JANAP 161

STATUS: Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USN DATE OF THIS SHEET: 23 June 1956



RADIO SET



Radio Set AN/PRC-29 is a portable (man-carried), low-power, fm (voice) radio receiving and transmitting equipment used for short-range, point-to-point communication over average terrain. It is used by guards and security police for communication during internal security and industrial control operations.

This equipment consists essentially of a commercial (Motorola Model X–11–1A) radio receiver-transmitter equipped with a carrying harness, antenna, and related accessories.

## AN/PRC-29

**RADIO SET** 

INSTRUCTION LITERATURE: NAVSHIPS 92759

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

#### MAJOR COMPONENTS

QTY

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

(Equipment consists of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Internal security and industrial control.

INSTALLATION: Portable (man-carried).

APPROXIMATE RANGE (IN MILES): 1 to 2.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 30 to 42.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 750 mw.

POWER REQUIREMENTS: Three 45-v (Burgess-type M30) B batteries or equiv (p); two 1.5-v std 4F-size batteries (fil).

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	151/8 x 121/8 x 5	23.7	.5		

**DOMESTIC PACK:** 

EXPORT PACK:

Change No. 1

JANAP 161



C

RADIO SET

AN/PRC-33



Radio Set AN/PRC-33 is a lightweight, short-range, vhf, fm (voice) receiving and transmitting equipment used for two-way communication applications in the field.

This equipment consists essentially of a militarized version of hand-carried commercial (Industrial Radio Corporation, Type PS-40, Model HC) radio equipment and is normally resistant to dust and rain. A weatherproof canvas case is used to protect the equipment under extreme weather conditions, and carrying straps are provided so that it can be carried on the back of the operator.

## AN/PRC-33

**RADIO SET** 

INSTRUCTION LITERATURE: NAVSHIPS 92651

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

#### **MAJOR COMPONENTS**

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

(Equipment consists of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Man-carried field and patrol applications.

INSTALLATION: Portable.

APPROXIMATE RANGE (IN MILES): 2 (nor); 10 (max).

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 30 to 42.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 750 mw (min).

POWER REQUIREMENTS: 1.5 v dc (fil); 45 v dc; 135 v dc (battery operated).

#### PHYSICAL CHARACTERISTICS

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

NET:

DOMESTIC PACK:

**EXPORT PACK:** 

Change No. 1

JANAP 161

MAW

AN/PRC-TYPE

PORTABLE VHF RADIO TRANS & REC EQUIP

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



SERVICE TYPE NUMBER:

Portable VHF Radio Transmitting and Receiving Equipment MAW is a low-power, v-h-f, pack type communication set used in ground-to-air liaison, ship, or shore based emergency communication. The entire equipment, including accessories, is contained in a portable submersion-proof case. It is capable of voice and mcw transmission and reception on any one of 10 preset crystal-controlled channels.

This equipment is powered by two 2-v storage batteries and a vibrator-type power pack.

The batteries are of the dry-charged type, and 24 ounces of 1.265 specific gravity sulphuric acid is required.

Battery charging can be accomplished by connection to a 6-v storage battery or other source of low voltage d-c power.

CONFIDENTIAL

ORIGINAL

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALL ED	WEIGHT (LBS)
1	Radio Transmitter- Receiver CHW-43069	17-15/16 × 14-1/2 × 5-3/8	42.0
2	Antenna Assembly CHW-66150	19 × 1-1/2 × 1-1/2	0.73
1	Shipping Chest CHW-10543	12-3/4 × 25 × 16-1/2	35.56

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard or shors stations.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): 10.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -2 2; AN/PRC-17, -20; AN/TRC-7; AN/TRC-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MAW; MBS; R-137/GR; RBK; RBQ; RC-256, -257; RCK; RCO; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644; 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: Transmitter: 0.7 w. 0.025 w into 600 ohm load. Receiver:

POWER REQUIREMENTS: 45.2 w, 4 v, dc.

#### PHYSICAL CHARACTERISTICS

Portable VHF Radio Transmitting and Receiving Equipment MAW measures 17-15/16 x 14-1/2 x 5-3/8 inches, net weight 91 pounds, volume 3.21 cu ft. Packed for domestic shipment: total weight 137 pounds, total volume 6.54 cu ft.

CONFIDENTIAL

ORIGINAL

JANAP 161

MAY

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

# AN/PRC-TYPE

SERVICE TYPE NUMBER: PORTABLE RADIO TRANS & REC EQUIPMENT



Portable Radio Transmitting and Receiving Equipment MAY is a general service, a-m (voice, mcw) low-power v-h-f/u-h-f transmitter-receiver designed for packboard operation in the field.

Four preset crystal-controlled channels are provided for the transmitter-receiver. It is designed for use with a collapsible broad-band antenna of the ground plane type, but will operate with a collapsible whip type array.

CONFIDENTIAL

C

MAY

INSTALLATION: Ground, portable.

TACTICAL USE: Field, amphibious.

APPROXIMATE RANGE (IN MILES): Medium.

PRC-TYPE

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/U RR-9, -12, -13; AN/U RT-10; MAR; MAY; R-273/GR; RDR; RDZ; SCR-616; TED.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 225 - 390.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Transmitter: 1 w into 50 ohm load. Receiver: 25 mw into 300 ohm load.

POWER REQUIREMENTS: Self-contained, 6 v, d-c lead acid storage battery capable of 4 hours continuous operation at a duty cyc of 3 to 1.

#### PHYSICAL CHARACTERISTICS

622

Information on Portable Radio Transmitting and Receiving Equipment MAY not available.

#### CONFIDENTIAL

DATE OF THIS SHEET : 23 May 52 PORTABLE RADIO TRANS & REC EQUIPMENT

INSTRUCTION LITERATURE:

CLASSIFICATION OF EQUIPMENT : Unclassified

NavShips 91392

USING SERVICE : Navy

#### MAJOR COMPONENTS

SERVICE TYPE NUMBER

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter-Receiver CRP-43071 (with Headset and	23-13/16 × 13-1/8 × 10	44.0
2	Microphone) Antenna AS-408/U	20-9/16 × 2-5/16 × 2-5/16	2.75

**OPERATIONAL CHARACTERISTICS** 

JANAP 161







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

## AN/PRC-TYP R: SCR-300 RADIO SET



Radio Set SCR-300 is a portable, short-range, low-power, f-m (voice) transmitting and receiving equipment used for communication by foct troops at company and higher combat levels.

This equipment consists of a transmitter-receiver contained in a metal housing, the lower portion of which is the battery compartment, and includes a flexible, whip-type antenna. It may be operated on the ground or while being carried by the operator or a "bearer" and may be installed in aircraft or vehicles. A handset with a press-to-talk switch is included but the equipment can be operated by means of headphones and microphone.

The vehicular version of this equipment is Radio Set AN/VRC-3.

#### CONFIDENTIAL

#### MAJOR COMPONENTS

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

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

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Infantry units, company, battalion, and higher headquarters; armored division, signal company; airborne division, signal company; tank company, antiaircraft battery.

INSTALLATION: Ground, man-carried. 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, -10, -16; AN/URR-10, -12; AN/VRC-2, -3, -7, -10, -15, -18, -22; AN/VRQ-3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607.

#### TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 40 - 48, in 40 channels.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice only.

POWER OUTPUT: Transmitter, 0.3 w. Receiver, 2.0 mw.

POWER REQUIREMENTS: Battery BA-80 or Battery Case CS-139.

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-300 weighs 23.25 pounds net. Packed for domestic shipment: total weight 26.5 pounds, total volume 2 cu ft. Packed for export shipment: total weight 44.5 pounds, total volume 3 cu ft. Shipped in 1 package both domestic and export.





**JANAP 161** 

INSTRUCTION LITERATURE: TM 11-242 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE : Army, Navy SERVICE TYPE NUMBER

DATE OF THIS SHEET: 30 Jan 52



SCR-300

RADIO SET

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





Radio Set SCR-509 is a portable, short-range, low-power, f-m (voice only), radio receiving and transmitting equipment used by armored, field artillery, and infantry units. The set is designed for operation on the ground but can be installed in a vehicle.

This equipment consists of a receiver-transmitter, a metal case containing the batteries, an antenna, and related accessories. The receiver-transmitter is mounted on the battery case by means of trunk-type clasps. It provides 80-crystal-controlled channels spaced 100 kc apart, two of which can be preset.

It can be operated from a remote point over a telephone pair by means of standard remote control apparatus.

Can be operated from the storage battery when installed in a vehicle by substituting Power Supply Unit PE-120 for Case CS-79. When so arranged the SCR-509 is identical with Radio Set SCR-510.

ORIGINAL

## JANAP 161

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-620	6-3/4 × 13-3/16 × 14-15/16	27.20
1	Case CS-79 (for batteries)	4-1/2 × 13-3/16 × 15-9/16	10.
1	Antenna AN-45	17-3/16 high 1/2 diameter	0.63

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Armored units, field artillery, and infantry.

INSTALLATION: Portable pack; operates from stationary position.

APPROXIMATE RANGE (IN MILES): 5

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

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES : 20.0 - 27.9.

TYPE MODULATION : Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 1.8 w.

POWER REQUIREMENTS: Battery BA-39, Battery BA-40, and Battery BA-41.

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-509 packed for export shipment: total weight 210 pounds, total volume 9 cu ft. Shipped in 3 packages both domestic and export.

**PRC- ΤΥΡΕ** : SERVICE TYPE NUMBER

SCR-509 RADIO SET

INSTRUCTION LITERATURE: TM 11-605 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE : Army, Navy DATE OF THIS SHEET : 22 Jan 52

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

## AN/PRC-TYPE SERVICE TYPE NUMBER: SCR-536

RATCE THE NOM

SCR-536 RADIO SET



Radio Set SCR-536 is a highly portable, hand-held, short range, transmitting and receiving equipment for a-m (voice) communication by foot-troops in forward areas.

This equipment consists of a crystal-controlled transmitter-receiver contained in a metal housing which also contains the batteries to which the earphone and microphone are assembled. The set is turned on or off by extending or retracting the telescoping antenna which is built into the set. A press-to-talk switch is mounted on the side of the housing.

This set operates on a single preset frequency of 50 available frequency channels any one of which can be preselected.

CONFIDENTIAL

C

INSTRUCTION LITERATURE: TM 11-235

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

JANAP 161

WEIGHT (LBS)

#### MAJOR COMPONENTS

QUANT NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

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

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Lower echelons, schools.

INSTALLATION: Hand carried.

APPROXIMATE RANGE (IN MILES): Normally about 1.

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 -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/S -15, -17, -18; AN/GRC-9. AN/SRR-3, -13; AN/SRT-4; ·12, AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, AN. BC-191, -312, -339, -342, -3 -59/FRC, -60A/FRT, -60B/FRT; 329, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, --208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RBB: RBC: RBG: RBH: RBM: RBO: RBP: RBS: RC-52; RCF: RCG: RCH: RDE: RDM; -205/U, -206/PR RDM; REA; SCR-244, -274, -39 FRT, -159/FRT, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL: TBM; TBN; TBO; TBW; TBX; TCB; TCC; TCE; TCH; TCK; 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 MR0-50; Westing-Collins 32V-2, house Type MW; Wilcox 96D, 99A.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 3.5 - 6.0 (any one of 50 channels).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Transmitter: Voice. Receiver: Voice and tone.

POWER OUTPUT: 0.02 w.

POWER REQUIREMENTS: 1 Battery BA-37, 1.5 v. 1 Battery BA-38, 103.5 v.

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-536 packed for export shipment: total weight 17 pounds, total volume 0.6 cu ft. Shipped in 1 package.

628

ORIGINAL



# AN/PRC-TYPE

RADIO SET

SERVICE TYPE NUMBER

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STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT : Unclassified USING SERVICE : Army DATE OF THIS SHEET: 10 Jan 52

# AN/PRC-TYPE

SERVICE TYPE NUMBER:

SCR-593 RADIO SET



Radio Set SCR-593 is a portable light weight, a-m (voice), radio receiving equipment used for airwarning, patrols, and similar applications.

This equipment consists of a pusb-button controlled receiver having a rechargeable two-volt battery, which operates on four-preselected channels. In portable applications, the telescoping antenna and associated lead-in form a harness by which the set can be carried slung from the shoulder.

In vehicular applications, a shock mounting is provided.

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-728-A	11-9/16 x 8-3/8 x 5-5/8	15.0
1	Antenna AN-75-A (extended)	84 (ig)	4.0
	(collapsed)	12 (lg)	4.0
1	Mounting FT-339-A and Accessories	Not Available	5. 77
1	Battery BB-54-A	5-17/32 × 3-27/32 × 3	4.75

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Field artillery battalion, antiaircraft battery.

INSTALLATION: Ground or vehicular.

APPROXIMATE RANGE (IN MILES): Short.

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; 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, -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; TD0; FEB; 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 - 6 mc, four push button channels.

TY FE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER REQUIREMENTS: 2-v storage Battery BB-54-A.

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-593 packed for domestic shipment: total weight 63 pounds, total volume 3 cu ft.

CONFIDENTIAL

630



RADIO SET

AN/PRC-

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



Radio Set SCR-609 is a transportable, low-power, short-range, f-m (voice), transmitting and receiving equipment used by field artillery units.

This equipment consists essentially of a receiver-transmitter component which derives its power from a set of dry batteries contained within a case to which it is attached by means of trunk-type clasps. Antenna, handset, and related accessories are included.

Provides 80 f-m channels spaced 100 kc apart, two of which can be preset in the field. This set can be operated by means of standard remote control equipment.

Radio Set SCR-609 can be operated in a vehicle by means of a power supply unit which derives its power from the storage battery of the vehicle in which the equipment is installed. When so arranged the equipment is identical with Radio Set SCR-610.

CONFIDENTIAL	JANAP T61
AN/PRC-TYPE	INSTRUCTION LITERATURE: TM 11-615 CLASSIFICATION OF EQUIPMENT: Unclassified
SCR-609 :SERVICE TYPE NUMB	ER USING SERVICE : Army, Navy
RADIO SET	DATE OF THIS SHEET: 22 Jan 52

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver and Transmitter BC-659	11-7/8 x 16-3/8 x 21-1/2	35.13
1	Antenna AN-29	154 (extended) 15-1/2 (collapsed)	2.0

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Battery fire control from observation posts or liaison airplanes. Also general communication between vehicles. Engineer company, field artillery battery, military police company.

INSTALLATION: Installed and operated on ground.

APPROXIMATE RANGE (IN MILES): 5.

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

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 1.3 w.

POWER REQUIREMENTS: Receiving: Battery BA-40; A, 1.5 v and B, 90 v. Transmitting: Batteries BA-39 and BA-40; A, 7.5 v and B, 150 v. Internal bias Battery BA-41 is also required.

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-609 packed for domestic shipment: total weight 137.5 pounds, total volume 7.4 cu ft.

CONFIDENTIAL

ORIGINAL

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

AN/PRC-TYPE R: SCR-619 RADIO SET

<image><image>

SERVICE TYPE NUMBER:

Radio Set SCR-619 is a pack and vehicular, short-range, f-m (voice) radiotelephone equipment used for communication in the v-h-f- band by field artillery units in battery fire control applications.

This equipment consists of a receiver-transmitter which is crystal-controlled and operates in 120 frequency channels spaced 100 kc apart, two of which are preset. A battery box, dynamotor, and charger are included.

This set uses a whip-type antenna and can be removed from the vehicle in which it is installed for operation from the ground.

It is powered by the vehicular storage battery or by dry batteries contained in the battery box.

CONFIDENTIA	NL	JANAP 161
AN/	PRC-TYPE	INSTRUCTION LITERATURE: TM 11-619 CLASSIFICATION OF EQUIPMENT: Unclassified
SCR-619	SERVICE TYPE	NUMBER USING SERVICE : Army, Navy
RADIO SET		DATE OF THIS SHEET: 30 Jan 52
	MAJOR COM	PONENTS
QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

- Receiver-Transmitter BC-1335 1
- 1 Mast Base MP-74
- Battery BB-54-A 9
- Battery Charger PE-219 1
- 1 Battery Box CY-740/PRC
- 1 Mounting FT-506

6-21/32 x 12-1/2 x 13-9/32 Not Available 5-7/16 x 3-31/32 x 3 6-11/32 x 12-1/8 x 12-5/16 Not Available 10-3/16 x 4-11/16 x 21-3/16

22.75 Not Available 4.3 25.0 Not Available 12.25

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Field artillery units and armored and infantry divisions.

INSTALLATION: Ground, portable or vehicular.

APPROXIMATE RANGE (IN MILES): 5.

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

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 27.0 - 38.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 1.5 w.

POWER REQUIREMENTS: 6 v, (6 amp) or 12 v, (3.5 amp) power supply or dry batteries; or 24 v w/Dynamotor DY-44/U.

#### PHYSICAL CHARACTERISTICS

Radio Set SCR-619 weighs 189.43 pounds net. Packed for domestic shipment: total weight 366 pounds, total volume 16.1 cu ft.



TBY, TBY-1, -2

PE

N/PRO

ULTRA PORTABLE TRANS & REC EQUIP

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



SERVICE TYPE NUMBER:

Ultra Portable Transmitting and Receiving Equipments TBY, TBY-1 and -2 are field, v-h-f radio communication sets designed for transportation as knapsack loads and may be operated while being carried on the operator's back.

The equipments are complete and self-contained, and specially designed for field use. They may be stowed and carried in shipping chests or pack transported.

Continuous tuning throughout the frequency range and crystal calibration of frequency are provided for both transmission and reception.

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RUCTION LITERATURE:
SIFICATION OF EQUIPMENT: Unclassified
IG SERVICE : Navy
E OF THIS SHEET: 9 May 52

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shipping Chest CAY-10038, -10142	10-7/8 × 20 × 16-7/16	20.6
1	Canvas Carrying Case CS <sub>S</sub> -10039	15-7/8 × 12-3/8 × 7-5/8	3.5
1	Battery Pack CGD-19018, 19018-A	4-1/2 × 9-3/8 × 6-9/16	13.0
1	Transmitter-Receiver Unit CAY-43007	12-3/32 × 10-23/32 × 7-1/4	23.0
1	Flagelliform Antenna CWA-66025	108 × 3/8 dia	0.7

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Field or advanced bases.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/CRW-7; AN/FRR-12, -28, -32; AN/FRT-15, -17, -18; AN/GRR-2, -3; AN/SRR-13; AN/URR-10, -12, -23; AN/URT-10; AN/VRT-1; BC-787, -794; MBF; OA-58/FRC; R-62/PR, -80/PR, -137/GR, -205/U, -211/U, -274/FRR, -320/FRC, -388/URR; RAO; RAS; RBG; RBK; RCF; RCG; RDM; SCR-607, -704; T-173/FR; TBS; TBY; AR-88 (RCA); Collins 75A-2; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 28 - 80.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Receiver: 1 mw into 600 ohm load. Transmitter: 0.5 w.

POWER REQUIREMENTS: 8.72 w (from Battery Pack Navy Type CGD-19018, -19018-A). Normal battery life is 30 hours with a 50:50 transmit-receive duty cycle.

#### PHYSICAL CHARACTERISTICS

Ultra Portable Transmitting and Receiving Equipments TBY, TBY-1, -2 measure 157/8 × 12-3/8 × 7-5/8 inches, net weight 82 pounds, volume 2.1 cu ft.

ORIGINAL

JANAP 161

TBY-4, -6, -7, -8

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AN/PRC-

**ULTRA PORTABLE TRANS & REC EQUIP** 

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



SERVICE TYPE NUMBER:

Ultra Portable Transmitting and Receiving Equipments TBY-4, -6, -7, and -8 are field, v-h-f radio communication sets designed for transportation as knapsack loads, and may be operated while being carried on the operator's back.

The equipments are complete and self-contained, and specially designed for field use. They may be stowed and carried in shipping chests or pack transported.

Continuous tuning through the frequency range and crystal calibration of frequency are provided for both transmission and reception.

CONFIDENTIAL

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JANAP 161

AN/PRC-TYPE		INSTRUCTION LITERATURE: NavShips 95596 CLASSIFICATION OF EQUIPMENT: Unclassif	
TBY-4, -6, -7, -8	SERVICE TYPE NUMBER	USING SERVICE : Navy	
ULTRA PORTABLE TH	RANS & REC EQUIP	DATE OF THIS SHEET: 9 May 52	

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shipping Chest CFG-10197	11-7/8 × 22-5/8 × 18	22.5
1	Canvas Carrying Case CSS-10039-A, -10039-8	16-1/2 × 12-1/2 × 8	3.5
1	Battery Pack CNC-19018-8	4-1/2 × 9-3/8 × 6-9/16	13.0
1	Transmitter-Receiver Unit CR1-43044	12-3/32 × 11-7/8 × 7-1/4	33.4
1	Antenna Assembly CWN-66087, -66087-S	108 × 3/8 dia	0.7

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Field or advanced bases.

INSTALLATION: Ground, portable.

CONFIDENTIAL

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/CRW-7; AN/FRR-12, -28, -32; AN/FRT-15, -17, -18; AN/GRR-2, -3 AN/SRR-13; AN/URR-10, -12, -23; AN/URT-10; AN/VRT-1; BC-787, -794; MBF; OA-58/FRC; R-62/PR, -80/PR, -137/GR, -205/U, -211/U, -274/FRR, -320/FRC, -388/URR; RAO; RAS; RBG; RBK; RCF; RCG; RDM; SCR-607, -704; T-173/FR; TBS; TBY; AR-88 (RCA); Collins 75A-2; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 28 - 80.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: Receiver: 1 mw into 600 ohms. Transmitter: Voice: 0.75 w; mcw: 0.5 w.

POWER REQUIREMENTS: 8.72 w (from Battery Pack Navy Type CNC-19018-B). Normal battery life is 30 hours with a 50:50 transmit-receive duty cycle.

#### PHYSICAL CHARACTERISTICS

Ultra Portable Transmitting and Receiving Equipments TBY-4, -6, -7, -8 measure 16-1/2 x 12-1/2 x 8 inches, net weight 90 pounds, volume 2.75 cu ft.





ORIGINAL

# COMPOENTIAL JANAP 161 STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52 JANAP 161



Radio Receiver R-62/PR is a hand-carried, a-m (voice, tone, and cw) radio receiving equipment used for intercept, monitoring, and similar applications in the m-f and h-f bands.

This equipment consists of a radio receiver in a steel cabinet having a carrying handle, a telescoping antenna, and a built-in loudspeaker. It has provision for connection of a headset and straight wire antenna and ground. This set has automatic or manual volume controls, automatic noise level adjustment, stand-by and beat-frequency oscillator switches, a-f and r-f gain controls, and band-spread tuning.

Operates from 115 v ac or dc or from dry batteries.

COMPOENTIAL

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INT DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

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

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Engineers, headquarters and headquarters company, survey battalion.

INSTALLATION: Ground, portable or fixed station.

APPROXIMATE RANGE (IN MILES): Short.

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, in 4 bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, tone,

POWER REQUIREMENTS: 40 w, 115v ac or dc

or One 6-v A battery and two 45-v B batteries.

## PHYSICAL CHARACTERISTICS

Radio Receiver R-62/PR measures 7 x 8-1/2 x 13-1/4 inches, net weight 18 pounds, volume 0.4 cu ft. Packed for domestic shipment: total weight 31.5 pounds, total volume 1.25 cu ft. Packed for export shipment: total weight 58 pounds, total volume 2.2 cu ft. Shipped in 1 package both domestic and export.

#### CONFIDENTIAL

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DATE OF THIS SHEET: 22 Jan 52

CONFIDENTIAL

QUANT

NAME OF COMPONENT

ORIGINAL





PRR-TYPE

R-62/PR RADIO RECEIVER

AN/COMP TYPE NUMBER

CEIVER

#### JANAP 161

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



AN/COMP TYPE NUMBER:

R-80/PR RADIO RECEIVER



Radio Receiver R-80/PR is a general purpose, hand-carried radio receiving equipment which receives a-m (voice, tone, and cw) signals in the m-f and h-f bands. It is used for communication, intercept, monitoring, and similar applications, or for morale purposes, at tactical or fixed stations.

This equipment consists of a radio receiver in a steel cabinet having a carrying handle, a telescoping antenna, and a built-in loudspeaker. It has automatic and manual volume controls, automatic noise level adjustment, a-f and r-f gain controls, stand-by and beat-frequency oscillator switches, and bandspread tuning. Has provision for use of headphones and connection to a long wire antenna and ground.



Operates from batteries or from 115 v ac or dc.

ORIGINAL

## JANAP 161

WEIGHT (LBS)

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

DIMENSIONS (IN) INSTALLED

### OPERATIONAL CHARACTERISTICS

MAJOR COMPONENTS

TACTICAL USE: Primarily for entertainment.

INSTALLATION: Ground, portable or fixed station.

**APPROXIMATE RANGE (IN MILES):** Short.

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: 0.55 - 30.5, in 4 bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, tone.

POWER REQUIREMENTS: 50 w, 110/117 v ac or dc

One 6-v A battery and two 45-v B batteries.

#### PHYSICAL CHARACTERISTICS

Radio Receiver R-80/PR measures 9 x 9 x 15 inches, net weight 28 pounds, volume 0.7 cu ft. Packed for domestic shipment: total weight 31.5 pounds, total volume 1.25 cu ft. Packed for export shipment: total weight 58 pounds, total volume 2.2 cu ft. Shipped in 1 package both domestic and export.

