STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: RDF RADIO RECEIVING EQUIPMENT

RDF

Radio Receiving Equipment RDF is a general purpose, fixed-tuned, l-f radio receiver for use in airport traffic control towers, aeronautical ground stations, and Civil Aeronautic Authority range monitoring and for receiving weather broadcasts.

This receiver includes provision for remote control operation.

A 500/600-ohm speaker, or set of headphones, is required but not supplied.

AN/FRR-TYPE

RDF :SERVICE TYPE NUMBER
RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95258
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CCI-46242	3-1/2 x 19 x 11-7/16	14.5
1	Coil Set CCI-47380	Not Available	Not Available
1	Coil Set CCI-47381	" "	" "
1	Coil Set CCI-47382	" "	" "
1	Coil Set CCI-47383	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, airport control towers, aeronautical ground stations, Civil Aeronautic Authority range monitoring.

INSTALLATION: Ground, fixed, rack-mounted.

APPROXIMATE RANGE (IN MILES): Medium.

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

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.20 - 0.55. One fixed-tuned channel. Four sets of plug-in coils cover the following bands:

Band 1: 0.20 – 0.25.
Band 2: 0.25 – 0.33.
Band 3: 0.33 – 0.43
Band 4: 0.43 – 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 45 w, 105-115 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

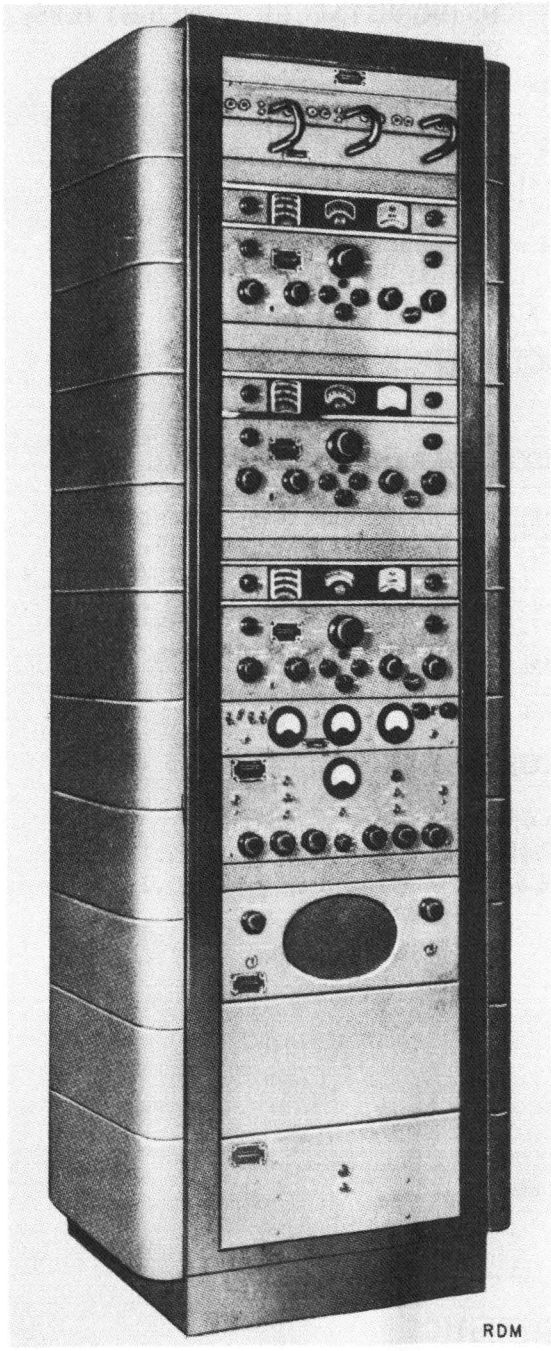
Radio Receiving Equipment RDF measures 3-1/2 x 19 x 11-7/16 inches, net weight 14.5 pounds, volume 4.45 cu ft.

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

AN/FRR-TYPE

SERVICE TYPE NUMBER: RDM, RDM-1

DIVERSITY RADIO RECEIVING EQUIPMENT


RDM

Diversity Radio Receiving Equipments RDM and RDM-1 are designed for the reception of either continuous wave or modulated carrier signals within the medium- and high-frequency ranges. They automatically select and deliver the strongest of three signals picked up by three space diversity antennas.

This equipment is complete except for the diversity antenna system and a set of high impedance headphones.

All major components are mounted in a rack-type cabinet.

Model RDM is supplied with cabinet, rack, and panel assembly which includes the antenna panel.

The RDM-1 is supplied with a cabinet and an antenna panel, as two separate components.

Complete system flexibility is provided in both models, through the use of three receivers, tone keyer unit, and monitoring unit.

AN/FRR-TYPE

RDM, RDM-1 :SERVICE TYPE NUMBER
DIVERSITY RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 91061, 95261
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Radio Receiver CRV-46256-A, -46256-B	11 x 19 x 19-1/4	98
1	Tone Keyer CALO-35049, -35049-A	7 x 19 x 10-1/2	26
1	Monitoring Unit CALO-23424, -23424-A	Not Available	11
1	Monitoring Unit Power Supply CALO-20289, -20289-A	, x 19 x 6-1/2	18
1	Speaker CALO-49526, -49526-A	8-3/4 x 19 x 4-3/4	12

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -608/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: 0.535 - 32.0 in 6 bands.

Band 1: 0.535 - 1.6	Band 3: 4.45 - 12.15	Band 5: 16.1 - 22.7
Band 2: 1.57 - 4.55	Band 4: 11.9 - 16.6	Band 6: 22.0 - 32.0 .

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

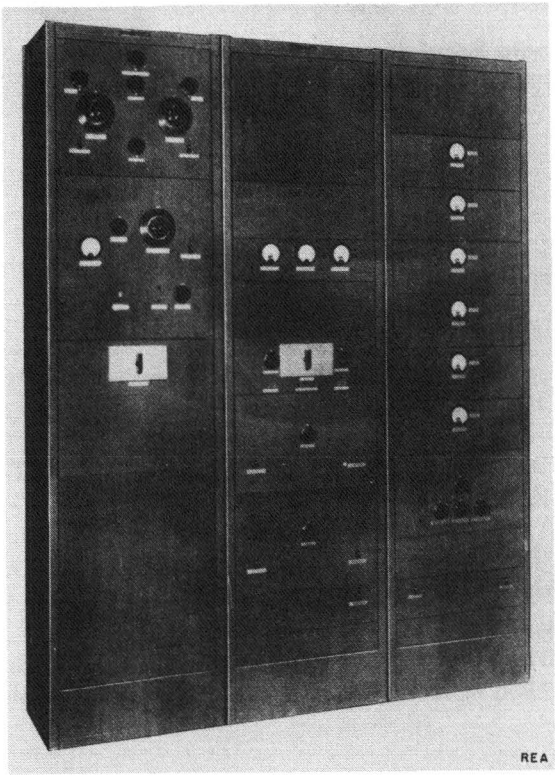
POWER OUTPUT: Tone keyer: 12 mw, 600 ohms.
Receiver: 2.5 w, 600 ohms and 2.5 ohms.

POWER REQUIREMENTS: 450 w, 100-165/190-260 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Diversity Radio Receiving Equipments RDM, RDM-1 measure 84 x 22 x 21 inches, net weight 650 pounds, volume 26.6 cu ft, 0.66 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy, Army DATE OF THIS SHEET: 2 May 52	AN/FRR-TYPE SERVICE TYPE NUMBER: REA, REA-1 SINGLE SIDE BAND RADIO RECEIVING EQUIPMENT



Single Side Band Radio Receiving Equipments REA and REA-1 are complete single side band, reduced-carrier, radio receivers of the triple detection type, for either one, or both of two telephone channels arranged as a twin-channel system. They can be used in conjunction with multichannel carrier telegraph receiving equipment.

The REA is identical to the REA-1, except that the REA-1 has an improved first beat oscillator-frequency control unit and an improved tuning control unit.

The equipment is enclosed in three rack-type bays, and is complete, except for a receiving antenna system, a power cable, headsets, and terminal equipment.

AN/FRR-TYPE	INSTRUCTION LITERATURE: NavShips 95354 CLASSIFICATION OF EQUIPMENT: Unclassified
REA, REA-1 :SERVICE TYPE NUMBER	USING SERVICE : Navy, Army
SINGLE SIDE BAND RADIO RECEIVING EQUIPMENT	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Single Sideband Radio Receiving Equipment CW-D-99945	65-1/8 x 84 x 18-1/4	1,440

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Long distance radio telephone receiving stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -401, -447, -610; MBS; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -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; TBW; TBX; TCB; TCC; TCE; TCH; TCO; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model): Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 - 22 in two bands.
Band 1: 4 - 10. Band 2: 10 - 22.

TYPE MODULATION: Am (single or double side band).

TYPE OF SIGNAL: Voice.

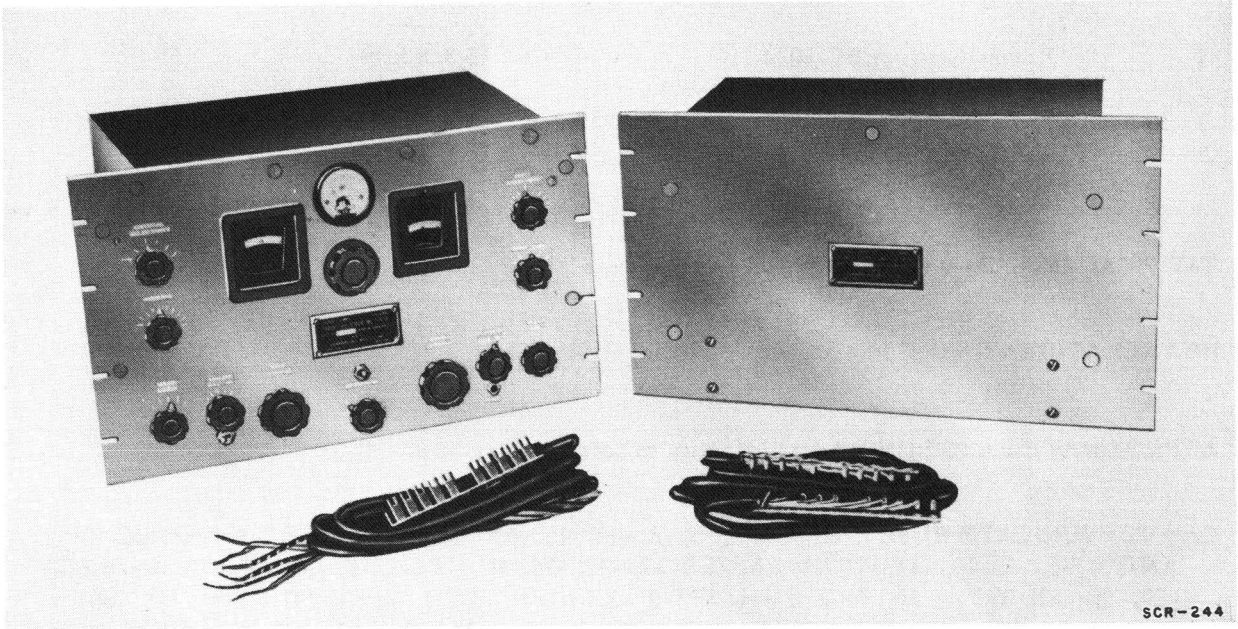
POWER OUTPUT: + 15 volume unit, 600 ohms, each channel.

POWER REQUIREMENTS: 600 w, 115 v ($\pm$ 15%) 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Single Side Band Radio Receiving Equipments REA, REA-1 measure 65-1/8 x 84 x 18-1/4 inches. Packed for domestic shipment: total weight 1,900 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: SCR-244 RADIO SET



Radio Set SCR-244 is a general purpose, a-m (voice and cw) receiving equipment used for communication, monitoring, or intercept purposes in the m-f and h-f bands in fixed station applications at division and higher headquarters.

This equipment consists essentially of a commercial (Hammerlund Super-Pro) communications type receiver, plus a power supply. It may be operated as table top equipment or installed on a standard relay rack. When cabinet inclosed it may be mounted on appropriate shock mounts and operated in vehicles.

Automatic and manual volume control are provided.

Some models of the receiver have a tuning meter on the front panel.

In later models (SCR-244-D, not illustrated) receiver and power supply components are installed together in a metal cabinet of the same size as the receiver cabinet of earlier models.

Antenna and accessory items are included and the equipment operates from conventional (105 to 125 v) a-c power.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TM 11-866
	CLASSIFICATION OF EQUIPMENT: Unclassified
SCR-244 :SERVICE TYPE NUMBER	USING SERVICE : Army
RADIO SET	DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-1004 (or Receiver, Radio R-483/FRR)	10-1/2 x 15-3/8 x 19	55
1	Power Supply Unit RA-84	10-1/2 x 10 x 19	60
1	Cabinet CH-104	12-1/4 x 16-1/2 x 23	18

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At division or higher headquarters.

INSTALLATION: Ground, transportable, mobile, fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

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

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 1.16, 1.16 - 2.5, 2.5 - 5, 5-10, 10 - 20. (SCR-244-D: 0.54 to 54.0, in 6 bands).

TYPE MODULATION: Am.

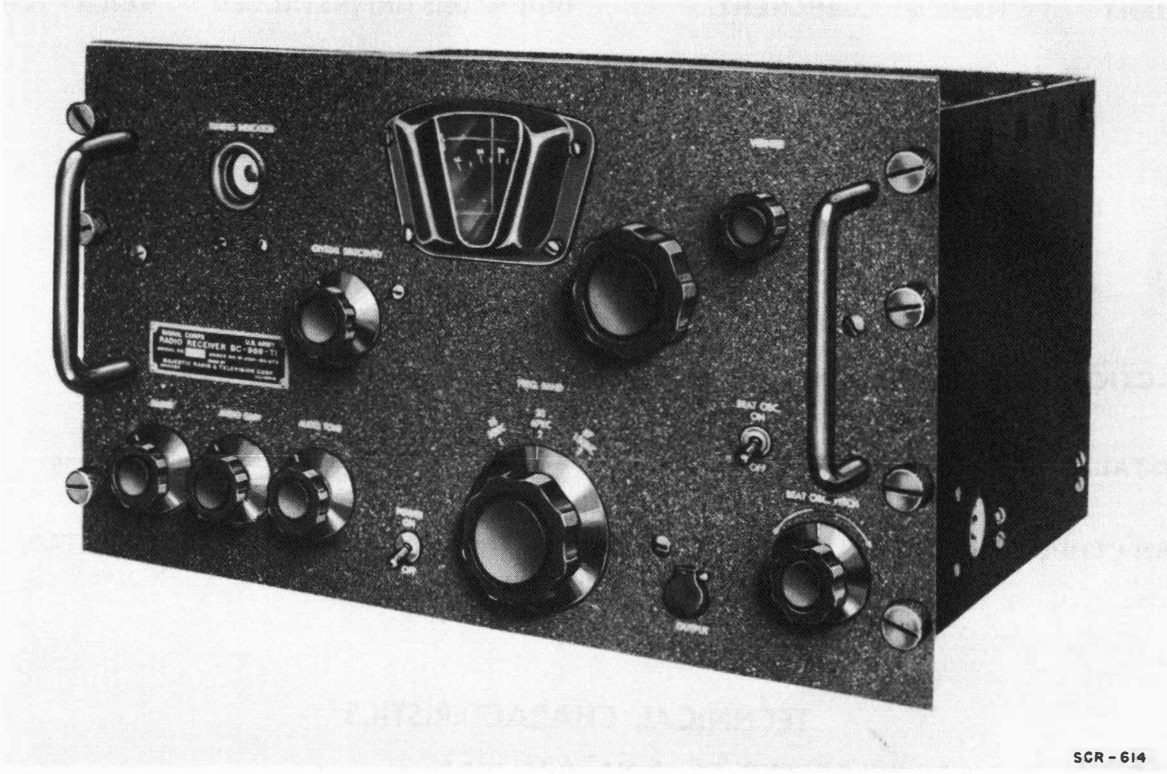
TYPE OF SIGNAL: Voice, tone, cw.

POWER REQUIREMENTS: 105 – 125 v, 50/60 cyc ac. (SCR-244-D; 95 – 260 v in 7 steps).

PHYSICAL CHARACTERISTICS

Radio Set SCR-244 weighs 55 pounds net. Packed for export shipment: total weight 90 pounds, total volume 4.3 cu ft. Shipped in 2 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: SCR-614 RADIO SET



Radio Set SCR-614 is an l-f, multiband a-m (voice, cw, and tone), long-range radio receiving equipment. It is intended for radio direction finding, monitoring, or intercept applications.

This equipment consists of a radio receiver, which can be rack-mounted or installed on a vehicular shock mount, a power supply unit, and associated accessories.

It uses a whip-type antenna in vehicular use and a balanced 100-ohm line antenna in fixed plant installations.

It operates from 115-or 230-v a-c power.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TM 11-873
SCR-614 : SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-969	19 x 10-1/2 x 15-7/8	49.3
1	Case CS-109-A	20-1/8 x 10-1/2 x 13-1/2	18.5
1	Mounting FT-411	21-1/4 x 3-1/2 x 13-1/2	10.2
1	Power Supply Unit RA-61	19 x 4 x 13-7/8	52.1
1	Mounting FT-414	18-1/4 x 3-1/2 x 11-3/4	9.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army Security Agency, headquarters.

INSTALLATION: Ground, fixed station or mobile. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/FRT-4, -10, -19; AN/TRQ-1; BC-365; T-5/FRC, -171/FR; TAB; TCG; Marconi TH-41-B; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.015 - 0.15, in 3 bands.
Band 1: 0.015 — 0.030.
Band 2: 0.030 — 0.0675.
Band 3: 0.0675 — 0.15.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, or tone.

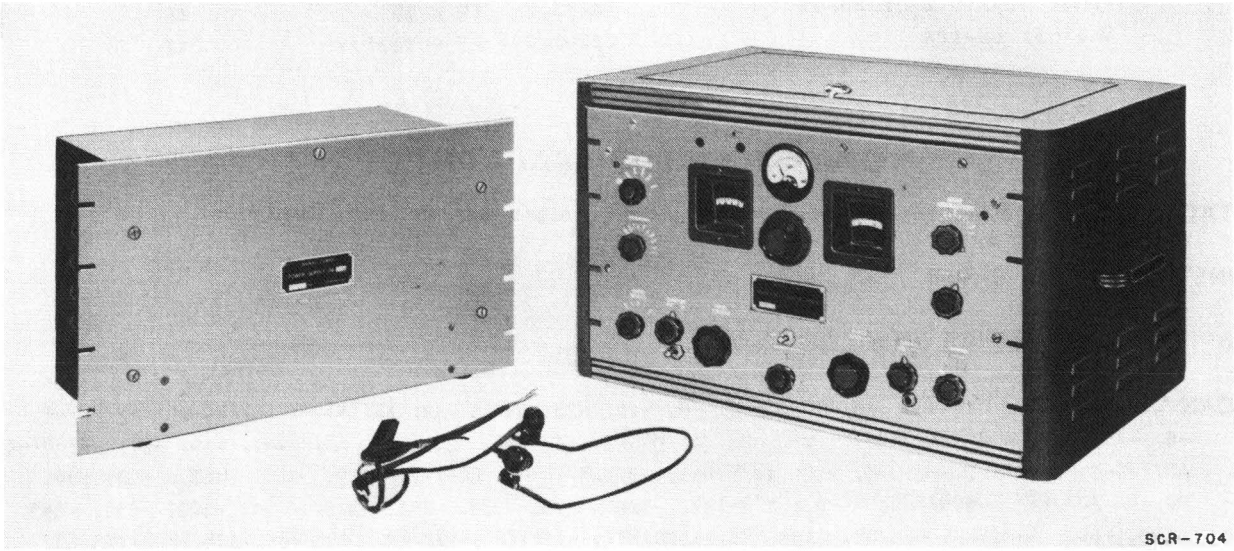
POWER OUTPUT: 2 w.

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

PHYSICAL CHARACTERISTICS

Radio Set SCR-614 weighs 141.7 pounds net.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: SCR-704 RADIO SET



SCR-704

Radio Set SCR-704 is a long-range, a-m (voice, tone, and cw) receiving equipment which is used far high-frequency intercept, monitoring, and similar applications for fixed plant use by army security agency (ASA).

This equipment consists essentially of a commercial (Hammarlund Super-Pro) communications-type table model receiver and a panel-mounted power supply. The equipment may be installed on a standard relay rack and operates in five frequency bands.

This set can be installed and operated in a vehicle and can be used for communication purposes. The antenna used is a single-wire and ground, or may be a doublet antenna system having a balanced transmission line. It can be used as an audio amplifier if required.

Operates from 115 or 230-v ac or from a 6-v vehicular storage battery and six 45-v dry cells.

AN/FRR-TYPE

SCR-704 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-866
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-794	10-1/2 x 19 x 15-3/8	55
1	Power Supply Unit RA-94	10-1/2 x 19 x 10	60
1	Cabinet CH-104	10-1/2 x 23 x 16-1/2	18

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army security agency headquarters, signal service team, fixed plant.

INSTALLATION: Ground, fixed station, or mobile.

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, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -608/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; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-8; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.25 - 40.0 in 5 bands.

Band 1: 1.25 - 2.50
Band 2: 2.50 - 5.0
Band 3: 5.0 - 10.0
Band 4: 10.0 - 20.0
Band 5: 20.0 - 40.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, and voice.

POWER REQUIREMENTS: 115 - 230 v, 50/60 cyc, ac, (or, 6-v storage battery, and six 45-v batteries).

PHYSICAL CHARACTERISTICS

Radio Set SCR-704 weighs 146.6 pounds net, volume 5.34 cu ft. Packed for export shipment: total weight 179 pounds, total volume 7.5 cu ft.

STATUS: Commercial
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 28 Apr 52

AN/FRR-TYPE

COMMERCIAL TYPE NUMBER: COLLINS 75A-2
RADIO RECEIVER

COLLINS 75A-2

Radio Receiver Collins 75A-2 is a double conversion, superheterodyne equipment designed for coverage of only the amateur bands in the frequency range of 1.5 to 30.0 mc. It is normally used for fixed ground, point-to-point communication in the Military Amateur Radio Systems (MARS) and has provisions for f-m reception by inserting NBFM adaptor 148C-1, and for check point calibration by inserting Crystal Calibrator Unit BR-1.

The input circuit operates from coaxial transmission lines, (such as RG-8/U (52 ohms) and RG-11/U (73 ohms)).

It has an automatic noise limiter for a-m reception, and a manually operated shunt-type noise limiter for cw.

Visual tuning accuracy to within 1 kc for the amateur bands 1.5 to 21.8 mc; and 2 kc for the 10 and 11 meter amateur bands (26 to 30 mc) is provided.

Provision has been made to connect a blocking voltage to mute the receiver audio when the key of an associated transmitter is closed.

Power requirements are 85 w of 115 v, ac.

AN/FRR-TYPE	INSTRUCTION LITERATURE: Collins 75A-2 Collins Instruction Book CLASSIFICATION OF EQUIPMENT: Unclassified
COLLINS 75A-2 : COMMERCIAL TYPE NUMBER RADIO RECEIVER	USING SERVICE : Air Force DATE OF THIS SHEET: 28 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver 75A-2	21-1/8 x 12-1/2 x 13-1/6	50
1	Speaker	15 x 11-1/8 x 9-1/8	15

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued for use in the Military Amateur Radio Systems.

INSTALLATION: Fixed ground for either table or standard 19-inch relay rack mounting.

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

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT; OA-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; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.6 - 32.0 in 6 bands.

Band 1: 1.6 - 2.0	Band 3: 6.4 - 8.0	Band 5: 19.2 - 24.0
Band 2: 3.2 - 4.0	Band 4: 12.8 - 16.0	Band 6: 25.6 - 32.0

TYPE MODULATION: Am and fm.

TYPE OF SIGNAL: Cw, mcw, and phone.

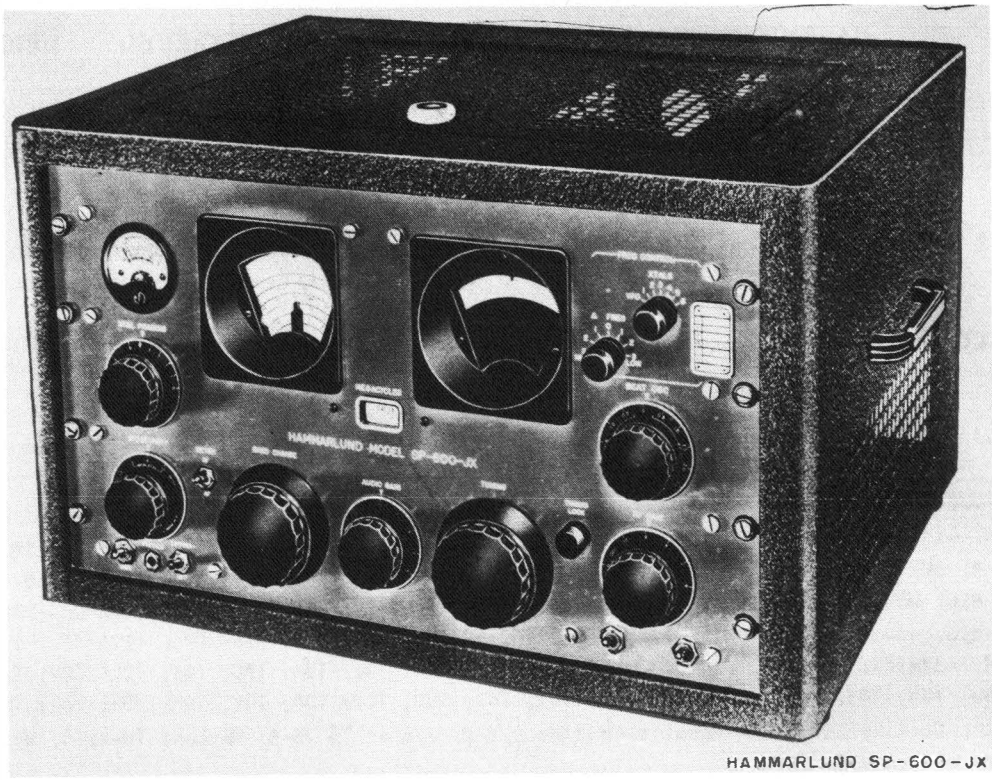
POWER OUTPUT: Audio output; 2.5 w at 500 ohm impedance.

POWER REQUIREMENTS: 85 w, 115 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Receiver Collins 75A-2 measures 21-1/8 x 24 x 13-1/6 inches, net weight 65 pounds, volume 2.9 cu ft. Packed for domestic or export shipment: total weight 70 pounds, total volume 3 cu ft. Shipped in 1 package.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 26 May 52	**AN/FRR-TYPE** COMMERCIAL TYPE NO: HAMMARLUND SP-600-JX RADIO RECEIVER



HAMMARLUND SP-600-JX

Radio Receiver Hammarlund SP-600-JX is a general purpose, fixed ground, a-m (voice, cw, and mcw) equipment operating signals in part of the m-f and v-h-f bands, and all of the h-f band. It is a single conversion type superheterodyne, from 0.54 to 7.4 mc; a double conversion type from 7.4 to 54.0 mc, and has a high degree of sensitivity and selectivity. The high frequency oscillator is designed for crystal control on any six-preset channels.

The intermediate frequency amplifier provides 455 kc output from a cathode follower to a connection on the rear skirt of the chassis, which may be used for dual diversity reception.

The input impedance of the antenna terminals is designed to match a 100-ohm balanced transmission line. Although the frequency of the oscillator is not crystal-controlled (except on the preset channels listed above) it has good frequency stability and will function for long periods with a minimum of monitoring.

Also has a noise limiter for reduction of pulse type interference. The receiver output is 600 ohms for operation into telephone lines, or a loudspeaker.

AN/FRR-TYPE	INSTRUCTION LITERATURE: Hammarlund Instruction Manual
HAMMARLUND SP-600-JX :COMMERCIAL TYPE NO.	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Air Force
	DATE OF THIS SHEET: 26 May 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: Issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground operated for mounting in standard 19-inch relay rack occupying 10-1/2-inch panel space.

APPROXIMATE RANGE (IN MILES): Long.

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

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 54 in 6 bands.

Band 1: 0.54 - 1.35	Band 3: 3.45 - 7.4	Band 5: 14.8 - 29.7
Band 2: 1.35 - 3.45	Band 4: 7.40 - 14.8	Band 6: 29.7 - 54.0.

TYPE MODULATION: Am.

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

POWER OUTPUT: 2.5 w.

POWER REQUIREMENTS: 130 w, 95-130/190-260 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiver Hammarlund SP-600-JX measures 21-3/8 x 12-3/4 x 17-1/8 inches, net weight 87.5 pounds, volume 3 cu ft. Packed for domestic or export shipment: total weight 95 pounds, total volume 3.5 cu ft. Shipped in 1 package.

STATUS: Commercial	AN/FRR-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	COMMERCIAL TYPE NUMBER: NATIONAL HRO-50
USING SERVICE: Air Force	RADIO RECEIVING EQUIPMENT
DATE OF THIS SHEET: 12 May 52	

NATIONAL HRO-50

Radio Receiving Equipment National HRO-50 is a radio receiver normally used for fixed ground, point-to-point communication in the Military Amateur Radio System. Its frequency range is covered by a series of plug-in coils, which have switches for spreading each one of the amateur bands (3.5 mc through 54 mc) over the entire tuning dial scale. This equipment can receive f-m signals by inserting the National NFM type narrow-band f-m adapter and the National XCU crystal calibrator for 100-kc and 1,000-kc check points.

The input circuit can be operated with a single wire antenna, a balanced transmission line, or a 72-ohm coaxial cable. The actual input impedance is between 300 to 600 ohms, depending on the frequency of the input signal.

There are two stages of r-f amplification (before the converter) to provide high sensitivity. The i-f system uses 12 permeability-tuned circuits in three i-f stages for selectivity. Terminals are provided for external input to the audio system for phone or mike and for silencing the receiver during periods of transmission. For emergency communication, a connector is available for operation from an exteraal 6-v d-c supply.

AN/FRR- TYPE

NATIONAL HRO-50 :COMMERCIAL TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: National HRO-50 Instruction Book
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver	19-3/4 x 10-1/8 x 16-1/2	75
1	Speaker	13 x 11 x 8	8

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued for use in the Military Amateur Radio System.

INSTALLATION: Fixed-ground, two models: one for table mounting, the other for standard 19-inch rack.

APPROXIMATE RANGE (IN MILES): Long.

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

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.05 - 0.43, 0.48 - 35.0, and 48.0 - 54.0.

TYPE MODULATION: Am (fm with Adaptor NFM-83-50).

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

POWER OUTPUT: 10 w.

POWER REQUIREMENTS: 110-120/220-240 v, 50/60 cyc , 1 phase at approximately 115 w. For emergency service, it can be operated from Vibrator Power Supply 650-S whose power requirements are 90 w (at 15 amp) from a 6-v storage battery.

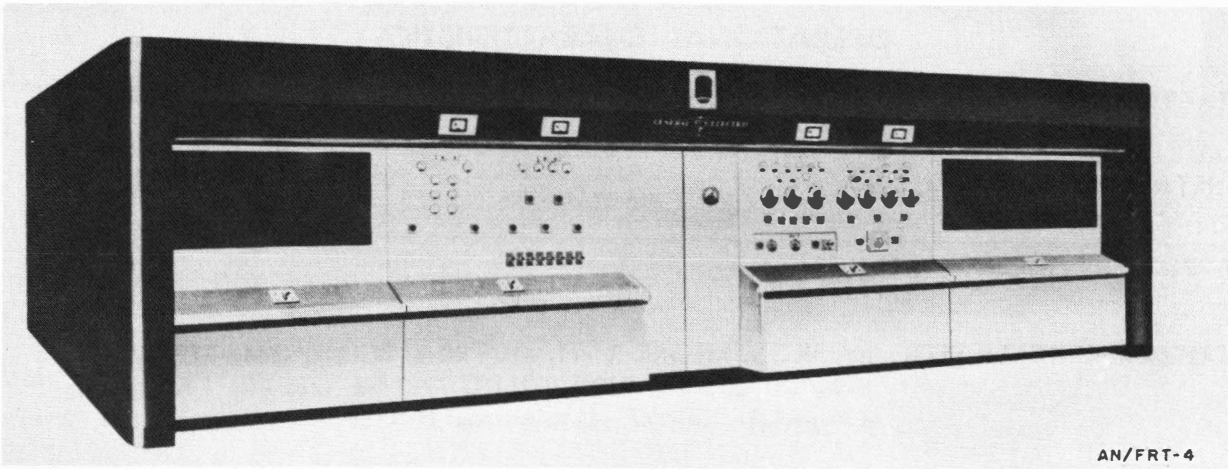
PHYSICAL CHARACTERISTICS

Radio Receiving Equipment National HRO-50 measures 21-1/8 x 19-3/4 x 16-1/2 inches, net weight 83 pounds, volume 2.6 cu ft. Packed for domestic or export shipment: total weight 95 pounds, total volume 3.4 cu ft. Shipped in 2 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy, Air Force
DATE OF THIS SHEET: 15 May 52

AN/FRT-4

RADIO TRANSMITTING SET



AN/FRT-4

Radio Transmitting Set AN/FRT-4 is a high-power, low-frequency a-m/f-m (cw, frequency-shift keying, facsimile) radiotelegraph transmitter for shore-to-ship use.

This equipment has master oscillator frequency control and provides continuous tuning throughout its frequency range. It is designed for operation into a 600-ohm transmission line.

AN/FRT-4

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: NavShips 91169.3
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy, Air Force
DATE OF THIS SHEET: 15 May 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: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/SRC-3; AN/SRR-3, -11; AN/TRQ-1; BC-314, -344, -779; MBS; R-96/SR, -203/SR, -210/U, -211/U, -212/SR, -215/SR; RAK; RBA; RBL; RCH; SCR-177, -614; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.050 - 0.150.

TYPE MODULATION: Am, Fm.

TYPE OF SIGNAL: Cw, frequency-shift keying, facsimile.

POWER OUTPUT: 55 kw.

POWER REQUIREMENTS: 230 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/FRT-4 not available.

STATUS: Std

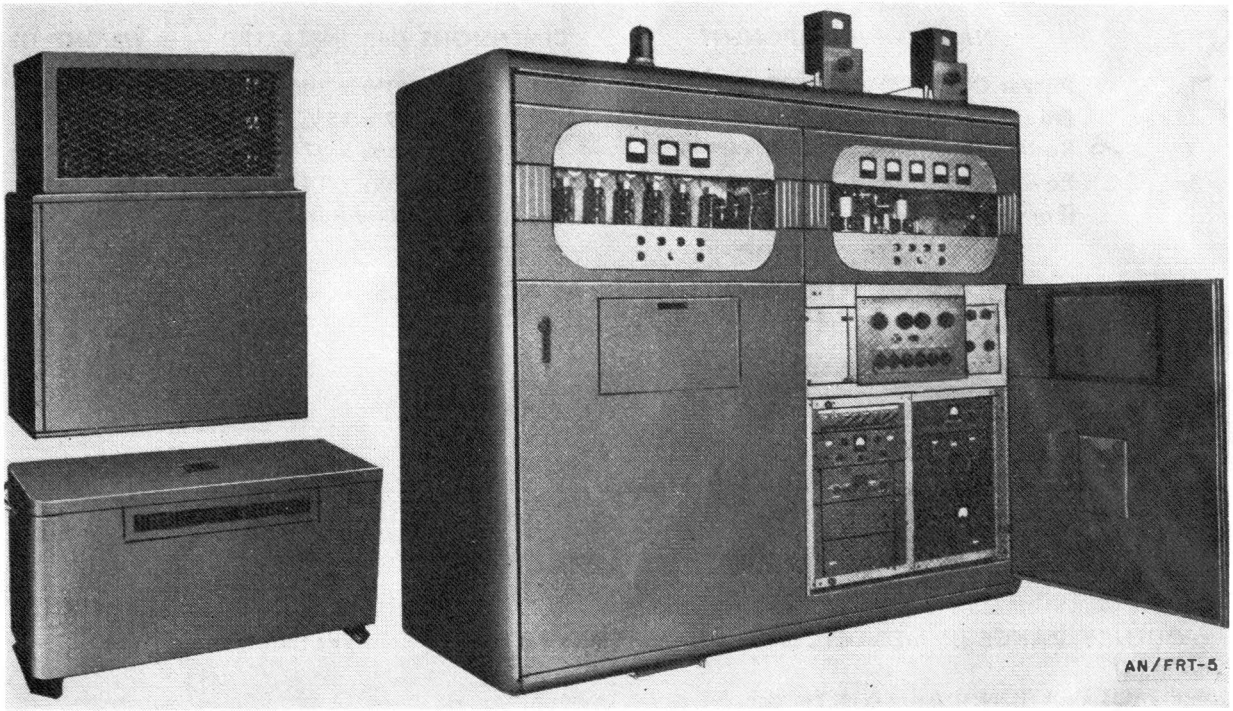
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRT–5( )

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT–5( ) is a medium-range, medium-power, hf transmitter for on-off radiotelegraph, frequency-shift keying or teletypewriter and facsimile transmission. It is capable of keying speeds up to 400 wpm on either cw or frequency-shift keying in ship-to-shore and point-to-point communication applications.

The AN/FRT–5A or AN/FRT–5B is the same as AN/FRT–5 except provisions are made in Frequency Shift Keyer KY–45A/FRT–5 for facsimile transmission. The A and B models differ only in circuitry design and component parts.

This equipment may be remotely operated and includes automatic shutdown facilities that can be adjusted to operate when the transmitter is not keyed for a predetermined period.

AN/FRT-5( )

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: NAVSHIPS 91183; 91457(A); 91740(A)

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Control C-587/FRT-5	30¼ x 30¼ x 14¼	298
1	Frequency Shift Keyer KY-45A/FRT-5	10½ x 19 x 15⅛	29
1	Radio Transmitter T-225A/FRT-5	91½ x 46⅝ x 37½	2,108
1	Power Transformer TF-122/U	18½ x 36½ x 14¾	527

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installation.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26 (10 preset chan or cont var tuning).

TYPE MODULATION: Am (A1), fm (F1, F4).

TYPE OF SIGNAL: Cw, fsk, facsimile.

POWER OUTPUT: 15 kw.

POWER REQUIREMENTS: 28 kw, 230 v +10%, 60 cy, 1 ph ac; 115 v, 60 cy, 1 ph ac (xtal oven).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT* (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91½ x 93¼ x 37½	5,104	221.5	5.54	
DOMESTIC PACK:		7,687	434.76	10.87	16
EXPORT PACK:					

STATUS: Std

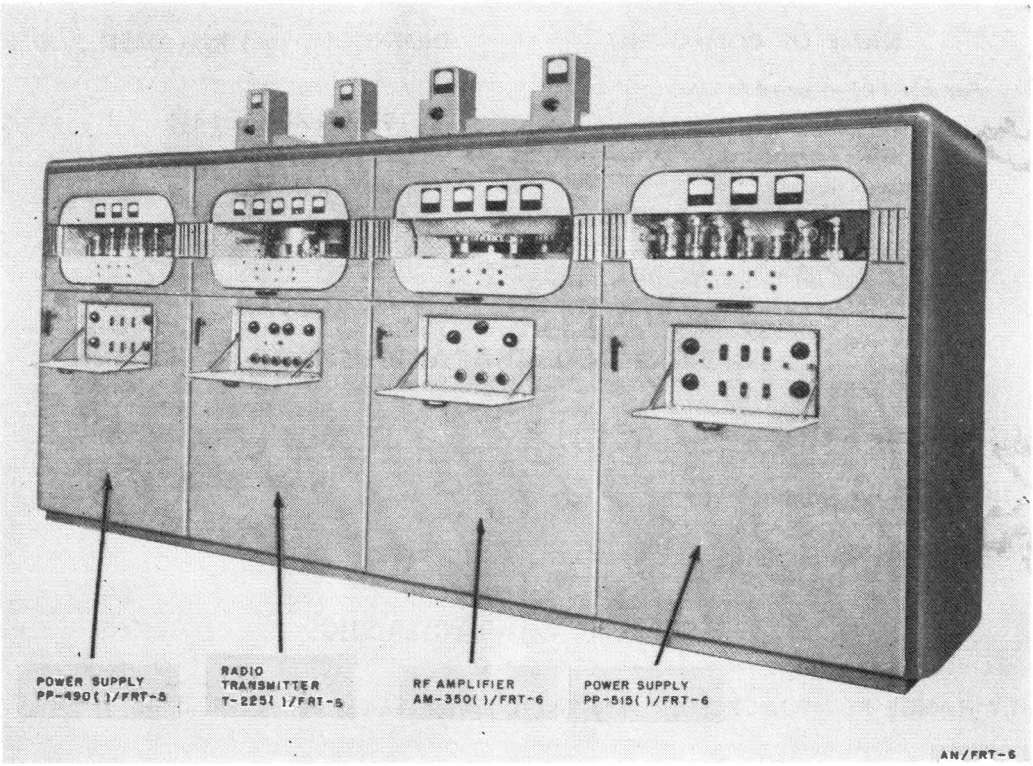
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

AN/FRT-6( )

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT–6( ) is a long-range, hf, high-power transmitter for on-off radiotelegraph, frequency-shift telegraph or teletypewriter, and facsimile transmission. It is capable of keying speeds up to 400 wpm on either cw or frequency-shift emission in point-to-point communication applications.

The AN/FRT–6, AN/FRT–6A, AN/FRT–6B are all functionally interchangeable except for minor parts changes. The AN/FRT–6C is functionally interchangeable with these earlier models except that the single-sideband conversion kit is omitted. It is also capable of operating from a 50/60-cycle power line source, if changes in transformers, relays, and blowers are made. All models are designed for optimum operation into an antenna with an impedance of 600 ohms. They may be operated (without the main rf amplifier section of the equipment) to provide a 15-kw output (instead of the normal 40-kw) for operation to medium distances or in emergencies. The power tubes are forced-air cooled. Power for the blowers is obtained from a 230-volt transmitter power supply.

AN/FRT-6( )

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: NAVSHIPS 91263

USING SERVICE: USN

DATE OF THIS SHEET: 9 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRT-6 or -6A:		
1	RF Amplifier AM-350/FRT-6 or AM-350A/FRT-6	91½ x 46⅝ x 54½	2,550
1	Power Supply PP-490/FRT-5 or PP-490A/FRT-5	91½ x 46⅝ x 37½	1,742
1	Radio Transmitter T-225/FRT-5 or T-225A/FRT-5	91½ x 46⅝ x 37½	2,108

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Long.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26 (10 preset chan or cont var tuning).

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

TYPE OF SIGNAL: Cw, fsk.

POWER OUTPUT: 40 kw (nor); 15 kw (w/o final rf ampl unit).

