

STATUS: S/Std (-8); Std (-8A, -8B)

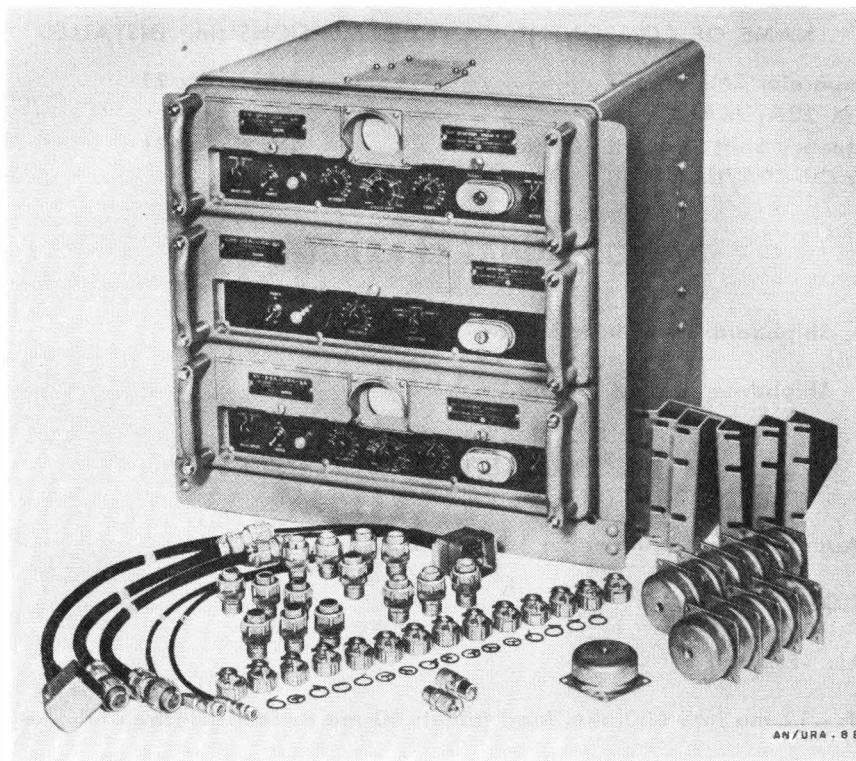
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

AN/URA-8()

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP



Frequency Shift Converter-Comparator Group AN/URA-8() operates from the audio outputs of each of two Radio Receiving Equipments RBA, RBB, RBC, or equivalent, in dual-diversity reception of frequency-shift transmissions, to key dc loop circuits to automatic teletypewriter printers.

This equipment will operate with the radio receivers arranged for either space-diversity or frequency-diversity reception.

The AN/URA-8, AN/URA-8A, and AN/URA-8B are functionally similar. They are issued in a table-type rack; however, the units may be mounted separately on individual sets of shock mounts, or each unit may be adapted for installation on a standard relay rack.

AN/URA-8()

INSTRUCTION LITERATURE: NAVSHIPS 91278; 91490

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP

USING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.)	INSTALLED	WEIGHT (lb)
1	Comparator CM-14/URR or CM-22A/URA-8A	5¼ x 17 x 21		39
2	Frequency Shift Converter CV-60/URR or CV-89A/URA-8A	5¼ x 17 x 21		50

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; ground stations.

TECHNICAL CHARACTERISTICS

FREQUENCY: Audio; w/ctr freq on either 1,000 or 2,550 cy.

TYPE MODULATION: Fm (F1).

TYPE OF SIGNAL: Fsk, tty.

POWER OUTPUT: 12 ma into 600-ohm load (tone); 60 ma tty loop (electron tube keying).

POWER REQUIREMENTS: 155 or 220 w, 105 to 125 v, 50/60 cy, 1 ph ac.

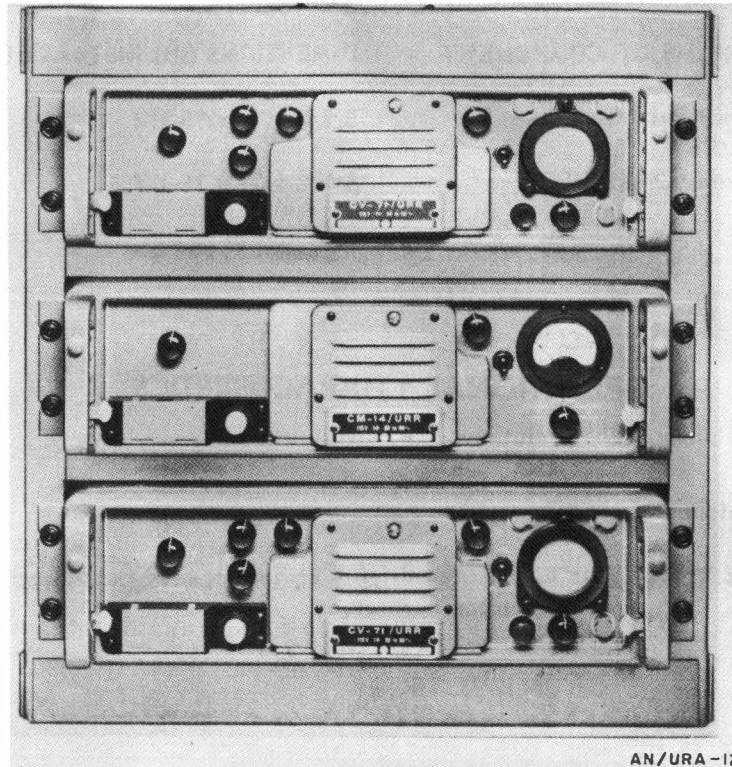
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	15¾ x 17 x 21	111			
DOMESTIC PACK:		401	13		2
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 29 May 52

AN/URA-12

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP



AN/URA-12

Frequency Shift Converter-Comparator Group AN/URA-12 converts frequency-shift-keyed radio-telegraph signals (derived from the i-f circuits of radio receivers) into appropriate signals for the operation of teletypewriters or other similar automatic recording devices. Two radio receivers are used in a diversity arrangement; the comparator selects the stronger signal to control the teletypewriter loop and the keyed tone.

This equipment is used in conjunction with two radio receivers and a standard or a high speed teletypewriter with loop power supply. Any communications receiver with the correct intermediate frequency and good stability may be used with this equipment.

Keying speeds are possible up to 100 dot cps, corresponding to four-channel multiplex (100 wpm each channel).

It is installed in a single cabinet for table mounting, but may be removed for installation in a standard relay rack.

AN/URA-12

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 29 May 52

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Frequency Shift Converter CY-227/URR	5-1/8 x 19 x 15-1/4	Not Available
1	Comparator CM-42/URR	5-1/8 x 19 x 15-1/4	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.19 – 0.21.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency-shift.

POWER OUTPUT: Electron tube keying of 60 ma teletype loop.
Tone: 12 mw into 600 ohm load.

POWER REQUIREMENTS: 240 w, 105-115-125 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Converter-Comparator Group AN/URA-12 measures 22 x 20-1/4 x 14-1/2 inches.

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

AN/URA-TYPE

CV-115/URR

CONVERTER, FREQUENCY SHIFT

NO PHOTOGRAPH AVAILABLE

Frequency Shift Converter CV-115/URR converts frequency-shift signals into dc output pulses that key the energizing loop circuit of an automatic receiving teletypewriter.

This equipment is designed for continuous duty and operates from the if (450 to 510 kc) output of a single radio receiver. It is capable of changing frequency-shift radioteletype signals into neutral dc pulses at speeds as high as 100 dot cycles per second. It has facilities that permit reversing the polarities of the output mark and space signals and for establishing mark output signals for adjusting purposes.

An intermediate control unit is required between the frequency shift converter and the teletypewriter to effect an impedance match between the two units.

This converter is used as a link in a complete radioteletype communication system. In addition to the CV-115/URR, a typical system includes a teletypewriter, a frequency-shift keyer, a radio transmitter, an antenna, a control unit and a teletypewriter printer.

AN/URA-TYPE

INSTRUCTION LITERATURE: TM 11-5085

CV-115/URR

USING SERVICE: USA

CONVERTER, FREQUENCY SHIFT

DATE OF THIS SHEET: 28 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: Fixed plant.

INSTALLATION: Ground, fixed or mobile station.

TECHNICAL CHARACTERISTICS

IF INPUT FROM RECEIVER: 450 to 510 kc.

SIGNAL INPUT VOLTAGE: 100 uv (min).

INPUT FREQUENCY-SHIFT RANGE: 150 to 1,000 cy.

INPUT IMPEDANCE: 50 ohms.

CONTROLS: POWER ON-OFF; AFC ON-OFF; AFC SHIFT ADJUSTMENT; AFC THRESHOLD LEVEL adjustment; DRIFT INDICATOR; AFC-XTAL-MARK HOLD; AFC INDICATOR; signal input meter; discriminator meter.

POWER REQUIREMENTS: 110 w, 115 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:	7 $\frac{3}{8}$ x 13 $\frac{1}{8}$ x 9	39	.5		
DOMESTIC PACK:					
EXPORT PACK:		43	1.95		1

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

AN/URA-TYPE

CV-116/URR

CONVERTER, FREQUENCY SHIFT

Frequency Shift Converter CV-116/URR changes fsk signals into dc pulses to key the loop circuit of automatic teletypewriters that operate from the if output of one or two radio receivers arranged in either space or frequency diversity.

This equipment consists of the converter unit, cables, and accessories.

The converter unit is designed for continuous duty and is used as an operating link in a complete radio-teletype communication system. In addition to the CV-116/URR, a typical system consists of a teletypewriter, a control unit, a frequency-shift keyer, a radio transmitter, two radio receivers, two antennas (one receiving and one transmitting), and a teletypewriter.

This equipment is used with such sets as Radio Receiving Set AN/FRR-38.

AN/URA-TYPE

CV-116/URR

CONVERTER, FREQUENCY SHIFT

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Cord CG-409A/U	72 lg	.3
1	Cable Assembly, Power Electrical CX-2491/U	72 lg	1.1
1	Frequency-shift converter unit	8 ³ / ₄ x 17 x 19	65

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 100 dot cy.

POWER REQUIREMENTS: 200 w, 115 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

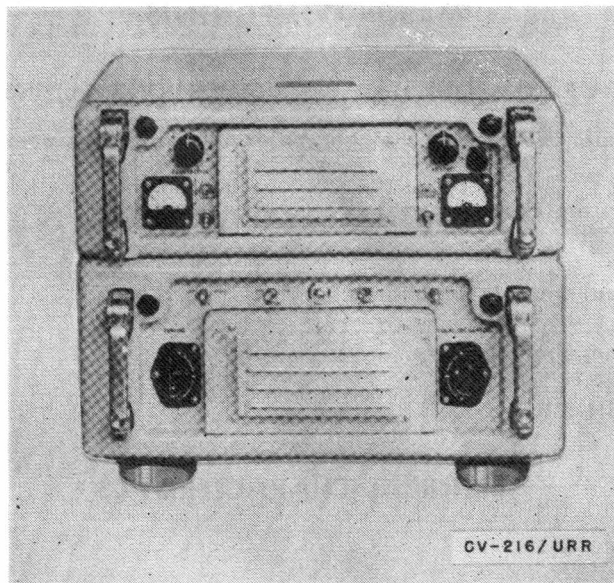
	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	8 ³ / ₄ x 17 x 19	69	1.6		
DOMESTIC PACK:		110	4.13		1
EXPORT PACK:					

STATUS: S/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

AN/JURA-TYPE**CV-216/URR****CONVERTER, SINGLE SIDEBAND**

Single Sideband Converter CV-216/URR is an equipment that can be connected to a superheterodyne communication receiver to reproduce the audio intelligence contained in one sideband of a single, or double, sideband transmission.

This equipment, attached to a Navy general purpose receiver, can provide the following types of reception: (a) one sideband of tone-modulated signal; (b) one sideband only of conventional double sideband am signals having any degree of modulation to 100 percent; (c) one sideband only of double sideband phase-modulated signals with any degree of phase modulation up to one radian; (d) one sideband only of a single sideband suppressed carrier transmission having any degree of carrier suppression from full carrier to a level 26 db below that of full carrier.

AN/URA-TYPE

CV-216/URR

CONVERTER, SINGLE SIDEBAND

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
(Equipment consists of a single major operating component.)			

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; shore stations.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 200 kc.

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

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT:

POWER REQUIREMENTS: 105/115/125 v, 50/60 cy, 1 ph ac (self-contained full-wave rect).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	13 ³ / ₄ x 17 ¹ / ₈ x 17 ⁵ / ₁₆	120	2.5		
DOMESTIC PACK:		170	8.65		1
EXPORT PACK:					

STATUS: Substitute Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 9 Jun 52

AN/URA-TYPE

SERVICE TYPE NUMBER: RBV, RBV-1
 PANORAMIC RADIO ADAPTOR



Panoramic Radio Adaptors RBV and RBV-1 are used for examination of r-f signals when connected to suitable radio receiving equipment. They present, as vertical deflections on a cathode ray tube, all signals receivable within a band which extends 0.05 mc on either side of the frequency to which the companion receivers are tuned.

This equipment permits determination of the strength, character, modulation, and frequency of received signals.

The companion receiver must be of the superheterodyne type having a 0.4 mc intermediate frequency, such as Radio Receiving Equipment RBC.

Panoramic Adaptor Unit CLP-10335, or equal is required to convert the receiver to panoramic operation.

AN/URA-TYPE	INSTRUCTION LITERATURE: NavShips 900,288; 900,501
	CLASSIFICATION OF EQUIPMENT: Unclassified
RBV, RBV-1	:SERVICE TYPE NUMBER
PANORAMIC RADIO ADAPTOR	USING SERVICE : Navy DATE OF THIS SHEET : 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Panoramic Radio Adaptor		
	*CDN-55089 or	7-1/4 x 13 x 13-1/4	46
	**CDN-55089-A	8-3/4 x 13-1/2 x 15	44
	*RBV.		
	**RBV-1.		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: Operates in conjunction with primary radio receiving equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Input: 0.4 mc.
Sweep frequency: ± 0.050 .

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, mcw, voice, frequency shift keying, pulse.

POWER REQUIREMENTS: 60 w, 115/230 v, 50/70 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Panoramic Radio Adaptors RBV, RBV-1, measure 8-3/4 x 13-1/2 x 15 inches. Packed for domestic shipment: total weight 151 pounds, total volume 10.4 cu ft. Shipped in 1 package.

STATUS: Selected Minor Item

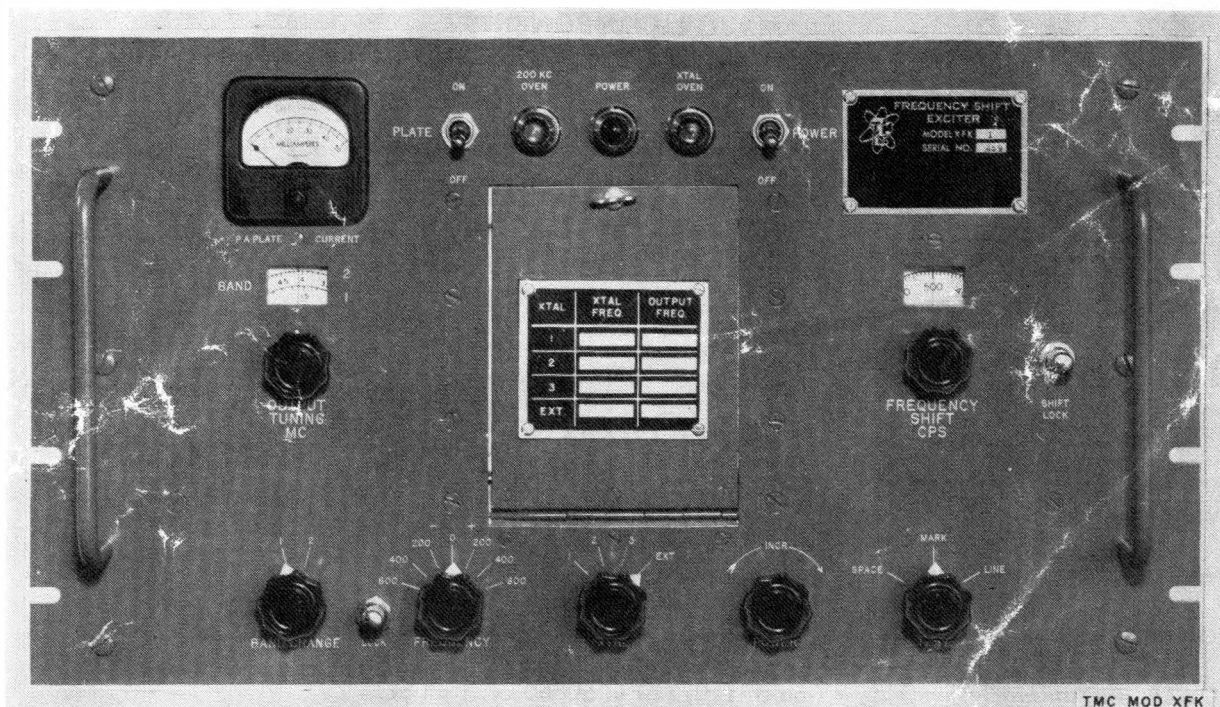
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/URA-TYPECOMMERCIAL TYPE NUMBER: TECHNICAL MATERIEL
CORPORATION MODEL XFK

FREQUENCY SHIFT EXCITER



Technical Materiel Corporation Frequency Shift Exciter Model XFK replaces the crystal oscillator in a transmitter and provides mark and space carrier-shift transmission of teleprinter, telegraph, fm telephone, facsimile, or telephoto signals.

This equipment is a high stability, self-contained rf oscillator whose frequency is shifted in accordance with audio or pulsed signals. Carrier shift, adjustable up to 1,000 cycles is available, either linear with applied voltage or independent of applied voltage variations. Three preset crystal frequencies, or an external rf source, may be selected by a front panel control.

The exciter may be keyed by a contact closing to ground, polar or neutral positive teletypewriter signals, or a linear input (30,000-ohm impedance) source.

Maximum keying speed is 1,000 wpm. Output power is adjustable to 3 watts in the frequency range 1 to 6.9 mc. Rf output impedance is 50 to 70 ohms.

AN/URA-TYPE

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

TECHNICAL: COMMERCIAL TYPE NUMBER MATERIEL
CORPORATION MODEL XFK

FREQUENCY SHIFT EXCITER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.)	INSTALLED	WEIGHT (lb)
(Equipment consists of a single major operating component.)				

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Fm (F0, F1, F2, F3, F4).

TYPE OF COMMUNICATION CIRCUITS: Conventional wire or rad.

CONTROLS: Primary power; plate power; output tuning; crystal or external oscillator selector.

POWER REQUIREMENTS: 180 w (max), 110/220 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

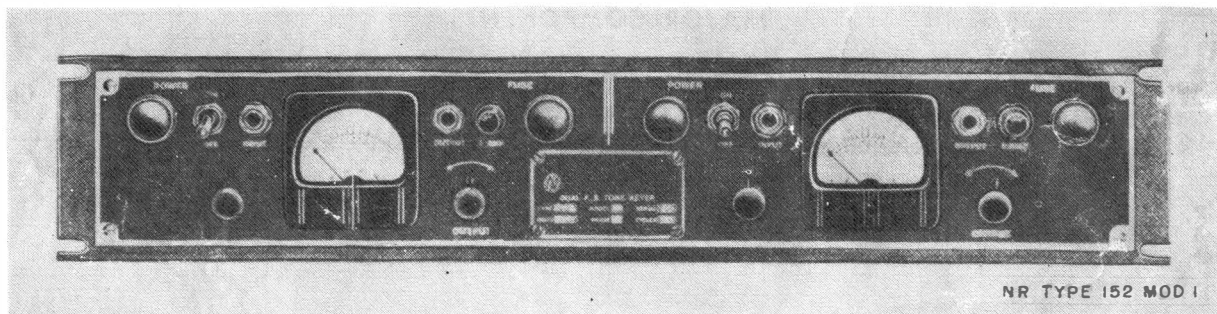
	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	10½ x 19 x 16	40	2		
DOMESTIC PACK:		120	12		1
EXPORT PACK:		133	12		1

STATUS: A/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/URA-TYPECOMMERCIAL TYPE NUMBER: NORTHERN
RADIO TYPE 152 MODEL 1**DUAL FREQUENCY-SHIFT TONE CONVERTER**

Northern Radio Dual Frequency-Shift Tone Converter Type 152 Model 1 is used as receiving terminal equipment of a multichannel communication system for teleprinter, telegraph, or telemetering operation over radio, microwave, or metallic circuits. The mark and space audio tones that comprise the signal input to the converter are utilized to produce dc signals at the converter's output.

This equipment consists of two completely separate frequency-shift telegraph receivers mounted on one standard rack panel. Each of the two converters is completely self-contained, including its own power supply, and will operate on any standard tone channel as selected by a Frequency Determining Network Type 152Z().

It is designed for use in a frequency division multiplex telegraph system. Such a system is one in which the simultaneous transmission and/or reception of more than one message over one line (pair of wires) is made possible by confining each message to a limited and separate portion of the audio spectrum.

When operated with an associated Dual Frequency-Shift Tone Keyer Type 153 Model 1, a complete multichannel frequency-shift tone-carrier system is obtained.

AN/URA-TYPE

INSTRUCTION LITERATURE: TO 31S1-4-1-()

USING SERVICE: USAF

NORTHERN: COMMERCIAL TYPE NUMBER
RADIO TYPE 152 MODEL 1

DATE OF THIS SHEET: 12 June 1956

DUAL FREQUENCY-SHIFT TONE CONVERTER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Frequency Determining Network Type 152Z()	2 $\frac{7}{8}$ x 8 $\frac{1}{4}$ x 3 $\frac{1}{4}$	3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Freq-shift audio tones.

TYPE OF COMMUNICATION CIRCUITS: Multichan wire and rad.

CONTROLS: Power on-off; sense; output.

POWER REQUIREMENTS: 40 w, 110/220 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:	3 $\frac{1}{2}$ x 19 x 15	28	.57		
DOMESTIC PACK:					1
EXPORT PACK:					1

STATUS: A/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

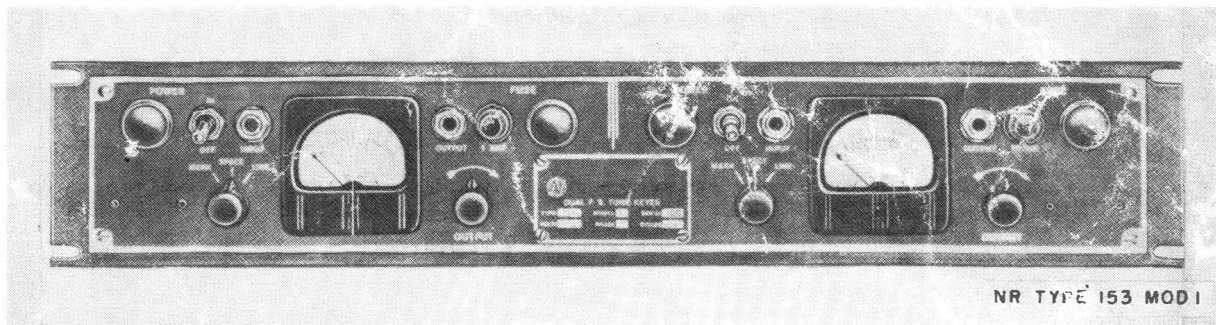
PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

ANJURA-TYPE

COMMERCIAL TYPE NUMBER: NORTHERN
RADIO TYPE 153 MODEL 1

DUAL FREQUENCY-SHIFT TONE KEYS



Northern Radio Dual Frequency-Shift Tone Keyer Type 153 Model 1 is used as the transmitting terminal of a multichannel communication system for telegraph, teleprinter, or telemetering operation over radio, microwave, or metallic circuits. The pulsed input signals are converted to frequency-shifted audio tones.

This equipment provides multiplexing capabilities for teletypewriter or telemetering facilities. By the use of 6 dual frequency-shift tone keyers, up to 12 teletypewriter signals can be multiplexed in a single voice channel.

It consists of two completely separate frequency-shift telegraph transmitters. Each of the two tone keyers is self-contained and operates in any of the standard tone channels. For teleprinter or telegraph operation the channel separation of the tones is usually 170 cycles and the keying speed does not usually exceed 100 wpm. The tone keyer may be keyed by one of the following sources: (1) dc current pulses, (2) dc voltage pulses, or (3) relay contacts.

When used with associated Dual Frequency-Shift Tone Converter Type 152 Model 1, a complete multichannel frequency-shift tone carrier system is obtained.

The output impedance is 600 ohms, unbalanced, and the output level is adjustable to $+3$ dbm.

INSTRUCTION LITERATURE: TO 31S1-4-1-()

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/URA-TYPENORTHERN: COMMERCIAL TYPE NUMBER
RADIO TYPE 153 MODEL 1

DUAL FREQUENCY-SHIFT TONE KEYS

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Frequency Determining Network Type 153Z()	2 $\frac{7}{8}$ x 8 $\frac{1}{4}$ x 3 $\frac{1}{4}$	3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Freq-shift audio tones.

TYPE OF COMMUNICATION CIRCUITS: Multichan wire and rad.

CONTROLS: Power on-off; mark-space-line; output level.

POWER REQUIREMENTS: 50 w, 110/220 v, 50/60 cy, 1 ph ac.

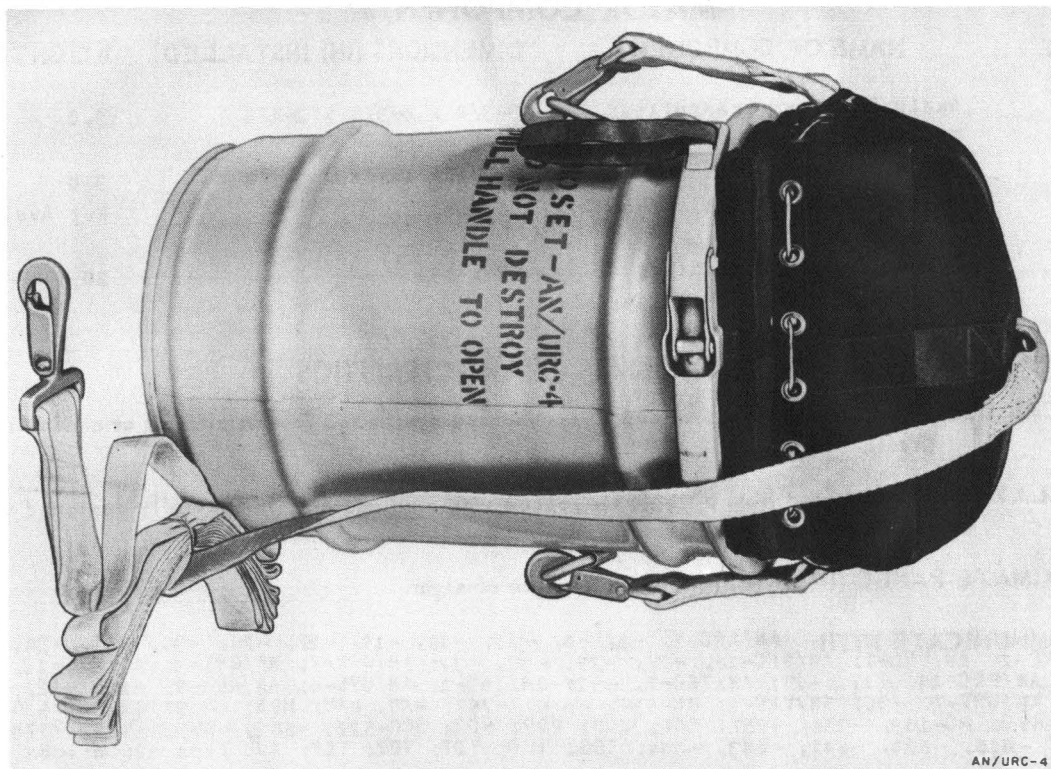
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	3 $\frac{1}{2}$ x 19 x 15	28	.57		
DOMESTIC PACK:					1
EXPORT PACK:					1

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 12 May 52

AN/URC-4

RADIO SET



AN/URC-4

Radio Set AN/URC-4 is used under emergency rescue conditions for air-to-ground, and point-to-point communication. It is dropped from aircraft in a water tight container which will float on the surface of the water and is capable of communicating by voice, keyed tone, and continuous tone modulation.

The transmitter is crystal-controlled, and depending upon crystal in use, will operate on any preset frequency within the v-h-f band of 120 to 130 mc, or the u-h-f band of 240 to 260 mc.

The radio set consists of two small components: a battery power supply and a transmitter and receiver.

The antenna is located in the top of the radio set and can be quickly extended.

The receiver uses a super-regenerative circuit for minimum size and power consumption.

The equipment may be operated while in motion and will operate continuously for 24 hours in cycles of five minutes of transmitting, and five minutes of receiving.

The equipment can also be used for emergency airdrome traffic control.

AN/URC-4

INSTRUCTION LITERATURE:
 TO 16-30URC4-2
 CLASSIFICATION OF EQUIPMENT: Restricted
 USING SERVICE : Air Force
 DATE OF THIS SHEET : 12 May 52

RADIO SET

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-159/URC-4	3-3/4 x 6-3/4 x 2-1/4	3.0
1	Battery BA-1264/U	3-3/8 x 6-1/4 x 2-1/4	3.0
1	Special Purpose Cable Assembly CX-1093/U	66 long	Not Available
1	Droppable Kit consisting of Parachute, Cargo Container, Aerial Delivery	22 x 13	20.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used by survivors at sea to communicate with sea rescue aircraft or marine rescue craft.

INSTALLATION: Parachuted from aircraft for rescue work and operated in specially designed vest by survivor.

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

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -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, -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, -787; MAR; MAY; MBS; 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; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: One crystal-controlled preset frequency in the range of 120 - 130 or harmonic operation on 240 - 260.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone or mcw.

POWER OUTPUT: Receiver: 75 mw.
 Transmitter: 35 mw.

POWER REQUIREMENTS: 125 v, 45 ma plate supply, dc, 125 v, 520 ma filament supply, dc.
 Battery life 24 hours when operated in cyc of 5 minutes transmitting and 5 minutes receiving. Batteries are contained in one unit.

PHYSICAL CHARACTERISTICS

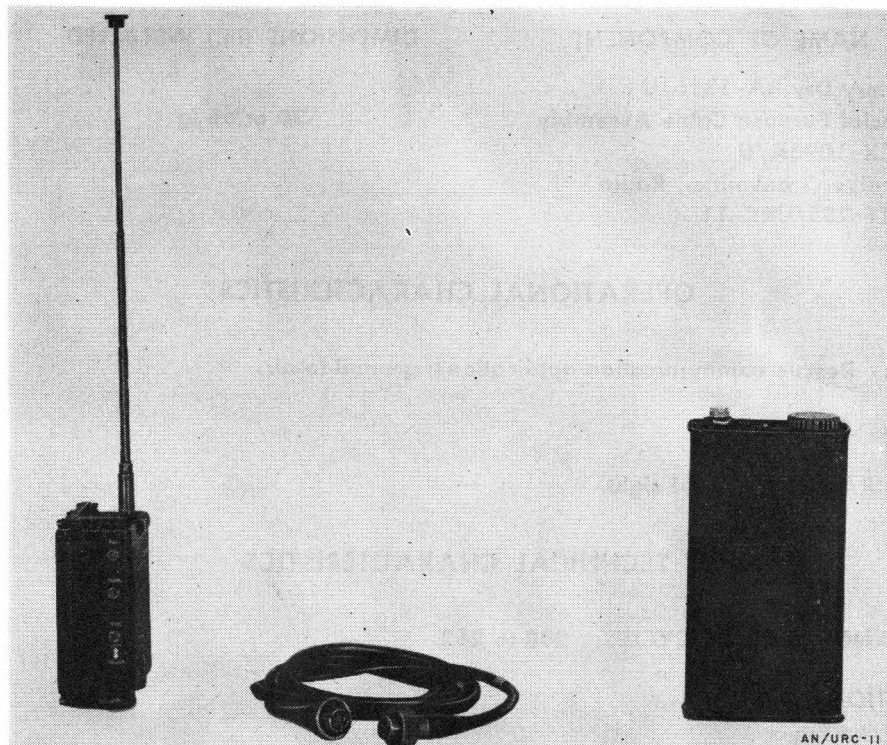
Radio Set AN/URC-4 weighs 26.6 pounds net, volume 1.7 cu ft. Packed for either domestic or export shipment: total weight 29.3 pounds, total volume 1.9 cu ft. Shipped in 1 package both domestic and export.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956

AN/URC-11**RADIO SET**

Radio Set AN/URC-11 is a subminiature, lightweight, uhf receiver-transmitter used for two-way voice and keyed tone communication under emergency rescue conditions.

This equipment can operate on any preset frequency within the uhf band, and its receiver portion can be tuned, independently of the transmitter, to any frequency within the given range.

AN/URC-11

RADIO SET

JANAP 161

INSTRUCTION LITERATURE: 12R2-2URC11-2

USING SERVICE: USAF

DATE OF THIS SHEET: 6 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.)	INSTALLED	WEIGHT (lb)
1	Battery Dry BA-1315/U			
1	Special Purpose Cable Assembly CX-1093A/U	30 or 66	lg	
1	Receiver-Transmitter, Radio RT-285/URC-11			

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Rescue communication applications; ground-to-air.

INSTALLATION: Airborne.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 238 to 263.

TYPE MODULATION: Am (A3).

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: 25 mw (rcvr); 75 mw (xmtr).

POWER REQUIREMENTS: 1.25 v, 550 ma dc; 120 v, 35 ma dc (Under a continuous operating cy of 5 min xmtg and 5 min rcving, Dry Battery BA-1315/U has a nor life of 24 hr.).

PHYSICAL CHARACTERISTICS

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

DOMESTIC PACK:

EXPORT PACK:

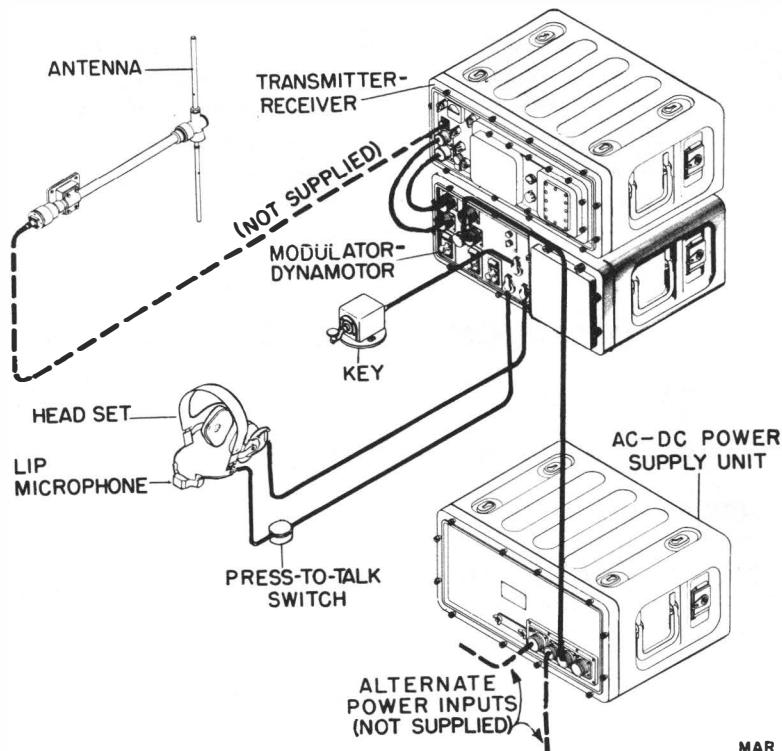
STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 23 May 52

AN/URC-TYPE

SERVICE TYPE NUMBER:

MAR

UHF RADIO TRANS & REC EQUIP



UHF Radio Transmitting and Receiving Equipment MAR is a general purpose, a-m (mcw, voice) transportable communication set, which uses a motor-driven selector mechanism for automatic selection of 10 preset crystal-controlled frequencies within the u-h-f band.

It is comprised of two units of the same form and size, one case containing the transmitter-receiver, the other, the modulator-dynamotor sections. In addition to these basic units, modification kits for shipboard, vehicular and field adaptations are supplied.

The use of these kits provides for widely varying power supply inputs, and operating environments.

Antenna Assembly Navy Type CRV-66147 is supplied for use with this equipment.

Remote Control Unit Navy Type CRV-23485 provides for remote control up to distances of one mile; communication between a remote and local operator, without resultant radio emission, is controlled by a panel switch on the modulator-dynamotor unit.

AN/URC-TYPE		INSTRUCTION LITERATURE: NavShips 900,719(A)
		CLASSIFICATION OF EQUIPMENT: Unclassified
MAR	:SERVICE TYPE NUMBER	USING SERVICE : Navy
UHF RADIO TRANS & REC EQUIP		DATE OF THIS SHEET : 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver CRV-43067	9-1/2 x 21-1/4 x 16-1/4	45.0
1	Modulator-Dynamotor Unit CRV-50248	9-1/2 x 21-1/4 x 16-1/4	45.0
1	AC-DC Power Supply Unit CLG-20379	10-7/8 x 21-1/4 x 16-1/4	100.0
1	Antenna Assembly CRV-66147	22 x 2-1/2 x 25	3.5
1	Shipboard Installation Kit	Not Available	Not Available
1	Field Application Kit	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, vehicles, or ground stations.

INSTALLATION: Shipborne, vehicular, ground transportable.

APPROXIMATE RANGE (IN MILES): Short.

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 on 10 preset frequencies.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Transmitter: 8 w.
Receiver: 1 w into 600 ohm load.

POWER REQUIREMENTS: 430 w, 13 - 24/115/230 v, dc; or 430 w, 115/230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

UHF Radio Transmitting and Receiving Equipment MAR measures 19 x 21-1/4 x 16-1/4 inches, net weight 193.5 pounds, volume 6.7 cu ft. Packed for domestic shipment: total weight 788 pounds, total volume 32.4 cu ft, 0.81 ship ton. Shipped in 5 packages.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

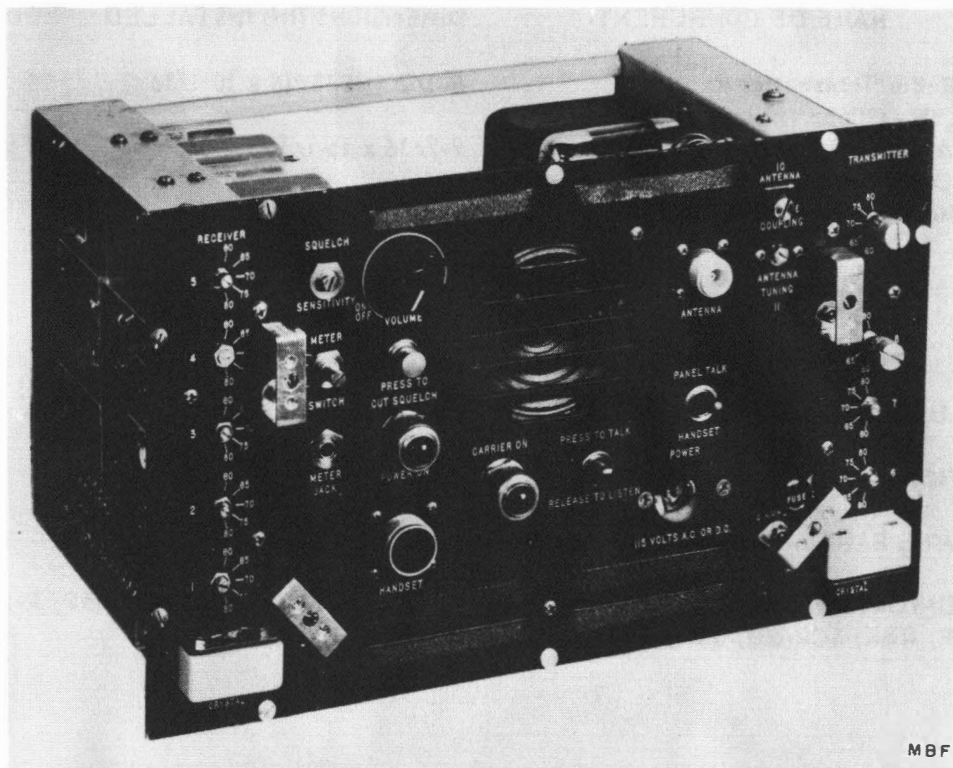
DATE OF THIS SHEET: 9 May 52

AN/URC-TYPE

SERVICE TYPE NUMBER:

MBF

RADIO TRANS & REC EQUIP



Radio Transmitting and Receiving Equipment MBF is a general purpose, low-power, v-h-f transportable radiotelephone set used for communication over line-of-sight distances.

This receiver has noise-limiting and squelch circuits.

The receiver and transmitter each have one preset crystal-controlled frequency within the frequency range.

A (coaxial) Portable Antenna such as Navy Types COL-66155 and COL-66156 is used with this equipment.

AN/URC-TYPE		INSTRUCTION LITERATURE: NavShips 900,508
		CLASSIFICATION OF EQUIPMENT: Unclassified
MBF	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANS & REC EQUIP		DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter-Receiver COL-43065	9-1/2 x 15-13/16 x 10-1/16	26
1	Accessory Case COL-10406	9-7/16 x 15-1/16 x 9-3/8	27
1	Mounting Base COL-10479	1-1/4 x 14 x 8-1/4	2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore.

INSTALLATION: Transportable, shipborne, ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/CRW-7; AN/URR-10, -12; AN/URT-10; BC-787; MBF; R-137/GR, -274/FRR; RBK; SCR-607; TBS; TBY.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 60 - 80.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 3 w.

Receiver: 1 w to speaker; 10 mw to headphones.

POWER REQUIREMENTS: 120 w, 115 v, 50/60 cyc, 1 phase, ac; or
120 w, 115 v, dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting and Receiving Equipment MBF measure 9-1/2 x 15-13/16 x 10-1/16 inches, net weight 129 pounds. Packed for domestic shipment: total weight 218 pounds, total volume 1 1.7 cu ft. Shipped in 2 packages.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 9 May 52

AN/URC-TYPE

SERVICE TYPE NUMBER: MN, MN-1 through -5
 FM RADIO TRANSMITTING AND RECEIVING EQUIPMENT



FM Radio Transmitting and Receiving Equipment MN and MN-1 through -5 are single-frequency, low-power radiotelephone sets designed for short-range general purpose communication. The equipment is installed aboard ship, at shore stations, on aircraft, and in vehicles. The MN, MN-4, and MN-5 are operated by remote control, and the MN-4 is used mainly by reconnaissance aircraft.

The transmitter utilizes direct crystal-control and phase-shift type of modulation, and the receiver is designed particularly for the crystal-controlled reception of the signals generated by the transmitter. Uses quarter- or half-wave vertical antenna-array.

AN/URC-TYPE	INSTRUCTION LITERATURE: NavShips 95138, 95139, 95140, 95141, 95142, 95143
	CLASSIFICATION OF EQUIPMENT: Unclassified
MN, MN-1 through -5	:SERVICE TYPE NUMBER
FM RADIO TRANSMITTING AND RECEIVING EQUIPMENT	USING SERVICE : Navy DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter-Receiver Unit CFL-43059, -43018,-43034, -43048	9-3/16 x 10-7/16 x 22-3/8 9-3/16 x 10-7/16 x 22-3/8	39 38
1	Remote Control Unit CFL-23285, CFL-23378, CFL-23285A	3-1/8 x 4-1/2 x 4-1/2 5-1/4 x 4 x 2-3/16 4-1/2 x 3-1/8 x 7-13/16	Not Available 1.3 2.1

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, aircraft, shipboard, or vehicles.

INSTALLATION: Ground, airborne, shipborne, vehicular.