CONFIDENTIAL

INSTRUCTION LITERATURE: TM 11-876 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE : Army DATE OF THIS SHEET: 22 Jan 52

PRR-TYPE

R-80/PR

QUANT

## CONFIDENTIAL

: AN/COMP TYPE NUMBER

NAME OF COMPONENT

RADIO RECEIVER

#### CONNDENTIAL

JANAP 161

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

R-206/PR RADIO RECEIVER

AN/PRR-



Radio Receiver R-206/PR is a highly portable, three-band, special purpose, a-m (voice and tone) receiving equipment which is used in the low-, medium-, and high-frequency bands for checking range courses and for similar application s.

This equipment consists of a small compact radio receiver contained in a suitcase-type housing. It has a built-in speaker and an output jack for connection of a headset. It has a loop antenna used in frequency bands 1 and 2 (0.195 - 0.41 and 0.54 - 1.56 mc); the whip-type antenna is used on all three bands.



This set operates on 115 v dc or 50/60 cvc ac or from a 7-1/2-v A battery and two 45-v B batteries.

#### MAJOR COMPONENTS

QUANT NAME OF COMPONENT

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

#### OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used primarily for checking range courses.

INSTALLATION: Ground, portable.

APPROXIMATE RANGE (IN MILES): Short and medium.

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; 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; 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: Band 1: 0.195 - 0.41. Band 2: 0.54 - 1.56. Band 3: 2.20 ~ 6.20.

**TYPE MODULATION: Am.** 

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: 50 mw on battery operation; 0.5w on a-c or d-c operation.

POWER REQUIREMENTS: 115 v, 50/60 cyc ac or 40 w, 115 v dc or 1 A battery - 7-1/2 v and 2 B batteries - 45 v.

#### PHYSICAL CHARACTERISTICS

Radio Receiver R-206/PR measures 8-1/2 × 6-1/2 × 12 inches, net weight 10.5 pounds, volume 0.375 cu ft. Packed for domestic shipment: total weight 21.5 pounds, total volume 2.25 cu ft. Shipped in 1 package.



DIMENSIONS (IN) INSTALLED

DATE OF THIS SHEET: 22 Jan 52

WEIGHT (LBS)



ORIGINAL

PRR-TYPE

R-206/PR **RADIO RECEIVER** 

# CONFIDENTIAL JANAP 161 STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army SERVICE TYPE NUMBER: RC-261

REMOTE CONTROL EQUIPMENT



Remote Control Equipment RC-261 is an assemblage of items enabling the erection of a local battery telephone facility between a remote operating position and the actual site of a radio equipment. It is used in conjunction with radio equipment used at company and battery level units which are organic to infantry, armored, and airborne divisions.

This equipment consists essentially of a control station designed to be operated at the remote point, a control box used at the radio set, and accessories. The remote control unit is connected to the control box at the radio set by a field telephone pair.

By means of this equipment the radio set can be operated from the remote point, transmission from the remote point can be monitored at the radio set, or operation at the radio set can be monitored at the remote point. In addition, the two terminal units of the system can be used as an intercommunication facility between the two locations.

The equipment is powered by dry batteries and by the hand generator unit which is integral in the remote control unit.

DATE OF THIS SHEET: 31 Jan 52



REMOTE CONTROL EQUIPMENT

**RC-261** 

INSTRUCTION LITERATURE: TM 11-2632 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52

#### MAJOR COMPONENTS

SERVICE TYPE NUMBER

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Remote Control Unit RM-52	7-1/16 × 3-1/4 × 5-3/16	3.5
1	Control Unit RM-53	8-1/2 × 4-3/8 × 4-3/8	4.94
1	Bag BG-186	15-1/2 x 5x 9-5/8	2.0

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Company and battery of infantry armored and airborne divisions.

INSTALLATION: Portable or fixed ground.

APPROXIMATE RANGE (in miles): 0.5.

CAN COMMUNICATE WITH: Through local battery switching and repeater equipment central office, and related apparatus to radio communication equipment at a remote point.

#### **TECHNICAL CHARACTERISTICS**

TYPE OF SIGNAL: Cw and voice.

TYPE COMMUNICATION CIRCUITS: Local battery telephone.

CONTROLS: A switch marked RADIO, REMOTE, INTERPHONE; impedance switch marked HIGH-LOW; and press-to-talk switch.

POWER REQUIREMENTS: 3 v dc (two Batteries BA-30); 6 v dc (four Batteries BA-30).

#### PHYSICAL CHARACTERISTICS

Remote Control Equipment RC-261 measures 22-1/2 x 20-1/4 x 15 inches, net weight 71.19 pounds. CONFIDENTIAL ORIGINAL









DATE OF THIS SHEET: 31 Jan 52



Remote Control Equipment RC-289 is an assemblage of items enabling the erection of a local battery telephone facility between a remote operating position and the actual site of the radio equipment. It is used in conjunction with radio equipment organic to company level units.

This equipment consists essentially of a modified steel-cased Telephone EE-8, a telegraph key, and a standard field Telephone EE-8. The connecting facility is usually a conventional field telephone pair. Telephone EE-8 is located at the remote station; the remote control unit is installed at the radio set.

The modes of operation available are local battery telephone communication between remote point and radio operator, control of radio equipment from the remote Telephone EE-8, voice circuit monitoring by the radio operator at the radio equipment, and operation of the radio set (voice or cw) with monitoring at either the remote station or the radio set.

It is powered by dry batteries and uses the hand generator integral in the remote control unit or in a Telephone EE-8 for ringing.

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CONFIDENTIAL		JANAP 161
ANI/DDIA/	TYPE	INSTRUCTION LITERATURE: TM 11-2667
AN/PRVV-	TTPE	CLASSIFICATION OF EQUIPMENT: Unclassified
RC-289	SERVICE TY	PENUMBER USING SERVICE : Army

REMOTE CONTROL EQUIPMENT

DATE OF THIS SHEET : 31 Jan 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Control Unit RM-39	9-5/16 × 6-5/8 × 5	12.9
1	Case CS-76-J	9-7/8 × 8-5/8 × 6-3/4	2.0
1	Cord CD-1254	60 (long)	
1	Cord CD-1255	72 (long)	.25
1	Cord CD-1256	32 (long)	.3
1	Key J-47	Not Available	.3
1	Telephone EE-8	n n	12.9

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Company and battery of infantry, armored and airborne divisions.

INSTALLATION: Fixed or portable.

CAN COMMUNICATE WITH: Telephone switching, repeater, terminal, and station apparatus between a remote operating point and the operating site of radio communication equipment.

#### **TECHNICAL CHARACTERISTICS**

TYPE OF SIGNAL: Cw and voice.

TYPE COMMUNICATION CIRCUITS: Local battery telephone.

CONTROLS: Four-position switch marked TELEPHONE, THROUGH, RADIO, CW: Crank GC-9; and toggle switch marked ANTI-HOWL.

POWER REQUIREMENTS: 4-1/2 v dc (Battery BA-27); 15 v dc (two Batteries BA-34); 1.5 v dc (Battery BA-30).

#### PHYSICAL CHARACTERISTICS

Remote Control Equipment RC-289 measures 20 x 14 x 13-3/4 inches. Packed for export shipment: total weight 70 pounds, total volume 2.2 cu ft. Shipped in 1 package.

#### CONFIDENTIAL

ORIGINAL

JANAP 161

STATUS: Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 18 June 1956

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Audio Frequency Monitor AN/PTA-1 is a battery-operated wiretapping device used to intercept communication signals transmitted over telephone wire circuits.

This equipment consists of an af amplifier, an af transformer, a headset assembly, and a wire reel with wire, ground rods, and other accessories.

The intercepted signal can be recorded, but recording equipment is not supplied as part of this assemblage.

It is packed in two units for convenience of transportation and can be easily carried by one man.

**JANAP 161** 

AN/PTA-1

MONITOR, AUDIO FREQUENCY

INSTRUCTION LITERATURE: TM 11-2099 USING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Amplifier, Audio Frequency AM-558/PTA-1	8¾ x 10½ x 15¾	20
1	Transformer, Audio Frequency TF-148/PTA-1	15% × 17% × 2 <sup>15</sup> %	.5
1	Headset Assembly 49507		.875
	(For complete list of components, s		

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Special organizations.

INSTALLATION: Ground, portable.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE: 200 to 8,000 cy.

**TYPE MODULATION:** 

TYPE OF SIGNAL:

**POWER OUTPUT:** 

POWER REQUIREMENTS: 6 v, 50 ma dc (fil); 90 v, 5 ma dc (p).

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO PACKAGES
NET:		32	1.5		
DOMESTIC PACK:					
EXPORT_PACK:		82	6.1		1
#### CONFIDENTIAL

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 17 Jan 52



EMERGENCY SWITCHBOARD



AN/COMP TYPE NUMBER:

Emergency Switchboard SB-18/GT is a small, compact, lightweight, manual switching equipment used in field wire facilities serving infantry units.

This equipment can be used as an emergency substitute for a 6-line magneto telephone switchboard; and consists of a small case containing Adapter Plug U-4/GT, and is fitted with a carrying strap; switching is performed by interconnecting the adapter plugs. These plugs have small neon bulbs which serve as signal lamps when energized by ringing current.

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The operator's telephone is a field Telephone EE-8 which supplies ringing power.

CONFIDENTIAL

CONFIDENTIAL		JANAP		
ANL/DTC TYPE		INSTRUCTION LITERATURE: None		
AN/PIC-TYPE		CLASSIFICATION OF EQUIPMENT: Unclassified		
SB-18/GT	:AN/COMP TYPE NUMBER	USING SERVICE : Army		
EMERGENCY SWITCHBOARD		DATE OF THIS SHEET: 17 Jan 52		

# **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Case CY-229/GT	12×4×1-1/2	Not available
1	Plug Holder MT-313/GT	12×3×1-1/4	Not available
7	Adapter Plug U-4/GT	2x1-1/2x5/8	0.1

# **OPERATIONAL CHARACTERISTICS**

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Used in field wire facilities.

# **TECHNICAL CHARACTERISTICS**

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of line circuits: 6

POWER REQUIREMENTS: None; ringing power supplied by accessory Telephone EE-8.

# PHYSICAL CHARACTERISTICS

Emergency Switchboard SB-18/GT measures 12x3x1-1/4 inches, net weight 2.25 pounds, volume 0,025 cu ft. Packed for export shipment: total weight 5 pounds, total volume 0.2 cu ft. Shipped in 1 package both domestic and export shipment.

ORIGINAL

STATUS: Std

C

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956



SB-86/P

JANAP 161

SWITCHBOARD, TELEPHONE, MANUAL



Manual Telephone Switchboard SB-86/P is a portable, field-type unit used for connecting local battery telephone and voice-frequency teletypewriter lines in many types of wire communication systems.

This equipment consists of a switchboard signal assembly, manual telephone switchboard section, power supply, and headset-handset. It is capable of handling 15 calls at one time. Provision is made for automatic and manual ringing, common-battery and magneto signaling, and conference calls. It is mounted for operation on its outer cover assembly. An additional jack field is required to handle more than 30 lines.

It is normally operated from 10 Batteries BA-200/U and 4 Batteries BA-30 or from a 24-volt storage battery for semipermanent locations. One Battery BA-2 (22<sup>1</sup>/<sub>2</sub> volts) can be used in emergencies.

Telegraph Terminal TH-5/TG and a teletypewriter are required to complete calls if the voice-frequency teletypewriter circuits are set up for telegraph-only service.

INSTRUCTION LITERATURE: TM 11-2134

USING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

SWITCHBOARD, TELEPHONE, MANUAL

**AN/PTC**-TYPE

SB-86/P

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Power Supply PP-990/G	10 x 21 x 7 <sup>1</sup> / <sub>8</sub>	29
1	Switchboard Section, Telephone, Manual SB-248/P	21 x 23 <sup>1</sup> ⁄ <sub>2</sub> x 18 <sup>1</sup> ⁄ <sub>2</sub>	65
1	Switchboard Signal Assembly TA-207/P	10 x 4 x 14½	6

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Ground, transportable.

### **TECHNICAL CHARACTERISTICS**

#### NUMBER OF SWITCHBOARD POSITIONS: 1.

#### NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment: Number of Cord Circuits: 16. Number of Line Circuits: 30 to 60. Number of Trunk Circuits: 2.

RINGING: 20 cy (auto from vibrator or man. from hand gen).

#### **POWER REQUIREMENTS:**

Common Battery Signaling: 20 to 26.5 v dc from five BA-200/U. Magneto Signaling: 15 to 26.5 v dc from five BA-200/U. Night Alarm and Panel Lamps: 3 v dc from two BA-30. Operator's Telephone: 3 v dc from two BA-30.

#### **PHYSICAL CHARACTERISTICS**

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	50 x 21½ x 23	181	13.5		
DOMESTIC PACK:		235	14.37		1
EXPORT PACK:		300	19.95		1

Change No. 1

#### CONFIDENTIAL

**EE-84** 

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT : Unclassified USING SERVICE : Army DATE OF THIS SHEET: 27 Jan 52

AN/PVC-TYPE SERVICE TYPE NUMBER:

SIGNAL LAMP EQUIPMENT



Signal Lamp Equipment is a portable, visual-signaling device which is used for communication by means of flashes of white or redlight which are keyed in accordance with the dots and dashes of telegraphic codes. It is used in line-of-sight communication, airport traffic control, and similar applications in forward areas of infantry divisions, by military police and security troops, and similar units.

This equipment consists essentially of a prefocussed lamp in a cylindrical housing, a tripod, and associated battery box. It has a sighting telescope having illuminated crossed-hairs used in setting up and aiming the device, and a compass and azimuthal scale for orientation.

It is powered by flashlight-type batteries.

VC-TYPE

CONFIDENTIAL

SIGNAL LAMP EQUIPMENT

EE-84

INSTRUCTION LITERATURE: TM 11-391 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 27 Jan 52

## MAJOR COMPONENTS

**SERVICE TYPE NUMBER** 

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Signal Lamp M-132	10 × 5-1/2 (diameter)	5.5
1	Tripod (Ordnance type G for aiming circle type M1916)	34 x 4 (diameter when folded)	7.4
	Cords, accessories, boxes and bags	Not Availabl <del>e</del>	24.0

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Infantry divisions in forward areas, airport traffic control, military police, security troops and similar units.

INSTALLATION: Ground, transportable, operates in fixed position.

APPROXIMATE RANGE (IN MILES): 2.5 miles in bright sunlight (maximum). Many times this range at night. Line of sight.

CAN COMMUNICATE WITH: Observer stations at remote terminal, or intermediate relay points, of a line-of-sight system.

# **TECHNICAL CHARACTERISTICS**

NUMBER AND TYPE OF CHANNELS: 1, keyed, or interrupted light flashes.

COMMUNICATION SPEED: 8 wpm.

TYPE LIGHT SOURCE: Incandescent lamp, prefocussed, paraboloidal reflector.

SPECIAL FEATURES: May use filters to modify light to red or other color. Includes red filter goggles for reading red light signals.

POWER REQUIREMENTS: 8 Batteries BA-30 plus 8 spares.

# PHYSICAL CHARACTERISTICS

Signal Lamp Equipment EE-84 measures 60 x 60 x 60 inches, net weight 37.1 pounds, volume 1.2 cu ft. Packed for export shipment: total weight 70 pounds, total volume 6 cu ft. Shipped in 2 packages.

# JANAP 161

ORIGINAL

652





Signal Lamp Equipment SE-11 is a light-signaling device by means of which communication can be conducted by flashes of red or white light keyed according to the dots and dashes of Morse or other codes. It is used in traffic control and forward area line-of-sight communication applications.

This equipment consists of a signal lamp having a pistol grip and trigger-type on-off switch. A gunstock type of mounting is provided for operating the equipment from the shoulder and a tripod is included for use when the signal lamp is installed on the ground in relatively permanent applications. The tripod has a swivel head assembly and the equipment can be operated by remote control.

The signal lamp is equipped with sights similar to those of a rifle and can be permanently trained upon a given target.

The equipment is battery powered and can be operated at speeds of about 10 words per minute.

CONFIDENTIAL

CONFIDENT	IAL			JANAP 161
AN/	DVC-TYPE		INSTRUCTION LITERATU	RE: TM 11-392
			CLASSIFICATION OF EQUIPM	ENT: Unclassified
SE-11	:SERVICE	TYPE NUMBER	USING SERVICE : Army	
SIGNAL LA	MP EQUIPMENT		DATE OF THIS SHEET : 2	23 Jan 52
	MAJOR	COMPONEN	ITS	
QUANT	NAME OF COMPONENT	DIMENSIC	NS (IN) INSTALLED	WEIGHT (LBS)

1	Signal Lamp M-227	18-1/2 × 6 × 1-3/4	2.1
1	Key J-51	1-11/16 × 59/16 × 1/2	0.1
] pr	Goggles M-172	8 × 2-3/4	0.3
1	Tripod LG-21	42 extended, 18 collapsed	1.4
1 pr	Filter MC-430	Not Available	Not Available

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Point-to-point communication on the ground and in the air.

INSTALLATION: Ground, portable; fixed station.

APPROXIMATE RANGE (IN MILES): 1-1/2 day. 5 night.

CAN COMMUNICATE WITH: Observation stations, relay points, or observers at line-of-sight distances.

# **TECHNICAL CHARACTERISTICS**

TYPE OF SIGNAL: Red or white light flashes.

TYPE COMMUNICATION CIRCUITS: Half-duplex; line of sight.

CONTROLS: Self-contained trigger and a hand key.

POWER REQUIREMENTS: 7.5 v from five Batteries BA-30 in series.

# PHYSICAL CHARACTERISTICS

Signal Lamp Equipment SE-11 measures 50 x 50 x 50 inches, net weight 8.5 pounds, 0.1 cu ft.

CONFIDENTIAL

654

ORIGINAL

#### CONFIDENTIAL

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



JANAP 161

INFRARED RECEIVING SET



Infrared Receiving Set AN/SAR-1 is a shipboard receiver of invisible light signals for use at night in converting invisible infrared radiation to visible light by a photoelectric tube known as an image tube.

The receiver consists of a lens and mirror system, an image tube, an eyepiece lens assembly and certain electrical components. It may be either hand-held or mounted; and may be powered by batteries or ship's power.

CONFIDENTIAL

C

CONFIDENTIAL	JANAP 161
AN/SAR-1	INSTRUCTION LITERATURE: NAVSHIPS 250-222-19 CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE : Navy
INFRARED RECEIVING SET	DATE OF THIS SHEET : 23 May 52

# **MAJOR COMPONENTS**

NAME OF COMPONENT QUANT DIMENSIONS (IN) INSTALLED WEIGHT (LBS) Not Available Not Available

1 Navy Type C-3 Nancy Receiver

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

**INSTALLATION:** Shipborne.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/SAC-1.

# **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 0.8 - 1.5 microns.

TYPE OF SIGNAL: Visual.

POWER REQUIREMENTS: Self-contained flashlight batteries; or 115 v dc/ac.

# **PHYSICAL CHARACTERISTICS**

Infrared Receiving Set AN/SAR-1 measures 8-13/16 x 8-1/2 x 14 inches.

CONFIDENTIAL

ORIGINAL

STATUS: Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USN DATE OF THIS SHEET: 9 May 1956

C

AN/SAR-4(

VIEWING SET, INFRARED



Infrared Viewing Set AN/SAR-4( ) is a shipboard viewer of invisible light signals used at night to receive and convert invisible infrared radiation to visible light (by means of a photoelectric image tube) in shipboard communications.

This equipment is used as the receiving unit in the infrared blinker systems with such transmitters as the AN/SAT-2 or the 12-inch signaling searchlight with infrared filters. It is also used with the infrared filtered searchlight to observe objects in total darkness.

The AN/SAR-4, AN/SAR-4A, AN/SAR-4B, and the AN/SAR-4X are functionally interchangeable.

WEIGHT (lb)

# AN/SAR-4()

VIEWING SET, INFRARED

INSTRUCTION LITERATURE: NAVSHIPS 91911A

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

## **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT DIMENSIONS (in.) INSTALLED
1	Case, Infrared Viewing Set
	CY-1410/SAR-4
1	Power Supply PP-782/SAR-4
1	Viewer, Infrared R-556A/SAR-4
	(For complete list of major components, see instruction literature.)

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

**INSTALLATION:** Shipborne.

**APPROXIMATE RANGE (IN MILES):** 

### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE: .8 to 1.5 microns.

TYPE MODULATION:

TYPE OF SIGNAL: Visual.

**POWER OUTPUT:** 

POWER REQUIREMENTS: 115 v ac; 6 or 115 v dc.

# PHYSICAL CHARACTERISTICS

DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
EQUIPMENT (INSTALLED)	(ai)	(CU TT)	IONS	PACKAGES

NET:

DOMESTIC PACK:

**EXPORT PACK:** 

AN/SAT-2

TRANSMITTING SET, INFRARED

STATUS: Std

4

0

**CLASSIFICATION OF EQUIPMENT: Unclassified** 

PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956



Infrared Transmitting Set AN/SAT-2 provides a secure means of signaling at night aboard ship under darkened conditions by means of signals that cannot be detected beyond 400 yards by the unaided eye.

This equipment is functionally and operationally equivalent to Beacon System US/X-3A NAN but has simpler controls and provides greater flexibility of installation.

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AN/SAT-2

TRANSMITTING SET, INFRARED

INSTRUCTION LITERATURE: NAVSHIPS 92169

USING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

## **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Transmitter C–1356/SAT–2	$10^{3}/_{4} \times 8 \times 6^{3}/_{8}$	10.25
2	Key, Telegraph KY-129/SAT-2	5% × 6¾ × 6¾	6
2	Transmitter, Infrared T-438/SAT-2	$10^{3}/_{4} \times 8 \times 6^{3}/_{8}$	18.75

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE: Line of sight.

## **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE: .75 to 1.2 microns.

TYPE MODULATION: Am (A1).

TYPE OF SIGNAL: Infrared.

POWER REQUIREMENTS: 115 v ac or dc.

## PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO
NET:	13¼ x 12½ x 12½	43.5			
DOMESTIC PACK:		83.75	6.26		1

**EXPORT PACK:** 

Change No. 1





STATUS: Std

0

CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USN DATE OF THIS SHEET: 11 May 1956 AN/SGA-TYPE

**KEYER** 



Keyer KY-75/SRT is used in long-distance radiotelegraph systems to improve transmission by utilizing a two-frequency method: one mark signal and one space signal.

The two-frequency method, or frequency-shift operation, provides a better signal-to-noise ratio resulting in better signal reception.

This equipment is similar to Keyer KY-58/GRT except for type of mounting.

**AN/SGA**-TYPE

KY-75/SRT

**KEYER** 

INSTRUCTION LITERATURE: NAVSHIPS 91543

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JANAP 161

USING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

#### MAJOR COMPONENTS

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

(Equipment consists of a single major operating component.)

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

**INSTALLATION:** Shipborne.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 1 to 6.7.

TYPE MODULATION: Fm (F1, F4).

TYPE OF SIGNAL: Fsk, facsimile.

POWER OUTPUT: 6 w.

POWER REQUIREMENTS: 470 w, 115/230 v, 50/60 cy, 1 ph ac.

# PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	24 <sup>1</sup> / <sub>2</sub> x 22 <sup>1</sup> / <sub>8</sub> x 26 <sup>9</sup> / <sub>16</sub>	220			
DOMESTIC PACK:		346	13.5		1

**EXPORT PACK:** 

#### CONFIDENTIAL

JANAP 161

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



# RADIO TELETYPE TERMINAL SET



Radio Teletype Terminal Sets AN/SGC-1 and 1A are used for the transmission and reception of teletypewriter messages, over radio channels between stations similarly equipped.

At the voice-operated transmitter, these terminal sets convert the current pulses from the teletype writer to audio tones which modulate the radio transmitter.

At the receiver, the transmitted signals are demodulated to facilitate operation of the associated teletypewriter station equipment.

CONFIDENTIAL

CONFIDENTIAL	JANAP 161
AN/SGC-1	INSTRUCTION LITERATURE: NavShips 91503, 91152 CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TELETYPE TERMINAL SET	USING SERVICE : Navy DATE OF THIS SHEET : 9 May 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter Terminal TT-40/SGC-1	9-11/16 x 19-1/4 x 17-9/16	50
or	Teletypewriter Terminal TT-40A/SGC-	1	

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

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

# **TECHNICAL CHARACTERISTICS**

FREQUENCY: 0.5 kc and 0.7 kc.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: +10 db.

POWER REQUIREMENTS: 86 w, 115 v, 50/60 cyc, 1 phase, ac.

# PHYSICAL CHARACTERISTICS

Radio Teletype Terminal Set AN/SGC-1(and 1A)measures 9-11/16 × 19-1/4 × 17-9/16 inches.

CONFIDENTIAL

662

ORIGINAL

#### CONFIDENTIAL

JANAP 161

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT:Unclassified USING SERVICE: Army DATE OF THIS SHEET:8 Jan 52





Public Address Set AN/SIQ-1 is a medium-power, sound amplifying and projecting equipment used for briefing, training, or morale purposes. It is designed primarily for shipboard use. It can also be used in indoor or outdoor auditoriums as required.