POWER REQUIREMENTS: 25.5 kw (low pwr), 86 kw (nor), 207 to 253 v, 60 cy, 3 ph ac; 115 v, 60 cy, 1 ph ac (xtal oven).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91½ x 186½ x 54½	12,641	513.2	12.8	
DOMESTIC PACK:		17,892	959.8	24	29
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Navy DATE OF THIS SHEET: 12 Jun 52	**AN/FRT-10** RADIO TRANSMITTING SET

NO PHOTOGRAPH AVAILABLE

Radio Transmitting Set AN/FRT-10 is l-f, high-power, a-m (cw, frequency-shift keying facsimile) transmitting equipment used for long-range shore-to-ship, point-to-point, or broadcast radiotelegraph or radioteletype transmission.

This equipment consists of transmitter and power supply installations.

The transmitter installation has a dual 250-kw transmitter, antenna system (less towers), operator's console, and monitoring equipment.

Seven Diesel engine generators, power control and distribution panels, oil storage tanks, and fuel transfer pumps comprise the power supply installation.

The equipment is so proportioned that it can be transported by air.

AN/FRT-10

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not available

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 12 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Transmitter T-281/FRT-10	84 x 48-1/4 x 54	2,300
2	Radio Frequency Amplifier AM-513/FRT-10	84 x 48-1/4 x 54-1/4	Not Available
2	Power Supply PP-657/FRT-10	84 x 48-1/4 x 54	1,800
2	Power Supply PP-658/FRT-10	84 x 48-1/4 x 54	Not Available
1	Console C-856/FRT-10	44-1/16 x 36-9/32 x 65-13/16	" "
2	Radio Frequency Tuner TN-189/FRT-10	84 x 48 x 72-1/4	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-5,-8; AN/GRR-3; AN/MRC-20; AN/SRR-3, -11, -12; AN/TRQ-1; AN/VRC-4; BC-344, -348, -779; MBS; R-96/SR, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -215/SR, -247/URR; RAK; RAS; RBA; RBL; RBM; RCH; RDF; SCR-274; -614; ARC-Type 12; Fisher TS 25-3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.1 - 0.2.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency-shift keying facsimile.

POWER OUTPUT: 500 kw.

POWER REQUIREMENTS: 825 kw (total power) obtained from three Diesel engine driven generators as follows: 1 - 480 v, 60 cyc, 3 phase.
2 - 4,160 v, 60 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/FRT-10 not available.

STATUS: Std

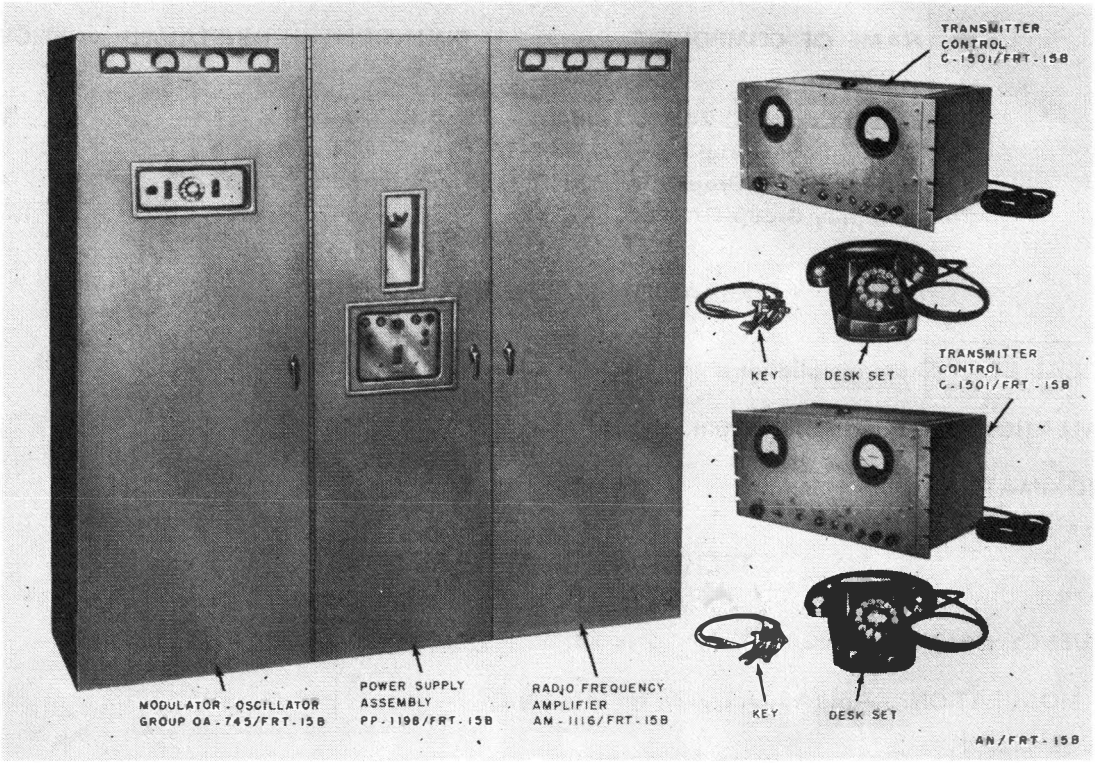
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRT–15( )

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT–15( ) is a general service equipment intended for naval shore or air stations to provide point-to-point cw, mcw, radioteletype, and facsimile communication, and other services requiring operation on a number of readily selected frequency channels.

This equipment contains, basically, a transmitter group, a radio modulator group, a power supply group, and two transmitter controls.

The AN/FRT–15, AN/FRT–15A, and AN/FRT–15B are generally interchangeable electrically and mechanically, although there are differences between some of their major operating components.

AN/FRT–15( )

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: NAVSHIPS 91690(A)

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRT–15:		
2	Transmitter Control C–745/FRT–15	9 x 19 x 11	105
1	Radio Modulator Group OA–204/FRT–15	84 x 29 x 31	830
1	Radio Transmitting Group OA–205/FRT–15	84 x 29 x 31	775
1	Power Supply Group OA–206/FRT–15	84 x 26 x 31	1,350

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 30.

TYPE MODULATION: Am (A1, A2, A3), fm (F1, F4).

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

POWER OUTPUT: 3,000 w.

POWER REQUIREMENTS: 9,920 w, 220 v, 50/60 cy, 3 ph ac; 110 v, 50/60 cy, 1 ph ac (remote-cont units).

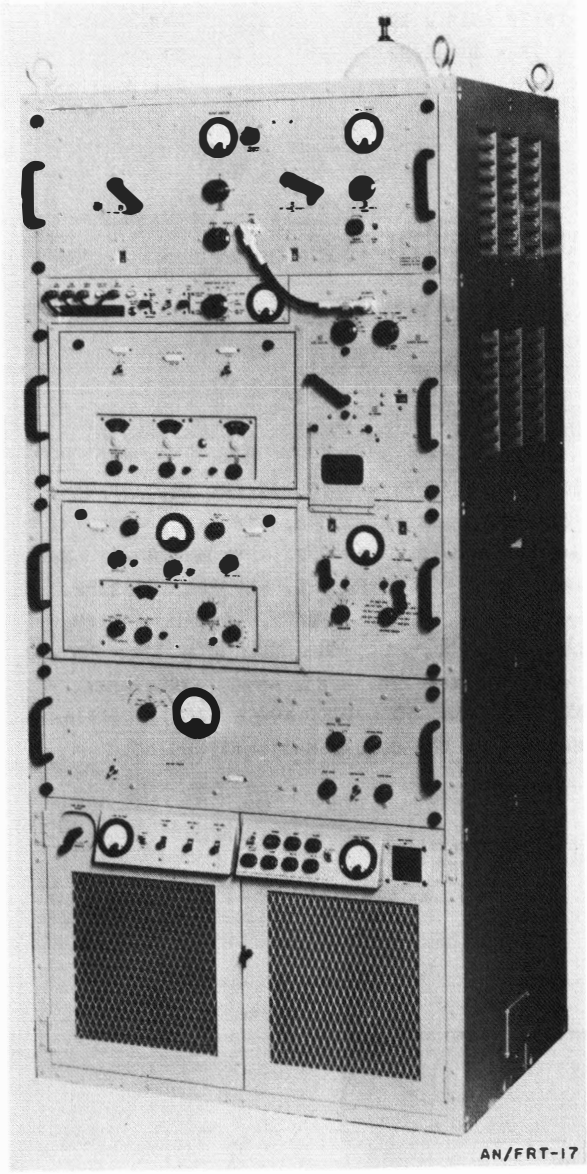
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	84 x 85 x 31	3,060			
DOMESTIC PACK:		7,413	521.33	13	
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 12 Jun 52

AN/FRT-17

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT-17 is a general purpose, medium-power, am (cw, mcw, voice, frequency shift keying, radioteletype or, facsimile) transmitter, designed for shore-station installation.

This equipment may be operated at either 250, 500, or 1,000 w r-f output.

Frequency control is by means of a master or crystal oscillator.

It is designed as a replacement for radio transmitting Equipment TDO.

AN/FRT-17

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 12 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	RF Unit, Collins Type 507A-1A	Not Available	Not Available
1	RF Oscillator O-91/FRT-5	10-15/32 x 13 x 19	" " "
1	Frequency Shift Keyer KY-45/FRT-5	13 x 19 x 10-15/32	50
1	Modulator, Collins Type 509A-1	Not Available	Not Available
1 each	Power Unit, Collins Type 506A-1, 509A-1	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

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, -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, -12, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -787, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; TBO; TBX; TBY; 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 - 30.

TYPE MODULATION: Am.

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

POWER OUTPUT: 250, 500, or 1,000 w.

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

PHYSICAL CHARACTERISTICS

Radio Transmitting Set AN/FRT-17 measures 84 x 47 x 32 inches.

STATUS: Std

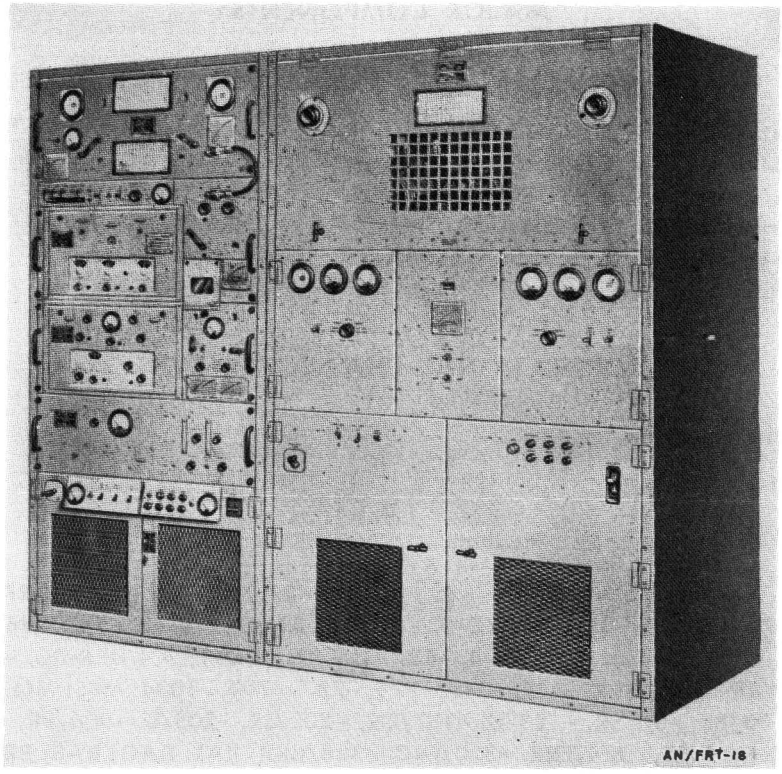
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: USN

DATE OF THIS SHEET: 12 June 1952

AN/FRT–18

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT–18 is a general purpose, medium-power, am (cw, mcw, voice, frequency-shift keying, facsimile) transmitter designed for shore-station installation.

It consists of Radio Transmitting Set AN/FRT–17 plus an rf amplifier bay. Frequency control is by means of a master or crystal oscillator. This equipment replaces Radio Transmitting Equipment TDH.

AN/FRT–18

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: USN

DATE OF THIS SHEET: 12 June 1952

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lbs)
1	RF Unit, Collins Type 507A–1A	Not Available	Not Available
1	RF Oscillator O–91/FRT–5	$10^{15}/_{32}$ x 13 x 19	Not Available
1	Frequency Shift Keyer KY–45/FRT–5	13 x 19 x $10^{15}/_{32}$	50
1	Modulator, Collins Type 509A–1	Not Available	Not Available
1 each	Power Unit, Collins Type 506A–1, 508A–1	Not Available	Not Available
1	RF Amplifier	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, Fixed.

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/SRR–3, –8, –12, –13; AN/TRQ–1; AN/URR–10, –12, –22, –23; AN/VRC–1, –4; AN/VRR–2; BC–312, –342, –348, –779, –787, –794, –1004; MBS; MQ; OA–58/FRC, –59/FRC; R–62/PR, –80/PR, –96/SR, –129/U, –137/GR, –203/SR, –205/U, –206/PR, –208/FR, –209/FR, –210/U, –211/U, –213/SR, –274/FRR, –320/FRC, –388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR–177, –188, –193, –244, –274, –281, –399, –499, –506, –536, –543, –585, –593, –607, –694, –704; TBO; TBX; TBY; 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: 2–30.

TYPE MODULATION: Am.

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

POWER OUTPUT: 3 kw.

POWER REQUIREMENTS: 230 v, 50–60 cyc, 3 phase, ac.

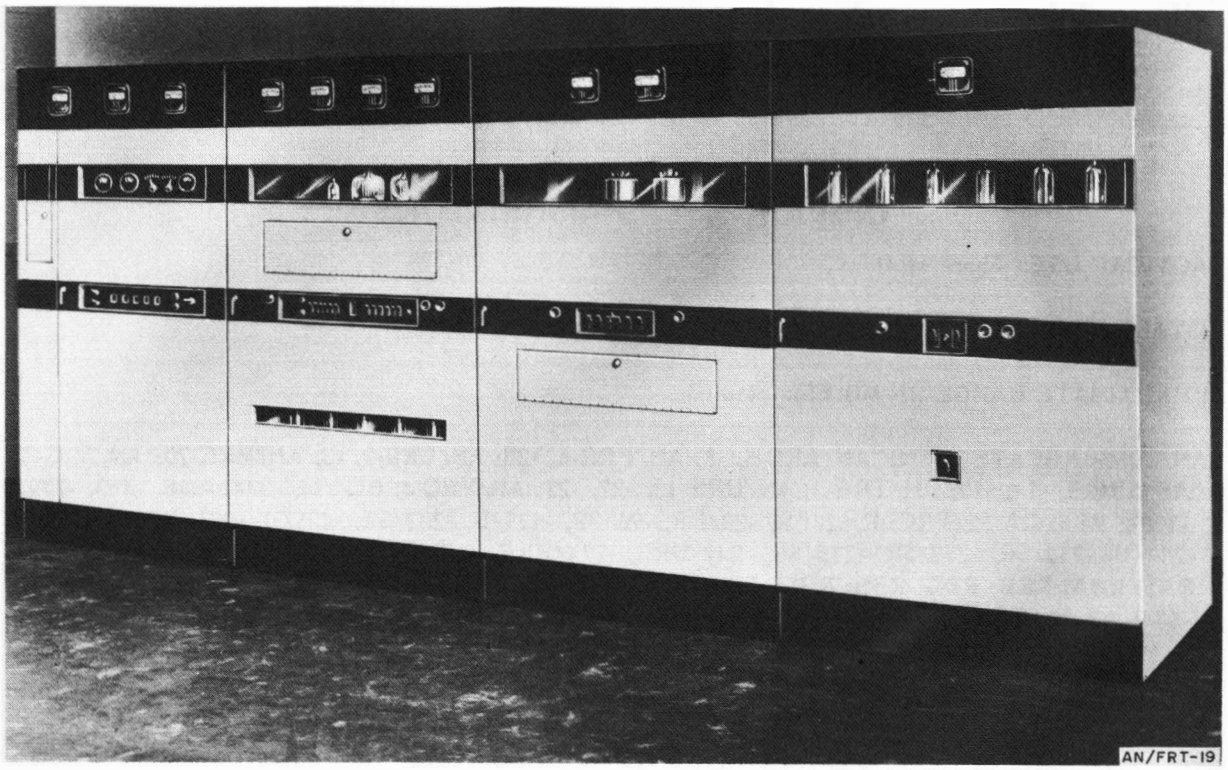
PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/FRT–18 not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 12 Jun 52

AN/FRT-19

RADIO TRANSMITTING SET



Radio Transmitting Set AN/FRT-19 is a single-frequency, medium-power, a-m (cw, mcw, frequency-shift keying, and facsimile) transmitter for shore-based radiotelegraph or radioteletype fixed station applications.

This equipment consists essentially of an exciter bay, amplifier bay, and antenna tuner. Frequency control for the one channel provided is by means of a master or crystal oscillator.

A power output of 15 kw is possible over a frequency range of 0.03 to 0.3 mc.

AN/FRT-19

RADIO TRANSMITTING SET

INSTRUCTION LITERATURE: Not available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 12 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Nomenclature assignments not made as yet.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium.

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/FR, -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: 0.03 - 0.60.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, Mcw, frequency-shift keying, facsimile.

POWER OUTPUT: 0.03 to 0.3 mc, 15 kw.
0.3 to 0.6 mc, 3 kw.

POWER REQUIREMENTS: 230 v, 50/60 cyc , 3 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Set AN/FRT-19 not available.

STATUS: Std

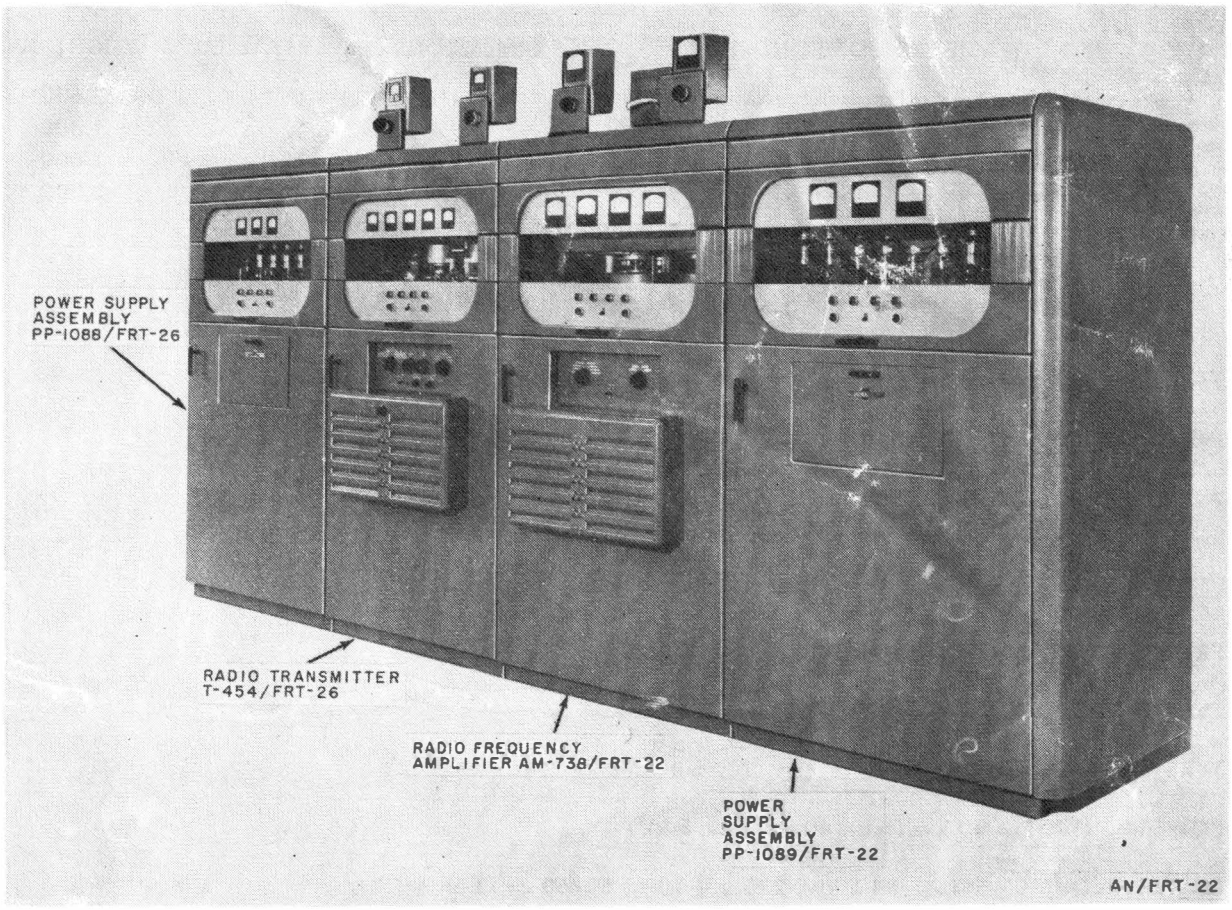
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/FRT–22

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/FRT–22 is a high-power, hf, fixed station radio equipment used for handling cw radiotelegraph, frequency-shift teletypewriter, or facsimile traffic over long distances.

It consists essentially of a transmitter (having two rf oscillators, a frequency-shift keyer, and a power supply), an amplifier, and two power assemblies. Each of these components is housed in a metal cabinet, four of which are bolted together to form a single unit.

This equipment is the primary operating component of Coded Facility –334 (TB SIG 322–334).

AN/FRT-22

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: TM 11-847

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Radio Frequency AM-738/FRT-22	91 7/16 x 43 1/2 x 59 7/16	2,650
1	Power Supply Assembly PP-1088/FRT-26	79 5/16 x 43 1/2 x 37 11/16	1,800
1	Power Supply Assembly PP-1089/FRT-22	79 5/16 x 43 1/2 x 37 11/16	2,000
1	Transmitter Radio T-454/FRT-26	91 7/16 x 43 1/2 x 42 7/16	2,200

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26.5.

TYPE MODULATION: Am (A1, A3b); fm (F1).

TYPE OF SIGNAL: Cw, fsk.

POWER OUTPUT: 30 kw (ssb), 40 kw (cw, fsk).

POWER REQUIREMENTS: 84.5 kw, 230 v ±10%, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91 7/16 x 180 1/4 x 59 7/16	12,595	481.4	12.04	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

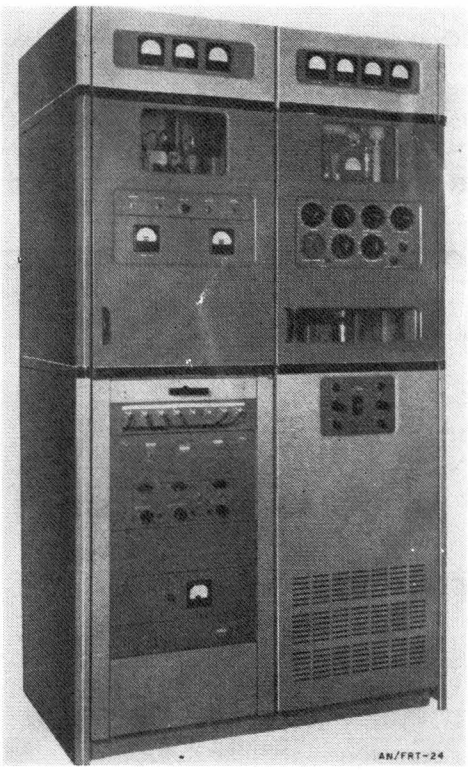
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRT–24

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/FRT–24 is used to provide reliable shore-to-ship, ground-to-aircraft, or point-to-point communication under wide variations in climatic conditions.

This equipment includes automatic tuning that selects any one of 10 preset channels for local or remote control. The two remote-control units are each provided with an impedance-matching device that permits feeding into connecting facilities ranging from a 52-ohm unbalanced line to a 600-ohm balanced line without tuning.

AN/FRT–24

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92223(A)

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Control, Transmitting Set C–1362/FRT–24	10⅞ x 11 x 21⅛	50
1	Power Supply PP–454/FRT–5	8¾ x 15⅛ x 19	88
1	Transmitter, Radio T–440/FRT–24	31¾ x 46⅞ x 83	1,500
2	Telephone Set TA–267/U	5⅛ x 5½ x 7½	4

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 30 in eight bands:

Band 1: 2 to 3
Band 2: 3 to 4
Band 3: 4 to 6
Band 4: 6 to 8
Band 5: 8 to 12
Band 6: 12 to 16
Band 7: 16 to 24
Band 8: 24 to 30

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: 1,000 w (A1 or A3) into 600-ohm load.

POWER REQUIREMENTS: 4.5 kw, 208/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	31¾ x 46⅞ x 83	1,500			
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

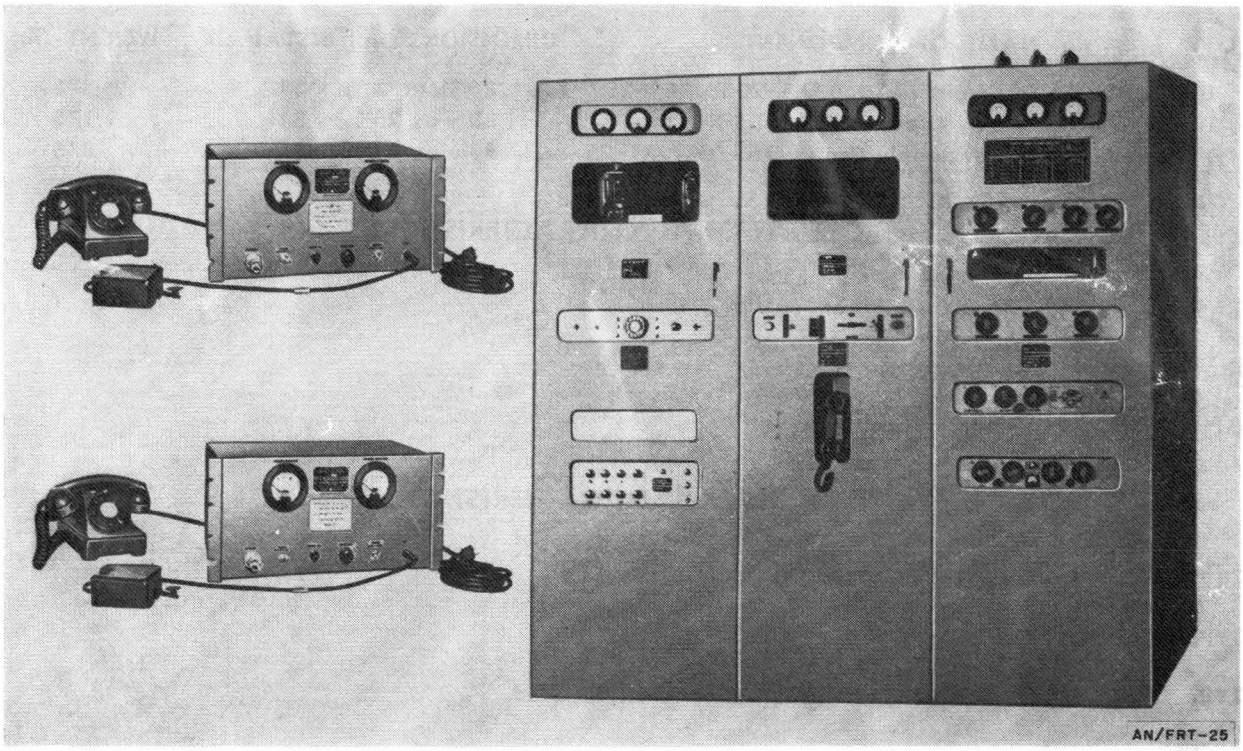
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRT–25

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/FRT–25 is used at naval shore installations to provide transmission facilities for point-to-point and ground-to-air communication applications.

This equipment is capable of continuous high-power operation on cw, frequency-shift keying, or photo-transmission.

It will operate in any one channel of 10 crystal-controlled frequencies or on 1 master-oscillator-controlled frequency.

AN/FRT-25

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92431

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Transmitter Group OA-205B/FRT-25	$86\frac{15}{16} \times 28\frac{15}{16} \times 31$	875
1	Power Supply Group OA-206B/FRT-25	$83\frac{15}{16} \times 25\frac{15}{16} \times 31$	1,175
1	Keyer-Power Supply Group OA-708/FRT-25	$83\frac{15}{16} \times 28\frac{15}{16} \times 31$	875

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installation.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 30.

TYPE MODULATION: Am (A1), fm (F1, F4).

TYPE OF SIGNAL: Cw, fsk, fsk w/ph modulation, facsimile.

POWER OUTPUT: 3 kw (max).

POWER REQUIREMENTS: 220 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

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

STATUS:

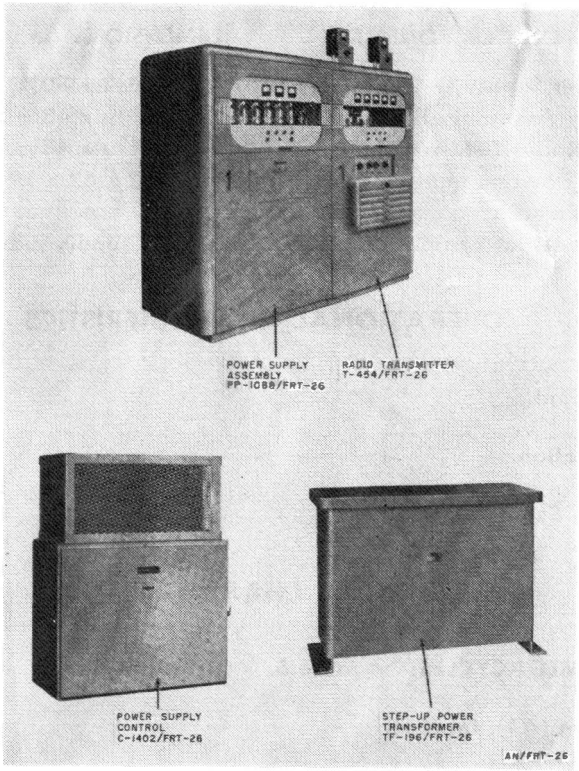
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/FRT–26

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/FRT–26 is a medium-power, hf fixed station radio equipment used for handling cw radiotelegraph, radioteletype, or facsimile traffic over long distances.

It consists essentially of a transmitter and its power supply (housed in two metal cabinets bolted together to form a single unit), a high-voltage power transformer, and a power control. The transmitter cabinet also contains two rf oscillators, a frequency-shift keyer, and a power supply.

This equipment is the primary operating component of Coded Facility –333 (TB SIG 322–333).

AN/FRT-26

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: TM 11-846

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Power Supply C-1402/FRT-26	38¼ x 30¼ x 14¾	298
1	Power Supply Assembly PP-1088/FRT-26	79⁵⁄₁₆ x 43½ x 37¹¹⁄₁₆	1,800
1	Transmitter, Radio T-454/FRT-26	91⁹⁄₁₆ x 43½ x 42⁷⁄₁₆	2,200
1	Transformer, Power, Step-up TF-196/FRT-26	32 x 42 x 19⅛	605

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26.5.

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

TYPE OF SIGNAL: Cw, fsk.

POWER OUTPUT: 15 kw.

POWER REQUIREMENTS: 27.5 kw, 230 v ±10%, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91⁹⁄₁₆ x 93¼ x 42⁷⁄₁₆	5,070	197	4.9	
DOMESTIC PACK:					
EXPORT PACK:					

AN/FRT–27

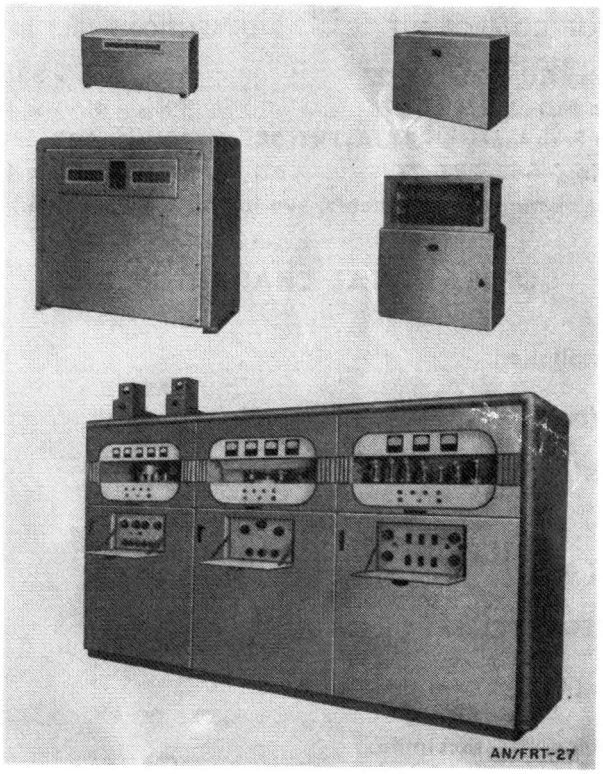
TRANSMITTING SET, RADIO

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956



Radio Transmitting Set AN/FRT–27 is used for shore-based, point-to-point radiotelegraph, radiotelephone, radioteletype, or facsimile communication applications.

With some modification in the power-amplifier circuit, this equipment will operate as a medium-power rf amplifier for a single-sideband transmitter.

AN/FRT-27

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92501(A)

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Coupler, Modulator CU-396/FRT-27	38⅛ x 41 x 33⅛	1,800
1	Modulator, Radio MD-232/FRT-27	79⅝ x 43½ x 41¾	1,805
1	Oscillator, Radio Frequency O-243A/FRT-24	10 15/32 x 18 3/16 x 16 13/16	15
1	Transmitter, Radio T-463/FRT-27	91 9/16 x 43½ x 41¾	1,943

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installation.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26.

TYPE MODULATION: Am (A1, A3), fm (F1, F4).

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

POWER OUTPUT: 10 kw (A3); 15 kw (A1, F1, F4).

POWER REQUIREMENTS: 230 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91 9/16 x 43½ x 41¾	8,508	325	8.1	
DOMESTIC PACK:		13,000	774	19.4	21
EXPORT PACK:					

STATUS: See note below *	**AN/FRT-TYPE**
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: BC-329
USING SERVICE: Air Force	RADIO TRANSMITTER
DATE OF THIS SHEET: 10 Jun 52	

Radio Transmitter BC-329 is a fixed, ground, a-m radio transmitter for short-range airport control by voice communication in the l-f (200 to 410 kc) range.

It is crystal controlled, but has a master oscillator for emergency operation at frequency range 0.19 to 0.4 mc.

The 500-ohm impedance audio input circuit is designed for a low impedance microphone or telephone line.

The antenna output is designed for operation into a long wire antenna such as the antenna kit (Signal Corps Stock No. 2A2530-GP-1) used with but not part of Tower AB-127/FR.

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* Radio Transmitters BC-329-A, -B, -C, -D, -E, -F, -G, -H, -J, -L, -M are Limited Standard; BC-329-N is Substitute Standard, but all models are interchangeable.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TO 16-30GRT-2-3
BC-329 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 10 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: Normally utilized at advanced air bases for emergency airport traffic control.

INSTALLATION: Ground, self-contained for table or floor mounting.

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

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/VRC-4; BC-344, -348, -453, -779; MBS; R-96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR; RAK; RAL; RAS; RBA; RBH; RBL; RBM; RCH; RDF; SCR-177, -274, -614; ARC Type 12; Fisher TS 25-3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 0.41, preset, single channel.

TYPE MODULATION: Am:

TYPE OF SIGNAL: Voice.

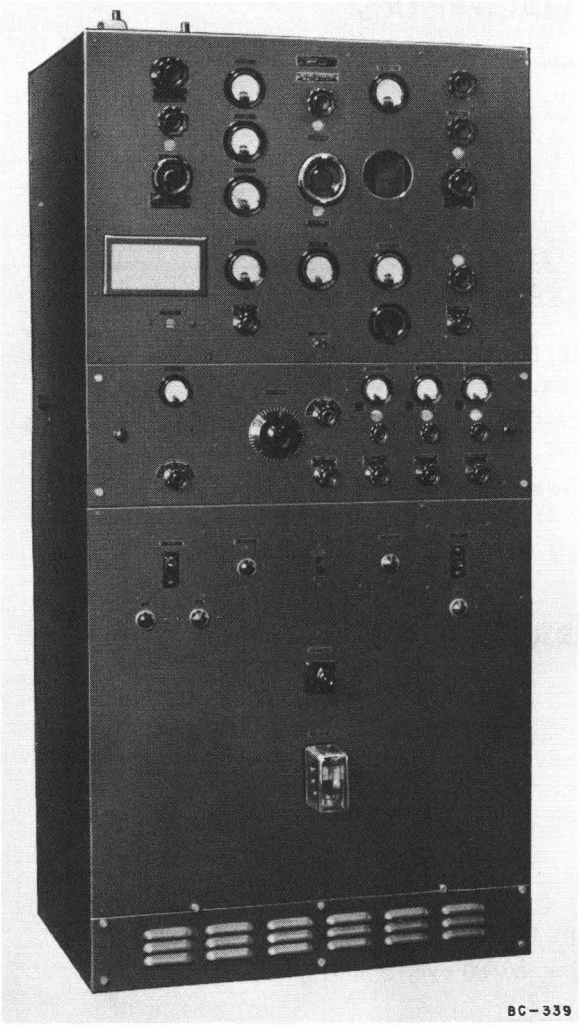
POWER OUTPUT: 25 w.

POWER REQUIREMENTS: 560 w, 105-125 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter BC-329 measures 30-1/2 x 24-1/2 x 20 inches, net weight 240 pounds, volume 6.9 cu ft. Packed for domestic or export shipment: total weight 264 pounds, total volume 7.4 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 8 Jan 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: BC-339 RADIO TRANSMITTER



BC-339

Radio Transmitter BC-339 is a high-frequency, medium power, radiotelegraph transmitting equipment used for fixed plant long range, high-speed communication.

This equipment consists of a floor type steel cabinet containing the operating components and related apparatus.

It can be operated independently, or as a driver for Power Amplifier BC-340 with Rectifier RA-22 and Water Cooling Unit RU-2 to form a 10-kw radiotelegraph or radioteletype facility.

It has provision for remote starting, stopping and keying the transmitter over a telephone pair from distances up to six miles away, and can be operated under such conditions at speeds of 300 wpm.

It is usually operated with a rhombic doublet, or similar array, and operates on 220-v ac.

AN/FRT-TYPE

BC-339 :SERVICE TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-836

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Theater commands, army security agency.

INSTALLATION: Ground, fixed station.

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, -29, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -9, -19, -20; AN/SRR-3, -9, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -9, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/SR, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 19S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency shift keying.

POWER OUTPUT: 1 kw.

POWER REQUIREMENTS: BC-339-A, -B, -C, -F: 220 v, 60 cyc, 3 phase, ac.
BC-339-E, -G, -H, -J, -K, -L, -M : 220 v, 50/60 cyc, 3 phase, ac.
Key up: 1,610 w, (7 amp) per line.
Key down: 4,300 w, (13 amp) per line.

PHYSICAL CHARACTERISTICS

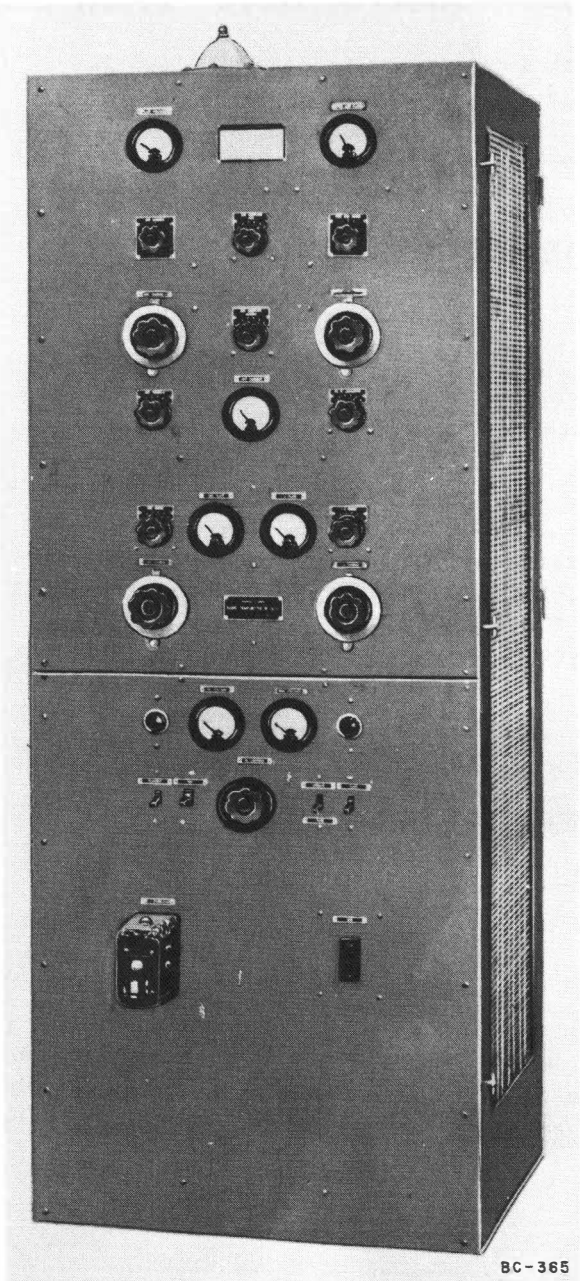
Radio Transmitter BC-339 measures 81-5/8 x 33-3/8 x 37-1/8 inches, net weight 1,560 pounds, volume 58.5 cu ft, 1.47 ship tons. Packed for domestic shipment: total weight 2,350 pounds, total volume 115 cu ft. Shipped in 6 packages. Packed for export shipment: total weight 2,350 pounds, total volume 115 cu ft, 3.91 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 11 Jan 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: BC-365

RADIO TRANSMITTER



BC-365

Radio Transmitter BC-365 is a medium-power, l-f and m-f, radiotelegraph transmitting equipment used at fixed plant installations for long range communication.

This equipment consists of a single floor-type cabinet containing the operating components and control units. The frequency-keyer control is mounted on the front panel, and two separate keyer tubes provide for both a-m and frequency-shift keying.

Its remote control component permits operation of the transmitter over a telephone pair from a point up to 6 miles away.

Requires about 2,000-w, 110/220-v ac.

AN/FRT-TYPE

BC-365 :SERVICE TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-828

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-365	28 x 26 x 76	810.00
1	Remote Control Unit RM-10	19 x 1-15/16 x 1-3/4	2.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed.

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-59/FRC; R-52/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: 0.15 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency-shift keying.

