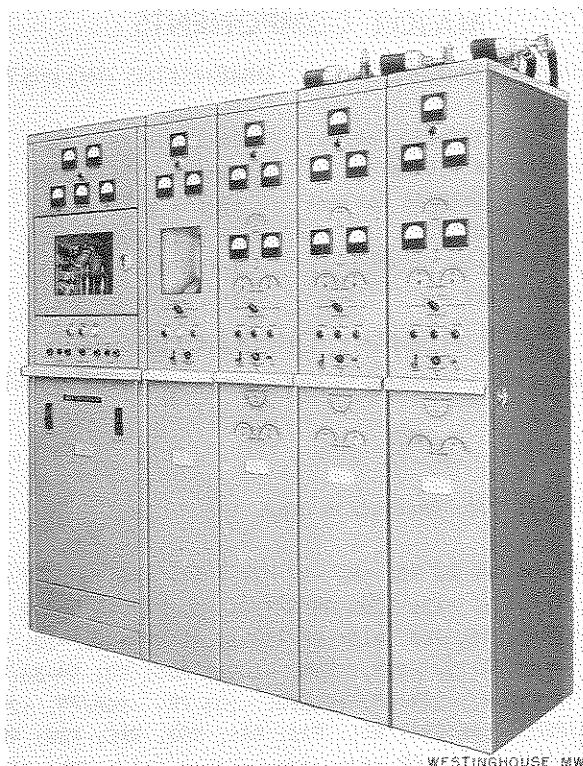


STATUS: Commercial
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 28 Apr 52

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 or 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 CLASSIFICATION OF EQUIPMENT: Unclassified
WESTINGHOUSE TYPE MW : COMMERCIAL TYPE NO. 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; RDM; RDO; RDP; 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.