APPROXIMATE RANGE (IN MILES): 10.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-5, -6, -7, -8; AN/MRC-5 -16;
AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/YRC-2,
-3, -9, -10, -14, -15, -17, -18, -21, -22; AN/YRQ-2, -3; AN/YRR-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 - 42.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 2 w. Receiver: 1 w into 8-ohm output.

POWER REQUIREMENTS: MN: 90 w, 115 v, 50/60 cyc, 1 phase.
MN-1, -2, -3: 90 w, 115 v, 50/60 cyc, 1 phase or 6 v dc.
MN-4: 90 w, 12/15 v dc.
MN-5: 80 w, 115 v, 50/400 cyc or 13.5/27 v dc.

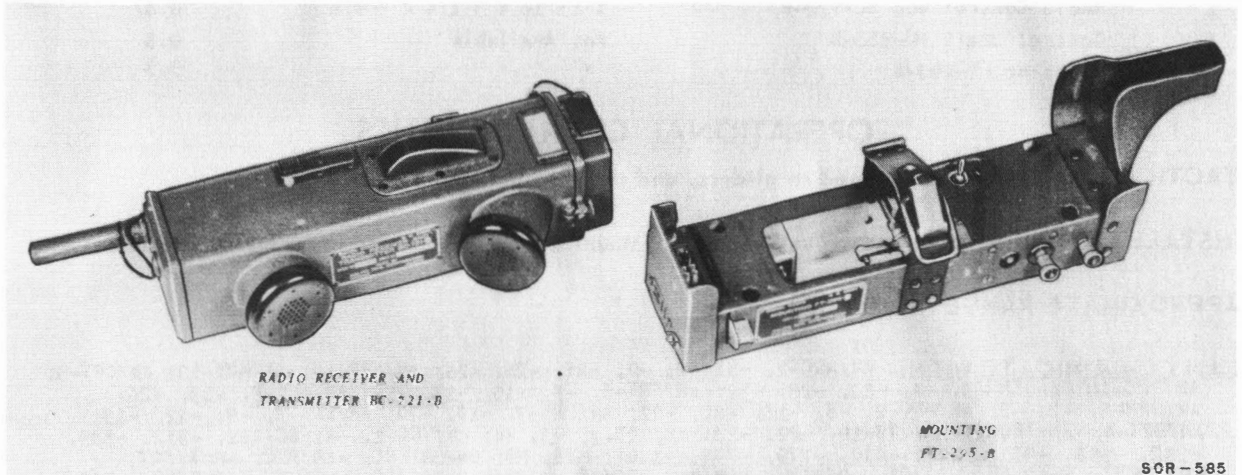
PHYSICAL CHARACTERISTICS

Information on FM Radio Transmitting and Receiving Equipment MN and MN-1 through -5 not available.

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

AN/URC-TYPE

SERVICE TYPE NUMBER: SCR-585
 RADIO SET



Radio Set SCR-585 is a portable, man-carried, crystal-controlled handy-talkie and is the airborne version of Radio Set SCR-536. It operates on a single preset channel, voice modulated, for point-to-point or air-to-ground, two-way communications with a range of 100 feet, to one mile in the 3.5 to 6.0 mc band.

It is designed for glider installation with Mounting FT-295 which allows personnel to quickly remove the equipment for ground use as emergency short range, light, man-carried communication equipment.

This radio set may also be used in flight by glider personnel for intercommunication, using Control Shaft MC-355.

It has a built-in 39-inch long telescopic antenna. Equipment is powered by Battery BA-37 (1.5 v) and Battery BA-38 (103.5 v).

Under normal operating conditions battery life is approximately 19 hours.

AN/URC-TYPE	INSTRUCTION LITERATURE: TM 11-227 & TM 11-235
	CLASSIFICATION OF EQUIPMENT:Unclassified
SCR-585	:SERVICE TYPE NUMBER
RADIO SET	USING SERVICE: Air Force
	DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-721-B	6 x 17-1/16 x 5-1/2	6.0
1	Radio Control Box BC-722-B	1-13/16 x 3-1/4 x 5-7/8	0.87
1	Control Shaft MC-355-B	Not Available	0.5
	Mounting FT-295-B	" "	3.3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to gliders, and air base personnel as required.

INSTALLATION: Airborne and ground portable: Mounting FT-295-B used in glider operation only.

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, -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; HBS; HQ; 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, -24, -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; T BX; TCC; TCE; TCH; TCK; TCO; 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: 3.5- 6.0 (reception and transmission) crystal-controlled on any one preset frequency.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Receiving: Voice or tone.
Transmitting: Voice.

POWER OUTPUT: Transmitter: 500 mw.
Receiver: 250 mw.

POWER REQUIREMENTS: 1 Battery BA-37 (1.5v) for filaments, and
1 Battery BA-38 (103.5 v) for B supply.

PHYSICAL CHARACTERISTICS

Radio Set SCR-585 measures 5-1/2 x 6 x 17-1/16 inches, net weight 11.5 pounds, volume 2 cu ft. Packed for domestic or export shipment: total weight 12 pounds, total volume 2.5 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Apr 52

AN/URC-TYPE
 SERVICE TYPE NUMBER: TBS, TBS-1 through -8
 VHF RADIO TRANS & REC EQUIP



VHF Radio Transmitting and Receiving Equipments TBS and TBS-1 through -8 provide a-m (cw, voice) radio communication between surface craft, and between submarines and surface craft. They are crystal-controlled and provide for full control of the transmitter from remote positions.

Chief difference between models of the TBS series is the type of motor generators and magnetic controllers employed as follows:

<u>MODEL OF EQUIPMENT</u>	<u>POWER SOURCE</u>	<u>MOTOR GENERATOR</u>	<u>MAGNETIC CONTROLLER</u>
TBS, TBS-1, -2, -3, -4, -5, -7, -8	120-v dc	CG-21300, -21300-A, -211127	CRV-21319
TBS-3, -4, -5, -6, -7, -8	230-v dc	CG-21745, -211130	CRV-21804
TBS, TBS-3, -4	220-v ac	CG-21301	CRV-21320
TBS, TBS-1, -2, -3, -5, -6, -7	*440-v ac	CG-21302, -211129	CRV-21320

*Transformer CAT-30445 is used for 440-v operation.

AN/URC-TYPE	INSTRUCTION LITERATURE: NavShips 900,590
	CLASSIFICATION OF EQUIPMENT:Unclassified
TBS, TBS-1 through -8	:SERVICE TYPE NUMBER
VHF RADIO TRANS & REC EQUIP	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CRV-52093, -52093-A	10-1/2 x 23-1/2 x 17-3/4	75
1	Radio Receiver CRV-46068, -46068-A, -46068-B	8-3/4 x 25-13/16 x 16-7/8	45
2	Remote Control Unit CRV-23135	5-11/16 x 10-7/16 x 7-1/4	9
*1	Antenna Assembly CRV-66015	Not Available	46
**1	Antenna Assembly CRV-66016	" "	46

*Surface craft type. **Submarine type.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, submarine.

INSTALLATION: Shipborne, submarine.

APPROXIMATE RANGE (IN MILES): 10.

CAN COMMUNICATE WITH: AN/CRW-7; AN/URR-10, -12; AN/URT-10; BC-787; MBF; R-137/GR, -274/FRR; RBK; SCR-607; TBS; TBY.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 60 - 80.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Transmitter: 50 w.
Receiver: 2 w.

POWER REQUIREMENTS: 1,152 w, 120 v, dc; 1,152 w, 230 v, dc; or (2.8 amp) per phase, 220 v, 60 cyc, 3 phase, ac; or (1.4 amp) per phase, 440 v, 60 cyc, 3 phase, ac.

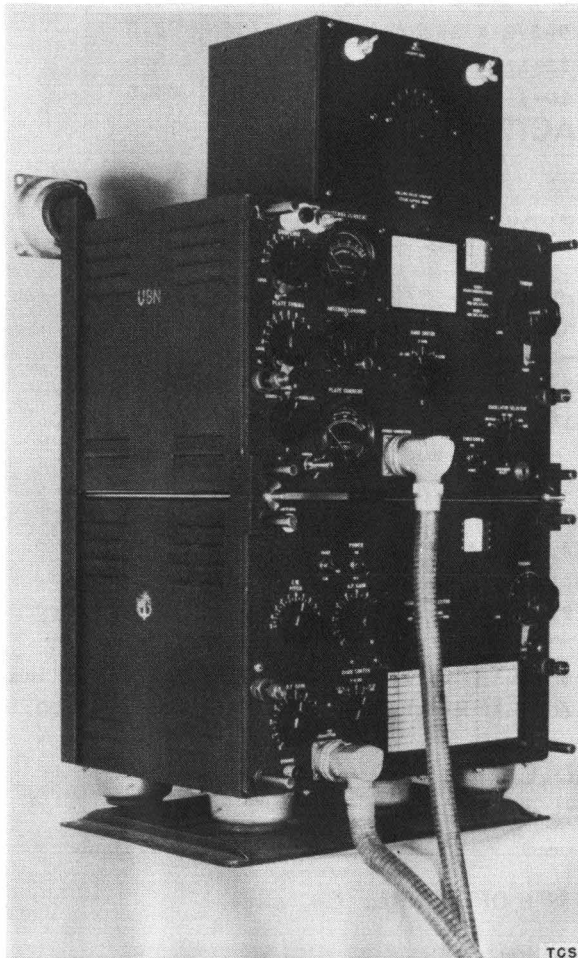
PHYSICAL CHARACTERISTICS

VHF Radio Transmitting and Receiving Equipments TBS, TBS-1 through 8 measure 19-1/4 x 25-13/16 x 17-3/4 inches. Packed for domestic Shipment: total weight 1,140 pounds, total volume 48.1 cu ft, 1.2 ship tons. Shipped in 9 packages.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 9 May 52

AN/URC-TYPE

SERVICE TYPE NUMBER: TCS, TCS-1 through -16
 RADIO TRANS & REC EQUIP



Radio Transmitting and Receiving Equipments TCS, TCS-1 through -16 are general service, semi-portable, m-f, and h-f telegraph and telephone communication sets, for patrol and landing craft, reconnaissance vehicles, and similar application.

Transmitter frequency control is by means of a continuously variable oscillator or four crystal-controlled channels. The crystals may be operated either on their fundamental, or harmonic frequencies, or both.

The receiver is continuously variable over the operating frequency range.

A remote control unit is supplied to provide loud speaker operation and remote control at distances up to 20 feet from the power supply.

Power supplies are available for operation from the following power sources: 12, 24, 32, 115, and 230-v dc; 115 and 230-v ac.

AN/URC-TYPE	INSTRUCTION LITERATURE: See note below*
	CLASSIFICATION OF EQUIPMENT: Unclassified
TCS, TCS-1 through -16 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANS & REC EQUIP	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter NT-52245, -52245-A	11 x 13-3/4 x 11-13/16	48.0
1	Radio Receiver NT-46159, -46159-A	11-1/16 x 13-13/16 x 11-7/8	38.0
1	Remote Control Unit NT-23270, -23270-A	4-3/8 x 7-3/8 x 5-3/4	6.0
1	Antenna Loading Coil NT-47205	6 x 8-1/2 x 6-3/4	3.75
1	Dynamotor Assembly, or Motor Generator Assembly, or Rectifier Power Unit	9-5/8 x 8-25/32 x 12-15/16 12-1/8 x 16 x 22-1/2 10-1/8 x 17-1/4 x 16-1/4	35.0 115.0 93.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, 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, -314, -339, -342, -344, -349, -401, -447,
-610, -779, -794, -1004; MBS; MQ; OA-59/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, -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; TCO; 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: 1.5-12.0 in three bands.

Band 1: 1.5-3.0.

Band 2: 3.0-6.0.

Band 3: 6.0-12.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: Transmitter: 10 w on voice, 25 w on cw.

Receiver: 1.4 w, into 500 ohm load.

POWER REQUIREMENTS: Rectifier power units: 243 w, 115/230 v, 60 cyc, 1 phase, ac.

Dynamotor assemblies: 205 w, 12 - 24 v, dc. Motor generator assemblies: 445 w, 24 v, dc; 474 w,
32 v, dc; 397 w, 115 v, dc; 385 w, 230 v, dc; 390 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

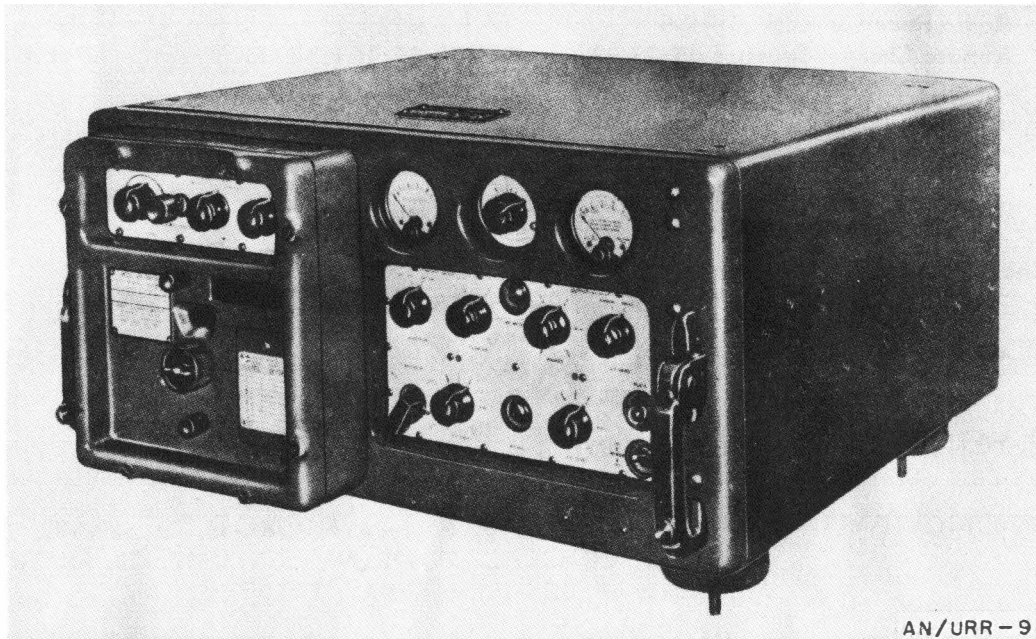
Radio Transmitting and Receiving Equipments TCS, TCS-1 through -16 measure 28 x 13-3/4 x 11-7/8 inches.

* Instruction Literature: NavShips 900,291; 900,269; 900,575; 900,612; 900,705; 95319; 95320;
95321; 95322; 95601.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URR-9

RADIO RECEIVING SET



Radio Receiving Set AN/URR-9 is a general purpose u-h-f, a-m (voice) receiver for use in emergencies as a replacement for VHF Radio Receiving Equipment RDZ. It is designed for ship or shore use. This equipment has automatic (crystal) and manual (self-excited) frequency control. Selection of ten preset frequencies can be made manually, or automatically, by front panel controls, or automatically from up to four remote points by use of selector control units.

It is designed to operate with a vertically polarized, unbalanced broad-band, coaxial stub antenna (such as Antenna Assembly AS-390/SRC) or with a broad-band, dipole antenna (such as Antenna AT-150/SRC).

Special terminals can be connected to associated apparatus, such as a radio-frequency scanning unit to provide a visual picture of the signals received. Video output terminals are provided for connection of special apparatus not associated with the normal function of the receiver.

AN/URR-9	INSTRUCTION LITERATURE: NavShips 91201
	CLASSIFICATION OF EQUIPMENT: Restricted
	USING SERVICE: Navy
RADIO RECEIVING SET	DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-289/URR-9	13-1/8 x 22 x 23	150
* 1 to 4	Remote Channel Selector NT-23492	5-1/4 x 4-9/16 x 3-5/16	Not Available

*Not supplied.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

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: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Audio Channel: 60 mw into 600 ohm load, or 600 mw into 30 ohm load.
Phone Jack: 4 mw into 600 ohm load.
Video Channel: 1.5 v across 1,000 ohm load.
Scanning Channel: More than 10,000 uv across 50 ohm load.

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

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-9 measures 13-1/8 x 22 x 23 inches, net weight 226 pounds, volume 7.54 cu ft. Packed for domestic shipment: total weight 426 pounds, total volume 17.50 cu ft.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 9 Jun 52

AN/URR-10

RADIO RECEIVING SET



AN/URR-10

Radio Receiving Set AN/URR-10 is a general purpose, a-m/f-m (cw, mcw, voice) receiver for m-f, h-f and v-h-f communication applications on board ship or at shore stations.

This equipment consists essentially of a commercial (Hallicrafters SX-42) communication-type superheterodyne receiver having band-spread tuning in the 3.5-, 7.0-, 14.0- and 28.0-mc bands. It is provided with a beat-frequency oscillator, a stand-by switch, and variable selectivity circuits and operates from 105/120 v, 60 cyc ac or from batteries.

AN/URR-10

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 9 Jun 52

RADIO RECEIVING SET

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-231/URR-10	10-1/4 x 20 x 18	52
1	Speaker LS-140/U	11-3/4 x 17 x 12-1/2	26
1	Mounting MT-598/U	1-1/2 x 18-5/8 x 15-13/32	5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-1A, -2, -3, -5, -8, -9, -18, -21, -28, -36; AN/ART-13; AN/CRC-2, -3; AN/CRT-3; AN/FRC-6, -7, -8, -9, -10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-3, -4, -5, -6, -7, -8, -9, -13, -26, -30; AN/MRC-2, -5, -6, -16, -20, -22; AN/PRC-6, -7, -8, -9, -10, -16, -19, -20; AN/SRT-4; AN/TRC-1, -3, -4, -7B; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -2, -3, -4, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-191, -339, -365, -401, -447, -640-D; MAN; MBF; MBS; MN; MQ-1; OA-60A/FRT, -60B/FRT; RC-52, -257-C; SCR-177, -188, -193, -274, -281, -293, -298, -300, -399, -499, -506, -508, -509, -510, -522-A, -528, -536, -542-A, -543, -573-A, -575-A, -585, -608, -609, -610, -619, -624-B, -628, -643-A, -694, -808, -828; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBS; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCF; TCH; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS253; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 110.0 in 6 bands.

Band 1: 0.54 - 1.62.

Band 4: 15.0 - 30.0.

Band 2: 1.62 - 5.0.

Band 5: 27.0 - 55.0.

Band 3: 5.0 - 15.0

Band 6: 55.0 - 110.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, voice, mcw.

POWER REQUIREMENTS: 105-120 v, 50/60 cyc, 1 phase or 40 w, 270 v dc and 47 w, 6.3 v dc (from external batteries).

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-10 measures 23-1/2 x 20 x 18 inches.

STATUS: Standard	AN/URR-12
CLASSIFICATION OF EQUIPMENT: Unclassified	
USING SERVICE: Navy	
DATE OF THIS SHEET: 9 Jun 52	RADIO RECEIVING SET

NO PHOTOGRAPH AVAILABLE

Radio Receiving Set AN/URR-12 is a general purpose a-m/f-m (cw, mcw, voice) receiver for v-h-f communication applications on board ship or at shore stations.

This equipment has a double superheterodyne circuit including a beat-frequency oscillator, automatic noise limiter, variable sensitivity control, and receptacle for connecting to a panoramic adapter. It replaces the RBK series of radio receiving equipment.

AN/URR-12	INSTRUCTION LITERATURE: Not available
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Navy
RADIO RECEIVING SET	DATE OF THIS SHEET : 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground. Can be mounted in standard 19-inch cabinet.

APPROXIMATE RANGE (IN MILES): Long range on lower frequencies and line of sight on higher frequencies.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -12, -18, -27, -28, -30, -33, -34, -36; AN/CRC-2, -3; AN/FRC-6, 7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-5, -12, -16, -22; AN/PRC-6, -8, -9, -10, -14, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12, -32; 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; MAR; MAW; MAY:MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -399, -499, -508; -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; TDZ; TED; Collins 32V-2; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27 - 225, in 4 bands.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER REQUIREMENTS: 80 w, 115 v, 50/60 cyc, 1 phase.

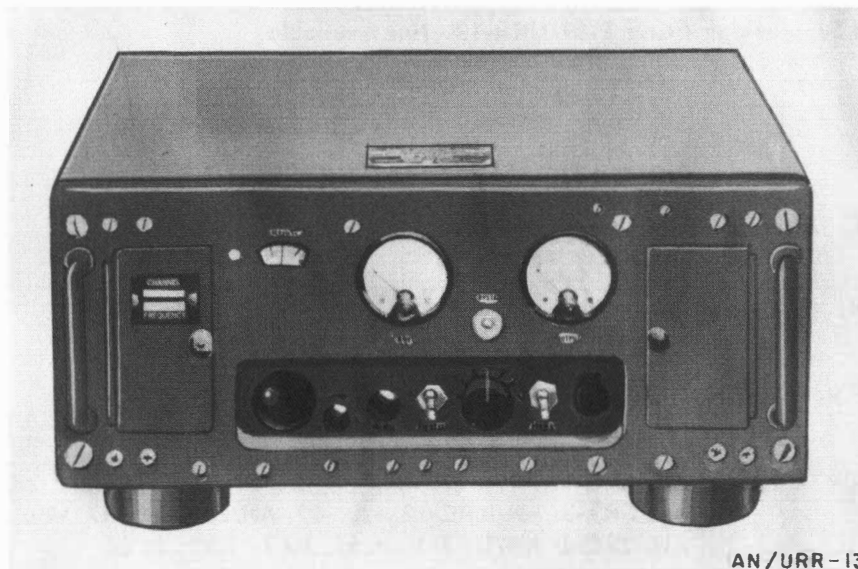
PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-12 measures 11 x 20-1/8 x 15 inches.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy, Air Force
DATE OF THIS SHEET: 29 May 52

AN/URR-13

RADIO RECEIVING SET



AN/URR-13

Radio Receiving Sets AN/URR-13 (including -A, -B, and -D) are general purpose, a-m (mcw, voice) equipments for use on Naval vessels, at Naval air and shore stations, or at other units of a military establishment, for u-h-f communication.

This equipment, replaces VHF Radio Receiving Equipment RED, and is used in conjunction with Radio Transmitting Equipment TED.

It may be operated on a single crystal-controlled channel, or by the self-excited conversion oscillator for continuously variable manual tuning.

Provision is made for connecting a panoramic type radio receiver to provide a visual picture of a received signal.

The receiver is designed to be used with a 1/4-wave broad-band antenna.

AN/URR-13

INSTRUCTION LITERATURE:
 NavShips 91270
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE : Navy, Air Force
 DATE OF THIS SHEET : 29 May 52

RADIO RECEIVING SET

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-266/URR-13	7 X 19 x 19-1/8	57
1	Band Suppression Filter F-89/URR-13	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft traffic control stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: 60 mw into 600 ohm load or 600 mw into a 60 ohm load.

POWER REQUIREMENTS: 125 w, 110 - 120 v, 50/60 cyc, 1 phase, ac.

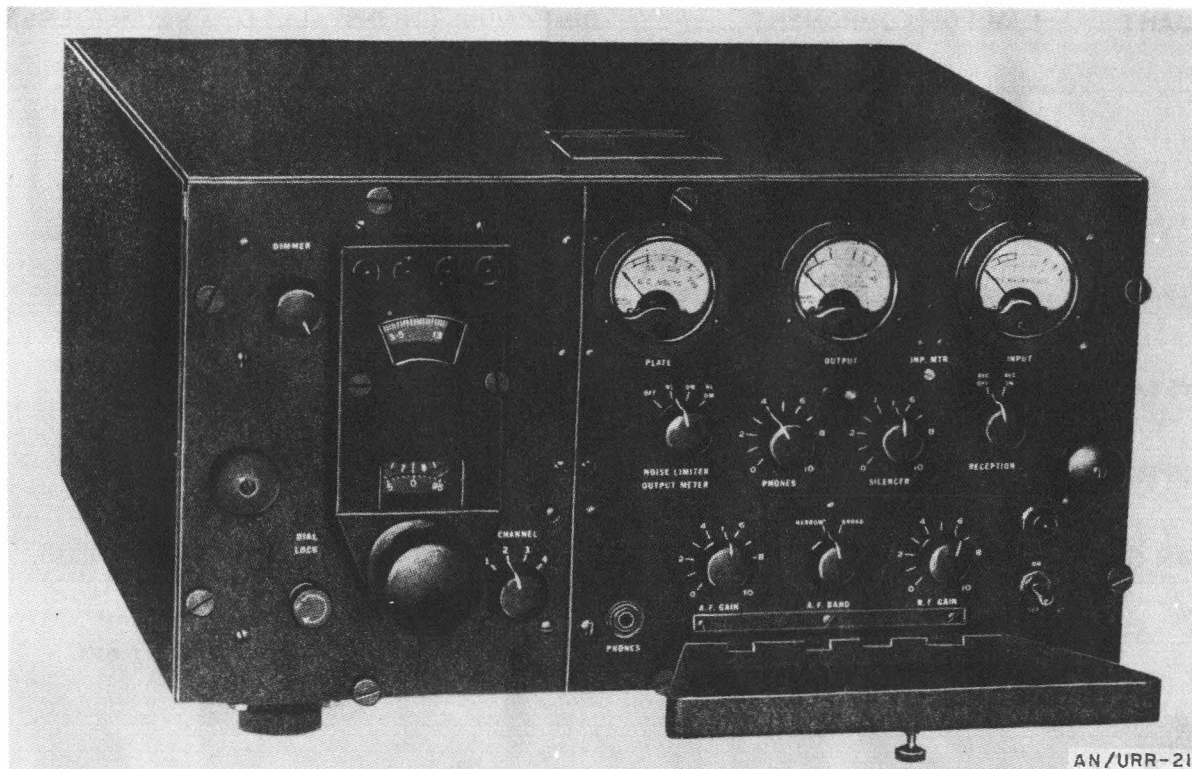
PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-13, (including -A, -B, -D) measures 8-7/16 x 17-1/2 x 19-1/8 inches.
 Packed for domestic shipment: total weight 167 pounds, total volume 7.4 cu ft. Shipped in one package.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 14 May 52

AN/URR-21

RADIO RECEIVING SET



Radio Receiving Sets AN/URR-21 and -21A are a-m (voice) v-h-f receivers used in conjunction with VHF Radio Transmitting Equipment TDQ on aircraft carriers, and at shore stations, for communicating with aircraft.

Four preset crystal-controlled channels are available, and the receivers feature a high degree of stability, freedom from cross modulation and radiation, and continuous tuning by means of a single dial.

In addition the AN/URR-21A employs a squelch circuit which operates when the input signal level drops below a predetermined value.

Both receivers are designed for use with a 50-ohm fixed antenna.

AN/URR-21

INSTRUCTION LITERATURE:
 NavShips 91497
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 14 May 52

RADIO RECEIVING SET

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-432/URR-21 or R-432A/URR-21	10-7/8 x 18-1/8 x 23	112

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft carriers or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

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: 115 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 68 mw into a 600 ohm load.

POWER REQUIREMENTS: 106 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-21, -21A measure 10-7/8 x 18-1/8 x 23 inches.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URR-22

RADIO RECEIVING SET

NO PHOTOGRAPH AVAILABLE

Radio Receiving Set AN/URR-22 is a morale and entertainment receiver for use aboard ship. It may be used as a replacement communications receiver in emergencies. Special features are a visual tuning indicator and high fidelity output.

This equipment is essentially a modification of Radio Receiving Equipment REE and will replace Radio Receiving Equipment RBO.

An open-wire high impedance type antenna is recommended for use with this equipment.

AN/URR-22	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE: Navy
RADIO RECEIVING SET	DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN)	INSTALL ED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

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; AN/VRC-1, -4; 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; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TOD; 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: 0.535 - 18.6.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER REQUIREMENTS: 80 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/URR-22 measures 12-1/2 x 18-1/16 x 17-1/2 inches.

STATUS: L/Std (-23); S/Std (-23A)

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

AN/URR-23()

RADIO RECEIVING SET



Radio Receiving Set AN/URR-23() is used for long-range ship or shore communication applications that require the highest order of stability and dial accuracy.

This equipment tunes with a normal setting error and drift of less than 1 kilocycle. The fundamental or harmonic output of the frequency oscillator is crystal controlled.

The AN/URR-23 consists essentially of a commercial (Collins model 51J-2) radio receiver; and the AN/URR-23A, of the Collins model 51J-3 receiver. Both receivers are similar but the A model has an antenna trimmer control and is fitted with chassis handles.

AN/URR-23()

INSTRUCTION LITERATURE: NAVSHIPS 91678

USING SERVICE: USN

RADIO RECEIVING SET

DATE OF THIS SHEET: 26 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Dynamic Loudspeaker LS-175/U (-23) or LS-199/U (-23A)	10 $\frac{1}{16}$ x 15 x 8 $\frac{7}{8}$	
1	Radio Receiver R-381A/URR-23 (-23) or R-388/URR (-23A)	12 $\frac{1}{4}$ x 21 $\frac{1}{8}$ x 13 $\frac{7}{8}$	

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; ground stations.

APPROXIMATE RANGE: Long.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 30.5 in 30 bands ea 1 mc wide.

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

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 1.5 w at 1,000 cy (less than 15% distortion).

POWER REQUIREMENTS: 85 w, 115/230 v, 45/70 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:	12 $\frac{1}{4}$ x 21 $\frac{1}{8}$ x 13 $\frac{7}{8}$				

DOMESTIC PACK:

EXPORT PACK:

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Army
 DATE OF THIS SHEET: 22 Jan 52

AN/URR-TYPE

AN/COMP TYPE NUMBER:

R-129/U

RADIO RECEIVER



R-129/U

Radio Receiver R-129/U is a transportable, a-m (voice, tone, and cw) radio receiving equipment which operates in the medium and high-frequency bands in fixed station communication, monitoring, or intercept applications.

This equipment is a table model, cabinet-inclosed radio receiver which can be removed from the cabinet and mounted on a standard relay rack. It can be installed and operated in a vehicle by means of appropriate shock mounts.

It uses a doublet antenna with balanced transmission line, a straight wire and ground, or similar antenna system.

Can be operated from 115- or 230-v a-c sources or by batteries in an emergency.

AN/URR - TYPE		INSTRUCTION LITERATURE: TM 11-866 TM 11-4054
		CLASSIFICATION OF EQUIPMENT: Unclassified
R-129/U	:AN/COMP TYPE NUMBER	USING SERVICE : Army
RADIO RECEIVER		DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-129/U (in Cabinet CH-104-A)	10-1/2 x 15-3/8 x 19 12-1/4 x 16-1/2 x 23	55 73

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant use.

INSTALLATION: Ground, fixed station or vehicular.

APPROXIMATE RANGE (IN MILES): long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -20, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -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-1, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; 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; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS25-3; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 10.0, in five bands:

- Band 1: 0.3 to 0.54.
- Band 2: 0.54 to 1.16.
- Band 3: 1.16 to 2.50.
- Band 4: 2.50 to 5.00.
- Band 5: 5.00 to 10.00.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, tone.

POWER REQUIREMENTS: Ac: 180 w, 95 to 130/190 to 260 v, 25/60 cyc or 180 w, 115/230 v, 50/60 cyc
Battery: One 6-v storage battery, five 45-v B batteries, and one 45-v C battery.

PHYSICAL CHARACTERISTICS

Radio Receiver R-129/U measures 10-1/2 x 15-3/8 x 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.

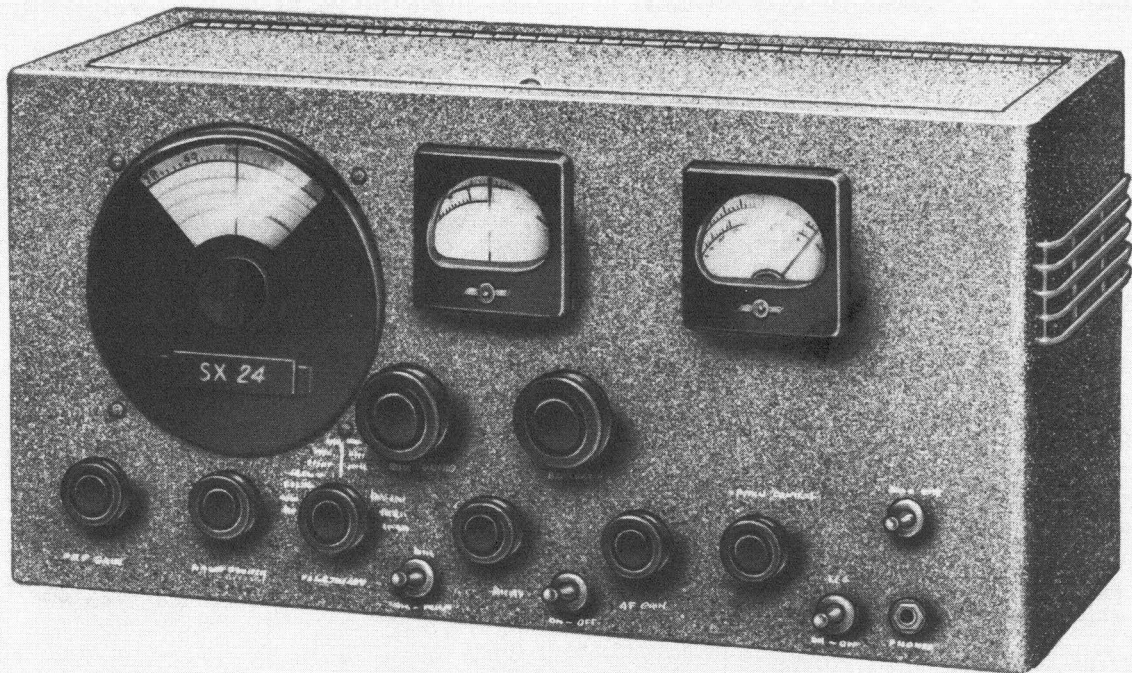
STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Army
 DATE OF THIS SHEET: 22 Jan 52

AN/URR-TYPE

AN/COMP TYPE NUMBER:

R-205/U

RADIO RECEIVER



R-205/U

Radio Receiver R-205/U is a lightweight, transportable, radio receiving equipment used in a-m (voice, cw and mcw) communication in the medium- high- and v-h-f bands. It is used as fixed station equipment.

This equipment is a commercial (Hallicrafters SX-24) communications-type, table model, receiver which operates in four frequency bands. It is designed to maintain frequency stability over a wide range of line voltage, and ambient temperature and humidity conditions. It is provided with means for break-in relay operation, has panel controls for selection of, or adjustments for, r-f gain, crystal phasing, audio gain, band spread, selectivity, station selection, and similar operating features, and includes a beat-frequency oscillator.

This set uses a conventional straight wire antenna but can be operated in conjunction with more elaborate arrays.

It is operated from a 70-w source of 110-v ac or from a 6-v storage battery through appropriate power modifying equipment.

AN/URR-TYPE		INSTRUCTION LITERATURE: None
R-205/U	:AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT:Unclassified
RADIO RECEIVER		USING SERVICE : Army
		DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant use.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Medium - 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/S T-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/F T, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/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 19S-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: 0.54 - 43.5 in 4 bands.

Band 1: 0.54 - 1.73
Band 2: 1.7 - 5.1

Band 3: 5.0 - 15.7
Band 4: 15.2 - 43.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER REQUIREMENTS: 70 w, 110 v, 50/60 cyc ac

or

6-v dc (supplied by a No. 301 Electronic Converter).

PHYSICAL CHARACTERISTICS

Radio Receiver R-205/U measures 19-1/2 x 9-1/2 x 10-1/8 inches, net weight 56 pounds, volume 1.16 cu ft.

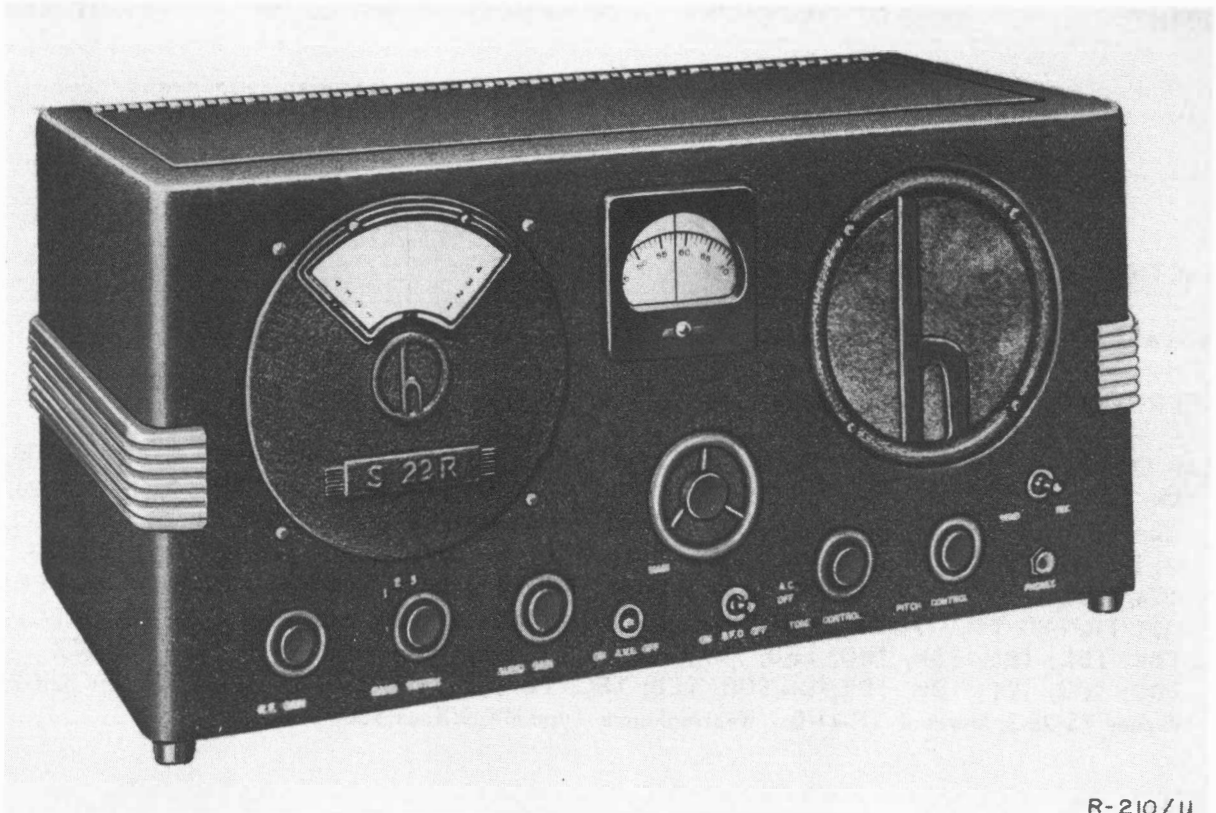
STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Army, Navy
 DATE OF THIS SHEET: 30 Jan 52

AN/URR-TYPE

AN/COMP TYPE NUMBER:

R-210/U

RADIO RECEIVER



R-210/U

Radio Receiver R-210/U is a transportable, a-m (voice and cw) equipment used for point-to-point communication in the l-f, m-f, and h-f ranges at fixed plant installations.

This equipment consists essentially of a commercial (Hallicrafters S22R) table model radio receiver of the conventional communications type and consists of a single unit in a steel cabinet. It has a built-in loudspeaker and provision for headset operation. Its controls include r-f and a-f gain, pitch, band selection, avc, beat-frequency oscillator, and on-off switches.

It uses a long wire type antenna and can be operated from 110/125-v a-c or d-c power sources.

AN/URR-TYPE		INSTRUCTION LITERATURE: None
R-210/U	: AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER		USING SERVICE: Army, Navy DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant and training.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

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/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; 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; TBX; TCB; TCC; TCE; TCG; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; 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: 0.11 – 18.0, in four bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw,

POWER REQUIREMENTS: 50 w, 110-125 v dc or ac, 50/60 cyc.

PHYSICAL CHARACTERISTICS

Radio Receiver R-210/U measures 18 x 8-1/2 x 9-1/4 inches, net volume 1 cu ft. Packed for domestic shipment: total weight 31 pounds. Packed for export shipment: total weight 55 pounds, total volume 2 cu ft.

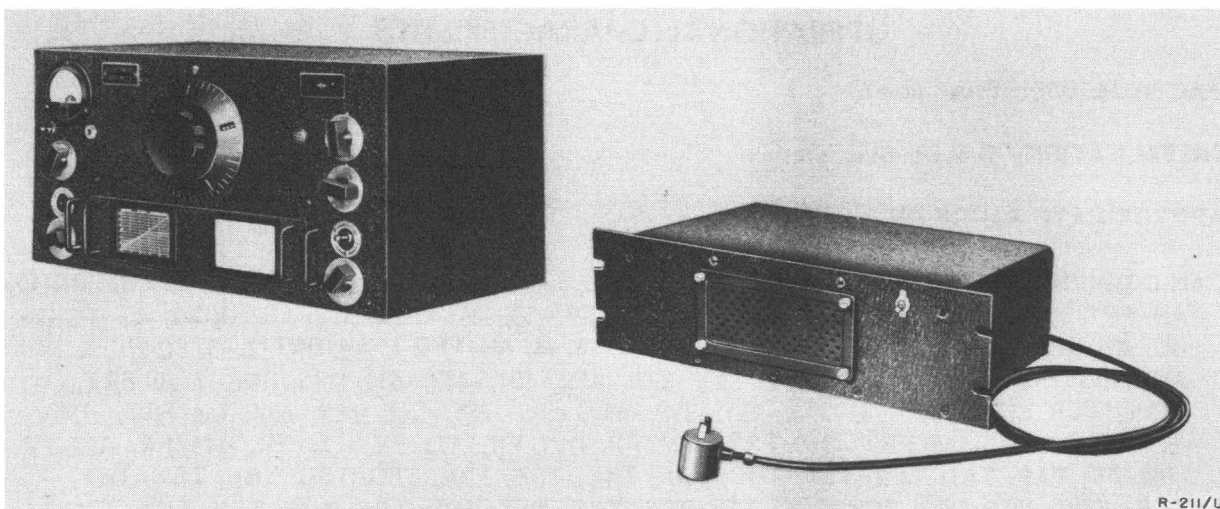
STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

AN/URR-TYPE

AN/COMP TYPE NUMBER:

R-211/U

RADIO RECEIVER



Radio Receiver R-211/U is a general purpose, lightweight, a-m (voice, tone, and cw) receiving equipment used for fixed plant communication in the l-f, m-f, and h-f bands.

This equipment consists of a single radio receiver, which may be table- or rack-and-panel-mounted. Has an external power supply. Operates in nine frequency bands, selected by means of interchangeable coils, and has a crystal-controlled band-pass filter which operates at 0.456 mc.

This receiver can be operated with a conventional single wire or doublet antenna system.

Power required is 115v ac or 6 v dc (by means of appropriate power supply unit).

AN/URR-TYPE		INSTRUCTION LITERATURE: None
R-211/U	: AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER		USING SERVICE : Army
		DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

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/SRC-3; AN/SRT-1, -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; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; 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: 0.05 - 30.0, by use of 9 r-f coil sets:

Type J: 0.05 - 0.10.	Type F: 0.48 - 0.96.	Type C: 3.5 - 7.3
Type H: 0.10 - 0.20.	Type E: 0.90 - 2.05.	Type B: 7.0 - 14.4
Type G: 0.18 - 0.43.	Type D: 1.70 - 4.00.	Type A: 14.0 - 30.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, tone.

POWER REQUIREMENTS: 115 v, 50/60 cyc ac with National Type SPU-697 Power Supply.
6 v, dc with National Type SPU-686-S Power Supply.

PHYSICAL CHARACTERISTICS

Radio Receiver R-211/U weighs 79.5 pounds net, volume 2.1 cu ft. Packed for domestic shipment: total weight 81 pounds, total volume 2.4 cu ft. Packed for export shipment: total weight 211 pounds, total volume 9.1 cu ft. Shipped in 3 packages both domestic and export.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 8 Jan 52

AN/URR-TYPE

AN/COMP TYPE NUMBER:

R-212/SR

RADIO RECEIVER



R-212/SR

Radio Receiver R-212/SR is a tuned-radio-frequency, a-m (cw, icw, and mcw) radiotelegraph receiving equipment used in shipborne and fixed station applications.