This equipment consists essentially of a combined two-speed phonograph turntable and audio amplifier, microphones, speakers, and related accessories. It is so arranged that the entire equipment can be packed into seven carrying cases each of which can be carried by two men.

Sound signals, whether speech or music, are picked up by means of the microphones or by means of the 33-1/3 or 78-rpm disk recording equipment, but there is no provision for input from wire communication or radio receiving equipment.

It operates on 115 v ac or, by means of the rotary converter component, on 115 v dc.

CONFIDENTIAL

CONFIDENTIAL	JANAP 161
ANUCIO 1	INSTRUCTION LITERATURE: TM 11-2577
AN/SIQ-I	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army
PUBLIC ADDRESS SET	DATE OF THIS SHEET : 8 Jan 52

## MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier-phonograph	17-1/4 × 18-3/4 × 23-3/4	83
1	Rotary converter	7-13/16 × 7-13/16 × 13-1/2	73
2	Microphone (with stand)	Not Available	Not Available
4	Loudspeaker (with stand)	n n	<b>TT TT</b>

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Post, camps, PW areas, division or higher headquarters.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

# **TECHNICAL CHARACTERISTICS**

FACILITIES AFFORDED: Two loudspeaker output channels, for 1 or 2 or for 3 or 4 speakers. One microphone, or amplifier-record-player, input. 10-, 12-, or 16-inch recordings at 33-1/2 or 78 rpm.

TYPE CONTROLS: Amplifier: volume, auxiliary volume, on-off, microphone-phono selector. Phono: on-off, Microphone: press-to-talk switch.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 250 w, 115 v, 60 cyc, single-phase ac. or 250 w, 115 v dc through converter.

# PHYSICAL CHARACTERISTICS

Public Address Set AN/SIQ-1 packed for domestic shipment: total weight 536 pounds, total volume 59.3 cu ft, 1.49 ship tons. Shipped in 7 packages.





STATUS: Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USN

DATE OF THIS SHEET: 26 June 1956

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KY-83( )/S

KEYER



Keyer KY-83( )/S adapts communication radio transmitters and receivers to remote-control operation of magnetic minesweeping equipment. This equipment makes it possible to transmit and receive the timing pulses used in this type of operation, by utilizing available radio communication equipment without interrupting the normal function of such units.

The KY-83/S and KY-83A/S are functionally identical; the A model is more compact and lighter than the basic model. They are operated with Auxiliary Controllers Mark VI and VII, and combinations of radio receivers and transmitters, for detonating magnetic mines.

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# AN/SRA-TYPE

KY-83( )/S

KI-03( //

KEYER

INSTRUCTION LITERATURE: NAVSHIPS 91764, 91822(B) USING SERVICE: USN

DATE OF THIS SHEET: 26 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: Shipboard.

**INSTALLATION:** Shipborne.

# **TECHNICAL CHARACTERISTICS**

TYPE OF SIGNAL:

Audio Oscillator: 500 cy. Stability: ±10 cy (under ±10% variation in 115 v dc). Ambient Temperature: −28°C to +65°C. Output Level: 0 to 2 v (adjustable). Audio output: 300 mw.

**POWER REQUIREMENTS:** 65 w, 115 v  $\pm 10\%$  dc.

## PHYSICAL CHARACTERISTICS

		DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	KY-83/S	16 x 20 x 32	120			
	KY-83A/S	10 x 13¾ x 21¼	50			

DOMESTIC PACK:

**EXPORT PACK:** 

Change No. 1

STATUS: L/Std (-315); Std (-315A) CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USN DATE OF THIS SHEET: 11 May 1956

C

AN/SRA-TYPE

CONTROL PANEL-TELEGRAPH KEY

SB-315( )/U



Control Panel-Telegraph Key SB-315( )/U is used for general electronic control applications aboard ship to accomplish the following operations from a remote location: turning power on or off for an associated radio transmitter, providing a visual indication when the transmitter is on, and permitting keying of the radio transmitter.

This equipment replaces 6-Wire-Telegraph Remote Control Panel 23146. The main improvements are miniature stop-start switches, a new waterproof telegraph key, and general waterproof construction of the panel.

The SB-315/U and SB-315A/U are electrically and mechanically interchangeable; however, the latter is protected to withstand 100 hours of salt spray.

6 1

AN/SRA-TYPE

SB-315( )/U

CONTROL PANEL-TELEGRAPH KEY

INSTRUCTION LITERATURE: NAVSHIPS 92038

USING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

## **MAJOR COMPONENTS**

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

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES):

## **TECHNICAL CHARACTERISTICS**

TYPE MODULATION: Fm (F1).

TYPE OF SIGNAL: Fsk.

POWER REQUIREMENTS: .250 w 115/2300 v, 60 cy, 1 ph ac.

# PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	4 <sup>7</sup> / <sub>6</sub> x 5 <sup>1</sup> / <sub>2</sub> x 8 <sup>3</sup> / <sub>8</sub>	2			
DOMESTIC PACK:		3.5	.25		1

EXPORT PACK:

STATUS: Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 25 June 1956

AN/SRC-6(

RADIO SET



Radio Set AN/SRC-6 (Radiomarine Model ET-8053) and Radio Set AN/SRC-6A (Mackay Type 401-A) are portable radiotelegraph transmitters and receivers, powered by a built-in hand-driven generator, for emergency use in lifeboats or other survival craft.

This equipment consists of a transmitter and receiver with a built-in hand generator and an antenna system.

Automatic or manual keying is provided to transmit twelve 4-second dashes with 1-second pauses followed by three distress signals on 500 kc, and three distress signals followed by a 30-second dash for direction finding on 8,364 kc.

Two-way communication can be accomplished by manual keying only.

The AN/SRC-6 and AN/SRC-6A are generally interchangeable as to purpose and use.



RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 92207; Commercial Instruction Book

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

#### MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Watertight case containing transmitter,	201⁄2 x 121⁄2 x 147⁄16	58.5
	(For complete list of components, see ar	propriate supply manuals.)	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Survival craft.

**INSTALLATION:** Shipborne; portable.

APPROXIMATE RANGE (IN MILES): 25 to 100.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: .5 or 8.364 (xmtr); .5 (fixed, rcvr); 8.25 to 8.75 (rcvr, AN/-SRC-6); 8.266 to 8.745 (rcvr, AN/SRC-6A).

TYPE MODULATION: Am (A1: rcvr; A2: rcvr, xmtr).

TYPE OF SIGNAL: Modulated keyed telegraphy (rcvr, xmtr); cw (rcvr).

#### POWER OUTPUT:

AN/SRC-6: 2 w on .5 mc, 5 w on 8.364 mc. AN/SRC-6A: 1.7 w (min) on .5 mc; 4 w (min) on 8.364 mc.

**POWER REQUIREMENTS:** Built-in hand generator.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	<b>201</b> /2 × 121/2 × 147/6	58.5	2.15		
DOMESTIC DACK					

DOMESTIC PACK:

**EXPORT PACK:** 

RADIO SET

STATUS: Std

**CLASSIFICATION OF EQUIPMENT: Unclassified** 

PREPARING SERVICE: USA



DATE OF THIS SHEET: 26 June 1956



Radio Set AN/SRC-7 (Radiomarine Model 5U) is a self-contained radiotelegraph communication set providing medium- and high-frequency emergency communication facilities.

This equipment consists of two medium-frequency transmitters (one main and one emergency), an hf transmitter, an hf receiver, one receiver that can receive in both the low- and medium-frequency bands, an auto alarm, an auto alarm keyer, control panels, power components, antennas, and accessories.

The main medium-frequency transmitter and the hf transmitter are cystal-controlled. The emergency transmitter is master-oscillator controlled. The emergency transmitter is operated from a 12-volt storage battery (through a battery charger from the ship's line under normal conditions). The low- and medium-frequency receiver operates from a 12-volt storage battery and a 90-volt B battery, under emergency conditions; normally it is operated from the ship's line as does the rest of the equipment.

This equipment can be operated on ships that have either ac or dc power or a combination of the two.

AN/SRC-7

AN/SRC-7

RADIO SET

INSTRUCTION LITERATURE: Commercial Instruction Book USING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

#### **MAJOR COMPONENTS**

QTY

DIMENSIONS (in.) INSTALLED WEIG

WEIGHT (Ib)

(For complete list of components, see appropriate supply manuals.)

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

**INSTALLATION:** Shipborne; fixed stations.

NAME OF COMPONENT

APPROXIMATE RANGE: Extended.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: .015 to .65 (low- and medium-freq rcvr); .085 to .55, 1.9 to 25 (hf rcvr); .35 to .515 (main and emer xmtr); 2 to 24 (hf xmtr).

TYPE MODULATION: Am (A1, A2).

TYPE OF SIGNAL: Cw, mcw.

- POWER OUTPUT: 40 w (mcw, emer xmtr); 200 w (cw), 250 w (mcw) (main medium-freq xmtr); 300 w (cw, hf xmtr).
- POWER REQUIREMENTS: 115 v, 17.4 amp, 60 cy, 1 ph ac (Code A); 115 v, 11.3 amp dc (Code A); 115 v, 22 amp, 60 cy, 1 ph ac (Code B); 115 v, 32 amp dc (Code C); 230 v, 22 amp dc (Code D). For operation from 220 or 440 ac, a step-down transformer is used; dc is supplied by a rotary converter.

#### PHYSICAL CHARACTERISTICS

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

NET:

DOMESTIC PACK:

**EXPORT PACK:** 

AN/SRC-8()

CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 26 June 1956

STATUS: Std

C

**RADIO SET** 



Radio Set AN/SRC-8( ) (Ray Jefferson, Inc. Model 914 Radio Telephone) provides medium-frequency, two-way, ship-to-shore, and ship-to-ship radiotelephone service for ships in coastwise waters.

This equipment consists of a transmitter, a receiver, an antenna, accessories, and power components.

The AN/SRC-8 and the AN/SRC-8X operate from a 115-volt dc and ac power source, Apectively; the AN/SRC-8XX, AN/SRC-8Y, and AN/SRC-8Z operate respectively from 12-volt, 32-volt, and 24-volt batteries.

P.C.



**RADIO SET** 

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 26 June 1956

#### **MAJOR COMPONENTS**

QTY NAME OF COMPONENT DIMENSIONS (in.) INSTALLED

WEIGHT (Ib)

1AntennaIRadiotelephone unit(For complete list of components, see appropriate supply manuals.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

**APPROXIMATE RANGE (IN MILES):** 

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 2 to 3 (10 xtal-cont chan).

TYPE MODULATION: Am (A3).

**TYPE OF SIGNAL:** Voice.

POWER OUTPUT: 65 w.

POWER REQUIREMENTS: 115 v, 60 cy ac (-8X); 12 v dc (-8XX); 24 v dc (-8Z); 32 v dc (-8Y); 115 v dc (-8).

#### **PHYSICAL CHARACTERISTICS**

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

NET:

DOMESTIC PACK:

**EXPORT PACK:** 

STATUS:

#### CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 26 June 1956

#### NO PHOTOGRAPH AVAILABLE

Radio Set AN/SRC-9 (Mackay Type 402-A) is a nonportable, rugged, compact, lifeboat radiotelegraph transmitter-receiver designed for communication between survival craft and rescue vessels in the international distress frequency band and in the long-range frequency band of 8,346 kc. The transmitter design assures effective use by personnel not trained in radio communication.

This equipment provides manual keying for sending distress signals, communication, and automatic keying that transmits sequences of the International Auto Alarm Signal and SOS signals on 500 kc, followed on 8,364 kc by more SOS signals and by a long dash for direction-determining receivers.

All power required for operation of the equipment can be provided by a 12-volt dc storage battery.

AN/SRC-9

RADIO SET

JANAP 161



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**RADIO SET** 

**INSTRUCTION LITERATURE: NAVSHIPS 92364** 

USING SERVICE: USA. USN

DATE OF THIS SHEET: 26 June 1956

### MAJOR COMPONENTS

QTY

DIMENSIONS (in.) INSTALLED

WEIGHT (Ib)

(Equipment consists of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Survival craft.

**INSTALLATION:** Shipborne; fixed stations.

APPROXIMATE RANGE (IN MILES): 50 to 200.

#### **TECHNICAL CHARACTERISTICS**

#### FREQUENCY RANGE IN MEGACYCLES:

Receiver: .492 to .508 (fixed tuned); 8.1 to 8.9 (tunable). Transmitter: .5, 8.364 (fixed tuned, xtal cont).

NAME OF COMPONENT

TYPE MODULATION: Am (A1, A2).

TYPE OF SIGNAL: Cw, mcw.

**POWER** OUTPUT: 30 w (min) into 10 ohms and 100  $\mu\mu$ f (500 kc); 40 w (min) into 40 ohms (8,364 kc).

POWER REQUIREMENTS: 12 v, 32 amp dc.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	22 x 21 x 15	92	4.01		

664

**DOMESTIC PACK:** 

**EXPORT PACK:** 

#### CONFIDENTIAL



RADIO SET

JANAP 161



Radio Set AN/SRC-3 is a crystal-controlled, fixed frequency, transmitting and receiving equipment which operates in the distress-frequency range for a-m (cw) communication from lifeboats.

This equipment consists of a single unit containing transmitting and receiving components and includes a charging panel, batteries, and headphones.

It can be used for distress (SOS) signaling or for emergency cw communication by means of the telegraph hand key on the front panel. It uses a conventional long-wire type of antenna.

Power is furnished by 1 storage battery and a 45-v dry cell.

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CONFIDENTIAL	JANAP 161		
	INSTRUCTION LITERATURE: None CLASSIFICATION OF EQUIPMENT: Unclassified		
AN/SRC-3			
	USING SERVICE : Army, Navy		
RADIO SET	DATE OF THIS SHEET: 15 Feb 52		

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver )	21 × 18 × 22	110
1	Radio Transmitter)		
1	Battery Charging Panel	12 × 12 × 8	9
2	12-v Storage Battery & Battery Rox	19-3/4 × 33-3/8 × 12	330
1	45-v B Battery	Not Available	Not Available

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Transmitting and receiving signals from lifeboat.

INSTALLATION: Installed and operated in lifeboat.

APPROXIMATE RANGE (IN MILES): Short and medium.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/ART-13; AN/CRT-3, -5; AN/FRT-19; AN/GRT-2; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/SRT-1, -3; AN/TRQ-1; AN/URR-23; AN/URT-2, -3. -4; BC-191, -314, -329, -344, -348, -365, -453; MBS; R-62/PR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177, -274; T-5/FRC, -171/FR; TAB; TAJ; TAQ; TBL; TBN; TBU; TBW; TCE; TCY; TCZ; TDD; TDE; TDK; Marconi TH-41-B; National HRO-50; Wilcox 99A.

# **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 0.5. Receiver : 0.35 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Icw and cw.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 2 each 12-v storage batteries and one 45-v B battery.

# PHYSICAL CHARACTERISTICS

Information on Radio Set AN/SRC-3 not available.

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ORIGINAL











Radio Set SCR-281 is a medium-power, crystal-controlled a-m (voice) transmitting and receiving equipment used for ship-to-ship, ship-to-shore, and shore station communication is coastwise and harbor-control applications.

This equipment consists of a radio transmitter and a radio receiver assembled within a single metal cabinet which may be installed on the floor or deck, or on a shelf of platform. It has a shock mounting and a handset, and the receiver section includes an integral loudspeaker.

It can be operated in four-channel preselected by means of appropriate plug-in crystals and includes provision for control of transmitter-receiver change-over by means of the press-to-talk switch of the handset.

It can use a conventional long-wire antenna or equivalent system but can be operated by means of a whip-type array 35 feet in length.

Operates from 115-v ac.

CONFIDENTIAL

CONFIDENTIAL			JANAP 161		
AN/SRC-TYPE			INSTRUCTION LITERATURE: TM 11-244 CLASSIFICATION OF EQUIPMENT: Unclassifi		ed (
SCR-281 :SERVICE TYPE		NUMBER	USING SERVICE : Army		
RADIO S	SET		DATE OF THIS SHEET :	30 Jan 52	
	MAJOR C	OMPONE	NTS		C
QUANT	NAME OF COMPONENT	DIMENSIC	ONS (IN) INSTALLED	WEIGHT (LBS)	
1	Radio Receiver and Transmitter BC-441	16 × 10	× 16	102	

 $1-1/2 \times 2-1/2 \times 17-7/8$ 

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Harbor control, shore-to-ship, ship-to-shore, and similar applications.

INSTALLATION: Ground or shipboard, fixed. APPROXIMATE RANGE (IN MILES): 10 - 25.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; 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, -342, -348, -401, -447, -610, -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; RA0; RAS; RBB; RBG; RBH; RBM; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; SCR-177, -188, -193. -244, -281, -399, -499, -506, -543, -593, -607, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -173/FR, -177/FR, -190/FR; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCC; TCF; TCS; TCZ; TDE; TDF; TDH; TDN; TD0; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HR0-50; Westinghouse Type MW; Wilcox 96D, 99A.

# **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 1.7 - 2.75.

Shockproof Mounting Brackets

TYPE MODULATION: Am.

2

TYPE OF SIGNAL: Voice only.

POWER OUTPUT: 25 w.

POWER REQUIREMENTS: Transmitter: 230 w) Receiver : 107 w) of 115 v, 60 cyc, 1 phase, ac.

# PHYSICAL CHARACTERISTICS

Radio Set SCR-281 weighs 102 pounds net, volume 1.5 cu ft. Packed for export shipment: total weight 143 pounds, total volume 6 cu ft.

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#### CONFIDENTIAL

JANAP 161

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



RADIO TELEPHONE TRANS & REC EQUIP



Radio Telephone Transmitting and Receiving Equipments TCO, and TCO-1 through -4 are m-f, a-m (voice) medium-power radiotelephone equipments for ship-to-ship and ship-to-shore communication. A selective ringer may be added to enable a local coastal harbor station to ring a bell aboard ship on which set is installed.

Provision is made for remote operation of the transmitter-receiver after the set has been turned on, and the desired frequency selected.

Six preset crystal-controlled channels are available.

This equipment is designed to be used with either a ''T'', ''L'', or vertical rod antenna. The ''T'' or ''L'' types should be from 25 to 35 feet long.

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AN	SRC-TYP	E		INSTRUCTION LITERATUR NavShips 95314; 953 CLASSIFICATION OF EQUIPMI	RE: 315 ENT: Unclassified
TCO, T	CO-1 through -4	SERVICE TYP	E NUMBER	USING SERVICE : Navy	
RADIO	TELEPHONE TRANS & R	EC EQUIP		DATE OF THIS SHEET : 2	29 May 52
		MAJOR CO	MPONE	NTS	
QUANT	NAME OF COMPO	DNENT	DIMENSIO	NS (IN) INSTALL ED	WEIGHT (LBS)
1	Radio Transmitter-Receiv -43026, -43026-A, -43026	er CRM-43008, -B	13-3/16 ×	24 × 18-3/16	80
1	Power Unit CRM-21563* -2 -21565***, -20120****,-2	1564**	12-7/8 ×	22 × 5	44
1	Remote Control Unit CRM- *12-v. dc operation.	23229, -23229-A	10-3/8 x	13-5/8 × 5-3/8	11
	***115-v, dc.	****230-v, dc or	Deration.		

\*\*\*\*\*115-v, 60 cyc, 1 phase, ac.

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

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INSTALLATION: Shipborne.

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; 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; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, R-203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RA0; RAS; RBB; RBC; RBG; RBH; RBM; RBP; RBS; RC-52; RCF; RCG; RCH; NDE; 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; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TC0; TCP;TCS; TCZ; TDE; TDF; TDH; TDN; TD0; 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: TCO, TCO-1: 2.0 - 3.0 TCO-2, -3 and -4: 2.0 - 3.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 25 w. Receiver: 50 mw to loudspeaker.

POWER REQUIREMENTS: 345/384 w, 12/32/115/220 v, dc; or 345 w, 115 v, 60 cyc, 1 phase, ac. PHYSICAL CHARACTERISTICS

Information on Radio Telephone Transmitting and Receiving EquipmentsTCO, TCO-1 through -4 not available.

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JANAP 161

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified	AN	SRC-TYPE
USING SERVICE: Navy	SERVICE TYPE NUMBER:	TCP, TCP-1, -2
DATE OF THIS SHEET: 2 May 52	RADIO TELEPHONI	TRANS & REC EQUIP



Radio Telephone Transmitting and Receiving Equipments TCP, TCP-1 and -2 are compact, medium power, m-f, transmitter-receivers for shipboard use in ship-to-ship or ship-to-shore radiotelephone communication.

A selective ringer may be used with this equipment to enable a shore station to signal the operator by ringing a bell aboard the ship.

Ten preset crystal-controlled transmitting and receiving channels are provided.

A single vertical-wire antenna 25 to 35 feet in length is used.

Transmitter-receiver components are available for operation from 32- or 115-v, d-c power sources.

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## AN/SRC-TYPE

**RADIO TELEPHONE TRANS & REC EQUIP** 

INSTRUCTION, LITERATURE: NavShips 95316, 95317 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit CRM-43009°, 43009-A°, 43010°°, 43010-A°°	37 x 20-1/8 x 22	310
1	Remote Control Unit CRM-23230	10-1/4 × 13-5/8 × 5-3/8	11
1	Line Filter Unit CRM-53076*, 53077**,	$10 \times 6 - 1/2 \times 6$	6
	53085°, 53086°°	10-9/16 × 9-3/8 × 3-5/8	9
	* 32 v, d—c power source **115. v d—c " "		

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard stations.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

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; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; 0A-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RA0; RAS; RBB; RBG; RBH; RBM; RB0; 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; TB0; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TD0; TEB; TEC; TEF; AR-88 (RCA); Collins 188-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 3.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 75 w. Receiver: 1 w.

POWER REQUIREMENTS: 832 w, 32 v, dc; or 920 w, 115 v, dc.

#### PHYSICAL CHARACTERISTICS

Radio Telephone Transmitting and Receiving Equipments TCP, TCP-1, -2 measure 37 × 20-1/8 × 22 inches.

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STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT:Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52 JANAP 161

TCP-3

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AN/SRC-



SERVICE TYPE NUMBER:

Radio Telephone Transmitting and Receiving Equipment TCP-3 is a compact, medium-power m-f transmitter-receiver for shipboard use in ship-to-ship, and ship-to-shore radiotelephone communication.

A selective ringer may be used with this equipment to enable a shore station to signal the operator by ringing a bell aboard the ship.

Ten preset crystal-controlled transmitting and receiving channels are provided.

A single vertical-wire antenna 25 to 35 feet in length should be used.

TCP-3 is available for operation from 32, 115, or 230-v dc; or 115-v, 50/60 cyc, ac.

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#### PHYSICAL CHARACTERISTICS

Radio Telephone Transmitting and Receiving Equipment TCP-3 measures 37 x 20-1/8 x 22 inches.

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#### MAJOR COMPONENTS

**:SERVICE TYPE NUMBER** 

QUANT	NAME OF COMPONENT	DIMENSIONS (I N) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit CRM-43010-/ 43009-A**, 43061***, 43062****	N* 37 × 20−1/6 × 22	310
1	Remote Control Unit CRM-23230	10-1/4 × 13-5/8 × 5-3/8	11
1	Line Filter Unit CRM-53086°, CRM-53085°° or 53192°°°	10-9/16 × 9-3/8 × 3-5/8	9
	* 115-v dc. ** 32-v dc.		
	*** 230-v dc. ****115-v, 50/60 d	cyc, 1 phase, ac.	

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

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TCP.3

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

SRC-TYPE

RADIO TELEPHONE TRANS & REC EQUIPMENT

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; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RA0; RAS; R88; RBG; R8H; R8M; R80; R8P; 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; T8C; T8K; T8L; TBM; T8N; T8D; TBU; TBX; TC8; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TD0; TE8; 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-41-8; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 3.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 75 w. Receiver: 1 w.

POWER REQUIREMENTS: 830 w, 32 v, dc; or 920 w, 115 - 230 v, dc: o

920 w, 115 - 230 v, dc; or 690 w, 115 v, 50/60 cyc, 1 phase, ac.

INSTRUCTION LITERATURE:

DATE OF THIS SHEET : 2 May 52

USING SERVICE : Navy

NavShips 95318 CLASSIFICATION OF EQUIPMENT: Unclassified





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AN/S

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



Radio Receiving Set AN/SRR-3 is a medium-range, a-m (voice, cw, and mcw) receiving equipment for radiotelephone and radiotelegraph communication in the I-f, m-f, and h-f ranges and is used on shipboard and at fixed shore stations.

This equipment consists essentially of a radio receiver, power supply components, a loudspeaker, and accessories. It is contained in a table model steel cabinet equipped with a shock mount.

It can be removed from its cabinet for rack and panel installation.

This set uses a single long wire or balanced feed line antenna system and is a-c operated.

ANI/CDD 2	INSTRUCTION LITERATURE: None
AN/ SKK-J	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army, Navy
RADIO RECEIVING SET	DATE OF THIS SHEET: 8 Jan 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver Model SLR-F	21 × 20-13/16 × 13-7/8	106
1	Inverter Model 262	8 × 10-7/16 × 8-11/16	28
1	Speaker (PM) Model SPM-8	10-1/2 × 5 × 9-3/16	6.5

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: European Theater of Command, fixed stations, shipboard.

