STATUS: Limited Standard

CLASSIFICATION OF EQUIPMENT : Unclassified

USING SERVICE : Navy

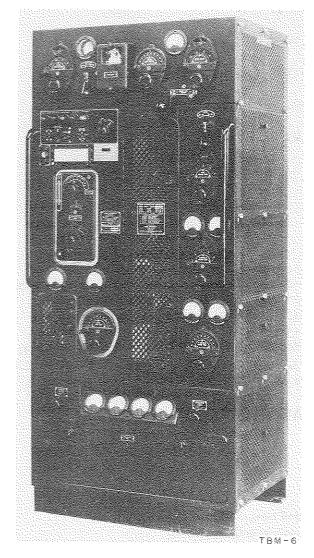
DATE OF THIS SHEET: 8 May 52

# AN/FRT-TYPE

SERVICE TYPE NUMBER:

TBM-6, -10

RADIO TRANSMITTING EQUIPMENT



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

TBM-6, -10

SERVICE TYPE NUMBER

RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,386, 900,387 CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Mavy

DATE OF THIS SHEET: 8 May 52

### MAJOR COMPONENTS

| QUANT    | NAME OF COMPONENT                                   | DIMENSIONS (IN) INSTALLED       | WEIGHT (LBS) |
|----------|---|---------------------------------|--------------|
| di<br>Sa | Radio Transmitter CAY-52170,<br>-52169              | 72 × 32 × 24                    | 8 25         |
| 4        | Modulator Unit CAY-50065,<br>-50065A                | 72 × 18 × 24                    | 380          |
| 1        | Rectifier Power Unit CAY-20228<br>(TSM-10 only)     | 72 × 32 × 24                    | 1,000        |
| 1        | Land Line Control Unit CAY-232 -23217               | i6, 20-11/16 × 20-7/16 × 10-3/8 | 91           |
| 2        | Motor Generator Unit CAY-21521 -21522 (TBM-6 only). | , 21-3/4 × 78-1/2 × 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, -9, -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 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.