This equipment consists of a commercial (Federal 128 AY) receiver having a regenerative detector. It can be operated with a single wire-and-ground antenna system.

Operates on ac or dc or from storage or dry batteries and has a power-selection switch by means of which the power source can be selected.

AN/URR-TYPE		INSTRUCTION LITERATURE: TM 11-868
R-212/SR	:AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER		USING SERVICE: Army
		DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne, fixed station. APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1 AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDE; TDK; TDO; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.650, in four overlapping bands.

Band A: 0.015 - 0.041.	Band C: 0.095 - 0.260.
Band B: 0.037 - 0.105.	Band D: 0.240 - 0.650.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and mcw.

POWER OUTPUT: 0.10 w with low distortion; 0.15 w without regard to distortion.

POWER REQUIREMENTS.	<u>A-c line</u>	<u>D-c line plus A battery</u>		<u>Batteries</u>	
	36 w	<u>line</u>	<u>battery</u>	<u>A</u>	<u>B</u>
	115 v	0.17 amp	1.9 amp	1.9 amp	7-12 ma
	60 cyc	115 v	6.3 v	6.3 v	90

PHYSICAL CHARACTERISTICS

Radio Receiver R-212/SR weighs 43 pounds net, volume 1.5 cu ft.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Army
 DATE OF THIS SHEET: 22 Jan 52

AN/URR-TYPE

AN/COMP TYPE NUMBER:

R-388/URR

RADIO RECEIVER



Radio Receiver R-388/URR is a general purpose, a-m (voice, cw, and frequency-shift keying) radio receiving equipment which operates in the m-f and h-f bands for fixed station or mobile applications.

This equipment, consisting of a single, self-contained, rack-mounted radio receiver having unusual stability and calibration accuracy, is especially useful for operating on known frequencies without searching or repeated readjustment and for reception of frequency-shift keying signals. Its features include a 100 kc crystal-calibrated oscillator, a coaxial antenna input connector, a coaxial connector for tapping the i-f output, and provision for connecting an external circuit to control the built-in remote-disabling relay. It can be operated by means of headphones or loudspeaker and in conjunction with straight wire or doublet type antenna systems.

Operates from conventional commercial type power or equivalent field power units

AN/URR-TYPE

R-388/URR

:AN/COMP TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-854

CLASSIFICATION OF EQUIPMENT:Unclassified
USING SERVICE : Army

DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station or mobile.

APPROXIMATE RANGE (IN MILES): Extended.

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; 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: 0.5- 30.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, frequency-shift keying

POWER REQUIREMENTS: 85w, 115/230 v, 45/70 cyc ac.

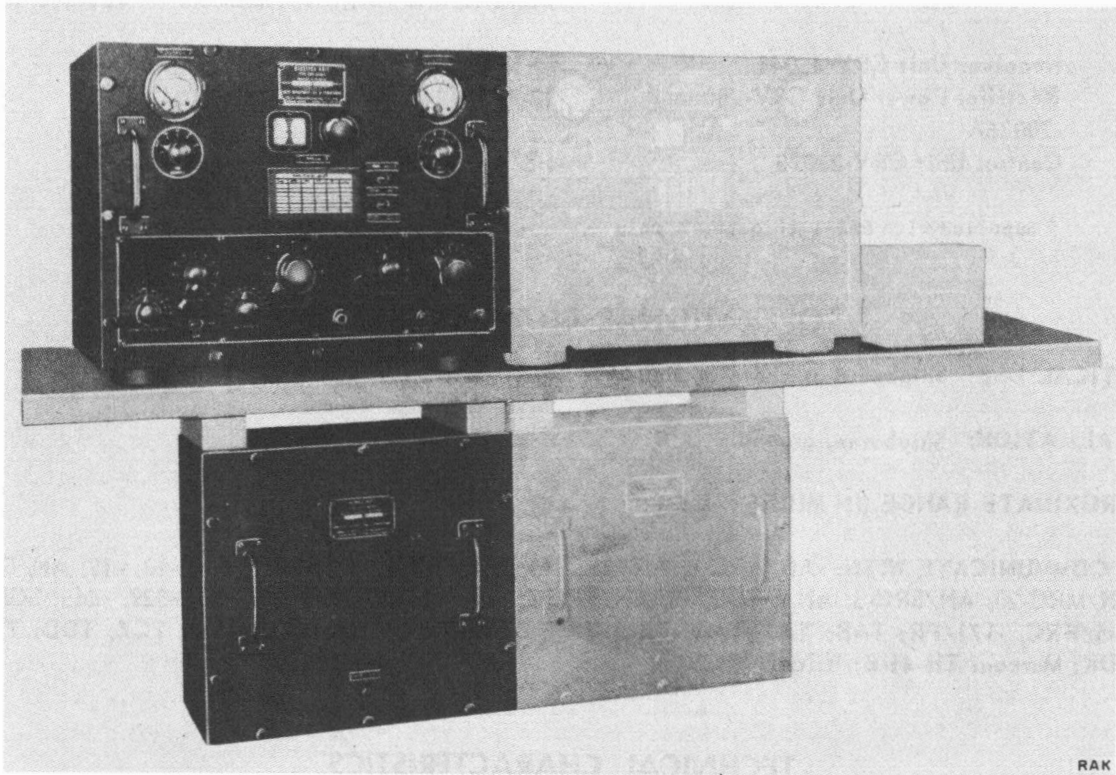
PHYSICAL CHARACTERISTICS

Radio Receiver R-388/URR measures 10-1/2 x 19 x 13-11/16 inches, net weight 35 pounds, volume 1.75 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAK, RAK-1 through 4
RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAK, and RAK-1 through -4 are general purpose tuned-radio-frequency receivers designed primarily to receive radiotelegraph signals within the frequency range 0.015 to 0.600 mc. Voice reception is intelligible only above 0.2 mc.

These equipments are essentially identical. The RAK is battery operated only but, in an emergency, the RAK-1 through -4 can also be operated from batteries. These receivers are often installed adjacent to an RAL series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied with the RAK-1 through -4 which permits this type of operation.

Equipment required but not supplied: 600-ohm headset and receiving antenna.

AN/URR-TYPE	INSTRUCTION LITERATURE: 1B-23299; -23299-1; 23299-2; -26678	
	CLASSIFICATION OF EQUIPMENT: Unclassified	
	USING SERVICE : Navy	
RAK, RAK-1 through 4	:SERVICE TYPE NUMBER	DATE OF THIS SHEET: 29 Mar 52
RADIO RECEIVING EQUIPMENT		

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CRV-46044	13-5/16 x 18 x 16-3/4	74
*1	Rectifier Power Unit CRV-20036, -20036A	12-1/4 x 14 x 8-5/8	41
*1	Control Unit CRV-23073	4-3/4 x 5-3/8 x 3-5/8	2

* Supplied with RAK-1 through -4 only.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600, in 6 bands.

- | | |
|--------------------------|-------------------------|
| Band 1: 0.015 – 0.025. | Band 4: 0.0775 – 0.153. |
| Band 2: 0.025 – 0.0435. | Band 5: 0.153 – 0.308. |
| Band 3: 0.0435 – 0.0775. | Band 6: 0.308 – 0.600. |

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2 mc).

POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: Without ballast tube: 60 w, 115 v (+ 10%) 60 cyc, 1 phase.
With ballast tube: 200 w, 115 v (+ 10%) 60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

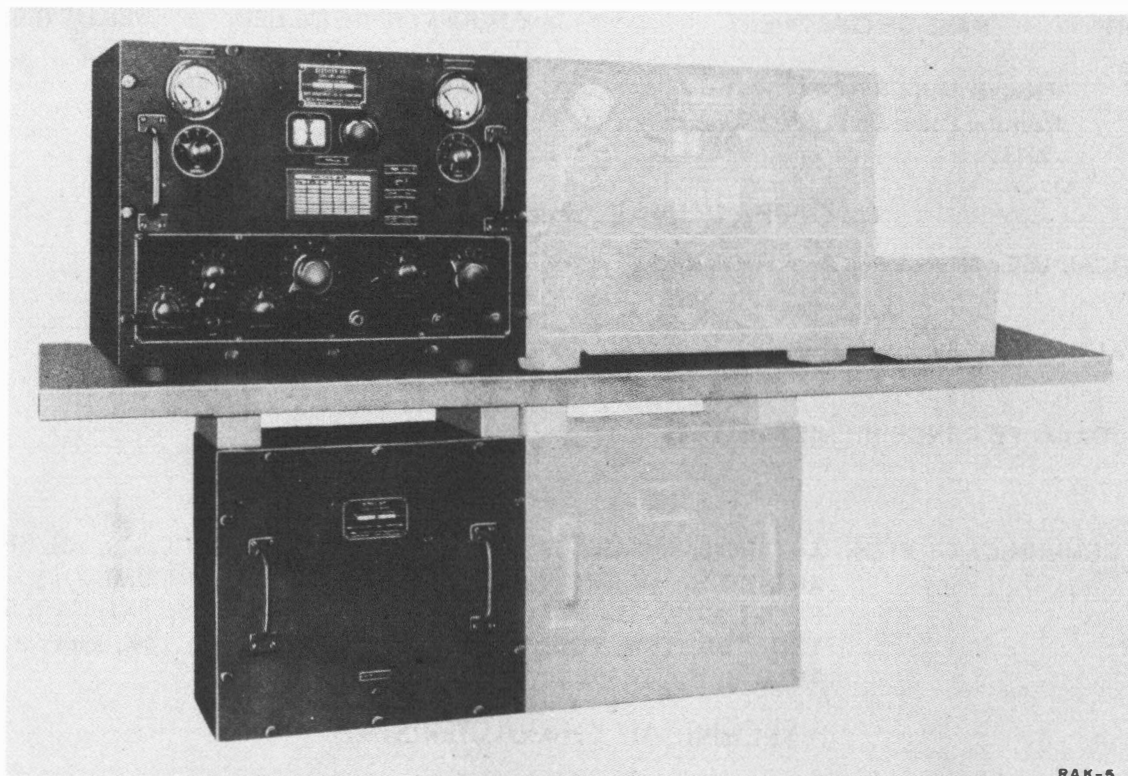
PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RAK and RAK-1 through 4 measure 26 x 18 x 16-3/4 inches each.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAK-5, -6
RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RAK-5 and -6 are general purpose tuned r-f receivers designed primarily to receive telegraph signals within the range of frequencies from 0.015 to 0.600 mc. Voice reception is intelligible only above 0.2 mc.

Either the RAK-5 or RAK-6 is often installed adjacent to an RAL series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied with the RAL-5 through -8 receivers which permits this type of operation.

In an emergency, the receiver can be operated directly from batteries.

Equipment required but not supplied: 600-ohm headset and receiving antenna.

AN/URR-TYPE		INSTRUCTION LITERATURE: IB-38043; NavShips 95231
RAK-5, -6	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT		USING SERVICE : Navy
		DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CRV-46044, -46155	13-5/16 x 18 x 16-3/4	74
1	Rectifier Power Unit CRV-20036A, -20131	12-1/4 x 14 x 8-5/8	41

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015-0.600, in six bands.

Band 1: 0.015 – 0.025.	Band 4: 0.0775 – 0.153.
Band 2: 0.025 – 0.0435.	Band 5: 0.153 – 0.308.
Band 3: 0.0435 – 0.0775.	Band 6: 0.308 – 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2mc).

POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 115 v ($\pm 10\%$) 60 cyc, 1 phase.

Without ballast tube: 60 w, 115 v ($\pm 10\%$) 60 cyc, 1 phase.

Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAK-5 and -6 measures 26 x 18 x 16-3/4 inches each.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAK-7, -8
RADIO RECEIVING EQUIPMENT



RAK-7

Radio Receiving Equipments RAK-7 and -8 are general purpose tuned-radio-frequency receivers designed primarily to receive telegraph signals within the frequency range 0.015 to 0.600 mc.

Each of these equipments is often installed adjacent to an RAL series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied with the RAL-5 through -8 receivers which permits this type of operation.

In an emergency, the receiver can be operated directly from batteries.

Equipment required but not supplied: 600-ohm headset and receiving antenna.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,232; 900,480
	CLASSIFICATION OF EQUIPMENT: Unclassified
RAK-7, -8	USING SERVICE: Navy
:SERVICE TYPE NUMBER	DATE OF THIS SHEET: 29 Mar 52
RADIO RECEIVING EQUIPMENT	

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CND-46155, CMX-46155-A	13-5/16 x 18 x 16-3/4	74
1	Rectifier Power Unit CND-20131, CMX-20131-A	12-1/4 x 14 x 8-5/8	42

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19;
AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1;
AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR;
TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ;
TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600, in 6 bands.

Band 1: 0.015 - 0.025.

Band 4: 0.0775 - 0.153.

Band 2: 0.025 - 0.0435.

Band 5: 0.153 - 0.308.

Band 3: 0.0435 - 0.0775.

Band 6: 0.308 - 0.600.

TYPE MODULATION: Am.

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

POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 110-120 v, 60 cyc, 1 phase.

Without ballast tube: 60 w, 110-120 v, 60 cyc, 1 phase.

Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

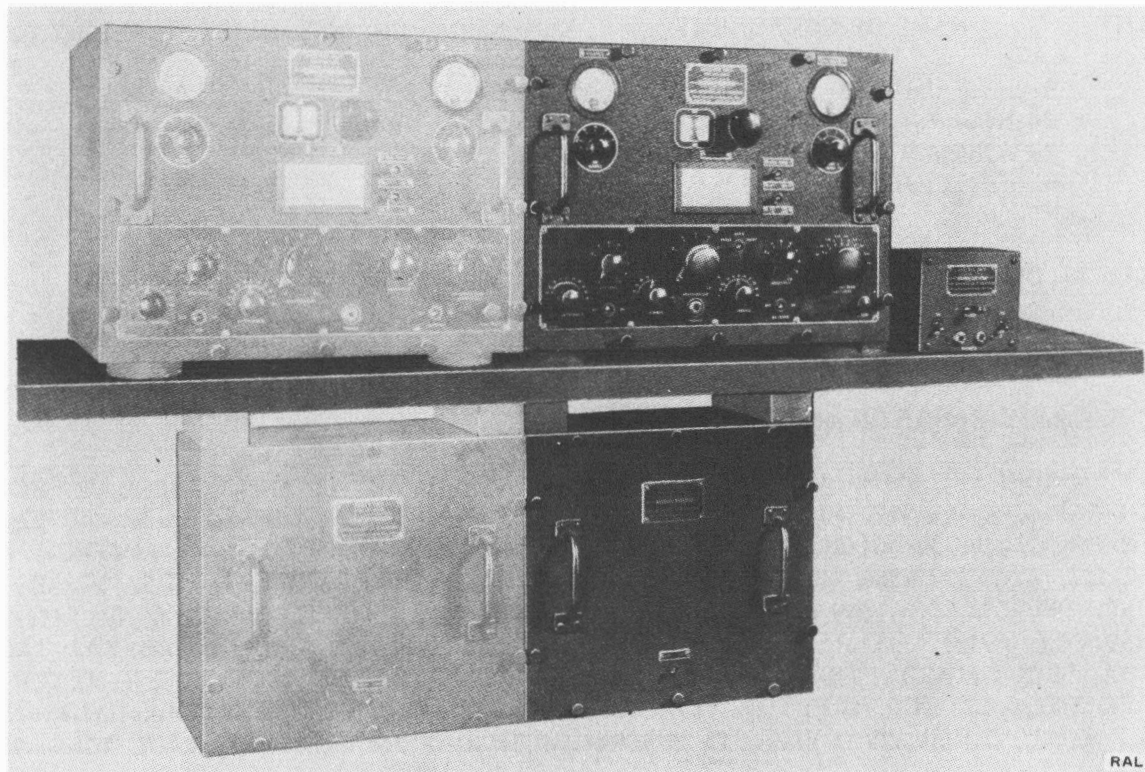
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAK-7 or -8 measures 26 x 18 x 16-3/4 inches, net weight 196 pounds, volume 4.7 cu ft. Packed for domestic shipment: total weight 371 pounds, total volume 16.9 cu ft. Shipped in 4 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAL, RAL-1 through -4
RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAL and RAL-1 through -4 are general purpose radio receivers designed to receiveradiotelegraph and voice signals within the frequency range 0.3 to 23.0 mc.

These receivers are essentially identical, but the RAL model is battery operated only.

They are often installed adjacent to an RAK (series) receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied with RAK-1 through -4 which permits this type of operation.

A 600-ohm headset and receiving antenna are required but not supplied.

Can be operated directly from batteries in an emergency.

AN/URR-TYPE		INSTRUCTION LITERATURE: IB-23900; -23900-1; -23900-2; -26679
		CLASSIFICATION OF EQUIPMENT: Unclassified
RAL, RAL-1 through 4	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CRV-46045	13-5/16 x 18 x 16-3/4	69
1	Rectifier Power Unit CRV-20036, CRV-20036-A (supplied with RAL-1 through -4 only)	12-1/4 x 14 x 8-5/8	41

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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, -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-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -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; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; 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: 0.3 - 23.0, in 9 bands.

Band 1: 0.3 — 0.49.	Band 4: 1.33 — 2.08.	Band 7: 5.5 — 8.8.
Band 2: 0.49 — 0.8.	Band 5: 2.08 — 3.4.	Band 8: 8.8 — 14.3.
Band 3: 0.8 — 1.33.	Band 6: 3.4 — 5.5.	Band 9: 14.3 — 23.0.

TYPE MODULATION: Am.

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

POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 115 v (+ 10%) 60 cyc, 1 phase.
Without ballast tube: 60 w, 115 v (+ 10%) 60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

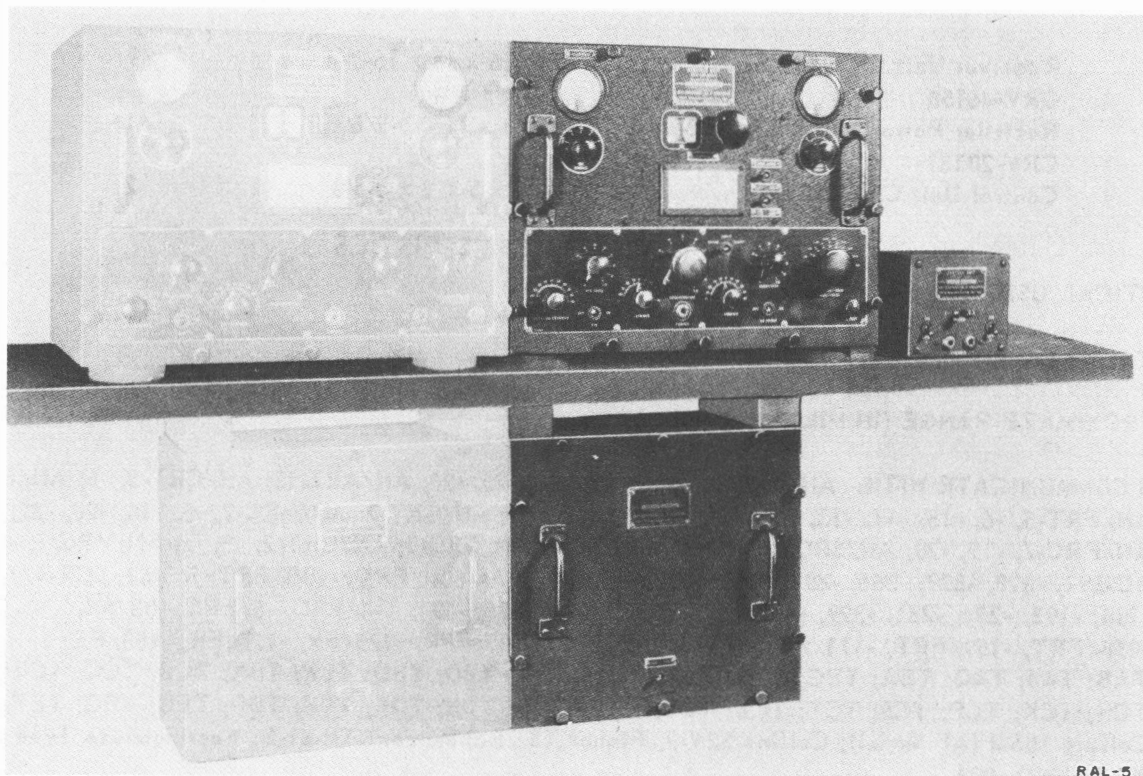
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAL or RAL-1 through -4 measures 26 x 18 x 16-3/4.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAL-5, -6
RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAL-5 and RAL-6 are general purpose, tuned-radio-frequency receivers for receiving radiotelegraph and voice signals within the frequency range 0.3 to 23.0 mc.

This type of radio receiver is often installed adjacent to an RAK series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied which permits this type of operation.

A 600-ohm headset and receiving antenna are required but not supplied.

Can be operated from batteries in an emergency.

AN/URR-TYPE		INSTRUCTION LITERATURE: IB-38044, NavShips 95233
		CLASSIFICATION OF EQUIPMENT: Unclassified
RAL-5, -6	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CRV-46045, CRV-46156	13-5/16 x 18 x 16-3/4	69
1	Rectifier Power Unit CRV-20036A, CRV-20131	12-1/4 x 14 x 8-5/8	41
1	Control Unit CRV-23073	4-3/4 x 5-3/8 x 3-5/8	2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3, -5; AN/FRC-10, AN/FRT-5, -6, -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-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -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; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 253; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 23.0, in 9 bands.

Band 1: 0.3 — 0.49.	Band 4: 1.33 — 2.08.	Band 7: 5.5 — 8.8.
Band 2: 0.49 — 0.8.	Band 5: 2.08 — 3.4.	Band 8: 8.8 — 14.3.
Band 3: 0.8 — 1.33.	Band 6: 3.4 — 5.5.	Band 9: 14.3 — 23.0.

TYPE MODULATION: Am.

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

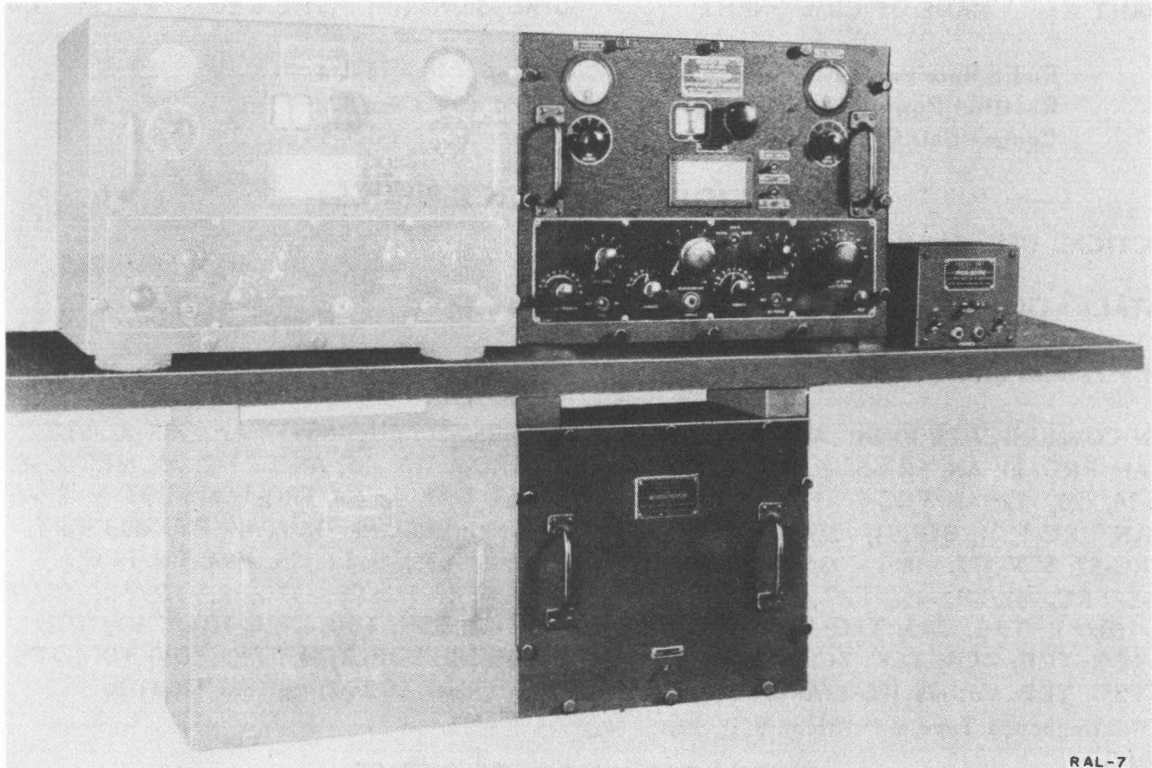
POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 110-120 v, 60 cyc, 1 phase.
Without ballast tube: 60 w, 110-120 v, 60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAL-5 or RAL-6 measures 26 x 18 x 16-3/4 inches.

STATUS: Limited Standard	AN/URR TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	
USING SERVICE: Navy	SERVICE TYPE NUMBER: RAL-7, -8
DATE OF THIS SHEET: 29 Mar 52	RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAL-7 and RAL-8 are general purpose, tuned-radio-frequency receivers for receiving radiotelegraph and voice signals within the frequency range 0.3 to 23.0 mc.

This type of radio receiver is often installed adjacent to an RAK series receiver to form a complete two-channel installation for guarding two frequencies simultaneously. A separate control unit is supplied which permits this type of operation.

A 600-ohm headset and receiving antenna are required but not supplied.

Can be operated from batteries in an emergency.

AN/URR TYPE		INSTRUCTION LITERATURE: NavShips 900,480; 95234
		CLASSIFICATION OF EQUIPMENT:Unclassified
RAL-7, -8	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CND-46156	13-5/16 x 18 x 16-3/4	69
1	Rectifier Power Unit CND-20131	12-1/4 x 14 x 8-5/8	42
1	Control Unit CND-23073	4-3/4 x 5-3/8 x 3-5/8	2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -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-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -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; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; 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: 0.3 - 23.0, in 9 bands.

Band 1: 0.3 - 0.49.	Band 4: 1.33 - 2.08.	Band 7: 5.5 - 8.8.
Band 2: 0.49 - 0.8.	Band 5: 2.08 - 3.4.	Band 8: 8.8 - 14.3.
Band 3: 0.8 - 1.33.	Band 6: 3.4 - 5.5.	Band 9: 14.3 - 23.0.

TYPE MODULATION: Am.

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

POWER OUTPUT: 170 mw.

POWER REQUIREMENTS: With ballast tube: 200 w, 115 v(± 10%)60 cyc, 1 phase.
Without ballast tube: 60 w, 115 v(± 10%)60 cyc, 1 phase.
Battery operation: 12.6 w, 6.3 v and 8.1 w, 180 v.

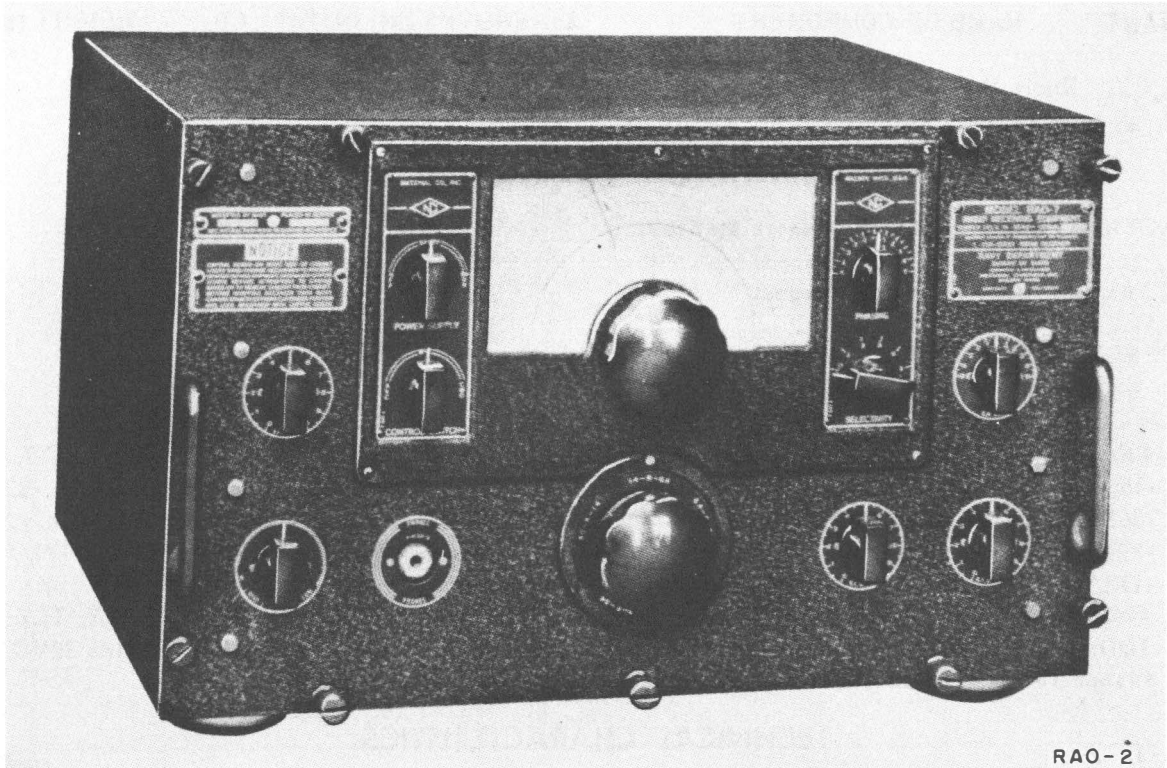
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAL-7 or RAL-8 measures 26 x 18 x 16-3/4 inches, net weight 193 pounds, volume 4.7 cu ft. Packed for domestic shipment: total weight 304 pounds, total volume 16.9 cu ft. Shipped in 4 packages.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAO-2, -3
 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAO-2 and RAO-3 are general purpose receivers for receiving radio-telegraph or voice signals.

Radiation of r-f power from the internal heterodyne oscillator has been reduced to less than 400 uuv at the antenna terminals.

These receivers are identical, with the exception that RAO-3 has a coaxial antenna input receptacle for use with a shielded lead-in cable.

A headset or loudspeaker and receiving antenna are required but not supplied.

RAO-2 and RAO-3 can be operated directly from batteries in an emergency.

AN/URR-TYPE		INSTRUCTION LITERATURE: NavShips 900,351 and 900,359
		CLASSIFICATION OF EQUIPMENT: Unclassified
RAO-2, -3	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46187, -46187-A	10-21/32 x 17-3/16 x 17-1/4	75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

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, -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; 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: 0.54 - 30.0, in 5 bands.

- Band 1: 0.54 - 1.30.
- Band 2: 1.3 - 2.8.
- Band 3: 2.8 - 6.4.
- Band 4: 6.4 - 14.0.
- Band 5: 14.0 - 30.0.

TYPE MODULATION: Am.

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

POWER OUTPUT: 0.3 w.

POWER REQUIREMENTS: 60 w, 115 v ($\pm 10\%$) 50/60 cyc, 1 phase.

Battery operation: 22 w, 6.3 v and 5.4 w, 135 v.

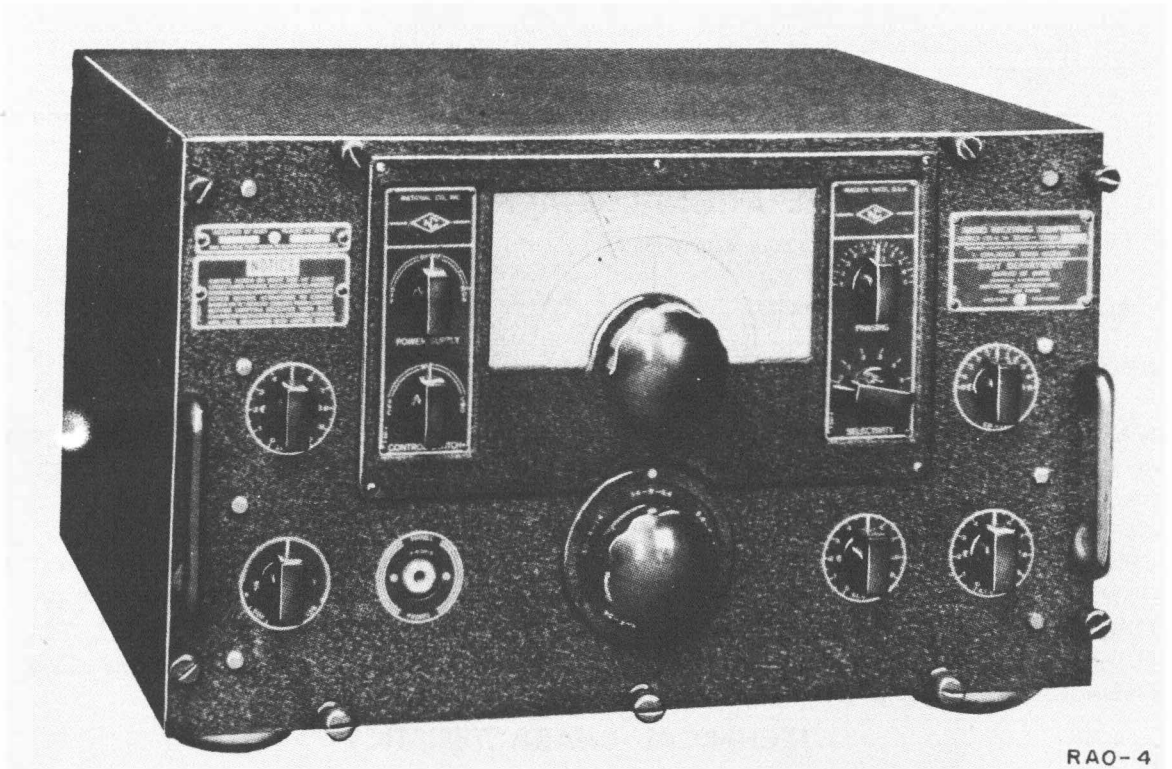
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAO-2 or RAO-3 measures 12-1/4 x 17-11/16 x 19-1/8 inches, net weight 115 pounds. Packed for domestic shipment: total weight 165 pounds, total volume 6.8 cu ft. Shipped in 1 package.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAO-4, -5
 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAO-4 and RAO-5 are general purpose receivers for receiving radiotelegraph or voice signals. Radiation of r-f power from the internal heterodyne oscillator has been reduced to less than 400 uuw at the antenna terminals.

These receivers are identical in design, with the exception of the a-f output circuit.

RAO-4 is supplied with a headset; RAO-5 is supplied with a loudspeaker. A receiving antenna is required but not supplied.

These receivers can be operated directly from batteries in an emergency.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,359 – 900,489
	CLASSIFICATION OF EQUIPMENT:Unclassified
RAO-4, -5 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CWQ-46187-B, -46229	10-21/32 x 17-3/16 x 17-1/4	75
1	Loudspeaker CJS-49493 (RAO-5 only)	8-5/8 x 8-1/4 x 5-1/8	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

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, -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/YRC-1, -4; AN/YRT-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; 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: 0.54 - 30.0, in 5 bands.

- Band 1: 0.54 – 1.30.
- Band 2: 1.3 – 2.8,
- Band 3: 2.8 – 6.4.
- Band 4: 6.4 – 14.0.
- Band 5: 14.0 – 30.0.

TYPE MODULATION: Am.

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

POWER OUTPUT: RAO-4: 0.3 w.
RAO-5: 0.015 for headset operation; 2.0 w for loudspeaker operation.

POWER REQUIREMENTS: 60 w, 115/230 v, 50/60 cyc, 1 phase.
Battery operation: 22 w, 6.3 v and 5.4 w, 135 v.

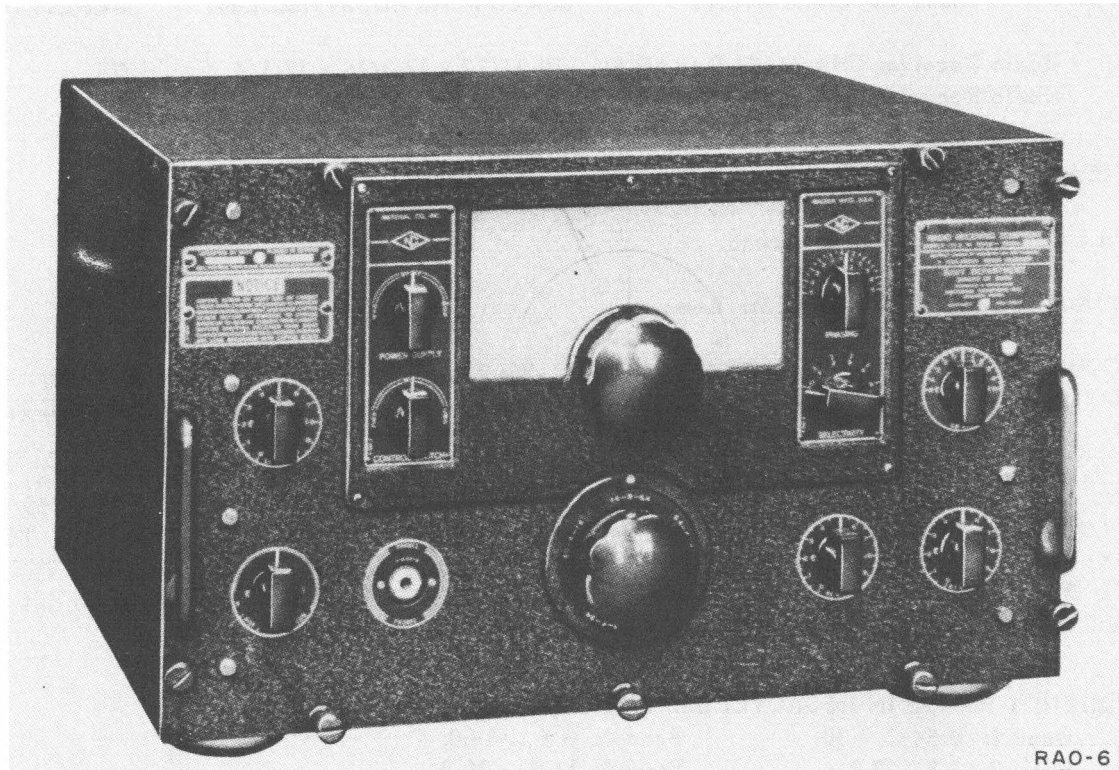
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAO-4 or RAO-5 measures 12-1/2 x 17-3/4 x 19-1/2 inches, net weight 90 pounds. Packed for domestic shipment: total weight 215 pounds, total volume 8.6 cu ft. Shipped in 1 package.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAO-6, -7
 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RAO-6 and RAO-7 are general purpose, a-m (voice, cw, icw, and mcw) receivers of radiotelegraph or voice signals. Radiation of r-f power from the internal heterodyne oscillator has been reduced to less than 400 uuw at antenna terminals.

These sets each have a coaxial antenna input receptacle for a shielded lead-in cable. There is also an output socket for connection to an auxiliary panoramic adapter such as Navy Model OBH, or equivalent.

Headset or loudspeaker and antenna are required but not supplied.

These receivers can be operated directly from batteries in an emergency.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,351
	CLASSIFICATION OF EQUIPMENT: Unclassified
RAO-6, -7 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46187-D (RAO-6)	10-21/32 x 17-3/16 x 17-1/4	75
1	Radio Receiver CNA-46233 (RAO-7)	12-7/16 x 19 x 17-25/32	97

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

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, -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; 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 253; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 30.0, in 5 bands.

- | | |
|----------------------|----------------------|
| Band 1: 0.54 - 1.30. | Band 4: 6.4 - 14.0. |
| Band 2: 1.3 - 2.8. | Band 5: 14.0 - 30.0. |
| Band 3: 2.8 - 6.4. | |

TYPE MODULATION: Am.

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

POWER OUTPUT: 0.3 w.

POWER REQUIREMENTS: 60 w, 115 v (+10%) 50/60 cyc, 1 phase.

Battery operation: 22 w, 6.3 v and 5.4 w, 135 v.

PHYSICAL CHARACTERISTICS

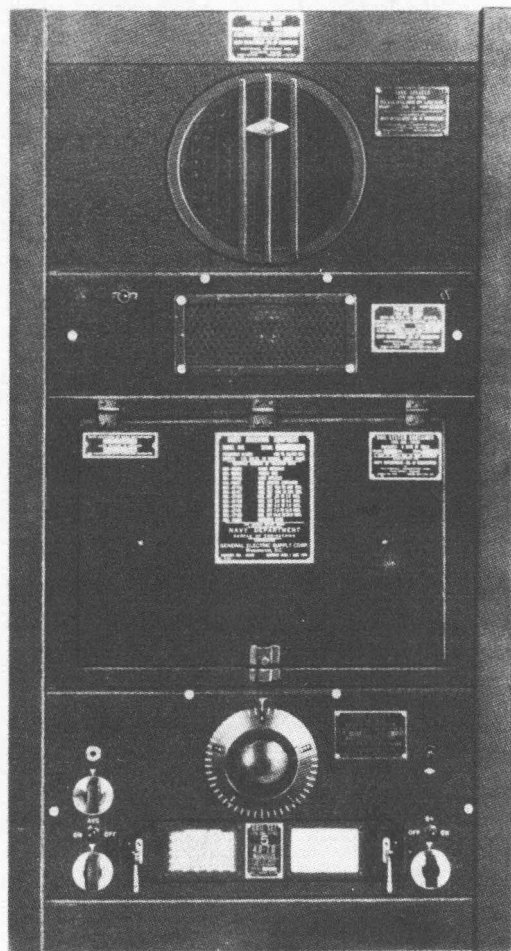
Radio Receiving Equipment RAO-6 measures 12-1/2 x 17-1/2 x 18-3/4 inches, net weight 127 pounds, volume 2.3 cu ft. Packed for domestic shipment: total weight 177 pounds, total volume 6.8 cu ft. Shipped in 1 package.

Radio Receiving Equipment RAO-7 measures 12-7/16 x 19 x 18-15/16 inches, net weight 169 pounds, volume 3.5 cu ft. Packed for domestic shipment: total weight 253 pounds, total volume 8.2 cu ft. Shipped in 2 packages.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RAS, RAS-1 Through-5
 RADIO RECEIVING EQUIPMENT



RAS

Radio Receiving Equipments RAS and RAS-1 through -5 are general purpose, rack-installed, radio receivers of radiotelephone or radiotelegraph signals.

The antenna input circuit is suitable for operation with either a single wire antenna or a balanced feed line.

A combination headphone-jack/loudspeaker-switch is provided for selection of either headphone or loudspeaker reception.

Besides the "Plate Volts-On-Off" switch, there is a terminal strip at the rear for remote control connections, permitting silencing of the receiver when a nearby transmitter is being used.

A receiving antenna is required but not supplied.

Can be operated from batteries in an emergency.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 95236 through 95239
	CLASSIFICATION OF EQUIPMENT: Unclassified
RAS, RAS-1 through -5 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CNA-46080	9-3/4 x 19 x 10-1/4	35
1	Coil System Container CNA-10037	12-1/4 x 19 x 6-5/8	26
1	Rectifier Power Unit (50-60 cyc) CNA-20090 or Rectifier Power Unit (25 cyc) CNA-20089	5-1/4 x 19 x 9-3/4	22
1	Loudspeaker CNA-49105	9-3/4 x 19 x 4-1/16	9
1	Mounting Rack CNA-10036	39-1/2 x 20 1/2 x 12-3/8	27

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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-1, -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-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; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; 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: 0.19 - 30.0 in 7 bands.