INSTALLATION: Fixed station, shipboard, or shore fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-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; 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:

Band 1:	0.08 - 0.22.	Band 4: 4.5 — 12.0.
Band 2:	0.21 - 0.56.	Band 5: 8.8 — 24.0.
Band 3:	1.90 - 5.10.	

TYPE MODULATION: Am.

CONCIDENTIAL

TYPE OF SIGNAL: Voice, cw, mcw.

POWER REQUIREMENTS: 85 w, 115 v, 60 cyc ac (0.75 amp).

#### PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/SRR-3 weighs 140.5 pounds net. CONFIDENTIAL 676

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#### CONFIDENTIAL

JANAP 161

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



RADIO RECEIVING SET

#### NO PHOTOGRAPH AVAILABLE

Radio Receiving Set AN/SRR-8 is an h-f, general service a-m (cw, mcw, and voice) receiver for shipboard use. It replaces Radio Receiving Equipment RBS.

This equipment is ruggedly constructed for use under adverse conditions.

CONFIDENTIAL

CONFIDENTIAL	JANAP 161
AN/SRR-8	INSTRUCTION LITERATURE: BuShips Spec. CS-1114 CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING SET	DATE OF THIS SHEET: 23 May 52

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-303/SRR-8	11 × 14 - 1/2 × 17	43
1	Power Supply PP-445/SRR-8	12 × 16 × 10-3/4	56

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -83/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; TD0; 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: 2.0 - 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

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

#### PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/SRR-8 measures 23 × 16 × 17 inches. CONFIDENTIAL 678



STATUS: L/Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USN DATE OF THIS SHEET: 9 May 1956





Radio Receiving Set AN/SRR-11 is a low-frequency, am (cw, mcw, tone) and fm (fsk), double-superheterodyne radio receiver for communication aboard ship.

This equipment differs from Radio Receiving Sets AN/SRR-12 and AN/SRR-13 only in frequency range and types of reception.

It is basically similar to Radio Receiving Sets AN/FRR-18, AN/FRR-21, and AN/MRR-1 except for physical construction and method of mounting. In an emergency, the AN/FRR-21, AN/MRR-1, or AN/SRR-11 may be used as substitute equipment for each other.

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AN/SRR-11

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NAVSHIPS 91875(A) USING SERVICE: USN DATE OF THIS SHEET: 9 May 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Radio Receiver R-439/SRR-11	29½ × 22¾ × 13½	73

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

**INSTALLATION:** Shipborne.

**APPROXIMATE RANGE (IN MILES):** 

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: .014 to .6.

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

TYPE OF SIGNAL: Cw, mcw, tone (fsk).

**POWER OUTPUT:** 

POWER REQUIREMENTS: 85 w, 105, 115, or 125 v, 50/60 or 400 cy, 1 ph ac.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	29½ x 22¾ x 13½	73			
DOMESTIC PACK:		122	4.9		2

**EXPORT PACK:** 

STATUS: L/Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USN DATE OF THIS SHEET: 9 May 1956



<image><image>

Radio Receiving Set AN/SRR-12 is a medium-frequency, am (cw, tone, voice) and fm (fsk), doublesuperheterodyne radio receiver for communication aboard ship.

This equipment differs from Radio Receiving Set AN/SRR-11 in frequency range and types of reception. It is identical with Radio Receiving Set AN/SRR-13 except for frequency range.

The AN/SRR-12 is basically similar to Radio Receiving Sets AN/FRR-22 and AN/MRR-2 except for physical construction and methods of mounting.

## AN/SRR-12

**RADIO RECEIVING SET** 

INSTRUCTION LITERATURE: NAVSHIPS 91875(A)

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Radio Receiver R-440/SRR-12	$18\frac{7}{16} \times 17\frac{1}{4} \times 8^{23}_{32}$	75

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

**INSTALLATION:** Shipborne.

APPROXIMATE RANGE (IN MILES):

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: .25 to 8.

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

TYPE OF SIGNAL: Cw, mcw, voice, tone (fsk).

**POWER OUTPUT:** 

POWER REQUIREMENTS: 85 w, 105/115/125 v, 50/60 or 400 cy, 1 ph ac.

#### **PHYSICAL CHARACTERISTICS**

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	$18\frac{7}{16} \times 17\frac{1}{4} \times 8^{23}_{32}$	75			
DOMESTIC PACK:		1 <b>52</b>	8.2		2
EXPORT PACK:					

AN/SRR-13

**RADIO RECEIVING SET** 

STATUS: L/Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USN DATE OF THIS SHEET: 10 May 1956

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Radio Receiving Set AN/SRR-13 is a high-frequency, double-superheterodyne radio receiver for shipboard reception of am (cw, voice) and fm (fsk) communication aboard ship.

This equipment differs from Radio Receiving Set AN/SRR-11 in frequency range and type of reception. It is identical with Radio Receiving Set AN/SRR-12 except for frequency range.

The AN/SRR-13 is basically similar to Radio Receiving Sets AN/FRR-19, AN/FRR-23, and AN/MRR-3 except for physical construction and methods of mounting. In an emergency, Radio Receiving Set AN/FRR-23, AN/MRR-3, or AN/SRR-13 may be used as substitute equipment for each other.

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## AN/SRR-13

**RADIO RECEIVING SET** 

INSTRUCTION LITERATURE: NAVSHIPS 91875(A)

USING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

#### MAJOR COMPONENTS

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

 1
 Radio Receiver R-441/SRR-13
 18% x 17¼ x 8<sup>2</sup>½2
 73

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

**APPROXIMATE RANGE (IN MILES):** 

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 2 to 32.

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

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

**POWER OUTPUT:** 

POWER REQUIREMENTS: 85 w, 105/115 or 125 v, 50/60 or 400 cy, 1 ph ac.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	187/6 x 171/4 x 8 <sup>23</sup> / <sub>32</sub>	73			
DOMESTIC PACK:		136	5		2
EXPORT PACK:					





Radio Receiver R-96/SR is a five-channel, a-m (voice, cw, icw, and mcw) receiving equipment which is used in the low-, medium-, and high-frequency bands in radio operation aboard ship. It may be installed on harbor patrol or seagoing craft.

This equipment consists of a crystal-controlled receiver which is designed to operate in conjunction with Radio Transmitter T-83/SR, to which it may be connected by cables. It has change-over relays in the transmitter to control sending and receiving. These relays are operated by means of the press-to-talk switch in the handset.

Uses a conventional ship's antenna or other suitable array. Operates on 115 v ac or dc.

CONFIDENTIAL		JANAP 161	
ANI/CDD		INSTRUCTION LITERATURE: TM 11-878	
AN/SKK-TYPE		CLASSIFICATION OF EQUIPMENT: Unclassified	
R-96/SR	: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)

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

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard and ports.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-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; **TB**A; 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:

Band 1:	0.135 - 0.26.	Band 4:	2.97 - 6.06.
Band 2:	0.255 - 0.51.	Band 5:	5.94 - 12.12.
Band 3:	1.48 - 3.03.		

TYPE MODULATION: AM.

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

POWER REQUIREMENTS: 115 v, 50/60 cyc ac. or 115 v dc -(0.4-amp) drain.

#### PHYSICAL CHARACTERISTICS

Radio Receiver R-96/SR measures 10 x 20-7/8 x 17-1/2 inches, net weight 87.5 pounds, volume 3 cu ft. Packed for domestic shipment: total weight 160.5 pounds, total volume 7.69 cu ft. Shipped in 1 package.







Radio Receiver R-203/SR is a table model receiving equipment for a-m (voice and cw) signals in the low-, medium-, and high-frequency bands used in shipborne and similar applications.

This equipment consists essentially of a commercial (RMCA model AR8506-A) marine receiver which is contained in a metal cabinet but which can be removed from the case and installed on a standard relay rack. It has a built-in loudspeaker and includes a headset and accessories.

It can be operated on a ship's antenna or other suitable array.

Operates from 115-v a-c or d-c sources, from 230-v a-c sources, or, by means of the fixed resistor unit included, from 230 v dc.

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CONFIDENTIAL			JANAP	
AN	/ SRR-TYPE		INSTRUCTION LITERAT CLASSIFICATION OF EQUIP	URE: TM 11-875 MENT: Unclassified
R-203/SR :AN/COMP TYPE NUMBER		PE NUMBER	USING SERVICE : Army	
RADIO RECEIVER			DATE OF THIS SHEET: 22 Jan 52	
	MAJOR CO	OMPONENT	S	
UANT	NAME OF COMPONENT	DIMENSION	IS (IN) INSTALLED	WEIGHT (LBS)
	Radio Receiver R-203/SR	11-3/4 × 13	-1/16 × 21	65
]	Electrical Noise Suppressor F-91/U	3-5/8 × 6-7/	/8 x <b>7-</b> 1/4	6
1	Fixed Resistor MX-1024/U	2-7/8 x 2-5/	/8 × 11-3/8	1.5

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

**INSTALLATION:** Shipborne.

APPROXIMATE RANGE (IN MILES): Medium-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, -10, -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; TBW; TBX; TBY; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCU; 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:

Band 1:	0.085 - 0.22.	Band 4:	52 - 12.0.
Band 2:	0.21 - 0.55.	Band 5:	11.5 - 25.0.
Band 3:	1.9 - 5.4.		

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, cw.

POWER REQUIREMENTS: 45 w, 115 v, 50/60 cyc ac or 90 w, 230 v, 50/60 cyc ac or 115 v dc or ac or, using Fixed Resistor MX-1024/U, 230 v dc or ac.

#### PHYSICAL CHARACTERISTICS

Radio Receiver R-203/SR weighs 77 pounds net, volume 2.15 cu ft. Packed for domestic shipment: total weight 145 pounds, total volume 12 cu ft. Shipped in 1 package.

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JANAP 161

R-213/SR

**RADIO RECEIVER** 

AN/ SRR-

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



AN/COMP TYPE NUMBER :

R-213/SR

Radio Receiver R-213/SR is a transportable, a-m (voice, tone, and cw) receiving equipment used for communication in the low-, medium-, and high-frequency bands in shipborne and similar marine applications or in fixed land stations.

This equipment is a self-contained, table model radio receiver inclosed in a metal cabinet and provided with a shock mount. It has a built-in loudspeaker and jacks for high- or low- impedance headphones and is provided with a beat-frequency oscillator, automatic or manual volume control, and electrical band-spread tuning.

Operates in four frequency bands and uses a doublet or other suitable antenna array.

Can be operated from either a-c or d-c power.

		INSTRUCTION LITERATURE: None
AN/SRR-	ТҮРЕ	CLASSIFICATION OF EQUIPMENT: Unclassified
R-213/\$R	: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	11-3/4 × 21 × 13-1/16	63
1	Line filter unit	7-1/4 × 6-7/8 × 3-5/8	5
1	External resistor unit	Not Available	Not Available

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Primarily shipboard.

CONTINENITIA

INSTALLATION: Shipboard or fixed station.

APPROXIMATE RANGE (IN MILES): Medium-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-60/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN;TD0; TEB; TEC; TEF; Collins 185-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B;Westinghouse Type MW; Wilcox 96D, 99A.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES:

Band 1: 0.21 - 0.55	Band 3: 5.2 — 12.0
Band 2: 1.90 — 5.40	Band 4: 11.5 – 25.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, voice.

POWER REQUIREMENTS: 45 w, 115 v ac or dc. 90 w, 250 v ac or dc w/325 ohm, 75-w external resistor unit.

#### PHYSICAL CHARACTERISTICS

Radio Receiver R-213 /SR measures 11-3/4 x 21 x 13-1/16 inches, net weight 68 pounds, volume 2.2 cu ft. Packed for domestic shipment: total weight 100 pounds, total volume 4.5 cu ft.

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#### CONFIDENTIAL

JANAP 161

R-215/SR

**RADIO RECEIVER** 

AN/ SRR

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT; Unclassified USING SERVICE: Army

DATE OF THIS SHEET: 15 Feb 52



AN/COMP TYPE NUMBER:

Radio Receiver R-215/SR is a medium-range, a-m (cw and mcw) receiving equipment which operates in the very-low-, low-, and medium-frequency ranges in shipboard or equivalent communication applications.

This equipment consists essentially of a commercial (RMCA AR-8510) table model radio receiver and includes a-c or d-c power supply components.

It operates by means of a conventional long wire or ship's antenna.

Operates from 110 v dc, 115 v ac, or 6-v storage battery plus 90 v of dry battery B supply.

CONFIDENTIAL

COMMUSATIA	L.		JANAP 161
AN/	SRR-TYPE	INSTRUCTION L	LITERATURE: None DF EQU!PMENT: Unclassified
R-215/SR	: AN/COMP	TYPE NUMBER USING SERVICE	: Army
RADIO RECEIVER		DATE OF THIS S	SHEET: 15 Feb 52
	MAJOR	COMPONENTS	
UANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTAL	LED WEIGHT (LBS)
		9 1 / 4 - 22 - 12	20

	Kadio Keceiver K-215/SK	0-1/4 × ZZ × 13	37
1	Control Unit RM-37 (dc only) or	Not Available	Not Available
1	Control Unit RM-23-A (ac only)	8-3/8 × 17 × 6-7/8	21.50

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Transports.

INSTALLATION: Fixed ground or shipboard.

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 - 0.65, in 4 bands. Band 3: 0.1 - 0.25 Band 1: 0.015 - 0.038 Band 2: 0.038 - 0.1 Band 4: 0.25 - 0.65.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw and cw.

POWER REQUIREMENTS: 6-v battery and 90-v battery or 110 v dc or 35 w, 115 v, 60 cyc ac.

#### PHYSICAL CHARACTERISTICS

Radio Receiver R-215/SR weighs 50.5 pounds net.

CONFIDENTIAL





STATUS: Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 15 June 1956





Radio Transmitting Set AN/SRT-2 is used on small boats as the main or emergency transmitter. It is operated in the standard international medium frequency band for ship-to-ship and ship-to-shore communication.

This equipment consists essentially of a commercial (Radiomarine Model ET 8003) radiotelegraph transmitter and can be operated from a 110-volt dc power source or from a 12-volt storage battery capable of supplying 45 amperes for a 6-hour period.

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INSTRUCTION LITERATURE: TM 11-831

USING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Motor generator	9 <sup>1</sup> / <sub>8</sub> × 30 × 9 <sup>1</sup> / <sub>4</sub>	128-
1	Power control and charging panel	21 × 12 × 9½	24
1	Radiotelegraph transmitter	20% × 15% × 11%	26

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

AN/SRT-2

**RADIO TRANSMITTING SET** 

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): 100.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: .355 to .5.

TYPE MODULATION: Am (A2).

TYPE OF SIGNAL: 700-cy tone.

POWER OUTPUT: 30 w.

POWER REQUIREMENTS: 12 v, 45 amp dc or 110/115 v, 4 amp dc.

#### **PHYSICAL CHARACTERISTICS**

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		195			
DOMESTIC PACK:		330			2
EXPORT PACK:					

#### CONFIDENTIAL

JANAP 161

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52



RADIO TRANSMITTING SET



Radio Transmitting Set AN/SRT-1 is a compact, fixed-frequency, single-channel, a-m radio receiver designed for operation in the distress-frequency band by means of c-w and i-c-w signals. It is designed to be carried on shipboard for use in life-saving rafts and similar craft but may be used for emergency c-w communication.

This equipment consists of a radio receiver having a built-in telegraph key (for manual code transmission). It includes a 6-v storage battery, conventional and phantom antenna, and related accessories.

This set can be arranged for automatic transmission of SOS signals, plus a long dash, 6 times in 2 minutes, and will then shut down. Can be operated once each hour for 48 hours without recharge of battery.

CONFIDENTIAL	JANAP 16
ANU/CDT1	INSTRUCTION LITERATURE: TM 11-830
AN/SRI-I	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army, Navy
RADIO TRANSMITTING SET	DATE OF THIS SHEET : 8 Jan 52

#### MAJOR COMPONENTS

NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
Battery Charging Panel	20-1/4 × 6-1/4 × 14-1/2	16
Battery BB-54-A	3-31/32 × 5-1/2 × 3	4.50
Rope	480 (long)	1.75
Antenna Wire	600 (1 ong)	1.875
	NAME OF COMPONENT Battery Charging Panel Battery BB-54-A Rope Antenna Wire	NAME OF COMPONENTDIMENSIONS (IN) INSTALLEDBattery Charging Panel20-1/4 × 6-1/4 × 14-1/2Battery BB-54-A3-31/32 × 5-1/2 × 3Rope480 (long)Antenna Wire600 (long)

#### OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or rescue craft.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): 50 to 100.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/HRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-23; AN/VRC-4; BC-314, -344, -348, -453, -779; MBS; R-62/PR, -96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM;RCH; RDF; SCR-177; ARC Type 12; National HRO-50.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES:0.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and icw.

POWER OUTPUT: 5 w.

POWER REQUIREMENTS: 6 v, (16 amp) dc (storage battery).

#### PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/SRT-1 measures 18 x 16 x 12 inches, net weight 60 pounds, volume 2 cu ft. Packed for domestic shipment: total weight 150 pounds, total volume 10.3 cu ft. Packed for export shipment: total weight 190 pounds, 11.46 cu ft. Shipped in 2 packages both domestic and export.

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CONFIDENTIAL



#### CONFIDENTIAL

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52



#### RADIO TRANSMITTING SET



Radio Transmitting Set AN/SRT-3 is a mediumpower, medium-range, crystal-controlled a-m (cw and mcw) transmitting equipment for ship-toship and ship-to-shore communication in the intermediate-frequency range.

This equipment consists of a floor-type transmitting assembly which is fitted with shockmountings and includes a motor generator, plus associated components.

It can be used in emergencies by adding an emergency panel and a small dynamotor.

Operates in eight preset frequency channels and uses the normal ship's antenna system.

CONFIDENTIAL	JANAP 161
ANI/COT 2	INSTRUCTION LITERATURE: None
AN/SRI-3	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army
RADIO TRANSMITTING SET	DATE OF THIS SHEET: 8 Jan 52

#### MAJOR COMPONENTS

14-1/8 × 27-3/4 × 9-3/4 44-3/4 × 17-3/8 × 28-3/4	225 200
	14-1/8 × 27-3/4 × 9-3/4 44-3/4 × 17-3/8 × 28-3/4

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

**INSTALLATION:** Fixed station.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: A N/ARC-5, -9; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-23; AN/VRC-4; BC-314, -344, -348, -453, -779; MBS; R-62/PR, -96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177; ARC Type 12; National HRO-50.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 0.35-0.515.

TYPE MODULATION: Am.

TYPE OF SIGNAL: cw, and mcw.

POWER OUTPUT: Mcw: 300 w; cw: 200 w.

POWER REQUIREMENTS: 1,300 w, 150/230 v, dc; 220/440 v, (4.5 amp) 60 cyc, 3 phase, ac.

#### PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/SRT-3 measures 45-3/16 x 17-3/4 x 29, net weight 425 pounds.

CONFIDENTIAL

#### CONFIDENTIAL

### STATUS: Standard CLASSIFICATION OF EQUIPMENT:Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52



#### RADIO TRANSMITTING SET



Radio Transmitting Set AN/SRT-4 is a low-power, medium-range, l-f and m-f, a-m (cw and mcw) transmitting equipment designed for use aboard ship in ship-to-ship or ship-to-shore communication in the m-f and h-f bands.

This equipment consists of a single, shock-mounted, floor type cabinet containing the operating components and control apparatus. It includes a motor generator and motor starter, control panel, crystal units, and related items. It operates on two preset frequencies and uses the ship's antenna array.

Requires about 1,300-w dc.

GONFIDENTIAL	JANAP 161
ANI/CDT A	INSTRUCTION LITERATURE: None
AN/SKI-4	CLASSIFICATION OF EQUIPMENT: Unclassified
	USING SERVICE : Army
RADIO TRANSMITTING SET	DATE OF THIS SHEET : 8 Jan 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitting Set AN/SRT-ų	45-3/16 × 13-1/4 × 19-1/2	360
1	Motor Generator	14-1/8 × 27-3/4 × 9-3/4	225

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Fixed shipboard.

APPROXIMATE RANGE (IN MILES): Medium and long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -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-9, -12, -13, -28; 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, -209/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB: RBC; RBG; RBH; RBM; RBO; RBP; RBS; 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: 2.00 - 22.14.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: 200 w below 17 mc, 150 w above 17 mc.

POWER REQUIREMENTS: 1,300 w, 115 v, dc.

#### PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/SRT-4 weighs 585 pounds net, volume 7 cu ft.

CONFIDENTIAL

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STATUS: L/Std **CLASSIFICATION OF EQUIPMENT: Unclassified** PREPARING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

# AN/SRT-10

RADIO TRANSMITTING SET



#### NO PHOTOGRAPH AVAILABLE

Radio Transmitting Set AN/SRT-10 is a 50-watt am (cw, voice) marine telephone and telegraph radio transmitter used on small ships. Provisions are included for its operation by remote control.

This set operates from a 115-volt ac or a 24-, 32-, or 110-volt dc source. When operating from the dc source, a motor starter and a suitable converter (not supplied) must be used.

This equipment is functionally identical with Radio Transmitter T-83/SR.

INSTRUCTION LITERATURE: TM 11-837

USING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

#### **MAJOR COMPONENTS**

#### QTY NAME OF COMPONENT

DIMENSIONS (in.) INSTALLED

WEIGHT (lb)

1 Power Supply PP-462/U

1 Motor Starter RE–79/SRT–10

1 Radio Transmitter T-240/SRT-10

(For complete list of components, see appropriate supply manuals.)

#### **OPERATIONAL CHARACTERISTICS**

TACT!CAL USE: Shipboard.

AN/SRT-10

RADIO TRANSMITTING SET

**INSTALLATION:** Shipborne; fixed stations.

APPROXIMATE RANGE (IN MILES): 25.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 1.7 to 8.7.

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 450 w, 115 v, 50/60 cy ac; 500 w, 24, 32, or 110 v dc.

#### **PHYSICAL CHARACTERISTICS**

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					3

STATUS:

0

CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 22 June 1956

### AN/SRT-13() TRANSMITTING SET, RADIO



Radio Transmitting Set AN/SRT-13( ) is a marine emergency radio telegraph transmitting set. It consists of a radio transmitter, a motor generator, a terminal box, a battery charger, two storage batteries, and accessories.

Radio Transmitting Sets AN/SRT-13 and AN/SRT-13X are identical, except for the battery charging circuit and the battery charger. Radio Transmitters T-433/SRT-13 and T-434/SRT-13X are not interchangeable, unless circuit changes are made to permit battery charging with the particular battery charger used.

This equipment is operated from two 6-volt batteries that may be charged by Battery Charger PP-1030/ SRT-13 from a 115-volt ac source, or by Battery Charger PP-1031/SRT-13X from a 115-volt dc source.

## AN/SRT-13( )

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: TM 11-844

USING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

#### **MAJOR COMPONENTS**

NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (	lb)
Charger, Battery PP–1030/SRT–13 or	12¾ x 85⁄8 x 12¼	29	
PP-1031/SRT-13X	11 x 7½ x 10¾	10	
Motor-Generator PU-277/SRT	12 <sup>1</sup> / <sub>8</sub> x 8 <sup>1</sup> / <sub>4</sub> x 9 <sup>5</sup> / <sub>16</sub>	52	
Transmitter, Radio T–433/SRT–13 or T–434/SRT–13X	21 x 13 x 18½	75	
	NAME OF COMPONENT Charger, Battery PP–1030/SRT–13 or PP–1031/SRT–13X Motor-Generator PU–277/SRT Transmitter, Radio T–433/SRT–13 or T–434/SRT–13X	NAME OF COMPONENT         DIMENSIONS (in.) INSTALLED           Charger, Battery PP-1030/SRT-13 or         12¾ x 85% x 12¼           PP-1031/SRT-13X         11 x 7⅓ x 10¾           Motor-Generator PU-277/SRT         12⅛ x 8¼ x 95‰           Transmitter, Radio T-433/SRT-13 or         21 x 13 x 18½           T-434/SRT-13X         11 x 7⅓ x 10¾	NAME OF COMPONENT         DIMENSIONS (in.) INSTALLED         WEIGHT (           Charger, Battery PP-1030/SRT-13 or         12¾ x 85% x 12¼         29           PP-1031/SRT-13X         11 x 7½ x 10¾         10           Motor-Generator PU-277/SRT         12½ x 8¼ x 95%         52           Transmitter, Radio T-433/SRT-13 or         21 x 13 x 18½         75           T-434/SRT-13X         21 x 13 x 18½         75

(For complete list of components, see appropriate supply manuals.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Emergency marine transmitter.

INSTALLATION: Shipborne; fixed stations.

APPROXIMATE RANGE (IN MILES): 50 to 100.

#### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: .35 to .505.

TYPE MODULATION: Am (A2).

TYPE OF SIGNAL: Tone.

POWER OUTPUT: 40 w.

POWER REQUIREMENTS: 12 v dc.

#### **PHYSICAL CHARACTERISTICS**

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/SRT-13		477	7.2		
AN/SRT-13X		458	6.9		
DOMESTIC PACK:					
EXPORT PACK:					
AN/SRT-13		635	17.8		
AN/SRT-13X		610	16.8		4

Change No. 1
STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52



SERVICE TYPE NUMBER: TAJ-2 through-10 500 WATT TRANSMITTING EQUIPMENT



500 Watt Transmitting Equipments TAJ-2 through -10 are general purpose, m-f, medium-power, a-m (cw and mcw) radiotelegraph transmitters for shipboard use. The transmitters may be operated locally or from a remote point over a standard fouror six-wire control system.

