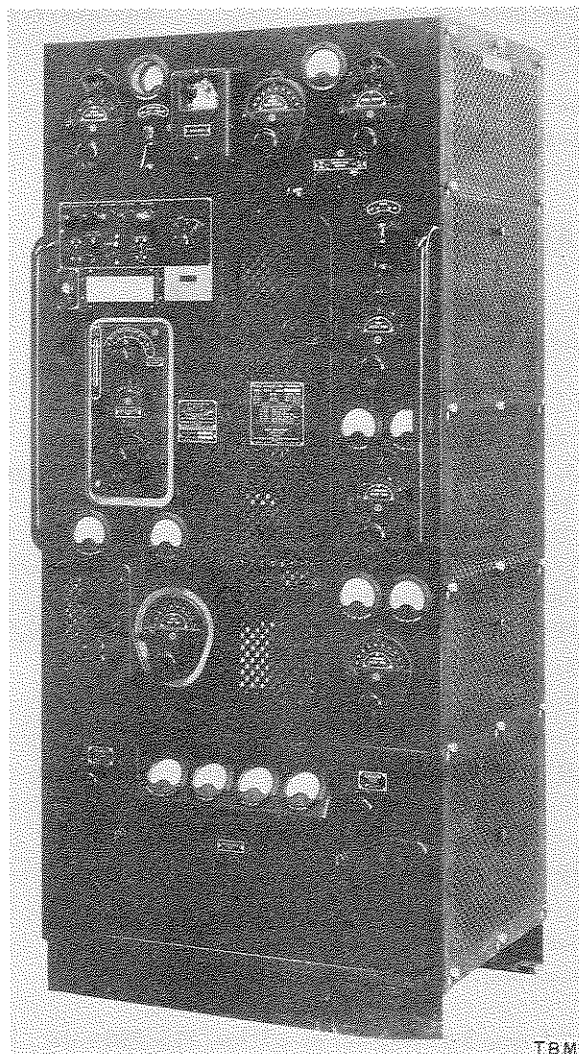


STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/URT-TYPE

SERVICE TYPE NUMBER: TBM, TBM-4, -5, -7, -9, -11
RADIO TRANSMITTING EQUIPMENT



TBM

Radio Transmitting Equipments TBM, and TBM-4, -5, -7, -9 and -11 are a-m (cw, mcw, voice) radio transmitters used on all type Naval vessels, except certain types of submarines, in h-f communication. Keying speeds up to 100 wpm on cw, and 50 wpm on mcw, are possible. The transmitter power output may be reduced from full- to low-power of 75 w.

TBM consists of a transmitter and a rectifier-modulator unit only. The modulator units employed with the other TBM series equipments permit the use of accessory units, such as a master monitor unit and remote radiophone units. The type of transmitters, modulators and power units used, is determined by the power sources available.

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

It may be controlled locally, or from a remote point by means of a standard four- or six-wire control system.

On "voice" the carrier may be controlled manually or by a voice operated relay in the modulator.

A vertical antenna 60 to 80 feet long is preferred for use with the transmitter.

AN/URT-TYPE

INSTRUCTION LITERATURE: NavShips
900 380; 900 388
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

TBM, TBM-4, -5, -7, -9, -11 :SERVICE TYPE NUMBER:
RADIO TRANSMITTING EQUIPMENT

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter	72 x 32 x 24	780
1	Rectifier CAY-20039 *	72 x 32 x 24	Not Available
1	Modulator Unit CAY-50065, or 50065-A	72 x 18 x 24	385
1	Motor Generator Unit **	20-1/2 x 78-7/8 x 20-1/2	1,275
1	Magnetic Controller **	26-1/4 x 17-1/2 x 16-7/8	110

* TBM only.
** Not part of TBM.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or submarines.

INSTALLATION: Shipborne, or submarine.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10;
AN/FRR-3, -4, -7, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/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, -198, -193, -244, -274,
-281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS;
AR-88 (RCA); Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund
SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

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

POWER REQUIREMENTS: TBM-4: 4.9 kw, 220/440 v, 60 cyc, 3 phase, ac; or 4.7 kw, 115/230 v dc.
TBM and TBM-5: 4.9 kw, 440 v, 60 cyc, 3 phase, ac.
TBM-9: 4.9 kw, 440 v, 60 cyc, 3 phase, ac; or 4.7 kw, 230 v dc.
TBM-7 and -11: 4.37 kw, 440 v, 60 cyc, 3 phase, ac; or 4.37 kw,
115/230 v dc.

PHYSICAL CHARACTERISTICS

Radio Transmitting Equipment TBM, TBM-4, -5, -7, -9, -11 weighs 3,139 pounds net. Packed for
domestic shipment: total weight 4,321 pounds, total volume 231 cu ft, 5.7 ship tons.