Band 1: 0.19 - 0.45	Band 4: 2.0 - 4.0	Band 7: 14.0 - 30.0.
Band 2: 0.45 - 0.90	Band 5: 4.0 - 7.0	
Band 3: 0.90 - 2.0	Band 6: 7.0 - 14.0	

TYPE MODULATION: Am.

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

POWER OUTPUT: 10 mw, headphone output;
2 w, loudspeaker output.

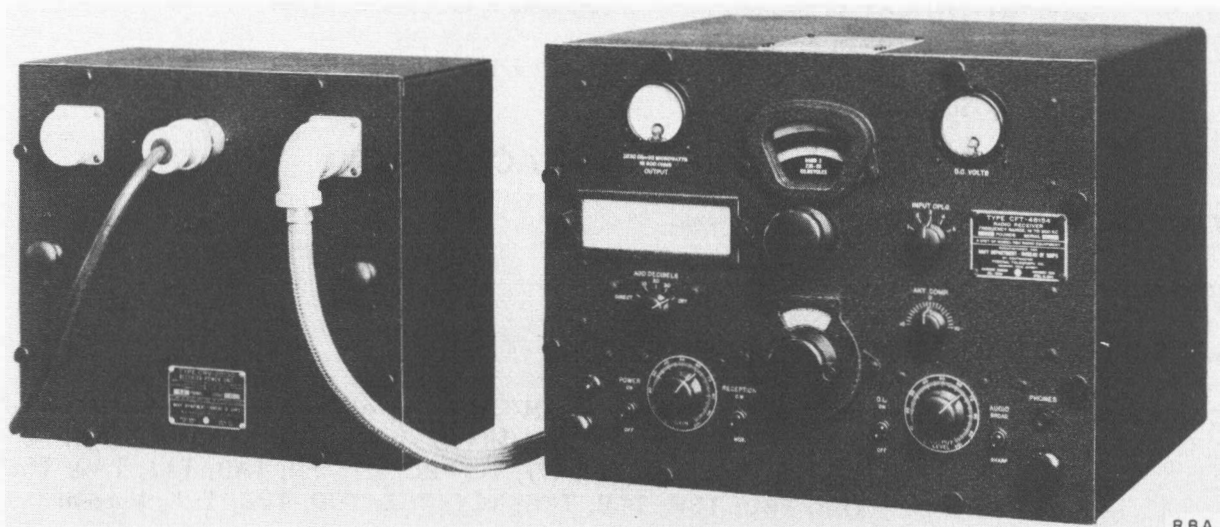
POWER REQUIREMENTS: 70 w, 110 - 120 v, 50/60 cyc, 1 phase, ac.
70 w, 110 - 120 v, 25 cyc, 1 phase, ac.
Battery operation: 10 w, 180 v and 21 w, 6.3 v.

PHYSICAL CHARACTERISTICS

Each Radio Receiving Equipment RAS and RAS-1 through -5 measures 39-1/2 x 20-1/2 x 13-7/8 inches, net weight 140 pounds.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: See note below *
 DATE OF THIS SHEET: 8 Apr 52

AN/URR-TYPE
 SERVICE TYPE NUMBER: RBA, RBA-1, -2, -3, -5, -7
 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBA, RBA-1, -2, -3, -5, and -7 are general purpose shipboard or shore station radio receivers of l-f and m-f signals.

These equipments include provision for operating a number of receivers from a common antenna and transmission line.

Automatic regulation of receiver output signal voltage (as a function of load resistance) permits from one to twenty 600-ohm headphones to be connected across the output circuit with less than 40 percent change in output voltage.

The various models of these equipments are electrically and mechanically interchangeable.

Sensitivity is 10 microvolt input for 6-mw output on c-w operation. Input impedance is adjustable over a wide range.

*USING SERVICE: RBA, Navy, Army.
 RBA-1, -2, -3, -5, -7 Navy.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900, 473; NavShips 900, 708
	CLASSIFICATION OF EQUIPMENT: Unclassified
RBA, RBA-1, -2, -3, -5, -7 :SERVICE TYPE NUMBER	USING SERVICE : See note below *
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 8 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CFT-46154, -46154-A, -46154-B	13-31/32 x 18-1/8 x 17-19/64	95
1	Rectifier Power Unit CRV-20130, -20130-B, -20130-D	13-1/2 x 15 x 9-3/4	52

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Ground, shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.6, in 4 bands.

Band 1: 0.015 — 0.038

Band 3: 0.095 — 0.235

Band 2: 0.038 — 0.095

Band 4: 0.235 — 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and mcw on all bands. Voice reception is possible, but some distortion is present below 0.3 mc due to the high order of selectivity and a-f filters.

POWER OUTPUT: 50 mw into 600-ohm load; 500 mw into 30-ohm load.

POWER REQUIREMENTS: 66 w, 110 — 120 v, 55 / 65 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBA, RBA-1, -2, -3, -5 or -7 measures 27-1/4 x 18-5/32 x 20-9/16 inches, net weight 147 pounds, volume 3.73 cu ft. Packed for domestic shipment: total weight 365 pounds, total volume 29.03 cu ft, 0.73 ship ton.

* USING SERVICE: RBA, Navy, Army.
RBA-1, -2, -3, -5, -7 Navy.

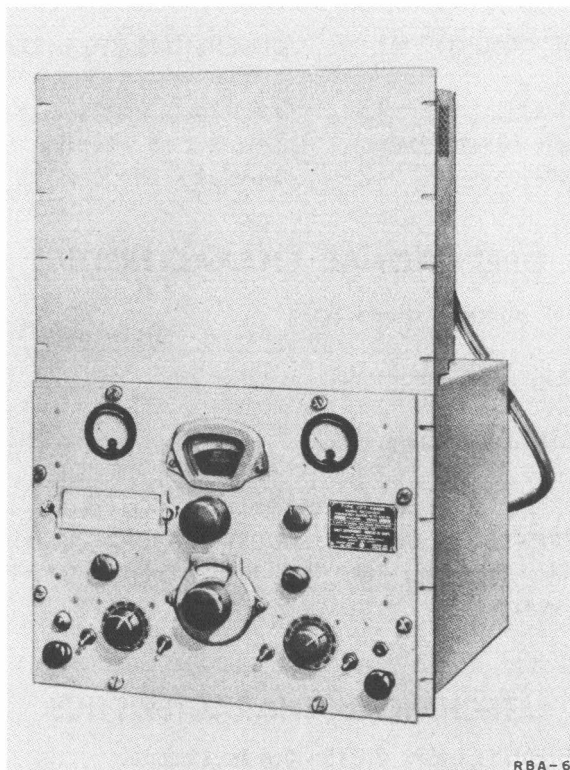
STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER:

RBA-6

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RBA-6 is a general purpose, tuned r-f receiver used for shipboard or shore station radio reception in the low- and medium-frequency bands.

This receiver provides for operation of a number of receivers from a common antenna and transmission line.

Automatic regulation of receiver output signal voltage (as a function of load resistance) permits from one to twenty 600-ohm headphones to be connected across the output circuit with less than 40 percent change in output voltage.

It is electrically interchangeable with the RBA, RBA-1, -2, -3, -5.

Sensitivity is 10-uv input for 6-mw output on cw.

Input impedance is adjustable over a wide range.

AN/URR-TYPE		INSTRUCTION LITERATURE: NavShips 900,708
		CLASSIFICATION OF EQUIPMENT: Unclassified
RBA-6	SERVICE TYPE NUMBER	USING SERVICE: Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET: 8 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CFT-46300	13-31/32 x 18-1/8 x 17-19/64	95
1	Rectifier Power Unit CRV-20130-B	13-1/2 x 15 x 9-3/4	52
1	Mounting Shelf CAOP-10349-A	14-9/32 x 19 x 9-29/32	53

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Ground, shipborne, mounted.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-8; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41/B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.6 in 4 bands.

Band 1: 0.015 - 0.038

Band 3: 0.095 - 0.235

Band 2: 0.038 - 0.095

Band 4: 0.235 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and mcw on all bands. Voice reception is possible, but some distortion is present below 0.3 mc due to the high order of selectivity and audio frequency filters.

POWER OUTPUT: 50 mw into 600 ohm load; 500 mw into 30 ohm load.

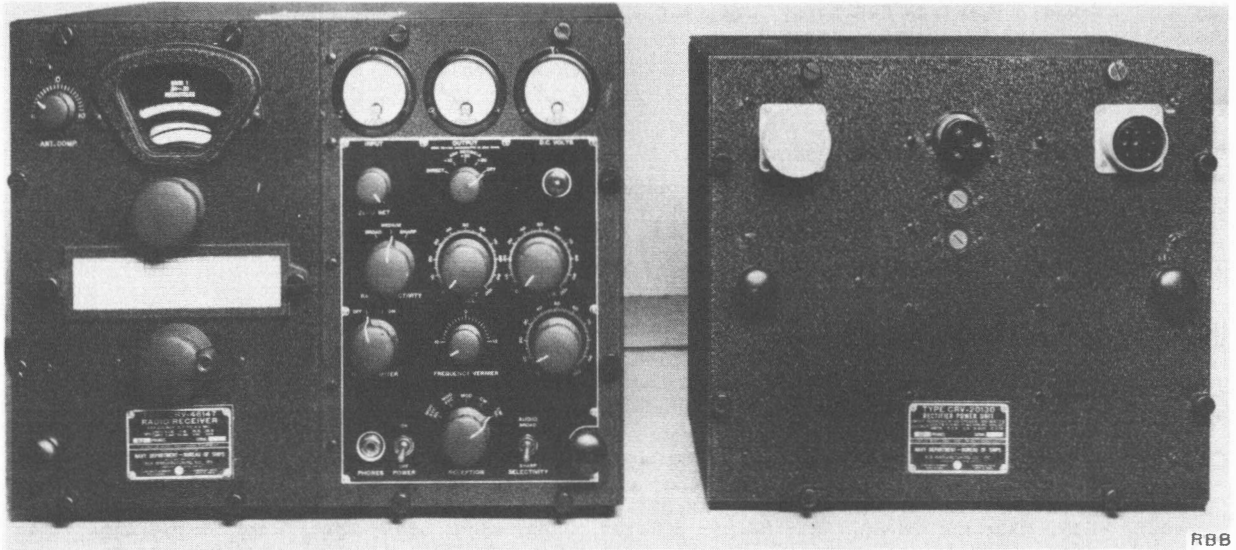
POWER REQUIREMENTS: 66 w, 110 - 120 v, 55/65 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBA-6 measures 28-9/16 x 19 x 9-3/4 inches, net weight 200 pounds, volume 3.9 cu ft. Packed for domestic shipment: total weight 365 pounds, total volume 29.03 cu ft, 0.73 ship ton.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE
SERVICE TYPE NUMBER: RBB, RBB-1 through -6
RADIO RECEIVING EQUIPMENT



RBB

Radio Receiving Equipments RBB, RBB-1 through RBB-6 are general purpose receivers of radiotelegraph or telephone signals within the frequency band 0.5 to 4.0 mc.

RBB, RBB-1, -2, -3, and -5 are designed for shelf installation; RBB-4 and -6 are intended for relay rack installation.

Modifying kits are available which permit the adaptation of any RBB model to crystal-controlled reception, panoramic reception in conjunction with panoramic Radio Adaptor RBV series, and frequency shift reception in association with Frequency Shift Receiver Converter Equipments FRA and FRF.

It is often installed next to an RBC (series) receiver for continuous coverage of 0.5 to 27.0 mc.

A receiving antenna and headset are required but not supplied.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,477; 91101; 91469
	CLASSIFICATION OF EQUIPMENT: Unclassified
RBB, RBB-1 through -6 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CRV-46147, -46147-C, -46147-D, -46296, -46296-A	14-3/4 x 18-1/2 x 20-1/8	52
* 1	Cabinet CRV-10350-A	Not Available	Not Available
1	Rectifier Power Unit CRV-20130, -20130-B	13-7/16 x 15 x 9-7/8	52
** 1	Mounting Shelf CRV-10349-A	Not Available	Not Available
	* Supplied with RBB-4 ** Supplied with RBB-4, RBB-6.		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; 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; AN/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -595, -694; T-4/FRC, -5/FRC, -83/SR, -159/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -190/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDE; TDF; TDH; TDK; TDM; TDO; TEB; TEC; Collins 18S-4 (AF Model); Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.5 - 4.0 in 4 bands.

Band 1: 0.50 - 0.84 Band 3: 1.41 - 2.37
 Band 2: 0.84 - 1.41 Band 4: 2.37 - 4.0.

TYPE MODULATION: Am.

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

POWER OUTPUT: 15 mw into 600 ohms.

POWER REQUIREMENTS: 100 w, 110 - 120 v, 55/65 cyc, 1 phase, ac.
 (In an emergency, the same power unit may be used for two receivers with a total power requirement of 160 w.)

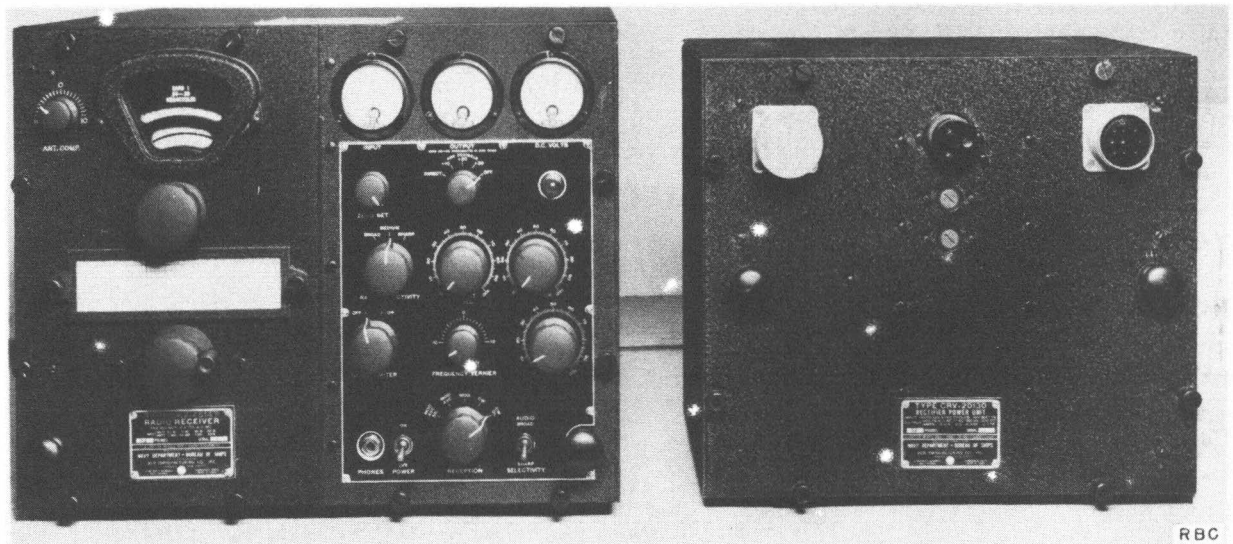
PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBB, RBB-1 through RBB-6 measure 28-3/16 x 18-1/2 x 20-1/2 inches, net weight 166 pounds, volume 6.43 cu ft. Packed for domestic shipment: total weight 261 pounds, total volume 18.3 cu ft. Packed for export shipment: total weight 312 pounds, total volume 22.8 cu ft, 0.57 ship ton. Shipped in 2 packages both domestic and export.

STATUS: Substitute Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBC, RBC-1 through -6
 RADIO RECEIVING EQUIPMENT



RBC

Radio Receiving Equipments RBC, RBC-1 through RBC-6 are general purpose, radiotelegraph, or radiotelephone receivers operating within the frequency band 4.0 to 27.0 mc.

RBC, RBC-1, -2, -3 and -5 are designed for shelf installation; RBC-4 and -6 are intended for relay rack installation.

Modifying kits are available which permit the adaptation of any RBC model to crystal-controlled reception, panoramic reception (in conjunction with Panoramic Radio Adaptor RBV series) and frequency-shift reception (in association with Frequency Shift Receiver Converter Equipments FRA and FRF).

This equipment is often installed next to an RBB (series) receiver for continuous coverage in the 0.5 to 27.0mc range.

A receiving antenna and headset are required but not supplied.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900.477; 91101; 91469
	CLASSIFICATION OF EQUIPMENT: Unclassified
RBC, RBC-1 through -6 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CRV-46149, -46149-C, -46297, -46297-A	14-3/4 x 19-1/2 x 20-1/8	92
*1	Cabinet CRV-10350-A	13-31/32 x 17-9/16 x 19	Not Available
1	Rectifier Power Unit CRV-20130, -20130-B	13-7/16 x 15 x 9-7/8	52
**1	Mounting Shelf CRV-10349-A	13-31/32 x 17-1/8 x 19	Not Available

* Supplied with RBC-4. ** Supplied with RBC-4 RBC-6.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; 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, -399, -401, -447, -610; MBS; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -198, -199, -274, -399, -499, -506, -536, -543, -595, -694; T-4/FRC, -83/SR, -159/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; TCO; 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: 4.0 - 27.0 in 4 bands.

Band 1: 4.00 - 6.45

Band 3: 10.30 - 16.50

Band 2: 6.45 - 10.30

Band 4: 16.50 - 27.00.

TYPE MODULATION: Am.

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

POWER OUTPUT: 15mw into 600 ohms.

POWER REQUIREMENTS: 100 w, 110 - 120 v, 55/65 cyc, 1 phase, ac.

(In an emergency, the same power unit may be used for two receivers with a total power requirement of 160 w.)

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBC, RBC-1 through -6 measure 28-3/16 x 18-1/2 x 20-1/2 inches, net weight 166 pounds, volume 6.43 cu ft. Packed for domestic shipment: total weight 261 pounds, total volume 18.3 cu ft. Packed for export shipment: total weight 305 pounds, total volume 22.8 cu ft, 0.57 ship ton. Shipped in 2 packages both domestic and export.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBG, RBG-1, -2

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBG-1, and -2 are highly sensitive and selective general purpose receivers of radiotelephone or radiotelegraph signals. Crystal selectivity is provided for reception of traffic under adverse conditions.

All three of these models have band-spread tuning over the following 4 h-f bands: 4.0 to 4.60 mc, 8.0 to 9.60 mc, 12.0 to 13.60 mc, and 15.0 to 18.0 mc.

A single wire or a 500-ohm, balanced feed-line antenna is required but not supplied. A phone jack output is provided on the front panel but a headset is not supplied.

RBG and RBG-2 are designed for operation from a 50/60 cyc a-c source. RBG-1 is designed for 25- cyc operation.

AN/URR-TYPE		INSTRUCTION LITERATURE: NavShips 900,004
RBG, RBG-1, -2	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT:Unclassified
RADIO RECEIVING EQUIPMENT		USING SERVICE : Navy
		DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHC-46140 (50/60 cyc)	12-3/16 x 18-15/16 x 14-11/16	62
	or Radio Receiver CHC-46163 (25 cyc)	12-3/16 x 18-15/16 x 14-11/16	67
1	Loudspeaker CHC-49154	9-3/8 x 10-5/16 x 7-5/16	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

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, -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; 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: 0.54 - 31.0, in 6 bands.

Band 1: 0.54 - 1.32	Band 4: 5.7 - 10.0
Band 2: 1.32 - 3.2	Band 5: 10.0 - 18.0
Band 3: 3.2 - 5.7	Band 6: 18.0 - 31.0

TYPE MODULATION: Am.

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

POWER OUTPUT: 10 mw into 600-ohm load for headset operation.
2 w into 5,000-ohm load for loudspeaker operation.

POWER REQUIREMENTS: 95 w, 110-120 v, 50/60 cyc, 1 phase.
95 w, 110-120 v, 25 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBG, -1, -2 measures 21-9/16 x 18-15/16 x 14-11/16 inches, net weight 87 pounds, volume 3.2 cu ft.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT:Unclassified

USING SERVICE: Navy

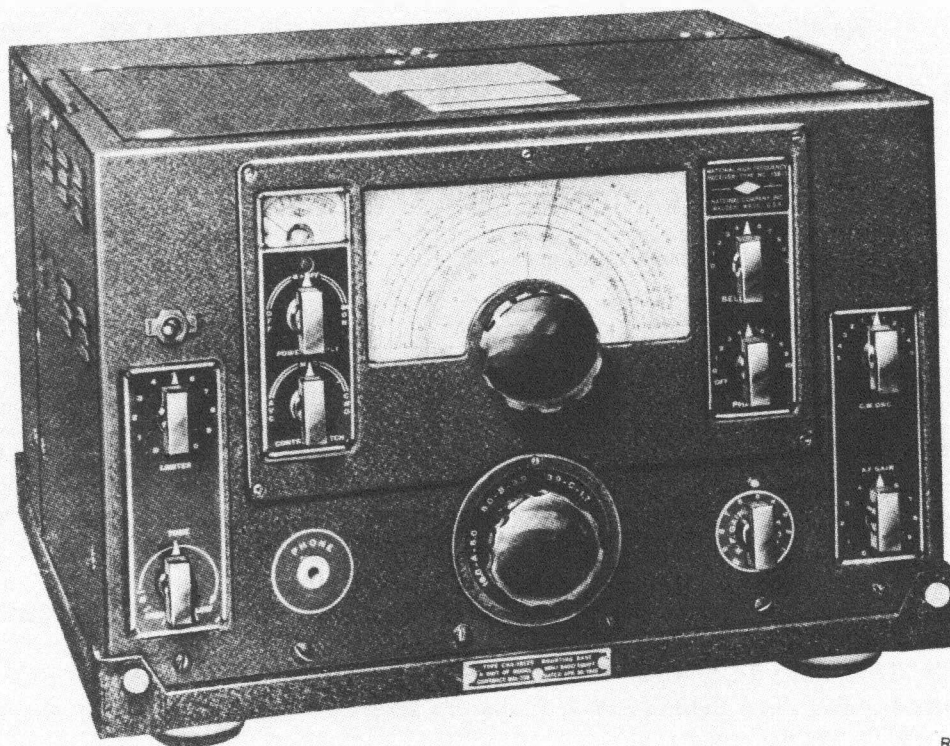
DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER:

RBH

RADIO RECEIVING EQUIPMENT



RBH

Radio Receiving Equipment RBH is a general purpose radio receiver of radiotelegraph or voice signals. Radiation of r-f power from the internal heterodyne oscillator has been kept below safe limits to permit use of this receiver in the combat zone.

The antenna input circuit is suitable for use with either a single wire antenna or a balanced feed line (70 ohms).

The loudspeaker supplied with the equipment matches the loudspeaker output circuit of the receiver. A headset output jack is also provided (600 ohms). The loudspeaker is shorted out when the headset is connected.

Crystal selectivity is provided in the first i-f stage of the receiver.

A receiving antenna and headset are required but not supplied.

AN/URR- TYPE		INSTRUCTION LITERATURE: NavShips 95242
		CLASSIFICATION OF EQUIPMENT: Unclassified
RBH	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46144	11 x 17-9/16 x 13-3/8	55
1	Loudspeaker CNA-49106	9-1/2 x 10-1/4 x 7-3/8	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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, -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-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/YRC-1, -4; BC-191, -329, -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; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; 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: 0.3 - 1.2 and 1.7 - 16.0, in 5 bands.

Band 1: 0.3 - 0.6

Band 4: 3.9 - 8.0

Band 2: 0.6 - 1.2

Band 5: 8.0 - 16.0.

Band 3: 1.7 - 3.9

TYPE MODULATION: Am.

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

POWER OUTPUT: 12 mw into 600-ohm load or 2 w into 5,000-ohm load.

POWER REQUIREMENTS: 70 w, 115 v (+ 10%) 50/62 cyc, 1 phase.

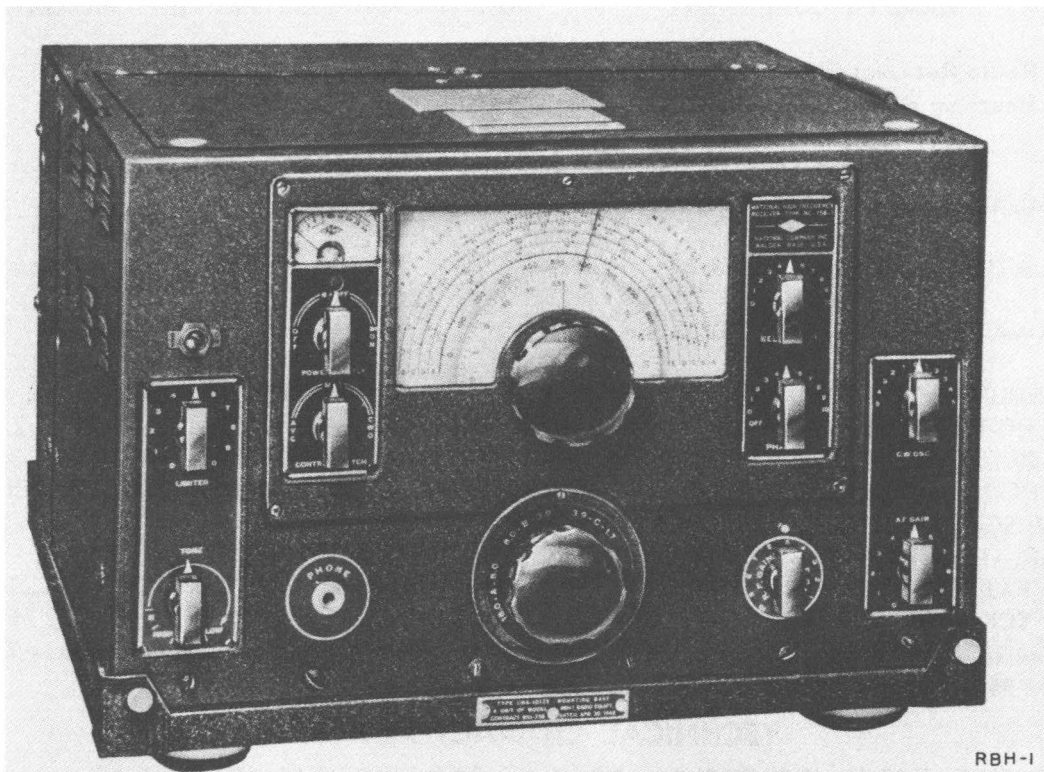
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBH measures 20-1/2 x 17-9/16 x 13-3/8 inches, net weight 85 pounds.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBH-1, -2, -3
 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBH-1, -2, and -3 are general purpose receivers of radiotelegraph or voice signals. Radiations of r-f power from the internal heterodyne oscillator have been reduced to less than 400 uuw at antenna terminals.

These receivers are similar in design and construction; RBH-3 has a coaxial antenna input jack and mating plug. All three models are supplied with mounting bases and can be operated directly from batteries in an emergency.

Crystal selectivity is provided in the first i-f stage.

A receiving antenna and a loudspeaker or headset are required but not supplied.

AN/URR-TYPE		INSTRUCTION LITERATURE: NavShips 900,411
		CLASSIFICATION OF EQUIPMENT: Unclassified
RBH-1, -2, -3	:SERVICE TYPE NUMBER	USING SERVICE: Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET: 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46188, -46188-A	10-3/4 x 17-1/4 x 18-11/16	74
1	Mounting Base CNA-10125	2-9/16 x 17-21/32 x 17-1/32	5.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -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-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/YRC-1, -4; BC-191, -329, -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: TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; 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: 0.3 - 1.2 and 1.7 - 16.0, in 5 bands.

Band A: 8.0 - 16.0

Band C: 1.7 - 3.9

Band E: 0.3 - 0.6.

Band B: 3.9 - 8.0

Band D: 0.6 - 1.2

TYPE MODULATION: Am.

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

POWER OUTPUT: 300 mw into 600-ohm load.

POWER REQUIREMENTS: 60 w, 115 v (+ 10%) 50 / 60 cyc, 1 phase.

Battery operation: 22 w, 6.3 v and 8 w, 180 v.

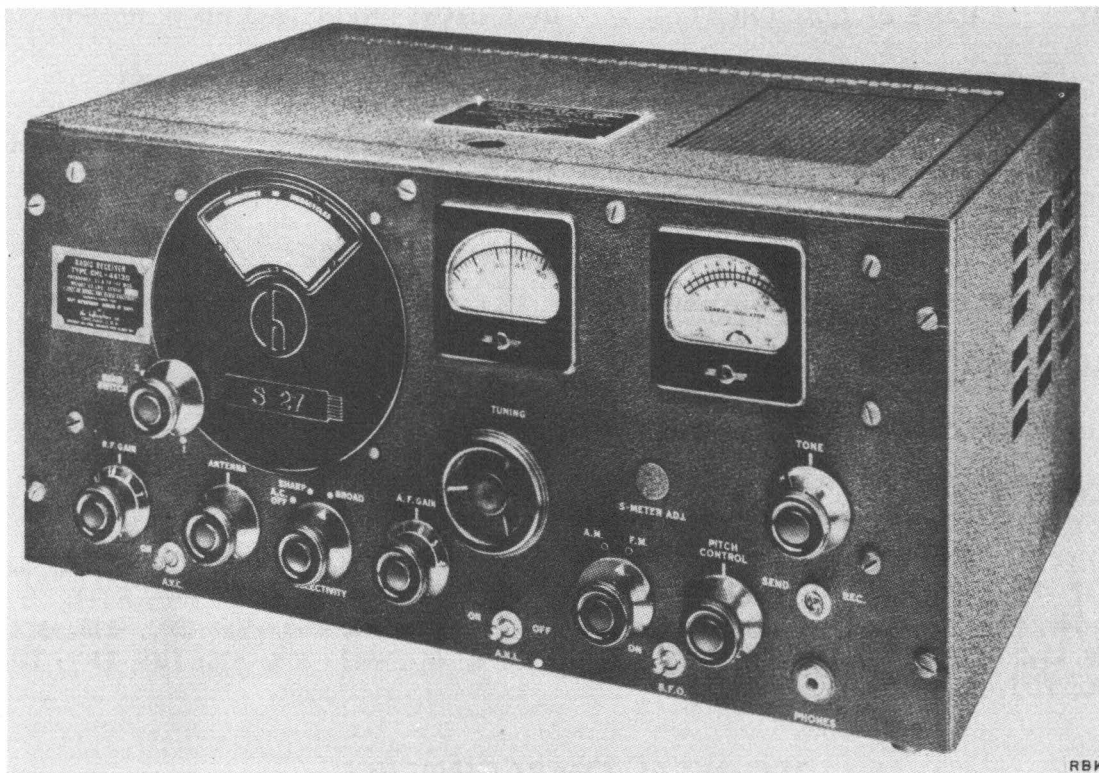
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBH-1, -2, or -3 measures 14-13/32 x 17-21/32 x 18-11/16 inches, net weight 109.75 pounds, volume 2.7 cu ft. Packed for domestic shipment: total weight 200 pounds, total volume 8.1 cu ft. Shipped in 1 package.

STATUS: Substitute Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBK, RBK-1, -2, -5, -7 thru 11
 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBK and RBK-1, -2, -5, -7, -8, -9, -10, and -11 are v-h-f, general purpose radio receivers of either a-m or f-m radiotelephone and radiotelegraph signals.

These receivers are similar except that the RBK-7, -8, and -9 are equipped with a special jack for use with a panoramic adapter, and the RBK-5, -7, -8, and -9 can be operated from either 110- or 230-v a-c power sources.

Receiver disabling is provided by means of a "send-receive" switch and a special socket for connection to the control circuit of the associated transmitter.

A receiving antenna and a headset are required but not supplied.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 95244, 95245
	CLASSIFICATION OF EQUIPMENT: Unclassified
RBK, RBK-1, -2, -5, -7 thru 11 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHL-46130, -46130-A, -46130-B, -46162, 46241	9-3/8 x 19-1/8 x 14-3/16	63
1	Loudspeaker CHL-49149, or CHL-49172	9-1/4 x 10-1/4 x 7 10-7/8 x 16 x 11	Not Available 20

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

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 — 46.

Band 2: 46 — 82.

Band 3: 82 — 143.

TYPE MODULATION: Am, fm.

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

POWER OUT FUT: 3 w into 500, 600, or 5,000 ohms.

POWER REQUIREMENTS: RBK, RBK-1, -2, -10, -11: 80 w, 110-125 v, 50/60 cyc, 1 phase.

RBK-5, -7, -8, -9: 80 w, 110-230 v, 50/60 cyc, 1 phase.

Battery operation: 28 w, 6.3 v and 35 w, 185 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBK, RBK-1, -2, -5, and -7 through -11 measure 20-1/4 x 19-1/8 x 14-3/16 inches each.

STATUS: Substitute Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBK-12, -13
 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBK-12 and RBK-13 are general purpose, v-h-f (am or fm) radio receivers of radiotelephone or radiotelegraph signals and can also be used with a panoramic reception adapter.

These receivers are similar to the RBK-14 except that they do not incorporate blanking circuits. However, both models incorporate a panoramic output socket for connection to equipments such as Dual Panoramic Radio Adaptor REM or Panoramic Radio Adaptor RBW-2M.

Receiver disabling is provided by means of a "send receive" switch and a special socket for connection to the control circuit of the associated transmitter.

A receiving antenna and a loudspeaker or headset are required but not supplied.

AN/URR-TYPE		INSTRUCTION LITERATURE: NavShips 900,235X
RBK-12, -13	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT		USING SERVICE : Navy
		DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHL 46130-C	9-5/16 x 19-1/8 x 15-13/16	100

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

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 3 bands.

Band 1: 27.8 — 46.

Band 2: 46 — 82.

Band 3: 82 — 143.

TYPE MODULATION: Am, fm.

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

POWER OUTPUT: 3 w into 500, 600, or 5,000 ohms.

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

Battery operations: 28 w, 6.3 v and 40 w, 270 v.

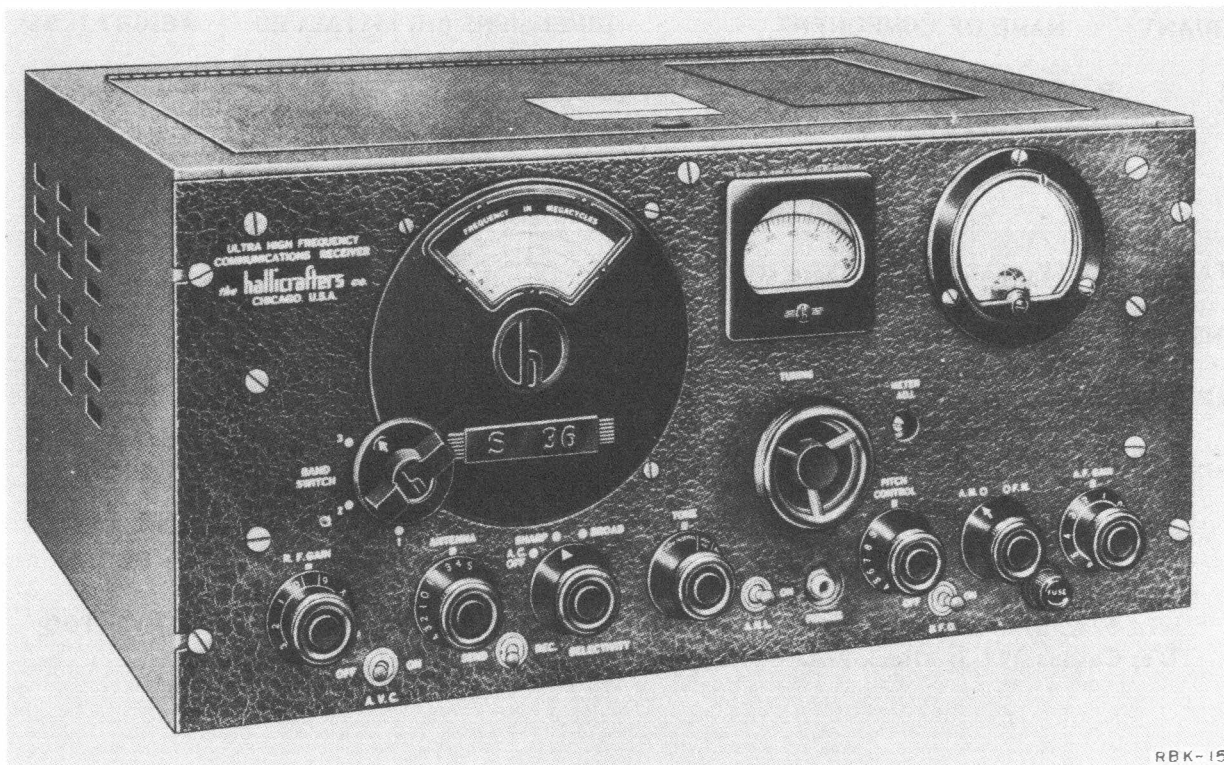
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBK-12 or -13 measures 9-5/16 x 19-1/8 x 15-13/16 inches, net weight 188 pounds, volume 1.7 cu ft. Packed for domestic shipment: total weight 228 pounds, total volume 5 cu ft. Shipped in 1 package.

STATUS: Substitute Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Mar 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBK-15
 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RBK-15 is a general purpose, v-h-f (am or fm) radio receiver of radio-telephone or radiotelegraph signals. It can be used with a panoramic reception adapter.

This receiver is similar to the RBK-14 except that it does not incorporate the blanking circuit. It includes an r-f oscillator, a radiation suppressor, and a coaxial antenna input jack for use with a coaxial lead-in cable.

Receiver disabling is provided by means of a send-receive switch, located on the front panel, and a special socket for connection to the control circuit of the associated transmitter.

A receiving antenna and a loudspeaker or headset are required but not supplied.

AN/URR-TYPE		INSTRUCTION LITERATURE: Not available
		CLASSIFICATION OF EQUIPMENT: Unclassified
RBK-15	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CHL-46298	9-7/8 x 19-1/8 x 15-7/8	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

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, -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 3 bands.

Band 1: 27.8 — 46.

Band 2: 46 — 82.

Band 3: 82 — 143.

TYPE MODULATION: Am, fm.

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

POWER OUTPUT: 3 w into 500, 600, or 5,000 ohms

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

Battery operation: 28 w, 6.3 v and 40 w, 270 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBK-15 measures 9-7/8 x 19-1/8 x 15-7/8 inches.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

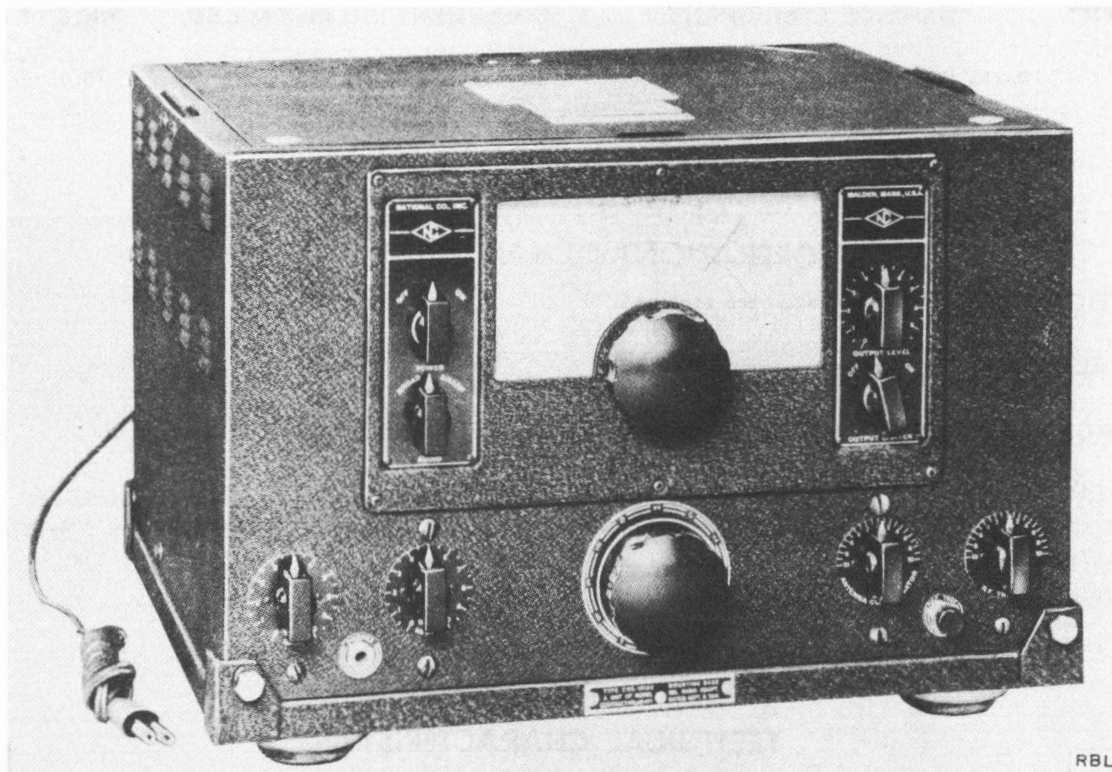
DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER:

RBL, RBL-1, -2

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBL, RBL-1 and RBL-2 are general purpose, tuned r-f receivers of telegraph signals between 0.015 to 0.6 mc. Voice reception is only possible above 0.2 mc. The level of r-f radiations is kept below 400 uuw making their use safe within combat areas.

These three receivers are identical.

Either a single-wire antenna or an unbalanced feed line can be used.

A receiving antenna and a 600-ohm headset are required but not supplied.

They can be operated either from ac or batteries. A special battery power socket is provided.

AN/URR-TYPE		INSTRUCTION LITERATURE: NavShips 900,353
		CLASSIFICATION OF EQUIPMENT:Unclassified
RBL, RBL-1, -2	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46161	10-31/32 x 17-3/16 x 16-5/8	75.0
1	Mounting Base CNA-10124	2-9/16 x 17-17/32 x 16-5/16	5.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-9; AN/ART-13; AN/CRT-3, -5; AN/FRT-4, -10, -19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600 in 6 bands.

Band A: 0.015 - 0.025	Band C: 0.045 - 0.080	Band E: 0.155 - 0.310
Band B: 0.025 - 0.045	Band D: 0.080 - 0.155	Band F: 0.310 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2 mc).

POWER OUTPUT: 300 mw.

POWER REQUIREMENTS: 46 w, 115 v, 60 cyc, 1 phase, ac.
Battery operation: 14 w, 6.3 v and 4 w, 135 v, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBL, RBL-1, -2 measure 12-13/32 x 17-11/16 x 17-1/4 inches, net weight 105.5 pounds, volume 1.8 cu ft. Packed for domestic shipment: total weight 225 pounds, total volume 9.7 cu ft. Shipped in 1 package.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER: **RBL-3, RBL-4**
RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBL-3 and RBL-4 are general purpose, tuned radio frequency receivers of telegraph signals between 0.015 and 0.6 mc. Voice reception is possible only above 0.2 mc. R-f radiations have been kept at a very low level making their use safe within combat areas.

RBL-3 and RBL-4 receivers are similar, and are fitted with a coaxial antenna input jack for use with a coaxial lead-in cable. RBL-4 can be operated either from 115-v or 230-v ac.

A receiving antenna and a 600-ohm headset are required but not supplied.

They can be operated from a source of a-c power or from batteries.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,292
	CLASSIFICATION OF EQUIPMENT: Unclassified
RBL-3, RBL-4 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CWQ-46161-A, CWQ-46230	10-7/16 x 17-3/16 x 15-1/4	84*
1	Mounting Base CWQ-10124-A	2-5/8 x 17-5/8 x 15-1/2	Not Available

*Includes weight of Mounting Base CWQ-10124-A.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

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-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329,
-365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY;
TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600 in 6 bands.

Band A: 0.015 - 0.025	Band C: 0.045 - 0.080	Band E: 0.155 - 0.310
Band B: 0.025 - 0.045	Band D: 0.080 - 0.155	Band F: 0.310 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2 mc).

POWER OUTPUT: 200 mw.