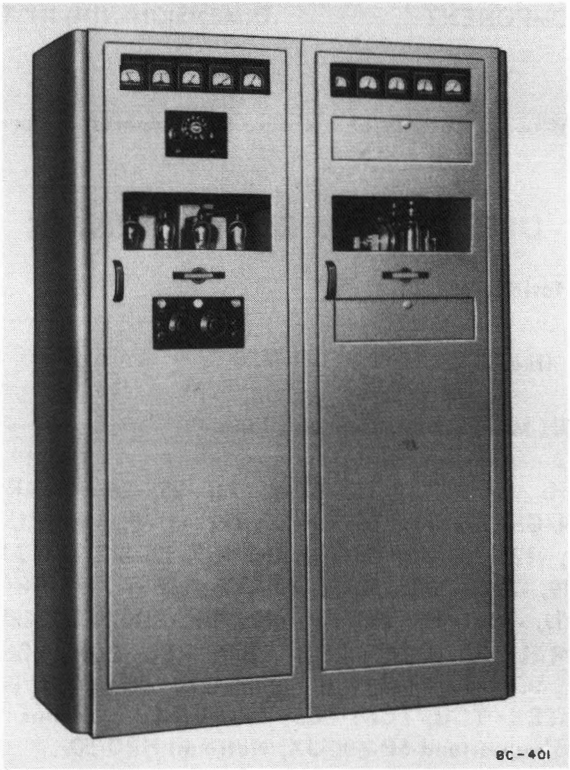
POWER OUTPUT: 350 w.

POWER REQUIREMENTS: 1,800 w, 110 / 220 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter BC-365 weighs 871 pounds net, volume 35 cu ft, 0.88 ship ton. Packed for export shipment: total weight 925 pounds, total volume 46 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: BC-401 RADIO TRANSMITTER



Radio Transmitter BC-401 is a crystal-controlled, a-m (voice and cw), m-f and h-f radio transmitting equipment which is used for medium- and long-range, high-power communication at permanent installations.

This equipment consists of a steel floor-type cabinet inclosing operating units and components. It operates in 10 preset crystal-controlled channels, has provision for full remote control operation, and uses a double-cage type of antenna.

A rectifier and modulation unit and a remote control unit are used with but are not issued as part of this equipment.

Operates on 220 v ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: None
BC-401 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed station.

INSTALLATION: Ground, fixed.

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-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: 400 w.

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

PHYSICAL CHARACTERISTICS

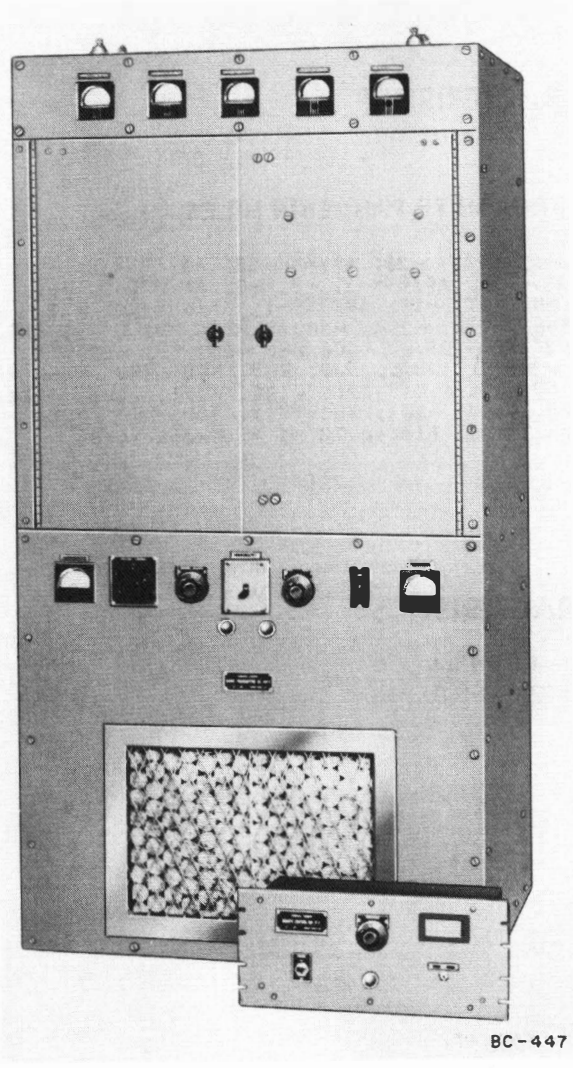
Radio Transmitter BC-401 measures 78 x 48 x 24 inches, net weight 1,640 pounds, volume 52 cu ft, 1.3 ship tons.

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

AN/FRT-TYPE

SERVICE TYPE NUMBER: BC-447

RADIO TRANSMITTER



BC-447

Radio Transmitter BC-447 is a medium-power, long range, radiotelegraph transmitting equipment which operates in the medium-and high-frequency bands at fixed plant installations.

This equipment consists of a cabinet-inclosed radio transmitter and associated remote control unit, and provides two crystal-controlled channels.

It can be operated from a remote point over a telephone pair, and uses any suitable antenna with a balanced 600-ohm transmission line.

Requires about 1,200-w of 115- or 230-v, ac.

AN/FRT-TYPE

BC-447 :SERVICE TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-827

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-447	72 x 35 x 27-3/16	871
1	Remote Control Unit RM-17	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed station.

INSTALLATION: Ground, fixed. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Channel 1: 4.0 - 13.4.
Channel 2: 2.0 - 8.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: 300 w.

POWER REQUIREMENTS: 1,200 w, 115 / 230 v, 50/60 cyc, ac.

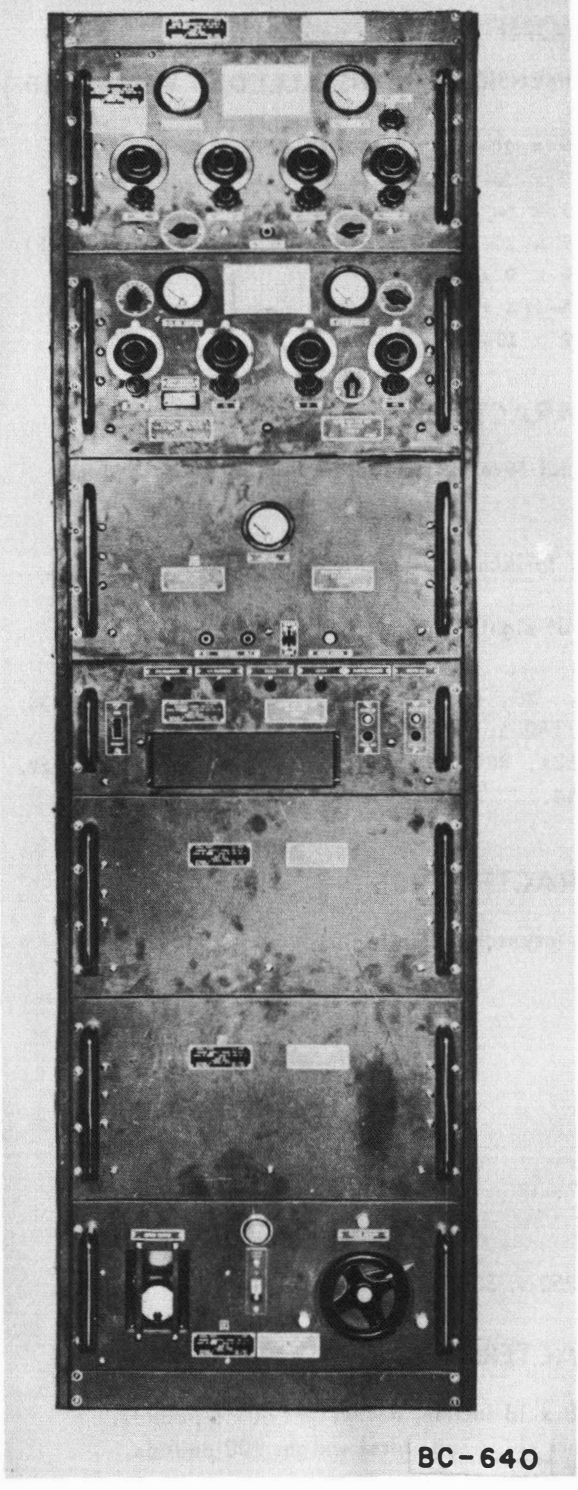
PHYSICAL CHARACTERISTICS

Radio Transmitter BC-447 weighs 871 pounds net, volume 42 cu ft, 1.05 ship tons. Packed for export shipment: total weight 1,247 pounds, total volume 92 cu ft, 2.30 ship tons. Shipped in 1 package.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 19 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: BC-640
RADIO TRANSMITTER



Radio Transmitter BC-640 is a 50-w crystal-controlled, a-m (voice or tone) v-h-f transmitter. Plug-in crystals are used to permit operation on any frequency in the 100 to 156 m-c range. It is normally operated from a fixed ground, or mobile location, for point-to-point or ground-to-air communication, and can be operated locally, or from a remote point up to eight miles away. The addition of repeater equipment extends the range of remote operation.

The output of the transmitter matches 72-ohm coaxial transmission lines, such as Radio Frequency Cable RG-11/U.

Recommended antennas are Antenna Equipment RC-81 and Antenna AN-188.

This radio transmitter and its associated Radio Receiver BC-639 form a single channel, radio link, terminal station, or a part of an aircraft control-net system.

Radio Transmitter BC-640, -A, -B, are interchangeable, operationally, with BC-640-D.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TO 16-40BC640-2
BC-640 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier Panel PN-9-C	19 x 10-1/2 x 16-1/4	41.5
1	Oscillator Panel PN-9-C	19 x 10-1/2 x 16-1/4	39.0
1	Control Panel PN-11-B	19 x 6-31/32 x 9-5/8	27.0
2	Power Supply Panel PN-12-B	19 x 10-1/2 x 14-1/2	84.0 (each)
1	Power Control Panel PN-13-C	19 x 9 x 9-3/4	40.0
1	Cabinet CS-88-A	21-1/4 x 72-3/8 x 18	210.0
1	Modulator Panel PN-10-C	19 x 10-1/2 x 15	48.0

OPERATIONAL CHARACTERISTICS

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

INSTALLATION: Ground fixed, designed for standard 19-inch relay rack mounting.

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

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/VRC-1; BC-639, -797; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 (crystal-controlled).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 860 watts of 110-125/220-250-v, 50/60-cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter BC-640-D measures 21-1/4 x 72-3/8 x 18 inches, net weight 601.5 pounds, volume 18.4 cu ft. Packed for either domestic or export shipment: total weight 900 pounds, total volume 55.33 cu ft, 1.38 ship tons. Shipped in 1 package.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

AN/FRT–TYPE

KY–7/FRT

TONE KEYING UNIT

NO PHOTOGRAPH AVAILABLE

Tone Keying Unit KY–7/FRT provides a keyed negative output voltage and adapts any type of keyed radio transmitting equipment to tone-keying operations.

A 1,000-cycle keying tone is fed over a 500-ohm line into the input transformer, which has a center tap for simplex control.

This equipment contains a polarized keying relay, controlled by the keyed tone input, that can be used to key an associated radio transmitter.

AN/FRT–TYPE

INSTRUCTION LITERATURE: TM 11–2669

USING SERVICE: USA

DATE OF THIS SHEET: 22 June 1956

KY–7/FRT

TONE KEYING UNIT

MAJOR COMPONENTS

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Tone keyed neg output voltage.

INPUT IMPEDANCE: 500 ohms.

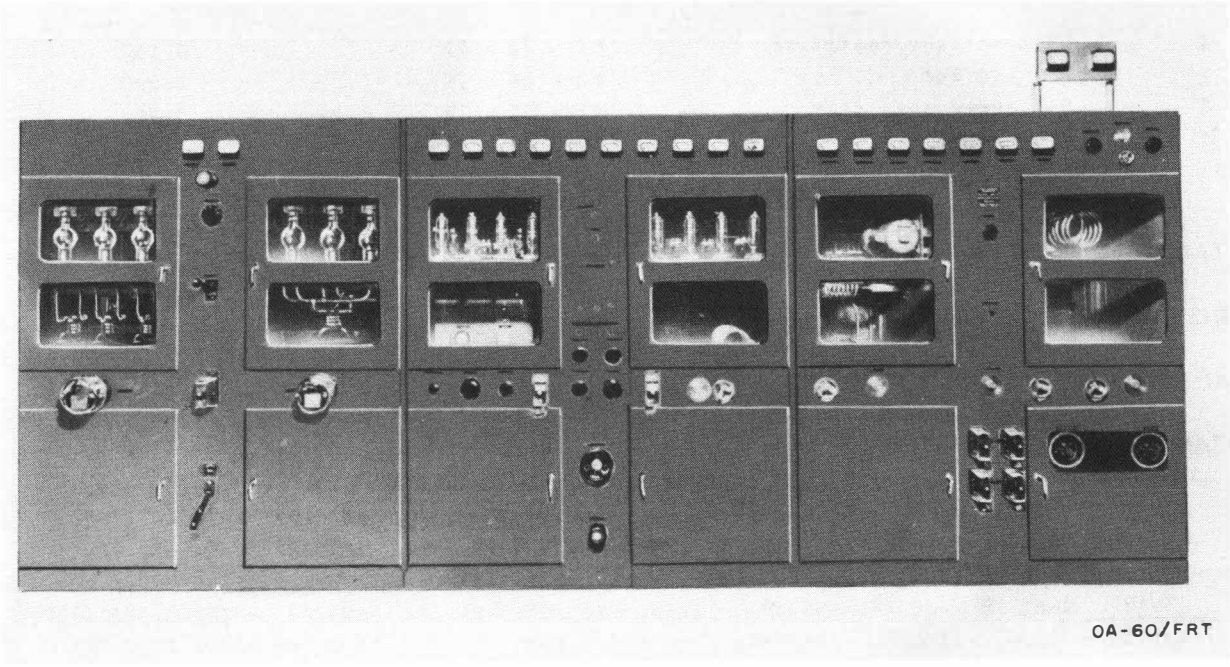
KEYED OUTPUT VOLTAGE: 0 to 115 v.

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

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	8¾ x 9 13/16 x 19	28.3	1		
DOMESTIC PACK:					
EXPORT PACK:		67	2.7		1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: OA-60/FRT RADIO TRANSMITTER ASSEMBLY



OA-60/FRT

Radio Transmitter Assembly OA-60/FRT is a high-power, a-m (cw), single side band, high-frequency radio transmitting equipment used for point-to-point long range communication applications at large fixed stations.

This equipment consists of an assembly of operating units and components rack and panel mounted in floor-type cabinets, and includes high-voltage rectifier, r-f exciter, r-f power amplifier sections, and water cooling, crystal-control, and related accessory and auxiliary items.

It can be used with a single-side band transmitter as a linear amplifier, controlled by six different crystals, and provides a single preset operating channel.

It is used for high-speed cw, and for radioteletype communication and can be controlled locally, or from a remote operating site, by appropriate remote control equipment.

Uses a 600-ohm transmission line operating into a rhombic antenna array, has a power output of about 40 kw and operates from a 100-kw source of 230-v, 3 phase, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-835
OA-60/FRT :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER ASSEMBLY	USING SERVICE : Army
	DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	High-voltage rectifier	82 x 56 x 72	4,860
1	R-f exciter	82 x 56 x 72	3,090
1	R-f power amplifier	82 x 56 x 72	3,290
1	Water-cooling Unit	66 x 66 x 60	1,093

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH:

AN/ARC-2, -5, -8, -9, -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/SR, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

OA-60B/FRT. In addition to communicating with all of the above sets, will also communicate with: AN/ARC-21; RBB; SCR-543.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: OA-60A/FRT: 5.3 - 21.
OA-60B/FRT: 4 - 21.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, or single side band.

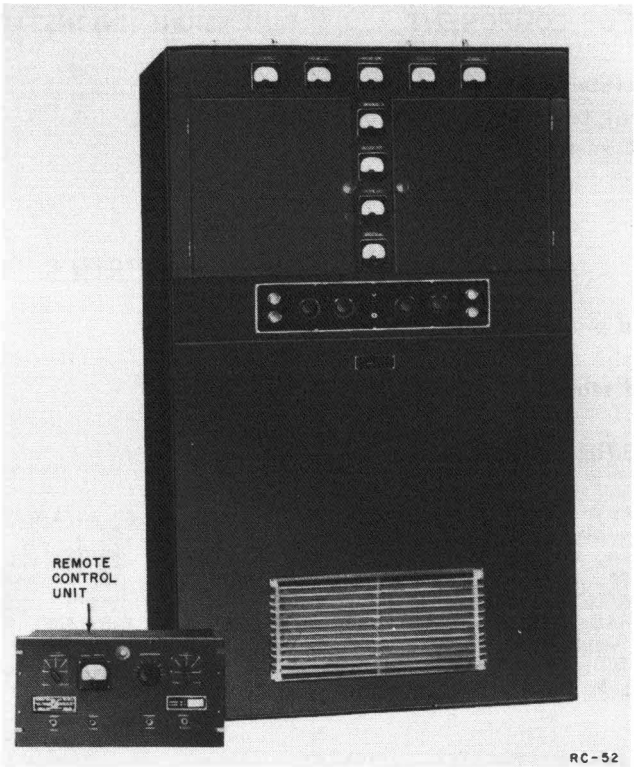
POWER OUTPUT: 40,000 w.

POWER REQUIREMENTS: 100 kw, 240 v, 3 phase, ac or, Power Unit PE-220.

PHYSICAL CHARACTERISTICS

Radio Transmitter Assembly OA-60/FRT measures 216 x 56 x 84 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	AN/FRT-TYPE SERVICE TYPE NUMBER: RC-52 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment RC-52 is a medium power, medium range, medium-and high-frequency fixed plant radio transmitting station equipment used for point-to-point communication, air-warning and similar applications by means of a-m (voice, cw, or mcw) signals.

This equipment consists of a single cabinet-inclosed unit and a remote control equipment plus microphone and accessory items. It covers its frequency range (1.5 to 7 mc) in four bands and operates in two preselected channels.

Provision is made for selection of specific types of emission from the remote operating or control point, and for automatic starting and stopping the equipment by remote control.

A rhombic or doublet antenna is used, and power is derived from a source of 115-v or 230-v, ac.

AN/FRT-TYPE

RC-52 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: None

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-452	29 x 24 x 72	Not Available
1	Remote Control Unit RM-22	Not Available	" "
1	Microphone T-27-B	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): 200.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -9, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -9, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -349, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -595, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 7.0 in 4 bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, and mcw.

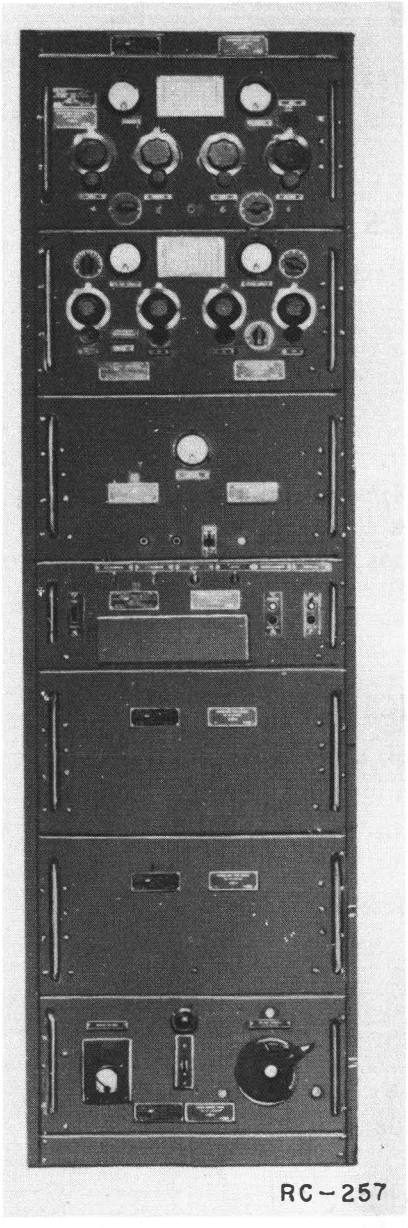
POWER OUTPUT: 300 w.

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

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment RC-52 weighs 1,250 pounds net. Packed for export shipment: total weight 1,750 pounds, total volume 50 cu ft, 1.3 ship tons.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 26 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: RC-257 RADIO TRANSMITTING EQUIPMENT



RC-257

Radio Transmitting Equipment RC-257 includes all components necessary to set up a complete radio transmitting station, except for an external source of a-c power. It is used for ground-to-air and point-to-point a-m operation in the v-h-f range, usually in conjunction with Radio Receiving Equipment RC-256 to provide a single-channel, radio-link, terminal station for voice or tone-modulated communication.

This equipment consists primarily of a Radio Transmitter BC-640, Antenna Equipment RC-81, Antenna Mast MA-6, Junction Box JB-132, and necessary connecting cables, relay rack, and microphone.

It may be operated locally, or, under average conditions, from remote positions up to eight miles away.

Radio Transmitting Equipment RC-257-A is similar to Radio Transmitting Equipment RC-257-C except that RC-257-A uses Radio Transmitter BC-640-A and Antenna Equipment RC-81-A.

Power requirements are: 1,200 w of 115/220-v, single-phase, 50/60 cyc, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TO 16-1A-10 & 16-40BC640-2
RC-257 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Air Force
	DATE OF THIS SHEET: 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-640-D	21-1/4 x 72 x 20	601
1	Mast MA-6	90 feet erected	883
1	Junction Box JB-132	12-3/16 x 17-13/32 x 7-11/16	16
1	Antenna Equipment RC-81-C	(Not Available)	Not Available

OPERATIONAL CHARACTERISTICS

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

INSTALLATION: Ground, fixed.

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

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -19, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/VRC-1; BC-639, -787; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 single channel, crystal-controlled (crystals not furnished).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

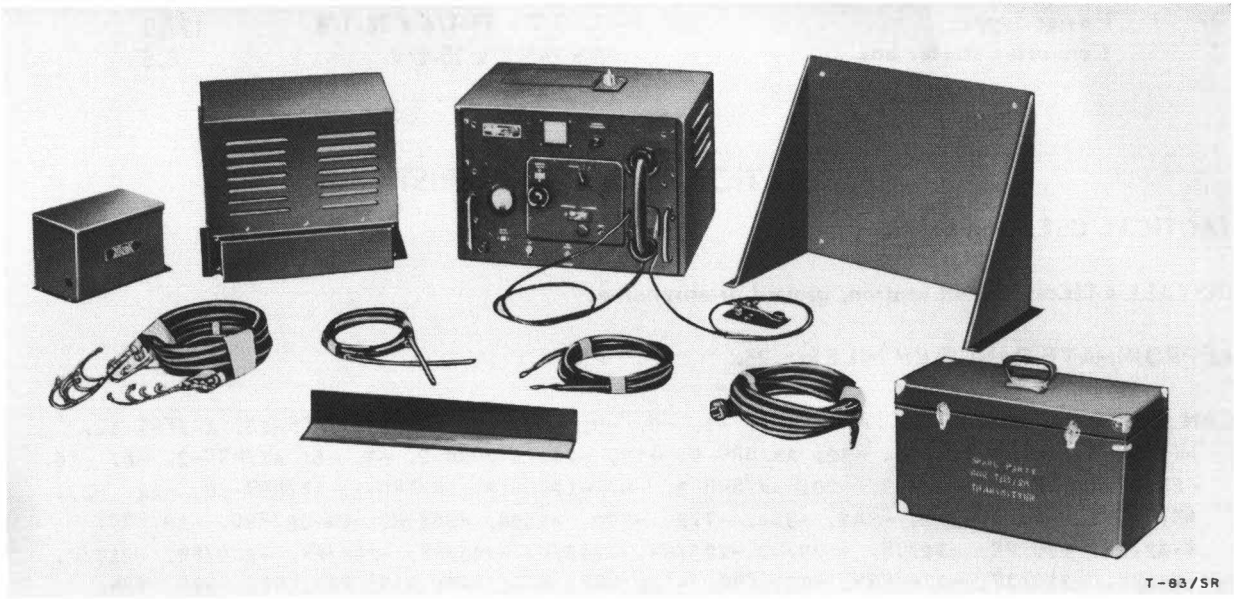
POWER OUTPUT: 50 w (Nominal).

POWER REQUIREMENTS: 1,200 w, 115/220 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment RC-257 measures 24 x 84 x 24 inches, net weight 1,500 pounds, volume 17.5 cu ft. Packed for either domestic or export shipment: total weight 1,700 pounds, total volume 17.5 cu ft, 0.5 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	AN/FRT-TYPE AN/COMP TYPE NUMBER: T-83/SR RADIO TRANSMITTER



Radio Transmitter T-83/SR is a crystal-controlled, short-range, a-m (voice and cw) transmitter equipment used in two-way ship-to-shore communication in the medium- and high-frequency range.

This equipment consists of the radio transmitter component and associated power supply and includes a converter starter box and accessories. It operates in five preset frequency channels selected by a five-position switch and can be controlled from a remote operating location.

It uses a long-wire or whip-type antenna and may be table or shelf-mounted.

It is powered by a source of 115-v ac.

AN/FRT-TYPE

T-83/SR :AN/COMP TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-837
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-83/SR	13-1/2 x 16 x 21	118.0
1	Power Supply	13-3/8 x 15-1/4 x 18-1/8	127.0
1	Converter starter box	6 x 6-1/8 x 10-1/2	8.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard.

INSTALLATION: Fixed station, ground or shipborne.

APPROXIMATE RANGE (IN MILES): 25.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; RBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.7 - 8.7.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw and voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 460 w, 115 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

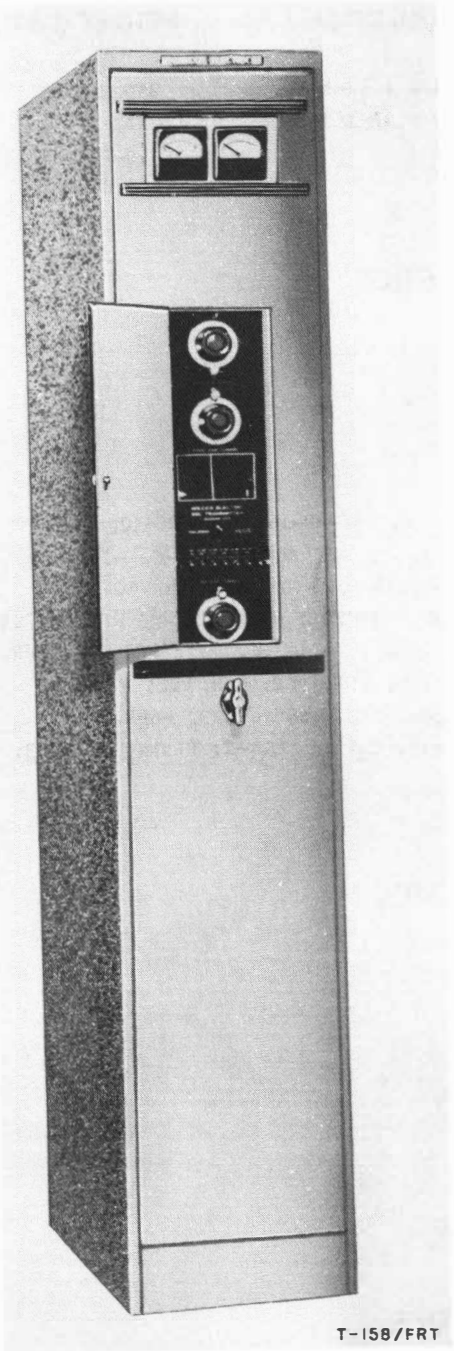
Information on Radio Transmitter T-83/SR not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

AN/FRT-TYPE

AN/COMP TYPE NUMBER: T-158/FRT

RADIO TRANSMITTER



T-158/FRT

Radio Transmitter T-158/FRT is crystal-controlled, a-m (voice, cw, mcw, and frequency shift keying) medium-power, transmitting equipment. It is used for fixed plant, ground-to-air, and point-to-point long range communication in the medium- and high-frequency range.

This equipment consists of a radio transmitter, exciter unit, and coil set inclosed in a floor-type cabinet and includes a radioteletype modification kit. The rectifier and modulator are not supplied as part of this equipment.

It is usually operated at a distant site by means of remote control equipment, and can use any 600-ohm antenna.

Requires 15 kva of 220-v ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-2671
T-158/FRT :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT:Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-158/FRT	73-3/4 x 26-1/4 x 12-1/4	365
1	Exciter Unit	8-3/4 x 8-1/2 x 17-1/4	27
1	Coil Set	Not Available	6.7
1	Teletype Modification Kit	" "	6.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -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, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 19S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 18.

TYPE MODULATION: Am.

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

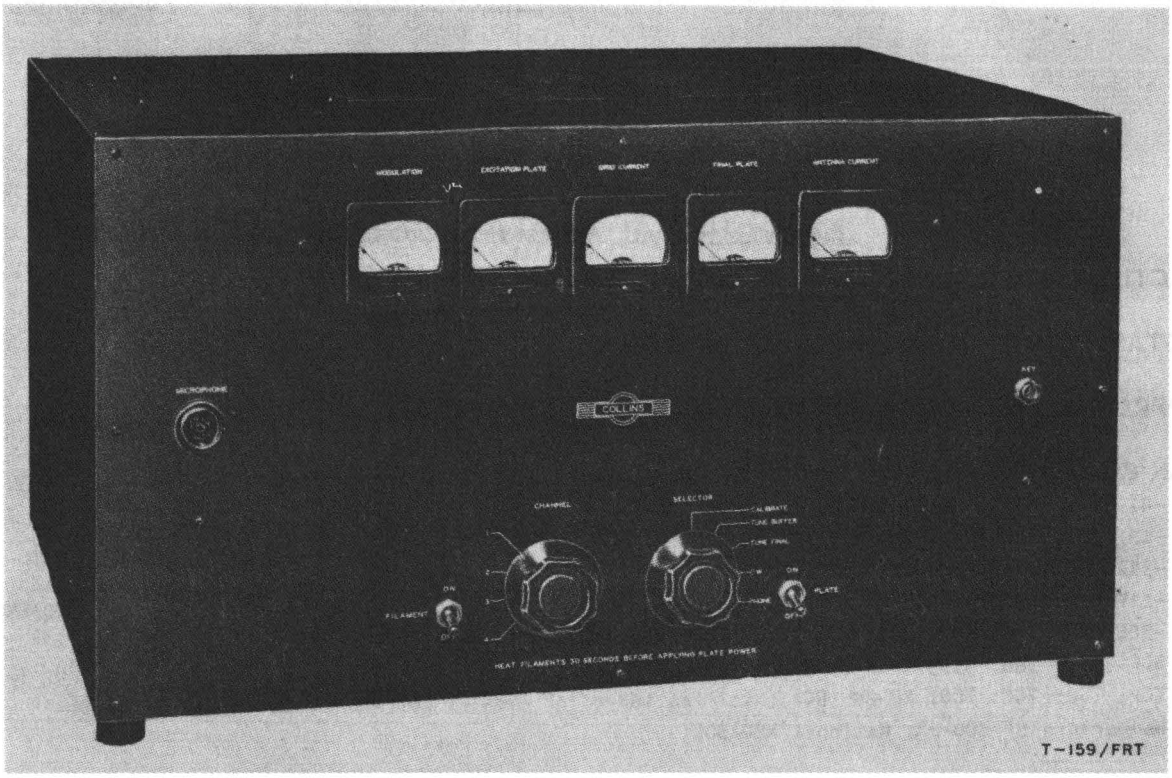
POWER OUTPUT: 2,500 w.

POWER REQUIREMENTS: 15 kva, 220 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-158/FRT packed for domestic shipment: total weight 732 pounds, total volume 51.6 cu ft, 1.25 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 1 Jan 52	AN/FRT-TYPE AN/COMP TYPE NUMBER: T-159/FRT RADIO TRANSMITTER



T-159/FRT

Radio Transmitter T-159/FRT is a low-power, a-m (voice and cw) radio transmitting equipment used for point-to-point, homing, and fixed or mobile station use in the medium- and high-frequency bands at corps and equivalent headquarters.

This equipment consists essentially of a commercial (Collins Model 32 RA-7, -8, or -9) table-model transmitter which is completely contained in a steel cabinet. The complete installation includes a microphone and a telegraph key. It operates in four preset channels and may be keyed up to speeds of 60 wpm.

It is designed to work into unbalanced antennas, or transmission lines, having a resistive impedance of 30 to 1,200 ohms and a reactive impedance of up to 300 ohms. It requires about 400 w of 115-v ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TO 16-10-116
T-159/FRT : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 1 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: General purpose use at corps and equivalent headquarters.

INSTALLATION: Ground, mobile or fixed station.

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, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 15.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and cw.

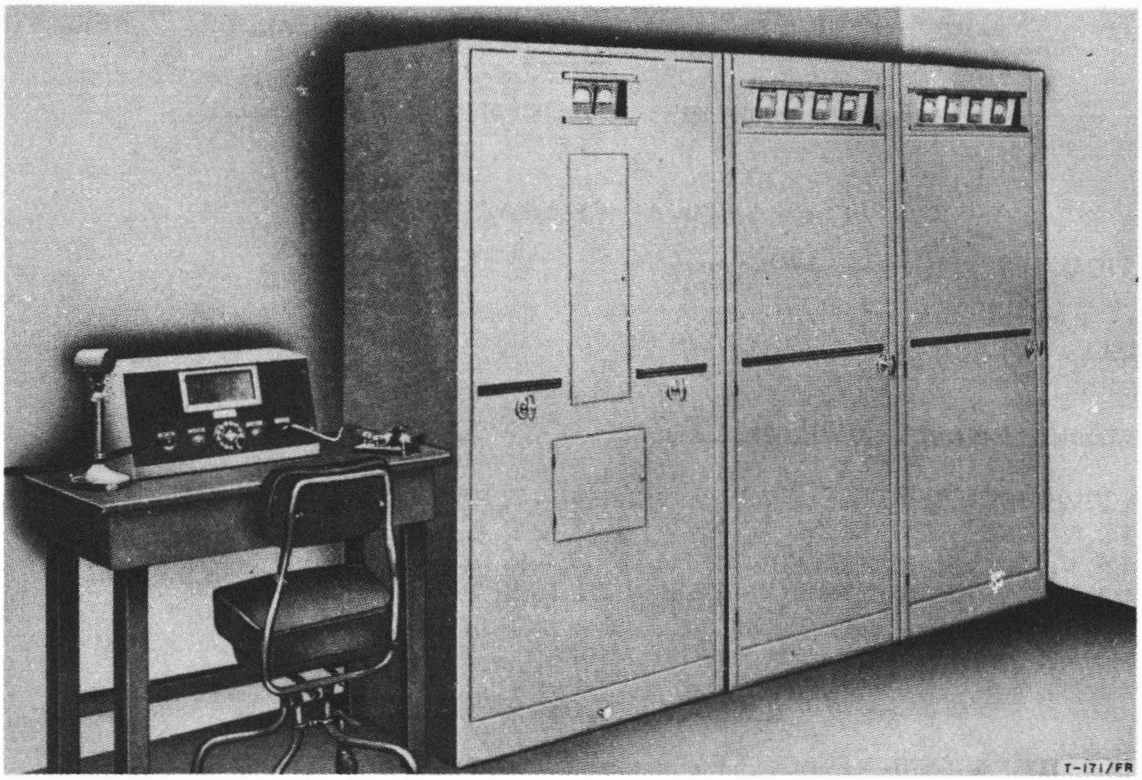
POWER OUTPUT: Voice: 50 w.
Cw: 75 w.

POWER REQUIREMENTS: 390 w (at 0.9 power factor) 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-159/FRT measures 12 x 22 x 18, net weight 120 pounds, volume 3 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 2 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-171/FR RADIO TRANSMITTER



Radio Transmitter T-171/FR is an l-f, high-power, long-range, a-m (voice and cw) radio transmitting equipment which is used for handling large traffic loads in fixed station application or can be used for homing.

This equipment consists essentially of a large floor type unit transmitter which is used in association with control and power components to form a complete radio transmitting station.

It may be operated from a distant point by means of remote control equipment and has provision for automatic keying.

T-171/FR provides voice and cw;T-171A/FR provides cw, remote keying, and voice; T-171B/FR provides frequency-shift keying and voice.

Power is derived from special power rectifier and supply units.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-802
T-171/FR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant installation.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

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-25; 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, -614, -794; ARC Type 12; Fisher TS 25-3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.125- 0.525.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice.

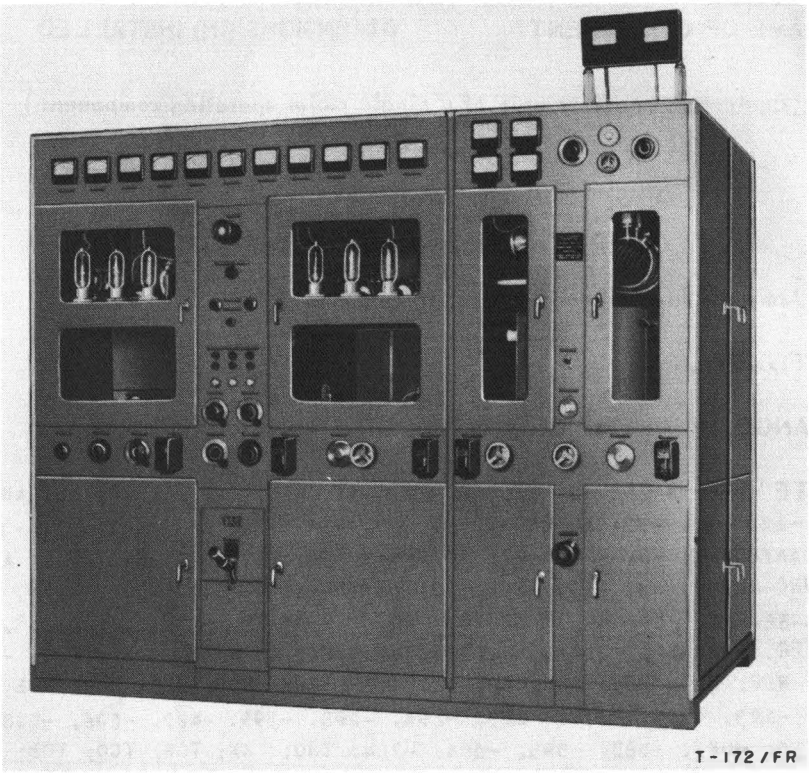
POWER OUTPUT: T-171/FR and T-171A/FR: 2,000 w.
T-171B/FR: 2,400 w.

POWER REQUIREMENTS: 1.0 amp at 4,000 v.
0.125 amp at 2,000 v.
0.1 amp at 500 v.
0.05 amp at 500 v.
1.0 amp at 12 v.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-171/FR measures 72 x 24-3/4 x 36-1/2 inches, net weight 705 to 720 pounds, volume 37.9 cu ft, 0.95 ship ton. Packed for domestic or export shipment: total weight 1,342 pounds, total volume 152.6 cu ft, 4 ship tons. Shipped in 9 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-172/FR RADIO TRANSMITTER



Radio Transmitter T-172/FR is a crystal-controlled, long-range, high-frequency, transmitting equipment used for o-m (cw, and frequency-shift keying) communications in fixed plant applications at army and higher headquarters.

This equipment consists of medium-power radio transmitting equipment, including rectifier, exciter, power amplifier, and related units inclosed in a large floor-type steel cabinet as a single unit. It is capable of c-w transmission at the rate of about 350 wpm, and by means of supplementary equipment, can be used in radioteletype communication.

It operates in six frequency channels which are selected by a six-position selector switch located on the operating panel.

This transmitter uses a rhombic antenna system, having a 500 to 600-ohm two-wire transmission line, and can be operated from a distant operating point by means of appropriate remote control components.

It operates from a source of 220-v ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-821
T-172/FR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters, fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH;RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 - 21.

TYPE OF SIGNAL: Cw, and frequency shift keying.

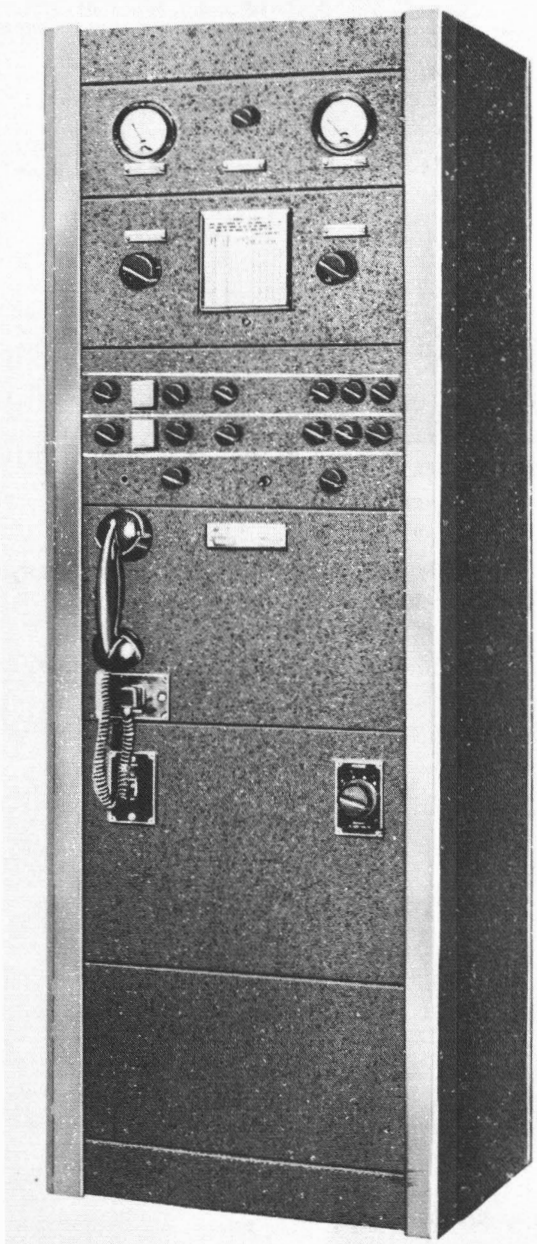
POWER OUTPUT: 15 kw.

POWER REQUIREMENTS: 35 kw, 220 v, 60 cyc, 3 phase, ac; 12 v dc.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-172/FR measures 108 x 84-1/2 x 56-1/4 inches, net weight 6,948 pounds, volume 294.2 cu ft. Packed for export shipment: total weight 11,227 pounds, total volume 885.4 cu ft. 22.1 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-174/FR RADIO TRANSMITTER



T-174/FR

Radio Transmitter T-174/FR is a crystal-controlled, medium-power, long range, a-m (voice, cw, and frequency shift keying) four-band, transmitting equipment for fixed plant ground-to-air communication applications in the high frequency range.

This equipment consists of r-f power amplifier, driver, audio amplifier, power and related apparatus rack-and-panel mounted in a floor type steel cabinet.

It has provision for two-tone telegraph, and telephone communication and operates on two-preset frequency channels. It can be operated at a distant location by means of appropriate remote control equipment.

A rhombic antenna, or a doublet type array which is fed by a 70 to 600-ohm balanced transmission line, is used.

Operates from a source of 200 to 250-v ac.

AN/FRT-TYPE

T-174/FR :AN/COMP TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-818

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 31 Jan 52

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-174/FR	76 x 27 x 25	550
1	Fan and housing	27 x 21 x 14	64
	Transformers	18 x 12 x 19	192
	Relays	26 x 20 x 26	85
	Power amplifier plate coils	Not Available	Not Available

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station. **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-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

FREQUENCY RANGE IN MEGACYCLES: 3 - 13 in 4 bands:

Band 1: 3 - 4.5 Band 3: 6 - 9

Band 2: 4.5 - 6 Band 4: 9 - 13.