These equipments have continuously variable master oscillator frequency control, while the TAJ-2 and -3 use crystal control.

The TAJ-8 through -10 transmitters may be relay keyed at speeds up to 100 wpm on cw and vacuum tube keyed at speeds up to 50 wpm on mcw.

The type of transmitter and power equipment used depends upon the power source available.

CONFIDEN	TIAL	JANAP 161
AN	/ SRT-TYPE	INSTRUCTION LITERATURE: NavShips 95288, 900,248 CLASSIFICATION OF EQUIPMENT: Unclassified
TAJ-2 thr	ough-10 :SERVICE T	YPE NUMBER USING SERVICE : Navy
500 WAT	TRANSMITTING EQUIPMENT	DATE OF THIS SHEET : 29 May 52
	MAJO	R COMPONENTS
QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

1	Radio Transmitter CG-4440 or -4444; CRV-52009, -52022; CAY-52029;	70 × 26-7/8 × 19	450
	CG-52078; CRR-52142, or -52143; CG-52140, -52167, or -52189	72 × 27 × 24 72-1/4 × 27 × 24	645 610
1	* Motor-Generator Set CG-4083, -4084,	18 × 33-3/8 × 18	527
	-21044, $-21045$ , $-21296$ , $-21297$ , -21299, $-21466$ , $-21467$ , $-21468$ ,	20 × 71-3/4 × 17	860
	-21456, -21456Å, -21571	18 × 64-3/4 × 12-3/4	960

\* Does not apply to TAJ-4, -5

# **OPERATIONAL CHARACTERISTICS**

#### TACTICAL USE: Shipboard.

#### INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

#### CAN COMMUNICATE WITH:

TAJ-2, -3: AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-5, -8, -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; 0A-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; RA0; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RB0; 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: TAJ-2, -3: 0.195 - 0.60 TAJ-4 through -10: 0.175 - 0.60.

#### TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: TAJ-2 through -7: 500 w. TAJ-8 through -10: 500 w on cw, 250 w on mcw.

POWER REQUIREMENTS: TAJ-2, -3: 3 kw, 115/230 v dc. TAJ-4: 2.82 kw, 230 v, 60 cyc, 3 phase, ac. TAJ-5, -6, -7, -9: 440 v, 60 cyc, 3 phase, ac. TAJ-8: 220/440 v, 60 cyc, 3 phase, ac or 3.2/3.46 kw, 115/230 v dc. TAJ-10: 440 v, 60 cyc, 3 phase, ac or 3.2/3.46 kw, 115/230 v dc.

# **PHYSICAL CHARACTERISTICS**

Information on 500 Watt Transmitting Equipments TAJ-2 through -10 not available.

CONFIDENTIAL

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JANAP 161

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

AN/SRT-TYPE SERVICE TYPE NUMBER: TAJ-11, -12, -14, -15, -18, -19 500 WATT TRANSMITTING EQUIPMENT



500 Watt Transmitting Equipments TAJ-11, -12, -14, -15, -18, -19 are general purpose, m-f, medium power a-m (cw, mcw) radiotelegraph transmitters for shipboard use. The transmitters may be operated locally, or remotely over a standard fouror six- wire control system.

These equipments employ continuously variable master oscillator frequency control. They may be relay keyed at speeds up to 100 wpm on cw and vacuum tube keyed at speeds up to 50 wpm.

The type of transmitter and power equipment employed is dependent upon power source available.

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ORIGINAL

# JANAP 161

INSTRUCTION LITERATURE: NavShips

USING SERVICE : Navy

900, 863; 900, 833; 900, 492-1B CLASSIFICATION OF EQUIPMENT: Unclassified

# SMITTING EQUIPMENT DATE OF THIS SHEET: 29 May 52 MAJOR COMPONENTS MAME OF COMPONENT DIMENSIONS (IN) INSTALLED WEIGHT (LBS) Transmitter CG=52240-4 74 x 27 x 25 540

1	Radio Transmitter CG-52240,-52240-Å.	74 × 27 × 25	540
•	-5224152241A. CRR-5225952260	74 × 27 × 25	540
1	Motor-Generator Set CG-21756, -21756Å,	20 × 76-1/2 × 19-3/4	960
-	-21757, -21757 A, -27158, -21956,	20 × 76-1/2 × 19-3/4	1,040
	-21783, -21784, -21785	20 × 76-1/2 × 19-3/4	850
1	Magnetic Controller CAO-21752, -21753,	29-3/4 × 14-1/4 × 13-1/4	70
	CG-21754, -21755, CAE-21874, -21875,	22 × 19-1/4 × 12-1/4	10 1
	CG-211086, -211087, -211088, -211089	17-5/16 × 11-9/16 × 10-5/8	55

# **OPERATIONAL CHARACTERISTICS**

#### TACTICAL USE: Shipboard.

#### INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-5, -9; AN/FRR-4, -28; AN/GRR-2, -9; 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, -100 4; MBS; OA-58/FRC; R-62/PR, -90/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, - 14; 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 - 0.60.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

POWER OUTPUT: 500 w on cw, 250 w on mcw.

POWER REQUIREMENTS: TAJ-11, -12, -14, -18, -19: 220 / 440 v, 60 cyc, 3 phase, ac; or 3.2/3.46 kw, 115 / 230 v, dc. TAJ-15: 3.40 kw, 230 v dc.

# PHYSICAL CHARACTERISTICS

Information on 500 Watt Transmitting Equipments TAJ-11, -12, -14, -15, -18, -19 not available.



N/SRT-TYPE

TAJ-11, -12, -14, -15, -18, -19 :SERVICE TYPE NUMBER 500 WATT TRANSMITTING EQUIPMENT

CONFIDENTIAL

QUANT

# CONFIDENTIAL JANAP 161 STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52



2 KW Transmitting Equipment TAQ-5 is a shipboard radio transmitter of unmodulated or modulated telegraph signals within the low frequency range.

There are four different versions of this equipment, permitting operation from either a 115-v d-c, a 230-v d-c, a 220-v a-c, or a 440-v a-c power source.

This transmitter can be operated locally, or from a remote point by means of a Navy standard 4or 6-wire remote control unit.

ONFIDENTIAL		JANAP 161
AN/SRT-TYPE		INSTRUCTION LITERATURE: NavShips 900,248 CLASSIFICATION OF EQUIPMENT: Unclassified
TAQ-5	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	Transmitter Unit CG-52113, -52114,	72 × 49-1/4 × 34-1/8	985
	-52115	72 × 49-1/4 × 34-1/8	1,050
1	Motor Generator Set CG-21358, -21359,	27 × 78-3/8 × 22-1/4	1,325
	-21360	27 × 71-5/8 × 22-1/4	1,185
1	Magnetic Controller CA0-21366,-21367	, 22-1/2 × 13-1/2 × 14-1/2	109
	-21368, -21369	26-7/16 × 25-15/16 × 12-19/32	140

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboord.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

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; ROM; 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, 440 v, 60 cyc, 3 phase, ac; or 8 kw, 220 v, 60 cyc, 3 phase, ac; or 8.6 kw, 230 v, dc; or 8.6 kw, 115 v, dc.

# PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAQ-5 measures 72 x 63-3/4 x 34-1/8 inches.



JANAP 161

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TAQ-6b

AN/SRT-T

2 KW TRANSMITTING EQUIPMENT

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



SERVICE TYPE NUMBER:

2 KW Transmitting Equipment TAQ-6b is a shipboard, 2 kw radio transmitter of unmodulated, or modulated telegraph signals within the low-frequency range.

This equipment is the modified version of the TAQ-6 which was originally built for operation from a 115-v dc source. After modification, the equipment can operate from 230-v dc.

The radio transmitter component and the motor generator set have also been modified, and the original magnetic controller is replaced.

The equipment can be operated locally, or controlled from a remote point by means of a Navy standard 4- or 6-wire remote control unit.

ONNOUNTAL		INSTRUCTION LITERATURE:
AN/SR	-TYPE	NavShips 900,248 CLASSIFICATION OF EQUIPMENT: Unclassified
TAQ-6b :SERVICE TYPE NUMBER		USING SERVICE : Navy
2 KW TRANSMITTIN	NG EQUIPMENT	DATE OF THIS SHEET: 2 May 52

#### NAME OF COMPONENT DIMENSIONS (IN) INSTAL LED

1	Transmitter Unit CG-52113	70 v NO-1/N v 2N-1/9	005
1	Motor Generator Set CG-21358	27 × 78-3/8 × 22-1/4	1,325
1	Magnetic Controller CAO-21367	22-1/2 × 13-1/2 × 14-1/2	94

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

QUANT

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

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; 0A-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: 8.6 kw, 230 v, dc.

# PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAQ-6b measures 72 x 63-3/4 x 34-1/8 inches.

CONFIDENTIAL



WEIGHT (LBS)





2 KW Transmitting Equipment TAQ-9 is a shipboard radio transmitter of unmodulated, or modulated, telegraph signals within the I-f spectrum.

Four different versions of this equipment are available and permit operation from a power source of either 115 v dc, 230 v dc, 220 v ac, or 440 v ac.

Can be operated locally or controlled from a remote point by means of a Navy standard four- or sixwire remote control unit.

#### JANAP 161



# MAJOR COMPONENTS

1 Radio Transmitter CG-52182, 72 × 49-1/4 × 34-1/8 985 or 1 -52183	,050
Motor Generator Set CG-21358,         27 × 78-3/8 × 22-1/4         1,325           -21358-A;-21359, -21359-A;         -21358-A;-21359, -21359-A;         -21358-A;-21359, -21359-A;	
-21360, -21360-A 27 × 71-5/8 × 22-1/4 1,185	
1 Magnetic Controller CAO-21366, 22-1/2 x 16-1/2 x 14-1/2 109	
-21367, 22-1/2 × 13-1/2 × 14-1/2 74	
-21368, -21369 26-7/16 x 26-61/64 x 12-19/32 140	

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

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 TS25-3; 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 or 8 kw, 440 v, 60 cyc, 3 phase or 8.6 kw, 230 v dc or 8.6 kw, 115/120 v dc.

# PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAQ-9 measures 72 x 63-3/4 x 34-1/8 inches.

CONFIDENTIAL



JANAP 161-

2

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified	AN/SRT-TYP	
USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	SERVICE TYPE NUMBER:	TBA
	RADIO TRANSMIT	TING EQUIPMENT



Radio Transmitting Equipment TBA is a medium power h-f ship-to-shore and ship-to-ship radiotelegraph transmitter for use on large surface vessels.

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

Sixteen crystal-controlled channels are provided.

A single-wire antenna is recommended for frequencies between 4.0 to 8.0 mc, either a single-wire or a horizontal doublet type is recommended at frequencies above 8.0 mc.

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AN/S	RT-TYPE	INSTRUCTION LITERATURE: NavShips 95289 CLASSIFICATION OF EQUIPMENT: Unclassified
TBA	SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSM	ITTING EQUIPMENT	DATE OF THIS SHEET : 29 Apr 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-4613	72 × 49 × 33-5/32	1,010
1	Motor Generator Set CG-12A396	23-11/16 × 80-1/4 × 23-3/8	1,660
1	Magnetic Controller CG-4615	23-3/4 × 16-1/2 × 13-11/16	72
1	Filter Unit CG-4614	25-1/8 × 15-1/8 × 6-3/16	82

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

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; RA0; RAS; RBB; RBC; RBG; RBH; RBM; RB0; 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; TB0; TBX; TCH; TC0; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Colling 75A-2; Hammarlund SP-600-JX; National HR0-50.

# TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

POWER OUTPUT: At 4 mc:- 1 w; at 26 mc: 600 w.

POWER REQUIREMENTS: 6.3 kw, 230 v, dc.

# PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA measures 72 x 49 x 33-5/32 inches, net weight 2,828 pounds.

CONFIDENTIAL

706

JANAP 16J





Radio Transmitting Equipment TBA-3 is a medium power ship-to-ship and ship-to-shore, h-f, radiotelegraph transmitter for surface vessels.

It may be keyed at speeds up to 100 wpm at all frequencies within its range.

Frequency is controlled by means of a continuously variable master oscillator.

A single-wire antenna is recommended for all frequencies.

This transmitter can be controlled at a remote site by means of a standard 4- or 6-wire Navy control unit.

CONFIDENTI	AL.	JANAP 101
AN/	SRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,398 CLASSIFICATION OF EQUIPMENT: Unclassified
TBA-3	SERVICE TYP	E NUMBER USING SERVICE : Navy
RADIO TR	ANSMITTING EQUIPMENT	DATE OF THIS SHEET : 29 Apr 52
	MAJOR C	OMPONENTS
QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

1	Transmitter Unit CG-52116	72 × 49 × 43-1/8	975
1	Motor Generator Set CG-21375	17-9/16 × 70-7/16 × 16	815
1	Magnetic Controller CG-21373,	21-1/8 × 20-1/4 × 10-1/4	65
	-21374		

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

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; 0A-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; RA0; RA8; RBB; RBC; RBG; RBH; RBM; RB0; 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; TB0; TBX; TCH; TC0; 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: 4,980 w, 220/440 v, 60 cyc, 3 phase, ac.

# PHYSICAL CHARACTERISTICS

708

Radio Transmitting Equipment TBA-3 measures 72 x 49 x 43-1/8 inches.



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STATUS : Limited Standard CLASSIFICATION OF EQUIPMENT : Unclassified	AN/	SRT-TYPE
USING SERVICE : Navy	SERVICE TYPE NUMBER:	TBA-6
DATE OF THIS SHEET: 29 Apr 52	RADIO TRANSMIT	TING EQUIPMENT



Radio Transmitting Equipment TBA-6 is a medium power, ship-to-shore and ship-to-ship, h-f, radiotelegraph transmitter for surface vessels.

It may be keyed at speeds up to 100 wpm at all frequencies within its range.

A single-wire vertical antenna is recommended for all frequencies.

It has a continuously variable master oscillator.

This transmitter can be controlled at a remote site by means of a standard 4- or 6-wire Navy control unit.

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# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Traesmitter CG-52195, -52196, -52197	72 × 49 × 24-7/8	953
1	Motor Generator Set CG-21375-A,	17-9/16 × 70-7/16 × 16	815
	-21595, -21596	19-13/16 × 63-5/8 × 18-5/8	915
1	Magnetic Controller CG-21374,	22-1/8 × 20-1/4 × 10-1/4	65
	-21591, -21592	22 × 17-9/32 × 15-1/4	65

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

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: 0A-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; 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 185-4 (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; or 5.3 kw, 115/230 v, dc.

# PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-6 measures 72 x 49 x 24-7/8 inches.

CONFIDENTIAL

ORIGINAL



JANAP 161

JANAP-161

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TBA-9

AN/SRT.

RADIO TRANSMITTING EQUIPMENT

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



SERVICE TYPE NUMBER:

Radio Transmitting Equipment TBA-9 is a medium power, ship-to-shore, h-f, radiotelegraph transmitter.

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

A single vertical-wire antenna is recommended for this transmitter.

This equipment can be operated from a remote location with a standard four- or six-wire Navy control unit.

Frequency control is by means of a continuously variable oscillator.

ORIGINAL

AN/SI	KI,-TYPE	CLASSIFICATION OF EQUIPMENT: Unclassified	
TBA-9	SERVICE TYPE NUMBER	USING SERVICE : Navy	
RADIO TRANSM	ITTING EQUIPMENT	DATE OF THIS SHEET: 29 Apr 52	
MAJOR COMPONENTS			

1	Radio Transmitter CG-52281	72 × 49 × 31-1/8	1,044
2	Motor Generator Set CG-21899	19-15/16 × 71-5/16 × 16-5/8	820
2	Magnetic Controller CG-21898	23-7/8 × 21-7/16 × 9-1/16	74

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

NAME OF COMPONENT

CONFIDENTIAL

QUANT

INSTALLATION: Shipborne.

APPROXIMATE RANGE (I N 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; ROM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -693, -694, -704; T80; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model): Collins 75A-2; Hammarlund SP-600-JX; National HR0-50.

# **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, 440 v, 60 cyc, 3 phase, ac.

# PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-9 measures 72 x 49 x 31-1/8 inches, net weight 3,174 pounds, volume 80.1 cu ft, 2 ship tons. Packed for domestic shipment: total weight 5,374 pounds, total volume 99 cu ft, 2.47 ship tons. Shipped in 11 packages.

712

CONFIDENTIAL



**JANAP** 161

INSTRUCTION LITERATURE:

DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT:Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 May 52 AN/SRT-TYPE SERVICE TYPE NUMBER: TBK-5 RADIO TRANSMITTING EQUI PMENT



Radio Transmitting Equipment TBK-5 is a shipboard a-m (cw) radiotelegraph transmitter of h-f communication. The transmitter may be keyed at speeds up to 100 wpm. Provisions are made for variation from full-power to low-power operation of 75 w in the frequency range of 2.0 to 9.05 mc.

This equipment uses master oscillator control and is continuously variable over the frequency range.

It may be controlled and keyed by use of the standard four-wire remote control system. The transmitter, motor generator system components, and starter are bolted to the deck.

A different combination of major components is used for each of three power sources which may be available for operation of the equipment.

CONFIDENTIAL		JANAF IDI
ANI/CDT		INSTRUCTION LITERATURE : Not Available
AN/SKI	I-TYPE	CLASSIFICATION OF EQUIPMENT: Unclassified
TBK-5	SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMIT	TING EQUIPMENT	DATE OF THIS SHEET: 8 May 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALL ED	WEIGHT (LBS)
1	Transmitter Unit CAY-52064,	72 × 32 × 24	695
	or -52066	72 × 32 × 24	662
1	Motor CAY-21242, -21243, -21244	13-9/16 × 14-3/8 × 22	900
1	Generator CAY-21240	13-5/8 × 15-7/8 × 28-3/4	900
1	Low Voltage Generator and Exciter	13-5/8 × 14-11/16 × 19-3/8	900
	CAY-21241		

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

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, -29, -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, -349, -779, -794, -1004; MBS; MQ; 0A-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, -398/URR; RAL; RA0; RAS; RBB; RBC; RBG; RBH; RBM; RB0; RBP; RBS; RCF; RCG; RCH; RDE; RDH; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TB0; 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: 3.51 kw, 440 v, 60 cyc, 3 phase, ac, or 3.38 kw, 115/230 v, dc.

# PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBK-5 measures 72 x 32 x 24 inches, net weight 2,176 pounds, volume 32.3 cu ft, 0.8 ship ton.

#### CONFIDENTIAL

ORIGINAL

714

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





Radio Transmitting Equipments TBL, TBL-2 and -3 are general purpose, medium-power m-f/h-f a-m (cw, mcw, voice) transmitters for shipboard use.

The transmitters have two separate r-f circuits to cover the m-f and h-f bands, only one of which is used at a time.

In the TBL, the m-f band is controlled by a crystal oscillator, and the h-f band is controlled by a master oscillator.

TBL-2 and -3 employ master oscillator control of both m-f and h-f bands. With the use of suitable speech input equipment, the TBL-2 and -3 provide voice transmission throughout their respective frequency ranges.

The type of transmitter, generator, and power line units employed by the TBL series is dependent upon the power source, or sources, which are available aboard ship.



INSTRUCTION LITERATURE: Not Available CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52

RADIO TRANSMITTING EQUIPMENT

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CRV-52042, CRV-52043, CAY-52059, -52060, -52061, -52082, -52083, -52084	72 × 32 × 24	800
1	Motor CC-21155, -21154, -21229, -21230, -21231, -21229A, -21230A, -21231A	15 × 16-1/8 × 20-7/8	Not Available
1	Generator CC-21156, -21157, CC-21232, -21233, -21233A	15 × 13 × 18 12-7/8 × 15-13/16 × 19-5/8	н н н н

# **OPERATIONAL CHARACTERISTICS**

#### TACTICAL USE: Shipboard.

#### INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -9, -11, -12, -13, AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; 0A-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; TB0; TBX; TCH; TCP; TCS; AR-38 (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: 0.175 - 0.60 and 2.0 - 18.1.

TYPE MODULATION: Am. TYPE OF SIGNAL: TBL: Cw, mcw. TBL-2 and -3: Voice, cw, mcw.

POWER OUTPUT: TBL: 200 w. TBL-2 and -3: A1, 200 w; A2, 100 w; A3, 50 w.

POWER REQUIREMENTS: TBL: 115 / 230 v, dc. TBL-2 and -3: 3.4 kw, 440 v, 60 cyc, 3 phase; or 3.2 kw, 115 / 230 v dc.

# PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Equipments TBL, TBL-2 and -3 not available.



STATUS: Standard

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

# AN/SRT-TYPE

SERVICE TYPE NUMBER: TBL-4, -5, -6, -7, -8, -9, -12, -13 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TBL-4, -5, -6, -7, -8, -9, -12 and -13 are general purpose, a-m (cw, mcw, voice), medium-power, m-f/h-f, radiotelegraph transmitters used aboard ship. This equipment may be operated locally or from a remote station by use of a standard four- or six-wire control system.

Keying speeds up to 100 wpm are possible, and when suitable speech input equipment is used, voice transmission is possible throughout the frequency range.

This transmitter incorporates two separate master oscillator controlled r-f circuits to cover the m-f and h-f bands. Only one band may be used at a time.

With the exception of the TBL-9, (which operates on 220-v ac only) any of the transmitting equipments may consist of various type transmitters, motor generators, and line equipment, dependent upon the power source available.

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIG	HT (LBS)
1	Radio Transmitter	72 × 32-1/4 × 24-1/2	Not	Available
1	Motor-Generator	20 × 61 × 13-1/4		
1	Magnetic Controller	19-3/4 × 11-11/16 × 9-13/16		•
1	Filter Unit	19-1/4 × 16-1/4 × 10-1/8		

# **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-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -914, -942, -944, -948, -779, -794, -1004; MBS; MQ; 0A-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/UR; RAK; RAL; RAO; RÅS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RB0; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -138, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TB0; TBX; TCH; TCP; TCS; AR-38 (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: 0.175 - 0.60 and 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

POWER OUTPUT: A1: 200 w. A2: 100 w. A3: 50 w.

#### **POWER REQUIREMENTS:**

TBL-4: 3.4 kw, 220/440 v, 60 cyc, 3 phase, ac; or 3.5 kw, 115/230-250 v dc. TBL-5, -7, -12, -13: 3.2 kw, 440 v, 60 cyc, 3 phase, ac; or 3.4 kw, 115/230 v, dc. TBL-6: 3.2 kw, 220/440 v, 60 cyc, 3 phase ac; or 3.4 kw, 115/230 v, dc. TBL-8: 3.4 kw, 440 v, 60 cyc, 3 phase, ac; 3.5 kw, 115/230-250 v, dc. TBL-9: 3.4 kw, 220 v, 60 cyc, 3 phase, ac.

# PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Equipment TBL-4, -5,-6, -7, -8, -9, -12, -13 not available.

#### JANAP 161

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

AN/SRT-TYPE

SERVICE TYPE NUMBER:

MBER: TBN-3 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBN-3 is a combined m-f and h-f equipment for shipboard a-m (cw, mcw, voice) transmission. Two separate transmitter units are alternately operated from a common rectifier. The h-f transmitter is arranged for cw, mcw, and voice transmission, while the m-f unit operates on cw and mcw only.

These transmitters may be keyed at speeds up to 100 wpm.

The full power output of either transmitter may be varied down to 25% of the maximum for telegraphic signaling.

These transmitters are master oscillator controlled, and are continuously variable over their frequency ranges.

Provisions are made for remote control using the standard four-wire control system.

Speech input equipment is provided for remote telephone operation of the h-f transmitter.



ORIGINAL

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy DATE OF THIS SHEET: 29 May 52

SERVICE TYPE NUMBER

# **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Rectifier CAY-20033	72 × 38 × 24	1,460
2	Transmitter Unit CAY-52046, -52048	72 × 32 × 24	7 49
1	Single-Channel Speech Input Equipment Consisting of: 1 Rectifier Power Unit-Telephone	24-13/16 × 16-5/8 × 24-5/16	Not Available
	C₩-20039 1 Master Monitor Unit C₩-23072	Not Available	<del>11</del> 11
	1 Station Control Unit CW-23070	99 99	

**OPERATIONAL CHARACTERISTICS** 

TACTICAL USE: Shipboard.

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TBN-3

INSTALLATION: Shipborne, fixed.

SRT-TYPE

RADIO TRANSMITTING EQUIPMENT

APPROXIMATE RANGE (IN MILES): Medium.

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, -198, -193, -244, -274, -281, -399, -499, -506, -543, -593, -704; TBO; TBX; TCH; TCP; TCS; AR-38 (RCA); ARC Type 12; Collins 185-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

# **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

POWER OUTPUT: HF Transmitter: 500 w at 2.0 to 18.1 mc. MF Transmitter: 1,000 w at 0.3 to 2.0 mc.

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

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBN-3 measures 72 x 102 x 24 inches.