POWER REQUIREMENTS: RBL-3: 45 w, 115 v, 50/60 cyc, 1 phase, ac;
RBL-4: 45 w, 115/230 v, 50/60 cyc, 1 phase, ac
Battery operation: 14 w, 6.3 v and 4 w, 135 v, dc.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBL-3, RBL-4 measure 12-5/16 x 17-5/8 x 17-5/16 inches. Packed for domestic shipment: total weight 201 pounds, total volume 7.6 cu ft. Shipped in 1 package.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER:

RBL-5,-6

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBL-5 and -6 are general purpose radiotelegraph receivers which operate in the frequency range 0.015 to 0.6 mc. Voice reception is possible only above 0.2 mc. The level of r-f radiations is kept below 400 micromicrowatts, permitting their use within combat areas.

These two receivers are similar. The RBL-5 is supplied with a mounting base and the RBL-6 is inclosed in a large metal cabinet with shock mounts and a drawer-type chassis.

They can be operated either from a source of a-c power or from batteries. A special battery cable and a-c jumper-plug receptacle are provided.

A coaxial antenna input receptacle permits the use of an unbalanced feed line or a single wire antenna.

A receiving antenna and a headset are required but not supplied.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900, 350
	CLASSIFICATION OF EQUIPMENT: Unclassified
RBL-5, -6	:SERVICE TYPE NUMBER
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46161-B* or CNA-46235**	10-21/32 x 17-3/16 x 16-5/8 12-7/16 x 19 x 17-7/8	80.5 104.0
*1	Mounting Base CNA-10124	2-9/16 x 17-21/32 x 16-5/16	5.5

* Supplied with RBL-5
** Supplied with RBL-6

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

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-20; AN/SRC-3; AN/SRT-1, -3; AN/TRQ-1; AN/URT-2, -3, -4; BC-191, -329, -365; SCR-177; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCG; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.600, in six bands.

Band A: 0.015 — 0.025	Band D: 0.080 — 0.155
Band B: 0.025 — 0.045	Band E: 0.155 — 0.310
Band C: 0.045 — 0.080	Band F: 0.310 — 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice (above 0.2 mc).

POWER OUTPUT: 300 mw.

POWER REQUIREMENTS: 46 w, 115 v, 50/60 cyc, 1 phase.
Battery operation: 14 w, 6.3 v and 4 w, 135 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBL-5, RBL-6 measures 12-13/32 x 17-21/32 x 18-1/16 inches, net weight 169 pounds, volume 5.1 cu ft. Packed for domestic shipment: total weight 255 pounds, total volume 8.75 cu ft. Shipped in 1 package.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 23 May 52

AN/URR-TYPE

SERVICE TYPE NUMBER:

RBO, RBO-1, -2, -3

RADIO RECEIVING EQUIPMENT



RBO

Radio Receiving Equipments RBO, RBO-1, -2, and -3 are α -m (tone, voice) broadcast (entertainment or morale) receivers for ship or shore station use. They are designed to provide high quality reception, using four output circuits to permit use of one headset and three loudspeakers.

These receivers are intended for use with loudspeakers; earphones are employed only for monitoring.

A phone input socket is provided for connection of a record player.

Special features and circuits are used to minimize r-f radiation.

AN/URR-TYPE	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Unclassified
RBO, RBO-1, -2, -3 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver		
	CZC-46139	13-3/4 x 20-1/2 x 18-1/2	103
	CZC-46224	13-3/4 x 20-1/2 x 18-1/2	103
	CZC-46225	13-3/4 x 20-1/2 x 18-1/2	104
	CZC-46225-A	13-3/4 x 20-1/2 x 18-1/2	104

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Naval personnel quarters.

INSTALLATION: Shipborne, or shore.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -25, -26; 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; AN/VRC-1, -4; BC-191, -339, -365, -401, -447, -610; MBS; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -188, -193, -274, -399, -499, -536, -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; TBU; TBW; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDD; TDE; TOF; 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: 0.54 - 1.6 and 5.55 - 15.6 in 3 bands.

Band 1: 0.54 - 1.6

Band 2: 5.5 - 9.55

Band 3: 9.2 - 15.6.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: 2 w into 600 or 5,000 ohm load; 30 mw into 600 ohm load.

POWER REQUIREMENTS: 85 w, 110 - 125 v, 58/62 cyc, 1 phase, ac.

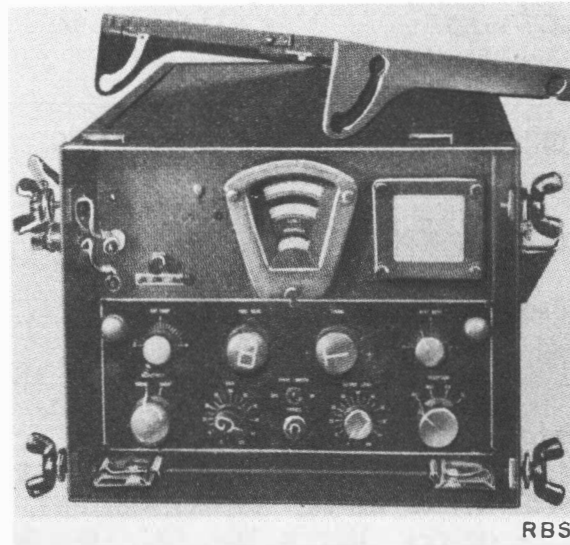
PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RBO, RBO-1, -2, -3 measure 13-3/4 x 20-1/2 x 18-1/2 inches, net weight 104 pounds, volume 2.4 cu ft.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RBS, RBS-1
RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RBS and RBS-1 are general purpose receivers designed for headset or loudspeaker reception of radiotelegraph or radiotelephone signals. Radiations from the oscillator stage are kept below safety requirements. They are ruggedly constructed, enclosed in a splashproof cabinet, and equipped with a special rack for wall mounting.

RBS and RBS-1 are identical. Each equipment includes a mounting rack that accommodates the receiver and power unit.

Two adapters are supplied for use with a coaxial antenna lead-in cable.

A receiving antenna and a headset or loudspeaker are required but not supplied.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 900,324
	CLASSIFICATION OF EQUIPMENT: Unclassified
RBS, RBS-1 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CCT-46217 (with cabinet)	20-1/2 x 16-7/8 x 11-1/2	70
1	Mounting Rack CCT-10227	19 x 17-3/4 x 11-3/4	40
1	Rectifier Power-Amplifier Unit CCT-20235, -20235-A	10-3/4 x 14 x 11	51

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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/YRC-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: 2 - 20, in 4 bands.

Band 1: 2.0 - 3.6

Band 3: 6.5 - 11.4

Band 2: 3.6 - 6.5

Band 4: 11.4 - 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 8 w into 600-ohm load for loudspeaker operation.
150 mw into 600-ohm load for headset operation.

POWER REQUIREMENTS: 120 w, 115 v, 50/60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RBS or RBS-1 measures 48 x 19-3/4 x 13 inches, net weight 242 pounds, volume 6.1 cu ft. Packed for domestic shipment: total weight 360 pounds, total volume 19.5 cu ft. Shipped in 1 package.

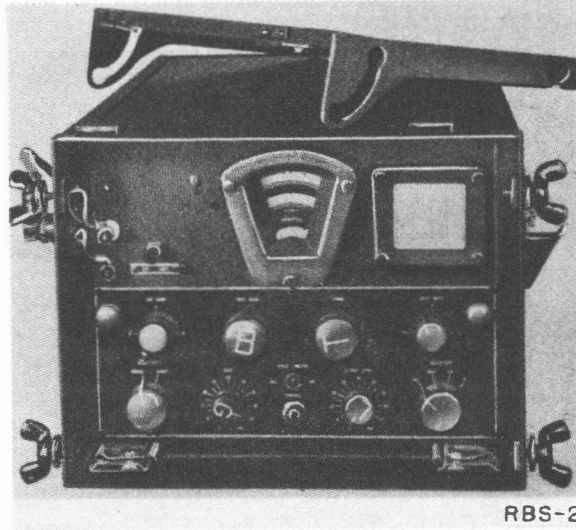
STATUS: Substitute Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER:

RBS-2

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RBS-2 is a general purpose receiver provided with a combination rectifier power-amplifier unit. It is designed for headset or loudspeaker reception of radiotelegraph or radio-telephone signals. Radiations from the oscillator stage are kept below safety requirements.

RBS-2 is similar to RBS and RBS-1 except for type of installation.

The receiver and power units are provided with shock mounts; mounting plates are used for table installation. Three special adapters are supplied for use with a coaxial antenna lead-in cable.

A receiving antenna and a headset or loudspeaker are required but not supplied.

AN/URR- TYPE		INSTRUCTION LITERATURE: NavShips 900,324
		CLASSIFICATION OF EQUIPMENT: Unclassified
RBS-2	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CCT-46217-A	17 x 14-1/2 x 10	43
1	Rectifier Power-Amplifier Unit CCT-20235-B	10-3/4 x 16 x 11-1/4	56

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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: 2 - 20, in 4 bands.

Band 1: 2.0 - 3.6	Band 3: 6.5 - 11.4
Band 2: 3.6 - 6.5	Band 4: 11.4 - 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 8 w into 600-ohm load for loudspeaker operation.
150 mw into 600-ohm load for headset operation.

POWER REQUIREMENTS: 120 w, 115 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

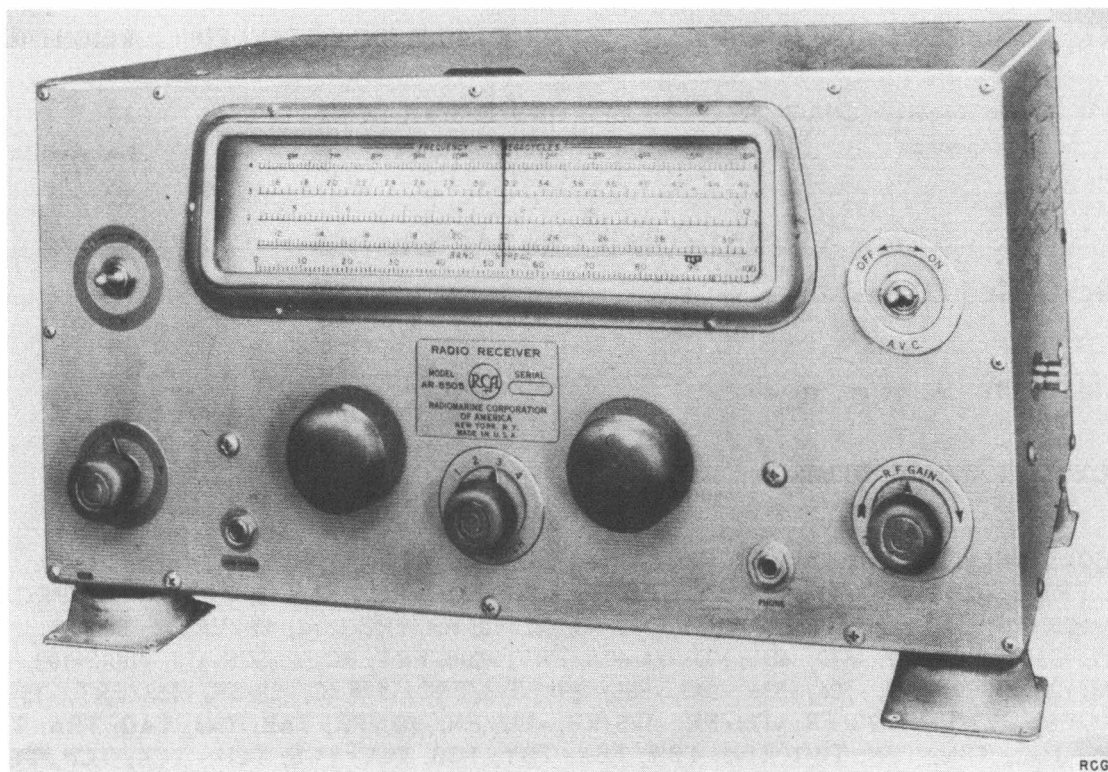
Radio Receiving Equipment RBS-2 measures 28 x 16 x 25 inches, net weight 179 pounds, volume 6 cu ft. Packed for domestic shipment: total weight 301 pounds, total volume 11.2 cu ft. Shipped in 3 packages.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 4 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RCG

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RCG is an a-c/d-c general purpose receiver of radiotelegraph or radio-telephone signals within the m-f and h-f ranges.

This equipment is complete and includes all necessary materials for setting up a doublet receiving antenna.

Because of the type of power supply used, no ground connection should be established between chassis and ground.

A phone output jack is provided for a headset (not supplied) having a d-c resistance of 2,000 to 3,000 ohms.

“Break-in” terminals and switch are provided for receiver disabling purposes.

AN/URR-TYPE	INSTRUCTION LITERATURE: NavShips 95256
	CLASSIFICATION OF EQUIPMENT: Unclassified
RCG	:SERVICE TYPE NUMBER
RADIO RECEIVING EQUIPMENT	USING SERVICE: Navy
	DATE OF THIS SHEET: 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CNA-46200	10 x 17-3/4 x 12-1/4	33
1	Loudspeaker	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Advanced bases, shipboard.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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, -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; 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: 0.54 - 30.0, in 4 bands.

Band 1: 11.2 - 30.0

Band 3: 1.5 - 4.6

Band 2: 4.4 - 12.0

Band 4: 0.54 - 1.60.

TYPE MODULATION: Am.

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

POWER REQUIREMENTS: 40.7 w, 110 v, 60 cyc, 1 phase or 40.7 w, 110 v d.c.

PHYSICAL CHARACTERISTICS

Information on Radio Receiving Equipment RCG not available.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 29 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER:

RCH

RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RCH is a general purpose receiver of radiotelegraph or radiotelephone signals in the m-f and h-f ranges. Radiations from the internal oscillator have been reduced to a safe level, permitting operation in combat areas.

This receiver has a mounting plate and shock mounts for table top installation.

Its audio output circuit can be connected (by means of a special socket) to the output of another receiver so that listening to either receiver or to both receivers simultaneously is possible.

A single wire or balanced feed line type antenna can be used.

AN/URR-TYPE		INSTRUCTION LITERATURE: NavShips 900,339
		CLASSIFICATION OF EQUIPMENT: Unclassified
RCH	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CZC-46209	13-7/8 x 21 x 20-13/16	106

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-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/SRC-3; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -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; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; 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: 0.08 - 0.56 and 1.9 - 24.0, in 5 bands.

Band 1: 0.08 - 0.22	Band 3: 1.9 - 5.1
Band 2: 0.21 - 0.56	Band 4: 4.5 - 12.0
	Band 5: 8.8 - 24.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 100 mw for 600 - or 20,000-ohm headset.
2 w for 600-ohm loudspeaker.

POWER REQUIREMENTS: 86 w, 110-125 v, 58/62 cyc, 1 phase.

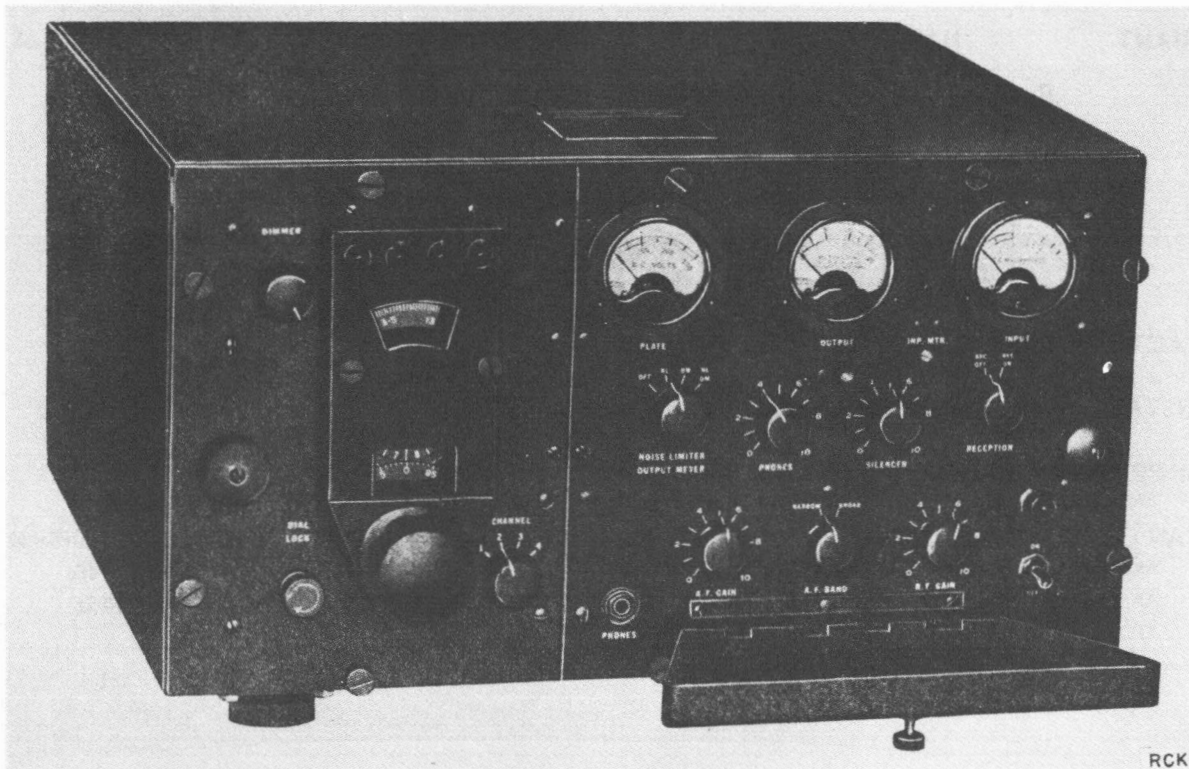
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RCH measures 13-7/8 x 21 x 20-13/16.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 14 May 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RCK, RCK-a
 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipments RCK and RCK-a are a-m (voice, mcw) v-h-f receivers used in conjunction with VHF Radio Transmitting Equipment TDQ on aircraft carriers and at shore stations for communicating with aircraft.

Four preset crystal-controlled channels are available, and the receivers have a high degree of stability, freedom from cross modulation and radiation, and continuous tuning by means of a single dial.

Both receivers are designed for use with a 50 ohm fixed antenna.

Reception of signals, by radio telephones or through remote control stations, is possible if a suitable power amplifier is connected between the receiver and the remote operating point.

RCK and RCK-a are identical equipments except that RCK-a has been modified to extend the upper limit of audio frequency response.

AN/URR-TYPE		INSTRUCTION LITERATURE: NavShips 900,228-1B
RCK, RCK-a	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT:Unclassified
RADIO RECEIVING EQUIPMENT		USING SERVICE : Navy
		DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CZC-46223 (RCK)	10-1/2 x 18-1/8 x 22-7/8	115

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft carriers and shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

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; MAM; 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: 115 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: 15 mw into 600 ohms.

POWER REQUIREMENTS: 106 w, 115 v, 60 cyc, 1 phase, ac.

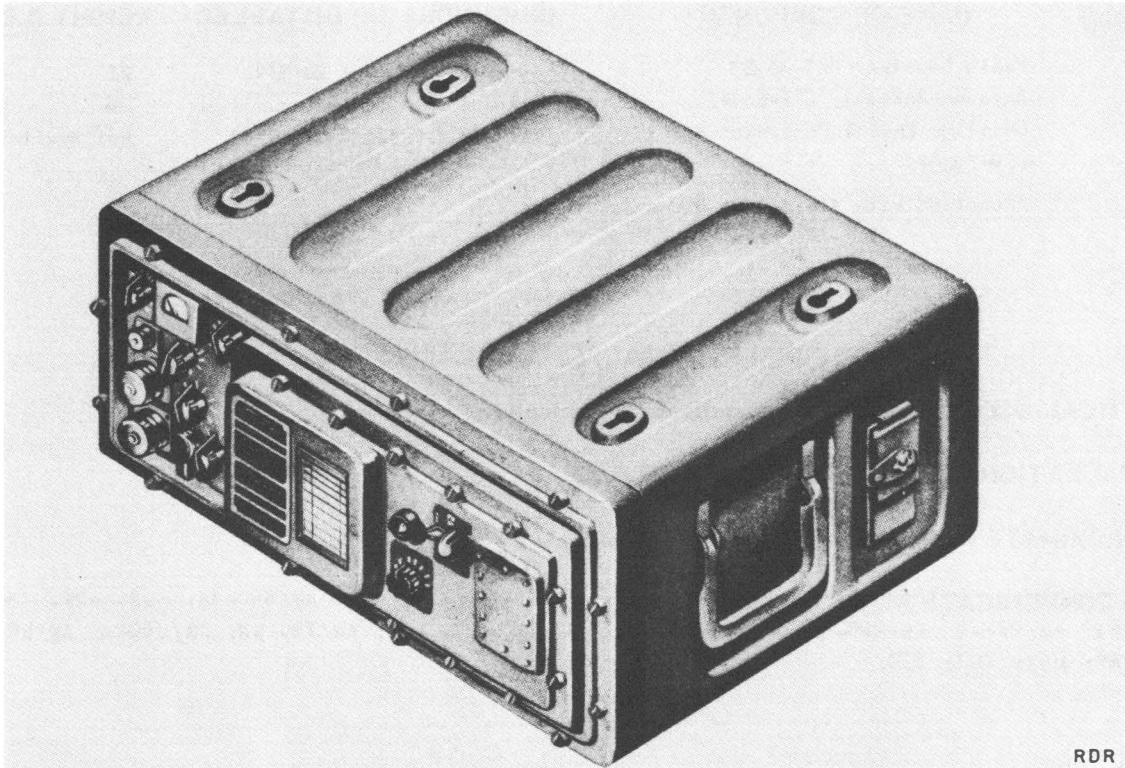
PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RCK, RCK-a measure 10-1/2 x 18-1/8 x 22-7/8 inches, net weight 115 pounds.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Apr 52

AN/URR-TYPE

SERVICE TYPE NUMBER: RDR
 PORTABLE RADIO RECEIVING EQUIPMENT



RDR

Portable Radio Receiving Equipment RDR is a general purpose, v-h-f/u-h-f, radio Telephone equipment used for ship, shore, field, and vehicular reception of tone signal or voice communication over line-of-sight distances. Ten preset crystal-controlled channels are available locally or remotely.

This equipment is supplied either for shipboard installation, (in which case power is derived from a Vibrator Power Unit CLG-20379, not supplied with the RDR), or for field, or vehicular installation. In the latter case, two shipping chests are supplied.

The vehicle's electrical system, or the gasoline engine generator set supply power to operate the receiver.

One Crystal in Holder CFT-40178 and a set of 10 crystals are required but not supplied.

AN/URR-TYPE

INSTRUCTION LITERATURE:
NavShips 900,841
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

RDR :SERVICE TYPE NUMBER
PORTABLE RADIO RECEIVING EQUIPMENT

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CRV-46283	3-1/4 x 27-1/4 x 20-3/4	91
1	Antenna Assembly CRV-66147	7-1/8 x 31 x 8-1/4	26
1	Gasoline Engine Generator Set CCW-73037	12-9/16 x 9-5/8 x 15-19/32	Not Available

*Supplied with field type RDR only.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations, or vehicular.

INSTALLATION: Shipborne, ground, vehicular.

APPROXIMATE RANGE (IN MILES): 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: 225 - 390.
10 crystal-controlled preset frequencies available.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 1 w, 600 ohms.

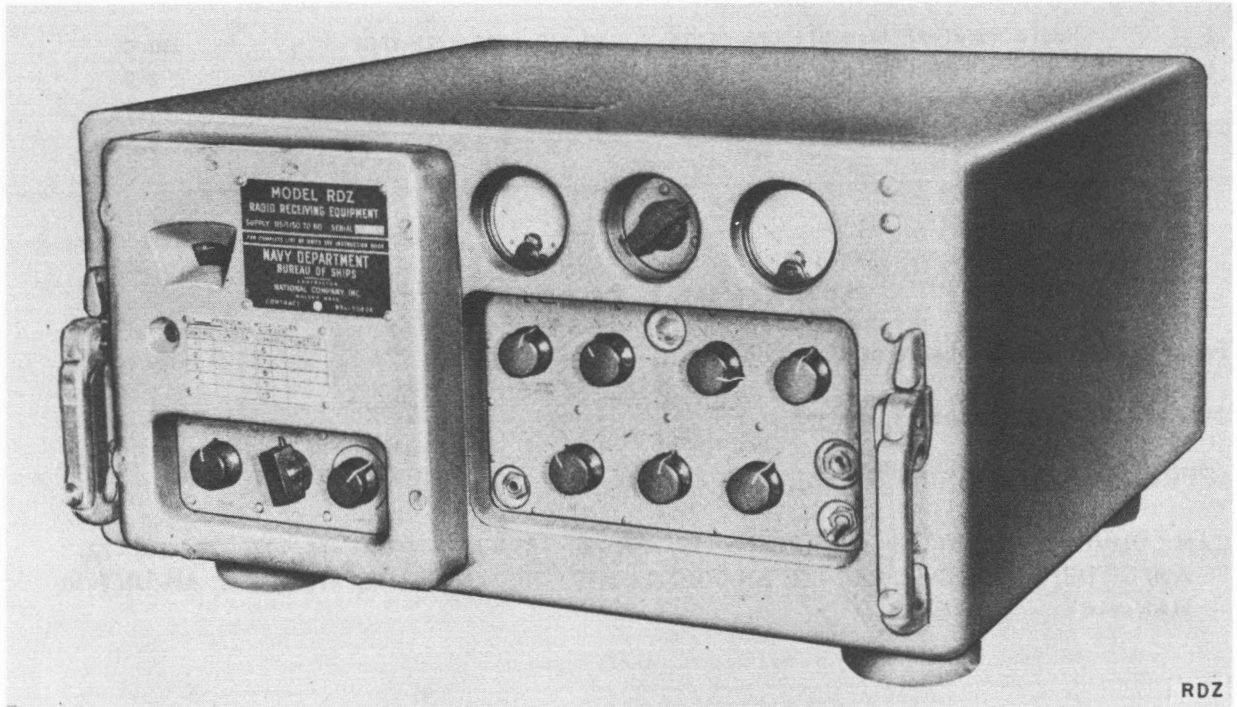
POWER REQUIREMENTS: 145 w, 13 v, dc; or
145 w, 13 v, ac and 375 v, dc.

PHYSICAL CHARACTERISTICS

Portable Radio Receiving Equipment RDR measures 13-1/2 x 27-1/4 x 20-3/4 inches.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Apr 52

AN/URR-TYPE
 SERVICE TYPE NUMBER: **RDZ**
VHF RADIO RECEIVING EQUIPMENT



VHF Radio Receiving Equipment RDZ is a general purpose, crystal-controlled, radiotelephone receiver which operates in the v-h-f/u-h-f range of 225 to 400 mc.

This receiver has a remote channel selector, making the system rapidly tunable to any one of 10 preset, crystal-controlled channels.

It incorporates a frequency-scanning amplifier stage and a video-output amplifier stage, which make it adaptable to panoramic reception, when used in association with a display unit.

An antenna such as Antenna Assembly NT-66147, Antenna AT-150/SRC, or Antenna Assembly AS-390/SRC is required but not supplied.

AN/URR-TYPE		INSTRUCTION LITERATURE: NavShips 91331, 900,617
		CLASSIFICATION OF EQUIPMENT:Unclassified
RDZ	:SERVICE TYPE NUMBER	USING SERVICE : Navy
VHF RADIO RECEIVING EQUIPMENT		DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver Assembly CNA-46275	13-1/8 x 22 x 22-5/32	150.0
1	Remote Channel Selector CNA-23492	4-9/16 x 5-1/4 x 3-5/16	2.0
2	Crystal Oven CNA-40148	2-1/4 x 3-21/32 x 2-19/32	0.75
100	Crystal Unit (Package) CNA-40162	1-1/2 x 9-1/4 x 5-1/4	2.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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: 225- 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Audio channel: 60 mw into 600 ohm load or 600 mw into 30 ohm load.
Phone jack: 4 mw into 600 ohm load.
Video channel: 1.5 v into 1,000 ohm load.

POWER REQUIREMENTS: 175 w, 110 - 120 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

VHF Radio Receiving Equipment RDZ measures 13-1/8 x 22 x 22-5/32 inches.

STATUS: Commercial
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Army
 DATE OF THIS SHEET: 7 Feb 52

AN/URR-TYPE
 COMMERCIAL TYPE NUMBER: AR-88 (RCA)
 RADIO RECEIVER



Radio Receiver RCA Model AR-88 is a commercial radio receiving equipment, two models of which have been procured. AR-88-D (shown above) is the cabinet-inclosed version and is used for a-m (voice, cw, and mcw) communication in the h-f range at corps and higher headquarters in point-to-point, ground-to-air, ship-to-shore, and similar applications.

AR-88-F (not illustrated here) is panel-mounted and is designed for triple diversity applications at fixed plant installations. Has been procured under official nomenclature Radio Receiver R-320/FRC, three of which are used in Radio Receiver Assembly OA-58A/FRC.

AR-88-F differs from AR-88-D by having automatic volume control, i-f gain, a diode output circuit, and provision for connection to a tone keyer rather than to a transmitter relay.

Both models operate in the same frequency range and require 100/165 or 190/260 v ac.

AN/URR-TYPE		INSTRUCTION LITERATURE: TM 11-880
AR-88 (RCA)	:COMMERCIAL TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER		USING SERVICE : Army
		DATE OF THIS SHEET : 7 Feb 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, army, or higher headquarters.

INSTALLATION: Fixed, ground.

APPROXIMATE RANGE IN MILES: Extended.

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; 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:

- Band 1: 0.54 - 1.6
- Band 2: 1.57 - 4.55
- Band 3: 4.45 - 12.15
- Band 4: 11.90 - 16.60
- Band 5: 22.0 - 32.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: 2.5 w (undistorted, audio).

POWER REQUIREMENTS: 100/165 / 190/260 v, 50/60 cyc ac.

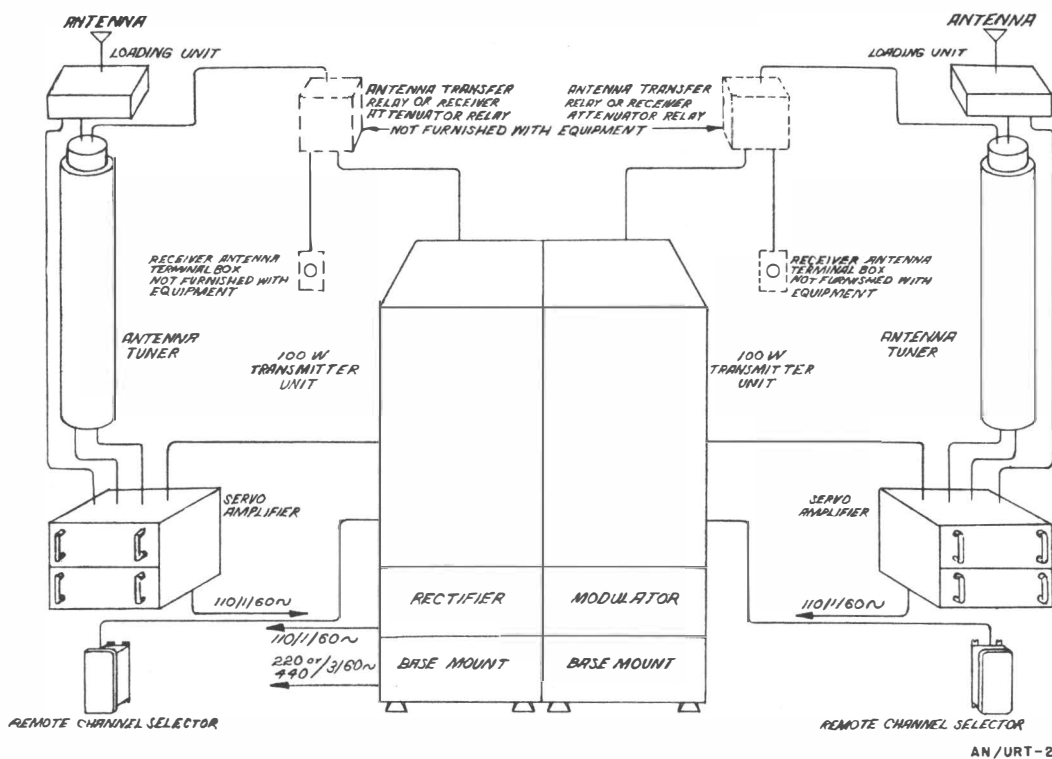
PHYSICAL CHARACTERISTICS

Radio Receiver AR-88 (RCA) packed for domestic shipment: total weight 140 pounds, total volume 8.15 cu ft.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Restricted
 USING SERVICE: Navy
 DATE OF THIS SHEET: 9 May 52

AN/URT-2, -3, -4

RADIO TRANSMITTING SET



Radio Transmitting Sets AN/URT-2 and AN/URT-2X, -3, -3X, -4, -4X are medium-power m-f/h-f transmitters for ship-to-shore use. They operate in conjunction with such receivers as Radio Receiving Equipment RBA, RBB, and RBC and the shipboard remote control system. A crystal-controlled synthesizer provides frequency control of 10 preset channels.

This equipment provides two frequency bands, 300 kc to 26 mc and 2 mc to 26 mc, obtaining higher power output on the latter. The AN/URT-4 consists of the AN/URT-2 and 3, which may be operated simultaneously. The AN/URT-2 may be used as a replacement for Radio Transmitting Equipment TBL, TDE, or TCZ; the AN/URT-3 may replace Radio Transmitting Equipment TBA, TBK, TBM, or TCK. The AN/URT-2X, -3X and -4X are identical to the AN/URT-2, -3 and 4 respectively, except that they require a 400 cyc ac power source.

The transmitters are designed for use with either a 35 ft whip antenna or an L type wire antenna.

AN/URT-2,-3,-4	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Restricted
RADIO TRANSMITTING SET	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT.	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
*1	Radio Transmitter	55-3/8 x 16 x 24	735
1	Radio Modulator MD-149/URT**	18-1/4 x 16 x 24	250
*1	Antenna Control Group OA-297/URT	17-7/8 x 18-11/16 x 14-1/2	135
1	Transmitter Control C-916/URT	5-1/4 x 4-3/4 x 10-5/8	5

* Two each for AN/URT-4 and -4X.

**Not applicable to AN/URT-2 and -2X

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

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-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -8, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4, -5, -8, -13, -16, -20; AN/VRC-1; 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/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; 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-N, -281, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model), Collins 75A-2; Fisher TS25-3; Hammerlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 26.0.

TYPE MODULATION: Am, fm.

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

POWER OUTPUT: AN/URT-2: 100 w.

AN/URT-3: 100 or 500 w.

AN/URT-4; 100 w and 100 or 500 w (two-unit).

POWER REQUIREMENTS: AN/URT-2; 1,000 w, 115 v, 60 cyc, 1 phase. AN/URT-2X: 1,000 w, 115 v, 400 cyc, 1 phase. AN/URT-3: 800 w, 115 v, 60 cyc, 1 phase or 1,800 w, 220 v, 60 cyc, 3 phase. AN/URT-3 X: 800 w, 115 v, 400 cyc, 1 phase or 1,800 w, 220 v, 400 cyc, 3 phase. AN/URT-4: 1,800 w, 115 v, 60 cyc, 1 phase or 220/440 v, 60 cyc, 3 phase. AN/URT-4X: 1,800 w, 115 v, 400 cyc, 1 phase or 220/440 v, 400 cyc, 3 phase.

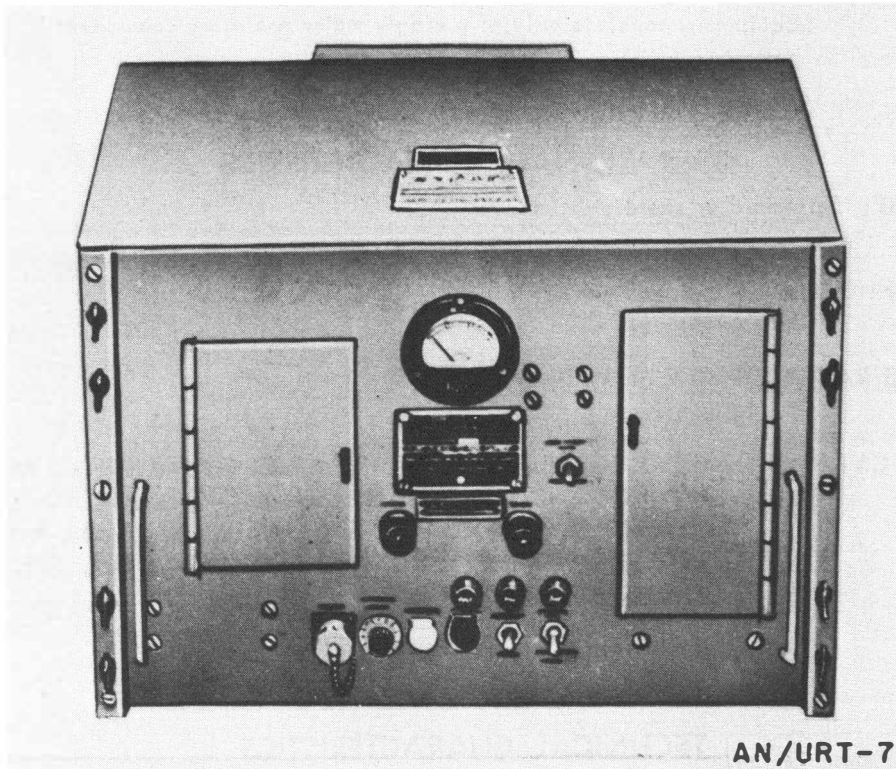
PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Sets AN/URT-2, -2X, -3, -3X, -4, and -4X not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/URT-7

TRANSMITTING SET, RADIO



Transmitting Set, Radio AN/URT-7 is a low-power, general purpose, v-h-f transmitter for use at ship or shore installations. A crystal oscillator provides frequency control of four preset channels. It can be keyed at speeds up to 40 words per minute.

This equipment is similar to, and will replace, VHF Radio Transmitting Equipment TDQ.

AN/URT-7	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Restricted
	USING SERVICE : Navy
TRANSMITTING SET, RADIO	DATE OF THIS SHEET : 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN)	INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

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-12, -21; AN/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: Cw, mcw, voice.

POWER OUTPUT: 30 w.

POWER REQUIREMENTS: 750 w, 115 / 230 v, 60 cyc, 1 phase, ac.

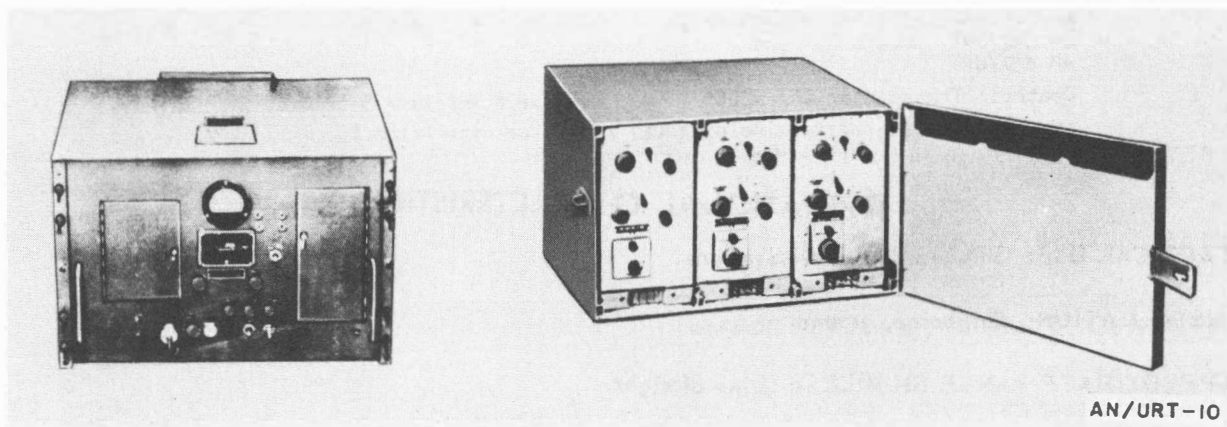
PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/URT-7 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 14 May 52

AN/URT-10

TRANSMITTING SET, RADIO



Transmitting Set, Radio AN/URT-10 is a v-h-f/u-h-f transmitter employed for a-m radiotelephone and mcw communication aboard ship or on shore.

The control unit is intended primarily for limited remote control up to five miles at shore stations; the transmitter can also be operated from standard shipboard remote units.

Four interchangeable units Amplifier-Oscillator AM-634/URT, AM-635/URT, AM-636/URT and AM-637/URT are provided to cover the frequency range, each employs a crystal-controlled master oscillator for frequency control.

Audio input to modulator and receiver monitoring is provided.

Two associated amplifier units are employed for monitoring purposes. The transmitter may be either table- or rack-mounted.

AN/URT-10	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Restricted
TRANSMITTING SET, RADIO	USING SERVICE : Navy
	DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter, Radio T-335/URT-10 includes one each:	13-23/32 x 19 x 16-1/2	146
	Amplifier-Oscillator AM-634/URT, AM-635/URT, AM-636/URT and AM-637/URT	9-31/32 x 5 x 14-1/2	30
1	Control, Transmitter CFT-23555 (Weight of transmitter includes (1) amplifier-oscillator.)	5-13/16 x 4-7/16 x 3-5/16	4

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -12, -18, -19, -27, -28, -30, -33, -34, -36;
AN/CRC-2; AN/CRW-7; AN/FRC-7; AN/FRR-12, -28, -32; AN/GRC-16, -27, -29, -30, -32; AN/GRR-2, -3,
-7; AN/MRC-12, -16, -20, -22; AN/PRC-14, -17, -20; AN/SRR-13; AN/TRC-7, -32; AN/TRQ-1;
AN/URC-4; AN/URR-9, -10, -12, -13, -21, -23; AN/VRC-1; AN/VRR-3; BC-639, -787, -794; MAR; MAW;
MAY; MBF; MBS; OA-58/FRC; R-62/PR, -80/PR, -137/GR, -205/U, -211/U, -274/FRR, -278/GR, -320/FRC,
-389/URR; RAO; RAS; RBG; RBK; RBQ; RC-103, -256; RCF; RCG; RCK; RCO; RDM; RDR; RDZ; SCR-522,
-542, -574, -575, -607, -616, -624, -641, -644, -704; TBS; TBY; A 98 (RCA); ARC Type 12;
Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 - 400 in 4 ranges.

AM-634/URT: 30 - 60

AM-636/URT: 115 - 225

AM-635/URT: 60 - 115

AM-637/URT: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 15 to 30 w.

POWER REQUIREMENTS: 750 w, 115/230 v, 50/60 cyc, 1 phase, ac.

