

STATUS: Standard

CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 9 Jun 52

AN/MRC-22

RADIO SET



Radio Set AN/MRC-22 is a mobile multichannel α -m (cw, mcw, voice) two-way communication equipment for u-h-f/v-h-f ground-to-air or point-to-point communication.

This equipment consists of three transceivers, a motor generator assembly, and a gasoline-driven motor generator installed in a two wheel trailer; composing a complete, self-powered, radio communication station which can be quickly moved to any ground location.

This set provides four preset crystal-controlled channels in the 1.5 to 12 mc range, 10 preset crystal-controlled channels in the 100 to 156 mc range, and 18 preset crystal-controlled channels in the 225 to 400 mc range.

Manual adjustment of the 18 u-h-f channels makes possible the use of 1,751 frequency channels.

Remote control up to 25 feet is possible.

<h1>AN/MRC-22</h1>	INSTRUCTION LITERATURE: Not Available
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MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver RT-18/ARC-1	9-1/32 x 10-19/32 x 24-3/16	47
1	Radio Receiver-Transmitter RT-179/ARC-27	12-3/8 x 11-1/4 x 27-7/8	72
1	Radio Transmitting and Receiving Equipment TCS including Motor Generator Assembly, COL-21926	11-1/2 x 23 x 17-1/2	143
1	Gasoline Engine Generator, Homelite 24D28-23	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Mobile command stations.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -12, -18, -19, -21, -25, -26, -27, -30, -33, -34, -36; AN/ARR-15; AN/ART-13; AN/CRC-2; AN/CRT-3; AN/FRC-7, -10; AN/FRR-3, -4, -7, -12, -29, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -16, -26, -27, -29, -30, -32; AN/GRR-2, -3, -5, -7; AN/GRT-3; AN/MRC-2, -6, -12, -16, -20, -22; AN/PRC-7, -14, -17, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRC-7, -32; AN/TRQ-1; AN/URC-4; AN/URR-9, -10, -12, -13, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -639, -640, -779, -794, -1004; MAR; MAW; MAY; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; 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, -279/GR, -320/FRC, -398/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBQ; RBS; RC-52, -103, -256, -257; RCF; RCG; RCH; RCK; RCO; RDE; RDM; RDR; RDZ; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -522, -536, -542, -543, -573, -574, -575, -585, -593, -607, -616, -624, -641, -643, -644, -694, -704; T-4/FRC, -83/SR, -159/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCZ; TDE; TDF; TDG; TDH; TDN; TDO; TDQ; TDT; TEB; TEC; TED; TEF; AR-99 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: TCS: 1.5- 12.0.

AN/ARC-1: 100 - 156.

AN/ARC-27: 225 - 400.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw: 25 w.

Mcw, voice: 10 w.

POWER REQUIREMENTS: Incorporates its own gasoline engine generator and motor-generator assembly.

PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-22 packed for domestic shipment: total weight 1,630 pounds, total volume 295 cu ft, 70.3 ship tons.