TYPE MODULATION: Am.

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

POWER OUTPUT: 350 w.

POWER REQUIREMENTS: 1,800 w, 2,000 va, 200 - 250 v, 50/60 cyc, 1 phase, ac.

Radio Transmitter T-174/FR packed for domestic shipment: total weight 1,700 pounds, total volume 87 cu ft, 2.2 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

AN/FRT-TYPE

AN/COMP TYPE NUMBER: T-175/FR
RADIO TRANSMITTER

T-175/FR

Radio Transmitter T-175/FR is a medium power, a-m (voice, cw, and frequency shift keying), long range, transmitting equipment which operates in the high frequency band in fixed plant point-to-point, ground-to-air, and similar applications.

This equipment consists of rack-and-panel mounted oscillator, exciter, power amplifier, driver, and related components inclosed in a floor type steel cabinet, and operates in four-frequency channels, two of which can be preset.

It uses a rhombic or doublet type antenna system, fed by a balanced 70- to 600-ohm transmission line.

It requires 200 to 250-v of a-c power.

AN/FRT-TYPE

T-175/FR :AN/COMP TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-818

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-175/FR	76 x 27 x 25	550
1	Fan and housing	27 x 21 x 14	64
	Transformers	15 x 12 x 21	166
	Vacuum Tubes	26 x 20 x 26	64

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed ground station. **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-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 3 - 13 in 4 bonds.

Band 1: 3 - 4.5
Band 2: 4.5 - 6
Band 3: 6 - 9
Band 4: 9 - 13.

TYPE MODULATION: Am.

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

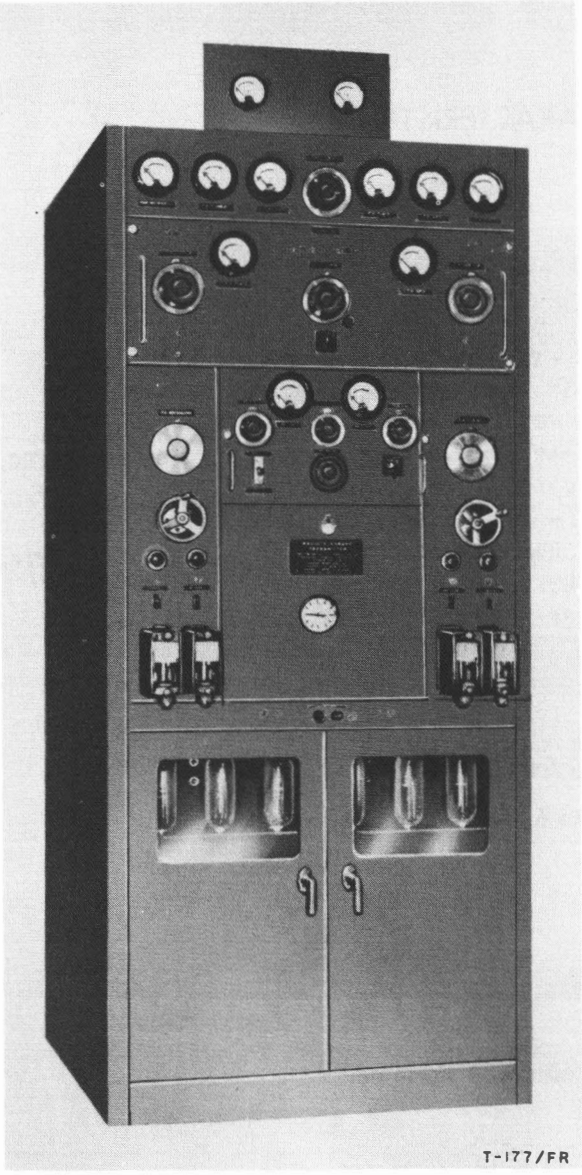
POWER OUTPUT: 350 w.

POWER REQUIREMENTS: 1,400 w, 1,500 va, 200 - 250 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-175/FR packed for domestic shipment: total weight 809 pounds, total volume 43.25 cu ft, 1 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-177/FR RADIO TRANSMITTER



T-177/FR

Radio Transmitter T-177/FR is a medium-power, low- and medium-frequency, long-range radio transmitting station equipment. It is used for cw or frequency-shift radioteletype communication over six preset channels at fixed plant installations serving army and equivalent headquarters.

This equipment consists essentially of a commercial (Press Wireless Model PW 918A) radio transmitter and is crystal or master-oscillator controlled. It has provision for electronic keying and for connection of Carrier Terminal OA-5/FC. Internal frequency-shift and remote control provisions are included.

It requires about 12-kva at 220/230-v, 50/60-cyc, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: TM 11-834
T-177/FR : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION: Fixed plant.

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

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 23.0 in 6 preselected channels.

TYPE MODULATION: Frequency shift.

TYPE OF SIGNAL: Cw and frequency shift keying.

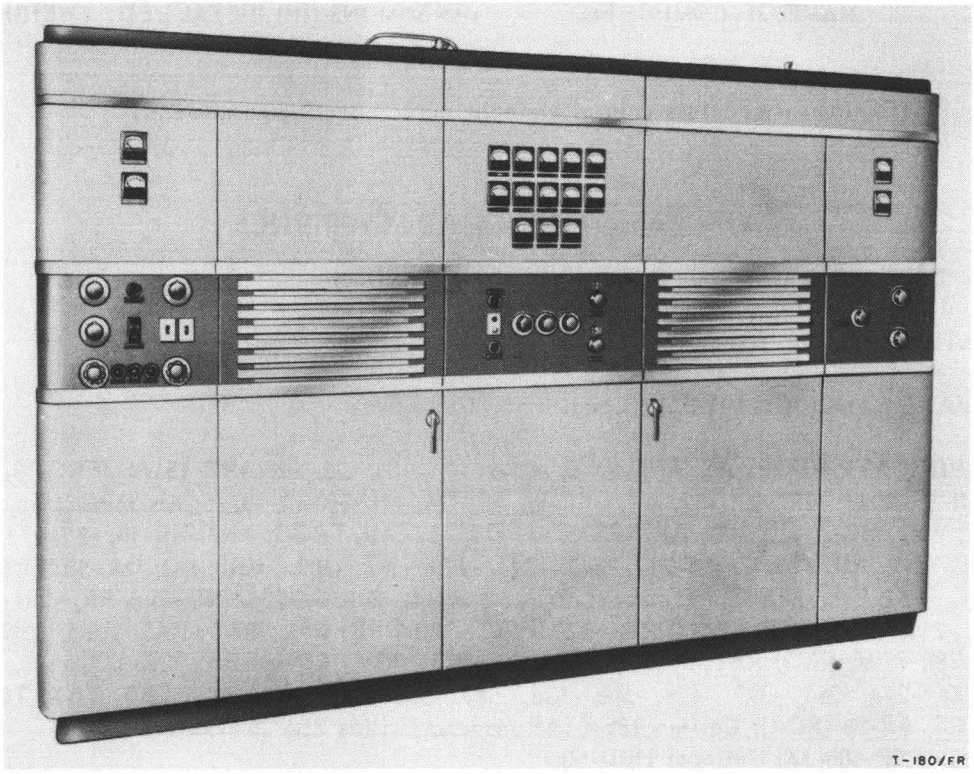
POWER OUTPUT: 2.5-kw.

POWER REQUIREMENTS: 11.8 kva, 220 v-230 v, 50/60 cyc, 3 phase ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-177/FR measures 77 x 33 x 36 inches, net weight 1,717 pounds. Packed for domestic shipment: total weight 3,326 pounds, total volume 196.8 cu ft, 1 ship ton. Shipped in 8 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 23 Jan 52	**AN/FRT-TYPE** AN/COMP TYPE NUMBER: T-180/FR RADIO TRANSMITTER



Radio Transmitter T-180/FR is a long-range, high-power, a-m (voice) transmitting equipment used for communication in the m-f and h-f bands in fixed station applications for point-to-point, ground-to-air, and broadcast purposes.

This equipment is a crystal-controlled transmitter which provides high-level, class B modulation and class C final.

It consists essentially of an assemblage of control and operating components inclosed in floor type steel cabinets.

It operates from a 220-v 50/60-cyc a-c source.

AN/FRT-TYPE	INSTRUCTION LITERATURE: None
T-180/FR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	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: Permanent, long range, fixed station applications.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10, AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13, AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA -58/FRC, -59/FRC R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 22.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 7.5kw.

POWER REQUIREMENTS: 220 v, 50/60 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

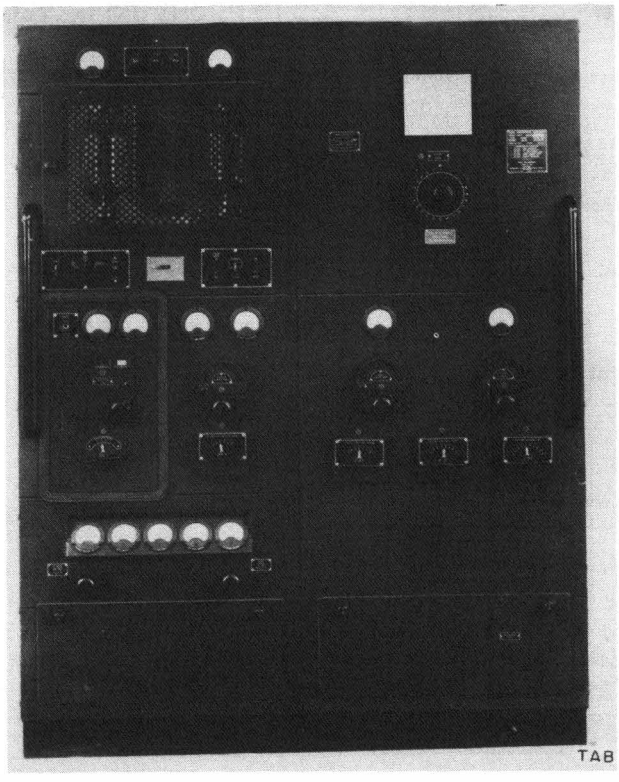
Radio Transmitter T-180/FR measures 122 x 90 x 49 inches.

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

AN/FRT-TYPE

SERVICE TYPE NUMBER: TAB, TAB-3

2 KW TRANSMITTING EQUIPMENT



2 KW Transmitting Equipments TAB and TAB-3 are medium-power, fixed station transmitters used to transmit radiotelegraph signals within the l-f and m-f range 0.1 to 0.555 mc.

TAB is intended for operation from either two- or three-phase power; TAB-3 operates from a three-phase power source only.

Both transmitters can be operated either locally or remotely by means of a single pair control line.

The equipment starts when the telegraph key is operated and automatically shuts down 30 seconds after keying is stopped.

Two transmitting antennas can be used to cover the frequency range; they are connected to the equipment by means of the antenna selector switch.

AN/FRT-TYPE

TAB, TAB-3 :SERVICE TYPE NUMBER

2 KW TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: GEI-1776 NavShips 95285
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 Unit CG-4320, CAY-3438-A	76-1/16 x 48-5/32 x 33-3/16	895
1	Generator Transfer Switch CG-4317, -4316, CAY-3452-A	28-1/2 x 30 x 15	125
1	Antenna Selector Switch CG-4319, CAY-3439	16-1/2 x 8 x 3	Not Available
1	Motor Generator Set CG-4313, -4314	80-11/16 x 25-3/4 x 18-1/2	1,580

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

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; TDM; SCR-177, -244, -274, -614; AR 88 (RCA); ARC Type 12; Fisher TS 253; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.1 - 0.555 in 6 bands.

Band 1: 0.1 – 0.143
Band 2: 0.143 – 0.19
Band 3: 0.19 – 0.27
Band 4: 0.27 – 0.356
Band 5: 0.356 – 0.45
Band 6: 0.45 – 0.555

TYPE MODULATION: Am.

TYPE OF SIGNAL: TAB: Cw, icw.
TAB-3: Cw, mcw.

POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.
Icw: 0.8 kw.

POWER REQUIREMENTS: TAB: 6.3 kw, 220 v, 60 cyc, 2 or 3 phase ac.
TAB-3: 6.3 kw, 220 v, 60 cyc, 3 phase ac.

PHYSICAL CHARACTERISTICS

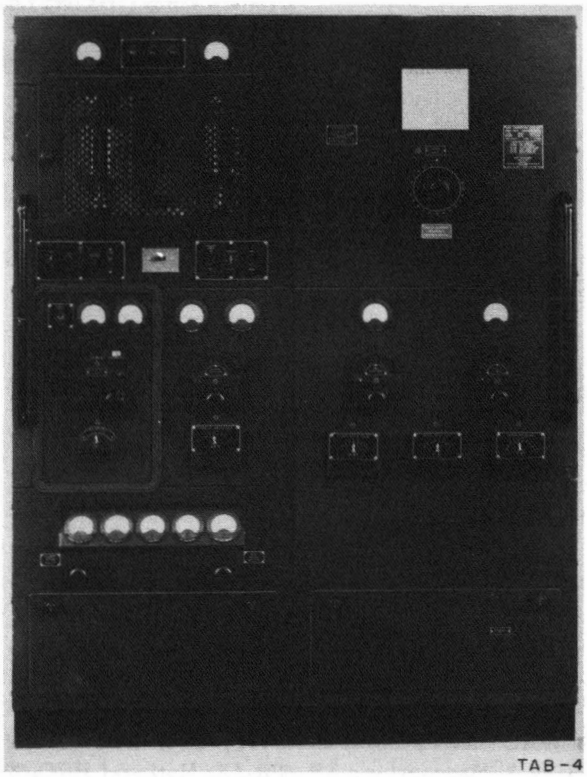
2 KW Transmitting Equipment TAB or TAB-3 measures 76-1/16 x 48-5/32 x 33-3/16 inches.

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

AN/FRT-TYPE

SERVICE TYPE NUMBER: TAB-4

2 KW TRANSMITTING EQUIPMENT



2 KW Transmitting Equipment TAB-4 is a medium-power fixed station radiotelegraph transmitter of signals within the l-f and m-f range 0.1 to 0.555 mc.

This transmitter can be operated either locally or from a remote point over a single telephone pair.

It starts when the telegraph key is operated and automatically shuts down 30 seconds after keying is stopped.

Its antenna selector switch permits a quick change from one transmitting antenna to another when two antennas are used to cover the frequency range.

AN/FRT-TYPE	INSTRUCTION LITERATURE: GEI-6092
TAB-4 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
2 KW TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter Unit CG-4225, -4225-A -4225-B	76 x 58-15/16 x 35-31/32	1,098
1	Motor Generator Set 12A354, 12A355, 12A148	23-5/8 x 73-7/8 x 22-7/8	2,216
1	Automatic Starter CG-4228, -4228-A, -4228-B	27-1/8 x 25-5/8 x 39-3/16	179
1	Generator Fuse and Filter Box CG-4226, -4226-A, -4226-B	22-1/4 x 17-1/2 x 15-5/8	113

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

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; TDM; 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: 0.1 - 0.555.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

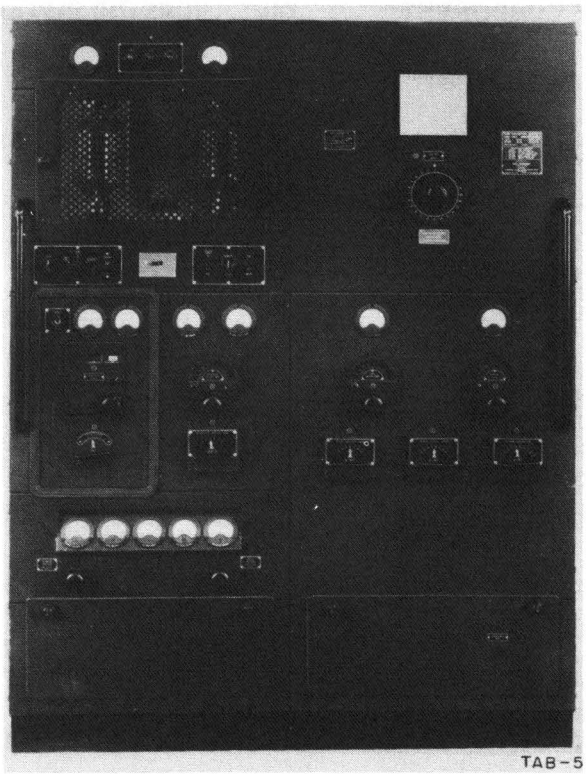
POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 7.9 kw, 220 v, 60 cyc, 3 phase or
7.0 kw, 440 v, 25 cyc, 3 phase or
7.75 kw, 120 v dc.

PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAB-4 measures 76 x 58-15/16 x 35-31/32 inches.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	AN/FRT-TYPE SERVICE TYPE NUMBER: TAB-5 2 KW TRANSMITTING EQUIPMENT



TAB-5

2 KW Transmitting Equipment TAB-5 is a medium-power, fixed station transmitter of radiotelegraph signals within the l-f and m-f range 0.1 to 0.555 mc.

Two motor generator sets, two magnetic controllers, and an a-c power transfer panel are supplied to provide operational and stand-by equipment.

The TAB-5 can be operated either locally or from a remote point over a single telephone pair.

It starts when the telegraph key is operated and automatically shuts down 30 seconds after keying is stopped.

Its antenna selector switch makes possible a quick change from one transmitting antenna to another when two antennas are used to cover the frequency range.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95287
TAB-5 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
2 KW TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52164, -52165	76 x 57-1/2 x 37	1,065
1	Land Line Control Unit CAY-23216, -23217	20-11/16 x 20-7/16 x 10-3/4	54
1	AC Power Transfer Panel CAY-24084, -24084-A	39-13/16 x 20-1/4 x 11	77
2	Motor Generator Set CAY-21503, CC-21507	25-5/16 x 72-1/2 x 22	2,450

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

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/FR, -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; TDM; 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: 0.1 - 0.555.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

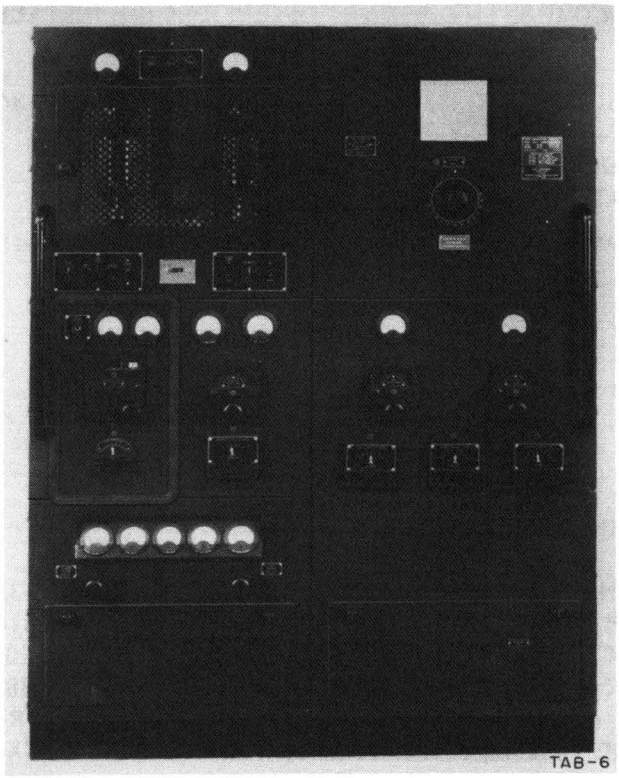
POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 7.2 kw, 220 v, 60 cyc, 3 phase or
7.2 kw, 220 v, 25 cyc, 3 phase or
7.2 kw, 440 v, 25 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

2 KW Transmitting Equipment TAB-5 measures 76 x 57-1/2 x 37 inches, net weight 4,020 pounds. Packed for domestic shipment: total weight 5,350 pounds, total volume 223.49 cu ft, 5.6 ship tons. Shipped in 10 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TAB-6, -7 2 KW TRANSMITTING EQUIPMENT



2 KW Transmitting Equipments TAB-6 and TAB-7 are fixed station, medium-power transmitters designed to transmit radiotelegraph signals within the l-f and m-f range of 0.1 to 0.555 mc.

Both transmitters can be operated either locally or remotely by means of a single pair control line.

They are started by operating the telegraph key and they shut down automatically 30 seconds after keying has stopped. Keying speeds up to 500 wpm are possible.

The antenna selector switch permits a quick change from one antenna to the other when two transmitting antennas are used to cover the frequency range.

TAB-6 has two rectifier power units and an a-c power transfer panel; TAB-7 has only one rectifier power unit.

AN/FRT-TYPE

TAB-6, -7 :SERVICE TYPE NUMBER

2 KW TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,379
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	Radio Transmitter CAY-52273	76 x 57-1/2 x 37	1,133
1	Land Line Control Unit CAY-23216	20-11/16 x 20-7/16 x 10-3/8	81
*1	AC Power Transfer Panel CAY-24084-A	39-13/16 x 20-1/4 x 11	108
**	Rectifier Power Unit CAY-20167	72 x 34 x 24	2, 340 (for 2)
1	Rotary Switch CAY-24145	9-1/4 x 17-1/2 x 20-7/8	23

*Supplied with TAB-6 only. ** Two supplied with TAB-6, one supplied with TAB-7.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Medium.

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

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.1 - 0.555.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

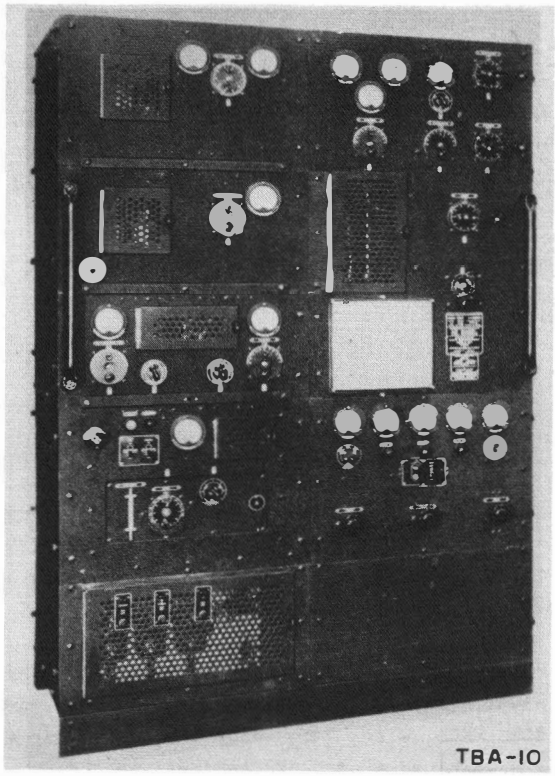
POWER OUTPUT: Cw: 2 kw.
Mcw: 1 kw.

POWER REQUIREMENTS: 7.5 kw, 220 v, 60 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

Information on 2 KW Transmitting Equipment TAB-6 or TAB-7 not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 Apr 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBA-10 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TBA-10 is a medium power shore-to-ship, h-f radiotelegraph transmitter.

Vacuum tube keying speeds up to 500 wpm, and relay keying at speeds up to 100 wpm are possible.

A land line control unit provides remote transmitter control over a land line.

Frequency control is by means of a continuously variable oscillator.

It is designed for use with a single vertical-wire antenna.

AN/FRT-TYPE

TBA-10 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,406
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CG-52282	72 x 49 x 24-7/8	953
2	Motor Generator Set CG-21375-A	17-9/16 x 70-7/16 x 16	815
2	Magnetic Controller CG-21373	22-1/8 x 20-1/4 x 10-1/4	65
1	Power Transfer Switch CG-24092	12-1/4 x 16 x 9-1/4	26
1	Land Line Control Unit CG-23269	42-1/8 x 24 x 15-3/4	165

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274; -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw.

POWER OUTPUT: 1 kw.

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

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBA-10 measures 72 x 49 x 24-7/8 inches, net weight 3,156 pounds, volume 101.7 cu ft, 2.54 ship tons. Packed for domestic shipment: total weight 5,008 pounds, total volume 158.3 cu ft, 3.95 ship tons. Shipped in 12 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 Jun 52	AN/FRT-TYPE SERVICE TYPE NUMBER: TBC-2 through -5 RADIO TRANSMITTING EQUIPMENT

NO PHOTOGRAPH AVAILABLE

Radio Transmitting Equipments TBC-2 through -5 are fixed, a-m (cw), radiotelegraph transmitters for h-f shore-to-ship communication. Provision is made for three types of keying; relay keying at speeds up to 200 wpm, and facsimile, or vacuum tube keying at speeds up to 1,000 wpm.

Crystal control of twelve preset frequencies is provided, as well as master oscillator control, to permit continuously variable tuning throughout the frequency range.

In addition to the exciter, power amplifier, and rectifier units, each equipment contains a contactor unit for control and voltage regulation of the filament and plate circuits; a main plate transformer for providing plate voltage to the power amplifier tubes, and a water cooling system.

The TBC-3 (25 cyc equipment) has a plate transformer for supplying plate voltage to the 1 kw exciter tubes, and a step-down transformer for reducing 440-v ac to the 230-v ac required for operation of all units (except the exciter, power amplifier, rectifier, and the main plate rectifier, which operate at 440-v ac).

AN/FRT-TYPE

TBC-2 through -5 :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95614; 900,853; 900,854
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Exciter Unit CG-52101, -52168, -52168A, -52155, or CG-*52177	93-1/2 x 50 x 36-3/4	1,255
1	Power Amplifier CG-50056, -50111, -50111-A, -50071 or CG-*50074	100-5/16 x 54 x 64	2,490
1	Main Rectifier CG-20077, -20152, -20260, 20115 or CG-20111*	100-5/16 x 74 x 49-1/4	2,635

*Used with 25-cyc source.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed. **APPROXIMATE RANGE (IN MILES):** Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -9, -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, -90/PR, -96/SR, -129/U, -203/SR, -205/SR, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -398/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.0 - 26.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER OUTPUT: 50 kw.

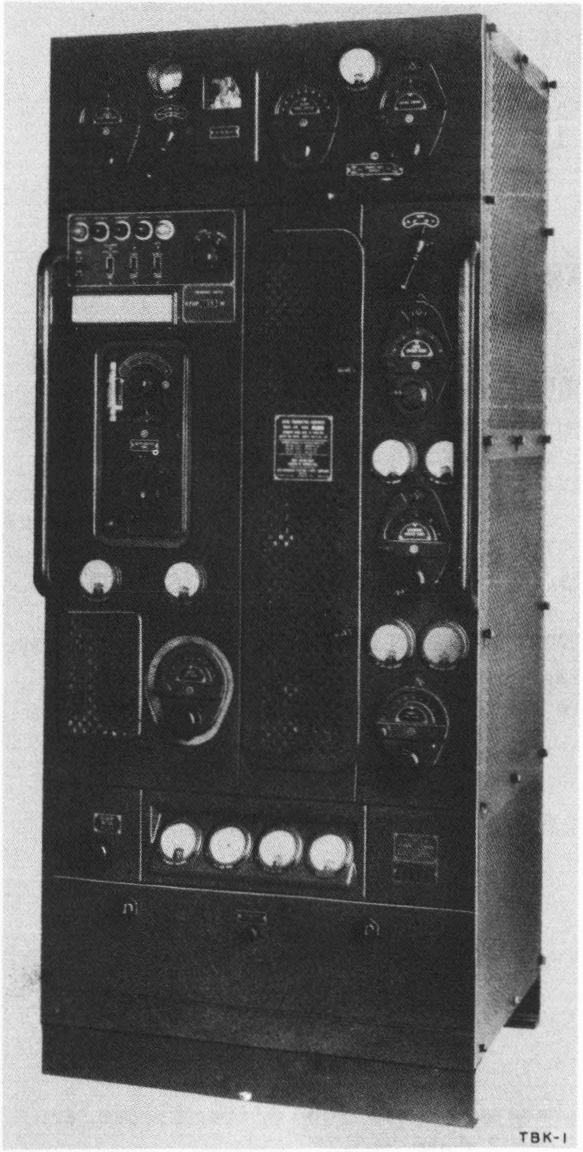
POWER REQUIREMENTS: TBC-2: *108 kw, 230 v, 60 cyc, 3 phase, ac.
TBC-3: *108 kw, 230 v, 60 cyc, 3 phase or 440 v, 25 cyc, 3 phase, ac.
TBC-4 and -5: *108 kw, 230 v, 60 cyc, 3 phase, ac.

*Does not include power required for water cooling system.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipments TBC-2 through -5 net volume 842.3 cu ft, 21 ship tons. Packed for domestic shipment: total weight 45,549 pounds, total volume 2,697 cu ft, 67.4 ship tons. Shipped in 84 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBK-1, -11 RADIO TRANSMITTING EQUIPMENT



TBK-1

Radio Transmitting Equipment TBK-1 and -11 are shore-based a-m (cw) radiotelegraph transmitters for h-f communication. TBK-11 is capable of vacuum-tube keying speeds up to 500 wpm, as well as relay keying of 100 wpm or better. Provisions are made in both equipments for variation from full-power to low-power operation of 75 w.

This transmitter uses master oscillator control and is continuously variable over its frequency range.

Remote control is provided over a two-wire landline up to 50 miles. Local operation from the transmitter panel is usually reserved for test purposes.

A power-transfer panel is used at the TBK-11 for manually switching the transmitter input from one motor generator set to the other. The two motor starters used obtain operating power from the transmitter control circuits.

It may be operated on any one of four power sources.

AN/FRT-TYPE

TBK-1, -11 :SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,386

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Navy

DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52169,* -52170	72 x 32 x 24	810
1	Land Line Control Unit CAY-23217, 23216	20-11/16 x 20-7/16 x 10-3/8	81
2	Motor-Generator Unit CAY-21521,* -21522, -21671	21-3/4 x 78-1/2 x 20-1/2 20-3/8 x 74-21/32 x 20-1/2	1,250 1,100
2	Magnetic Controller Unit* CAY-21610, -21644, -21609, -21512	24-1/4 x 17 x 11-5/8	80

* These components are for TBK-11.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; ROE; ROM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

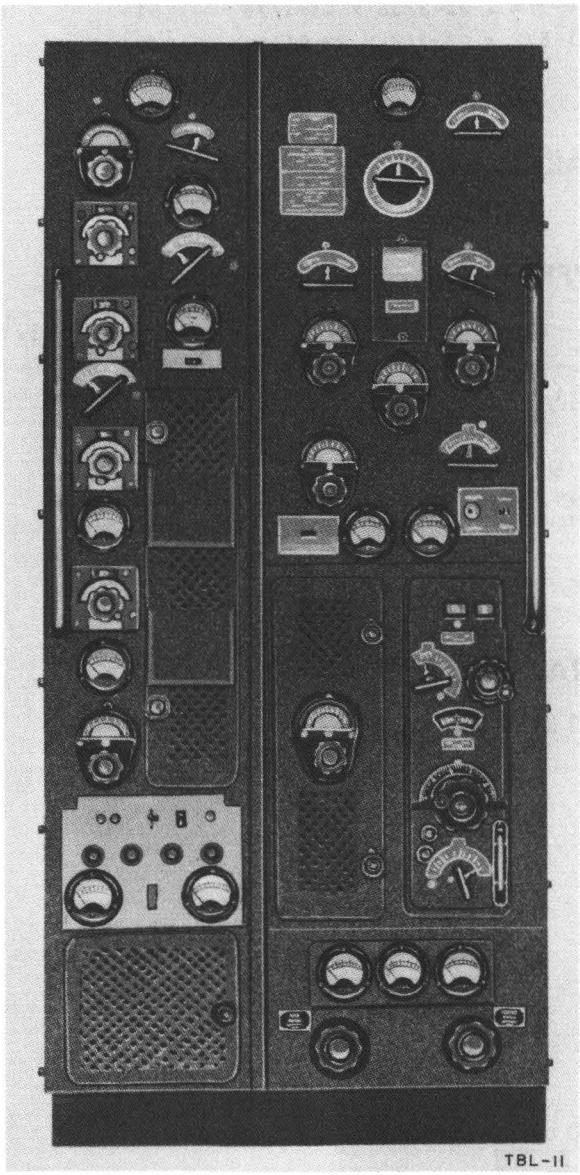
POWER OUTPUT: 2.0 - 18.1 mc: 500 w.
2.0 - 9.05 mc: 75 w.

POWER REQUIREMENTS: 3.96 kw, 220 v, 60 cyc, 3 phase ac; 4.5 kw, 220 v, 60 cyc, 1 phase, ac; or 3.96 kw 220 / 440 v, 25 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBK-1 and -11 weigh 3,812 pounds net. Packed for domestic shipment: total weight 5,242 pounds, total volume 189.32 cu ft, 4.73 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBL-11 RADIO TRANSMITTING EQUIPMENT



TBL-11

Radio Transmitting Equipment TBL-11 is general purpose, a-m (cw, mcw, voice) medium power m-f/h-f transmitter designed for shore installations where space is at a premium.

This equipment may be operated locally, or from a remote station over a landline up to 50 miles in length.

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

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

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,390-1B
TBL-11 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52249	72 x 32 x 24-3/8	829
1	Land Line Control Unit CAY-23216	20-3/4 x 21-3/16 x 11-1/16	81
1	Rectifier Power Unit CAY-20195	71-5/8 x 27-1/8 x 23-9/16	819

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground. **APPROXIMATE RANGE (IN MILES):** Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -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; TBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.175 - 0.60 and 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

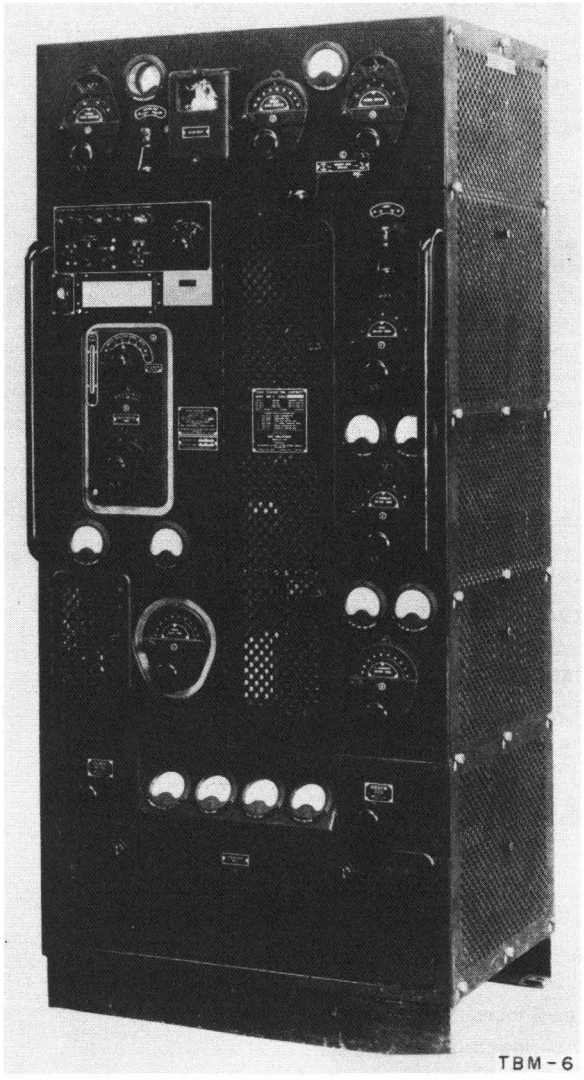
POWER OUTPUT: Cw: 200 w.
Mcw: 100 w.
Voice: 50 w.

POWER REQUIREMENTS: 3.5 kw, 220 / 440 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBL-11 weighs 1,898 pounds net.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBM-6, -10 RADIO TRANSMITTING EQUIPMENT



TBM-6

Radio Transmitting Equipments TBM-6 and TBM-10 are a-m (cw, mcw, and voice) radio transmitters for use at shore stations in h-f communication. Vacuum tube keying speeds up to 500 wpm on cw and relay keying speeds up to 100 wpm on cw and 50 wpm on mcw are possible. Provisions are made for reduction from full- to low-power operation at 75 w for radiotelegraph operation.

These transmitters use master oscillator frequency control and are continuously variable over their frequency range.

They may be controlled from local or remote locations. For c-w and m-c-w operation, remote control is by landline; while "voice" transmission may be remotely controlled by the use of radiophone units or by means of a voice-operated relay located in the modulator.

A power transfer panel is used in TBM-6 for manually switching the transmitter input from one motor generator set to the other. (The two motor starters used obtain operating power from the transmitter control circuits.)

TBM-10 uses a rectifier power unit instead of a motor generator.

The type of components used by either TBM equipment depends upon the power source available.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,386, 900,387
TBM-6, -10 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52170, -52169	72 x 32 x 24	825
1	Modulator Unit CAY-50065, -50065A	72 x 18 x 24	380
1	Rectifier Power Unit CAY-20228 (TBM-10 only)	72 x 32 x 24	1,000
1	Land Line Control Unit CAY-23216, -23217	20-11/16 x 20-7/16 x 10-3/8	81
2	Motor Generator Unit CAY-21521, -21522 (TBM-6 only).	21-3/4 x 78-1/2 x 20-1/2	1,250 each

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, 22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

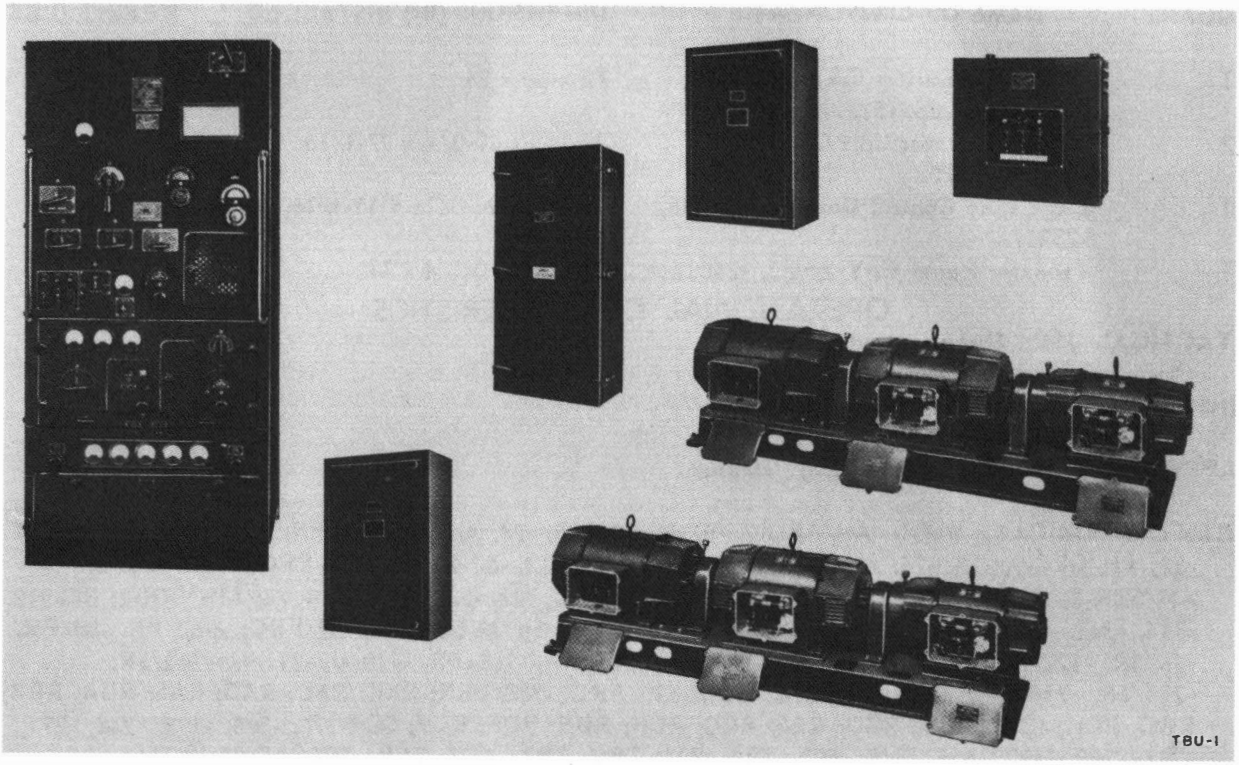
POWER OUTPUT: 2.0 to 18.1 mc: cw, 500 w; voice and mcw, 350 w.
2.0 to 9.05 mc (power amplifier disconnected); cw, 75 w.

POWER REQUIREMENTS: TBM-6: 5.1 kw, 220 v, 25/60 cyc, 3 phase, ac.
TBM-10: 5.2 kw (5.8 kva), 220/440 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBM-6 or TBM-10 weighs 4,219 pounds net. Packed for domestic shipment: total weight 5,899 pounds, total volume 224 cu ft, 5.6 ship tons.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TBU-1, -3 RADIO TELEGRAPH TRANSMITTING EQUIPMENT



Radio Telegraph Transmitting Equipments TBU-1 and TBU-3 are medium-power, m-f radiotelegraph transmitters for shore installation. The emitted frequency is continuously variable throughout the frequency range 0.3 to 2.0 mc.

TBU-1 and TBU-3 are similar to TBU and TBU-2 but have been especially adapted for service at shore stations by the addition of duplicate motor generator sets and magnetic controllers and a land-line control unit.

TBU-1 and TBU-3 can be operated locally or from a remote location by means of the landline control unit.

Telegraph keying speeds up to 500 wpm are possible by means of vacuum tube keying and up to 100 wpm by means of relay keying.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,384
TBU-1, -3 :SERVICE TYPE NUMBER:	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TELEGRAPH TRANSMITTING EQUIPMENT	USING SERVICE: Navy
	DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CAY-52223, -52224, -52225, -52227	72 x 34 x 24	769
2	Motor Generator Unit CAY-21447, -21448, -21703	22-1/8 x 20-3/4 x 77-1/16	1,300
1	Land Line Control Unit CAY-23216, -23217	20-3/4 x 21-3/16 x 11-1/16	81
1	Transfer Panel CAY-24083, -24084-A	39-7/8 x 20-1/4 x 11	108

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

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 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.3 - 2.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw.

