information from RADC CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Air Force
DATE OF THIS SHEET: 12 May 52

## MAJOR COMPONENTS

WEIGHT (LBS) QUANT NAME OF COMPONENT DIMENSIONS (IN) INSTALLED Transceiver  $14 \times 3 \times 3$ 8 each **Batteries** The batteries and antenna Antenna are carried with the transceiver 1 Web Harness case and are included in the weight and size.

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: For use by ground-rescue search parties.

INSTALLATION: Equipment is carried with or dropped to para-rescue teams or ground-rescue parties.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -13; AN/SRT-4; AN/TRC-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; MBS; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -398/URR; RAL; RAO; RAS; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBW; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, -75A-2; Fisher TS 25-3; Hammarl und SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Total frequency range capability: 8.2 - 8.4.

Normal operating frequency: 8.364.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 1 w.

Receiver: Sufficient to operate ear phones with a signal input of better than 5

microvolts.

POWER REQUIREMENTS: Total Wattage: 9.14.

Voltage: 1.25 v, dc, 6.3 v, dc, and 135 v, dc.

Battery Life: Approximately 8 hours.

## PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-19 measures  $3 \times 3 \times 14$  inches, net weight 8 pounds, volume .073 cu ft. Packed for either domestic or export shipment: total weight 10 pounds, total volume 0.1 cu ft. Shipped in 1 package.

STATUS: Not Assigned

CLASSIFICATION OF EQUIPMENT : Restricted

USING SERVICE: Air Force

DATE OF THIS SHEET: 12 May 52

AN/PRC-20

RADIO SET

## NO PHOTOGRAPH AVAILABLE

Radio Set AN/PRC-20 provides voice communication for survivors, with aircraft in flight, advanced bases, mobile radio vehicles, and other ground-search parties. This equipment is used by ground-search parties (scouting) of any field service engaged in search for missing or wrecked aircraft, or for other emergencies which require a lightweight portable emergency transceiver.

It can be hand-carried, or stowed in aircraft, for parachuting to survivors, para-rescue teams, or ground-rescue parties.

Used, primarily, in regions of mountainous terrain, jungle, or where heavy snow, would prevent carrying heavy equipment, and where the mission requires separation of the members of ground-search parties, or other groups.

This radio set is used in conjunction with Radio Set AN/PRC-19, portable radio Direction Finder Set AN/PRD-4, and direction finding Radio Set SCR-291.

The set can be operated from batteries, a battery-vibrator combination or a hand generator.

**RADIO SET** 

INSTRUCTION LITERATURE:
(None Available) RADC
CLASSIFICATION OF EQUIPMENT: RESTATES AND ADDRESS AND AD

USING SERVICE : Air Force

DATE OF THIS SHEET: 12 May 52

## MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transceiver	8 × 10 × 2-3/4	8
1 *	Batteries	8 × 10 × 2-3/4	14
1	Hand Generator	6 × 6 × 6	14
1	Submersion Bag for Transceiver	8-1/2 × 10-1/2 × 3-1/4	2
1	Submersion Bag for Batteries	8-1/2 × 10-1/2 × 3-1/4	2
1	Submersion Bag for Receiver	$6-1/2 \times 6-1/2 \times 6-1/2$	2
	* Batteries in one pack.		

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Normally used by ground-rescue search parties.

**APPROXIMATE RANGE (IN MILES):** 

INSTALLATION: Man-carried.

8.364 mc - 25.

121.5 mc - Line of sight. 243 mc - Line of sight.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -25, -26; AN/ARR-15; AN/ART-13; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; 0A-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; MBS; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR. -320/FRC, -398/URR; RAL; RAO; RAS; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBM; TBM; TBM; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-98 (RCA); COllins 19S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund Sp-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 8.364

121.5 243.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and tone on 8.364 mc.

Voice only on 121.5mc and 243 mc.

POWER OUTPUT: Transmitter: 2 w at 8.364 mc.

1 w at 121.5 mc and 243 mc.

Receiver: 1-1/2 w minimum.

POWER REQUIREMENTS: Total Wattage: 53

Voltages: 1.25 v, 6.3 v and 135 v. Battery Life: Approximately 8 hours.

# PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-20 measures 8  $\times$  10  $\times$  2-3/4 inches (w/o batteries), net weight 22 pounds, volume 0.125 cu ft (w/o batteries).

STATUS: L/Std

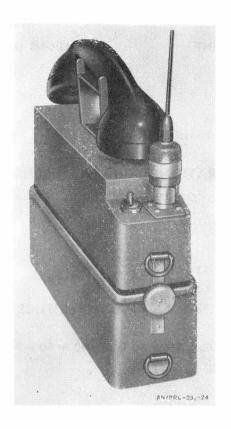
CLASSIFICATION OF EQUIPMENT: Unclassified

AN/PRC-23, -24

RADIO SET

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956



Radio Set AN/PRC-23 (Motorola Model FHTR-1BLL) and Radio Set AN/PRC-24 (Motorola Model FHTR-1BH) are self-contained, short-range, single-frequency, low-power, battery-operated, fm (voice) transmitting and receiving equipment capable of providing two-way communication up to 1.5 miles over average terrain.

Both sets are pretuned to the selected frequency within their respective ranges. Realignment of the individual stages of the transmitter and receiver is required to change the operating frequency of either one.

Operating power is provided in each set by six  $1\frac{1}{2}$ -volt Batteries BA-30 and three  $67\frac{1}{2}$ -volt Batteries BA-51. The batteries provide 6 to 8 hours of continuous operation before replacement is required.

# AN/PRC-23, -24

**RADIO SET** 

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna		
1	Handset		
1	Housing		
1	Power supply chassis		
1	Transmitter-receiver chassis		

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Special.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): 1.5,

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 25 to 30 (-23); 40 to 50 (-24).

TYPE MODULATION: Fm (F2, F3).

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 500 mw.

POWER REQUIREMENTS: 1.3 v, 490 ma dc; 1.3 v, 750 ma dc; 1.23 w (standby) 60 v, 10 ma dc; 5.8 w

(transmit), 120 v, 40 ma dc.

#### PHYSICAL CHARACTERISTICS

DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
12 <sup>5</sup> / <sub>8</sub> × 3 <sup>1</sup> / <sub>8</sub> × 10 (ea set)	9.8	.2		

DOMESTIC PACK:

NET:

**EXPORT PACK:**