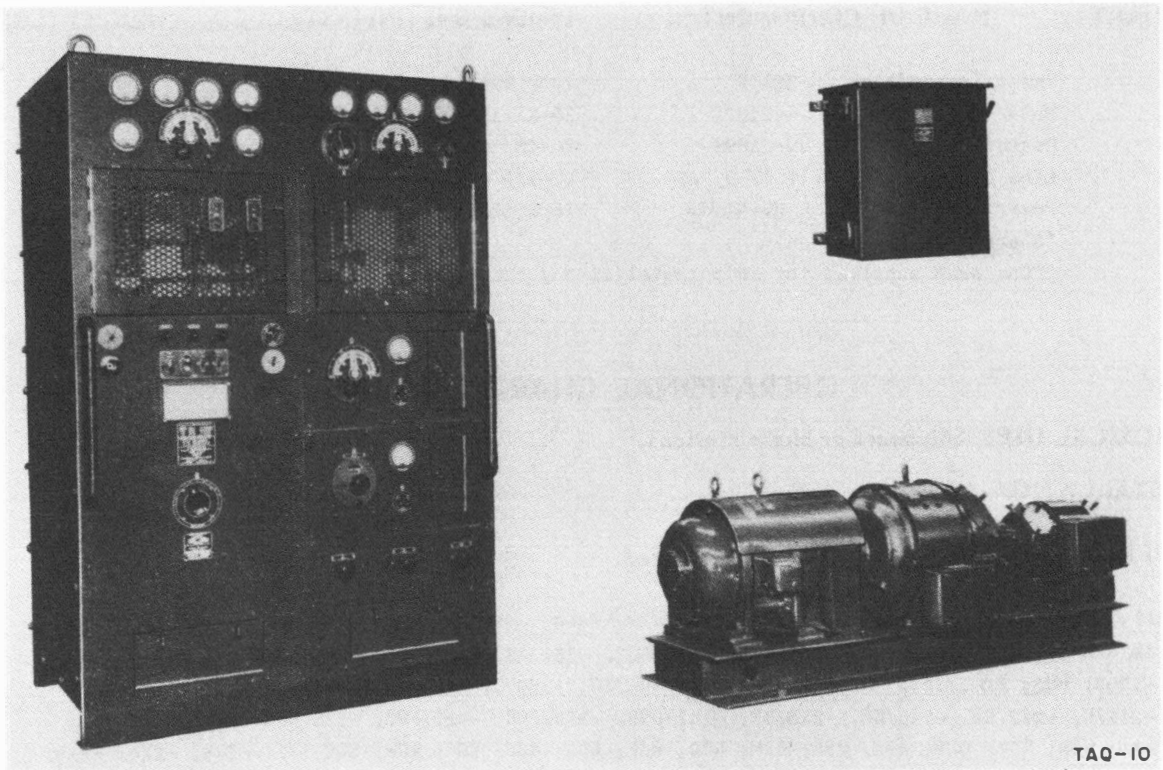
PHYSICAL CHARACTERISTICS

Transmitting Set, Radio AN/URT-10 measures 13-23/32 x 19 x 16-1/2 inches, net weight 240 pounds, volume 2.75. Packed for domestic shipment: Shipped in 3 packages.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 2 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TAQ-10
 2 KW TRANSMITTING EQUIPMENT



2 KW Transmitting Equipment TAQ-10 is a radio transmitter of unmodulated, or modulated telegraph signals within the low frequency range.

Two different component groupings of this equipment are available depending on installation requirements.

For shipboard installation, the equipment consists of three major units, and is similar to previous TAQ series models.

For shore installation, the motor generator set and magnetic controller are duplicated, and in addition, a power transfer switch and landline control unit make the installation more flexible.

Either remote or local control of the transmitter is possible.

AN/URT-TYPE		INSTRUCTION LITERATURE: NavShips 900,549
		CLASSIFICATION OF EQUIPMENT: Unclassified
TAQ-10	:SERVICE TYPE NUMBER	USING SERVICE : Navy
2 KW TRANSMITTING EQUIPMENT		DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52279	72 x 49-1/4 x 34-1/8	960
**	Motor Generator Set CG- 21892	26-11/16 x 71-5/8 x 21-1/2	1,200
**	Magnetic Controller CG-21896	26-15/16 x 24-7/8 x 10-7/8	100
*1	Land Line Control Unit CG-23269	42-1/8 x 24 x 14-1/2	165
*1	Power Transfer Switch CG-24092	16 x 12-1/2 x 9-1/4	26

*Shore installation only.

**One each supplied for ship installation, two each for shore installation.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314, -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.600.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 8 kw, 220 v, 60 cyc, 3 phase, ac.

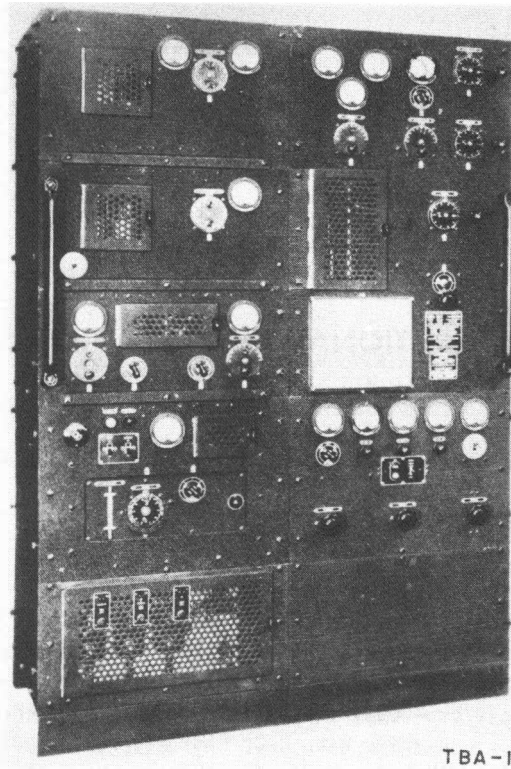
PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAQ-10 for shore installation measures 72 x 74-1/8 x 34-1/8 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/URT-TYPE

SERVICE TYPE NUMBER:	TBA-1
RADIO TRANSMITTING EQUIPMENT	



TBA-1

Radio Transmitting Equipment TBA-1 is a general purpose, medium power h-f radiotelegraph transmitter for use on surface vessels and at shore stations.

The equipment may be keyed at speeds up to 100 wpm throughout its frequency range.

Sixteen crystal-controlled channels are provided.

The transmitter operates best with a single-wire antenna below 8 mc. Above 8 mc either a single-wire or horizontal doublet antenna may be used.

AN/URT-TYPE		INSTRUCTION LITERATURE: NavShips 95290
		CLASSIFICATION OF EQUIPMENT: Unclassified
TBA-1	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT		DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-52011, -52012, -52007, -52010	72 x 49 x 33-5/32	1,215
1	Motor Generator Set CG-12A445, -12A444, -12A442, or -12A443	Not Available	1,977
1	Starter CG-4228, -4288A, -21014, -21001	Not Available	178
1	Filter Unit, CG-53007, -53008, -53005, -53003	Not Available	80

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium to 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-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; 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, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

POWER OUTPUT: At 4.0 mc: 1 kw.
At 26.0 mc: 600 w.

POWER REQUIREMENTS: 6.5 kw, 220 v, 60 cyc, 3 phase, ac; or 5.9 kw, 440 v, 25 cyc, 3 phase, ac; or 6.4 kw, 230 v, dc; or 6.4 kw, 115 v, dc.

PHYSICAL CHARACTERISTICS

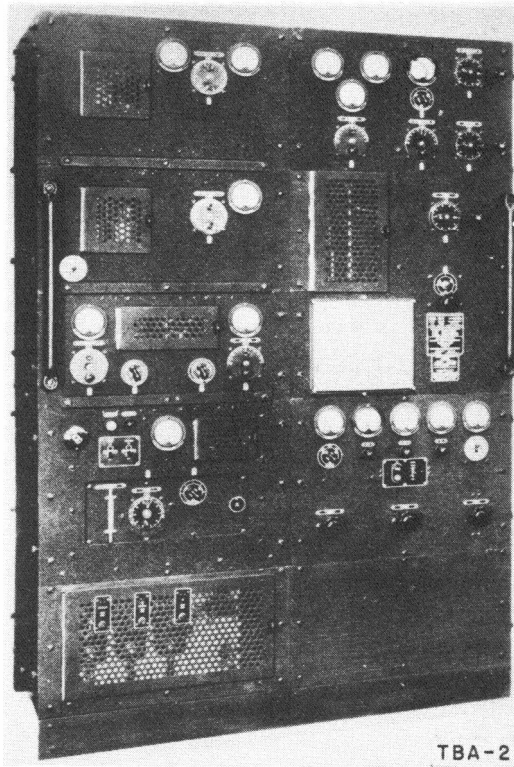
Radio Transmitting Equipment TBA-1 measures 72 x 49 x 33-5/32 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TBA-2

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBA-2 is a general purpose, medium power h-f radiotelegraph transmitter designed for use aboard surface vessels and at shore stations.

It may be keyed at speeds up to 100 wpm throughout its frequency range.

Sixteen crystal-controlled channels are provided.

The transmitter operates best with a single-wire antenna at frequencies between 4.0 to 8.0 mc. A horizontal doublet, or a single-wire antenna is recommended for frequencies above 8 mc.

AN/URT-TYPE	INSTRUCTION LITERATURE: Nav Ships 95291
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE: Navy
TBA-2 :SERVICE TYPE NUMBER	DATE OF THIS SHEET: 29 Apr 52
RADIO TRANSMITTING EQUIPMENT	

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-52040	72 x 49 x 33-5/32	1,090
1	Rectifier Power Unit CG-20027	72 x 23 x 33-3/4	1,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium to 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-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; 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, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; T80; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

POWER OUTPUT: At 4.0 mc: 1 kw.
At 26.0 mc: 600 w.

POWER REQUIREMENTS: 5.28 kw, 440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-2 measures 72 x 72 x 33-3/4 inches.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

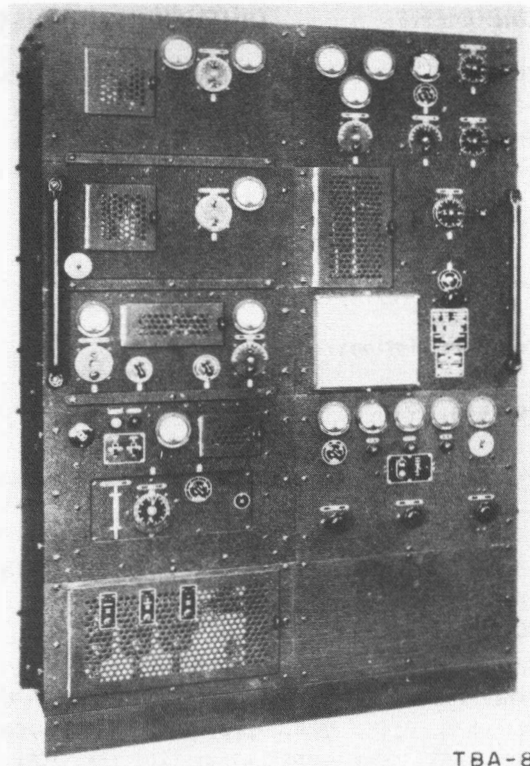
DATE OF THIS SHEET: 29 Apr 52

AN/URT-TYPE

SERVICE TYPE NUMBER:

TBA-8, -11

RADIO TRANSMITTING EQUIPMENT



TBA-8

Radio Transmitting Equipments TBA-8 and TBA-11 are general purpose, medium power, h-f, radio-telegraph transmitters for surface vessels or shore stations.

Relay keying speeds up to 100 wpm, and vacuum tube keying up to 500 wpm, are possible.

They can be used with single-wire antennas, or be connected to balanced 650-ohm transmission lines which are properly terminated into 650-ohm loads.

Frequency control is by means of a continuously variable oscillator.

These transmitters are designed for 220-v, 60-cyc, 3 phase, ac, but may be converted to 440-v, 60-cyc, 3 phase, ac operation for surface vessels.

AN/URT-TYPE		INSTRUCTION LITERATURE: NavShips 900,290
TBA-8, -11	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT		USING SERVICE : Navy
		DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52280, -52280-A	81-7/16 x 49 x 13-1/8	975
2	Motor Generator CG-21899	19-15/16 x 71-5/16 x 18-1/8	815
1	Land Line Control Unit CG-23269	42-1/8 x 24 x 15-3/4	160
2	Magnetic Controller CG-21897	23-7/8 x 21-7/16 x 9-1/16	70
1	Power Transfer Switch CG-24092	12-1/4 x 16 x 9-1/4	26

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; 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, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

POWER OUTPUT: 1 kw.

POWER REQUIREMENTS: 4.6 kw, 220/440 v, 60 cyc, 3 phase, ac.

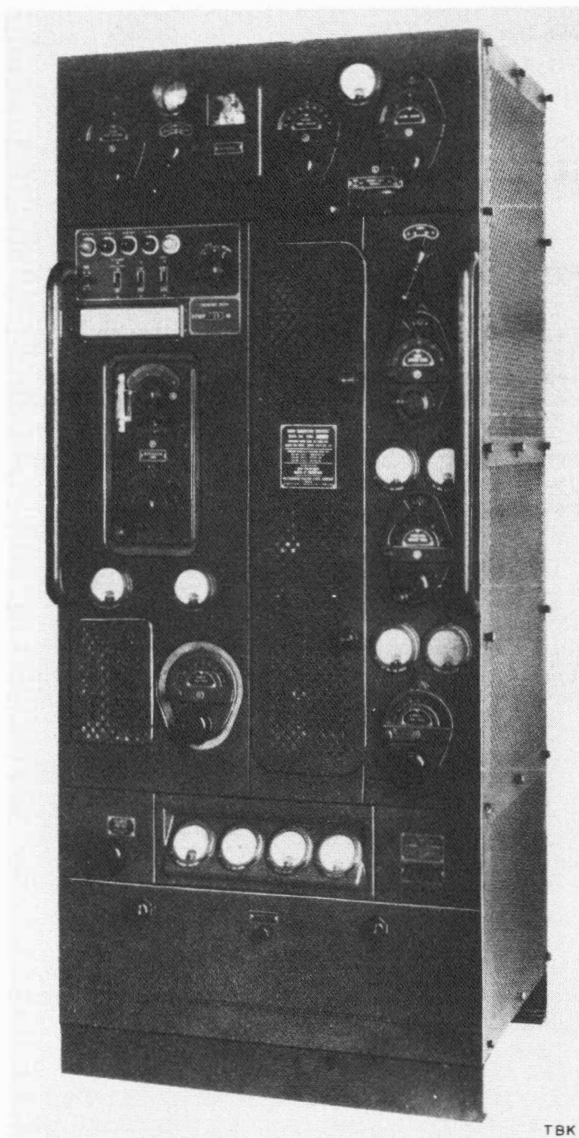
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TBA-8, -11 measure 81-7/16 x 49 x 31-1/8 inches, net weight 3,325 pounds, volume 135.1 cu ft, 3.37 ship tons. Packed for domestic shipment: total weight 5,554 pounds, total volume 340.4 cu ft, 8.5 ship tons. Shipped in 12 packages.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 8 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TBK
 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBK is a general purpose, a-m (cw), radiotelegraph transmitter for ship or shore use in h-f communications. Keying speeds up to 100 wpm are possible. The power output may be varied from the nominal full power to a minimum of 75 w.

This transmitter uses master oscillator frequency control and is continuously variable over its frequency range.

It has provisions for operation over the standard remote control system of Naval vessels.

A junction box is used where two transmitters and two rectifier equipments are installed near each other; the rectifier circuits are connected to the transmitters via the junction box.

A typical installation of this type uses a TBK and the 500 Watt Transmitting Equipment TAJ.

TBK

AN/URT-TYPE		INSTRUCTION LITERATURE: Not Available
:SERVICE TYPE NUMBER		CLASSIFICATION OF EQUIPMENT: Unclassified
TBK		USING SERVICE: Navy
RADIO TRANSMITTING EQUIPMENT		DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CAY-52032	72 x 32 x 24	695
1	Rectifier Power Unit CAY-20018	71-7/8 x 23-15/16 x 22-7/8	975
1	Junction Box CAY-23055	46-1/8 x 23-7/16 x 11-7/8	150

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; A/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; A/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; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -90/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, -585, -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: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: 2.0 - 18.1 mc: 500 w.
2.0 - 9.05 (power amplifier disconnected): 75 w.

POWER REQUIREMENTS: 440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

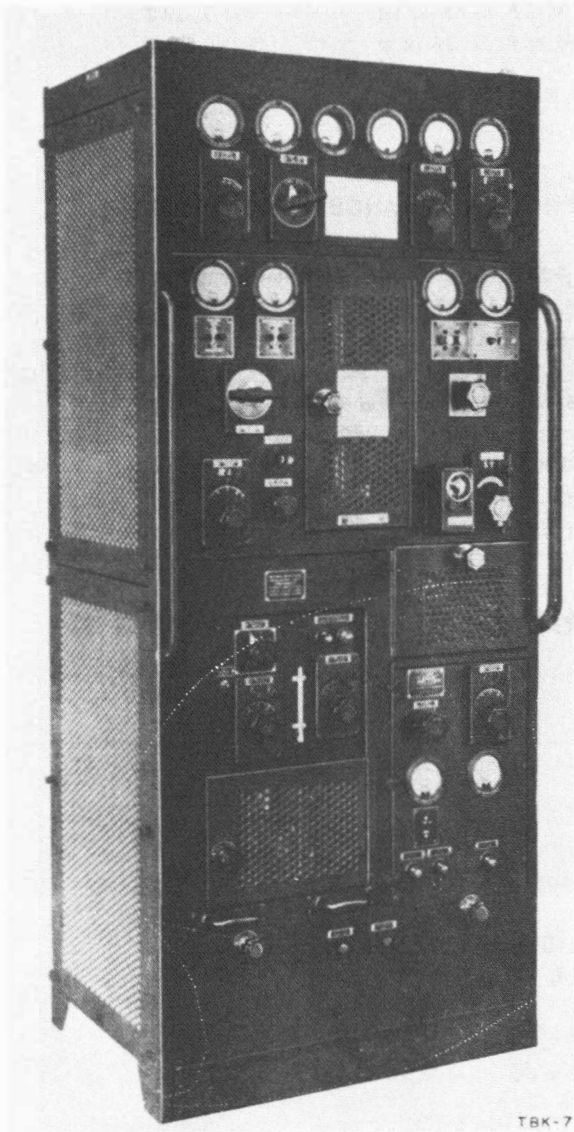
Radio Transmitting Equipment TBK weighs 2,020 pounds net, volume 55 cu ft, 1.37 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/URT-TYPE

SERVICE TYPE NO: TBK-7 thru 10, -12 thru -14, -17 thru -20

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TBK-7 through -10, -12 through -14, and -17 through -20, are a-m (cw) radiotelegraph transmitters for use on all type Naval vessels, except certain types of submarines, for h-f communications. Keying speeds up to 100 wpm are possible. The transmitter power output may be varied from full power to a minimum of 75 w.

These transmitters are master oscillator control and are continuously variable over the frequency range.

Provisions are made for control over a standard four- or six-wire remote control system. Local operation from the transmitter panel is usually reserved for test purposes.

A vertical antenna 60 to 80 feet long is preferred.

The type transmitter, motor generator, and magnetic controller components used with the various equipments depends upon the power source available. Motor generators are of the three-unit type mounted on a single bedplate.

Power for operation of the magnetic controllers is obtained from the transmitter control circuits.

AN/URT-TYPE	INSTRUCTION LITERATURE: See note below*
	CLASSIFICATION OF EQUIPMENT:Unclassified
TBK-7 thru 10, -12 thru -14, -17 thru -20: SERVICE TYPE NO	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT	DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter	72 x 32 x 24-9/16	740
1	Motor Generator Unit	23 x 19 x 71-1/16	1,162
1	Magnetic Controller Unit	19-21/32 x 16 x 9	48

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or submarines.

INSTALLATION: Shipborne, submarine.

APPROXIMATE RANGE (IN MILES): Long.

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, -8, -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: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: 2.0 to 18.1 mc: 500 w.
2.0 to 9.05 mc (power amplifier disconnected): 75 w.

POWER REQUIREMENTS: TBK-7 and -18: 3.65 kw, 440 v, 60 cyc, 3 phase, ac.
TBK-8, -9, -10, -12, -13, -14, -17, -18: 220/440 v, 60 cyc, 3 phase, ac; or 115/230 v dc.
TBK-19: 3.34 kw, 220/440 v, 60 cyc, 3 phase, ac; or 230 v dc.
TBK-20: 3.83 kw, 115/230 v dc.

PHYSICAL CHARACTERISTICS

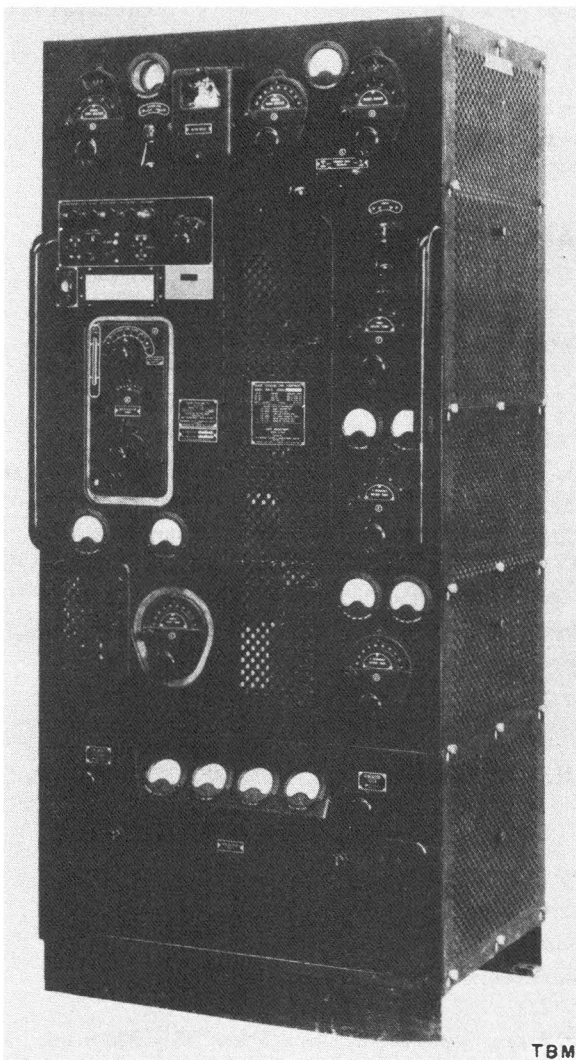
Radio Transmitting Equipments TBK-7 through -10, -12 through -14, -17 through -20 weigh 2,653 pounds net. Packed for domestic shipment: total weight 3,630 pounds, total volume 164.8 cu ft, 4.12 ship tons.

*NavShips 95293; 95294; 900,380; 900,386; 900,388; 900,482.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 23 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TBM, TBM-4, -5, -7, -9, -11
 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TBM, and TBM-4, -5, -7, -9 and -11 are a-m (cw, mcw, voice) radio transmitters used on all type Naval vessels, except certain types of submarines, in h-f communication. Keying speeds up to 100 wpm on cw, and 50 wpm on mcw, are possible. The transmitter power output may be reduced from full- to low-power of 75 w.

TBM consists of a transmitter and a rectifier-modulator unit only. The modulator units employed with the other TBM series equipments permit the use of accessory units, such as a master monitor unit and remote radiophone units. The type of transmitters, modulators and power units used, is determined by the power sources available.

This transmitter uses master oscillator control and is continuously variable over its frequency range.

It may be controlled locally, or from a remote point by means of a standard four- or six-wire control system.

On "voice" the carrier may be controlled manually or by a voice operated relay in the modulator.

A vertical antenna 60 to 80 feet long is preferred for use with the transmitter.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 90 0,380; 900,388
	CLASSIFICATION OF EQUIPMENT: Unclassified
TBM, TBM-4, -5, -7, -9, -11 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT	DATE OF THIS SHEET : 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter	72 x 32 x 24	780
1	Rectifier CAY-20033 *	72 x 32 x 24	Not Available
1	Modulator Unit CAY-50065, or 50065-A	72 x 18 x 24	385
1	Motor Generator Unit **	20-1/2 x 78-7/8 x 20-1/2	1,275
1	Magnetic Controller **	26-1/4 x 17-1/2 x 16-7/8	110

* TBM only.
** Not part of TBM.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or submarines.

INSTALLATION: Shipborne, or submarine.

APPROXIMATE RANGE (IN MILES): Line of sight.

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/HRC-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; 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, -585, -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: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 2.0 to 18.1 mc: Cw, 500 w; mcw and voice, 350 w.
2.0 to 9.05 (power amplifier disconnected): Cw, 75 w.

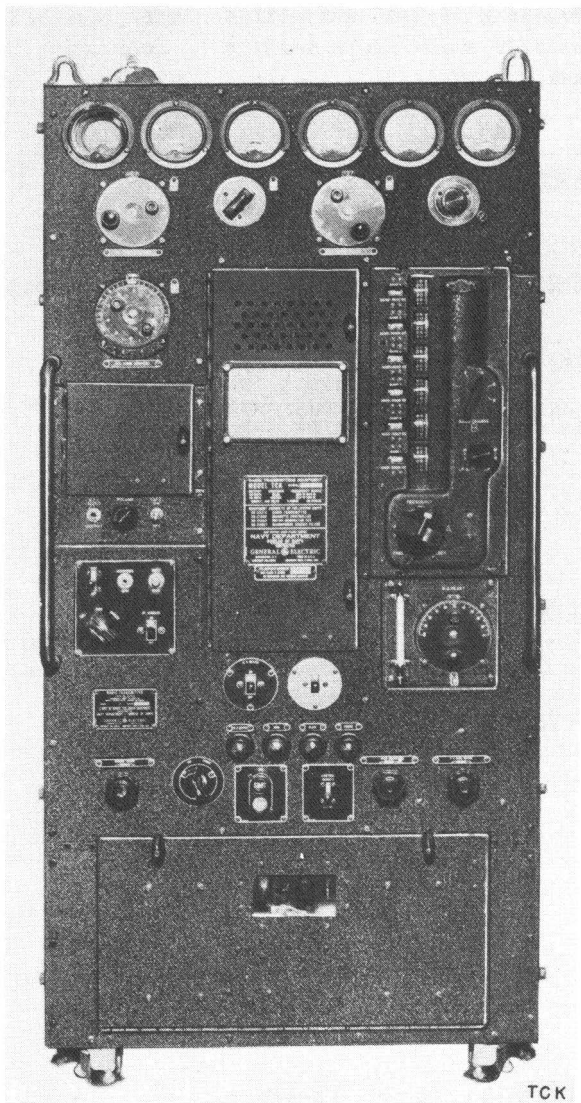
POWER REQUIREMENTS: TBM-4: 4.9 kw, 220/440 v, 60 cyc, 3 phase, ac; or 4.7 kw, 115/230 v dc.
TBM and TBM-5: 4.9 kw, 440 v, 60 cyc, 3 phase, ac.
TBM-9: 4.9 kw, 440 v, 60 cyc, 3 phase, ac; or 4.7 kw, 230 v dc.
TBM-7 and -11: 4.37 kw, 440 v, 60 cyc, 3 phase, ac; or 4.37 kw, 115/230 v dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBM, TBM-4, -5, -7, -9, -11 weighs 3,139 pounds net. Packed for domestic shipment: total weight 4,321 pounds, total volume 231 cu ft, 5.7 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/URT-TYPE
SERVICE TYPE NUMBER: TCK, TCK-1, -2
RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TCK, TCK-1, and -2 are general purpose, medium-power, m-f and h-f telegraph and telephone transmitters designed for ship or shore use.

The TCK (series) transmitters are small with a relatively high output, and are used where space is at a premium.

They may be operated from the front panel, or from a remote location by use of a standard four- or six-wire Navy control unit.

Frequency control is by means of a continuously variable master oscillator.

Single vertical-wire antennas are recommended for these transmitters.

The TCK is available with either a 220/440-v ac, 115-v dc, or 230-v dc motor generator set. The TCK-1 and -2 are furnished with 220/440-v, 60-cyc, 3 phase, ac, motor generator sets.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 900,210
	CLASSIFICATION OF EQUIPMENT: Unclassified
TCK, TCK-1, -2	:SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52214, -52215, -52216, -52216-A	52-5/16 x 25 x 18-1/4	285
1	Magnetic Controller CG-21627, -21628, -21629, -21630	29-9/16 x 19-7/16 x 13-11/16 19-15/16 x 20-7/16 x 8-13/16	190 40
1	Motor Generator Set CG-21631, -21632, -21633	14-1/8 x 41-15/16 x 11-1/4	370

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium, long.

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, -8, -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; RA S; 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, -585, -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: 2.0 - 18.1 in 6 bands.

Band 1: 2.0 - 3.0
Band 2: 3.0 - 4.5

Band 3: 4.5 - 6.0
Band 4: 6.0 - 9.0

Band 5: 9.0 - 12.0
Band 6: 12.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, voice.

POWER OUTPUT: Cw: 400 w.
Voice: 100 w.

POWER REQUIREMENTS: TCK, TCK-1, -2: 2.4 kw, 220/440 v, 60 cyc, 3 phase, ac.
TCK: 2.3 kw, 115 v, dc.
TCK: 2.3 kw, 230 v, dc.

PHYSICAL CHARACTERISTICS

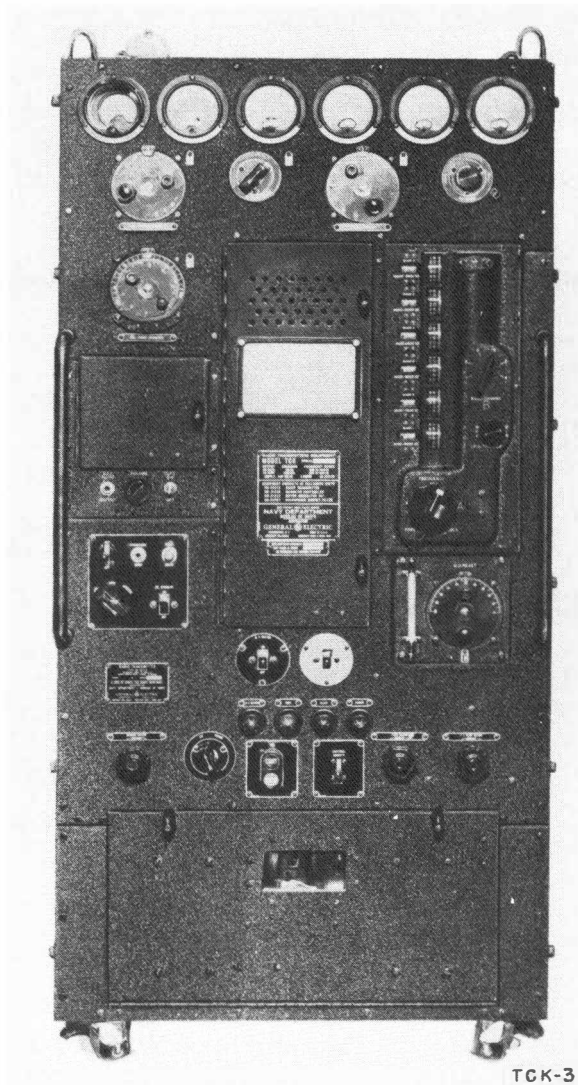
Radio Transmitting Equipments TCK, TCK-1, -2 measure 52-5/16 x 25 x 18-1/4 inches.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 Apr 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TCK-3, -5, -7

RADIO TRANSMITTING EQUIPMENT



TCK-3

Radio Transmitting Equipments TCK-3, -5, -7 are general purpose, medium-power, m-f and h-f telegraph and telephone transmitters designed for ship or shore station use.

TCK (series) are small with a relatively high output, and are used where space is at a premium.

They may be operated from the front panel or from a remote location by use of a standard four- or six-wire Navy control unit.

Frequency control is by means of a continuously variable master oscillator.

Single-wire vertical antennas are recommended for the TCK-3, -5, and -7.

TCK-3 is available with either a 220/440-v ac, 115-v, dc, or 230-v, dc motor generator set. TCK-5 is furnished with a 115-v, d-c motor generator set. TCK-7 has a 230-v dc motor generator set.

AN/URT-TYPE		INSTRUCTION LITERATURE: NavShips 900,210
TCK-3, -5, -7 :SERVICE TYPE NUMBER		CLASSIFICATION OF EQUIPMENT:Unclassified
RADIO TRANSMITTING EQUIPMENT		USING SERVICE : Navy
		DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52214-A, -52215-A, 52216-A, -52345	52-5/16 x 25 x 18-1/4	285
1	Motor Generator Set CG-21631-A, -21632-A, -21633-A	14-1/8 x 41-15/16 x 11-1/4	345
1	Magnetic Controller CG-21627, -21628, -21629, -211297	29-3/16 x 19-7/16 x 13-11/16 17-5/16 x 11-9/16 x 10-5/8	130 46

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium, long.

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/HRC-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; 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, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (ROA); 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: 2.0 - 18.1 in 6 bands.

Band 1: 2.0 - 3.0	Band 3: 4.5 - 6.0	Band 5: 9.0 - 12.0
Band 2: 3.0 - 4.5	Band 4: 6.0 - 9.0	Band 6: 12.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, voice.

POWER OUTPUT: Cw: 400 w.
Voice: 100 w.

POWER REQUIREMENTS: TCK-3, -5: 2.3 kw, 115v dc.
TCK-3, -7: 2.3 kw, 230 v dc.
TCK-3: 2.4 kw, 220/440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TCK-3, -5, -7 measure 52-5/16 x 25 x 18-1/4 inches.

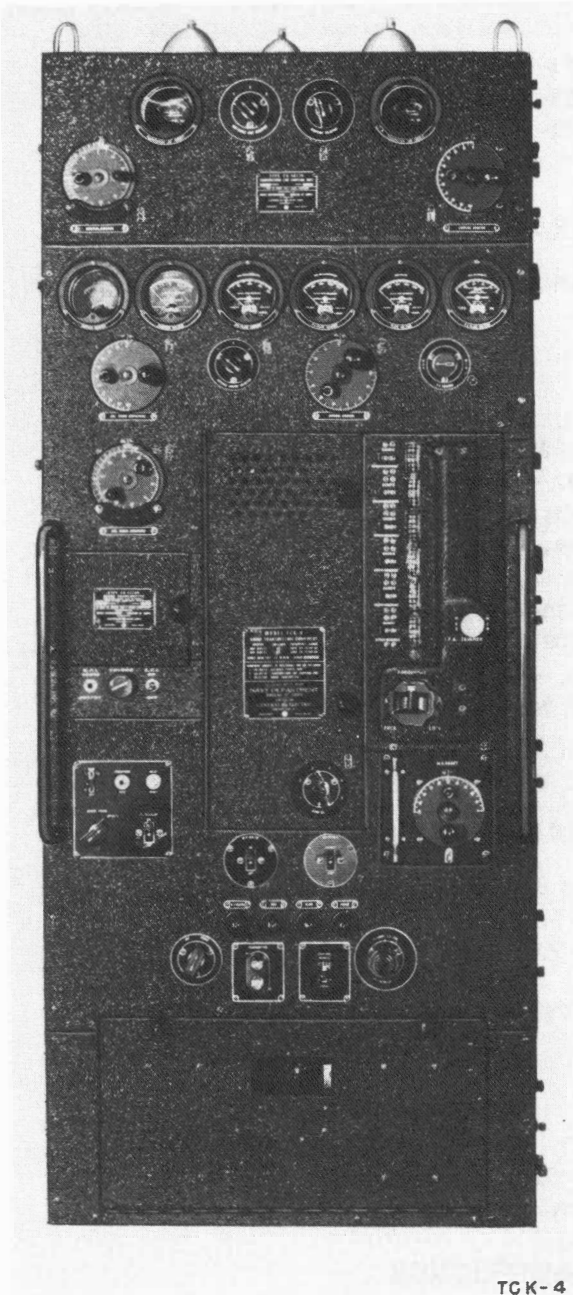
STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

AN/URT-TYPE

SERVICE TYPE NUMBER:

TCK-4, -6

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TCK-4 and TCK-6 are medium-power, m-f, and h-f telegraph and telephone transmitters designed for general purpose and shore use. However, installation of shock mounting to the units adapt them to shipboard installation.

TCK (series) are small in size, with a relatively high output, and are used where space is at a premium.

They may be operated from the front panel or from a remote location by use of a standard four- or six-wire Navy control unit.

Frequency control is by means of a continuously variable master oscillator.

Either single vertical-wire antennas, or antennas having balanced transmission lines can be used.

TCK-4

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 900 210	
	CLASSIFICATION OF EQUIPMENT: Unclassified	
TCK-4, -6	:SERVICE TYPE NUMBER	
RADIO TRANSMITTING EQUIPMENT		USING SERVICE : Navy DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52299	52-5/16 x 25 x 18-1/4	290
1	Rectifier Power Unit CG-20219	51-25/32 x 24-13/16 x 16	375
1	Transmission Line Coupling Unit CG-50139	11-15/32 x 25 x 16-3/32	65

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, advanced bases, or shipboard.

INSTALLATION: Ground, shipborne.

APPROXIMATE RANGE (IN MILES): Medium, long.

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, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MB8; 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, -585, -593, -694, -704; TBO; TBX; TCH; RCP; 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: 2.0 - 18.1 in 6 bands.

Band 1: 2.0 - 3.0	Band 3: 4.5 - 6.0	Band 5: 9.0 - 12.0
Band 2: 3.0 - 4.5	Band 4: 6.0 - 9.0	Band 6: 12.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, voice.

POWER OUTPUT: Cw: 400 w.
Voice: 100 w.

POWER REQUIREMENTS: TCK-4: 1.8 kw, 115/230 v, 50/60 cyc, 1 phase, ac.
TCK-6: 1.8 kw, 220 v, 60 cyc, 3 phase, ac.

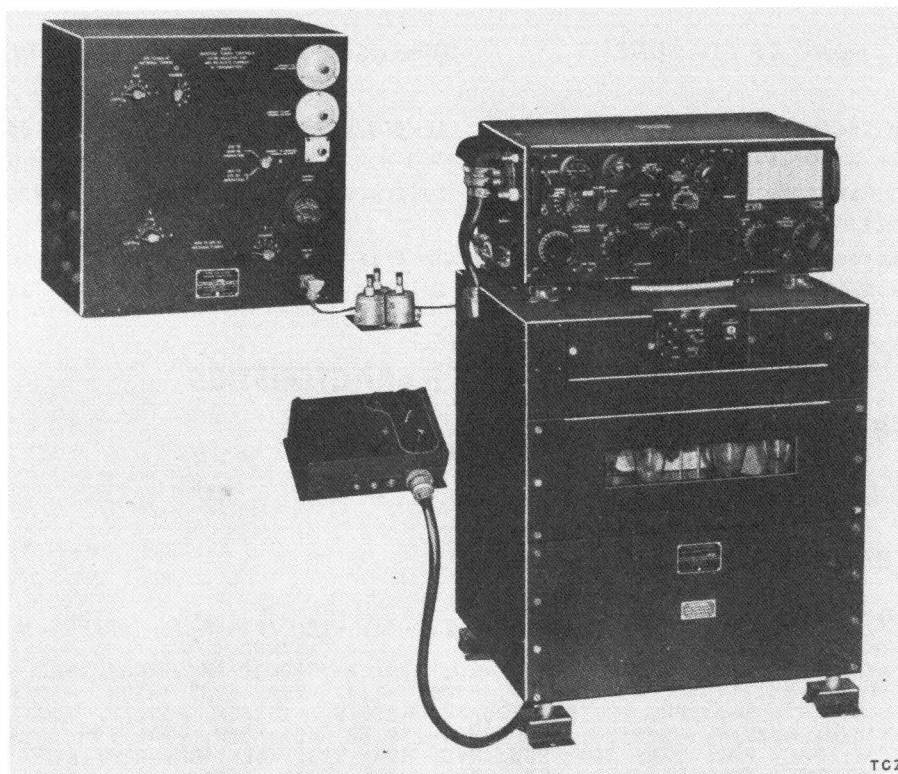
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TCK-4, -6 measure 61-23/32 x 25 x 18-1/4 inches, net weight 880 pounds, volume 28.5 cu ft, 0.7 ship ton. Packed for domestic shipment: total weight 1,288 pounds, total volume 102.3 cu ft, 2.55 ship tons. Shipped in 3 packages.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 9 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: _____ TCZ
 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TCZ is a medium-power, general purpose, h-f equipment for ship or shore use. An autotune system allows rapid automatic selection of eleven preset frequencies; manual tuning throughout the frequency range is possible. A master oscillator is used for frequency control.

A frequency-limiting circuit, consisting of a combined tuning and load coil, is used to tune the transmitter power-amplifier over the 0.3 to 0.6 mc range. The loading coil must be manually tuned for each change of frequency.

Provision is made for break-in operation so that an associate receiver may be used with the transmitter.

Remote control, by means of one or more remote selector units, or 4- or 6-wire radiophone units, is possible.

This is a shipboard adaptation of the ATC Aircraft Radio Transmitting Equipment.

AN/URT-TYPE		INSTRUCTION LITERATURE: Not Available
TCZ	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT		USING SERVICE: Navy
		DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52286	10-3/4 x 23-9/16 x 13-1/4	66.0
1	Remote Control Unit COL-23410	4-3/4 x 9-31/32 x 6-9/16	8.0
1	Motor Generator-Rectifier COL-211101 or Dynamotor Assembly COL-211102	29-1/8 x 23-1/8 x 20-1/8	320.0
1	Antenna Load Coil COL-47970	29-7/16 x 23-7/16 x 20-1/8	210.0
		10-7/32 x 18-5/8 x 12-27/32	14.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-30; AN/FRR-3, -4, -12, -28; AN/GRC-9, -19, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -29; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -453, -779, -787, -794, -1004; MBS; MQ; OA-58/FRC, -89/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -189, -193, -244, -274, -281, -399, -499, -506, -536, -549, -585, -599, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-9; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 0.6 and 2 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: 100 w.

POWER REQUIREMENTS: 650 w, 115 v, 60 cyc, 1 phase, ac; or 1,150 w, 115 v, dc.

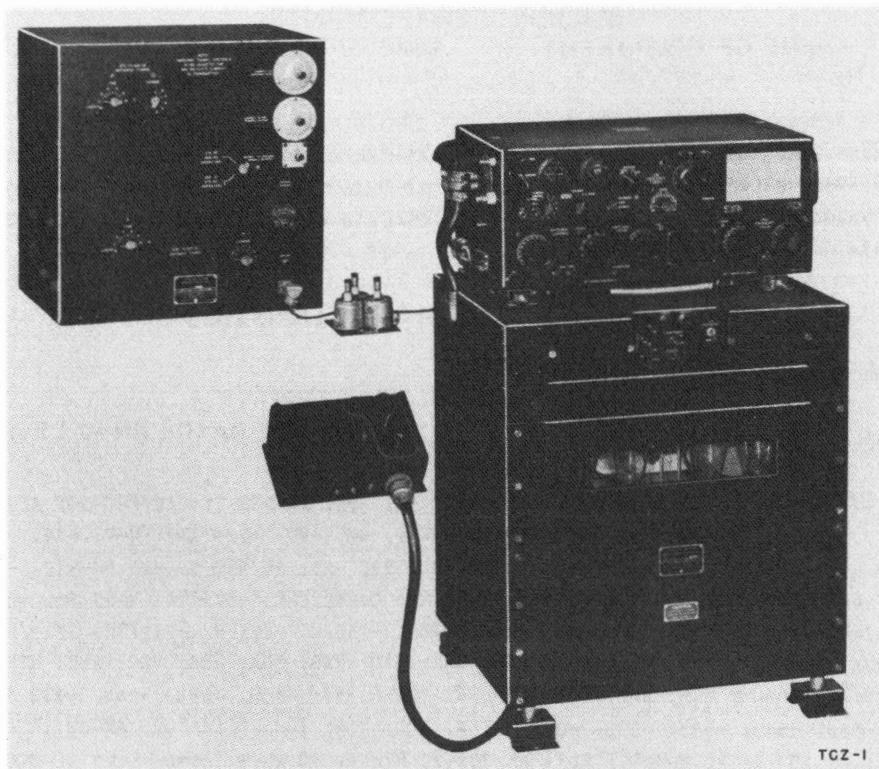
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TCZ measures 40-3/16 x 23-9/16 x 20-1/8 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TCZ-1, -2
RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TCZ-1 and -2 are medium-power, general purpose, h-f equipment for ship or shore station use. An autotune system allows rapid, automatic selection of 11 preset channels; manual tuning throughout the frequency range is possible. A master oscillator is used for frequency control.

A frequency-limiting circuit, consisting of a combined tuning and load coil is used to tune the power amplifier over the 0.2 to 1.5 mc frequency range. The loading coil must be manually tuned for each change of frequency.

Provision is made for break-in operation so that an associated receiver may be used with the transmitter.

Remote control, by means of one or more remote selector units, or four- or six-wire radiophone units, is possible.