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

POWER REQUIREMENTS: TBU-1: 220 v, 25/60 cyc , 3 phase.
TBU-3: 220/440 v, 25 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

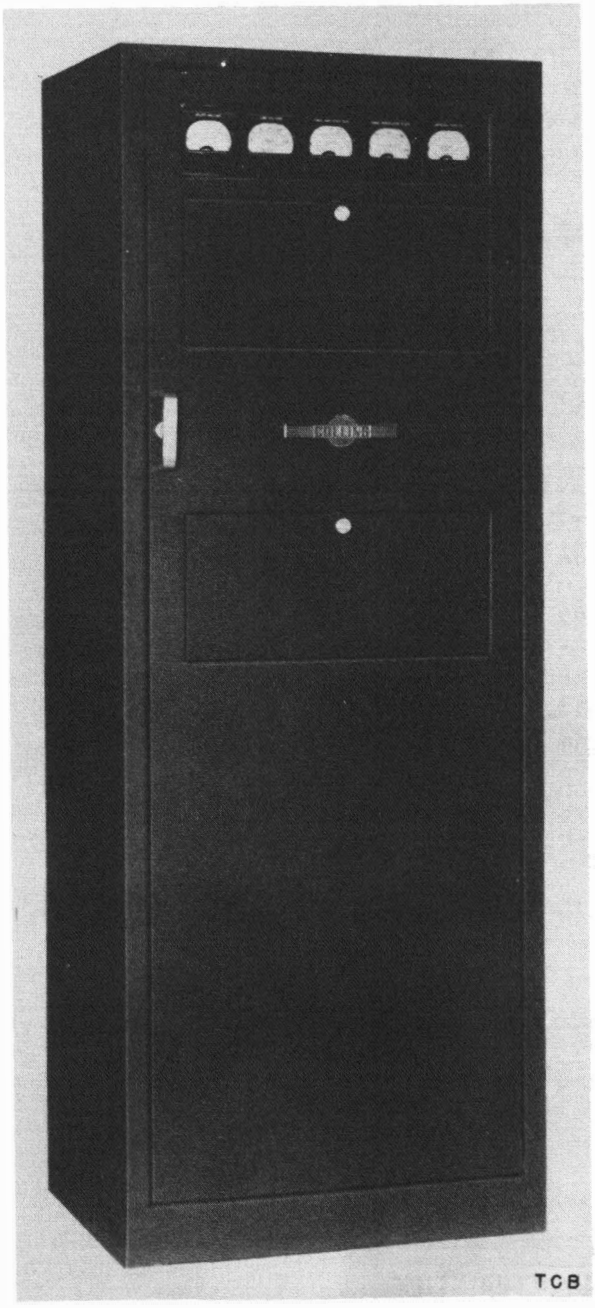
Radio Telegraph Transmitting Equipment TBU-1 or TBU-3 measures 72 x 34 x 24 inches, net weight 3,578 pounds. Packed for domestic shipment: total weight 4,182 pounds, total volume 169.12 cu ft, 4.23 ship tons. Shipped in 9 packages.

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

AN/FRT-TYPE

SERVICE TYPE NUMBER: TCB

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP



Radio Telephone and Telegraph Transmitting Equipment TCB is designed for general telegraph or voice transmission (at low power) within the high-frequency range. An autotune system provides rapid automatic selection of ten preset crystal-controlled frequencies from a remote location, or at a local station control unit.

Terminals for connection of a facsimile sender are provided.

The operator's desk set includes a control dial and a handset, and provision is made for telephone intercommunication with the station control unit, also for connection of the handset to the output of a stotion receiver for complete send-receiver operation.

The transmitter cabinet has an antenna input terminal, and an antenna transfer terminal, for automatic transfer of the antenna connection to a station receiver, whenever the transmitter is brought to CARRIER-OFF-STAND-BY OPERATION.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95302
TCB :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TELEPHONE & TELEGRAPH TRANS EQUIP	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter 16-E1	61-3/4 x 21-1/2 x 16-1/2	502.0
1	Station Control Unit 176L-1	7-3/4 x 9 x 5-1/4	11.0
1	Operators Control Unit 177E-1	8-3/4 x 19 x 10	38.0
1	Operators Desk Set 223F-4	6 x 9 x 7-1/2	5.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Short, medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, 4; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5- 12.0. On 10 pretuned crystal-controlled carrier frequencies.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

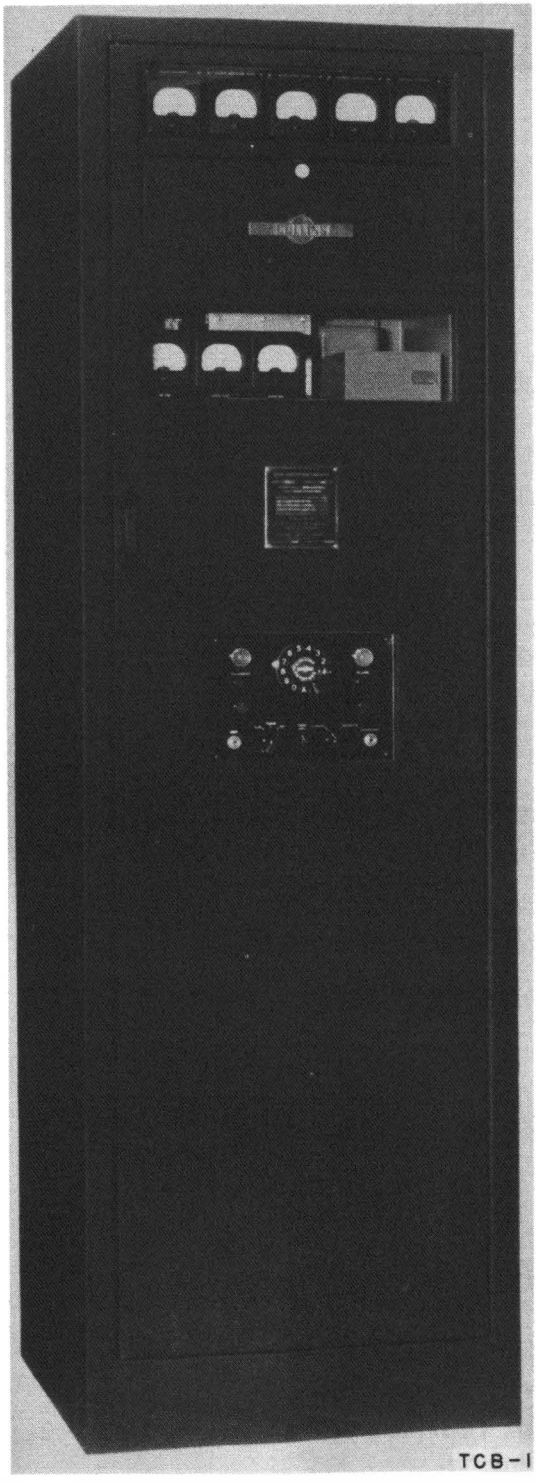
POWER OUTPUT: 150 w.

POWER REQUIREMENTS: 1 kw, 110 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Telephone and Telegraph Transmitting Equipment TCB measures 61-3/4 x 21-1/2 x 16-1/2 inches, net weight 557 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TCB-1, TCB-2 RADIO TELEPHONE & TELEGRAPH TRANS EQUIP



TCB-1

Radio Telephone and Telegraph Transmitting Equipments TCB-1 and TCB-2 are designed for general telegraph and voice transmission at low power within the high-frequency range. An autotune system provides rapid automatic selection of ten preset crystal-controlled frequencies from a remote location, or at a local station control unit.

TCB-1 and TCB-2 are similar, except that TCB-1 can operate on either 60 cyc or 25 cyc power (by use of alternate major components).

A handset is supplied for the local operating position.

The operator's desk set includes a telephone type dial control, and a telegraph key.

A companion receiver can be connected to the antenna transfer panel to provide complete communication facilities.

Circuits, relay switches, and terminals are incorporated in the operator's control unit which mute the receiver when transmitter carrier is switched on, or permit listening to the receiver when transmitter carrier is switched off.

AN/FRT-TYPE

TCB-1, TCB-2 :SERVICE TYPE NUMBER

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP

INSTRUCTION LITERATURE: NavShips 95303, 95304
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 16E-5, 16E-6	78 x 24 x 24	952.0
1	Operator's Control Unit 117G-4, 117G-5	10 x 19 x 11-1/4	53.0
1	Desk Set 223G-3, 223G-6	6 x 9 x 7-1/2	5.75
1	Handset 69H-5	Not Available	Not Available
1	Telegraph Key 67A-3	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Short, medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.5 - 15.0 on 10 pretuned crystal-controlled carrier frequencies.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Cw, mcw, voice.

POWER OUTPUT: 75 w, into 600 ohm resistive load.

POWER REQUIREMENTS: TCB-1: 900 w, 110 v, 25/60 cyc, 1 phase, ac.
TCB-2: 900 w, 110 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

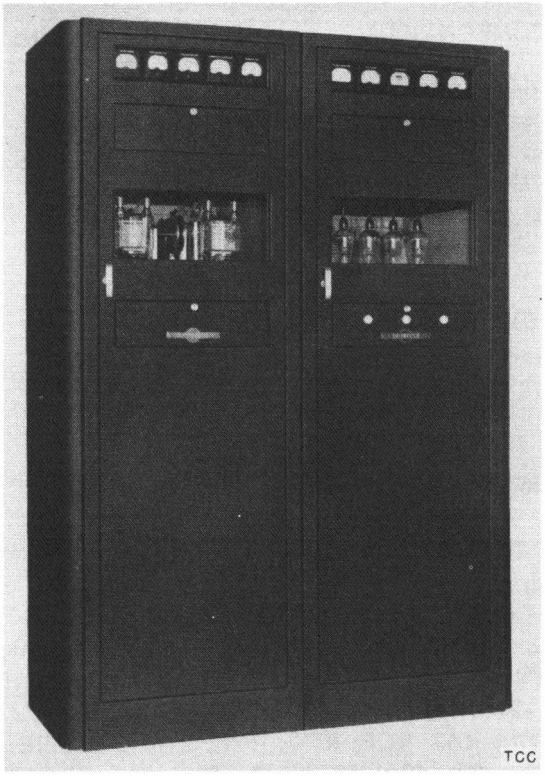
Radio Telephone and Telegraph Transmitting Equipments TCB-1 and TCB-2 measure 78 x 24 x 24 inches, net weight 1,011 pounds, volume 26 cu ft, 0.6 ship ton.

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

AN/FRT-TYPE

SERVICE TYPE NUMBER: TCC, TCC-2

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP


TCC

Radio Telephone and Telegraph Transmitting Equipments TCC and TCC-2 are designed to transmit radiotelegraph or radiotelephone signals at medium power in the 2- to 20-mc frequency range point-to-point, ground-to-air, and transoceanic communication. Ten preset, crystal-controlled channels are available and can be selected from a remote position.

TCC and TCC-2 are complete h-f transmitters and include all units necessary for either local or remote control.

By use of the operator's control unit and a four-wire control line, the transmitter can be dial-tuned, started, or stopped and the r-f carrier can be turned on, keyed, or modulated; all operations being controlled from the remote position.

The control units includes an audio input circuit and a muting relay switch which permit operation of a receiver in conjunction with this transmitting equipment.

Telephone intercommunication between the local and remote positions is provided.

AN/FRT-TYPE

TCC, TCC-2 :SERVICE TYPE NUMBER

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP

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	Autotune RF Bay 1007-6	78 x 24 x 24	990.0
1	Power and Modulator Bay 1006-6	78 x 24 x 24	580.0
1	Station Control Unit 1764-2	11-1/2 x 12-1/4 x 6-3/8	12.0
1	Operator's Control Unit 177E-2	8-3/4 x 19 x 10	38.0
1	Operator's Desk Set 223F-4	6 x 9 x 7-1/2	5.75
1	Telegraph Key, Cord and Plug 274N-7	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 20.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

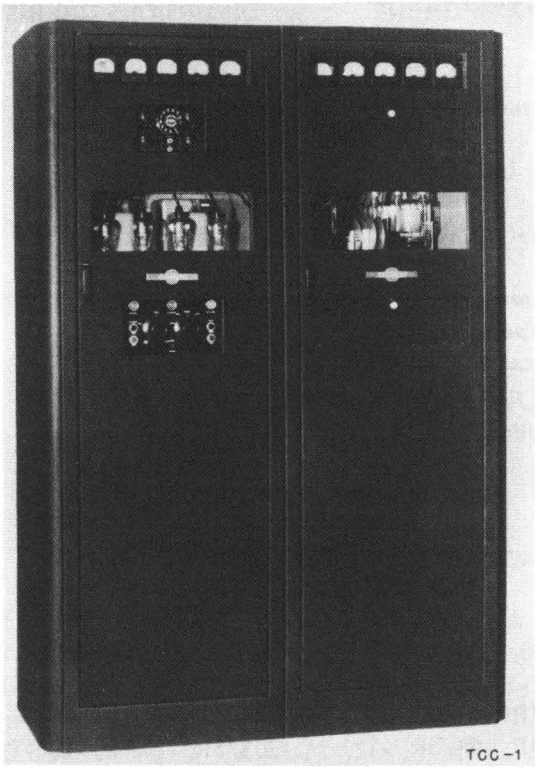
POWER OUTPUT: Cw: 1 kw.
Mcw: 600 w.

POWER REQUIREMENTS: Transmitter: 4.50 w, 220 v, 50/60 cyc, 3 phase, ac.
Operator's and station control units: 110 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Telephone and Telegraph Transmitting Equipment TCC or TCC-2 measures 78 x 48 x 24 inches, net weight 1,626 pounds, volume 52 cu ft, 1.3 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TCC-1, TCC-3 RADIO TELEPHONE & TELEGRAPH TRANS EQUIP



Radio Telephone and Telegraph Transmitting Equipments TCC-1 and TCC-3 are used to transmit radiotelegraph or radiotelephone signals at medium power in the 2.0 to 18.1 m-c frequency range for point-to-point, ground-to-air, and transoceanic communication. Ten preset, crystal-controlled frequencies are available and can be selected by a remote control.

By use of the operator's control unit and a four-wire control line, the transmitter can be dial-tuned, started, or stopped and the r-f carrier turned on or off, keyed, or modulated; all operations being controlled from the remote operating position.

The control unit includes an audio input circuit and a muting relay switch used when a receiver is operated jointly with this transmitter. This unit also includes intercommunication connections for a telephone line linking local and remote positions.

This transmitter, when operated from a 25-cyc, 3-phase power source, uses Collins Radio Frequency Changer 231N500 and other slightly different major components.

AN/FRT-TYPE

TCC-1, TCC-3 :SERVICE TYPE NUMBER

RADIO TELEPHONE & TELEGRAPH TRANS EQUIP

INSTRUCTION LITERATURE: NavShips 95306, 95308
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	Autotune RF Bay, 1014-1, -2, -5	78 x 24 x 24	600
1	Power and Modulator Bay, 1021-1, -2, -5	78 x 24 x 24	1,000
1	Operator's Control Unit 177G-1, -3, -5	10-1/2 x 19 x 10	53
1	Operator's Desk Set 223G-1, 223G-3	5-1/2 x 51/8 x 7-1/2	5.75
1	Frequency Converter 231N500 (supplied only for operation from 25-cyc power source)	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

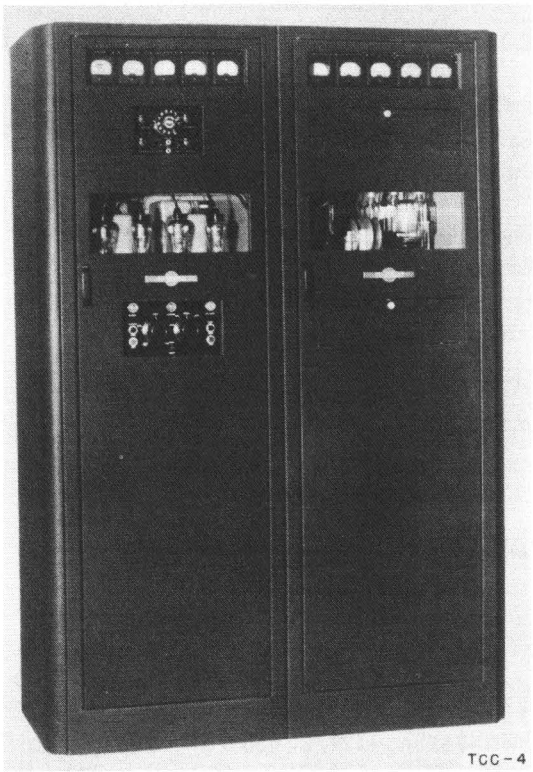
POWER OUTPUT: Cw: 1 kw.
Mcw: 600 w.

POWER REQUIREMENTS: Transmitter: 4.50 kw, 220 v, 25/60 cyc, 3 phase, ac.
Operator's control unit, TCC-1: 105-125 v, 25/50/60 cyc, 1 phase, ac.
Operator's control unit, TCC-3: 105-125 v, 25 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Telephone and Telegraph Transmitting Equipment TCC-1 or TCC-3 measures 78 x 48 x 24 inches, net weight 1,659 pounds, volume 52 cu ft, 1.3 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TCC-4 RADIO TELEPHONE & TELEGRAPH TRANS EQUIP



Radio Telephone and Telegraph Transmitting Equipment TCC-4 transmits radiotelegraph and radiotelephone signals at medium power in the 2.0- to 18.1-mc frequency range for point-to-point, ground-to-air, and transoceanic communication. Ten preset, crystal-controlled transmitting frequencies are available and can be selected from a remote position.

This equipment is a complete h-f transmitting station which includes all units necessary for either local or remote control.

With a four-wire control line, the control unit can be used to dial-tune, start, and stop the transmitter, to key the carrier on or off, and to relay tone or voice modulating signals.

Circuits are provided for a telephone line linking local and remote operating positions.

When operating the transmitter from a 25-cyc, 3-phase power source, a frequency converter is used. In all cases, the remote control unit operates on 25-cyc ac.

AN/FRT-TYPE

TCC-4 :SERVICE TYPE NUMBER
RADIO TELEPHONE & TELEGRAPH TRANS EQUIP

INSTRUCTION LITERATURE: NavShips 900,214
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52297	78 x 48 x 24	1,600.0
1	Station Handset and Cord 69H-5	Not Available	Not Available
1	Remote Control Unit COL-23360	10-1/2 x 19 x 10	53.0
1	Operator's Desk Set 223G-3	5-1/2 x 5-1/8 x 7-1/2	5.75
1	Telegraph Key Cord and Plug 67A-3	Not Available	Not Available
1	Frequency Converter 231N500	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore radio stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13, AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

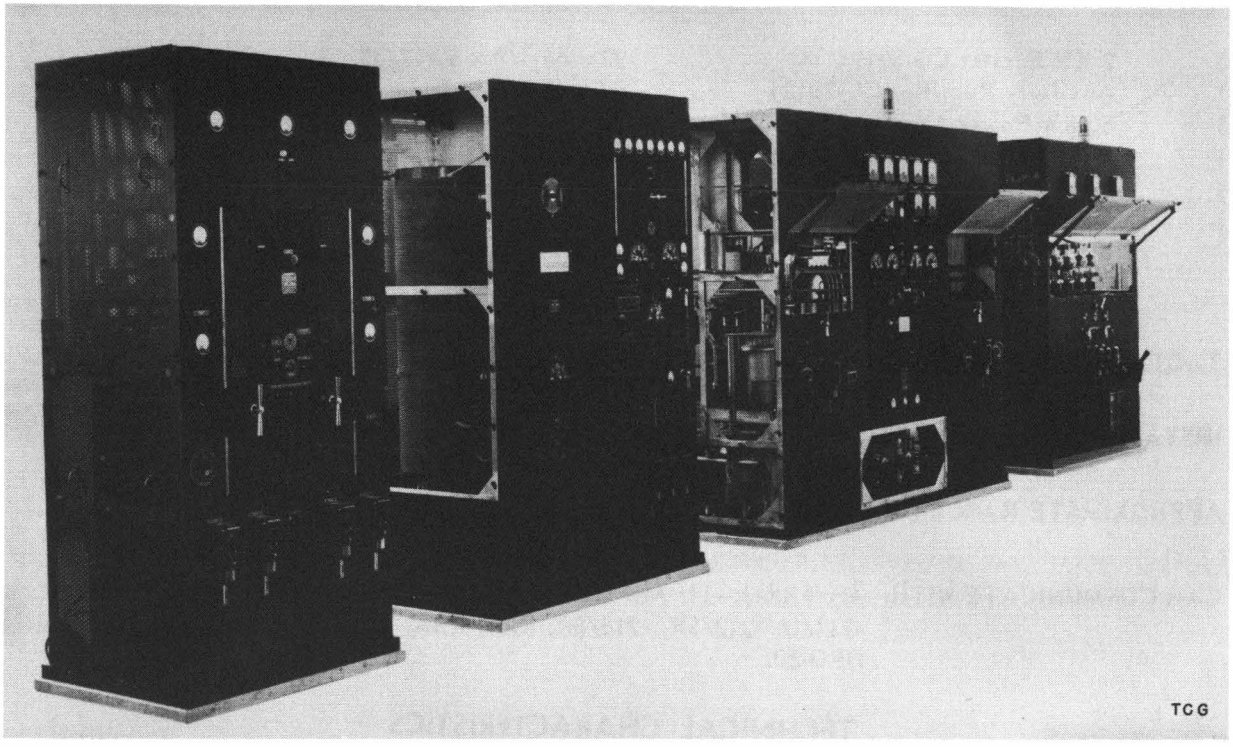
POWER OUTPUT: Cw: 1 kw.
Mcw: 600 w.

POWER REQUIREMENTS: Transmitter: 4.50 kw, 220 v, 25/60 cyc, 3 phase, ac.
Operator's control unit: 105-125 v, 25 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Telephone and Telegraph Transmitting Equipment TCC-4 measures 78 x 48 x 24 inches, net weight 1,700 pounds, volume 52 cu ft, 1.3 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 Apr 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TCG RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TCG is designed for high-power, low-frequency shore-to-ship radiotelegraph service.

This equipment has a continuously variable, temperature-controlled master oscillator which can operate over the range of 0.05 to 0.15 mc. Requires an antenna having a resistance of 2 to 7 ohms and a capacitance of 2,500 to 4,000 mmf. Provision is made to operate the exciter unit directly into the antenna system. The r-f amplifier uses water-cooled tubes.

The transmitter can be keyed at speeds up to 500 words per minute and can convert facsimile audio signals (within a frequency range of 2,000 to 10,000 cps) to c-w signals.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95311 CLASSIFICATION OF EQUIPMENT: Unclassified
TCG :SERVICE TYPE NUMBER	USING SERVICE : Navy
RADIO TRANSMITTING EQUIPMENT	DATE OF THIS SHEET : 8 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	2 KW Exciter CG-52194	92 x 66-1/8 x 50-17/32	1350
1	Auxiliary Rectifier CG-20121	92 x 45 x 38-5/8	1397
1	50 KW Power Amplifier CG-50081	100-5/16 x 120-7/8 x 143-7/16	6275
1	Main Rectifier Unit CG-20111	100-5/16 x 74-7/8 x 49-1/4	2635
1	Power Transformer CG-30458-A	44-1/2 x 65-5/8 x 100-3/8	5000
1	Contactor Unit CG-29092	65-3/8 x 46 x 44	1790

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore transmitting station.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/SRR-3, -11; AN/TRQ-1; BC-344, -779; R-96/SR, -203/SR, -210/U, -211/U, -212/SR, -215/SR; RAK; RBA; RBL; RCH; SCR-614; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.050 - 0.150, in 6 bands.

Band 1: 0.050 – 0.062
Band 2: 0.062 – 0.073
Band 3: 0.073 – 0.087
Band 4: 0.087 – 0.105
Band 5: 0.105 – 0.124
Band 6: 0.124 – 0.150.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

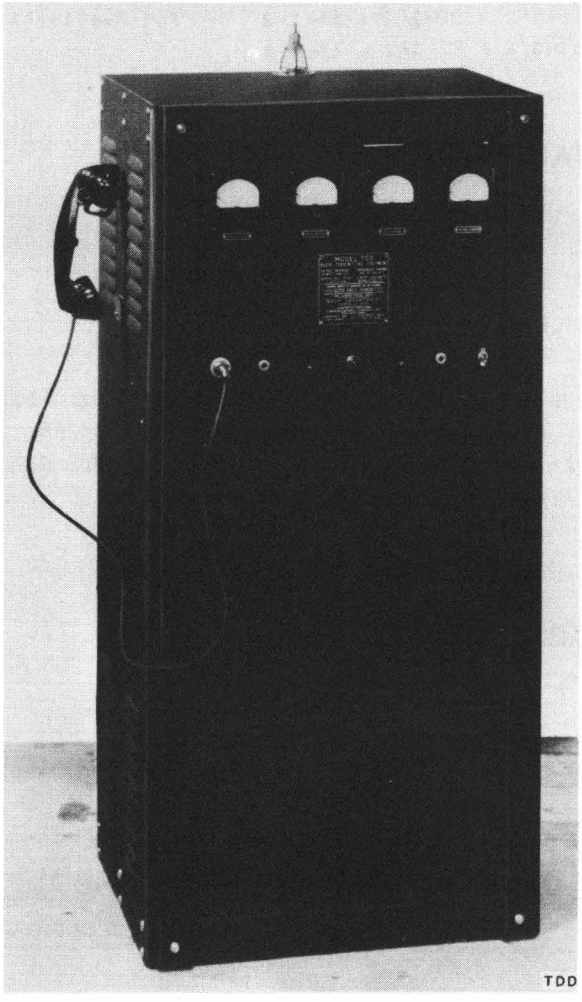
POWER OUTPUT: 50 kw, 2 kw without r-f amplifier.

POWER REQUIREMENTS: 100 kw, 230 v, 60 cyc, 3 phase. Operation without r-f amplifier: 12 kw, 230 v, 60 cyc, 3 phase.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitting Equipment TCG not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 14 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TDD, TDD-1 through -4 RADIO TELEPHONE TRANSMITTING EQUIPMENT



TDD

Radio Telephone Transmitting Equipments TDD and TDD-1 through -4 are single-frequency, low-power, a-m (voice) transmitters for use in airport traffic control towers.

This equipment has one preset crystal-controlled channel and the antenna load coil incorporates a variometer adjustment for fine tuning. Taps on the stator permit course adjustment, thus providing a wide choice of antenna types.

Provisions are made for connection of a remote telephone or microphone, and a muting relay is utilized to prevent feedback or objectionable interference when a receiver is used in conjunction with this transmitter.

AN/FRT-TYPE

TDD, TDD-1 through -4 : SERVICE TYPE NUMBER
RADIO TELEPHONE TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,271
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CCI-52258, or anyone of the following:	52 x 25-1/2 x 18	190
	CCI-52258-A	52 x 25-1/2 x 18	190
	CBST-52258-B	51-1/2 x 22-1/2 x 17-1/2	Not Available
	CCI-52258-C	51-1/2 x 22-1/2 x 17-1/2	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airport control towers.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/GRR-3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/VRC-4; BC-344, -348, -453, -779; MBS; R-96/SR, -129/U, -203/SR, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR; RAK; RAL; RAS; RBA; RBH; RBL; RBM; RCH; RDF; SCR-177, -274, -614; ARC Type 12; Fisher TS 25-3; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.20 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 15 w.

POWER REQUIREMENTS: 330 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

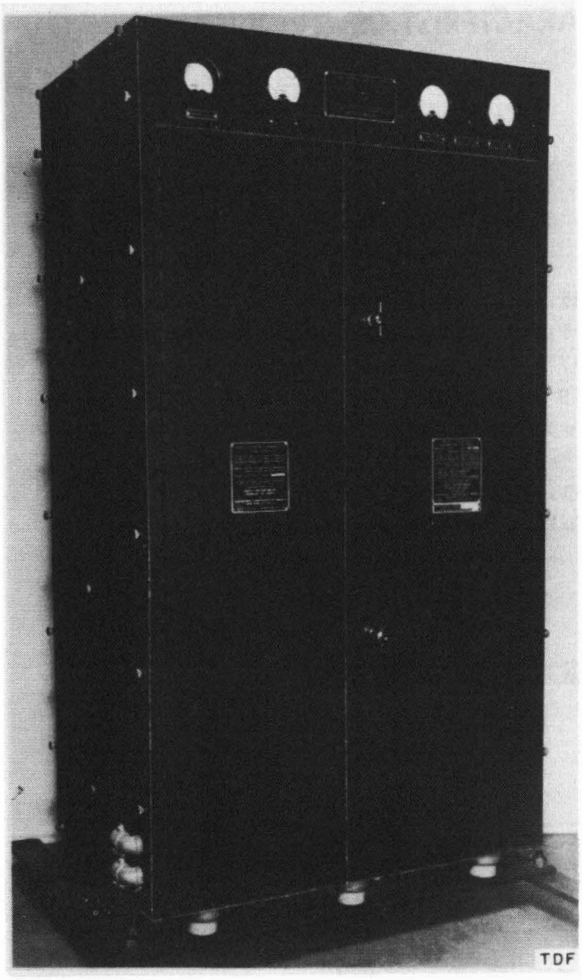
Radio Telephone Transmitting Equipment TDD or TDD-1 through -4 measures 52 x 25-1/2 x 18 inches. Packed for domestic shipment: total weight 475 pounds.

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

AN/FRT-TYPE

SERVICE TYPE NUMBER: TDF

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TDF is a medium-power, general purpose, m-f/h-f, radiotelephone equipment used specifically for remote control operation, permitting shore station installations to communicate with ships, or other shore stations. Six preset crystal-controlled channels can be selected by either of the two remote control units.

Relay keying speeds up to 40 wpm are possible.

A horizontal, or sloping type, single-wire antenna, 50 to 65 feet long, is suitable for this equipment.

A low resistance ground system is essential.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95329
TDF :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CRM-52261	61-1/4 x 34 x 20	690
2	Remote Control Unit CRM-23288	9-1/4 x 14 x 9-1/4	16

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium, long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, 16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 9.4.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: 125 w.

POWER REQUIREMENTS: 1,030 w, 105-125 v /210-250 v, 50/60 cyc, 1 phase, ac.

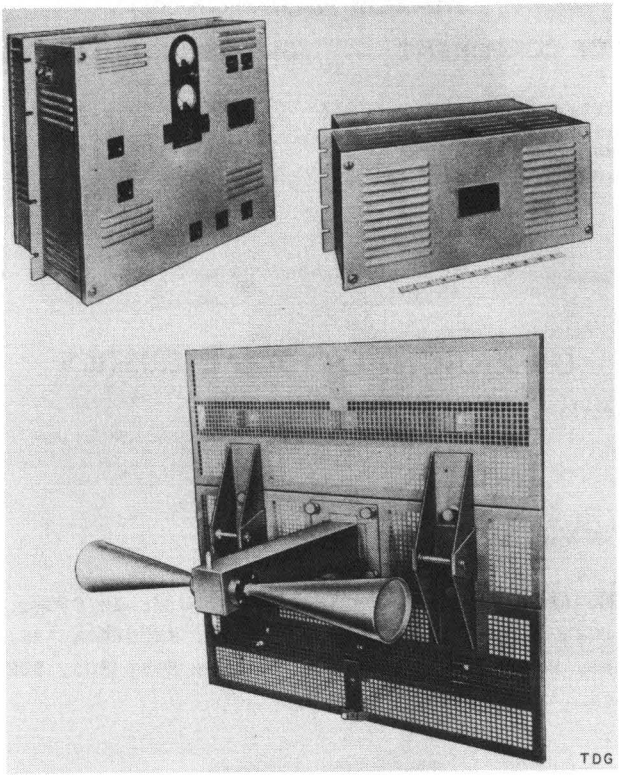
PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDF measures 61-1/4 x 34 x 20 inches, net weight 1,135 pounds. Packed for domestic shipment: total weight 1,660 pounds, total volume 74 cu ft, 1.85 ship tons.

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

AN/FRT-TYPE

SERVICE TYPE NUMBER: TDG, TDG-1
HF RADIO TELEPHONE TRANS EQUIP



High Frequency Radio Telephone Transmitting Equipments TDG and TDG-1 are radio transmitting terminals of permanent point-to-point, v-h-f, radio link systems. They provide one crystal-controlled channel within the frequency range, 132 to 156 mc. Facilities are provided for remote control of the equipment.

These units are used for voice, or multichannel telegraph, transmission using voice frequencies; or combinations of voice and telegraph derived from suitable carrier terminal equipment.

Portable Antenna, Navy Type, CW-66157, is used for semipermanent installations.

For permanent high tower installations either the 9-db antenna, Western Electric Co. Type D-150428, or the 3-db antenna, Western Electric Co. Type D-140427 is required, but not supplied.

Outdoor Cabinet, Navy Type CW-10589, (which permits installation of the equipment at the base of the antenna tower or pole) is available.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,620; 95330
TDG, TDG-1 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
HF RADIO TELEPHONE TRANS EQUIP	USING SERVICE : Navy
	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CW-52255, -52366	15-3/4 x 19 x 10	43
1	Spare Part Panel CW-10568	3-1/2 x 19 x 5	3
1	Rectifier Power Unit CW-20143	8-3/4 x 19 x 11-1/4	75
1	Portable Antenna CW-66157	40 x 40 x 20	65

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -29, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-12, -21; AN/VRC-1; BC-639, -797; MAR; MBS; R-137/GR; RBK; RBQ; RC-256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 132 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

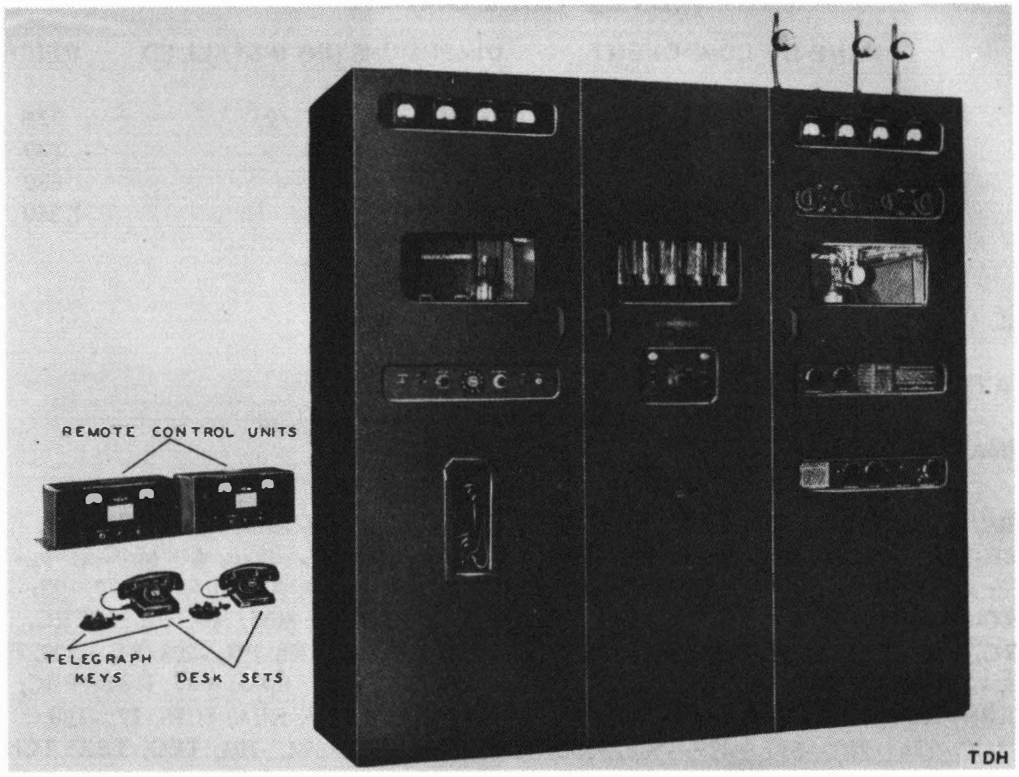
POWER OUTPUT: 12 w.

POWER REQUIREMENTS: 390 w, 115 v, (± 10%) 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

High Frequency Radio Telephone Transmitting Equipments TDG, TDG-1 measure 28 x 19 x 11-1/4 inches.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TDH, TDH-2, -3, -4 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TDH and TDH-2 through -4 are designed for general purpose, high-power, h-f point-to-point communication, aeronautical ground station use, and other services requiring operation on a number of readily selected frequencies. An autotune system is used for automatic selection of any one of 11 preset master oscillator controlled channels. Selection is made locally or at one of the remote control stations, either of which provides for complete control of the transmitter. Manual tuning over the entire frequency range is possible.

The remote control units are located at any distance where the total line loss does not exceed 25 db and may be mounted in standard relay racks.

Vacuum tube keying speeds up to 200 wpm on cw and 60 wpm on mcw are obtainable.

The equipment is designed for use with an unbalanced antenna or transmission line of 70-600-ohm impedance.

AN/FRT-TYPE

TDH, TDH-2, -3, -4 :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95331, 95332, 900,904, 900,798
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52291,	95-5/8 x 31 x 28-1/2	775
	-52343	84 x 31 x 28-1/2	749
1	Modulator COL-50129	84 x 31 x 28-1/2	830
1	Rectifier Power Unit COL-20196	84 x 31 x 25	1,350

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations and aeronautical ground stations.

INSTALLATION: Ground, fixed.

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/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10; -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794; -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP: RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

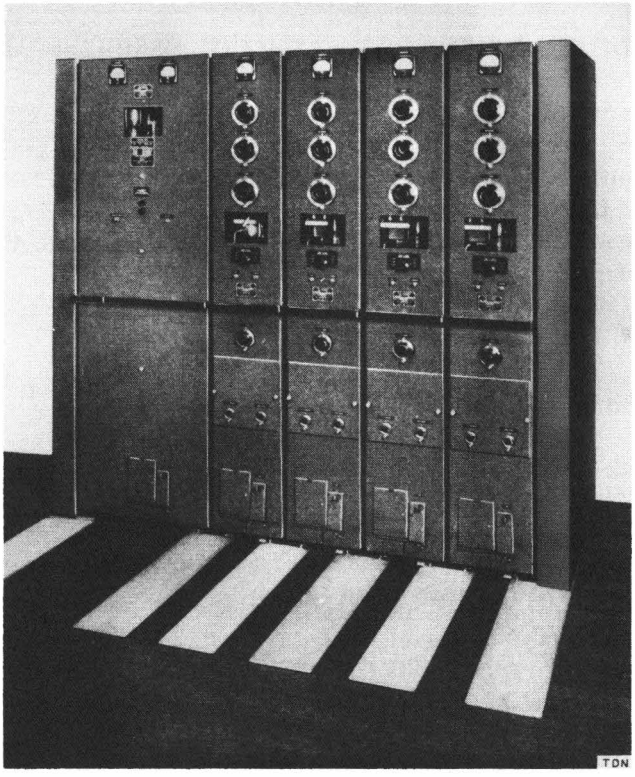
POWER OUTPUT: 2 to 12 mc, 3,000 w.
12 to 18.1 mc, 2,500 w.

POWER REQUIREMENTS: Transmitter: 9.92 kw, 230 v, 50/60 cyc, 3 phase.
Remote control unit: 52 w, 115 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDH or TDH-2 through -4 measures 95-5/8 x 82-1/16 x 31 inches, net weight 3,325 pounds. Packed for domestic shipment: total weight 5,716 pounds.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 23 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TDN, TDN-4 RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipments TDN and TDN-4 are single-frequency, a-m (cw and voice) radio transmitters for use at aircraft ground stations or for general shore station communication.

These transmitters use separate r-f units for different channels, making possible not only simultaneous operation on several frequencies but also rapid frequency change without using complicated r-f switching.

Each r-f unit is a complete telegraph transmitter, lacking only the power supply to operate independently. Each r-f unit operates with a separate antenna.

The audio amplifier unit is a complete a-f equipment which provides voice transmission throughout the frequency range of the transmitting equipment.

TDN has crystal oscillator control on six preset channels; TDN-4 has master oscillator control and has been modified to facilitate connection of external frequency-shift keying apparatus.

Remote control of both equipments is usually satisfactory at distances up to 1/2 mile, and provision is made for the connection of telegraph keys.

AN/FRT-TYPE

TDN, TDN-4 :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

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

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Transmitter CFT-52349	72 x 11-1/4 x 34	Not Available
2	Radio Transmitter CFT-52350	72 x 11-1/4 x 34	" "
1	Radio Transmitter CFT-52351	72 x 11-1/4 x 34	" "
1	Local Control Unit CFT-23357	7 x 18-3/4 x 3-1/4	" "
1	Rectifier Power Unit CFT-20208	71-3/4 x 22-1/8 x 34-1/4	" "
1	Audio Amplifier Unit, Fed. Tel. Type 123-A	Not Available	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft ground stations.

INSTALLATION: Ground, fixed.

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/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 20, in 3 bands.
Band 1: 2.0 — 5.16 Band 2: 5.16 — 13.3 Band 3: 13.3 — 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice.

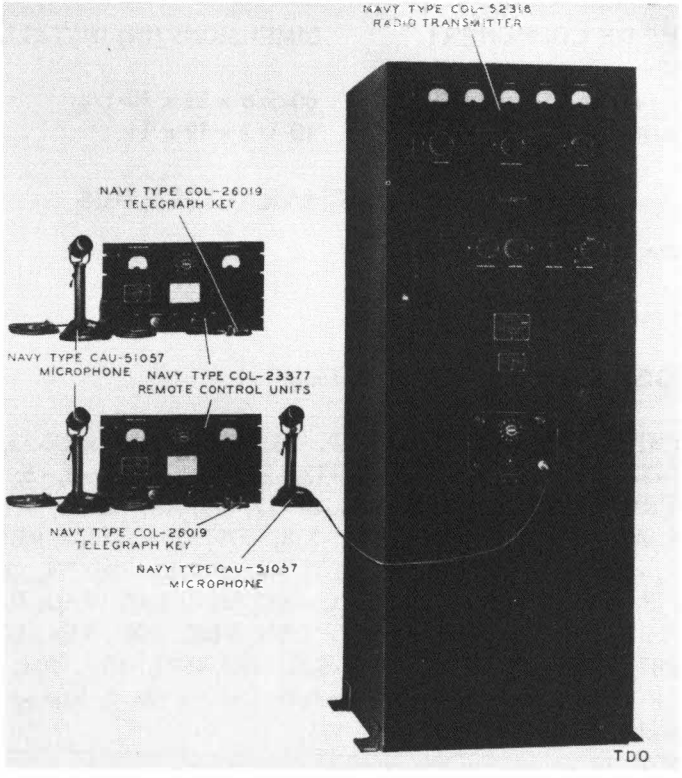
POWER OUTPUT: 3 kw.

POWER REQUIREMENTS: 20 kw, 220 v, 50/60 cyc, 3 phase (4 r-f units operating).

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDN or TDN-4 measures 72 x 66-7/8 x 34-1/4 inches.

STATUS: Limited Standard	AN/FRT-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: TDO
USING SERVICE: Navy	RADIO TRANSMITTING EQUIPMENT
DATE OF THIS SHEET: 9 May 52	



Radio Transmitting Equipment TDO is used for medium-power, m-f and h-f point-to-point communication. It uses an autotune system for instantaneous selection of any one of 11 preset channels. Channel selection is made by means of a telephone dial on the transmitter panel, or at the remote control unit.

The remote control units may be used for complete control of the equipment at any distance where the total line loss does not exceed 25 db.

An electronic carrier control is provided which permits keying speeds up to several hundred wpm for c-w operation and 60 wpm for m-c-w operation.

A master oscillator is used for frequency control.

The equipment is designed to operate into an unbalanced 70 to 600 ohm antenna or line.

