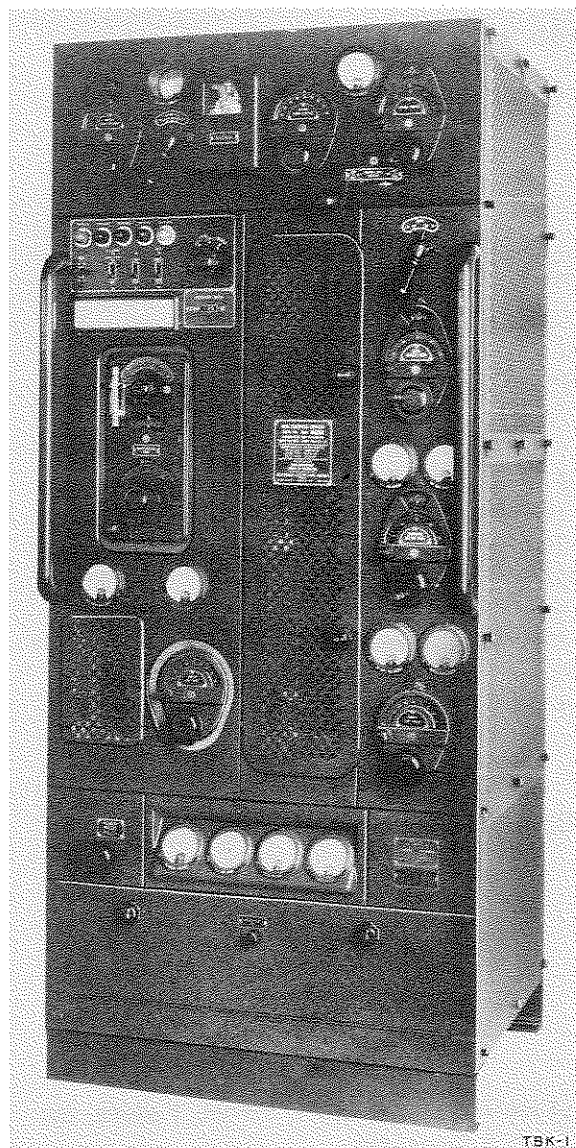


STATUS: Limited Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Navy
 DATE OF THIS SHEET: 8 May 52

AN/FRT-TYPE

SERVICE TYPE NUMBER: TBK-1, -11
 RADIO TRANSMITTING EQUIPMENT



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		INSTRUCTION LITERATURE: NavShips 900 386
		CLASSIFICATION OF EQUIPMENT: Unclassified
TBK-1, -11	SERVICE TYPE NUMBER	USING SERVICE: Navy
RADIO TRANSMITTING EQUIPMENT		DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter 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; 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-98 (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.