#### JANAP 161

CONFIDENTIAL		JANAP 161
STATUS : Substitute Standard CLASSIFICATION OF EQUIPMENT : Unclossified	AN/	SRT-TYPE
USING SERVICE: Navy	SERVICE TYPE NUMBER:	TBU, TBU-2
DATE OF THIS SHEET: 2 May 52	RADIO TELEGRAPH TRANS	MITTING EQUIPMENT



Radio Telegraph Transmitting Equipments TBU and TBU-2 are medium-power, m-f radiotelegraph transmitters used on larger types of surface vessels. Frequency control is continuously variable throughout the frequency range 0.3 to 2.0 mc.

TBU and TBU-2 are similar to TBU-1 and TBU-3 except that the last two have been adapted for shore station installation.

Can be operated locally or can be keyed from a remote operating position by means of standard keying equipment.

For complete remote control operation, including start, key, and stop, a standard Navy four- or six-wire control unit can be used.

Telegraph keying speeds up to 100 wpm are possible by means of relay keying.

ONFIDENTIAL		JANAP 161
AN/ SRT	-TYPE	INSTRUCTION LITERATURE: NavShips 900,384 CLASSIFICATION OF EQUIPMENT: Unclassified
TBU, TBU-2	SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TELEGRAPH 1	RANSMITTING EQUIPMENT	DATE OF THIS SHEET: 2 May 52

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CAY-52123, -52124, -52222	72 x 34 x 24	769
1	Motor Generator Unit CAY-21447, -21448, -21673	22-1/8 x 20-3/4 x 77-1/16	1, 205
1	Magnetic Controller CAY-21449, -21710, -21693	22-21/32 × 16-5/8 × 13-1/4	70

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25, -26; AN/ARR-15, AN/FRR-4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -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/SR, -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; RBG; RBH; RBL; RBM; RBO; RBS; RCG; RCH; RDE; RDF; RDM; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -543, -593, -614, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 185-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

# **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 2.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, Mcw.

POWER OUTPUT: Cw: 1 kw. Mcw; 500 w.

POWER REQUIREMENTS: 440 v, 60 cyc, 3 phase, ac or 230 v dc or 115 v dc.

# PHYSICAL CHARACTERISTICS

Radio Telegraph Transmitting Equipment TBU or TBU-2 measures 72 x 34 x 24 inches, net weight 2,350 pounds. Packed for domestic shipment: total weight 3,130 pounds, total volume 123.30 cu ft, 3.08 ship tons. Shipped in 11 packages.

CONFIDENTIAL



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Radio Transmitting Equipment TCE is a compact, general purpose, low-power transmitter for small surface craft. When used in conjunction with a suitable receiver, it provides radiotelegraph, or radiotelephone, communication over the m-f/h-f ranges. Six plug-in-type tuning units cover the frequency range.

Different motor generator units, and magnetic controllers are supplied, dependent upon power sources available.

A single wire antenna can be used for transmission and reception (when the associated receiver is connected to the antenna transfer terminal of TCE).

This equipment can be operated from a remote location by means of a remote control unit, such as Navy Type CAY-23305.



RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: Not Available CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52

# **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Rectifier Unit CAY-52129	14-15/16 × 24-1/8 × 17-3/32	58.0
1	Motor Generator Unit CC-21413 through -21416	26-1/2 × 12-1/2 × 10-1/2	157.0
1	Magnetic Controller CAY-21417 through -21420	20-1/2 × 13-1/2 × 12-1/4	60.0

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

#### APPROXIMATE RANGE (IN MILES): Medium.

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/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, -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; TCO; TCP; TCS; 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: 0.35 - 9.05 in 6 bands.

Band A:	0.35 - 0.8	Band C:	1.5 - 3.0	Band E:	4.525 - 6.5
Band B:	0.8 - 1.5	Band D:	3.0 - 4.525	Band F:	6.5 - 9.05.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw or mcw: 125 w. Voice: 40 w.

POWER REQUIREMENTS: 1,200 w, 115 v, 60 cyc, 1 phase, ac; or 24/32/120 v, dc.

# PHYSICAL CHARACTERISTICS

Transmitting Equipment TCE measures 14-15/16 x 24-1/8 x 17-3/32 inches.



# JANAP 151 STATUS: L imited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52



Radio Transmitting Equipment TCE-1 is a compact, general purpose, low-power transmitter for small surface craft. It provides radiotelegraph or radiotelephone communications over the m-f/h-f ranges (when used in conjunction with a suitable receiver). Six plug-in type tuning units cover the frequency range.

Different motor generators and magnetic controllers are supplied, dependent upon power sources available.

A single wire antenna can be used for transmission and reception (if the associated receiver is connected to the antenna transfer terminal of this TCE-1).

This equipment can be operated from a remote location by means of a remote control unit such as Navy Type CAY-23245

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N/SRT-TYPE		INSTRUCTION LITERATURE: NavShips 95309 CLASSIFICATION OF EQUIPMENT: Unclassifie	
E-1	SERVICE TYPE NUMBER	USING SERVICE : Navy	
DIO TRANSMITT	TING EQUIPMENT	DATE OF THIS SHEET : 9 May 52	

# MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52151	16 × 25-1/8 × 17-1/8	58
1	Motor Generator CC-21635 through CC-21638	12-1/2 × 28 × 14	160
1	Magnetic Controller CAY-21418, -21419, -21558, -21420	20-1/2 × 13-1/2 × 12-1/4	60

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

#### APPROXIMATE RANGE (IN MILES): Medium.

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/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, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; R6H; 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; TB0; TBX; TCH; TCO; TCP; TCS; 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: 0.35 - 9.05 in 6 bands.

Bånd A: 0.35 - 0.8	Band C:	1.5 - 3.0	Band E:	4.525 - 6.5
Band B: 0.80 - 1.5	Band D:	3.0 - 4.525	Band F:	6.5 - 9.05.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw or mcw: 125w. Voic e: 40 w.

POWER REQUIREMENTS: 1,200 w, 115 v, 60 cyc, 1 phase, ac; or 32/120/230 v, dc.

# PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment measures 16 x 25 · 1/8 x 17 · 1/8 inches.

CONFIDENTIAL

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# CONFIDENTIAL JANAP 161 STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TCE-2 is a compact, general purpose, low-power, transmitter for small craft. It provides radiotelegraph or radiotelephone communication over the m-f/h-f ranges when used in conjunction with a suitable receiver. Six plug-in type tuning units cover the frequency range.

Different motor generators and magnetic controllers are supplied, dependent upon power sources available.

A single wire antenna can be used for transmission and reception (if the associated receiver is connected to the antenna transfer terminal of the TCE-2).

This equipment is operated from a remote location by means of Remote Control Unit, Navy Types CAY-23305, or CAY-23245.

CONFIDENTIAL		JANAF UI
AN/SR1	-TYPE	INSTRUCTION LITERATURE: NavShips 95319 CLASSIFICATION OF EQUIPMENT: Unclassified
TCE-2	SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITT	ING EQUIPMENT	DATE OF THIS SHEET : 9 May 52

# **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52151-AS	16 × 25-1/8 × 17-1/8	78.0
1	Motor Generator CC-21636, -21637 -21638, -21927, -21607	, 12-1/2 × 26-1/2 × 14	160.0
1	Magnetic Controller CAY-21373, -21558, -21420, -21846, -21847	20-1/2 × 15-1/2 × 12-1/4	60.0
1	Remote Control Unit CAY-23245, -23305	6-1/16 × 6 × 5-3/8	4.25

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

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/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-912, -314, -342, -344, -9 A8, -453, -779, -794, -1004; MBS; MQ; 0A-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, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RB0; 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; TB0; TBX; TCH;TC0; TCP; TCS; 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: 0.35 - 9.05 in 6 ranges.

Band A: 0.35 - 0.8	Band C: 1.5 - 3.0	Band E:	4.525 - 6.5
Band B: 0.8 - 1.5	Band D: 3.0 - 4.525	Band F:	6.5 - 9.05.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw or mcw: 125 w. Voice: 40 w.

POWER REQUIREMENTS: 1,300 w, 115/230 v, 60 cyc, 1 phase, ac, or 208/440 v, 60 cyc, 3 phase, ac; or 115/230 v, dc.

# PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TCE-2 measure 16 x 25-1/8 x 17-1/8 in ches.

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ORIGINAL

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JANAP 161

TCY, TCY-1

AN/SRT-TYPE

PORTABLE EMERGENCY RADIO TRANS EQUIP

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

# <image>

SERVICE TYPE NUMBER:

Portable Emergency Radio Transmitting Equipment TCY and TCY-1 are used for emergency or distress signaling by inexperienced personnel in lifeboats or liferafts. They radiate "SOS" or "SSS" signals on the international distress frequency of 0.5 mc.

This transmitter can be keyed both automatically and manually.

A roll of rubber-covered, flexible wire is supplied for the antenna, together with three insulators, and suitable fittings.

The antenna should be installed so that it retains certain basic electrical characteristics, however, the flexibility of the equipment is such that almost any length, or height of antenna can be used.

730

ORIGINAL

# JANAP 161

INSTRUCTION LITERATURE:

NavShips 95324

			CLASSIFICATION OF EQUIPMENT: Unclassified		
TCY, TO	CY-1	SERVICE TYPE	NUMBER	USING SERVICE : Navy	
PORTABLE EMERGENCY RADIO TRANS EQUIP			DATE OF THIS SHEET : 29 Apr 52		
		MAJOR CO	MPONE	NTS	
QUANT	NAME OF COMP	ONENT	DIMENSIO	NS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter Rect CFT-52236, -52236-A	ifier	16-1/4 ×	21-1/4 × 9-3/8	60

# **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Lifeboats or liferafts.

INSTALLATION: Shipbome.

APPROXIMATE RANGE (IN MILES): Short, medium.

CAN COMMUNICATE WITH: AN/ARC-5, -9; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-23; AN/VRC-4; BC-314, -344, -349, -453, -779; MBS; R-62/PR, -96/SR, -129/U, - 203/SR, - 206/PR, - 210/U, - 211/U, - 212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177; ARC Type 12; National HRO-50.

**TECHNICAL CHARACTERISTICS** 

FREQUENCY RANGE IN MEGACYCLES: 0.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw.

POWER OUTPUT: 5 w.

POWER REQUIREMENTS: Self-contained, 90 w, 6 v, dc. (Battery permits in excess of 48 cyc of operation, each cyc being of approximately two minutes duration, or 1~1/2 hours continuous keying)

# PHYSICAL CHARACTERISTICS

Portable Emergency Radio Transmitting Equipments TCY, TCY-1 measure 16-1/4 x 21-1/4 x 9-3/8 inches, net weight 60 pounds.

CONFIDENTIAL



I/SDT\_TYPE T P

CONFIDENTIAL
CONFIDENTIAL		JANAP 161
STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT :Unclassified	AN/S	RT-TYPE
USING SERVICE : Navy, Army	SERVICE TYPE NUMBER:	TDK
DATE OF THIS SHEET: 23 May 52	EMERGENCY RADIO TELEGRAP	HTRANSMITTER



Emergency Radio Telegraph Transmitter TDK is a-m (mcw) equipment for emergency m-f transmission aboard ship. It provides a high degree of reliability, together with simplified operation and minimum drain from the power supply circuits.

This transmitter uses a simple self-excited oscillator for frequency control.

It will operate from 115-v, d-c, or 12-v storage battery power sources. When it is used only for emergency service from a 12-v battery, no connections are needed to the 115-v motor: but 115-v, d-c must be connected to the power control panel for battery charging.

CONFIDENTIAL

## AN/SRT-TYPE TDK :SERVICE TYPE NUMBER EMERGENCY RADIO TELEGRAPH TRANSMITTER

INSTRUCTION LITERATURE:Not Available CLASSIFICATION OF EQUIPMENT:Unclassified USING SERVICE : Navy, Army DATE OF THIS SHEET : 23 May 52

## **MAJOR COMPONENTS**

NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
Radio Transmitter Unit CRM-52269	20-1/8 × 15-1/8 × 7-1/2	26.0
Péwer Control Panel CRM-23310	19 × 12 × 8-3/8	25.0
Control Unit CRM-23309	$4 \times 9 - 1/8 \times 5$	4.5
Plate Transformer CAY-30892	5 × 5 × 5-3/4	8.5
Motor Generator Set CBP-21864	9-1/8 × 30 × 7-3/4	130.0
	NAME OF COMPONENT Radio Transmitter Unit CRM-52269 Péwer Control Panel CRM-23310 Control Unit CRM-23309 Plate Transformer CAY-30892 Motor Generator Set CBP-21864	NAME OF COMPONENTDIMENSIONS (IN) INSTALLEDRadio Transmitter Unit CRM-52269 $20-1/8 \times 15-1/8 \times 7-1/2$ Pówer Control Panel CRM-23310 $19 \times 12 \times 8-3/8$ Control Unit CRM-23309 $4 \times 9-1/8 \times 5$ Plate Transformer CAY-30892 $5 \times 5 \times 5-3/4$ Motor Generator Set CBP-21864 $9-1/8 \times 30 \times 7-3/4$

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shipboard.

INSTALLATION: Shipborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-23; AN/VRC-4; BC-314, -344, -349, -453, -779; MBS; R-62/PR, -96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -388/URR; RAK; RAL; RAS; RBA; RBB; RBH; RBL; RBM; RCH; RDF; SCR-177; ARC Type 12; National HRO-50.

## **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 0.355 - 0.50.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw.

POWER OUT PUT: 30 w into a 750 uuf, 4 ohm antenna.

POWER REQUIREMENTS: 460 w, 115 v, dc; or 540 w, 12 v, dc (consisting of one BA-801 and one BA-802, 256-ampere-hour storage battery).

## PHYSICAL CHARACTERISTICS

Emergency Radio Telegraph Transmitter TDK measures 20-1/8 x 15-1/8 x 7-1/2 inches.

CONFIDENTIAL

732



STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

## AN/TCA-1, TCC-13, TRA-10

MULTIPLEXER GROUP; MULTIPLEXER SET; RESTORER GROUP, PULSE FORM



Multiplexer Group AN/TCA-1, Multiplexer Set AN/TCC-13 (shown above), and Pulse Form Restorer Group AN/TRA-10 are used as drop-and-insert terminals, terminal sets, and pulse form restorers, respectively, in 23- or 45-channel two-way microwave radio-relay systems.

Multiplexer Set AN/TCC-13 is operated in pairs, one at each end of the system, to combine 23 independent voice-frequency channels into a common video signal for transmission over a single rf carrier.

Multiplexer Group AN/TCA-1 provides eight independent voice-frequency channels at a repeater station. It is limited to a system using the AN/TCC-13.

Pulse Form Restorer Group AN/TRA-10 reshapes the 23- or 45-channel pulse train received from radio receiving equipment into a standard wave shape before feeding the transmitter at a relay station in a microwave radio-relay system.

Multiplexer Set AN/TCC-13 can be used only with a manual switchboard and can be operated on a two-wire or four-wire basis for each of 23 standard telephone channels.

AN/TCA-1, TCC-13, TRA-10

MULTIPLEXER GROUP; MULTIPLEXER SET; RESTORER GROUP, PULSE FORM INSTRUCTION LITERATURE: TM 11-2141

USING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956

#### MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
	For AN/TCA-1:		
1	Control-Monitor C-1151/TC	19 x 19 x 10½	
2	Control, Remote Switching C-1509/TC	4 <sup>1</sup> ⁄ <sub>2</sub> x 2 <sup>3</sup> ⁄ <sub>4</sub> x 5 <sup>1</sup> ⁄ <sub>2</sub>	
1	Regulator, Voltage CN–236/G	23 x 17½ x 19½	215
16	Modem, Telephone MD–179/TC	16 x 2½ x 8½	5.5
1	Power Supply PP-691/G	19 x 19 x 12	123
1	Restorer, Pulse Form TD-68/G	22¾ x 19 x 155⁄8	
	For AN/TCC-13:		
1	Control-Monitor C-1151/TC	19 x 19 x 10½	
2	Control, Remote Switching C-1509/TC	4½ x 2¾ x 5½	
1	Regulator, Voltage CN–236/G	23 x 17½ x 19½	215
24	Modem, Telephone MD–179/TC	16 x 2½ x 8½	5.5
1	Power Supply PP-691/G	19 x 19 x 12	123
1	Multiplexer TD-60/TCC-13	19 x 19 x 8¾	
	For AN/TRA-10:		
1	Control-Monitor C–1151/TC	19 x 19 x 10½	
2	Control, Remote Switching C-1509/TC	41⁄2 x 23⁄4 x 51⁄2	
1	Regulator, Voltage CN–236/G	23 x 17½ x 19½	215
4	Modem, Telephone MD–179/TC	16 x 2½ x 8½	5.5
1	Power Supply PP-691/G	19 x 19 x 12	123
1	Restorer, Pulse Form TD-68/G	22¾ x 19 x 1558	
	(For complete list of components, see appro	priate supply manuals.)	

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Corps and higher headquarters. INSTALLATION: Ground, transportable. MAXIMUM SYSTEM LENGTH: Extended.

#### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Radio Set AN/TRC-29.
FACILITIES AFFORDED: 2 chan (TRA-10); 8 chan (TCA-1); 23 chan (TCC-13).
FREQUENCY: Modulating Bandwidth: 300 to 3,500 cy. Signaling: 20 cy. Test: 1,000 cy.
TYPE MODULATION: Pulse pos; time div multiplexing.
TYPE RINGING: 20 cy.
POWER REQUIREMENTS: 785 w (TRA-10), 1.1 kw (TCA-1, TCC-13), 115/230 v, 1 ph ac.

732b

## PHYSICAL CHARACTERISTICS

• •

		TOTAL	TOTAL		
	DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
	EQUIPMENT (INSTALLED)	(Ib)	(cu ft)	TONS	PACKAGES
NET:					
AN/TCA-1	26½ × 27 × 60 (ea rack)	1,264	55.1	1.4	
AN/TCC-13	26½ x 27 x 60 (ea rack)	1,284	55.1	1.4	
AN/TRA-10	26½ x 27 x 60	810	30.2	.8	
DOMESTIC PACK:					
EXPORT PACK:					
AN/TCA-1:		2,576	159.5	4	6
AN/TCC-13:		2,596	159.5	4	6
AN/TRA-10:		1,746	98.7	2.5	5



JANAP 161

UH

AN/TCA-TYPE

RADIO-LINE TERMINAL EQUIPMENT

STATUS: Limited Standard	
CLASSIFICATION OF EQUIPMENT : Unclassifi	ed A
USING SERVICE: Navy	SERVICE TYPE NUMBER:
DATE OF THIS SHEET: 29 May 52	RADIO-LIN



Radio-Line Terminal Equipment UH is control equipment used for a radio relay link. It separates the transmitting and receiving paths to the radio transmitter and receiver when a two-wire line is used for connection to a line terminal and provides a means of adjusting the levels to the required values in either two- or four-wire operation. It is used as a component of Portable Carrier Control System UF.

Telephone communication between rad io line terminals (over the radio link) is possible but interrupts telegraph service. This equipment has two separate channels, one for passing the higher circuit frequencies and one for passing the lower circuit frequencies.

CONFIDENTIAL

733

AN/	ΤCA-ΤΥΡΕ	INSTRUCTION LITERATURE: NavShips 900,223 CLASSIFICATION OF EQUIPMENT: Unclassified
UH	SERVICE TYPE NUMB	ER USING SERVICE : Navy
RADIO-LIN	E TERMINAL EQUIPMENT	DATE OF THIS SHEET: 29 May 52
	MAJOR COM	PONENTS
QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

2 Control Unit CW-23427 Not Available Telephone Set Unit CW-51068 2

Cabinet CW-10332 2

CONSIDENTIAL

> $20 \times 2 \cdot \frac{1}{2} \times 7$ 24-1/4 x 17-1/8 x 23-7/8

Not Available ... ...

JANAP 161

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore stations.

INSTALLATION: Ground transportable.

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

## **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Between UH and UG, two- or four-wire line; between UH and radio link equipment, two-wire line.

FREQUENCY: 500 to 2,050 cps in two groups: Low group - 500 to 1,235 cps. High group - 1,235 to 2,050 cps.

TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 15 w, 103 - 126 or 207 - 253 v, 50/60 cyc, 1 phase ac (per cabinet).

## PHYSICAL CHARACTERISTICS

Radio-Line Terminal Equipment UH measures 24-1/4 x 17-1/8 x 23-7/8 inches, net weight 326 pounds, volume 11-1/4 cu ft. Packed for domestic shipment: total weight 746 pounds, total volume 27 cu ft, 0.675 ship ton.

#### CONFIDENTIAL

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 15 June 1956



Telephone Terminals AN/TCC-3 and AN/TCC-23 are four-channel carrier telephone terminal sets used to provide four traffic channels and one order-wire channel over loaded spiral-four cable, or equivalent wire facilities; or to carry a single wide-band special service channel.

The AN/TCC-3 consists essentially of a telephone modem unit and an amplifier power supply. The AN/TCC-23 is composed of the AN/TCC-3 plus two power units (one spare) and accessory items.

Systems using this equipment may include such units as Telephone Repeaters AN/TCC-5 and can be operated with Radio Sets AN/GRC-10, AN/TRC-1, AN/TRC-8, and AN/TRC-24.

TERMINAL, TELEPHONE

AN/TCC-3, -23

## AN/TCC-3, -23

TERMINAL, TELEPHONE

INSTRUCTION LITERATURE: TM 11-2142

USING SERVICE: USA. USAF

DATE OF THIS SHEET: 15 June 1956

#### MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
	For AN/TCC-3:		
1	Amplifier-Power Supply AM-682/TCC-3	91/8 x 181/16 x 205/8	68 or 73
1	Modem, Telephone TA-219/U For AN/TCC-23:	171/16 x 181/16 x 205/8	103
1	Terminal, Telephone AN/TCC-3		
2	Power Unit PE-75	24½ × 19 × 36	330
	(For complete list of components, see a	ppropriate supply manuals.)	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters. INSTALLATION: Ground, transportable. MAXIMUM SYSTEM LENGTH: 25 (100 mi w/AN/TCC-5).

#### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four cable (unloaded) or four-wire facilities. FACILITIES AFFORDED: 4 traffic chan plus 1 order wire chan or 1 wide-band chan; monitoring and talking on ea chan.

FREQUENCY:

Channel 1:	8 kc.
Channel 2:	12 kc.
Channel 3:	16 kc.
Channel 4:	20 kc.
FREQUENCY BA	NDS:
Order Wire:	300 to 3,100 cy.
Channel 1:	4,500 to 7,700 cy.
Channel 2:	8,500 to 11,700 cy.
Channel 3:	12,500 to 15,700 cy
Channel 4:	16,000 to 19,700 cy

TYPE MODULATION: Am (A3a).

TYPE RINGING: 1,600 cy.

POWER REQUIREMENTS: 125 w, 115/230 v, 50/60 cy ac.

cy. cy.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES	
NET:	26 <sup>3</sup> / <sub>16</sub> x 18 <sup>1</sup> / <sub>16</sub> x 20 <sup>5</sup> / <sub>8</sub>	176 or 456.5	5.7			
DOMESTIC PACK:						
EXPORT PACK:						

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 18 June 1956

## AN/TCC-4, -20

TERMINAL, TELEGRAPH

<image><image>

Telegraph Terminals AN/TCC-4 and AN/TCC-20 are used for high-speed frequency-shift, voicefrequency, carrier telegraph communication over two-wire or four-wire systems.

These terminal sets are composed of different arrangements of the same basic operating components to provide 4, 8, or 16 communication channels over systems composed of open-wire, spiral-four cable, carrier telephone, and/or radio links in such systems, or a combination of such facilities.

They are used in point-to-point, trunk circuit, telegraph-through-telephone-channel, and telegraph-through-radio-link systems.

Different types of communication systems can be accommodated by varying the terminal arrangements and interconnecting facilities of this equipment.

AN/TCC-4, -20

TERMINAL, TELEGRAPH

INSTRUCTION LITERATURE: TM 11-2242

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 18 June 1956

## MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)	
	Telegraph Terminal Group TH-13/Tª	167⁄8 x 181∕8 x 205⁄8	104	
	Modem, Telegraph TH-14/T <sup>a</sup>	9 x 18 <sup>1</sup> / <sub>8</sub> x 20 <sup>5</sup> / <sub>8</sub>	49	
	Telegraph Modem Assembly TH-15/T <sup>a</sup>	82		
	(For complete list of components, see appropriate supply manuals.)			
	<sup>a</sup> Quantity depends on type of system.			

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters.

**INSTALLATION:** Ground, transportable.

MAXIMUM SYSTEM LENGTH: Extended.

### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Teletypewriter at each term., Telegraph Terminal TH-5/TG, and interconnecting facilities, depending on type sys desired.

FACILITIES AFFORDED: 4-chan 2-wire, 4-chan 4-wire, 8-chan 2-wire, 8-chan 4-wire, 16-chan 4-wire (TCC-4); 4-chan 2-wire, 4-chan 4-wire, 8-chan 4-wire (TCC-20).

FREQUENCY: 425 to 2,975 cy (w/TH-14/T). 425 to 1,615 cy (w/o TH-14/T).

TYPE MODULATION: Fsk.

TYPE RINGING: 20 cy.

POWER REQUIREMENTS: 115/230 v, 1 ph ac.