AN/FRT-TYPE

TDO :SERVICE TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95336
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter COL-52318	80-5/8 x 28 x 30-1/4	1,140
2	Remote Control Unit COL-23377	10-1/2 x 19 x 11	30

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

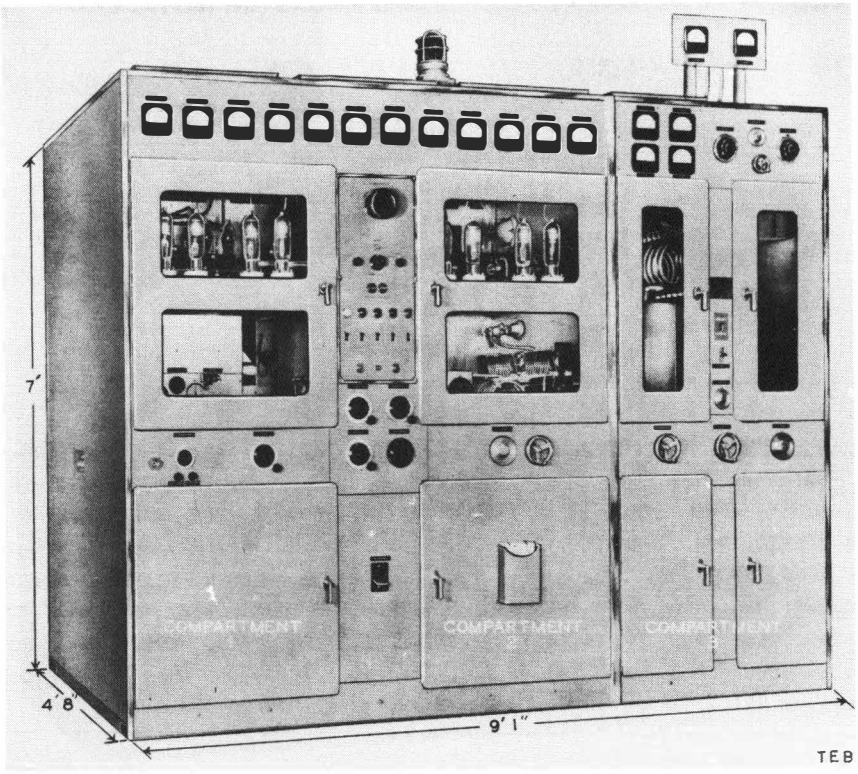
POWER OUTPUT: Voice, mcw: 250 w.
Cw: 400 w.

POWER REQUIREMENTS: Transmitter: 1570 w, 115-230 v, 50/60 cyc, 1 phase, ac.
Remote control unit: 25 w, 115 v, 50/60 cyc 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TDO measures 80-5/8 x 28 x 30-1/4 inches, net weight 1,365 pounds. Packed for domestic shipment: total weight 2,362 pounds, total volume 102.6 cu ft, 2.5 ship tons. Shipped in 12 packages.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TEB RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TEB is used for general purpose, high-power, h-f, radiotelegraph, or frequency-shift operation in shore-to-ship, and point-to-point communication. Vacuum-tube keying speeds up to 400 wpm are possible, and provision is made for the connection of an external frequency shift keyer.

Six preset crystal-controlled channels are available, and provision is made for connection of an external master oscillator.

An automatic control circuit will shut down the entire equipment, except blowers and oscillator oven, if the transmitter is not keyed for a predetermined period (adjustable from two to 30 minutes).

This equipment is designed to work into a balanced two-wire transmission line of 550 to 650 ohm impedance and zero reactance.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,352(A)
TEB :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CYV-52353	84 x 109 x 56	9,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 - 21.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency shift (when external keyer is used).

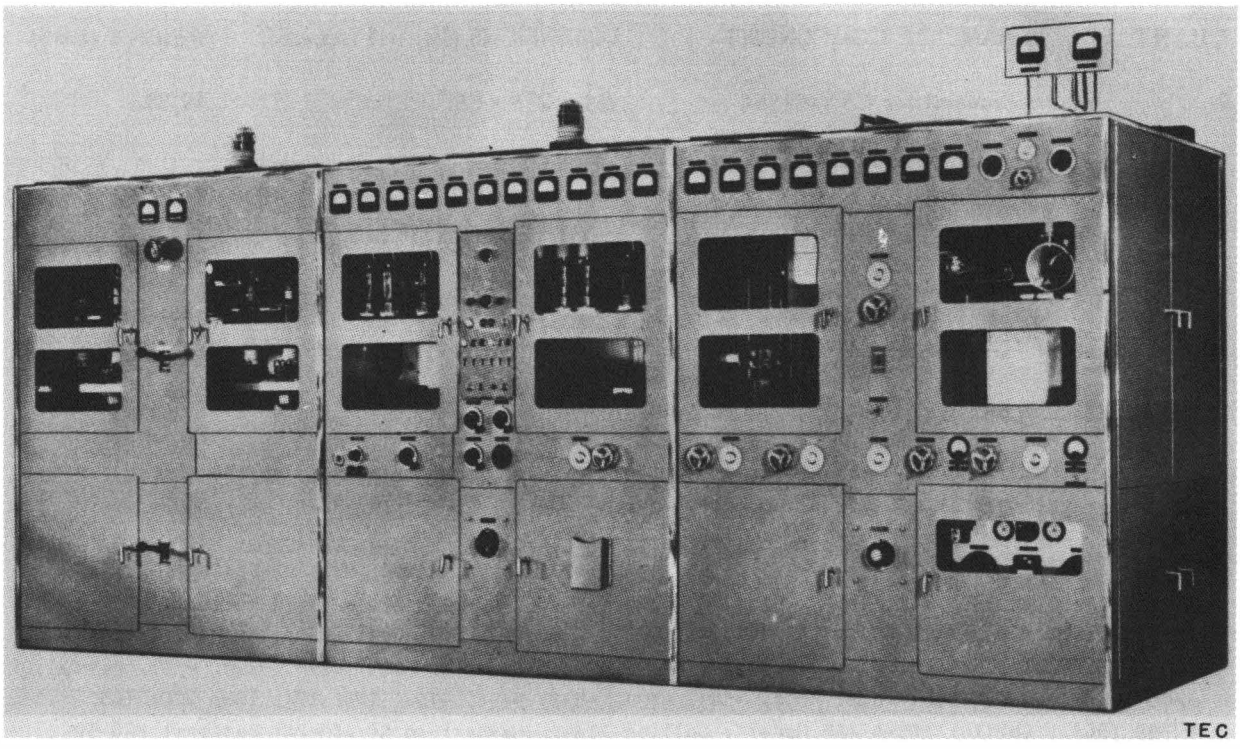
POWER OUTPUT: 15 kw.

POWER REQUIREMENTS: 35 kw, 230 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TEB measures 84 x 109 x 56 inches, net weight 11,302 pounds, volume 510 cu ft. Packed for domestic shipment: total weight 15,563 pounds, total volume 833 cu ft. Shipped in 20 packages.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TEC RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment TEC is used for high-power, general purpose, h-f radiotelegraph, or frequency-shift operation in shore-to-ship and point-to-point communication. Vacuum-tube keying speeds up to 400 wpm are obtainable, and provision is made for frequency shift keying through connection of an external frequency shift keyer.

It may be used in conjunction with a single-sideband transmitter, the output of which is fed into the power amplifier stage of TEC.

Six preset crystal-controlled channels are available, and provision is made for connection of an external master oscillator.

This transmitter works into a balanced two-wire transmission line of 550 to 650 ohm impedance, with zero reactance.

It has an automatic control feature which will shut down the equipment if it is not keyed for a predetermined period, which is adjustable from two to 30 minutes.

The control circuit provides overload protection for driver, and power amplifier stages both.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 900,212X
TEC :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter CYV-52354	84 x 216 x 56	19,584

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Short to medium.

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; R8B; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 - 21.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, frequency shift (when external keyer shifter is used).

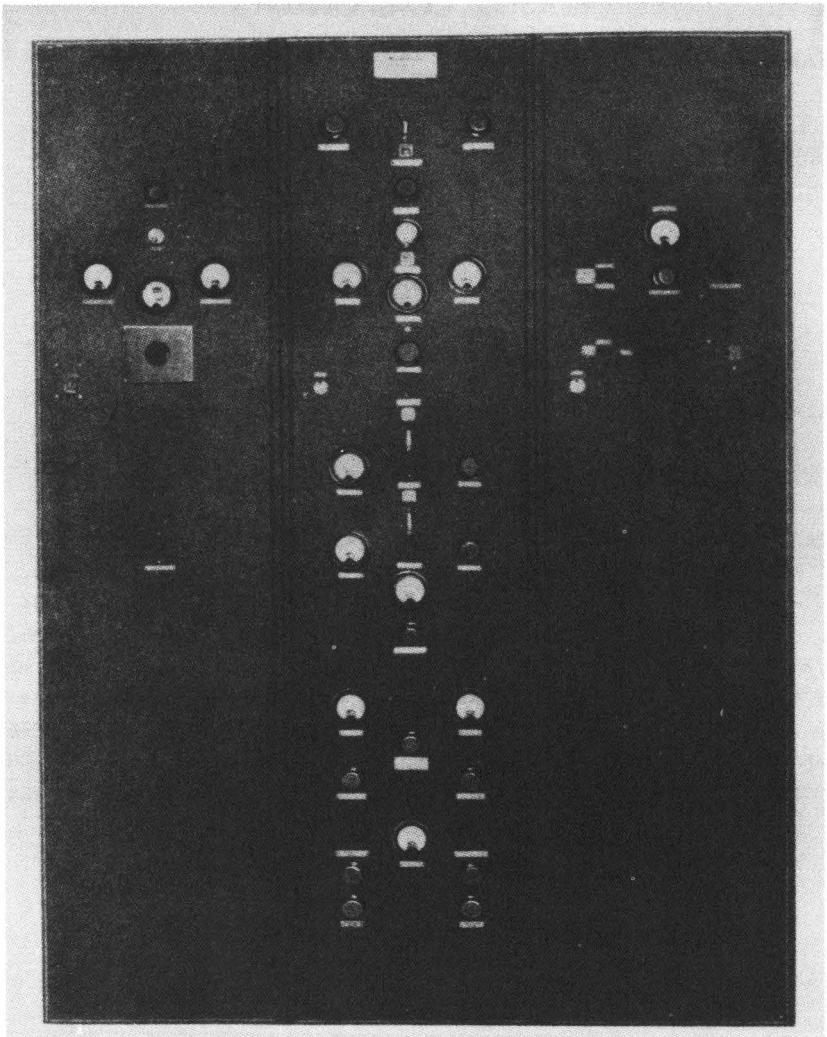
POWER OUTPUT: Normal operation: 40 kw.
Without power amplifier: 2 kw.

POWER REQUIREMENTS: 95 kw, 230 v, 60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TEC measures 84 x 216 x 56 inches, net weight 23,992 pounds. Packed for domestic shipment: total weight 36,119 pounds, total volume 2,258 cu ft. Shipped in 52 packages.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 May 52	**AN/FRT-TYPE** SERVICE TYPE NUMBER: TEF RADIO TRANSMITTING EQUIPMENT



TEF

Radio Transmitting Equipment TEF is a medium-power, h-f, short wave, long distance, multichannel, radiotelephone equipment for use in transoceanic communication. It provides two telephone channels in a twin-channel single-sideband system, and (alternatively) one conventional double-sideband channel. The change from single to double sideband, or selection of six preset crystal-controlled frequencies, may be made at the equipment, or from a remote control panel.

This transmitter is used with a balanced open wire line of 400-800 ohms, or a balanced concentric line of 200 ohms.

It has a monitor circuit which is used to measure the degree of distortion at the output.

AN/FRT-TYPE	INSTRUCTION LITERATURE: NavShips 95356
TEF :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter Western Electric Co D-156000	89 x 60-3/4 x 27	2,400

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Transoceanic.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4.5- 22.9.
(4 - 20 by modification).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw, cw.

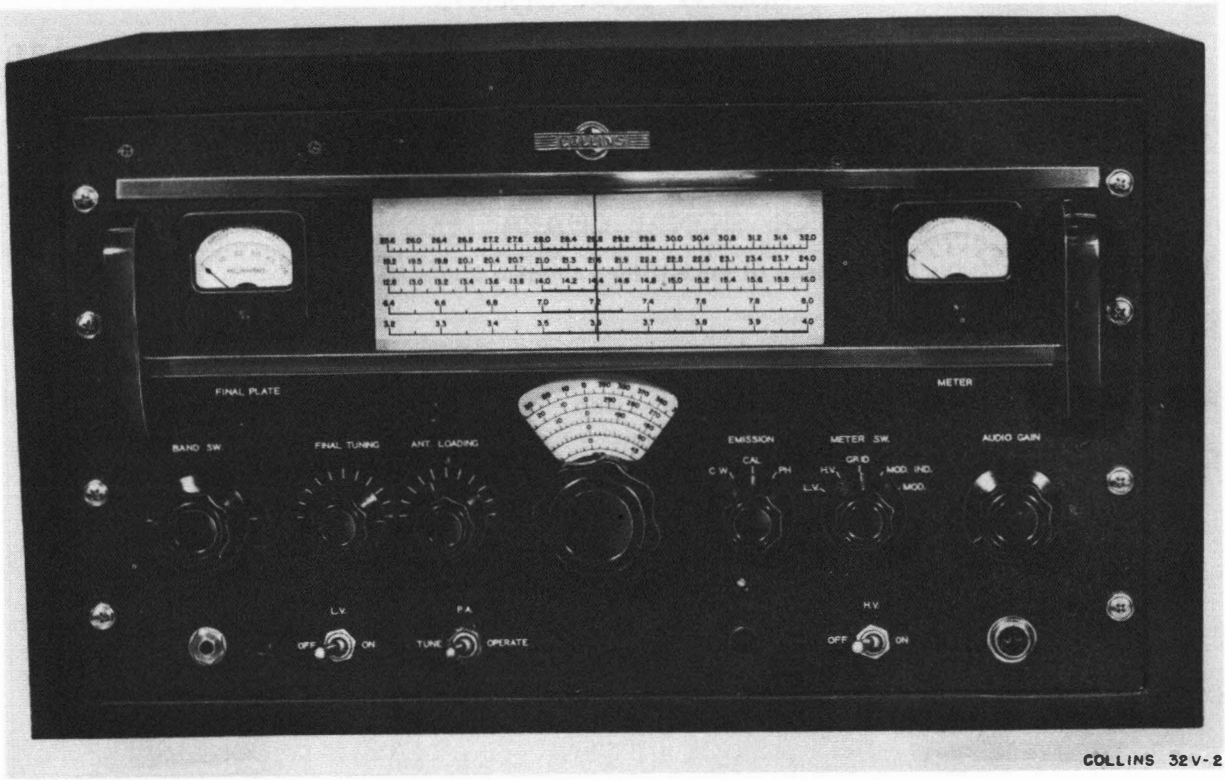
POWER OUTPUT: 500 w.

POWER REQUIREMENTS: 5 kw, 220-235 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TEF measures 89 x 60-3/4 x 27 inches, net weight 2,400 pounds.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 7 Jun 52	AN/FRT-TYPE COMMERCIAL TYPE NUMBER: COLLINS 32V-2 RADIO TRANSMITTER



COLLINS 32V-2

Radio Transmitter Collins 32V-2 is a small, compact unit, with built-in power supply, speech amplifier, and modulator. It is capable of c-w and voice operations on all amateur bands between 3.5 and 29.7 mc by bandswitching, and by continuous tuning through its accurate permeability-tuned oscillator.

This equipment is normally used in the military Amateur Radio System (MARS) for point-to-point communication.

The output network of this transmitter will operate satisfactorily with antenna transmission line impedances of 26 to 200 ohms.

The modulator output has provisions for supplying 60 w of audio to an external 500 ohm resistive load (when it is not required for modulation of the transmitter).

Terminals are provided to turn the transmitter ON/OFF from a remote point.

It has provisions for push to talk, break-in keying when used with its companion Radio Receiver Collins 75A-2, and automatic antenna change-over relay control.

Requires 500 w of 115-v, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: Collins Instruction Manual
COLLINS 32V-2 : COMMERCIAL TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 7 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: Issued to stations of the Military Amateur Radio System.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-3, -4, -9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -22; AN/PRC-7, -8, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -5, -8, -13, -16, -20; AN/VRQ-1; BC-312, -342, -348, -779, -794, -1004; MBS; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCQ; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -293, -294, -298, -399, -499, -506, -508, -509, -510, -528, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 3.2 - 32.0 in 5 bands.

Band 1: 3.2 - 4.0
Band 2: 6.4 - 8.0
Band 3: 12.8 - 16.0
Band 4: 19.2 - 24.0
Band 5: 25.6 - 32.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or cw.

POWER OUTPUT: Voice: 90 w
Cw: 113 w.

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

PHYSICAL CHARACTERISTICS

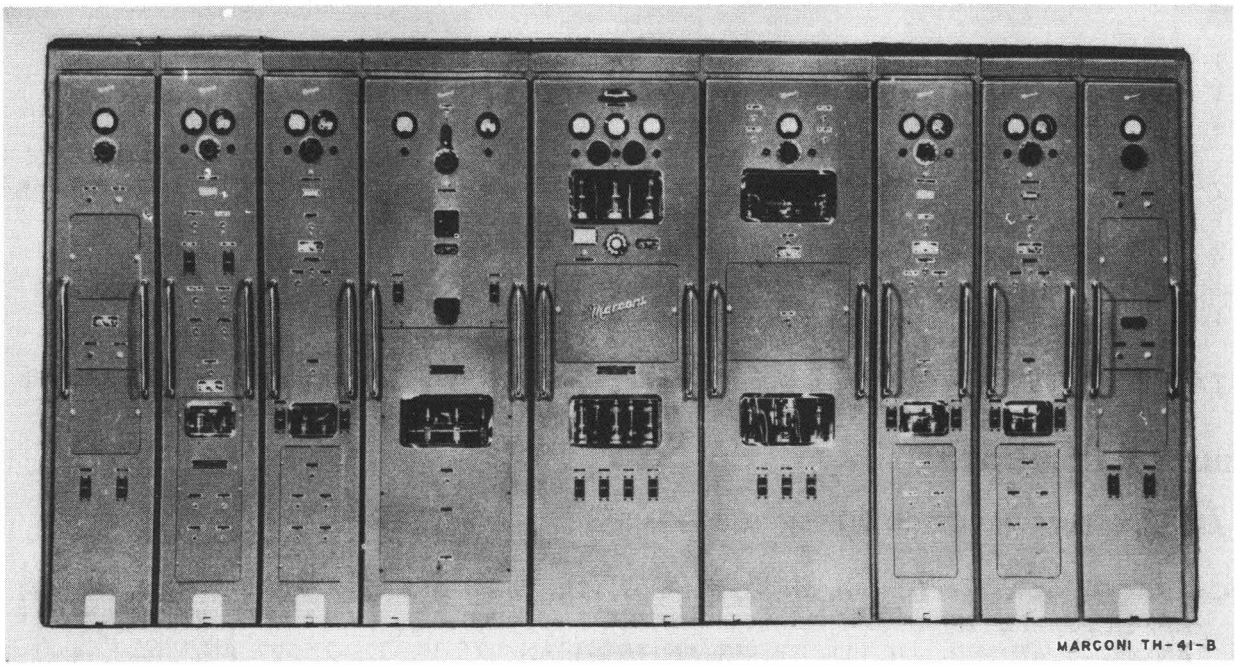
Radio Set Collins 32V-2 measures 21-1/8 x 12-1/4 x 13-13/16 inches, net weight 110 pounds, volume 3.57 cu ft. Packed for domestic and export shipment: total weight 128 pounds, total volume 4 cu ft. Shipped in one package both domestic and export.

STATUS: Commercial
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 11 Jun 52

AN/FRT- TYPE

COMMERCIAL TYPE NUMBER: MARCONI TH-41-B

RADIO TRANSMITTING EQUIPMENT



Radio Transmitting Equipment Marconi TH-41-B, is a high-power, c-w, frequency-shift keying, and a-m radio transmitter for ground fixed station use in long distance point-to-point communication.

This equipment consists of nine large cabinets containing the following: rectifier power supply, modulator, l-f/r-f unit, four h-f/r-f units, two r-f exciter units,and one separate remote control unit. Each r-f unit can be operated on up to 10 preset channels (either crystal or master oscillator frequency controlled), except the l-f unit which uses master oscillator frequency control only.

Three transmitting units cen be operated simultaneously on either c-w or frequency-shift keying; when voice is used, only two units may be operated at a time (one unit modulated and the other on c-w or frequency-shift keying).

Complete remote control of all functions is provided by Master Remote Control Unit 141-398 from distances up to 5 miles over four pairs of standard telephone lines.

The transmitter r-f units are designed to operate into a 600-ohm balanced or unbalanced transmission line; however, an L type matching section is included in the h-f units to provide an impedance matching range of 70 to 2,500 ohms. The l-f unit uses a T type matching section for 72-ohm coaxial Radio Frequency Cable RG-34/U, or equivalent.

Power requirements are: 40.5 kva, 208/220 v, 3 phase, 60 cyc, ac.

AN/FRT-TYPE

MARCONI TH-41-B :COMMERCIAL TYPE NUMBER
RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: Marconi Instruction Book
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 11 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	148-000 Rectifier Unit	24-1/2 x 81-1/16 x 37-1/2	2,780
1	148-002 Modulator Unit	24-1/2 x 81-1/16 x 37-1/2	1,320
5	148-006A,B,C,D, and 112973 Radio Transmitter	14-1/2 x 81-1/16 x 37-1/2	440 each
2	148-008 Dual Exciter Unit	14-1/2 x 81-1/16 x 37-1/2	Not Available
1	141-398 Master Remote Control Unit	19 x 8-3/4 x 10	" "
2	141-581 Auxiliary Remote Control Unit	19 x 5-1/4 x 3-1/8	" "
1	117-807 Remote Speech Amplifier Unit	19 x 5-1/4 x 12-9/16	" "
1	129-837 R.F. Tuner	Not Available	" "

OPERATIONAL CHARACTERISTICS

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

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Medium to long (depending on frequency).

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -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, -10, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -12, -22, -23; AN/VRC-1, -4, -22; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -779, -787, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/SR, -96/SR, -129/U, -137/GR, -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; RBK; 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, -607, -614, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.08 - 0.2, single channel master oscillator frequency control. 2 - 28, 10 preset channels per unit. Either master oscillator or crystal control may be used.

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

POWER OUTPUT: 5,000 w.

POWER REQUIREMENTS: 40 kva (approx) 40,000 w, 208/220 v, 3 phase, 60 cyc ac. 250 w, 115 v, 1 phase, 60 cyc ac, when master oscillator oven heaters are used. 150 w, 115/220 v, 1 phase, 60 cyc ac, when remote control equipment is used.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment Marconi TH-41-B measures 126 x 81-1/16 x 37-1/2 inches, net weight 10,000 pounds, volume 135.7 cu ft. Packed for domestic or export shipment: total weight 11,000 pounds, total volume 150 cu ft, 3.75 ship tons. Shipped in 15 packages.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 28 Apr 52	**AN/FRT-TYPE** COMMERCIAL TYPE NO: WESTINGHOUSE TYPE MW RADIO TRANSMITTER

Radio Transmitter Westinghouse Type MW is a fixed station a-m (voice, cw, mcw), tone, OFF-ON or frequency-shift-keying, teletypewriter equipment. A normal installation consists of one rectifier unit, one modulator unit, plus various radio frequency units to provide for the requirements of the installation.

All r-f units require external excitation of 2 w in the range 2.0 to 4.5 mc from a 70-ohm impedance coaxial cable. Provides for connecting up to six r-f and/or modulator units to a single rectifier unit at a time; only four such units can be operated simultaneously from one rectifier unit.

The modulator unit provides effective voice transmission with 20-db adjustable volume compression, bypassed at will, and a peak limiter which prevents overmodulation on either the positive of the negative peaks of the modulation envelope.

Remote control facilities are available for keying, voice, and power ON-OFF control.

The r-f output circuit is designed for operation into a 700-ohm balanced transmission line, and contains harmonic suppression equipment. Normally a doublet (Antenna Kit MX-741/FR), or a rhombic (Antenna Kit MX-742/FR) array are used.

Power input required is approximately 24 kw of 210 to 250 v, ac.

AN/FRT-TYPE	INSTRUCTION LITERATURE: Instruction Book CF-1624
WESTINGHOUSE TYPE MW : COMMERCIAL TYPE NO.	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE: Air Force
	DATE OF THIS SHEET: 28 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Rectifier Unit Style 1474264 Cabinet	24-1/4 x 76 x 24	650
1	R-F Unit Style 1474265 Cabinet	12-1/4 x 76 x 24	350
1	Modulator Unit Style 1474266 Cabinet	12-1/4 x 76 x 24	340
1	Power Supply Style 1353091	19 x 14 x 9-1/4	57
1	Crystal Oscillator Style 1353089	8-1/4 x 5 x 6-5/16	3
1	Plate Transformer T-112	31 x 22 x 47-1/2	1,100

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued as project material in accordance with AFR 100-17.

INSTALLATION: Fixed, ground.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -12, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -787, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; TBO; TBX; TBY; 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: For six coil ranges 2 - 30 in 6 bands.

Band 1: 2 - 3.46	Band 3: 6.0 - 10.4	Band 5: 18 - 24
Band 2: 3.46 - 6.0	Band 4: 10.4 - 18.	Band 6: 24 - 30.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, tone, OFF-ON, and frequency shift keying teletype.

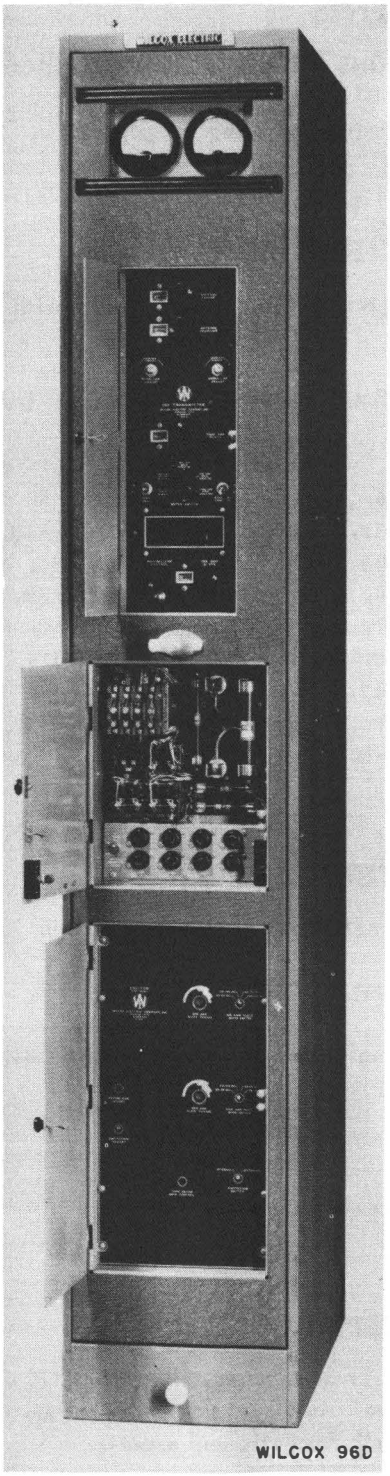
POWER OUTPUT: Am: 2.5 kw, at all frequencies up to 24 mc; from 24 - 30 mc output is slightly less.
Cw: 3 kw.

POWER REQUIREMENTS: 24 kw, 210-250 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter Westinghouse Type MW measures 79 x 76 x 24 inches, net weight 2,500 pounds, volume 63 cu ft. Packed for domestic shipment: total weight 2,700 pounds, total volume 67 cu ft. Packed for export shipment: total weight 3,000 pounds, total volume 70 cu ft. Shipped in 5 packages both domestic and export.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 19 May 52	**AN/FRT-TYPE** COMMERCIAL TYPE NUMBER: WILCOX 96D RADIO TRANSMITTER



Radio Transmitter Wilcox Model 96D is a 2.5 kw equipment intended primarily for ground-to-air, and long distance point-to-point a-m, radiotelephone and radioteletype communication in the frequency range 2 to 26 mc. Power supply or modulator are not included. Normally used with Modulator MD-69/FRT (Wilcox 50 H Modulator) and Rectifier Power Unit PP-219/FRT (Wilcox 36D Rectifier) which are separately supplied.

This equipment is designed for simultaneous radioteletype and voice, or tone operation when an external frequency-shift exciter is used, and the transmitter has been properly adjusted for this type of operation.

Remote control up to nine miles is possible by means of Remote Control Console CY-161/FRC.

The output impedance is 500 to 600 ohm for either balanced or unbalanced antenna transmission lines. It is normally used with a doublet (Antenna Kit MX-741/FR) or a rhombic, transmitting (Antenna Kit MX-742/FR).

This transmitter is a commercial model similar to Radio Transmitter T-158C/FRT and has tone keying facilities and an extended frequency range; features not included in the T-158/FRT.

AN/FRT-TYPE	INSTRUCTION LITERATURE: Wilcox Instruction Manual CLASSIFICATION OF EQUIPMENT: Unclassified
WILCOX 96D :COMMERCIAL TYPE NUMBER	USING SERVICE : Air Force
RADIO TRANSMITTER	DATE OF THIS SHEET : 19 May 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: Issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground, fixed. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 26 single channel preset crystal-controlled.

TYPE MODULATION: Am (when used with external modulator).

TYPE OF SIGNAL: Cw, voice, icw and frequency shift keying teletypewriter (when used with external equipment).

POWER OUTPUT: 2.5 kw.

POWER REQUIREMENTS: Rectifier Power Unit PP-219/FRT (Wilcox 36D Rectifier).

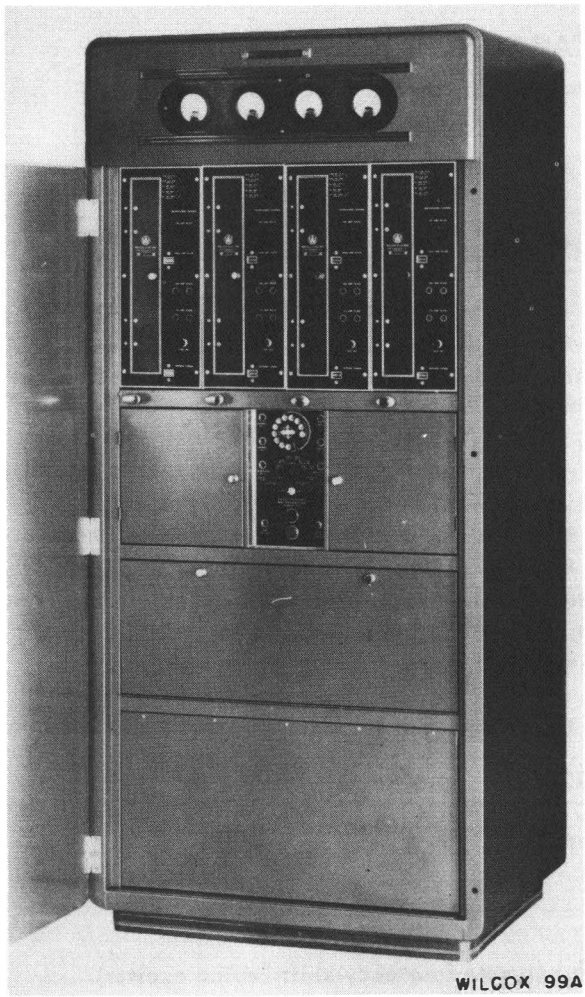
PHYSICAL CHARACTERISTICS

Radio Transmitter Wilcox 96D measures 12-5/16 x 73-1/2 x 27-3/4 inches, net weight 320 pounds, volume 15 cu ft. Packed for either domestic or export shipment: total weight 1,225 pounds, total volume 125.7 cu ft, 3.14 ship tons. Shipped in 3 packages both domestic and export.

STATUS: Commercial
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 26 May 52

AN/FRT-TYPE

COMMERCIAL TYPE NUMBER: WILCOX 99A
RADIO TRANSMITTER


WILCOX 99A

Radio Transmitter Wilcox Model 99A is a (nominal) 400 w, a-m, (mcw or cw) crystal-controlled equipment with a system of plug-in r-f units permitting operation in the frequency ranges 0.125 to 0.525 mc; 2 to 20 mc; and 108 to 132 mc. Simultaneous voice, radioteletype or tone may be transmitted in the 2- to 20-mc range when frequency-shift-keying Exciter Unit 0-5/FRT, or equal is used. Remote keying is accomplished with a 1,000-cyc tone (or remote d-c keying). Remote channel selection is possible by using a 60-cyc dialing pulse.

The transmitter proper houses a maximum of four r-f units, power supplies, two independent modulators, and necessary channel-selection equipment.

For radiotelephone operation Amplifier BC-730 and ancillary equipment is used for volume limiting of the audio-input signal.

An adjustable antenna-matching network permits feeding balanced transmission lines of from 20 to 600 ohm impedance.

The two separate modulators and the system of plug-in r-f units permit simultaneous operation of two channels on either frequency shift keying or voice, or any combination of these.

This transmitter has a power-reduction feature which enables operation at either 400 w or 40 w output. At present only h-f, radio frequency units are being procured by the Air Force.

Power requirements are 4,780 w of 220-v, ac, (for normal operation at 400 w output).

AN/FRT-TYPE

WILCOX 99A : COMMERCIAL TYPE NUMBER
RADIO TRANSMITTER

INSTRUCTION LITERATURE: Mfr. Instruction Manual
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter 99A	32-3/4 x 72 x 27-7/16	1,450
1 to 4	*RF Units (each)	21 x 17-3/4 x 7	54
1	Coil Cabinet	40 x 40 x 7	225

* 1 to 4 RF Units may be installed at one time.
Any two may be operated simultaneously.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued on any organizational level as project material in accordance with ARF 100-17.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): LF - medium; HF - long; VHF - line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -28, -36; AN/ARR-15; AN/CRC-2; AN/FRC-10; AN/FRR-3, -4, -7, -12, -23; AN/GRC-9, -13, -26, -30; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -17, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -21, -22, -23, -25; AN/VRC-1, -4; AN/VRR-2; BC-312, -314, -342, -344, -348, -453, -639, -779, -794, -1004; MAW; 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; RBQ; RBS; RC-103; RC-256; RCF; RCG; RCH; RCK; RCO; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -574, -575, -585, -593, -614, -624, -641, -644, -694, -704, -794; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX: National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:

LF	0.125	-	0.525
HF	2.0	-	20.0
VHF	108.0	-	132.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, mcw or radioteletype (with separate frequency-shift-keying exciter).

POWER OUTPUT: 400 w (nominal), or 40 w (depending upon position of power selector switch).

POWER REQUIREMENTS: 4,780 w, 200 - 230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter Wilcox 99A measures 72 x 72-3/4 x 28 inches, net weight 1,450 pounds, volume 37.5 cu ft. Packed for either domestic or export shipment: total weight 2,504 pounds, total volume 116.5 cu ft, 2.9 ship tons. Shipped in 11 packages both domestic and export.

STATUS: Std

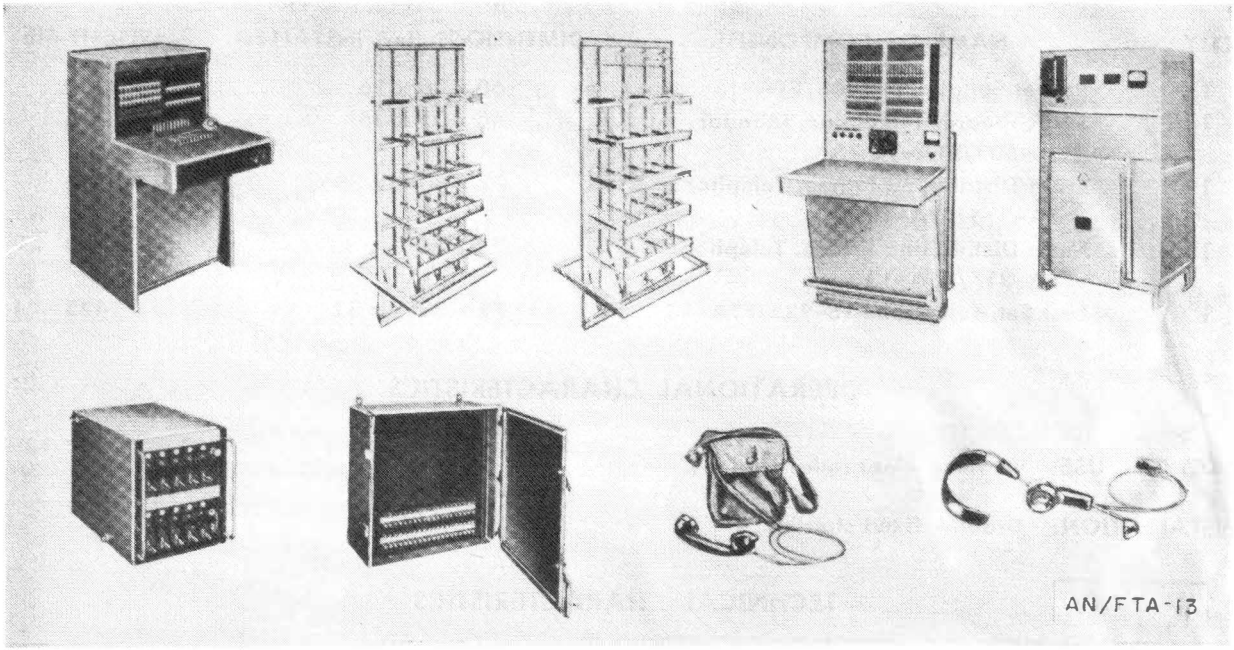
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

AN/FTA–13

TELEPHONE CENTRAL OFFICE GROUP, MANUAL



Manual Telephone Central Office Group AN/FTA–13 is a tactical fixed station equipment designed to furnish communication facilities for radar stations and related radar networks. It provides for selective intercommunication among operating personnel at the radar station, and for communication by telephone line or by control of a radio link, with radio shelters and information centers, other radar stations, or other outside points, including aircraft in flight.

This equipment provides protected terminations for 300 outside wire lines that may be used for telephone or radio circuit connections. Through cross-connections in the distributing frames, these lines may be selectively connected to one or more suitable components in the group.

Included in the system are 10 trunk circuits for connections to other switchboards and 20 switching relays for making connections to any of 20 radio circuits.

A primary power source of 115-volt, 60-cycle, ac power is required to charge the batteries and to provide ringing power. This equipment is designed to operate on 24-volt dc battery voltage.

AN/FTA–13

TELEPHONE CENTRAL OFFICE GROUP, MANUAL

INSTRUCTION LITERATURE: 31W1–2FTA13-Series

USING SERVICE: USAF

DATE OF THIS SHEET: 4 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Supply PP–1408/FTA–13	60 x 30 x 26	249
1	Switchboard, Telephone, Manual SB–503/FTA–13	46 x 25 x 35	315
1	Main Distributing Frame, Telephone TA–315/FTA–13	72 x 30¼ x 30½	260
1	Main Distributing Frame, Telephone TA–317/FTA–13	72 x 30¼ x 30½	260
1	Test Set, Telephone TS–925/FTA–13	72 x 33½ x 32	425

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At fixed plant radar stations.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of Cord Circuits: 10
Number of Line Circuits: 30
Number of Trunk Circuits: 10

PERCENT TRUNKING:

POWER REQUIREMENTS: 690 w, 115 v, 6 amp, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

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

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FTC-9

TELEPHONE CENTRAL OFFICE SET

NO PHOTOGRAPH AVAILABLE

Telephone Central Office Set AN/FTC-9 is fixed plant, unattended, single-party, bridged ringing, 48-volt, common battery-type private automatic (dial) equipment that provides the necessary switching facilities required for a 50-line dial telephone system. It is used in larger structures and limited areas to provide connections for local intercommunication only. It is capable of expansion to accommodate up to 100 lines.

This equipment consists essentially of commercial (Automatic Electric Company Type 50 PAX) dial switching equipment and includes installation materials, batteries, and battery-charging accessories.

It is mounted in a double-sided frame, inclosed in a steel cabinet with hinged collapsible doors.

N/FTC-9

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-2100; TM 11-2105; TB SIG 322-102

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Steel cabinet with equipment	72 x 24 x 84⅛	Floor loading requirements: 125 psf

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: Unattended.

AUTOMATIC EQUIPMENT:

NUMBER OF LINE CIRCUITS: 50 (ult 100).

POWER REQUIREMENTS: 115 v, 6 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

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

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

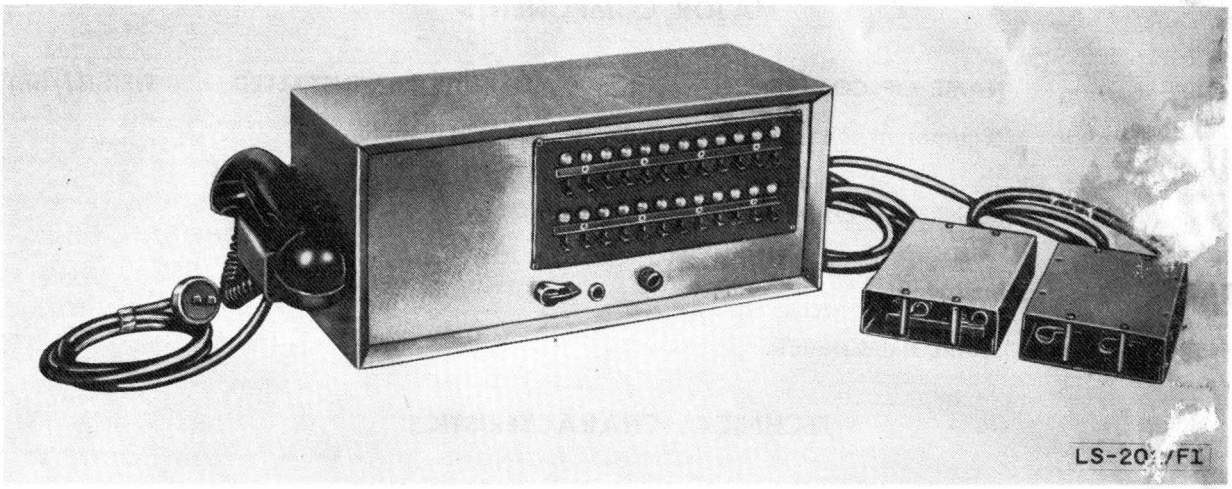
PREPARING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

AN/FTC–TYPE

LS–200/FI, LS–201/FI, LS–202/FI

INTERCOMMUNICATION STATION



Intercommunication Stations LS–200/FI, LS–201/FI, and LS–202/FI (illustrated above) are used for voice communication over wire lines between offices of a large headquarters. These sets are arranged to provide privacy of communication (by means of speaker-microphone or handset) between stations when all master stations in the system are equipped with this feature. Annunciators are used as a means of signaling between points.

These equipments are similar in construction and operation but differ in size, internal wiring, and station capacity. The LS–200/FI controls six stations. The LS–201/FI is similar to Intercommunicating Station LS–125B/FI; each can handle 12 master or remote stations. The LS–202/FI is similar to Intercommunicating Station LS–127B/FI; each can be used to control a maximum of 24 stations.

AN/FTC–TYPE

LS–200/FI, LS–201/FI, LS–202/FI

INTERCOMMUNICATION STATION

INSTRUCTION LITERATURE: TM 11–5089

USING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

MAJOR COMPONENTS

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: The LS–200/FI controls 6 stations; the LS–201/FI, 12 stations; and the LS–202/FI, 24 stations.