Motor Generator Rectifier COL-211322 is used with TCZ-1 for operation from a-c sources; Dynamotor Assembly COL-211624 is used with TCZ-2 for d-c operation.

AN/URT-TYPE		INSTRUCTION LITERATURE: NavShips 900,481(a)
TCZ-1, -2	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT		USING SERVICE : Navy
		DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52286-A	10-3/4 x 23-9/16 x 13-1/4	70
1	Antenna Load Coil COL-47505	19-3/4 x 18-5/8 x 15-1/2	48
1	Motor-Generator Rectifier COL-211322	29-7/16 x 23-7/16 x 20-1/8	320
	or Dynamotor Assembly COL-211624	29-7/16 x 23-7/16 x 20-1/8	210
1	Remote Control Unit COL-23410	4-3/8 x 9-31/32 x 6-1/2	8

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -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; BC-312, -314, -342, -344, -348, -453, -779, -787, -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, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; 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, -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 - 1.5 and 2 - 18.1 in 13 bands.

Band 1: 2.0 - 2.4	Band 5: 4.0 - 4.8	Band 9: 9.0 - 10.8
Band 2: 2.4 - 3.0	Band 6: 4.8 - 6.0	Band 10: 10.8 - 12.0
Band 3: 3.0 - 3.6	Band 7: 6.0 - 7.2	Band 11: 12.0 - 14.4
Band 4: 3.6 - 4.0	Band 8: 7.2 - 9.0	Band 12: 14.4 - 18.1
		Band 13: 0.2 - 1.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: 100 w.

POWER REQUIREMENTS: TCZ-1: 1,200 w, 110 - 115 v, 50/60 cyc, 1 phase, ac.
TCZ-2: 1,300 w, 115 v, dc.

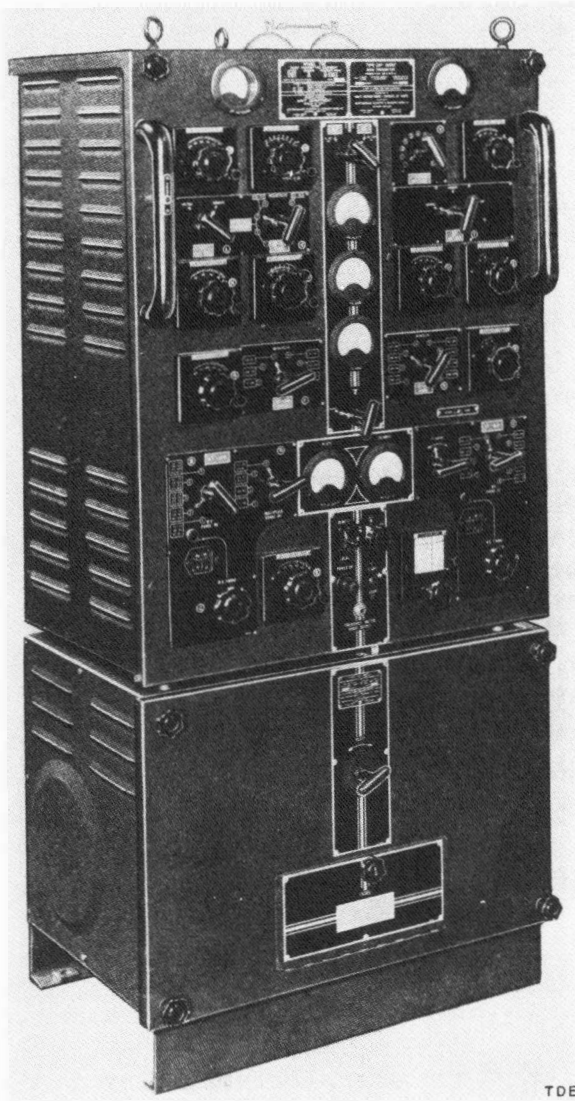
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TCZ-1 and TCZ-2 measure 40-3/16 x 23-7/16 x 20-1/8 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TDE, TDE-1 through-3
RADIO TRANSMITTING EQUIPMENT



TDE

Radio Transmitting Equipments TDE, TDE-1 through -3 are general purpose, m-f/h-f low-power a-m (cw, mcw, voice) sets especially designed for rapid installation aboard surface vessels, or in shore stations. Different models of the series are similar in design and operating characteristics; the major units vary with the type of power source available.

The output frequency is continuously variable and is obtained from two high stability self excited master oscillators.

These sets are readily matched to any type antenna, or may use separate antennas for the m-f and h-f sections.

They can be controlled and keyed by a remote control unit supplied; a standard four- or six-wire remote control system such as Radiophone Units 23211 or 23172.

A special auto transformer is supplied for operation from a 208-v, 60-cyc, 3 phase, a-c source.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 900,389, 95328
	CLASSIFICATION OF EQUIPMENT:Unclassified
TDE, TDE-1 through-3 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52267, -52267-A	39-13/16 x 28-1/4 x 20-1/2	334.0
1	Motor Generator and Rectifier Power Unit CAY-21848, -21849, -21850, -211030	22-13/16 x 28 x 19-7/16	372.0
1	Remote Control Unit CAY-23305, -23381	3-11/16 x 5-7/16 x 5-3/16	3.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ARR-15; 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; 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/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -543, -593, -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: 0.3 - 1.5 and 1.5 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw: 125 w.
Mcw: 35 w.
Voice: 30 w.

POWER REQUIREMENTS: TDE, TDE-2: 1.2 kw, 115/230 v dc; or 1.2 kw, 220 /440 v, 60 cyc, 3 phase, ac. TDE-1, TDE-3: 1.2 kw, 115 /220 v, dc; or 1.2 kw, 115 /230 v, 60 cyc, 1 phase, ac; or 1.2 kw, 208 - 220 / 440 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TDE, TDE-1 through 3 measure 62-7/16 x 28-1/4 x 20-1/2 inches, net weight 829 to 866 pounds, volume 20 cu ft, 0.5 ship ton. Packed for domestic shipment: total weight 1,165 pounds, total volume 46.71 cu ft, 1.2 ship tons.

STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

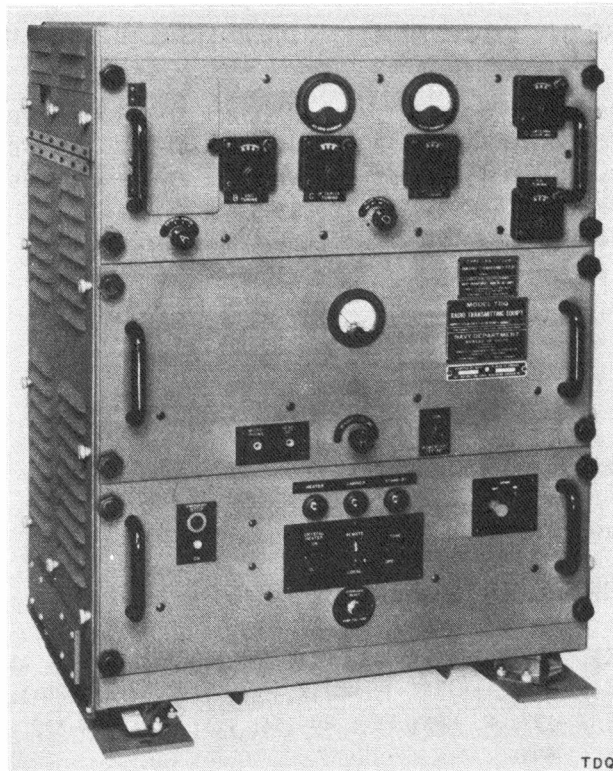
USING SERVICE: Navy

DATE OF THIS SHEET: 29 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TDQ and TDQ-a

VHF RADIO TRANSMITTING EQUIPMENT



VHF Radio Transmitting Equipments TDQ and TDQ-a are essentially low-power, general purpose, a-m (mcw, voice) radio transmitters for ship-to-shore, ground-to-air, ship-to-air, or point-to-point communication. They can be operated locally, or at a remote site by the standard four- or six-wire remote control system. Keying speeds up to 40 words per minute are possible.

This transmitter consists of an r-f unit, a modulator, and a power unit. These are supported on metal tracks within a single cabinet, and each may be withdrawn individually for ease of maintenance.

Navy Field Change No. 4 converts the TDQ to TDQ-a, to extend the a-f response, and to permit operation in conjunction with Navy Type Portable Carrier Control System UF, and Army Type CF-1-A Telephone Terminal equipment.

It operates on 115/230-v, a-c power. A step-down transformer permits operation from 440-v, ac.

It can also be operated on 115/230-v dc by using the proper motor generator and magnetic controller.

AN/URT-TYPE		INSTRUCTION LITERATURE: NavShips 900.474
TDQ and TDQ-a :SERVICE TYPE NUMBER		CLASSIFICATION OF EQUIPMENT: Unclassified
VHF RADIO TRANSMITTING EQUIPMENT		USING SERVICE: Navy
		DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CRV-52328	32-1/4 x 25-1/4 x 18-3/8	283
1	Motor Generator Unit CG-211092*	11-3/4 x 27-3/8 x 13-3/8	210
1	Motor Generator Unit CG-211093**	11-3/4 x 27-3/8 x 13-3/8	210
1	Line Transformer CRV-30984	13-3/4 x 11 x 9	57
1	Antenna Assembly CLS-66095	24-1/4 x 46-1/2 x 4-3/4	17

*For 115 v d-c power source. **For 230 v d-c power source.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): Short.

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-12, -21; AN/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: Mcw, voice.

POWER OUTPUT: 15 w.

POWER REQUIREMENTS: 115/230/440 v, 50/60 cyc, 1 phase, ac; or 115/230 v, dc.

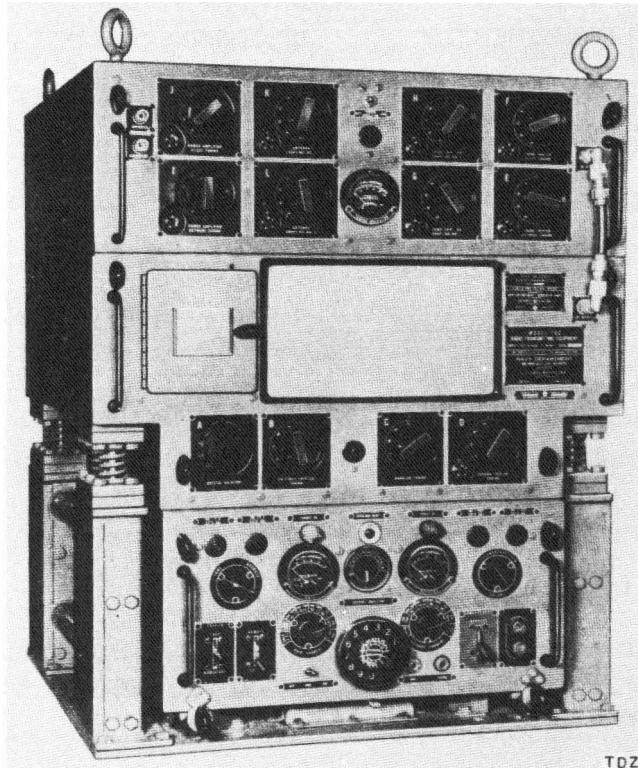
PHYSICAL CHARACTERISTICS

VHF Radio Transmitting Equipments TDQ and TDQ-a measure 32-1/4 x 25-1/4 x 18-3/8 inches.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Restricted
 USING SERVICE: Navy
 DATE OF THIS SHEET: 9 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TDZ
 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TDZ is a medium-power, v-h-f/u-h-f, general purpose, multichannel equipment for ship or shore station use. It provides rapid automatic selection of 10 preset crystal-controlled channels (by the use of a telephone type dial) either at the transmitter, or through use of a remote channel selector unit; or a six-wire radiophone remote control unit. Manual tuning throughout the frequency range is provided.

As many as four channel selector units and four radiophones may be used.

Keying is accomplished either locally, or at a remote station, and relay keying speeds up to 40 wpm are possible.

A vertical-dipole type antenna, such as Navy Type CRV-66147 can be used.

This equipment operates only from ac. When the power source is dc, power conversion equipment must be used to convert dc to ac.

AN/URT-TYPE		INSTRUCTION LITERATURE: NavShips 900,809, 91328
		CLASSIFICATION OF EQUIPMENT: Restricted
TDZ	:SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT		DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (I N) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52342	32-1/16 x 24-3/4 x 25-11/16	760
*	Motor Generator Unit CGU-211403 or CGU-211405	13-1/2 x 31-15/16 x 10-1/4	250
*	Magnetic Controller CGU-211375 or CGU-211374	17-5/16 x 11-9/16 x 10-5/8	48
1	Remote Channel Selector Unit CG-23445 *Supplied for d-c operation.	6-7/8 x 6-7/8 x 4-7/8	7

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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: 225 -400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: Unmodulated: 30 - 50 w.
Modulated: 30 - 60 w.

POWER REQUIREMENTS: 870/955/990 w, 110/220/440 v, 50/60 cyc, 1 phase, ac; or 1.6/1.53 kw, 115/230 v, dc.

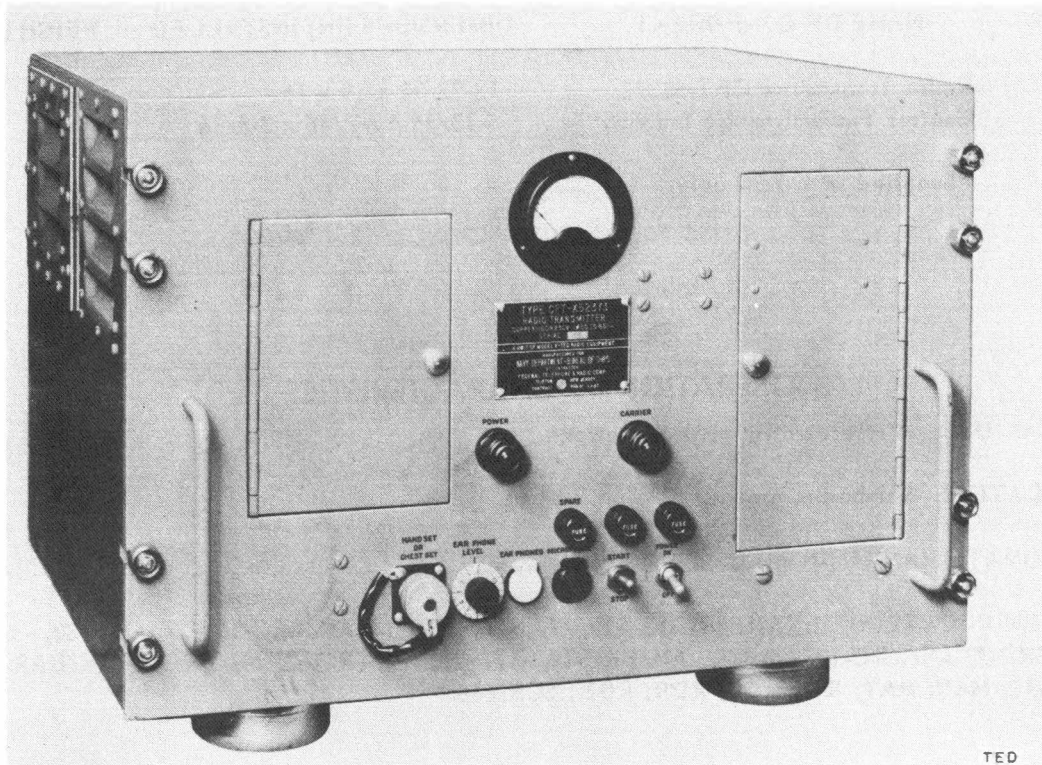
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDZ packed for domestic shipment: total weight 1,800 pounds, total volume 101.2 cu ft, 2.5 ship tons. Shipped in 2 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TED, TED-1 and -2
RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TED, TED-1 and -2 are low-power α -m (cw, mcw, voice) u-h-f radio-telephone transmitters used primarily for shipboard and shore station aircraft traffic control. It may be used in conjunction with an associated receiver, and can be controlled through use of two control units; one for local operation, and one for limited remote control. Remote operation also is possible by use of standard shipboard remote control units.

Four preset crystal-controlled channels are available. This transmitter is operated in conjunction with Radio Receiving Set AN/URR-13.

This equipment is designed to be used with either Antenna Assembly NT-66147 (which is a vertical mounted half-wave center-fed dipole), Antenna AT-150/SRC (a broad-band dipole), or Antenna Assembly AS-390/SRC (which is of the broad-band unbalanced type).

The type antenna used is dependent upon installation requirements.

It may be table operated or mounted in standard relay racks.

AN/URT-TYPE	INSTRUCTION LITERATURE: NavShips 91357
	CLASSIFICATION OF EQUIPMENT:Unclassified
TED, TED-1 and -2 :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CFT-52373	13-23/32 x 19 x 15	135
1	Control Transmitter CFT-23555*	5-13/16 x 4-7/16 x 3-5/16	4

*Supplied with TED only.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft traffic control stations.

INSTALLATION: Shipborne, ground.

APPROXIMATE RANGE (IN MILES): 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: 225- 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 15w.

POWER REQUIREMENTS: 750 w, 115/230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TED, TED-1 and -2 measure 16-1/4 x 28-1/2 x 21-3/4 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	AN/UXA-TYPE	
	AN/COMP TYPE NUMBER:	CV-97/UX
	FREQUENCY SHIFT CONVERTER	

NO PHOTOGRAPH AVAILABLE

Frequency Shift Converter CV-97/UX limits and demodulates received frequency shift signals and converts them to a-m signals which are used to operate facsimile equipment. The resulting intelligence is used to modulate the a-f carrier which in turn is fed to the signal input of a suitable facsimile recorder.

This equipment is normally used in association with Radio Receiving Equipment RBC.

AN/UXA-TYPE		INSTRUCTION LITERATURE: Not Available
		CLASSIFICATION OF EQUIPMENT: Unclassified
CV-97/UX	:AN/COMP TYPE NUMBER	USING SERVICE : Navy
FREQUENCY SHIFT CONVERTER		DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN)	INSTALL ED	WEIGHT (LBS)
1	Receiver-converter	8-3/4 x 19 x 17		Not Available
1	Cabinet	11 x 22 x 18		90

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or shore.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Center frequency, 0.40. Frequency shift in + 400 cps.

TYPE OF SIGNAL: Output is a-m 1-, 2-, or 3-kc signal.

POWER OUTPUT: 0 to + 20 dbm, 600 ohms.

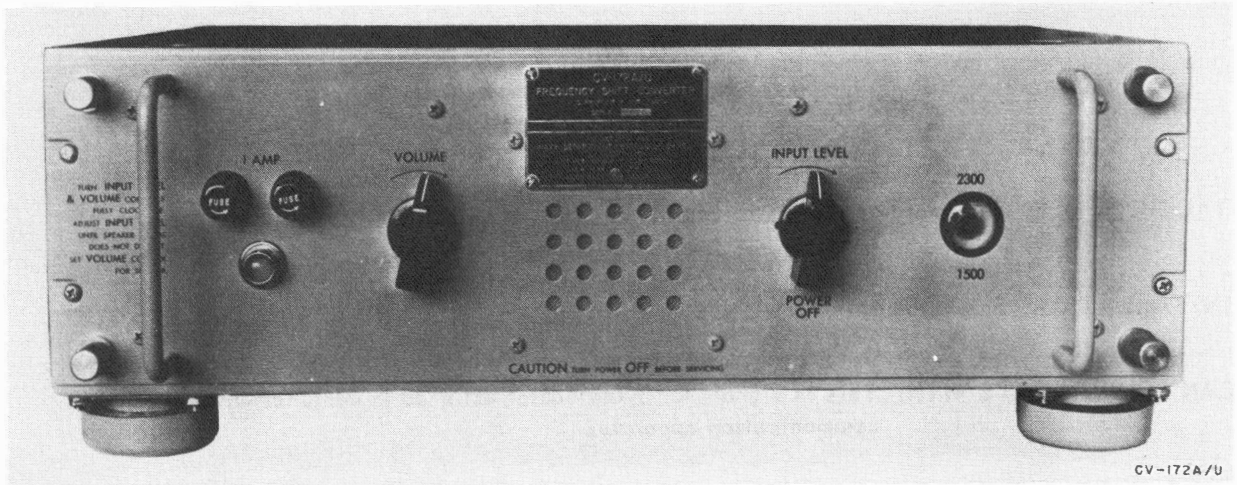
POWER REQUIREMENTS: 115 / 230 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Converter CV-97/UX weighs 90 pounds net, volume 2 cu ft.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 29 May 52

AN/UXA-TYPE	
AN/COMP TYPE NUMBER:	CV-172A/U
FREQUENCY SHIFT CONVERTER	



Frequency Shift Converter CV-172A/U converts 1,500-2,300 cps facsimile signals (received from a radio circuit) to a-m signals for a facsimile recorder. The signals from the radio receiver are audio frequency shift signals in which 1,500 cps represents black and 2,300 cps represents white for the recorder.

Provision is made for aural monitoring of the incoming signal, and for visual checking of frequency limits.

This converter is primarily intended for use with Facsimile Recorder RD-92/UX. It is a modification of a commercial (Times Facsimile Corp Model RGD) facsimile frequency shift converter.

It has a balanced input of 500 ohms, and requires an input signal level of zero to -40 dbm.

AN/UXA-TYPE		INSTRUCTION LITERATURE: NavShips 91394
CV-172A/U	:AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
FREQUENCY SHIFT CONVERTER		USING SERVICE : Navy
		DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY: 1500-2300 cps, frequency swing \pm 400 cps.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency shift keying.

POWER OUTPUT: .04 v a-c at 1500 cps and .009 v a-c at 2300 cps into a balanced 500 ohm line.

POWER REQUIREMENTS: 30 w, 100-130 v, 50/60 cyc.

PHYSICAL CHARACTERISTICS

Frequency Shift Converter CV-172A/U measures 6-1/2 x 19 x 16-1/2 inches.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/UXA-TYPE

SERVICE TYPE NUMBER:

FRB

FREQUENCY SHIFT RECEIVER EQUIPMENT



Frequency Shift Receiver Equipment FRB is used for the demodulation of facsimile or radio-photo frequency-shift signals, and is used aboard ship or at shore stations.

Audio fm keyer equipment FSJ is often used with this equipment to form a converter-inverter system in conjunction with Facsimile Transmitter-Receiver Equipment TT-41/TXC-1B, and TT-66/TXC.

AN/UXA-TYPE		INSTRUCTION LITERATURE: NavShips 95002
		CLASSIFICATION OF EQUIPMENT: Restricted
FRB	:SERVICE TYPE NUMBER	USING SERVICE : Navy
FREQUENCY SHIFT RECEIVER EQUIPMENT		DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Receiver CBCM-35123	10-1/2 x 22 x 14-3/4	74

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY: 1.0 to 2.5 kc, and 2.1 to 3.0 kc.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency shift.

POWER OUTPUT: Output level: 0 dbm to +10 dbm across 600 ohm load.

POWER REQUIREMENTS: 87 w, 100-125 v, 60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Frequency Shift Receiver Equipment FRB measures 10-1/2 x 22 x 14-3/4 inches, net weight 74 pounds, volume 1.97 cu ft.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT:Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET:29 May 52

AN/UXA-TYPE

AN/COMP TYPE NUMBER:

MD-168/UX

RADIO MODULATOR



Radio Modulator MD-168/UX is a subcarrier frequency-shift unit operating on frequencies of 1.5 to 10 kc. It converts amplitude-modulated facsimile signals to audio frequency-shift signals of constant amplitude, which in turn are used to modulate the carrier of a radio transmitter.

This modulator has provision for audio monitoring and visual indication of the frequency of transmitted signals.

Contrast ratio (maximum to minimum signal ratio) is zero to -40 dbm.

Frequency of maximum signal is 1,500 cps, and for minimum signal, 2,300 cps.

It consists essentially of commercial (Times Facsimile Corp Model CGR-1) equipment.

It can be used with any facsimile transmitter having an output within the range 1.5 to 10 kc, and keying speeds up to 900 cps.

AN/UXA-TYPE		INSTRUCTION LITERATURE: Not Available
		CLASSIFICATION OF EQUIPMENT: Unclassified
MD-168/UX	: AN/COMP TYPE NUMBER	USING SERVICE : Navy
RADIO MODULATOR		DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY: 1.5 to 10.0 kc.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Pulse.

POWER REQUIREMENTS: 70 w, 115 v, 60 cyc.

PHYSICAL CHARACTERISTICS

Radio Modulator MD-168/UX measures 5-3/8 x 16-1/2 x 19 inches.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Navy

DATE OF THIS SHEET: 2 May 52

AN/UXH-TYPE

AN/COMP TYPE NUMBER:

RD-92/UX

FACSIMILE RECORDER



Facsimile Recorder RD-92/UX is used to make direct recordings of copy transmitted by Facsimile Transceiver TT-41/TXC-1B. It may be used for recording facsimile signals from either wire or radio communication circuits.

This is a self-contained unit for table or relay rack mounting.

When used with wire lines, it can be connected directly to the line, or to an am receiver having a 500-ohm output.

For subcarrier f-m signals, Frequency Shift Converter CV-172/U is used, in addition to the associated radio receiver.

AN/UXH-TYPE

INSTRUCTION LITERATURE:
NavShips 91401
CLASSIFICATION OF EQUIPMENT:Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 2 May 52

RD-92/UX :AN/COMP TYPE NUMBER
FACSIMILE RECORDER

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
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(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Telephotograph receiving stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Facsimile Transceiver TT-41/TXC-1B, and equivalent facsimile equipment.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: 12 x 18-3/4.

LINES PER INCH: 96.

TRANSMISSION TIME: 20 minutes.

DRUM DIAMETER: 6 inches.

DRUM SPEED: 60 rpm.

INDEX OF COOPERATION: 576 (International index).

TYPE OF RECORDING: Direct stylus.

PHASING SIGNAL: Pulses (1 per sec.).

TYPE OF MODULATION: Am; convertible to sub-carrier fm or frequency shift by addition of Frequency Shift Converter CV-172/U.

TYPE TRANSMISSION FACILITIES REQUIRED: Wire line: Voice-frequency (if less than 100 miles); greater distances require "schedule one" or "schedule two" facsimile circuit.
Radio: Am radio receiver with 500-ohm output.

POWER REQUIREMENTS: 150 w, 90-130 v,
55/65 cyc, 1 phase.

INPUT VOLTAGE LEVEL AND IMPEDANCE:
Input signal level: 0 to -40 dbm.
Input impedance: 1600 ohms.
Input frequency: 500-10,000 cps.

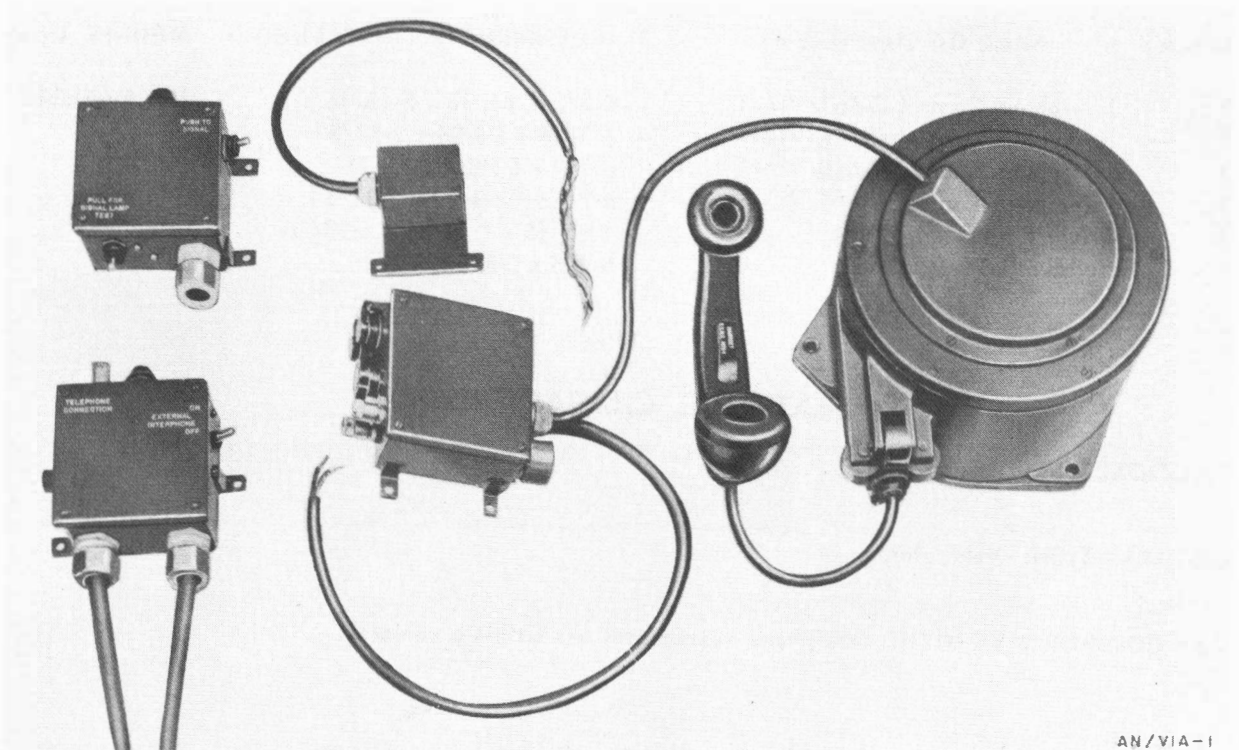
PHYSICAL CHARACTERISTICS

Facsimile Recorder RD-92/UX measures 14-1/2 x 20 x 16-1/2 inches.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

AN/VIA-1

AUXILIARY INTERPHONE EQUIPMENT



AN/VIA-1

Auxiliary Interphone Equipment AN/VIA-1 is an assemblage of auxiliary components used to extend a vehicular interphone system to the exterior of the vehicle. It is used in inclosed or armored vehicles.

This equipment consists of interphone station control units which are installed within the vehicle and a cable reel which includes a handset and a control unit designed to be mounted on the exterior of the vehicle to provide an outside interphone station.

The stations of this system have call signal lamps to indicate that contact with the exterior station is desired.

The only adjustment provided is for control of volume.

It is powered by the electrical system of the vehicle in which the equipment is installed.

AN/VIA-1	INSTRUCTION LITERATURE: TM 11-704
	CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE : Army DATE OF THIS SHEET : 22 Jan 52
AUXILIARY INTERPHONE EQUIPMENT	

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Interphone Control C-663/VIA-1	6-3/8 x 4-7/16 x 5-15/16	Not Available
1	Interphone Control C-664/VIA-1	6-3/16 x 6-9/16 x 2-17/32	" "
1	Interphone Control C-665/VIA-1	8-1/2 x 5-5/8 x 3-13/16	" "
1	Interphone Control C-666/VIA-1	4-7/16 x 4-3/32 x 1-11/16	" "
1	Cable Reel RL-149/VIA-1	10-3/16 x 9-13/16 x 5-13/16	" "
1	Handset MTS-1 (USMC)	8-7/8 x 2-3/4 x 3-1/2	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored units.

INSTALLATION: Vehicular.

CAN COMMUNICATE WITH: Interphone system stations within a vehicle.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Can be used with Radio Sets SCR-508, -528, -608, -628, or AN/VRC-3 or with Interphone Equipment RC-99 or similar types of equipment.

TYPE CONTROLS: C-663: external interphone ON-OFF switch.
C-664: external interphone PUSH TO SIGNAL switch.
C-665: VOLUME.

POWER OUTPUT: Dependent on interphone system.

POWER REQUIREMENTS: Draws required power from system to which it is connected.

PHYSICAL CHARACTERISTICS

Information on Auxiliary Interphone Equipment AN/VIA-1 not available.

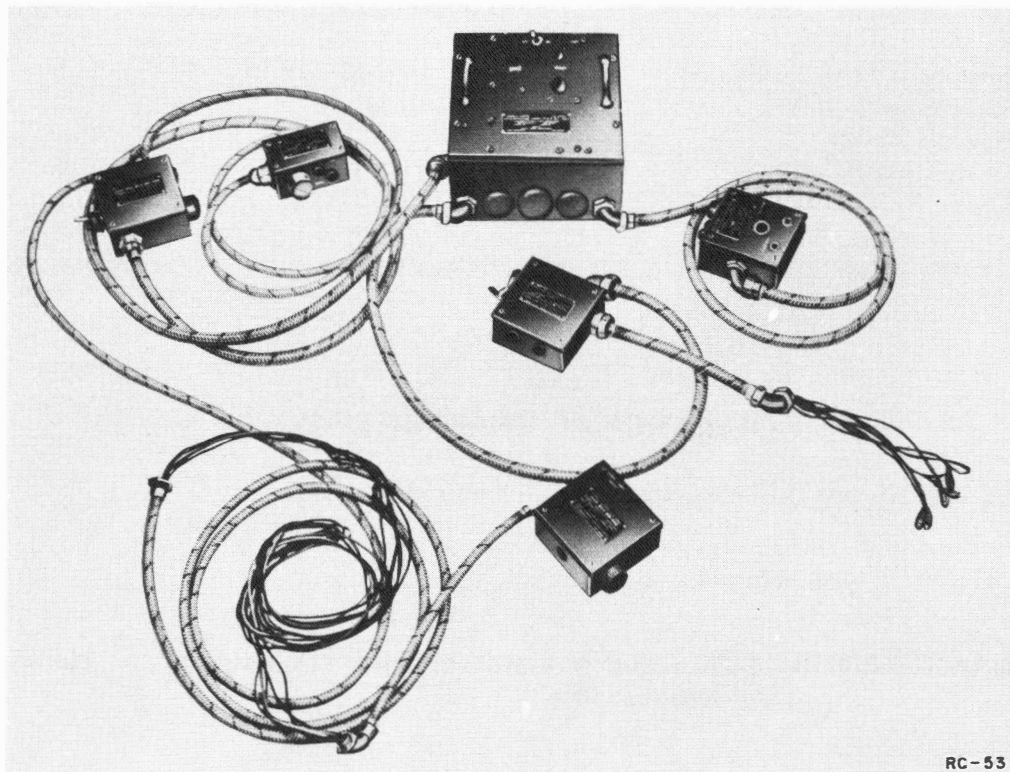
STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

AN/VIC-TYPE

SERVICE TYPE NUMBER:

RC-53

INTERPHONE EQUIPMENT



Interphone Equipment RC-53 is a vehicular interphone communication system for tanks and other inclosed vehicles used in armored and infantry divisions.

This equipment consists essentially of an amplifier, control and jack boxes, and related components.

Through the equipment, the radio operator and tank commander may control the vehicular radio equipment and maintain communication contact.

It is powered by the vehicle's 12-v battery.

AN/VIC-TYPE		INSTRUCTION LITERATURE: TM 11-700
RC-53	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT:Unclassified
INTERPHONE EQUIPMENT		USING SERVICE : Army
		DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Interphone Amplifier BC-367	8-15/16 x 8-15/16 x 5-5/8	18.5
5	Microphone T-30-A	Not Available	.3
6	Headset HS-18	" "	Not Available
1	Control Box BC-422	5-11/16 x 2-3/16 x 4-3/16	2.0
1	Control Box BC-449	5-11/16 x 2-3/16 x 4-3/16	1.7
1	Jack Box BC-378,-379,-448	2-3/16 x 4-11/16 x 5-1/2	3.2
1	Terminal Block TM-183	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored vehicles, armored and infantry divisions.

INSTALLATION: Ground, vehicular.

CAN COMMUNICATE WITH: Radio equipment of the vehicle in which it serves as an internal interphone system.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Radio and voice; between interphone station.

TYPE CONTROLS: Selector switch, volume control, on-off switch.

POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 12-v storage battery, operating current: (3.0 to 3.5 amp).

PHYSICAL CHARACTERISTICS

Information on Interphone Equipment RC-53 not available.

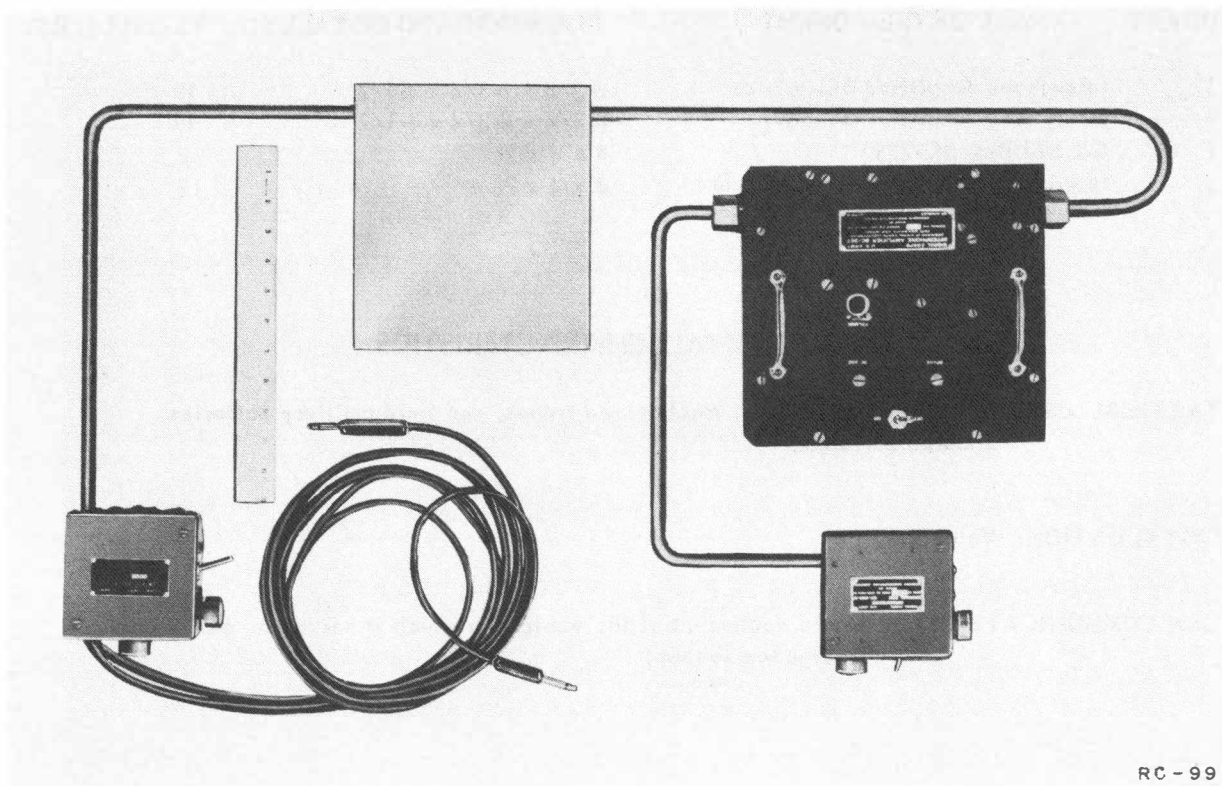
STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

AN/VIC-TYPE

SERVICE TYPE NUMBER

RC-99

INTERPHONE EQUIPMENT



RC-99

Interphone Equipment RC-99 is a vehicular, multistation, intercommunication system used in inclosed vehicles of mechanized cavalry, artillery, and armored units.

This equipment consists of a master-station amplifier unit, two control boxes, and associated accessories. It provides intercommunication facilities between all stations of the system when installed within a vehicle and permits the radio operator and vehicle commander to retain partial control of the vehicle's radio equipment.

This interphone equipment is powered by the 12- or 24-v storage battery of the vehicle in which it is installed, through dynamotor equipment of the appropriate voltage.

AN/VIC-TYPE		INSTRUCTION LITERATURE:TM 11-702
RC-99	:SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT:Unclassified
INTERPHONE EQUIPMENT		USING SERVICE : Army
		DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Interphone Amplifier BC-367- or	8-3/4 x 8-3/4 x 4-1/2	19
1	Interphone Amplifier BC-667	8-3/4 x 8-3/4 x 4-1/2	19
1	Control Box BC-739	4 x 4 x 2	2.5
1	Interphone Control Box BC-606-D	4 x 4 x 2	2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: In vehicles of cavalry, mechanized troops, and field artillery batteries, armored division.

INSTALLATION: Vehicular.

CAN COMMUNICATE WITH: Radio equipment of the vehicle in which it serves as an internal interphone system.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: a-f; voice frequency.

TYPE COMMUNICATION CIRCUITS: Interphone and radio communication circuits.

CONTROLS: Volume control; radio-interphone switch; and on-off switch.

POWER REQUIREMENTS: 12-v or 24-v storage battery and Dynamotor DM-45-A, 24 / 250 v,(0.05 amp).

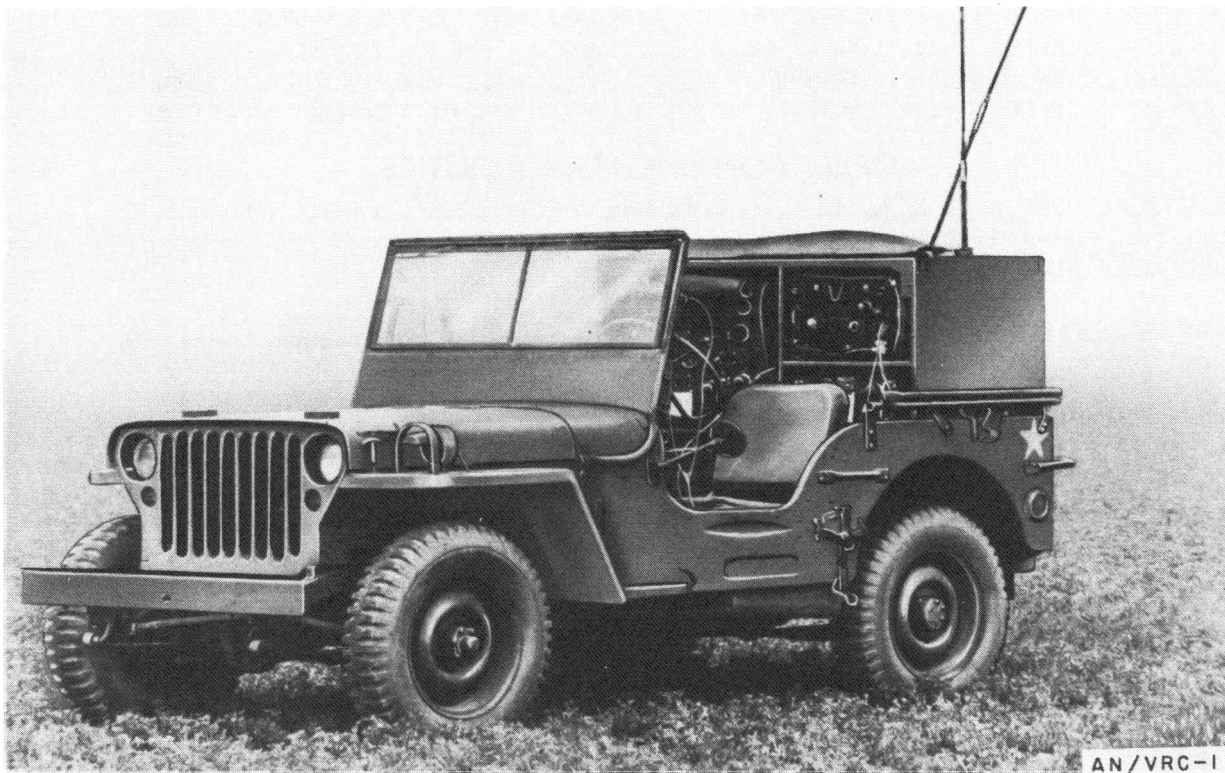
PHYSICAL CHARACTERISTICS

Information on Interphone Equipment RC-99 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

AN/VRC-1

RADIO SET



Radio Set AN/VRC-1 is a short range, h-f and v-h-f, a-m (voice, tone, and cw) radio transmitting and receiving equipment which may be installed in vehicles for ground-to-air communication at Air Force bases and similar installations.