#### **PHYSICAL CHARACTERISTICS**

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	•				
DOMESTIC PACK:					
EXPORT PACK:		495	22.7	.6	3
	734d			(	Change No. 1

STATUS: Std

0

CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA

## AN/TCC-5, -22

**REPEATER, TELEPHONE** 

DATE OF THIS SHEET: 18 June 1956



Telephone Repeater AN/TCC-5 is a four-wire carrier telephone repeating equipment specifically designed for use at intermediate points of a system terminated by Telephone Terminal AN/TCC-3 to permit the addition of spiral-four cable sections within a system. It may also be operated with suitable radio terminal equipment in a radio link in such a system.

This equipment consists of a single major operating component that has its own power supply and includes provisions for ringing, monitoring, and connection facilities to the order-wire channel of the system.

Telephone Repeater AN/TCC-22 is composed of the AN/TCC-5 plus a power unit and accessory items.

## AN/TCC-5, -22

**REPEATER**, **TELEPHONE** 

INSTRUCTION LITERATURE: TM 11-2136

USING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
	For AN/TCC-22:		
1	Repeater, Telephone AN/TCC–5	12¾6 x 18¼6 x 205⁄8	86
1	Junction Box J-85/G	$4\frac{1}{8} \times 4\frac{3}{8} \times 5\frac{1}{2}$	8
1	Junction Box JB-110	2¼ × 4½ × 12¼	8.5
1	Ground Rod MX–148/G	<b>72 lg x ¾ dia</b>	4
2	Power Unit PE-214-B	14 x 18½ x 10	40

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Ground, fixed.

MAXIMUM SYSTEM LENGTH: 25 mi (ea rep); 100 mi (max).

### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four sys composed of Cable Assemblies CX-1065/G, w/Telephone Loading Coil Assemblies CU-260/G.

FACILITIES AFFORDED: Four message chan plus order-wire chan (both directions).

**FREQUENCY:** 

Carrier Channels: 4,500 to 19,700 cy. Order Wire: 300 to 3,100 cy. Order-Wire Signaling Circuit: 1,600 cy.

TYPE RINGING: Ringer-oscillator.

POWER REQUIREMENTS: 115 or 230 v gc.

#### **PHYSICAL CHARACTERISTICS**

		TOTAL	TOTAL			
	DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.	
	EQUIPMENT (INSTALLED)	(lb)	(cu ft)	TONS	PACKAGES	
NET:						
AN/TCC-5	12¾6 × 205⁄8 × 18¼6	86	2.6			
DOMESTIC PACK:				a.)		
EXPORT PACK:						
AN/TCC-5		150	6.8			
	734 <del>f</del>	100		C	Change No. I	

AN/TCC-7

TERMINAL. TELEPHONE

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956



Telephone Terminal AN/TCC-7 is used in a 12-channel carrier telephone facility composed of a single nonloaded spiral-four cable and/or radio-relay links of the system. Such a system includes attended Telephone Repeater AN/TCC-8 and unattended Telephone Repeater AN/TCC-11 to provide two-way transmission of 12 voice-frequency message channels and one order-wire circuit.

This equipment consists of an amplifier, a receiver-transmitter test set group, two power supplies, four telephone modems, and a telephone carrier frequency supply.

Radio equipment, such as Radio Set AN/TRC-24, may be inserted as a radio-relay link in the transmission path of the system.

AN/TCC-7

**TERMINAL, TELEPHONE** 

INSTRUCTION LITERATURE: TM 11-2139

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 18 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT	(lb)
1	Amplifier-Pilot Regulator AM–707/TCC–7	17 <sup>1</sup> / <sub>16</sub> × 18 <sup>1</sup> / <sub>16</sub> × 20 <sup>5</sup> / <sub>8</sub>	108	
1	Receiver-Transmitter-Test Set Group OA–443/TCC–7	171/16 × 181/16 × 205/8	83	
1	Power Supply PP-826/U	17½6 × 18½6 × 205⁄8	103	
1	Power Supply PP-827/U	17½6 × 18½6 × 205⁄8	100	
	(For complete list of components, see app	propriate supply manuals.)		

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Corps or higher headquarters.

INSTALLATION: Ground, fixed.

MAXIMUM SYSTEM LENGTH: 200 mi.

#### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Nonloaded spiral-four cable, Telephone Repeater AN/ TCC-8, Telephone Repeater AN/TCC-11, and/or rad links.

FACILITIES AFFORDED: 12 voice freq message chan; 1 order-wire chan; monitoring and ringing facilities on the order-wire chan.

FREQUENCY: .3 to 99 kc (over spiral-four cable); 12 to 60 kc (over spiral-four cable and/or rad links).

TYPE MODULATION: Am.

TYPE RINGING: 1,600 cy.

POWER REQUIREMENTS: 710 w, 115/230 v, 49/65 cy ac.

#### **PHYSICAL CHARACTERISTICS**

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		746	21.8	.5	
DOMESTIC PACK:					
EXPORT PACK:		1,258	51.2	1.3	9

STATUS: Std

C

CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 18 June 1956

## AN/TCC-8, -21

**REPEATER, TELEPHONE** 



Telephone Repeater AN/TCC-8 is the attended repeater element of a 12-channel carrier telephone system that includes Telephone Terminal AN/TCC-7 and unattended Telephone Repeater AN/TCC-11. Such a system can be operated over nonloaded spiral-four cable and/or radio links for distances up to 200 miles.

This equipment consists of an amplifier, a receiver-transmitter test set group, and two power supplies that also furnish power to one, two, or three unattended repeaters located in the system. A voicefrequency channel and a ringing signal are provided for communication between attended points of the system.

Telephone Repeater AN/TCC-21 is composed essentially of one AN/TCC-8 plus a power unit and accessories.

## AN/TCC-8, -21

**REPEATER, TELEPHONE** 

INSTRUCTION LITERATURE: TM 11-2140

USING SERVICE: USA

DATE OF THIS SHEET: 18 June 1956

#### MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (I	b)
1	Amplifier-Pilot Regulator AM–708/TCC–8	171/16 x 181/16 x 205/8	118	
1	Receiver-Transmitter-Test Set Group OA–446/TCC–8	171/16 × 181/16 × 505/8	87	
2	Power Unit PE–75–( ) (–21)	24½ × 19 × 36	330	
2	Power Supply PP-826/U	171/16 x 181/16 x 205/8	103	
1	Power Supply PP-827/U	17¼6 × 18¼6 × 205⁄8	100	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Corps and higher headquarters. INSTALLATION: Ground, fixed. MAXIMUM SYSTEM LENGTH: 200 mi.

#### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Single nonloaded spiral-four cable, Telephone Terminal AN/TCC-7, Telephone Repeater AN/TCC-11, and/or radio links.

FACILITIES AFFORDED: 12 message chan and an order-wire chan in both directions.

FREQUENCY: 12 to 60 kc (pilot freq: 68 kc; test freq: 83, 91, 99 kc).

**ORDER-WIRE CHANNEL:** 

Frequency Range: 300 to 1,700 cy (line). Signaling Frequency: 1,600 cy.

TYPE RINGING: Ringer-oscillator.

POWER REQUIREMENTS: 115/230 v ac.

#### **PHYSICAL CHARACTERISTICS**

		TOTAL	TOTAL		
	DIMENSIONS (IN INCHES) OF	WEIGHT	VOLUME	SHIP	TOTAL NO.
	EQUIPMENT (INSTALLED)	(Ib)	(cu ft)	TONS	PACKAGES
NET:					
AN/TCC-8		511	18.4		
AN/TCC-21		1,171	39.4	.99	
DOMESTIC PACK:					
EXPORT PACK:					
AN/TCC-8		831	41.5	1	5



#### STATUS:

C

CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 27 June 1956

# AN/TCC-11

**REPEATER, TELEPHONE** 



Telephone Repeater AN/TCC-11 is a four-wire, unattended, carrier-telephone repeater. It is used to extend the length of a 12-channel spiral-four carrier-telephone system that uses Telephone Terminals AN/TCC-7 and attended Telephone Repeaters AN/TCC-8. The extension obtained for each AN/TCC-11 added to the system is  $5\frac{3}{4}$  miles.

This equipment contains facilities for amplifying, equalizing, and regulating the two-way transmission of a band of frequencies from 12 to 99 kc. This band contains 12 carrier-frequency message channels, a 68-kc pilot frequency, and three fault-finding frequencies of 83 kc, 91 kc, and 99 kc. Amplification is supplied to overcome cable loss at the various frequencies transmitted; regulation is applied to correct for changes in cable loss that occur with changes in temperature.

In addition, a means of ringing, talking, and listening at attended points is provided over an unamplified voice-frequency order-wire circuit.

AN/TCC-11

**REPEATER, TELEPHONE** 

INSTRUCTION LITERATURE: TM 11-2148

USING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

#### **MAJOR COMPONENTS**

QTY

DIMENSIONS (in.) INSTALLED WEIGHT (Ib)

(Equipment consists of a single major operating component.)

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters.

**INSTALLATION:** Ground, transportable.

MAXIMUM SYSTEM LENGTH: 5.75 mi between repeaters.

NAME OF COMPONENT

### **TECHNICAL CHARACTERISTICS**

NUMBER AND TYPE OF FACILITIES: Extends the length of 12-chan carr-tel sys that uses Telephone Terminals AN/TCC-7 and Telephone Repeaters AN/TCC-8 at the attended pt.

POWER REQUIREMENTS: 148 v, .1 amp dc (cur reg).

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	28¼ x 10	75	1.3		
DOMESTIC PACK:					
EXPORT PACK:		130	4.4		1

#### STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 19 June 1955

## AN/TCC-14

TERMINAL, TELEGRAPH-TELEPHONE



Telegraph-Telephone Terminal AN/TCC-14 is an assemblage of three separate operating components that permits simultaneous transmission of telegraph pulses and speech.

This equipment can be operated in four different types of systems: point-to-point, networks connecting three or more teletypewriter stations, switched systems serving several teletypewriter stations, and push-to-talk remote control radio applications.

It is used in systems composed of two-wire, four-wire, carrier or voice-frequency telegraph facilities, and includes components enabling normal telephone ringing and supervision required for both local battery and common battery switchboards.

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**JANAP 161** 

## AN/TCC-14

TERMINAL, TELEGRAPH-TELEPHONE

INSTRUCTION LITERATURE: TM 11-2239

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

#### **MAJOR COMPONENTS**

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (Ib)
1	Assembly, Electrical Filter F–98/U	10 x 8 <sup>3</sup> / <sub>4</sub> x 6 <sup>1</sup> / <sub>2</sub>	25.5
1	Converter, Telegraph-Telephone Signal TA–182/U	11 x 10½ x 7½	15
1	Terminal, Telegraph TH–5/TG	11 x 10½ x 7½	18.5

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Ground, fixed.

MAXIMUM SYSTEM LENGTH:

## **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Two-wire, four-wire, voice freq, carrier, and/or radio remote cont.

FACILITIES AFFORDED: Alt tig tel; simultaneous tig tel; speech plus half-duplex, push-to-talk radio; and/or tig only.

#### FREQUENCY:

Telegraph Terminal: Mark, 1,325 cy; space, 1,225 cy; Electrical Filter Assembly: 1,275 cy (midfreq).

TYPE MODULATION: Fsk.

TYPE RINGING: 20 cy.

POWER REQUIREMENTS:  $115 v \pm 10\%$ , 50/60 cy ac.

### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		58			
DOMESTIC PACK:		68.5	2.2		3
EXPORT PACK:		88.5	3.1		1

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

#### JANAP 161

CF-1

AN/TCC-TYPE

TELEPHONE TERMINAL



Telephone Terminal CF-1 (carrier) is a transportable, four-channel, carrier telephone terminal equipment used in systems composed of spiral-four cable or equivalent facilities. It is used for long distance communication in systems serving division and higher headquarters.

This equipment consists of a single bay of apparatus which provides one voice-frequency, plus three carrier-frequency channels.

It requires additional equipment for ringing. It may used with other carrier terminal equipment to provide telephone and telegraph traffic handling, and transmission facilities. Distances up to about 100 miles are possible with repeaters at 25-mile intervals, over cable on the ground or in the air, and up to 400 miles over buried cable. Operation over nonrepeated circuits is possible up to 45 miles.

This terminal is the principal operating component of Telephone Terminal Set TC-21.

It operates from 115/230-v, a-c power and in emergencies can be operated from a 12-v storage battery.

CONFIDENTIAL

SERVICE TYPE NUMBER:

ORIGINAL

## CONFIDENTIAL C-TYPE

TELEPHONE TERMINAL

CF-1

## MAJOR COMPONENTS

NAME OF COMPONENT QUANT

DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

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

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division, corps, army and higher headquarters.

INSTALLATION: Ground, transportable. Operates in fixed or semifixed installations.

MAXIMUM SYSTEM LENGTH: 400 miles.

CAN COMMUNICATE WITH: Repeater, terminal, central office, related station equipment, and subsidiary apparatus which operates in the same connecting facility in tactical or cable systems.

## **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four cable or facility of equivalent quality.

FACILITIES AFFORDED: One v-f plus 3 carrier frequency channels. CF-1-A;-two-wire termination. CF-1-B;-two-wire and four-wire termination.

FREQUENCY: 200 to 12,000 cps; approximate band spacing of 2,600 cps.

TYPE OF MODULATION: Am (nominal).

TYPE RINGING: Voice frequency by means of extra ringing equipment.

POWER REQUIREMENTS: 115/230 v, 50/60 cyc ac; or one 12-v, two 6-v storage batteries in emergencies.

## PHYSICAL CHARACTERISTICS

Telephone Terminal CF-1 measures 66 x 28 x 19 inches, net weight 475 pounds, volume 20.32 cu ft, 0.5 ship ton. Packed for export shipment: total weight 562 pounds, total volume 32 cu ft, 1.7 ship tons. Shipped in one package.

#### CONFIDENTIAL

INSTRUCTION LITERATURE: TM 11-341 CLASSIFICATION OF EQUIPMENT: Unclassified SERVICE TYPE NUMBER USING SERVICE : Army, Navy DATE OF THIS SHEET: 9 Jan 52

JANAP 161



STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 26 Jan 52

AN/TCC-TYPE SERVICE TYPE NUMBER:

TELEGRAPH TERMINAL

JANAP 161

**CF-2** 



Telegraph Terminal CF-2 is a transportable, four channel, v-f carrier terminal equipment used for two-way transmission of teletypewriter signals in each channel, and which operates over a channel of a carrier-telephone system derived by means of Telephone Terminal CF-1, Repeater CF-3, and associated equipment. It is used in spiral-four cable, or equivalent systems, serving division and higher headquarters.

This equipment consists of panel-mounted apparatus covering four channels, inclosed in a single cabinet; (CF-2-A, not illustrated here, consists of equivalent apparatus arranged in two cabinets but performing the identical service).

It can be installed adjacent to the carrier telephone terminal, but may be operated from a distant point over a two-wire circuit (between carrier telephone and telegraph bays) which has a net loss that does not exceed 8 db; or over any telephone circuit terminating on a two-wire basis (which has the required stability and freedom from interference) and the net loss of which does not exceed 25 db (at 500 - 2,050 cps).

Requires 200 to 250 w of 110-125 or 200-250-v ac.

ONFIDEN	ItAL			JANAP. 161		
AN/TCC-TYPE		INSTRUCTION LITERATURE: TM 11-355 CLASSIFICATION OF EQUIPMENT: Unclassifie				
CF-2	SERVICE TYPE	NUMBER	ER USING SERVICE : Army, Navy			
TELEGR	TELEGRAPH TERMINAL		DATE OF THIS SHEET: 26 Jan 52			
	MAJOR	COMPONI	INTS			
QUANT	NAME OF COMPONENT	DIMENSI	ONS (IN) INSTALLED	WEIGHT (LBS)		
1	Telegraph Terminal CF-2-A (1 Bay of equipment) or	66 × 27-1	/2 × 19	530		

66 × 19 × 27-1/2

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Telegraph (teletypewriter) carrier terminal facility at division and higher headquarters.

INSTALLATION: Ground, transportable, in fixed locations.

Telegraph Terminal CF-2-B

(2 Bays of equipment)

1

MAXIMUM SYSTEM LENGTH: 100 miles or more; depending upon quality of facility.

CAN COMMUNICATE WITH: Repeater, terminal, central-office and related station equipment and subsidiary apparatus, which operates in the same connecting facility in tactical wire or cable systems.

## **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four cable or equivalent quality facilities.

FACILITIES AFFORDED: Two-wire or four-wire teletypewriter communication; four teletypewriter two-way channels.

FREQUENCY: 500 - 2,050 cps, 8 channels spaced 170 cps apart.

TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 200 to 250 w, 100 - 125 v, or 200 - 250 v, 50/60 cyc, ac.

## PHYSICAL CHARACTERISTICS

Telegraph Terminal CF-2-A weighs 1,060 pounds net, volume 40.6 cu ft, 1 ship ton. Packed for export shipment: total weight 1,450 pounds, total volume 84 cu ft, 2 ship tons. Shipped in 2 packages. Telegraph Terminal CF-2-B weighs 530 pounds net, volume 20.3 cu ft, 0.5 ship ton. Packed for export shipment: total weight 760 pounds, total volume 42 cu ft, 1 ship ton. Shipped in 1 package.

ORIGINAL

560

STATUS: Standard	
CLASSIFICATION OF EQUIPMENT : Unclassified	ΑΝ/ΙCC-ΤΥΡΙ
USING SERVICE : Army	SERVICE TYPE NUMBER: CF-3
DATE OF THIS SHEET: 9 Jan 52	REPEATER



Repeater CF-3 is a carrier repeater equipment used to extend the range of telephone and telegraph carrier facilities using spiral-four or equivalent wire or cable in systems serving division, corps, or higher headquarters.

Equipment consists essentially of two one-way amplifiers and provides for deriving two d-c groundreturn simplex circuits from the two associated cable pairs in each direction. One such circuit is used for signaling, the other may be used for d-c telegraph. Transmission in direction A-B is over one pair; B-A is over the other pair. Channel 1 uses the v-f band; channels 2, 3, and 4 are in the carrier-frequency range. Each telephone channel uses the same frequency in both directions.

The CF-3 is the primary operating component of Repeater Set TC-23 and can be storage battery operated in emergencies.

REPEATER

JANAP 161



INSTRUCTION LITERATURE: TM 11-341 TM 11-4403 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 9 Jan 52

### **MAJOR COMPONENTS**

QUANT

IT NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

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

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Intermediate points in facilities serving division and higher headquarters.

INSTALLATION: Ground; transportable. Operates in fixed locations.

MAXIMUM SYSTEM LENGTH: At 25-mile intervals in a system.

CAN COMMUNICATE WITH: Repeater, terminal, central office, and related station equipment and subsidiary apparatus which operate in the same connecting facility in tactical or cable systems.

## **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four or equivalent quality facilities.

FACILITIES AFFORDED: Four-wire telephone and telegraph.

FREQUENCY: 200 to 12,000 cyc.

TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 30 w 115/230 v, 50/60 cyc ac or 3.75 amp from 12-v storage battery in emergencies.

## PHYSICAL CHARACTERISTICS

Repeater CF-3 measures 28 x 14 x 34 inches, net weight 225 pounds, volume 9 cu ft. Packed for export shipment: total weight 340 pounds, total volume 17.9 cu ft. Shipped in 1 package.

CONFIDENTIAL

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Dec 51

SERVICE TYPE NUMBER:

743

CF-4 CONVERTER

AN/TCC-TYPE



Converter CF-4 is carrier-converter equipment, designed to be used at junctions of open wire and Telephone Terminal CF-1, or spiral-four cable, to change four-wire operation from the terminal (or the cable) to effective two-wire operation over the open wire pair. It is used in systems serving corps or higher headquarters.

This equipment consists of a single bay, or cabinet of apparatus which provides equivalent four-wire operation in direction B-A by maintaining the frequency of that channel in the 0.2 to 11.6 kc band, and by raising transmission in the A-B direction to the 20.85 to 32.25 kc band.

It is the primary operating component of Converter Set TC-33 and can be used at either terminal A or B, in systems using Repeater CF-5 at intermediate points to extend the operating range of an open wire system. It can also be used in conjunction with Repeater CF-3 at junctions between four-wire and two-wire facilities.

It operates from 115/230-v ac, or a 12-v storage battery.

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ORIGINAL

## PHYSICAL CHARACTERISTICS

Converter CF-4 measures 49-1/2 × 24 × 17 inches, net weight 280 pounds, volume 11.6 cu ft.

# **ΤϹϹ**-ΤΥΡΕ

SERVICE TYPE NUMBER

CONVERTER

CONFIDENTIAL

CF.4

#### TM 11-2008, TM 11-4404 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Jan 51

## MAJOR COMPONENTS

QUANT NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

INSTRUCTION LITERATURE:

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

## **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: At corps, army, or higher headquarters.

- INSTALLATION: At four-wire, two-wire junction points of a tactical open wire or spiral-four cable system.
- MAXIMUM SYSTEM LENGTH: Six-db repeatered circuits on spiral-four cable (aerial or on the ground) 150 miles, (buried):- 400 miles.

CAN COMMUNICATE WITH: Repeater, terminal, central office, related station equipment, and subsidiary apparatus which operates in the same connecting facility.

## **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Open wire or equal.

FACILITIES AFFORDED: Equivalent four-wire operation.

FREQUENCY: B-A direction (as converter B in a system) 0.2 to 11.6 kc. A-B direction (as converter A in a system) 20.85 to 32.25 kc.

TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 30 w, 115/230 v, 50/60 cyc, ac; and 12 v, dc (at 3.5 amp) from a storage battery.

STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Unclassified USING SERVICE : Army

DATE OF THIS SHEET: 23 Jan 52

## JANAP 161

AN/TCC-TYPE



Repeater CF-5 is a carrier repeater equipment used to extend the transmission range of open wire carrier systems in which Telephone Terminal CF-1, Converter CF-4, and related equipment are operated. It is used at intermediate points of communication systems serving division and higher headquarters.

This equipment consists essentially of two independent amplifiers, and related alarm, and signaling circuits arranged on relay rack panels and housed in a vertical cabinet as a single bay of equipment. Can be used in systems in which Converter CF-4 converts four-wire transmission to two-wire transmission, over a single open wire pair.

COMPRESENTIAL

SERVICE TYPE NUMBER:

CONTRENTAL		JANAP 161
AN/TCC-	ТҮРЕ	INSTRUCTION LITERATURE: TM 11-2008, -4405 CLASSIFICATION OF EQUIPMENT: Unclassified
CE-5	SERVICE TYPE NUMBER	USING SERVICE : Army

REPEATER

DATE OF THIS SHEET: 23 Jan 52

## **MAJOR COMPONENTS**

QUANT

NAME OF COMPONENT

DIMENSIONS (IN) INSTALLED

WEIGHT (LBS)

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

## OPERATIONAL CHARACTERISTICS

TACTICAL USE: In open wire lines at division or higher headquarters.

INSTALLATION: Ground, transportable, operates in fixed locations.

MAXIMUM SYSTEM LENGTH: 150 miles dependent upon quality of connecting facility.

CAN COMMUNICATE WITH: Repeater, terminal, central office, and related station equipment and subsidiary apparatus which operates in the same connecting facility in tactical wire or cable systems.

## **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Open-wire or equivalent system facilities.

FACILITIES AFFORDED: Two-wire, intermediate repeater range amplification.

FREQUENCY: A-B direction, 20,850 and 32,250 cps; B-A direction, 200 to 11,600 cps.

TYPE OF MODULATION: Am.

TYPE RINGING: Vf.

POWER REQUIREMENTS: 105 - 125, or 210 - 250 v, 50/60 cyc ac, 45 w, (4.5 amp.) 12 v, dc from storage battery.

## PHYSICAL CHARACTERISTICS

Repeater CF-5 weighs 380 pounds net. Packed for domestic shipment: total weight 450 pounds, total volume 22 cu ft, 1 ship ton. Packed for export shipment: total weight 690 pounds, total volume 40 pounds, 1 ship ton. Shipped in 1 package both domestic and export.

CONFIDENTIAL



STATUS: L/Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA DATE OF THIS SHEET: 26 June 1956

## AN/TCC--TYPE

SERVICE TYPE NUMBER: CF-6

**TELEGRAPH TERMINAL** 

#### NO PHOTOGRAPH AVAILABLE

Telegraph Terminal CF-6 is a portable unit providing two channels of voice-frequency carrier telegraph. It may be used separately or in combination with Telegraph Terminal CF-2-( ).

A system using Telegraph Terminals CF-2-( ) and CF-6 is designed to operate over one channel of a four-channel telephone facility using Telephone Terminal CF-1-A. Such a system provides six two-way telegraph circuits.

In four-wire operation, transmission in each direction is over a separate line pair and each of the 12 channel frequencies can be transmitted in both directions. Eight of these 12 frequencies are provided by Telegraph Terminal CF-2-() and four by Telegraph Terminal CF-6. Two each of the CF-2-() and the CF-6 are required at each end of the carrier line.

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## AN/TCC-TYPE

JANAP 161

INSTRUCTION LITERATURE: TM 11-2009 USING SERVICE: USA DATE OF THIS SHEET: 26 June 1956

CF-6: SERVICE TYPE NUMBER

**TELEGRAPH TERMINAL** 

#### MAJOR COMPONENTS

Sand

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

 (Equipment consists of a single major operating component.)

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters.

**INSTALLATION:** Ground, transportable.

### TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Normally u/w Telegraph Terminal CF-2-( ) (carr) and Telephone Terminal CF-1-A (carr).