TYPE CONTROLS: Station selector; talk-listen; volume control; on-off; handsets.

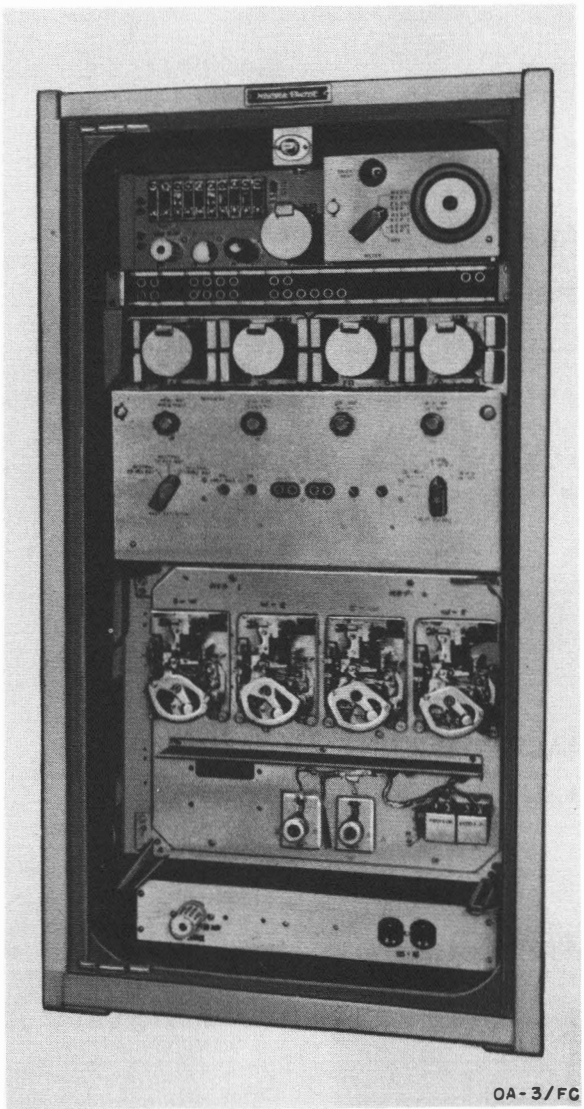
POWER OUTPUT: 2 w.

POWER REQUIREMENTS: 30 w, 105 to 125 v, 60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
LS–200/FI	13¾ x 7⅛ x 7½				
LS–201/FI	13¾ x 7⅛ x 7½				
LS–202/FI	21¾ x 7½ x 8½				
DOMESTIC PACK:					
LS–200/FI		22	1.6		1
LS–201/FI		24	1.6		1
LS–202/FI		28	1.9		1
EXPORT PACK:					
LS–200/FI		27	2.0		1
LS–201/FI		29	2.0		1
LS–202/FI		33	2.3		1

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: OA-3/FC REGENERATIVE REPEATER



OA-3/FC

Regenerative Repeater OA-3/FC is an intermediate d-c, neutral only, repeater equipment used at points between two Telegraph Repeaters OA-6/FC in facilities serving army and higher headquarters.

This equipment consists of two panel-mounted d-c telegraph regenerative repeaters housed in a single floor-type cabinet. It re-forms, re-times, and re-transmits teletypewriter signals and enables operation in tandem of several line sections thus effectively increasing the over-all length (or operating distance) of a telegraph line circuit.

When operated in conjunction with carrier equipment it is used only with the d-c portion of the circuit.

Operates from 115 to 130-v oc.

AN/FTC-TYPE	INSTRUCTION LITERATURE: TM 11-2032
	CLASSIFICATION OF EQUIPMENT: Unclassified
OA-3/FC :AN/COMP TYPE NUMBER	USING SERVICE : Army
REGENERATIVE REPEATER	DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communications zone and zone of interior.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Repeater, terminal, carrier, central office and station equipment and apparatus operating in the same facility.

TECHNICAL CHARACTERISTICS

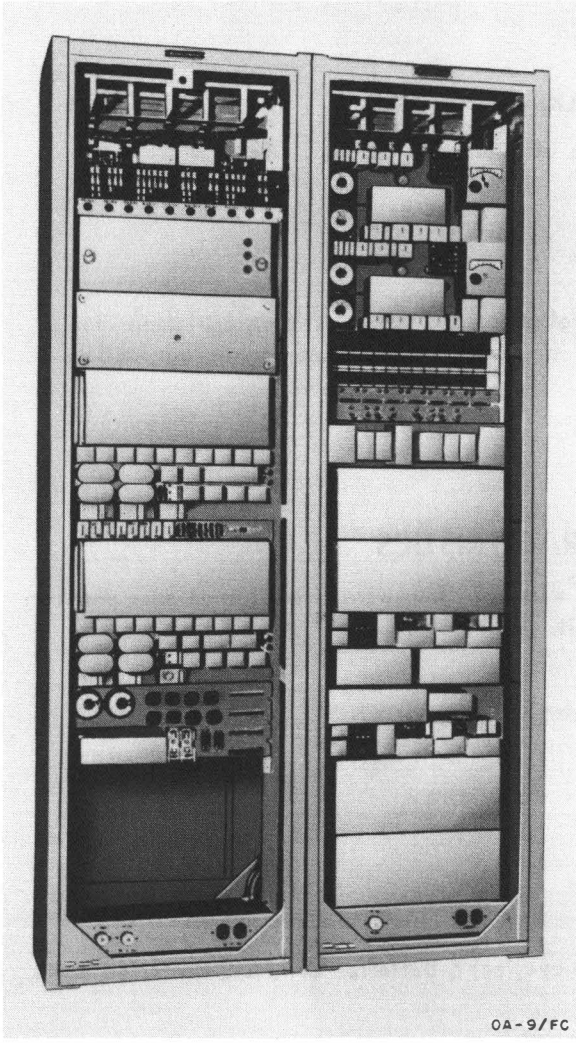
NUMBER AND TYPE OF FACILITIES: Neutral half-duplex, neutral full-duplex, and neutral three-way.

POWER REQUIREMENTS: 150 w, 115 v, 50/60 cyc, 180 va ac, 130 v dc.

PHYSICAL CHARACTERISTICS

Regenerative Repeater OA-3/FC weighs 315 pounds net, volume 10 cu ft. Packed for export shipment: total weight 510 pounds, total volume 23.8 cu ft, 0.6 ship ton.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: OA-9/FC CARRIER REPEATER



OA-9/FC

Carrier Repeater OA-9/FC is a fixed plant wire communication equipment used to superimpose three additional telephone channels on an existing physical open wire (or side-circuit) v-f telephone circuit. It is used at army and equivalent headquarters.

This equipment consists of apparatus mounted on standard rack panels in two, floor type steel cabinets which are installed side by side.

It is installed in carrier terminals and can be used in systems to extend the operating range.

Operates on 105 - 125-v, 50/60 cyc, ac, or from batteries.

AN/FTC-TYPE	INSTRUCTION LITERATURE: TM 11-2023
OA-9/FC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
CARRIER REPEATER	USING SERVICE : Army
	DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Carrier repeater bay	22-1/4 x 17 x 84	1,080
1	Repeater line and power bay	22-1/4 x 17 x 84	1,080

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communication zone and zone of interior.

INSTALLATION: Fixed ground.

CAN COMMUNICATE WITH: Repeater, terminal, central-office and related station equipment and subsidiary apparatus which operates in the same connecting facility in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Open wire pair, four-wire circuit, open wire phantom circuit.

FACILITIES AFFORDED: Four v-f circuits, v-f telegraph system circuit.

FREQUENCY: 6 to 29 kc.

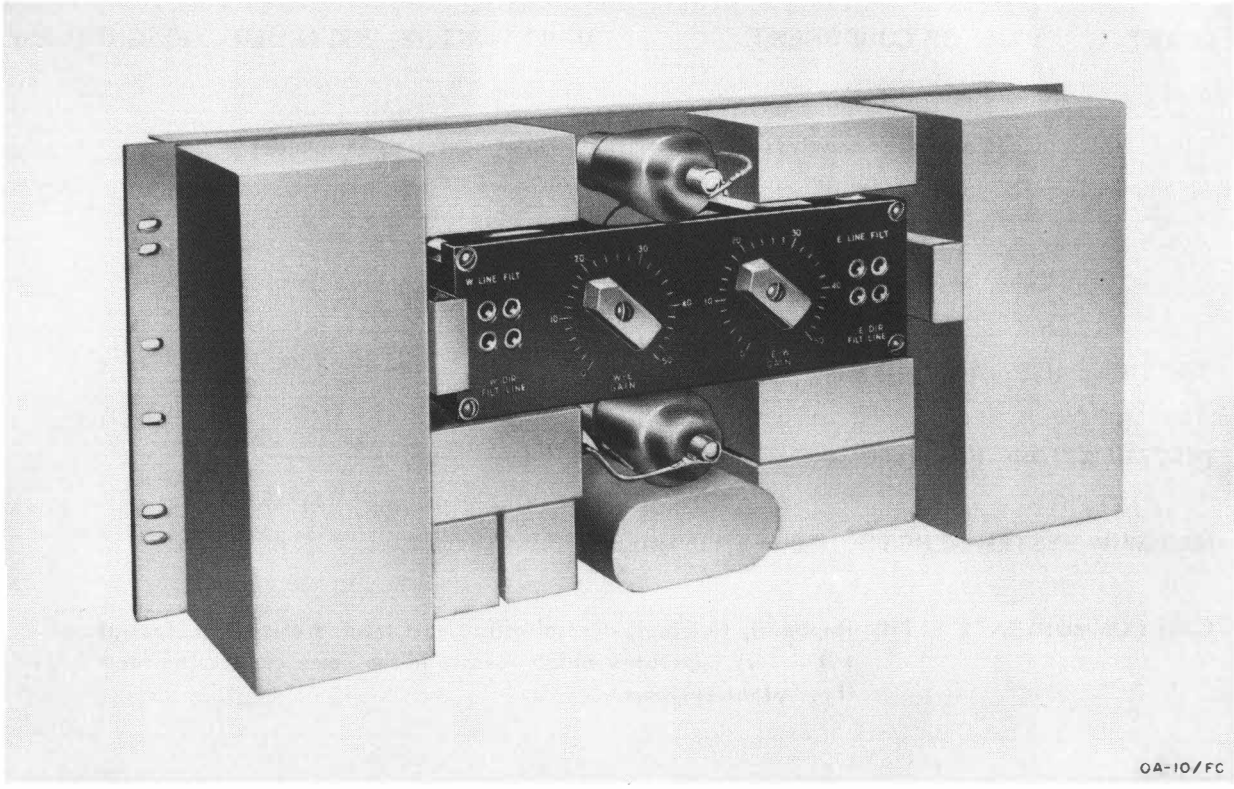
TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 200 w, 105 - 125 v, 50/60 cyc, ac; 6 Batteries BA-34, 2 Batteries BA-8, and 10 Batteries BA-27.

PHYSICAL CHARACTERISTICS

Carrier Repeater OA-9/FC weighs 1,080 pounds net, volume 42 cu ft. Packed for domestic shipment: total weight 1,570 pounds, total volume 75 cu ft, 1.9 ship tons. Shipped in 3 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: OA-10/FC CARRIER REPEATER



Carrier Repeater OA-10/FC is a single-channel, type H telephone and telegraph carrier-repeater equipment used to extend the range, in both directions, of transmission in a system operated in conjunction with Carrier Terminal OA-13/FC, or equivalent terminal apparatus. It is used at fixed station installations at army and higher headquarters.

This equipment consists of two amplifiers, two sets of line and filter jacks, and associated telephone apparatus mounted on a single rack panel which can be mounted in Cabinet CY-413/FC or CY-414/FC. It can be used in conjunction with radio relay and related terminal equipment in a system and can be installed at intermediate points of a section or facility.

It operates on 105-125 v ac.

AN/FTC-TYPE

OA-10/FC :AN/COMP TYPE NUMBER
CARRIER REPEATER

INSTRUCTION LITERATURE: TM 11-2025
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION: Fixed station.

MAXIMUM SYSTEM LENGTH: 150 to 1,135 miles.

CAN COMMUNICATE WITH: Repeater, terminal, central office, and related station equipment and subsidiary apparatus which operate in the same connecting facility in fixed plant systems.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Two-wire.

FACILITIES AFFORDED: Composited or simplexed circuits.

FREQUENCY: 4 to 10 kc.

POWER REQUIREMENTS: 105 — 125 v, 50/60 cyc ac, 15 w.

PHYSICAL CHARACTERISTICS

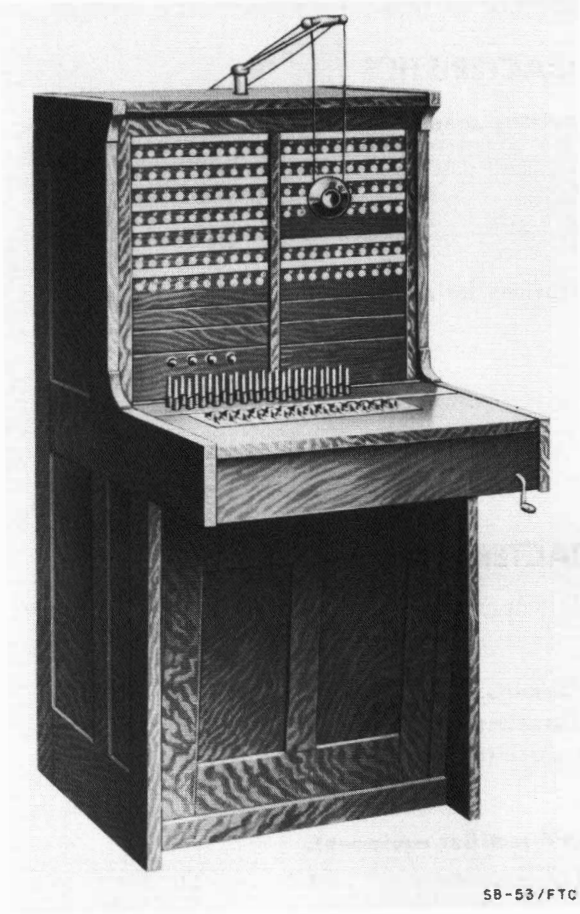
Carrier Repeater OA-10/FC weighs 35 pounds net, volume 0.49 cu ft. Packed for export shipment: total weight 70 pounds, total volume 4.5 cu ft, 0.11 ship ton.

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

AN/FTC-TYPE

AN/COMP TYPE NUMBER: SB-53/FTC

TELEPHONE SWITCHBOARD



SB-53/FTC

Telephone Switchboard SB-53/FTC is a single-position, manual, cord type, universal switchboard used for switching local common battery and magneto lines, and for connecting other switchboards. It is used in fixed plant applications.

This equipment consists of a desk type switchboard which uses a separate ringing generator (not furnished with this equipment) and is provided with a built-in magneto ringing generator for emergency use.

Fifteen simultaneous talking connections can be operated through this switchboard.

Operates on a 24-v storage battery and 24-v power source when used as a branch exchange, or a small main exchange, and is interchangeable with the Stromberg-Carlson universal type 106, or the Kellogg 100-line universal switchboard.

AN/FTC-TYPE	INSTRUCTION LITERATURE: TM 11-2087
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-53/FTC :AN/COMP TYPE NUMBER	USING SERVICE : Army
TELEPHONE SWITCHBOARD	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in fixed plant and in communications zone.

INSTALLATION: Ground, fixed station.

CAN COMMUNICATE WITH: Used in fixed plant applications for switching, local common battery, and magneto lines.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

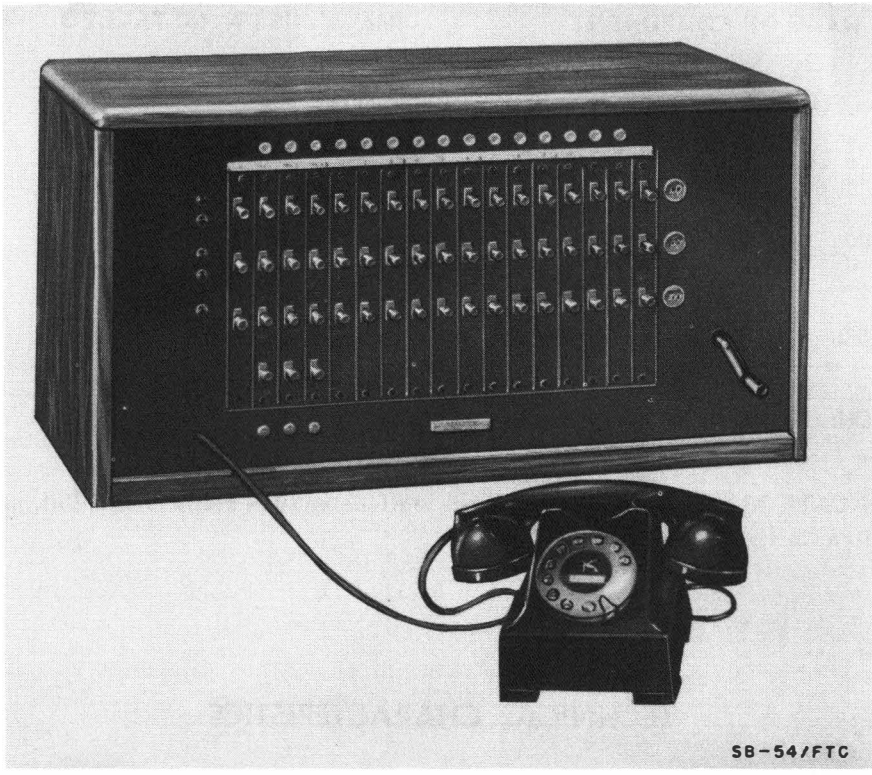
NUMBER AND TYPE OF CIRCUITS: Number of Cord Circuits: 15
Number of Line Circuits: 100
Number of Trunk Circuits: 10.

POWER REQUIREMENTS: 24 v, from storage battery and rectifier equipment.

PHYSICAL CHARACTERISTICS

Telephone Switchboard SB-53/FTC measures 59 x 24 x 38-3/8 inches, net weight 550 pounds, volume 31.5 cu ft, 0.6 ship ton. Packed for export shipment: total volume 66 cu ft, 1.55 ship tons. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC- TYPE** AN/COMP TYPE NUMBER: SB-54/FTC TELEPHONE SWITCHBOARD



Switchboard SB-54/FTC is a cordless, manual, single-position, common-battery telephone switchboard used for establishing connections between a small number of local stations, or between such stations and a dial, or manual, central office. It is used in fixed-station applications in the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Kellogg 1007-cc, special, or equal) telephone switchboard of the desk-mounted or turret type, in which interconnections are made by means of a key in each line or circuit. The maximum capacity for interconnection of lines is five telephone circuits or trunks.

It is designed for 48 v d-c ringing from central office and has additional keys for night service. Includes provision for alternate magneto ringing. Requires an operator's desk set which is not furnished with this equipment.

AN/FTC - TYPE	INSTRUCTION LITERATURE: None
SB-54/FTC : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone fixed stations.

INSTALLATION: Ground; fixed plant.

CAN COMMUNICATE WITH: Used between local stations or such stations and dial, or manual, central office, in fixed station applications.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1

NUMBER AND TYPE OF CIRCUITS:

Number of connecting circuits: 5.
Number of line circuits: 12.
Number of trunk circuits: 5.

POWER REQUIREMENTS: Battery (operates on a common battery basis).

PHYSICAL CHARACTERISTICS

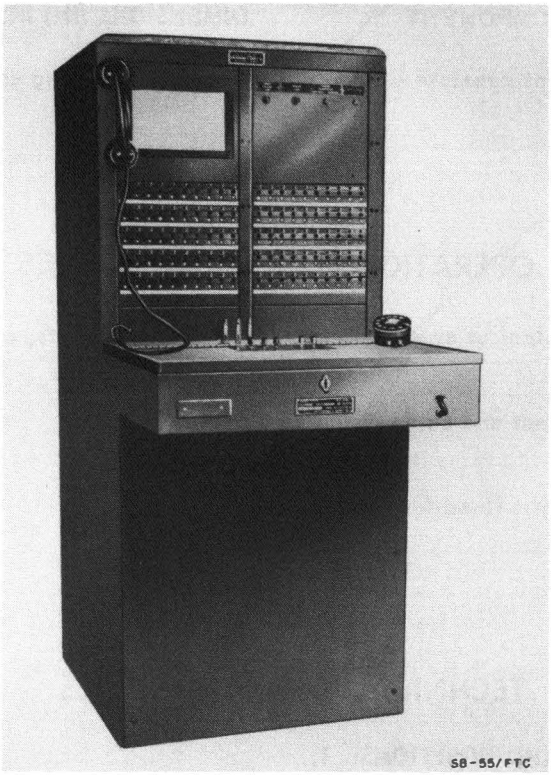
Telephone Switchboard SB-54/FTC weighs 110 pounds net, volume 24 cu ft. Packed for export shipment: total weight 200 pounds, total volume 40 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 25 Jan 52

AN/FTC-TYPE

AN/COMP TYPE NUMBER: SB-55/FTC

TELEPHONE SWITCHBOARD



Telephone Switchboard SB-55/FTC is a manual, single-position, two-panel, switchboard used for fire-reporting and similar applications at posts, camps, and stations.

This equipment consists of a single floor-type desk unit having a 100-line capacity, three cord circuits, and two trunks operated by two 3-position keys. The trunks may be manual- or dial-operated.

It includes a handset for the operator and requires 48 v of battery and 20-cyc ringing current.

Switchboards SB-55/FTC and SB-55A/FTC are interchangeable but differ in line circuit, and are otherwise similar.

AN/FTC-TYPE	INSTRUCTION LITERATURE: TM 11-2084
SB-55/FTC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 25 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant at army and higher headquarters; posts, camps, and stations.

INSTALLATION: Permanent and semipermanent comcenters.

CAN COMMUNICATE WITH: Used for fire reporting systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 3.
Number of line circuits: 100.
Number of trunk circuits. 2.

POWER REQUIREMENTS: 48 v.

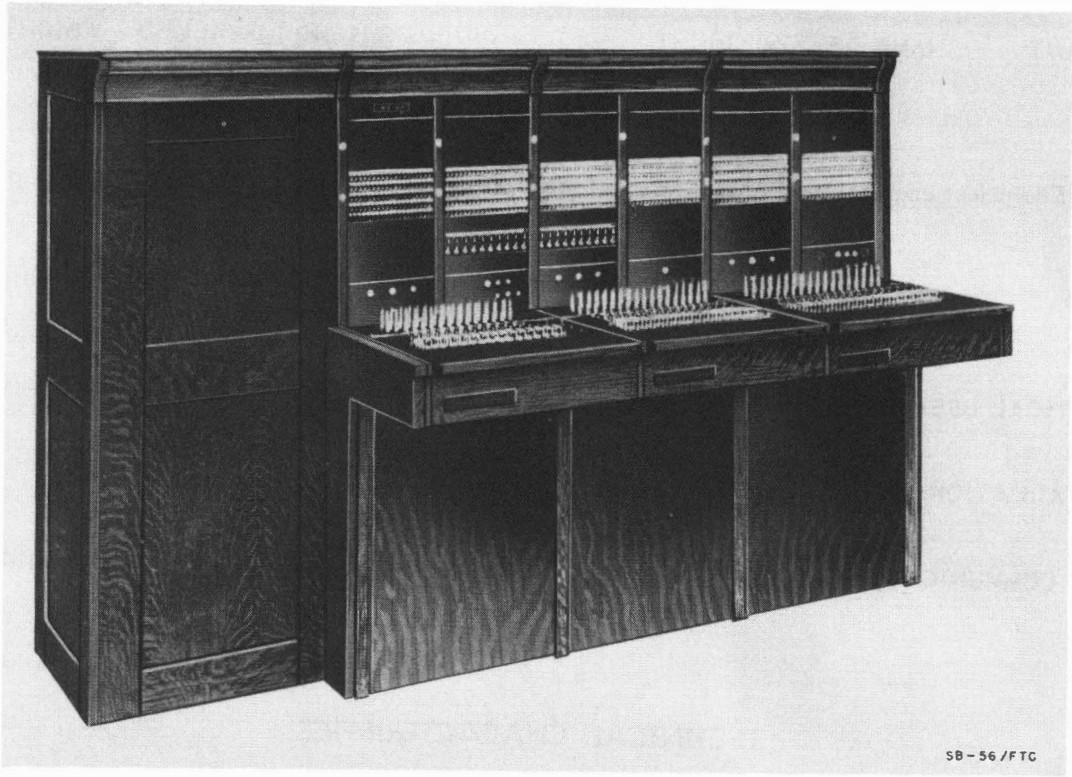
PHYSICAL CHARACTERISTICS

Telephone Switchboard SB-55/FTC measures 38-1/4x24x57-1/4 inches, net weight 400 pounds, volume 30 cu ft. Packed for export shipment: total weight 600 pounds, total volume 40 cu ft, 2 ship tons. Shipped in 1 package both domestic and export.

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

AN/FTC-TYPE

AN/COMP TYPE NUMBER: SB-56/FTC
SWITCHBOARD



Switchboard SB-56/FTC is a three-position, multiple, common-battery, manual telephone switchboard with a maximum capacity of 800 lines and is used in the communications zone of a theater of operations.

This equipment consists of large commercial (Kellogg #6-800) central office type switchboard, each position of which has 2 jack panel sections. Each position has 15 universal cord circuits, dial circuit, and an operator's circuit. The switchboard is wired and equipped for 20 magneto trunks, and 20 two-way trunks to automatic exchanges, lamp supervision, and miscellaneous circuits.

A relay rack is mounted at the rear of the switchboard, and the main distributing frame, and operator's telephone equipment is not supplied as part of this equipment.

Battery supply of 24 v and ringing current source are furnished separately.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
SB-56/FTC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Fixed plant. Permanent installation.

CAN COMMUNICATE WITH: Provides three-position, multiple common-battery, manual facilities in fixed plant central office switchboard.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3 expandable. MAXIMUM: As required.

MINIMUM: 3.

NUMBER AND TYPE OF CIRCUITS:

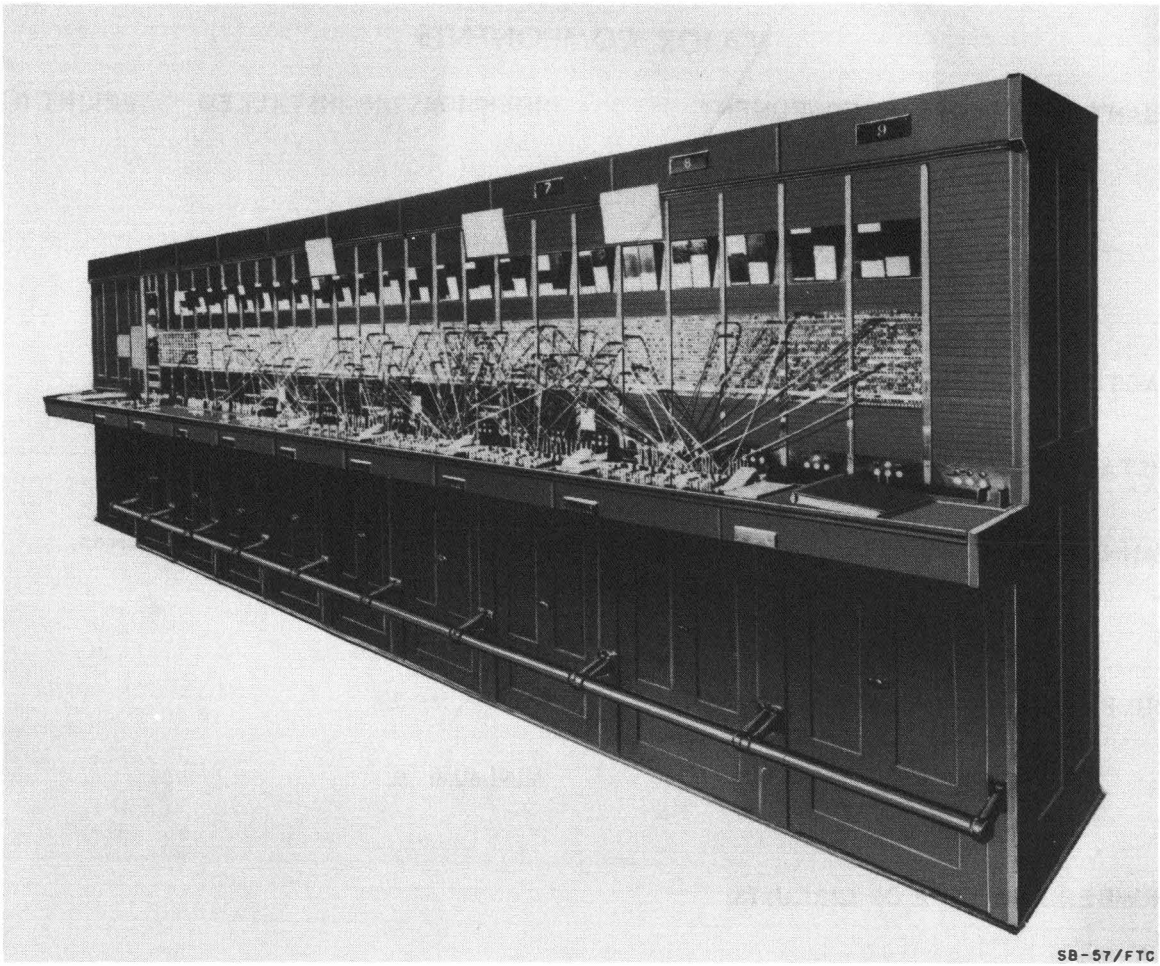
Number of cord circuits: 45 (3 dial).
Number of line circuits: 800.
Number of trunk circuits: 40.

POWER REQUIREMENTS: Kellogg #6-800.

PHYSICAL CHARACTERISTICS

Switchboard SB-56/FTC packed for export shipment: total weight 7,500 pounds, total volume 480 cu ft, 12 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-57/FTC SWITCHBOARD



SB-57/FTC

Switchboard SB-57/FTC is a large, manual, multiple, common battery switchboard used for local service, with trunking facilities to other offices in permanent installations.

This equipment consists of commercial (Kellogg #2800; Stromberg Carlson #18, or Western Electric Company #11) telephone central office switchboard equipment. This equipment has apparatus for common battery line, common battery and dial trunk, night alarm, and related circuits, and has provision for re-ring signals.

Requires 24 v of battery, and 20-cyc ringing power.

AN/FTC-TYPE	
SB-57/FTC	:AN/COMP TYPE NUMBER
SWITCHBOARD	

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Large fixed plant installations, in multioffice areas.

INSTALLATION: Ground; fixed station.

CAN COMMUNICATE WITH: Used for local service, with trunking facilities to other offices, in fixed plant installations.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: MAXIMUM: 20.

MINIMUM: 5.

NUMBER AND TYPE OF CIRCUITS:

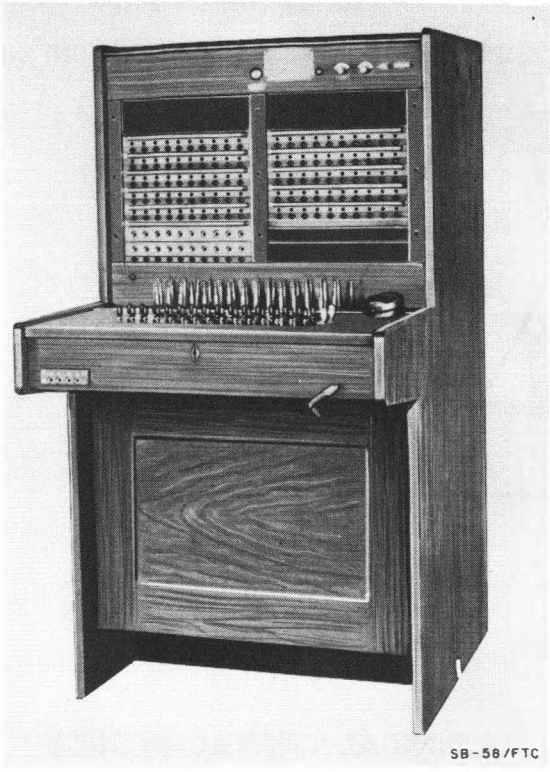
Number of cord circuits:	17 per position.
Number of line circuits:	Maximum capacity 2800 lines, multiplied on a 7-panel basis.
Outgoing trunks:	40.
Manual or dial trunks:	20.
Magneto trunks:	20.
Information trunks:	10.
Interposition trunks:	10.

POWER REQUIREMENTS: 24-v battery and 20-cyc ringing power.

PHYSICAL CHARACTERISTICS

Switchboard SB-57/FTC weighs 6,000 pounds net. Packed for export shipment: total weight 7,800 pounds, total volume 430 cu ft, 10.75 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-58/FTC SWITCHBOARD



Switchboard SB-58/FTC is a single-position, nonmultiple, telephone switching equipment for interconnection and communication between common-battery and magneto lines, and operation to manual or dial central offices in the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Western Electric Co No. G1) floor-type unit having two jack-panels, and is equipped for 80 common-battery and 20 local-battery magneto station lines. It also has 15 universal cord circuits, and 10 trunks, a dial and cord for operation with automatic central offices, line and supervisory lamps for local lines. Has provision for one-lamp signaling on trunks.

Includes an operator's telephone set and has a hand generator for emergency ringing. Does not include battery supply or 20-cyc ringing equipment.

Operates from 24-v battery (common-battery lines).

AN/FTC-TYPE

SB-58/FTC : AN/COMP TYPE NUMBER
SWITCHBOARD

INSTRUCTION LITERATURE: None
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Fixed station applications.

CAN COMMUNICATE WITH: Used between common-battery and magneto lines, and in operation to manual or dial central offices.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

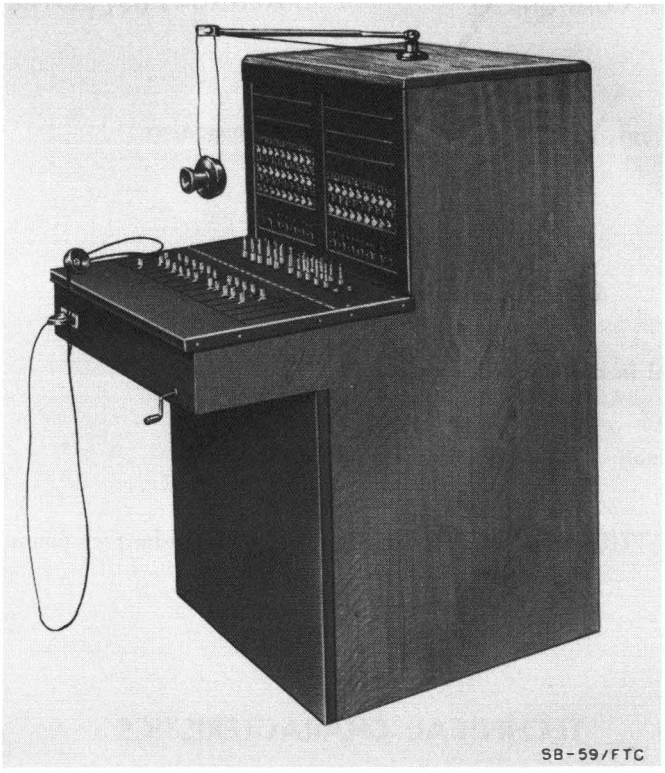
Number of cord circuits: 15; 1 dial.
Number of line circuits: 100.
Number of trunk circuits: 10.

POWER REQUIREMENTS: 24 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-58/FTC weighs 487 pounds net, volume 24 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-59/FTC SWITCHBOARD



Switchboard SB-59/FTC is a manual, single position, common-battery, telephone switchboard used for trunking to other common-battery, manual or dial central offices and is not intended for "through" switching applications. It is used in systems serving the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Kellogg K100) telephone switchboard. It is a floor-mounted desk-type unit wired for a dial circuit, but does not include a dial. It is equipped with 100 line circuits, 15 cord circuits, and 10 trunks, includes an operator's telephone set and a hand generator for emergency ringing.

Operates from 24-v battery.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-59/FTC :AN/COMP TYPE NUMBER	USING SERVICE : Army
SWITCHBOARD	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Permanent or semipermanent installations

CAN COMMUNICATE WITH: Used for trunking to other common-battery (manual or dial) central offices.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

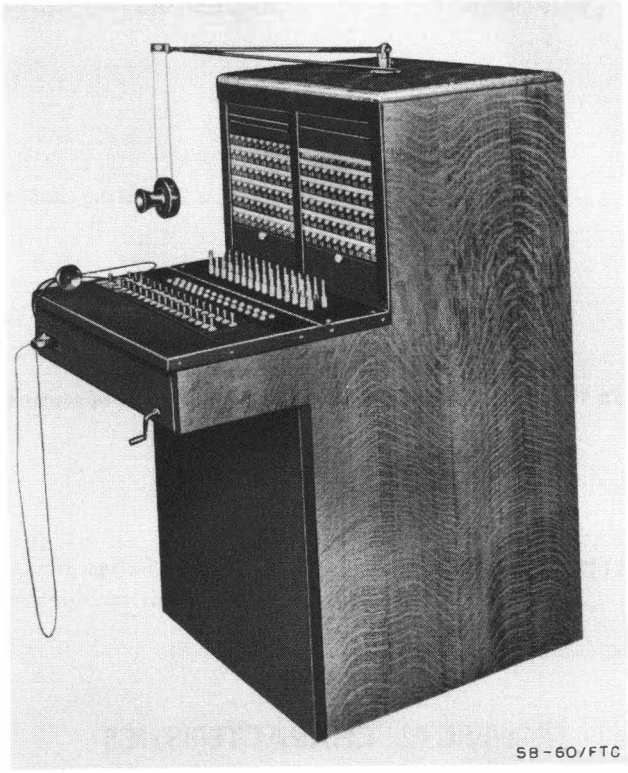
Number of cord circuits: 15.
Number of line circuits: 100.
Number of trunk circuits: 10.

POWER REQUIREMENTS: 24 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-59/FTC weighs 390 pounds net, volume 24 cu ft. Packed for export shipment: total weight 581 pounds, total volume 35 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-60/FTC SWITCHBOARD



Switchboard SB-60/FTC is a single-position, nonmultiple, manual, magneto telephone switchboard used in situations where line resistance, leakage, or other unfavorable plant conditions prohibit satisfactory common battery operation in the communications zone of a theater of operations.

This equipment is a floor-mounted, desk-type unit having combination drops (not shown in the illustration) and jacks arranged on 2 jack panels, and providing for 100 magneto lines, and 15 cords furnished and equipped for double drop supervision. There is also a 5-bar hand generator wired to a key for switching to power generator. An operator's telephone is included.

Local battery supply is furnished separately.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
SB-60/FTC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in the communications zone of a theater of operations.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Used for magneto operation of facilities where line resistance, leakage, or other unfavorable conditions prohibit common battery operation.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1

NUMBER AND TYPE OF CIRCUITS:

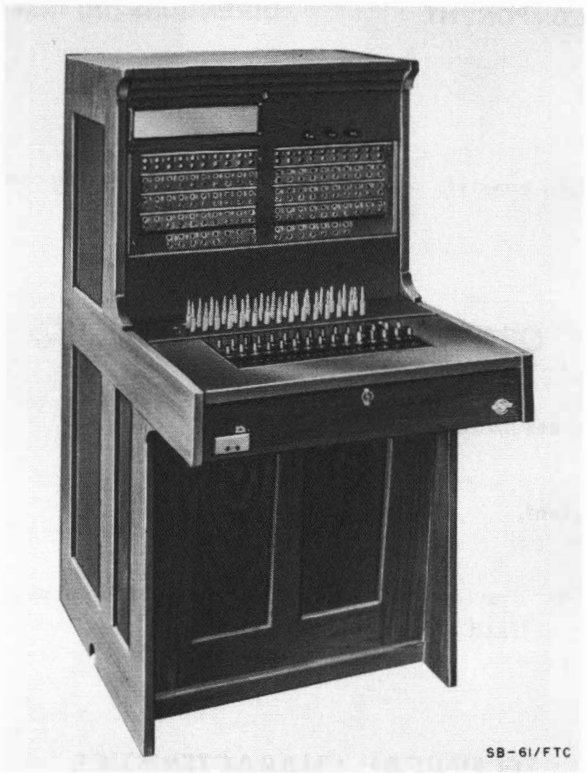
Number of cord circuits: 15.
Number of line circuits: 100.
Number of trunk circuits: 0.

POWER REQUIREMENTS: 3 v dc from dry cells.

PHYSICAL CHARACTERISTICS

Switchboard SB-60/FTC weighs 390 pounds net, volume 24 cu ft. Packed for export shipment: total weight 575 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-61/FTC SWITCHBOARD



Switchboard SB-61/FTC is a single-position, nonmultiple, common-battery telephone switchboard having switchboard circuits for manual or dial operation to connecting central offices in the communications zone of a theater of operations.

This equipment consists of a floor-type commercial (Western Electric Co No. 550 SC) switchboard having 2 jack-panels and is wired for 80 common-battery lines, 15 cord circuits, and 15 trunks. It has lamp signaling and supervision. A hand generator is furnished for emergency ringing. It is equipped with a dial which is not shown in the illustration. Includes an operator's telephone set.

Battery supply 24 v dc and ringing current must be furnished separately.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-61/FTC (AN/COMP TYPE NUMBER)	USING SERVICE : Army
SWITCHBOARD	DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Provides manual or dial operation to connecting central offices in fixed plant systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

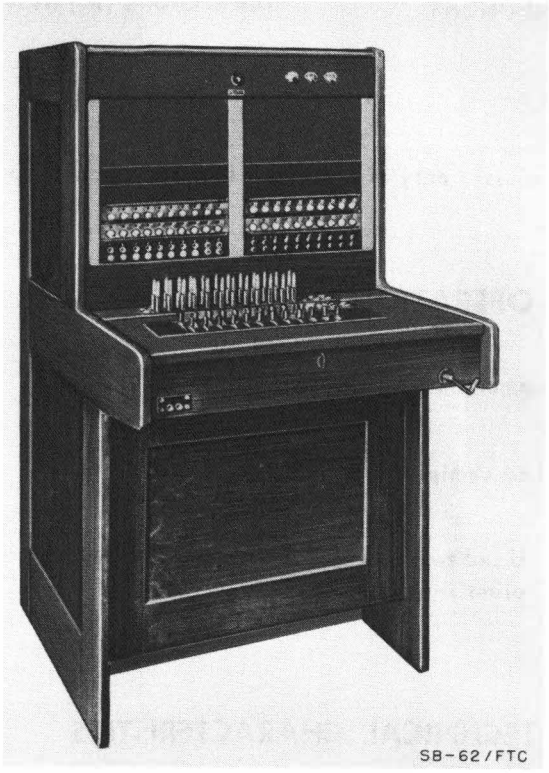
Number of cord circuits: 15.
Number of line circuits: 80.
Number of trunk circuits: 15.