This equipment consists essentially of a ground communication transmitter and receiver, plus transmitting and receiving equipment designed for airborne use. It is usually used for communication in ground point-to-point nets but can be used as a beacon for compass-equipped aircraft and for h-f ground-air radio communication. Antenna and accessory equipment is included. It is powered by the 12-v storage battery of the vehicle in which it is installed.

AN/VRC-1	INSTRUCTION LITERATURE: TM 11-271
	CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 11 Jan 52
RADIO SET	

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-191	21-21/32 x 23-1/8 x 9-5/16	68
1	Radio Transmitter BC-625	8-3/4 x 5-7/8 x 15-3/8	7
1	Radio Receiver BC-312	10 x 9-1/16 x 18-1/16	58
1	Radio Receiver BC-624	8-3/4 x 5-7/8 x 15-3/8	7

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At airfields, Air Force squadrons, Air Force bases, schools, infantry.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): V-h-f section: Line of sight. H-f section: Voice - 20,
Tone - 40, Cw - 60 (approximate).

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -18, -21, -25, -26, -36; AN/ARR-15;
AN/ART-13; AN/CRC-2; AN/CRT-3; AN/FRC-7, -10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5,
-6, -15, -17, -18; AN/GRC-9, -13, -26, -30; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20,
-22; AN/PRC-7, -17, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRC-7; AN/TRQ-1;
AN/URC-4; AN/URR-10, -12, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -4;
BC-191, -312, -339, -342, -348, -401, -447, -610, -639, -640, -779, -794, -1004; 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, -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, -281, -399, -499, -506, -522, -536, -542, -543, -573, -574, -575, -585,
-593, -607, -616, -624, -641, -643, -644, -694, -704; 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; TCO; TCP; TCS; TCZ; TDE; TDF;
TDG; TDH; TDN; TDO; TDQ; TDT; TEB; TEC; 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: Transmitters: BC-191 - 3 - 6.2, BC-625 - 100 - 156.
Receivers: BC-312 - 1.5 - 18, BC-624 - 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: H-f section: Cw, tone, and voice. V-h-f section: Voice.

POWER OUTPUT: H-f section: 40.75 w. V-h-f section: 8 - 9 w.

POWER REQUIREMENTS: (65.7 amps) from 12 v vehicular storage battery (through dynamotors).

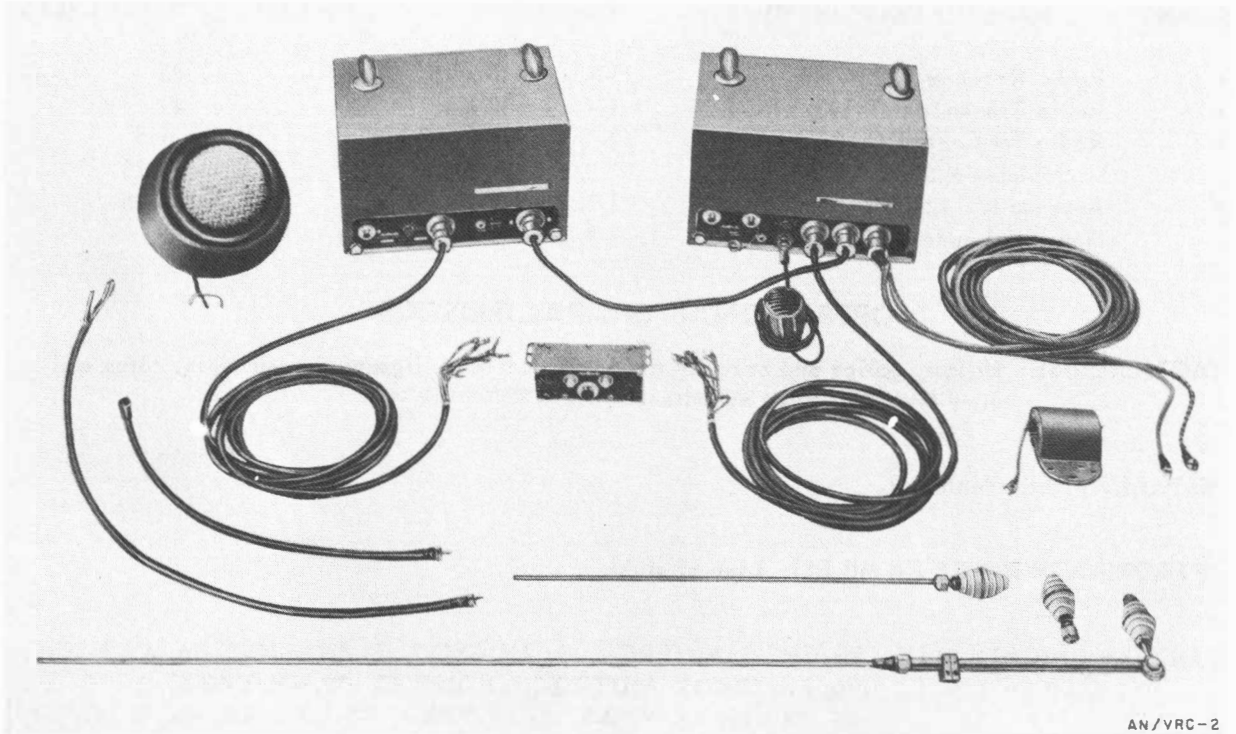
PHYSICAL CHARACTERISTICS

Information on Radio Set AN/VRC-1 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 11 Jan 52

AN/VRC-2

RADIO SET



Radio Set AN/VRC-2 is a vehicular, short-range, v-h-f, f-m (voice), radio receiving and transmitting equipment used by military police and security troops for highway traffic control and similar applications.

This equipment consists of a crystal-controlled radio transmitter and receiver controlled from the driver's position in a vehicle and is powered through individual vibrator power supply units by the storage battery of the vehicle in which the equipment is installed.

It uses a single telescopic whip-type antenna which is controlled by an antenna change-over relay located in the transmitter.

The transmitter component of some models of this equipment is equipped with a dynamotor.

AN/VRC-2	INSTRUCTION LITERATURE: TM 11-607
	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-237/VR	11-1/2 x 10 x 15	35
1	Radio Transmitter T-193/VRC-2	11-1/2 x 10 x 15	41
1	Radio Set Control C-493/VRC-2	2-1/4 x 3-1/4 x 7-1/4	1.5
1	Microphone M-27/U	3-3/4 x 3-1/2 x 5	1.25
1	Antenna AT-129/VR	1-1/2 x 1-1/2 x 78	3.25
1	Dynamic Loudspeaker LS-158/U	9-1/2 x 4-1/4 (diameter)	5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Military police and security troops. Counterintelligence detachments, corps and army level, air force squadrons.

INSTALLATION: Vehicular.

APPROXIMATE RANGE (IN MILES): Line of sight.

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

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 - 40.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 25 w.

POWER REQUIREMENTS: 6-v vehicular storage battery through vibrator power supplies.
 Transmitter: (25 amp) at 6.3 v and (0.15 amp) at 540 v.
 Receiver: (14.5 amp) at 6.3 v and (0.08 amp) at 250 v.

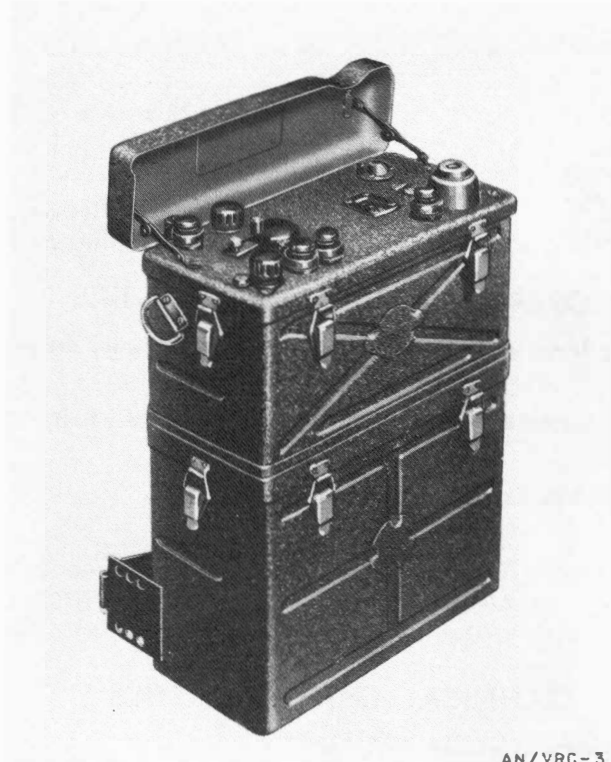
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-2 packed for export shipment: total weight 168 pounds, total volume 8 cu ft.
 Shipped in 2 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

AN/VRC-3

RADIO SET



AN/VRC-3

Radio Set AN/VRC-3 is the vehicular version of Radio Set SCR-300. It is a crystal-controlled, short-range, f-m (voice) transmitting and receiving equipment used for communication in the v-h-f band. It is used between tanks and supporting infantry.

This equipment consists of a dry battery operated receiver-and-transmitter component (BC-1000). It uses a whip-type antenna and includes Battery BA-70 which can be replaced by Battery Case CS-139.

AN/VRC-3	INSTRUCTION LITERATURE: TM 11-637
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army
RADIO SET	DATE OF THIS SHEET : 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-1000	5-5/8 x 11-5/16 x 7-1/8	13
1	Battery BA-70	7-23/32 x 10-5/16 x 4-1/2	15
1	Case CS-128-A	9-3/8 x 10-15/16 x 7-1/4	3.66
2	Mast Section MS-116	38 x 3/8 (diameter)	Not Available
2	Mast Section MS-117	38 x 1/4 to 3/8 (diameter)	" "
2	Mast Section MS-118	38 x 1/8 to 1/4 (diameter)	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level units organic to armored and infantry divisions.

INSTALLATION: Ground, vehicular. Operates on the move or at the halt.

APPROXIMATE RANGE (IN MILES): 3.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-3, -4, -5, -6, -7, -8; AN/PRC-6, -7, -10; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/YRQ-3; AN/YRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-607.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 40 - 48.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 0.3 w (r-f).
Receiver: 2 mw (r-f).

POWER REQUIREMENTS: Battery BA-70 (20/25 hr), Battery Case CS-139 (26 hr), or Vibrator Power Supply PP-114/VRC-3.

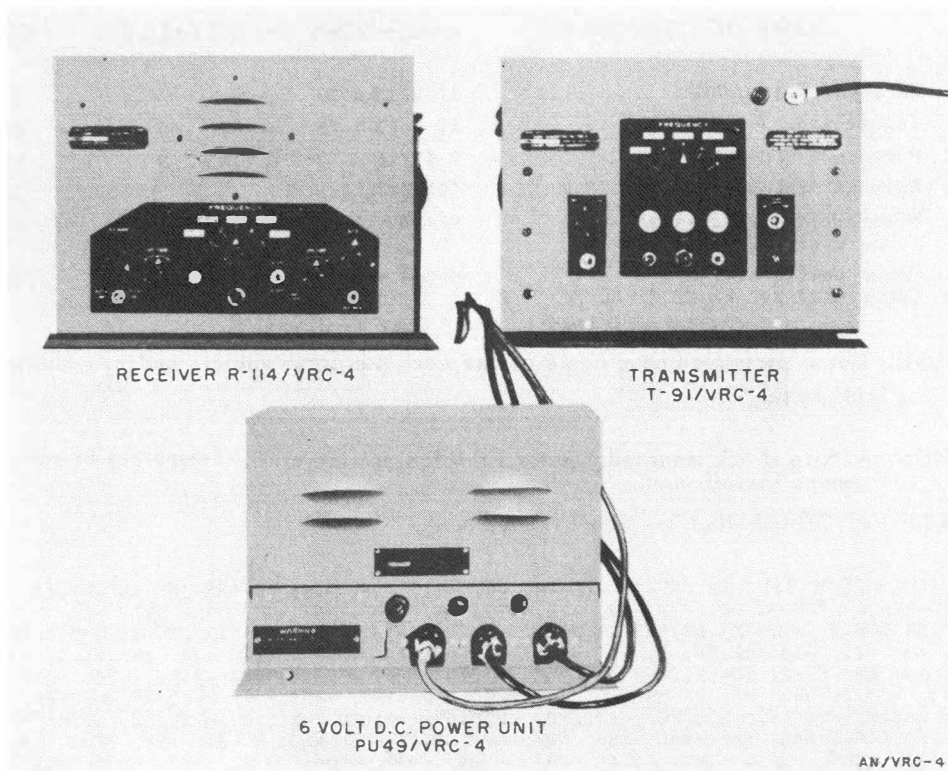
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-3 measures 17 x 11 x 7-1/4 inches, net weight 31.5 pounds, volume 0.8 cu ft. Packed for domestic shipment: total weight 35.5 pounds, total volume 1.9 cu ft. Packed for export shipment: total weight 215 (4 units), total volume 11.9 cu ft. Shipped in 1 package both domestic and export.

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

AN/VRC-4

RADIO SET



Radio Set AN/VRC-4 (similar to Fisher Radio Set TS25-3) is normally used for either fixed or mobile two-way, ground-to-air or point-to-point communication in the h-f range. The radio receiver component operates on any four preset channels in the range 1.7 to 8.7 mc, with continuous tuning from 0.19 to 0.51 mc. The radio transmitter operates on either voice or cw on any four preset channels in the frequency range 4 to 8 mc, and one tunable range 4 to 7 mc.

This equipment uses 35-foot vertical-whip Antenna Assembly AS-170/VRC-4.

Set can operate from 110 to 220-v, ac, or 6-v, dc.

Frequency Meter Set SCR-211 is supplied with this set for receiver calibration.

This equipment will be replaced by AN/VRC-19.

AN/VRC-4	INSTRUCTION LITERATURE: TM 11-829
	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Air Force
	DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver R-114/VRC-4	17 x 13 x 16	34.50
1	Transmitter T-91/VRC-4	17 x 13 x 16	39.00
1	Power Unit PU-49/VRC-4	9-13/16 x 10-5/8 x 13-7/8	32.00
1	Antenna Assembly AS-170/VRC-4	192 Height	10.75
1	Power Unit (Transmitter) Commercial No. PS-25 HIT-AC	9-3/4 x 10-11/16 x 15-7/8	47.50
1	Power Unit (Receiver) Commercial No. PS-25 HIRAC	9-3/4 x 6-13/16 x 11-11/16	15.00

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on a basis of one each per crash vehicle and/or ambulance per air base.

INSTALLATION: Mobile shock mounted: motor vehicles, marine craft. Temporary or permanent ground installation.

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, -29, -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, -19, -20; AN/SRC-3; AN/SRR-3, -8, -12, -13; AN/SRT-1, -3, -4; AN/TRQ-1; AN/UFR-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; MB; MQ; OA-59/FRC, -59/FRC, -60A/T, -60B/FRT; R-62/PR, -90/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, -389/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -199, -193, -244, -274, -291, -399, -499, -606, -536, -543, -595, -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, -190/FR; TAB; TAJ; TQ; TBA; TBC; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; 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: Any four preset channels, and one tuneable channel (4 to 7) in frequency range 1.7 - 8.7.

Receiver: Any four preset channels in the frequency range 1.7 - 8.7 and continuously tuneable 0.19 - 0.51.

TYPE MODULATION: Am.

POWER REQUIREMENTS:

Dc Receiver: 6 v, (6-1/2 amp.)

TYPE OF SIGNAL: Transmitter: Cw, voice.
Receiver: Cw, voice.

Dc Transmitter: 6 v, (42 amp.)

Ac Receiver, Transmitter: 340 w, 110/220 v, 50/60 cyc, 1 phase, ac.

POWER OUTPUT: Transmitter: 25 w.
Receiver: 2 w.

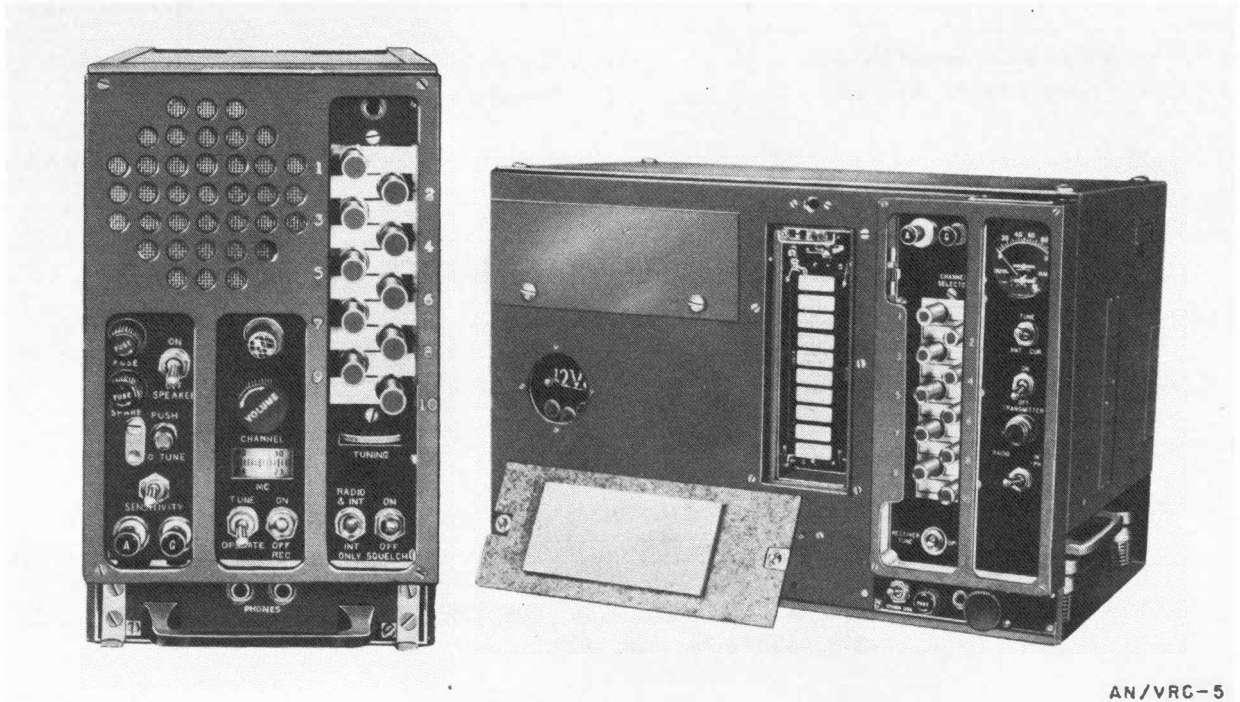
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-4 measures 60 x 47 x 15 inches, net weight 186 pounds, volume 30 cu ft, 0.75 ship ton. Packed for domestic or export shipment: total weight 200 pounds, total volume 33 cu ft, 0.82 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Army, Navy
 DATE OF THIS SHEET: 22 Jan 52

AN/VRC-5

RADIO SET



AN/VRC-5

Radio Set AN/VRC-5 is a short-range, low-power, h-f, f-m (voice) radiotelephone equipment used for communication while installed in vehicles of the armored force.

This equipment consists of a crystal-controlled transmitter and a receiver, plus antenna and related accessories. The transmitter and the receiver operate on 10 preset channel frequencies which are selected by means of pushbuttons mounted on the front panels of each of these components.

A single whip-type antenna is used for transmission and reception, and provision is made for automatic disabling of receiver output during operation of the transmitter dynamotor.

Can be operated from the storage battery of the vehicle in which it is used by means of appropriate dynamotors which are installed within the housings of the transmitter and the receiver.

AN/VRC-5	INSTRUCTION LITERATURE: TM 11-600
	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE: Army, Navy
RADIO SET	DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-604	11-1/2 x 10-1/4 x 18	67
1	Radio Receiver BC-603	11-1/2 x 6-3/4 x 12-1/2	35

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored units.

INSTALLATION: Ground, vehicular.

APPROXIMATE RANGE (IN MILES): 10 - 15

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 (10 preset channels).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 30 w. (receiver: 2 w at speaker, 0.2 w at headset).

POWER REQUIREMENTS: (24 amp) from 12-v storage battery through Dynamotor DM-35 or (14 amp) from 24-v storage battery through Dynamotor DM-37.

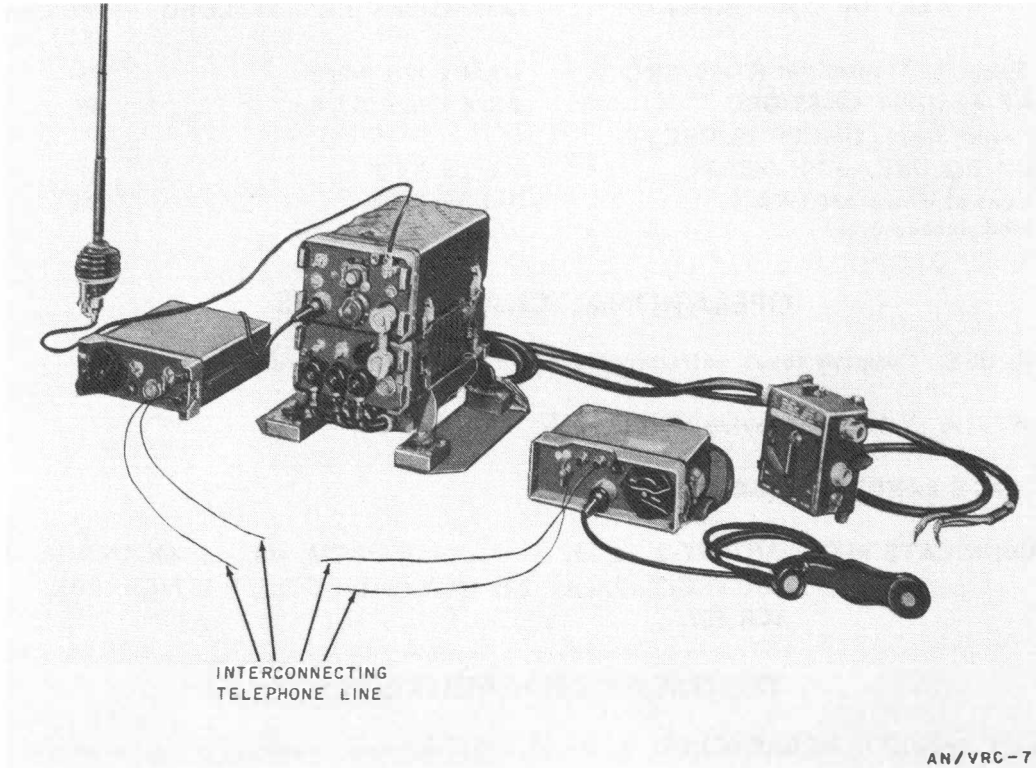
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-5 packed for export shipment: total weight 645 pounds, total volume 29.6 cu ft, 0.74 ship ton. Shipped in 6 packages.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Army
 DATE OF THIS SHEET: 8 Jan 52

AN/VRC-7

RADIO SET



Radio Set AN/VRC-7 is a short-range, f-m (voice), vehicular radiotelephone equipment used within and between artillery, infantry, and armored force units.

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.

Includes vehicular installation unit, power supply equipment, and interphone amplifier, plus various control and accessory equipment such as microphone, headset, and loudspeaker.

Can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-7	INSTRUCTION LITERATURE: TM 11-285
	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army
	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-70/GRC	4-3/4 x 13 x 7-7/8	25
1	AF Amplifier AM-65/GRC	4-3/4 x 13 x 7-7/8	15
1	Power Supply Unit PP-28/GRC, PP-282/GRC, or PP-448/GR	4-1/2 x 6 x 3	6
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level, units organic to armored and infantry divisions.

INSTALLATION: Vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 3/4.

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 - 58.4 (115 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice only.

POWER OUTPUT: Transmitter, 500 mw (approximately).
Receiver, 75 mw (approximately).
Interphone, 350 mw (approximately).

POWER REQUIREMENTS: From vehicular storage battery:

	<u>6 v</u>	<u>12 v</u>	<u>24 v</u>
Transmitting:	5.3	4.3	2.5 amp
Stand-by:	5.1	4.1	4.3 amp
Interphone:	2.6	2.6	1.4 amp

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-7 weighs 105 pounds net. Packed for export shipment: total weight 164 pounds, total volume 4.92 cu ft. Shipped in 3 packages.

STATUS: Standard

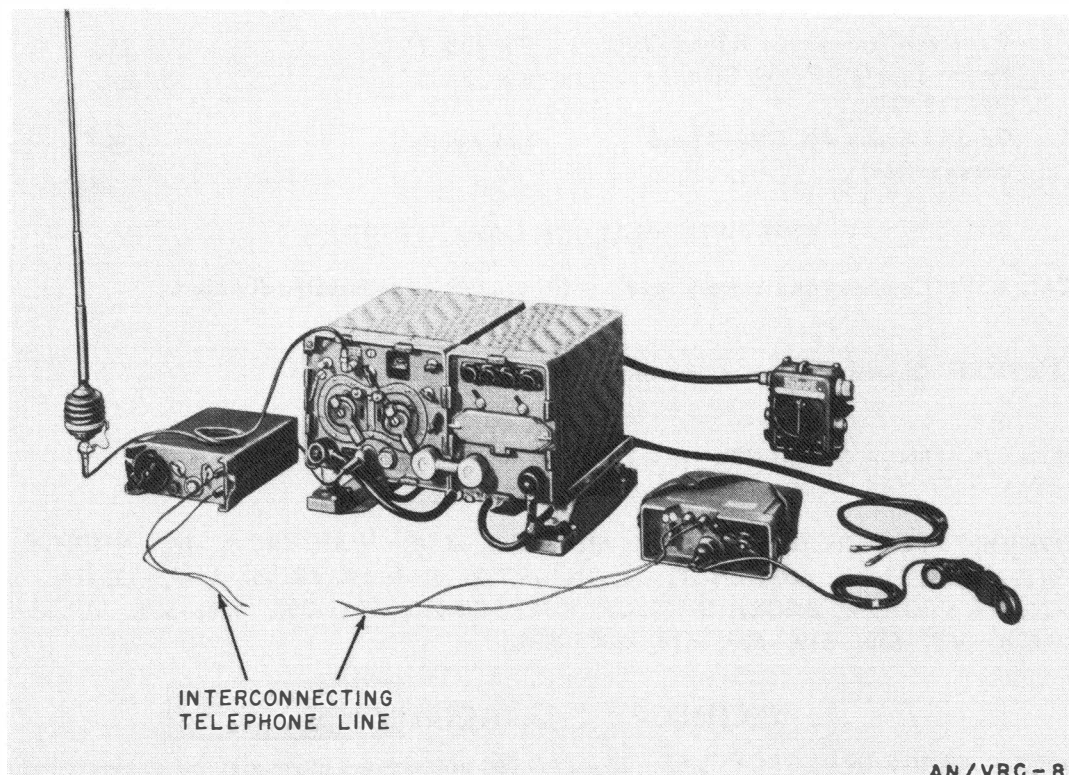
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 8 Jan 52

AN/VRC-8

RADIO SET



Radio Set AN/VRC-8 is a short-range vehicular f-m (voice) equipment for communication within and between armored units, and for liaison between armored force and artillery units.

This set consists of the receiver-transmitter component designated as set 1, when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-3 and AN/GRC-4. Vehicular installation unit, power supply equipment, control and accessory components are included.

This equipment can be operated from a remote point up to a distance of about two miles over a telephone pair, by means of Control Group AN/GRA-6.

AN/VRC-8	INSTRUCTION LITERATURE: TM 11-286
	CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE : Army, Navy DATE OF THIS SHEET : 8 Jan 52
RADIO SET	

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-66/GRC	9 x 13 x 11-1/4	35
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Control Group AN/GRA-6 (and accessories)	Not Available	125

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level units organic to an armored division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

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 - 27.9 (80 preselected channels; 2 preselected channels; or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 16 w on high power; 2 w on low power.
Receiver: 1 w at loudspeaker; 50 mw at headphone terminals.

POWER REQUIREMENTS: From vehicular storage battery:

	12 v	24 v
Transmitting:	11.9	7.3 amps
Stand-by:	2.3	1.5

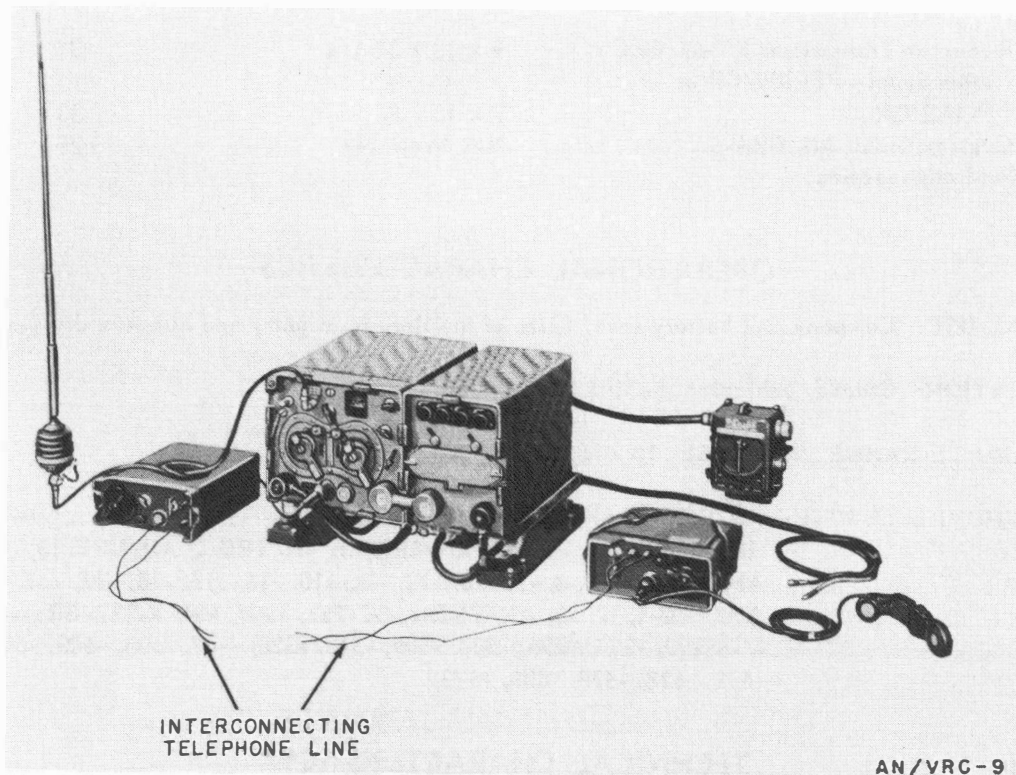
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-8 weighs 100 pounds net. Packed for export shipment: total weight 267 pounds, total volume 6.05cu ft. Shipped in 3 packages.

STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Army, Navy
 DATE OF THIS SHEET: 8 Jan 52

AN/VRC-9

RADIO SET



Radio Set AN/VRC-9 is a short-range, vehicular, f-m (voice) equipment for communication within and between artillery units and for liaison between artillery, armored, and infantry units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-5 and AN/GRC-6. Vehicular installation unit, power supply equipment, and control and accessory items are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-9	INSTRUCTION LITERATURE: TM 11-286
	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-67/GRC	9 x 13 x 11-1/4	35
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Control Group AN/GRA-6 (and accessories)	Not Available	125

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level units of artillery in infantry and airborne divisions.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 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 (120 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

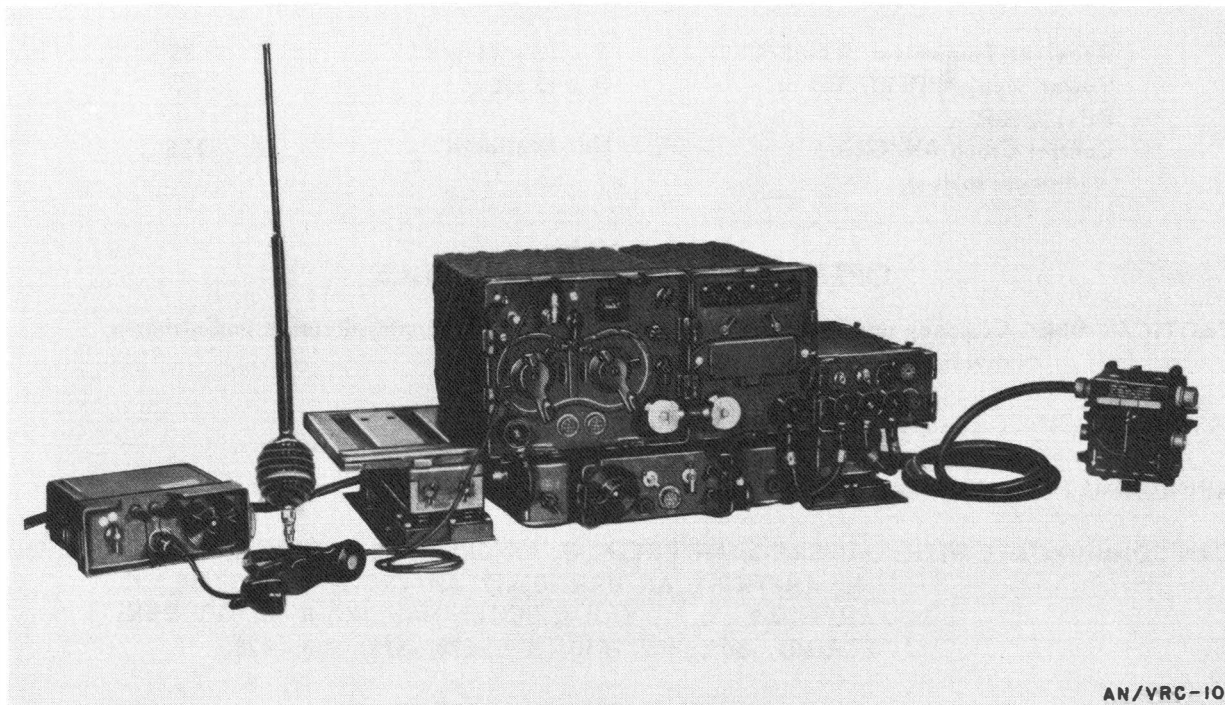
POWER OUTPUT: Transmitter, 16 w on high power, 2 w on low power.
Receiver, 1 w at loudspeaker, 50 mw at headphone terminals.

POWER REQUIREMENTS: From vehicular storage battery:

	<u>12 v</u>	<u>24 v</u>
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp.

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-9 weighs 100 pounds net. Packed for export shipment: total weight 267 pounds, total volume 6.05 cu ft. Shipped in 3 packages.

STATUS: Standard**CLASSIFICATION OF EQUIPMENT: Unclassified****USING SERVICE: Army, Navy****DATE OF THIS SHEET: 8 Jan 52****AN/VRC-10****RADIO SET**

Radio Set AN/VRC-10 is short-range, vehicular, f-m (voice) equipment for communication within and between infantry units and for liaison between infantry and artillery units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-7 and AN/GRC-8. Vehicular installation unit, power supply equipment, and control and accessory items are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-10	INSTRUCTION LITERATURE: TM 11-286
	CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52
RADIO SET	

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-68/GRC	9 x 13 x 11-1/4	35
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 8	33
1	Control Group AN/GRA-6 (and accessories)	Not Available	125

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company and battery level units organic to an infantry division and airborne division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

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 (170 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter, 16 w on high power, 2 w on low power.
Receiver, 1 w at loudspeaker, 50 mw at headphone terminals.

POWER REQUIREMENTS: From vehicular storage battery:	12 v	24 v
	Transmitting:	7.3 amp
	Stand-by:	1.5 amp

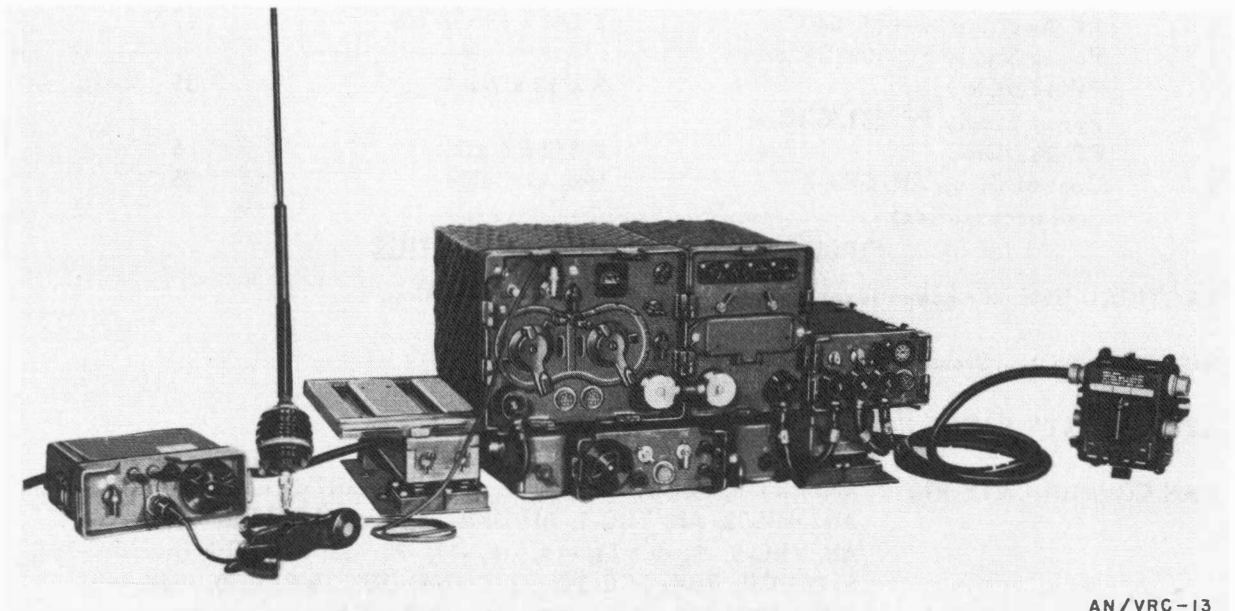
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-10 weighs 100 pounds net. Packed for export shipment: total weight 267 pounds, total volume 6.05 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/VRC-13

RADIO SET



Radio Set AN/VRC-13 is a short-range, vehicular, f-m (voice) equipment for communication within and between armored units and for liaison between armored force and artillery units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-3 and AN/GRC-4. Vehicular installation unit, power supply equipment, interphone amplifier, antenna, and accessory components are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

<h1>AN/VRC-13</h1>	INSTRUCTION LITERATURE: TM 11-291
	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army
	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 x 13 x 11-1/4	35
1	AF Amplifier AM-65/GRC	4-1/4 x 13 x 7-7/8	15.5
1	Power Supply PP-109/GR or PP-112/GR	9 x 13 x 7-1/4	35
1	Power Supply PP-281/GRC or PP-282/GRC	4-1/2 x 6 x 3	6
1	Control Group AN/GRA-6 (and accessories)	Not Available	96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company level units organic to an armored division.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 15.

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 (80 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitting, 16 w on high power, 2 w on low power.
Receiving, 1 w at loudspeaker, 50 mw at headphone terminals.
Interphone, 350 mw.

POWER REQUIREMENTS:	From vehicular storage battery:	<u>12 v</u>	<u>24 v</u>
	Transmitting:	11.9	7.3 amp
	Stand-by:	2.3	1.5 amp
	Interphone: (transmitting)	3.2	1.8 amp
	(stand-by)	2.6	1.4 amp.

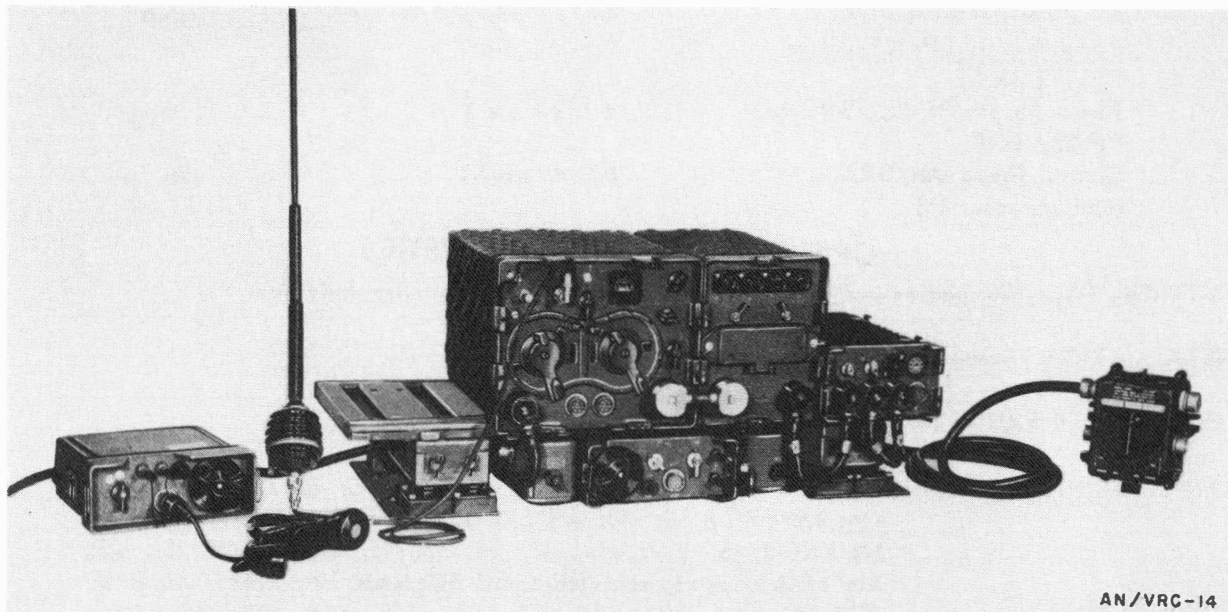
PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-13 weighs 185 pounds net. Packed for export shipment: total weight 337 pounds, total volume 8.59 cu ft. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/VRC-14

RADIO SET



AN/VRC-14

Radio Set AN/VRC-14 is a short-range, vehicular, f-m (voice) equipment for communication within and between artillery units and for liaison between artillery, armored, and infantry units.

This set consists of the receiver-transmitter component designated as set 1 when used as part of radio sets of the integrated series such as Radio Sets AN/GRC-5 and AN/GRC-6. Vehicular installation unit, interphone amplifier equipment, power supply, and control and accessory items are included.

This equipment can be operated by means of Control Group AN/GRA-6 from a remote point up to a distance of about 2 miles over a telephone pair.

AN/VRC-14	INSTRUCTION LITERATURE: TM 11-291
	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-67/GRC	9 x 13 x 11-1/4		35
1	AF Amplifier AM-65/GRC	4-1/2 x 13 x 7-7/8		15.5
1	Power Supply PP-109/GR or PP-112-GR	9 x 13 x 7-1/4		35
1	Power Supply PP-281/GRC or PP-282/GRC	4-1/2 x 6 x 3		6
1	Contrpl Group AN/GRA-6 (and accessories)	Not Available		96

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Companies and batteries organic to armored or infantry divisions.

INSTALLATION: Ground, vehicular, moving or at the halt.

APPROXIMATE RANGE (IN MILES): 10 - 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 (120 detented channels, two preselected channels, or continuous manual tuning).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitting, 16 w on high power, 2 w on low power.
Receiving, 1 w at loudspeaker, 50 mw at headphone terminals.
Interphone, 350 mw.

POWER REQUIREMENTS: From vehicular storage battery:

	<u>12 v</u>	<u>24 v</u>
Transmitting:	11.9	7.3 amp
Stand-by:	2.3	1.5 amp
Interphone: (transmitting)	3.2	1.8 amp
(stand-by)	2.6	1.4 amp.

PHYSICAL CHARACTERISTICS

Radio Set AN/VRC-14 weighs 185 pounds net. Packed for export shipment: total weight 337 pounds, total volume 8.59 cu ft. Shipped in 3 packages.