FACILITIES AFFORDED: Two chan of voice-freq carr tlg.

FREQUENCY: 340 to 2,400 cy spaced 170 cy apart.

**POWER REQUIREMENTS:** 150 w, 115 or 230 v  $\pm 10\%$ , 50/60 cy ac.

### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	49¾ x 24 x 17	400	12		

DOMESTIC PACK:

**EXPORT PACK:** 

STATUS: L/Std CLASSIFICATION OF EQUIPMENT: Unclassified PREPARING SERVICE: USA

DATE OF THIS SHEET: 21 June 1956

## AN/TCC-TYPE

SERVICE TYPE NUMBER: CF-7

CARRIER HYBRID

NO PHOTOGRAPH AVAILABLE

Carrier Hybrid CF-7 is a unit used to connect Telephone Terminal CF-1-A (carrier) or Repeater CF-3-A (carrier), both of which are designed for four-wire operation, to a two-wire line. With this equipment, four two-way telephone circuits can be obtained over a single pair of wires. In addition, two dc ground-return telegraph circuits or one dc signaling circuit and one dc telegraph circuit can be obtained.

This equipment is used primarily with open-wire lines but may also be used on field wire or spiral-four cable.

Four voice-frequency telegraph channels can be made available in place of one of the telephone circuits by applying Telegraph Terminal CF-2-A or CF-2-B (carrier) at the telephone terminals.

This unit is similar to and interchangeable with Hybrid Circuit Network TA-255/TT.

**INSTRUCTION LITERATURE: TM 11-2003** 

DATE OF THIS SHEET: 21 June 1956

USING SERVICE: USA

AN/TCC-TYPE

CF-7: SERVICE TYPE NUMBER

**CARRIER HYBRID** 

#### MAJOR COMPONENTS

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

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

#### **TECHNICAL CHARACTERISTICS**

**TYPE OF SIGNAL:** Voice, dc tlg.

TYPE COMMUNICATION CIRCUITS: Field wire or spiral-four cable.

#### **PHYSICAL CHARACTERISTICS**

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	183/8 × 91/2 × 73/8	48	1		

DOMESTIC PACK:

**EXPORT PACK:** 




JANAP 161

TA-31/U

AN/TCC-TYPE

NETWORK, HYBRID CIRCUIT

STATUS: Std

**CLASSIFICATION OF EQUIPMENT: Unclassified** 

PREPARING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

#### NO PHOTOGRAPH AVAILABLE.

Hybrid Circuit Network TA-31/U is a portable unit that electrically couples two- and four-wire circuits, and permits full-duplex operation in two-wire systems.

This equipment may be used in wire, radio, single- and double-ended, multichannel vf, and point-topoint systems. Provision is made for establishing simplex facilities, signaling, and remote control of radio transmitters. Additional equipment is required in systems used for remote control of radio transmitters, in simplex circuits, and where through signaling is required.

Change No. 1



JANAP 161

# AN/TCC-TYPE

TA-31/U

NETWORK, HYBRID CIRCUIT

INSTRUCTION LITERATURE: TM 11-2144

DATE OF THIS SHEET: 22 June 1956



#### **MAJOR COMPONENTS**

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

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Communications terminals.

INSTALLATION: Ground, fixed station.

MAXIMUM SYSTEM LENGTH:

#### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Two- or four-wire line from comm equip.

FACILITIES AFFORDED: Two- and four-wire lines.

FREQUENCY: 250 to 3,200 cy.

IMPEDANCE: 600 to 4,000 ohms.

#### PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (Ib)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	9 x 11 x 16		.9		
DOMESTIC PACK:		43.5	1.9		1
EXPORT PACK:		70	3.25		1



DATE OF THIS SHEET: 4 Jan 52



Telephone Terminal Set TC-21 is a carrier telephone terminal equipment which provides four v-f channels over a 100-mile spiral-four system, an open wire pair, or a combination of these facilities, for telephone and teletypewriter communication in long-range tactical carrier communication applications.

This equipment consists essentially of Telephone Terminal CF-1 (Carrier), plus rectifier and power unit components and related accessories.

It is usually installed at the terminal of a system in which Repeater Set TC-23 is used at intermediate points to extend the operating range. Also operated in conjunction with Repeater Sets TC-33 and TC-37 in open wire systems. Can also be used in a system in which one channel is transmitted over a radio link.

Operates from 115/230 v ac or, in emergencies, from a 12-v storage battery.

			INSTRUCTION LITERATU	RE: TM 11-341
AN/ICC-ITPE			CLASSIFICATION OF EQUIPM	ENT: Unclassified
TC-21 :SERVICE TYPE NUMBER		NUMBER	USING SERVICE : Army	
TELEPI	HONE TERMINAL SET		DATE OF THIS SHEET : 4	Jan 52
	MAJOR CON	PONENT	S	
QUANT	NAME OF COMPONENT	DIMENSIC	NS (IN) INSTALLED	WEIGHT (LBS)
1	Telephone Terminal CF-1-A or CF-1-B	66 × 28 ×	19	475
2	Power Unit PE-75	36 x 19 x	26	660
1	Rectifier RA-83	14 x 10 x	16	57
2	Dattery DD-35 Telephone FE-8	20 × 14 ×	У ,	10
•		/ × 10 × /		10
	OPERATIONAL C	HARACTI	ERISTICS	
TACTIC	CAL USE: Division or higher headquarters	ō.		
INSTAL	LATION: Ground, fixed or vehicular.			
MAXIMU	JM SYSTEM LENGTH: Is used in 100-mile system, allowable number of repeaters	e spiral-four net loss, wi s.	system. Depends on t refacilities available,	ype of and
CAN CO	OMMUNICATE WITH: Repeater, terminal, operating in the sam	central offic ne facility of	e, carrier, and station r system.	equipment
	TECHNICAL CHA	RACTERI	STICS	
FACILI	TIES REQUIRED FOR TRANSMISSION:	Open wire or	spiral-four cable.	
FACILI	TIES AFFORDED: Two-wire or four-wire bandwidth, 2,600 cps facilities provided.	; four chann per channel	els (one vf, three carrie . Talking and monitori	er); ng
FREQU	ENCY: 200 to 12,000 cps.			
TYPEC	OF MODULATION: Am.			
TYPER	RINGING: Vf (Ringing Equipment EE-101	•A required	at each terminal).	
POWER	REQUIREMENTS: 115/230 v ac, 50/60 c	yc, or a 12-v NDACTEDI	v storage battery (emerg	gency operation).
			51165	
Telepho	one Terminal Set TC-21 weighs 1,312 poun	d <mark>s net.</mark> Vol	ume 46.7 cu ft.	

CONTRACTAL

CONFIDENTIAL

ORIGINAL

JANAP 161

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 13 Feb 52



REPEATER SET



Repeater Set TC-23 is a transportable, four-wire, carrier repeater equipment used at intermediate points in a spiral-four cable carrier facility serving division and higher headquarters.

This equipment consists of the repeater component, a power unit, rectifier, and related accessories. It has facilities for transmitting, testing, and monitoring a v-f channel and for automatic transfer to emergency power supply.

Primary operating component of this equipment is part of Telephone Central Office Set AN/TCC-2 and is composed of repeater apparatus mounted on panels and contained in a wooden case. It is used with Telephone Terminal CF-1.

Operates on 115/230 v ac or 12-v storage battery.

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AN	I/TCC-TYPE	INSTRUCTION LITERATURE: TM 11-341 CLASSIFICATION OF EQUIPMENT: Unclassified
TC-23	:SERVICE	TYPE NUMBER USING SERVICE : Army
REPEATER SET		DATE OF THIS SHEET : 13 Feb 52
	MAJOR	COMPONENTS
QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED WEIGHT (LBS)
1	Repeater CF-3	28 × 14 × 34 225
1	Power Unit PE-214	14-1/8 × 17-3/4 × 12-3/16 57

13 x 7 x 9-3/8 (ea)

 $14 \times 10 \times 16$ 

 $7 \times 6 \times 5 - 1/2$ 

7 x 16 x 7

110

51

8

31

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, communications zone, and zone of interior.

INSTALLATION: Ground; transportable.

**Battery BB-55** 

**Rectifier RA-83** 

**Test Equipment IE-53** 

Tool Equipment TE-123

2

1

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1

CAN COMMUNICATE WITH: Carrier, terminal, central office, and related equipment operating in the same facility or composing the system.

#### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED: Spiral-four cable.

FACILITIES AFFORDED: Two simplexed circuits of the spiral-four transmission line.

POWER REQUIREMENTS: 115/230 v, 50/60 cyc ac or 12-v storage battery.

#### PHYSICAL CHARACTERISTICS

Repeater Set TC-23 weighs 482 pounds net, volume 22.5 cu ft. Packed for export shipment: total weight 1,036 pounds, total volume 35 cu ft, 1 ship ton.

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PF

TC-29

AN/TCC-TY

TELEPHONE REPEATER SET

STATUS: Limited Standard	
CLASSIFICATION OF EQUIPMENT : Unclassifi	ed
USING SERVICE: Army, Air Force	SERVICE TYPE NUMBER:
DATE OF THIS SHEET: 15 Feb 52	



Telephone Repeater Set TC-29 is a portable repeating equipment used at intermediate or terminal points of a field telephone system to extend the transmission range of facilities serving division or higher headquarters.

This equipment consists of two amplifiers contained in a carrying case, two ground rods, and related components. It is designed for simplex operation as terminal equipment and for two-way operation over spiral-four transmission lines when used at intermediate points in a system.

Provides for monitoring and talking in either direction, and/or gain control of each of the two amplifiers, and impedance switching.

Operates from a storage battery or from dry cells which can be contained in the carrying case.

		JANAP IO
ANITOO		INSTRUCTION LITERATURE: TM 11-348
AN/ICC-	- TYPE	CLASSIFICATION OF EQUIPMENT: Unclassified
TC-29	: SERVICE TYPE NUMBER	USING SERVICE : Army, Air Force
TELEPHONE REPEAT	ER SET	DATE OF THIS SHEET: 15 Feb 52

### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Telephone Repeater EE-99-A	14 × 12 × 8	40
1	Telephone EE-8	4 x 8 x 10	10
1	Power Supply PE-204	5-1/2 x 5-3/4 x 6-3/4	10
1	Ground Rod	72 × 1/2 (dia)	4.15
	Accessory Equipment	Not Available	16

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher units.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: Repeater, terminal, or central office equipment operating in field wire or equivalent facilities or systems.

#### **TECHNICAL CHARACTERISTICS**

NUMBER AND TYPE OF FACILITIES: Field wire, open wire, and spiral- four facilities. Simplex and phantom circuit operation, with monitoring and talking in either direction.

POWER REQUIREMENTS: One 12-v storage battery or three Batteries BA-23 and four Batteries BA-36.

#### PHYSICAL CHARACTERISTICS

Telephone Repeater Set TC-29 weighs 80 pounds net.

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CONFIDENTIAL

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#### COMPRESENTIAL

#### STATUS: Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 4 Jan 52

#### SERVICE TYPE NUMBER:

REPEATER SET

AN/TCC-TYPE



Repeater Set TC-37 is a two-wire, four-channel carrier repeater for extending the transmission range over open wire facilities in fixed plant applications at division or higher headquarters.

This equipment consists of Repeater CF-5, power unit and rectifier, and associated items. It is usually operated in conjunction with Converter Set TC-33 and Telephone Terminal Set TC-21.

This system provides four telephone channels, one of which is used for voice-frequency telegraph communication.

Operates on 110/220-v a-c power; it can be operated by a 12-v storage battery in emergencies.

JANAP 161

TC-37

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CONFIDENT	AL	JANAP 161
AN/	ТСС-түре	INSTRUCTION LITERATURE: TM 11-2008 CLASSIFICATION OF EQUIPMENT: Unclassified
TC-37	SERVICE TYP	E NUMBER USING SERVICE : Army
REPEATE	R SET	DATE OF THIS SHEET: 4 Jan 52
	MAJOR	COMPONENTS
QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED WEIGHT (LBS)

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (
1	Repeater CF-5	24 × 19 × 65	380
1	Power Unit PE-214	12-3/16 × 14-1/8 × 17-1/8	56
1	Rectifier RA-83	14 × 10 × 16	57
2	Battery BB-55	26 × 14 × 19	110

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Division and higher headquarters.

#### INSTALLATION: Ground.

CAN COMMUNICATE WITH: Repeater, or terminal carrier terminal equipment and related apparatus operating in the connecting facility or composing the system.

### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-4 cable, or facility of equivalent quality.

FACILITIES AFFORDED: Two-wire, 4 channels.

FREQUENCY: AB direction of transmission, 200-11,600 cps; BA direction of transmission, 20,850-32,250 cps. 2,600 cps channel spacing.

TYPE OF MODULATION: Am (nominal).

POWER REQUIREMENTS: 46 w 110/220 v, 50/60 cyc, ac, or a 12-v storage battery.

### PHYSICAL CHARACTERISTICS

Repeater Set TC-37 packed for export shipment: total weight 942 pounds, total volume 48.1 cu ft, 1.2 ship tons. Shipped in 6 packages.

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Telegraph Terminal TH-1/TCC-1 is a carrier telegraph equipment which provides two-way, v-f telegraph or teletypewriter communication over a portion of the frequency range of a v-f telephone circuit, and is used principally at fixed plant installations at Army and equivalent headquarters.

This equipment consists essentially of three panels of operating apparatus. One of these is called the modem unit, the second is the monitoring unit, and the third is a voice-frequency ringer panel. The monitoring unit panel is mounted above the modem unit panel in a wooden cabinet; the ringer panel is mounted at the top rear of the cabinet.

It can be used to provide speech-plus-duplex operation in connection with line facilities which may be open wire, cable, field wire, repeatered lines, or carrier facilities. Filter F-2/GG (not a component of this equipment) is required at intermediate points in the telephone circuit to separate telephone and telegraph circuit frequencies.

It operates from a 12-v storage battery or from 100 - 130 or 200 - 250 -v ac.

JANAP 161

TELEGRAPH TERMINAL

#### **INSTRUCTION LITERATURE:** TM 11-2206 CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE : Army, Navy DATE OF THIS SHEET: 30 Jun 52

### MAJOR COMPONENTS

QUANT NAME OF COMPONENT **DIMENSIONS (IN) INSTALLED** WEIGHT (LBS)

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

### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Army and equivalent headquarters.

INSTALLATION: Ground, fixed plant.

MAXIMUM SYSTEM LENGTH: 620 miles (using 104-mil hd copper open wire).

CAN COMMUNICATE WITH: Repeater, terminal, and related apparatus operating in the connecting facility and composing the system.

### TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Open wire, field wire, repeatered lines; carrier facilities of not more than 50-db attenuation.

FACILITIES AFFORDED: Speech, plus duplex.

FREQUENCY: Telephone Circuit: - 200 to 3,000 cps. Telegraph Circuit: - 1,500 to 2,000 cps.

TYPE OF MODULATION: Am.

TYPE RINGING: v-f; 20-cyc (1,000 or 500-cyc signals interrupted at 19 cyc).

POWER REQUIREMENTS: (12.5 amp) from 12-v storage battery 160 w (maximum) at 100 - 130/200 - 250 v, 50/60 cyc, ac.

### PHYSICAL CHARACTERISTICS

Telegraph Terminal TH-1/TCC-1 measures 22-1/4 x 21-1/4 x 17-3/4 inches, net weight 200 pounds, volume 5 cu ft.

ORIGINAL



CONFIDENTIAL

CC-TYPE :AN/COMP TYPE NUMBER

TH-1/TCC-1

JANAP 161

UF

AN/TCC-

PORTABLE CARRIER CONTROL SYSTEM

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT : Unclassified USING SERVICE: Navy

DATE OF THIS SHEET: 29 May 52



SERVICE TYPE NUMBER:

Portable Carrier Control System UF is used in multichannel carrier telegraph operation over landlines or radio relay links. It converts d-c telegraph or teletypewriter signals into a-m (tone) voice frequencies for transmission over the line or radio link and reconverts such o-c signals to d-c signals.

A system of UF equipment consists of four Line Terminal Equipments UG and two Radio-Line Terminal Equipments UH.

These six equipments, and the necessary radio transmitting and receiving units for two radio channels (one for each direction of transmission), provide four two-way telegraph circuits.

An eight-channel system may be operated under favorable conditions of radio transmission.

For one eight-channel system, four additional UG equipments are required (total of eight).

CONFIDENTIAL		JANAP 161
AN/TO	СС-түре	INSTRUCTION LITERATURE: NavShips 900,223 CLASSIFICATION OF EQUIPMENT: Unclassified
UF	SERVICE TYPE NUMBER	USING SERVICE : Navy
PORTABLE CA	RRIER CONTROL SYSTEM	DATE OF THIS SHEET : 29 May 52

#### **MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Line Terminal Equipment UG	49-1/2 x 24-1/4 x 17-1/8	373
2	Radio-Line Terminal Equipment UH	24-1/4 x 23-7/8 x 17-1/8	163

### OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, transportable.

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

### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: Two- or four-wire landline or radio relay link.

FACILITIES AFFORDED: Four channels, polar or neutral operation.

FREQUENCY: 595, 765, 935, 1,105, 1,445, 1,615, 1,785, and 1,955 cps.

TYPE OF MODULATION: Am.

TYPE RINGING: 20 cyc.

POWER REQUIREMENTS: Each UG: 135 w, 103 - 126 / 207 - 253 v, 50/60 cyc, 1 phase, ac. Each UH: 15 w, 103 - 126 / 207 - 253 v, 50/60 cyc, 1 phase, ac.

### PHYSICAL CHARACTERISTICS

Information on Portable Carrier Control System UF not available.

#### CONTRACTIONAL

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JANAP 161

UG

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT:Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52 AN/TCC-TYPE

LINE TERMINAL EQUIPMENT



Line Terminal Equipment UG converts d-c telegraph signals to a-c for carrier telegraphic transmission over a land line, or radio relay link, and reconverts such a-c signals to dc. The system consists of four, two-way telegraph circuits. These may be connected to either a two- or four-wire line.

Telephone communication between line terminals is provided. By means of two switches, one of which selects the operating frequencies for two oscillators, and the other selects the two corresponding filters for each circuit. Two circuits of a terminal unit may be operated on any one of four combinations of frequencies.

The system permits connection for either duplex or half-duplex operation, and is capable of handling manual telegraph, teletypewriter, and automatic tape recording.

Neutral or polar operation is possible.

The two- or four-wire line used with the system must have less than 25 db loss.

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SERVICE TYPE NUMBER:

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AN	<b>/TCC</b> -TYPE	INSTRUCTION LITERATURE: NavShips 900,223 CLASSIFICATION OF EQUIPMENT: Unclassified
UG	SERVICE TY	PENUMBER USING SERVICE : Navy
LINE TERMINAL EQUIPMENT		DATE OF THIS SHEET : 29 May 52
	MAJOR	COMPONENTS
QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED WEIGHT (LBS)
	Cabinet CV-10331	49-1/2 x 24-1/4 x 17-1/8 Not Available

Cabinet CW-10331	49-1/2 × 24-1/4 × 17-1/8	Not Available
Fuse Panelboard CN-28016	Not Available	• •
Line Control Unit CM-23426	• •	
Load Control Unit CW-50177	• •	• •
Rectifier Power Unit CW-20290	• •	
Telephone Set Unit CW-51068	$20 \times 2 - 1/2 \times 7$	

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore stations.

\* \* \* \* \*

INSTALLATION: Ground, transportable.

MAXIMUM SYSTEM LENGTH: 6 miles using Wire W-110-B line, or 16 miles using Wire W-143 or 19 gauge-quad nonloaded line.

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

#### **TECHNICAL CHARACTERISTICS**

FACILITIES REQUIRED FOR TRANSMISSION: 2- or 4-wire land line.

FACILITIES AFFORDED: 4 channels, polar or neutral keying.

FREQUENCY: 595, 765, 935, 1,105, 1,445, 1,615, 1,785, and 1,955 cps.

TYPE OF MODULATION: Am.

TYPE RINGING: 20 cyc.

POWER REQUIREMENTS: 135 w, 103-126/207-253 v, 50/60 cyc, 1 phase, ac(for each cabinet).

#### PHYSICAL CHARACTERISTICS

Line Terminal Equipment UG measures 49-1/2 x 34-1/2 x 24-1/4 inches, net weight 1,492 pounds, volume 48 cu ft, 1.2 ship tons. Packed for domestic shipment: total weight 2,840 pounds, total volume 90 cu ft, 2.25 ship tons.

COMPANY





CONTRENTAL

FSB

AN/TGA-

FREQUENCY SHIFT KEYER EQUIPMENT

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



SERVICE TYPE NUMBER:

Frequency Shift Keyer Equipment FSB is an auxiliary keying equipment for radiotelegraph transmitter. It is used at shore stations to impress intelligence on an r-f carrier by the frequency-shift method to minimize the effects of fading, noise interference, and static disturbances at the receiving equipment. In addition to frequency-shift keying, facilities for phase modulation of the carrier and for use of the equipment in radiophoto frequency-shift transmission are provided.

The keyed input for this equipment may be any type of signal, including Morse code, teletypewriter, radiophoto, or facsimile.

A crystal oscillator with three preset channels is used and provision is made for the alternate use of an external oscillator, such as the transmitter oscillator.

The equipment may be permanently installed in the associated transmitter cabinet or mounted in a separate mobile cabinet. A coupler unit must be connected between the transmitter and frequency-shift keyer for impedance matching.

CONFIDENTIAL		JANAP 161
AN/TO	A-TYPE	INSTRUCTION LITERATURE: NavShips 900,928 CLASSIFICATION OF EQUIPMENT: Unclassified
FSB	SERVICE TYPE	UMBER USING SERVICE : Navy
FREQUENCY SHIFT KEYER EQUIPMENT		DATE OF THIS SHEET : 9 May 52
	MAJOR COM	<b>MPONENTS</b>
QUANT		IMENSIONS (IN) INSTALLED WEIGHT (LBS)

1 Frequency Shift Keyer CYV-35062 16 x 19 x 15 and accessories

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Shore stations.

INSTALLATION: Ground, transportable.

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

### **TECHNICAL CHARACTERISTICS**

FREQUENCY RANGE IN MEGACYCLES: 1.0 - 6.7.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency shift keying.

POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 175 w, 115/230 v, 50/60 cyc, 1 phase, ac.

### **PHYSICAL CHARACTERISTICS**

Frequency Shift Keyer Equipment FSB measures 16 x 19 x 15 inches, net weight 141 pounds, volume 7 cu ft. Packed for domestic shipment: total weight 315 pounds, total volume 15 cu ft. Shipped in 2 packages.

CONTIDENTIAL

ORIGINAL

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STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Dec 51

## JANAP 161



TELETYPEWRITER SET



Teletypewriter Set AN/TGC-1 is an automatic, high-speed, multichannel, teletypewriter station equipment used for sending, receiving, or monitoring, by means of typed and perforated paper tape, at army and equivalent headquarters.

This equipment consists of a single operating assemblage composed of a multiple transmitterdistributor (which provides one number transmitter and two message transmitters) and two typing reperforators. It can be used for conventional duplex make-and-break, duplex polar, single, split duplex make-and-break, split duplex polar, and/or split single operation.

Several of these equipments may be installed side by side for handling large traffic loads. It can be used for tape relay operation, and is designed for continuous operation.

It operates on 115-v ac or dc; the tapewinder motor operates on ac only.

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COMERCENTIAL	JANAP 161	
AN/TGC-1	INSTRUCTION LITERATURE: TM 11-2203; AFM 102-2 CLASSIFICATION OF EQUIPMENT: Unclassified	
	USING SERVICE : Army, Navy	
TELETYPEWRITER SET	DATE OF THIS SHEET: 18 Dec 51	

#### MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Cabinet, Console-type	24 × 24 × 65	250.0
2	Typing, Reperforator, w/motor	13 × 12 × 8	34.25
1	Multiple Transmitter-Distributor, w/motor	15-1/4 × 16-3/4 × 5-3/4	90.0
1	Tape winder, w/motor	12 × 6 × 11	10.0
1	54 A Rectifier	5 × 15-3/4 × 6-3/4	35.0
1	Signal indicator panel	5 × 21 × 1-3/4	20.0

#### **OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Corps, army, and higher headquarters.

INSTALLATION: Ground, fixed station.

CAN COMMUNICATE WITH: Terminal, repeater or station apparatus over wire, cable, carrier or radioteletypewriter standard communication facilities, composing the system in which it operates.

### **TECHNICAL CHARACTERISTICS**

OPERATING FUNCTIONS: No keyboard. Number release key; release key; tape feed-out key; break key; alarm switch.

OPERATING SPEED: 368.1 or 600.0 opm.

MOTOR CHARACTERISTICS: Series-governed motor, 87.6 cyc, tuning fork, 2,102 rpm; or a synchronous motor requiring no adjustment.

POWER REQUIREMENTS: 115 v, 50/60 cyc, ac; or 115 v, dc.

#### PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/TGC-1 measures 65 x 24 x 24 inches, net weight 439.25 pounds, volume 21.6 cu ft, 0.54 ship ton. Packed for either domestic or export shipment: total weight 1,267 pounds, total volume 42.5 cu ft, 1.02 ship tons. Shipped in 5 packages.

ORIGINAL