POWER REQUIREMENTS: 24 v dc

PHYSICAL CHARACTERISTICS

Switchboard SB-61/FTC weighs 500 pounds net, volume 24 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	AN/FTC-TYPE AN/COMP TYPE NUMBER: SB-62/FTC SWITCHBOARD



Switchboard SB-62/FTC is a common-battery, nonmultiple, manual, telephone switchboard having circuits for dial (not shown in this illustration) or manual operation to connecting central offices and is used in fixed plant applications in the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Western Electric Co No. 551A) telephone switchboard and is a floor-mounted desk-type unit. It is a single-position equipment with 2 panels and is wired for 40 common-battery lines, 10 cord circuits, and 10 trunks. It has lamp signaling and supervision, a hand generator for emergency signaling, an operator's telephone set, and includes 20 line-circuits equipped with relays for use on circuits of high line-resistance characteristics.

Does not include battery supply or ringing equipment and operates on 24-v battery.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-62/FTC :AN/COMP TYPE NUMBER	USING SERVICE : Army
SWITCHBOARD	DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	(WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Permanent or semipermanent communications centers.

CAN COMMUNICATE WITH: Used to provide dial or manual operation to central offices in fixed plant installations.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

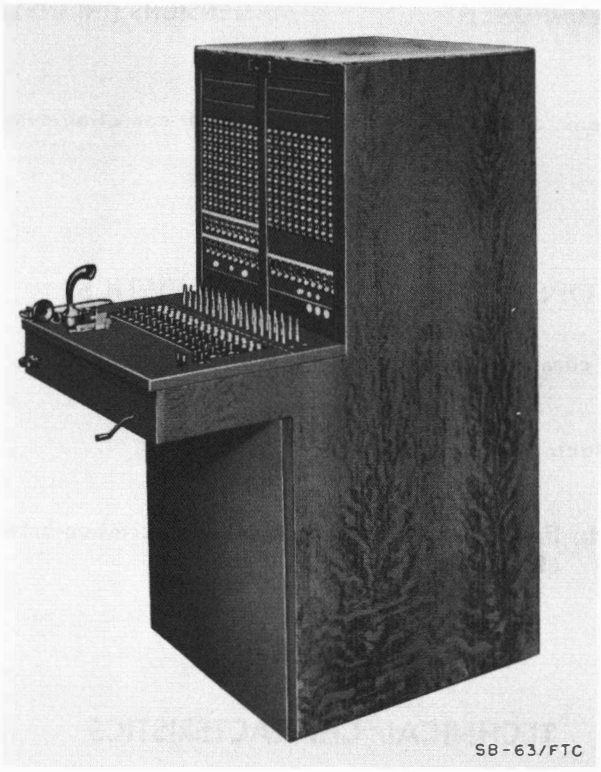
Number of cord circuits: 10.
Number of line circuits: 40.
Number of trunk circuits: 10.

POWER REQUIREMENTS: 24 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-62/FTC weighs 500 pounds net, volume 24 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-63/FTC SWITCHBOARD



Switchboard SB-63/FTC is a single-position, manual, common-battery telephone switchboard used in the communications zone of a theater of operations.

This equipment consists essentially of a commercial (Kellogg Jr. Masterbuilt) telephone switchboard of the floor-mounted, desk-type having 2 jack-panels and equipped for 40 common-battery, 40-universal, 20 magneto (with lamp signaling) lines, and wired for 20 (equipped for 10) dial trunks. It has 15 universal cord circuits, a hand generator for emergency ringing and an operator's telephone set.

Uses 24-v battery, but ringing current and battery must be furnished separately.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
SB-63/FTC : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET: 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in communications zone.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Provides single-position, manual, common-battery facilities in fixed plant installations.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

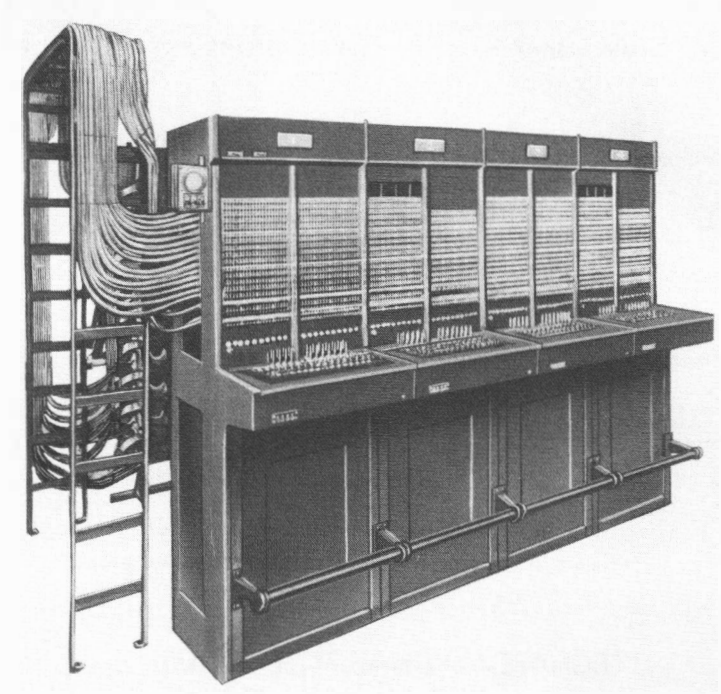
Number of cord circuits: 15.
Number of line circuits: 40 common battery; 40 universal, 20 magneto.
Number of trunk circuits: 10.

POWER REQUIREMENTS: 24 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-63/FTC weighs 500 pounds net, volume 24 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 7 Feb 52	**AN/FTC-TYPE** AN/COMP TYPE NUMBER: SB-64/FTC SWITCHBOARD



SB-64/FTC

Switchboard SB-64/FTC is a medium-size central-office type, multiposition, manual, 640-line (maximum capacity) switchboard equipment used in fixed plant applications.

This equipment consists essentially of a commercial (Western Electric Co No. 12 640-line) exchange switchboard which is a 4-position equipment constructed sectionally and having 2 jack panels per position, each position constituting a self-contained unit. It may be equipped with a total of 640 common battery and/or magneto lines with lamp signaling multiplied on a 2 -panel basis, and 120 2-way ring-down trunks; 15 universal cord circuits are wired per position (the normal equipment for each position is 13 cords) with lamp supervisory equipment on cord circuits.

It also is equipped with dial and dial cord, and ringing current is supplied by a separate power unit. It uses a main distributing frame supplied separately which is connected to this switchboard by cabling.

Operates on 48-v battery.

AN/FTC-TYPE	INSTRUCTION LITERATURE: None
SB-64/FTC : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Permanent fixed plant applications.

INSTALLATION: Ground; fixed station.

CAN COMMUNICATE WITH: Provides multiposition manual central office facilities in fixed plant installations or in systems serving fixed plan.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3 (expandable).

MAXIMUM: As required.

MINIMUM: 3.

NUMBER AND TYPE OF CIRCUITS: (Per position.)

Number of cord circuits: 15.
Number of line circuits: 640.
Number of trunk circuits: 120.

POWER REQUIREMENTS: 48 v dc.

PHYSICAL CHARACTERISTICS

Switchboard SB-64/FTC weighs 3,360 pounds net, volume 112 cu ft. Packed for export shipment: total weight 7,500 pounds, total volume 480 cu ft. 12 ship tons.

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

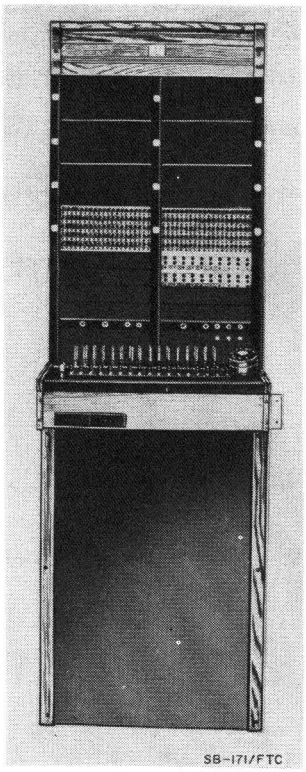
PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/FTC–TYPE

SB–171/FTC

MANUAL TELEPHONE SWITCHBOARD SECTION



Manual Telephone Switchboard Section SB–171/FTC is the basic unit of local manual central office switching facilities that are capable of handling 1,200 to 1,600 lines.

This equipment consists essentially of one commercial (Kellogg No. 1600) switchboard section equipped with 15 universal cord circuits.

The 1,200-line office (Coded Facility –152, TB SIG 322–152) includes 16 operating positions or sections and two end positions composed of the SB–171/FTC. The 1,600-line office (Coded Facility –156, TB SIG 322–156) has 22 such operating positions and two end positions.

AN/FTC–TYPE

INSTRUCTION LITERATURE: TM 11–2061

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

SB–171/FTC

MANUAL TELEPHONE SWITCHBOARD SECTION

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Manual Telephone Switchboard Section SB–171/FTC	22⅝ x 37 1/16 x 72⅞	
	(For complete list of components, see appropriate supply manuals.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: Dependent on size of central office in which instl.

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of Cord Circuits: 15

Number of Line Circuits: } As reqd by instl

Number of Trunk Circuits: }

PERCENT TRUNKING:

POWER REQUIREMENTS:

PHYSICAL CHARACTERISTICS

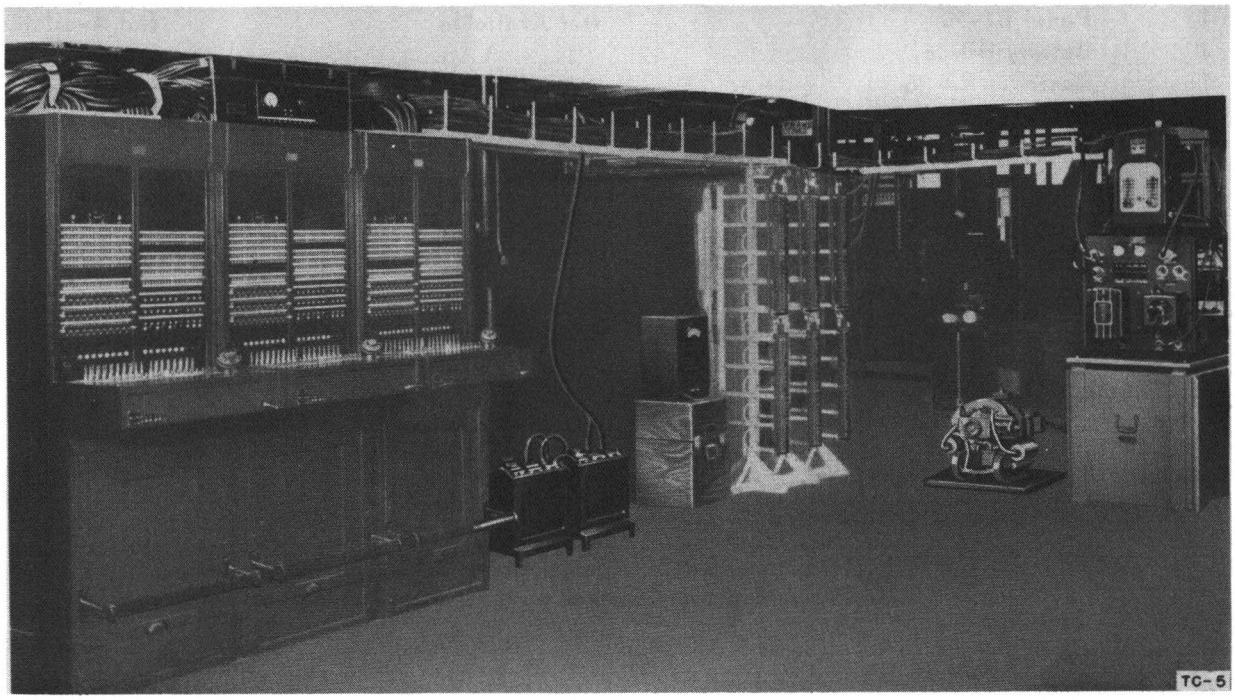
	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:		2,797	145.8	3.6	11

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 18 Feb 52

AN/FTC-TYPE

SERVICE TYPE NUMBER: TC-5

AUXILIARY TELEPHONE CENTRAL EQUIPMENT



Auxiliary Telephone Central Equipment TC-5 is a group of installation components used to enable movement of Telephone Central Office Set TC-2 or TC-10 with a minimum of interruption of service at army or equivalent headquarters.

This equipment consists essentially of a power unit, cable racks, and related items which are installed at the new location preliminary to movement of the telephone exchange, as in a "leap-frogging" operation. Switchboards, main frame, and wire chief's test cabinet are then obtained separately and added to these installed components to complete the move.

AN/FTC-TYPE

TC-5 :SERVICE TYPE NUMBER

AUXILIARY TELEPHONE CENTRAL EQUIPMENT

INSTRUCTION LITERATURE: None

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Panel BD-90	Not Available	Not Available
4	Battery BB-46	" "	" "
1	Rectifier RA-36	" "	" "
1	Power Unit PE-75	" "	" "
1	Cabinet BE-75	" "	" "
1	Cabinet BE-72	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army headquarters or equivalent.

INSTALLATION: Transportable.

CAN COMMUNICATE WITH: Telephone central office, repeater, and switching equipment and related station apparatus composing the system in which it is operated.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice.

TYPE COMMUNICATION CIRCUITS: Telephone.

CONTROLS: Panel BD-90, Cabinet BE-75, and Cabinet BE-72.

POWER REQUIREMENTS: 2.5 kva, 115 v, 60 cyc ac (Power Unit PE-75)
0.0 _ 65 v (Rectifier RA-36)
40 _ 56 v (storage battery)

PHYSICAL CHARACTERISTICS

Auxiliary Telephone Central Equipment TC-5 weighs 1,601 pounds net. Packed for export shipment: total weight 2,531 pounds, total volume 149 cu ft, 3.7 ship tons.

STATUS: S/Std (–44A, –44V); Std (–44C)

CLASSIFICATION OF EQUIPMENT: Unclassified

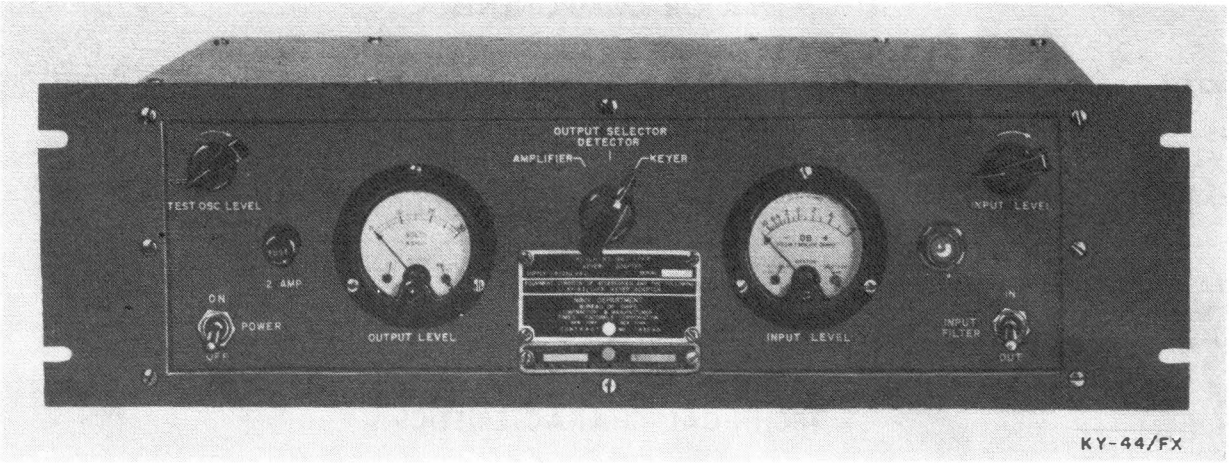
PREPARING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

AN/FXA–TYPE

KY–44( )/FX

KEYER ADAPTER



Keyer Adapter KY–44( )/FX is a frequency-shift adapter used to convert am, af facsimile signals into keying signals for frequency-shift exciter units in radio transmitter equipments.

This equipment is a self-contained unit and may be table-mounted or installed in a standard relay rack.

For alignment purposes, an internal test oscillator provides an unmodulated 1,800-cycle signal to check the unit for proper operation, and to determine the output levels required from the unit in its function as an amplifier, detector, or keyer when no incoming signal is available.

The KY–44A/FX, KY–44B/FX, and KY–44C/FX have essentially the same appearance, electrical rating, and performance. The major differences are changes in internal parts and cabinet design.

AN/FXA–TYPE

KY–44( )/FX

KEYER ADAPTER

INSTRUCTION LITERATURE: NAVSHIPS 91627

USING SERVICE: USN

DATE OF THIS SHEET: 10 May 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 or shore installations.

INSTALLATION: Shipborne or ashore.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 0 to 800 cy (modulation); 100 to 7,000 cy (carrier, –44A, –44B); 1,500 to 7,000 cy (carrier, –44C).

TYPE MODULATION: Am (A4).

TYPE OF SIGNAL: Facsimile.

OUTPUT LEVEL: 20 v ±5% across 600 ohms.

POWER REQUIREMENTS: 40 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	$6\frac{11}{32} \times 14\frac{59}{64} \times 18\frac{15}{16}$	26.5			
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

AN/GCA–TYPE

TA–182/U

CONVERTER, TELEGRAPH-TELEPHONE SIGNAL

NO PHOTOGRAPH AVAILABLE

Telegraph-Telephone Signal Converter TA–182/U provides a means of signaling in circuits that will not pass 20-cycle ringing signals because of line or equipment characteristics.

In telegraph circuits, it converts 20-cycle ringing signals to 1,225 cycles for transmission, and reverses this operation upon reception. In telephone circuits, it converts 20-cycle ringing signals to 1,600 cycles for transmission, and reverses this operation upon reception.

AN/GCA–TYPE

INSTRUCTION LITERATURE: TM 11–2137

USING SERVICE: USA

DATE OF THIS SHEET: 28 June 1956

TA–182/U

CONVERTER, TELEGRAPH-TELEPHONE SIGNAL

MAJOR COMPONENTS

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Ringing.

FREQUENCY: 20/1,225 cy (tlg); 20/1,600 cy (tel).

TYPE COMMUNICATION CIRCUITS: Tlg and tel ringing.

CONTROLS: 2W–4W selector; TP–TG selector; HI–LO SENSITIVITY selector.

POWER REQUIREMENTS: 40 w, 115 v ±10%, 50/60 cy, 1 ph ac.

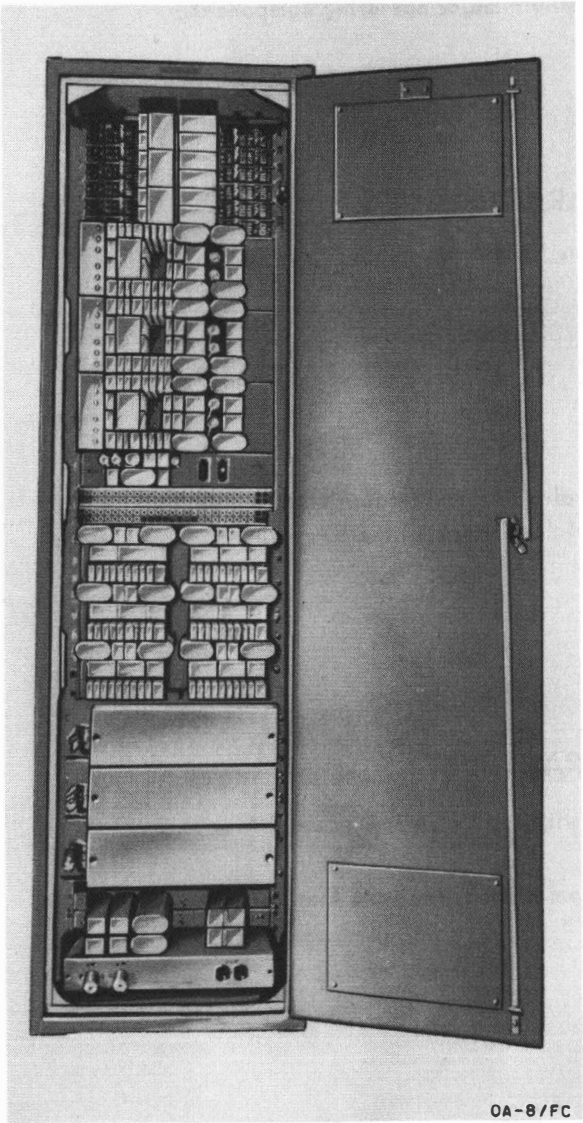
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	11 x 7½ x 10½	15	.50		
DOMESTIC PACK:		19	.78		1
EXPORT PACK:		24	1.02		

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

AN/GCC-TYPE

AN/COMP TYPE NUMBER: OA-8/FC
TELEPHONE REPEATER



OA-8/FC

Telephone Repeater OA-8/FC is a v-f equipment used to extend the range of communication of two- or four-wire v-f telephone systems on open wire or cable facilities. It is used as an intermediate or terminal repeater in long distance communication facilities serving army and equivalent headquarters.

This equipment consists of three v-f telephone amplifiers mounted in a single cabinet, and includes composite sets, adjustable equalizers for two- or four-wire circuits, and adjustable network for two-wire balancing. Each of the amplifiers has its own power supply, and bridging circuits to permit talking to other repeaters or to circuit terminals.

It has provision for monitoring, 2- or 4-wire termination, signaling, level indicating, and includes overload and safety devices.

It operates on 115-v ac.

AN/GCC-TYPE	INSTRUCTION LITERATURE: TM 11-2028
OA-8/FC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE REPEATER	USING SERVICE : Army
	DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army, communications zone and zone of interior.

INSTALLATION: Fixed plant.

MAXIMUM SYSTEM LENGTH: 500 miles.

CAN COMMUNICATE WITH: Repeater, terminal, central-office and related station equipment and subsidiary apparatus, which operates in the same connecting facility, in fixed plant systems.

TECHNICAL CHARACTERISTICS

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

FACILITIES AFFORDED: Two- and four-wire phantom circuit, two- and four-wire physical circuit.

FREQUENCY: 200 to 2,500 cps.

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

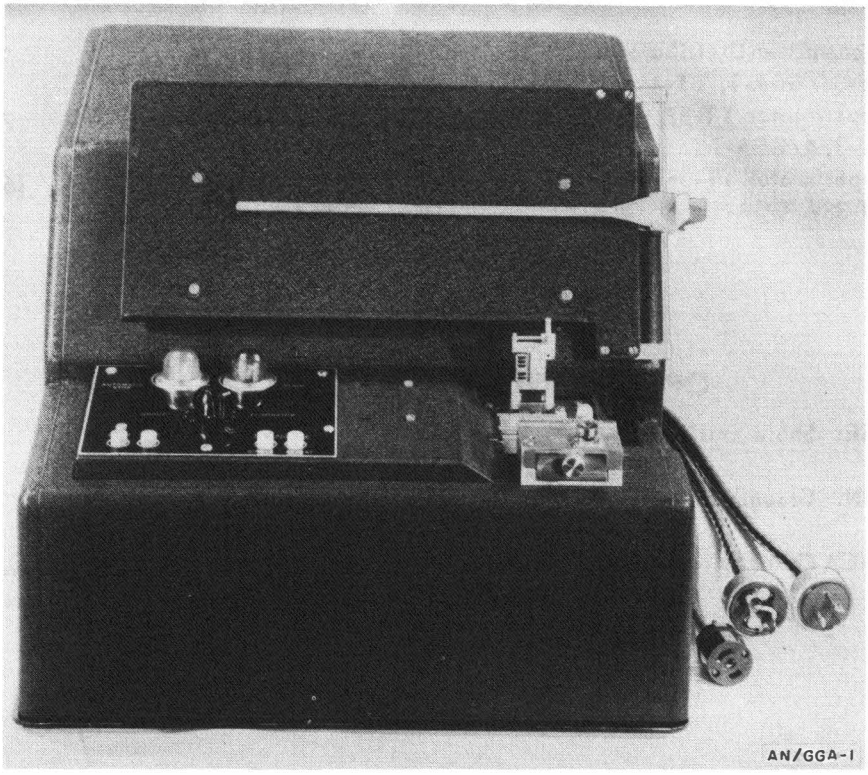
PHYSICAL CHARACTERISTICS

Telephone Repeater OA-8/FC measures 84 x 22-1/2 x 17 inches, net weight 650 pounds, volume 18.3 cu ft. Packed for export shipment: total weight 975 pounds, total volume 35.5 cu ft, 0.9 ship ton.

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

AN/GGA-1

TELETYPEWRITER GROUP



Teletypewriter Groups AN/GGA-1 and AN/GGA-1A are general purpose, send-receive teletypewriter systems for use with related communication equipment at shore stations.

This group consists of a transmitter-distributor, two send-receive typing reperforators (one with keyboard), a receive-only teletypewriter, and a power supply mounted on a teletypewriter table.

The table has two tape bins and a storage drawer.

It can be operated from either 110 to 120 v or 190 to 250 v, ac.

Power for the synchronous motors is furnished by the power supply component.

AN/GGA-1

TELETYPEWRITER GROUP

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

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Distributor TT-36/GGA-1, TT-36A/GGA-1	13-1/4 x 16-1/4 x 20-3/4	78
1	Reperforator TT-37/GGA-1, TT-37A/GGA-1	11-1/2 x 16-1/2 x 17-1/2	77
1	Reperforator TT-38/GGA-1, TT-38A/GGA-1	39-1/8 x 21-1/2 x 18	167

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Related (or equivalent) terminal and control equipment over wire or radio facilities and associated apparatus composing the system in which it is operated.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Receives messages in printed page form or on tape. Automatically transmits to line circuits from perforated tape. Keyboard operation.

OPERATING SPEED: 72 English characters per line, 460 opm.

MOTOR CHARACTERISTICS: Synchronous, 115v, 60 cyc, ac motors.

POWER REQUIREMENTS: 1,400 va, 110 — 120 v or 190 — 250 v, 60 cyc, 1 phase, ac.

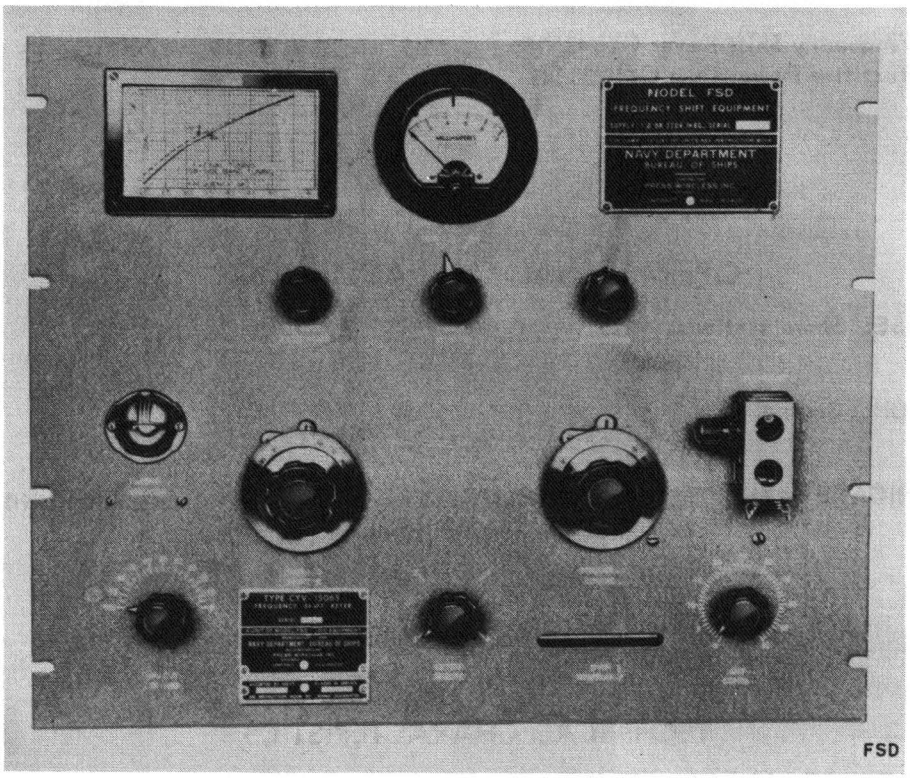
PHYSICAL CHARACTERISTICS

Teletypewriter Group AN/GGA-1 or AN/GGA-1A measures 68-1/2 x 60-3/4 x 25 inches.

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

AN/GGA-TYPE

SERVICE TYPE NUMBER: FSD
FREQUENCY SHIFT KEYER EQUIPMENT



Frequency Shift Keyer Equipment FSD is used to replace the exciter of a c-w transmitter with a source of r-f excitation that can be shifted in frequency a small value (higher and lower) to produce telegraph or facsimile signals corresponding to the signals at the keyer input. This frequency-shift method minimizes selective fading, interference, and static disturbances, thereby assuring high fidelity of transmission.

It is used at long distance transmitting stations to improve transmission.

Four preset crystal-controlled oscillator frequencies are provided.

AN/GGA-TYPE	INSTRUCTION LITERATURE: Not Available
FSD :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
FREQUENCY SHIFT KEYER EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Keyer CYV-35065	15-3/4 x 19 x 12-1/2	65
1	Rectifier Power Unit CYV-20349	8-3/4 x 19 x 12	30

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

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

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 5.

TYPE MODULATION: Fm.

TYPE OF SIGNALS: Frequency-shift keying.

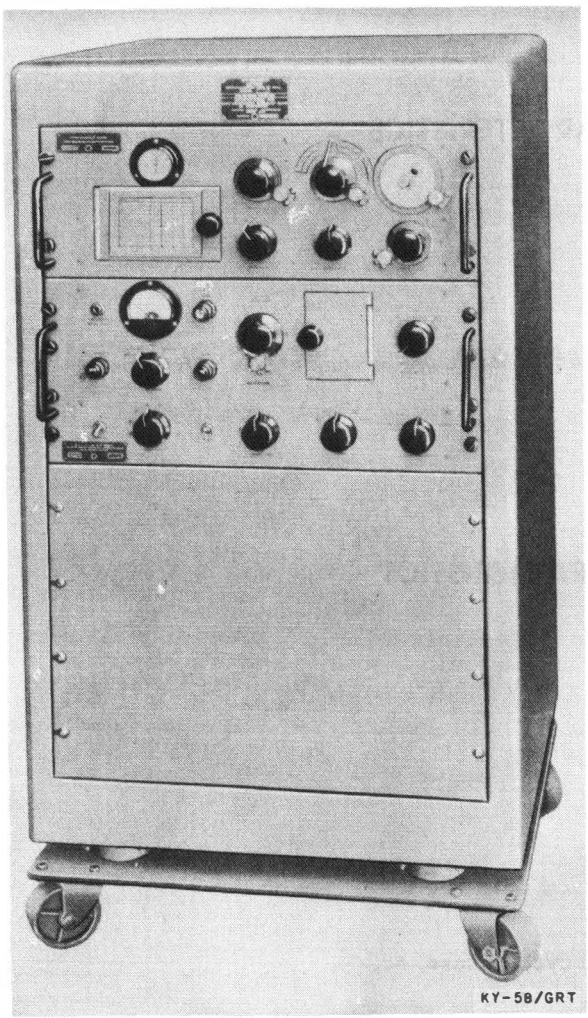
POWER OUTPUT: 1.5 w.

POWER REQUIREMENTS: 110 / 260 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Keyer Equipment FSD measures 24-1/2 x 19 x 12-1/2 inches.

STATUS: Standard	AN/GGA-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	AN/COMP TYPE NUMBER: KY-58/GRT
USING SERVICE: Navy, Air Force	KEYER
DATE OF THIS SHEET: 15 May 52	


KY-58/GRT

Keyer KY-58/GRT is used at long distance transmitting station to improve transmission. It replaces the exciter of a c-w transmitter, with a source of excitation that can be shifted in frequency (a small value higher and lower) to produce telegraph or facsimile signals corresponding to those delivered to the keyer input. This frequency-shift method is used to minimize selective fading, interference, and static disturbances.

This Keyer can be connected to an external master oscillator (such as that of the associated transmitter) and provides three crystal-controlled channels.

AN/GGA-TYPE

KY-58/GRT :AN/COMP TYPE NUMBER

KEYER

INSTRUCTION LITERATURE: NavShips 91,543
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy, Air Force
DATE OF THIS SHEET : 15 May 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: Shore stations.

INSTALLATION: Ground.

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 facsimile.

POWER OUTPUT: 6 w into 75 ohm load.

POWER REQUIREMENTS: 470 w, 115 / 230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Keyer KY-58/GRT measures 41-7/16 x 22-1/8 x 29-9/16 inches, net weight 322 pounds. Packed for domestic shipment: total weight 469 pounds, total volume 20.89 cu ft. Shipped in 2 packages.

STATUS: Std

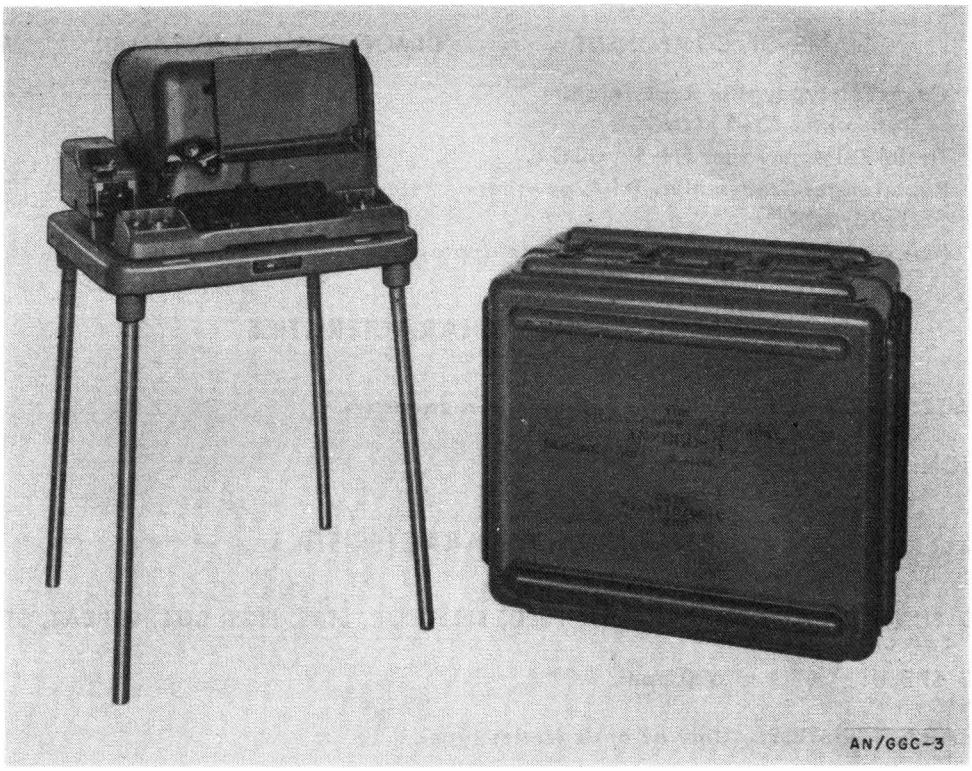
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/GGC-3

TELETYPEWRITER SET



Teletypewriter Set AN/GGC-3 is a lightweight, portable sending and receiving equipment used at division and higher headquarters.

This equipment consists essentially of a typing reperforator unit with a keyboard transmitter and a tape transmitter; and includes a teletypewriter table. It derives line-operating current from an associated teletypewriter switchboard, Telegraph Terminal TH-5/TG, or other external source, and can be arranged to operate on either neutral or polar signals on a half- or full-duplex basis.

This set provides facilities for sending from either a keyboard or a tape transmitter; received signals are printed and perforated on tape. It operates over dc wire lines, carrier, or radio channels through suitable line terminating equipment, and is equipped with a universal series-governed motor, enabling operation from either ac or dc sources.

AN/GGC–3

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11–2225

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Case, Teletypewriter Reperforator-Transmitter CY–1110/GGC	25 x 22 x 16	30
1	Table, Teletypewriter FN–52/GGC	21 x 18 x 28	15
1	Reperforator-Transmitter, Teletypewriter TT–76/GGC	21 x 18 x 12	45

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant; division and higher headquarters.

INSTALLATION: Portable or fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: CAR. RET., LINE FEED, SELECTOR, LTRS, FIGS, BELL, REPEAT, START-STOP.

OPERATING SPEED: 368.1 or 600 opm.

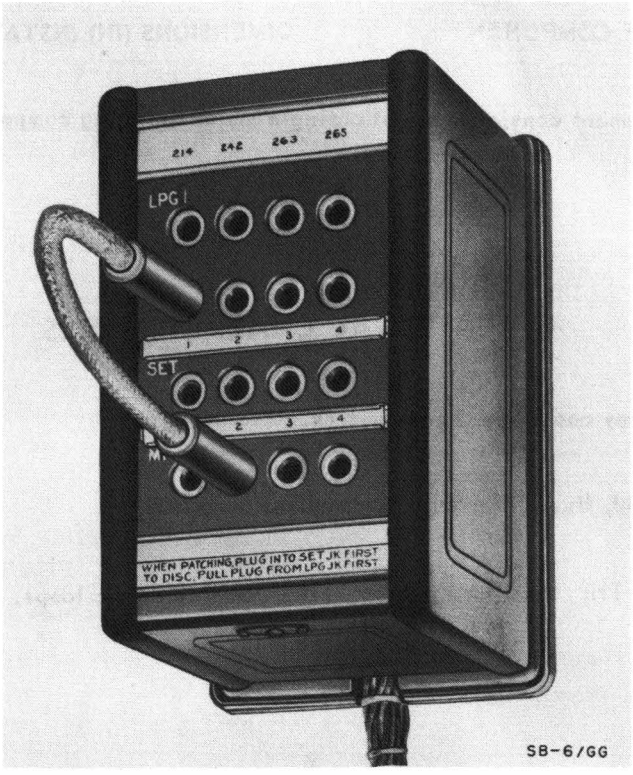
MOTOR CHARACTERISTICS: Univ ac or dc (series type).

POWER REQUIREMENTS: 150 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	21 x 18 x 28	97	13.85		
DOMESTIC PACK:		106	6.75		1
EXPORT PACK:		208	18.36		1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/GGC-TYPE** AN/COMP TYPE NUMBER: SB-6/GG TELEGRAPH SWITCHBOARD



Telegraph Switchboard SB-6/GG is a transportable, jack-patching manual switchboard used for interconnecting local lines dc , loops, extensions, and teletypewriter sets . It is used at army headquarters in fixed plant applications.

The equip ment consists of 16 panel mounted jacks in a steel cabinet, and serves four line circuits. For each line circuit, there are two loop-jacks and a set jack for connection of a teletypewriter or other equipment and a miscellaneous jack for connection of auxiliary equipment, or spare teletypewriter sets.

The equipment is used to switch circuits and to make tests of associated line facilities.

AN/GGC- TYPE	INSTRUCTION LITERATURE: TM 11-2035
SB-6/GG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEGRAPH SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At army and higher headquarters.

INSTALLATION: Ground, fixed for mobile communications centers.

CAN COMMUNICATE WITH: Used for interconnecting local lines d-c loops, extensions, and teletypewriter station equipment.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of line circuits: 4.

PHYSICAL CHARACTERISTICS

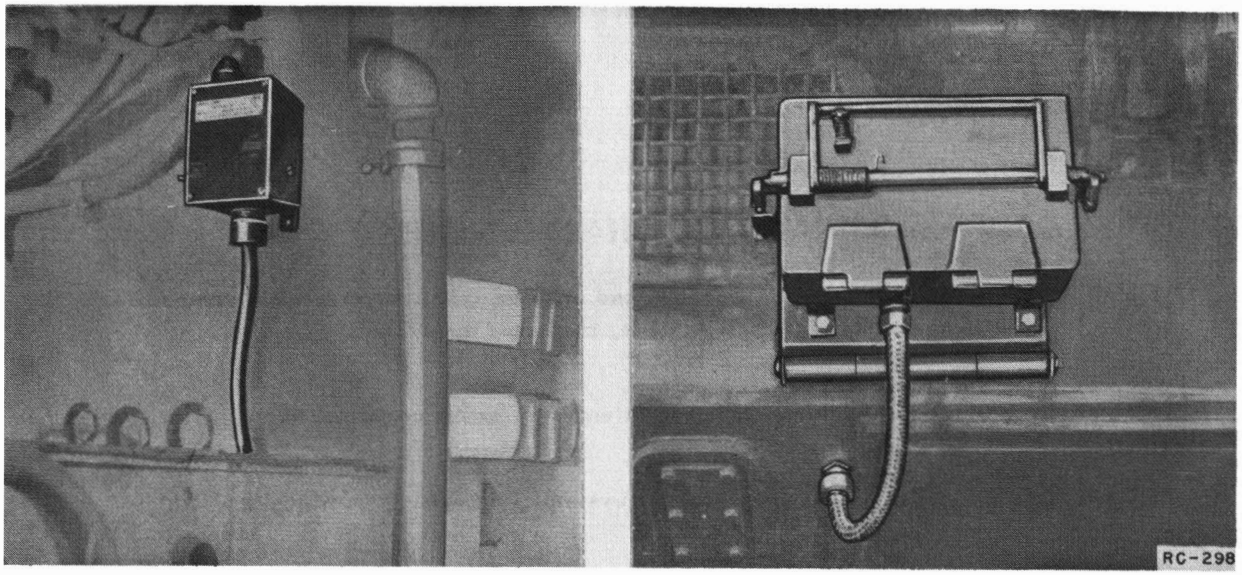
Telegraph Switchboard SB-6/GG measures 7-5/16x4-3/4x4-5/8 inches, net weight 4 pounds, volume 0.5 cu ft.

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

AN/GIC-TYPE

SERVICE TYPE NUMBER: RC-298

INTERPHONE EXTENSION KIT



Interphone Extension Kit RC-298 is an assemblage of components which can be added to the existing interphone equipment of inclosed vehicles to provide an interphone station located outside the vehicle. It is used in conjunction with interphone systems designed for use in armored vehicles.

This equipment consists of an external interphone box, an internal interphone switchbox, and related components. The only adjustment provided is for control of volume. Internal and external interphone stations have call signal lamps to indicate to using personnel that contact with the station outside the vehicle is desired.

AN/GIC-TYPE

RC-298 :SERVICE TYPE NUMBER

INTERPHONE EXTENSION KIT

INSTRUCTION LITERATURE: TM 11-703

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	External Interphone Box BC-1362	Not Available	Not Available
1	Switchbox BC-1361	" "	" "
1	Toggle Switch ST52R	" "	" "
1	Cordage CO-213 (hardware and necessary mounting)	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Armored vehicles of infantry, and armored units. Companies of armored, infantry, and airborne divisions; corps and army level.

INSTALLATION: Ground; vehicular. External interphone station connected to vehicular system.

CAN COMMUNICATE WITH: Internal interphone system of the vehicle to which applied.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice; telephone.

TYPE COMMUNICATION CIRCUITS: Two-way; press-to-talk.

CONTROLS: Volume only (on external interphone station).

POWER REQUIREMENTS: Vehicular storage battery derived through vehicular interphone system with which connected.

PHYSICAL CHARACTERISTICS

Interphone Extension Kit RC-298 packed for export shipment: total volume 3.75 cu ft. Shipped in 1 package.