

STATUS: Standard

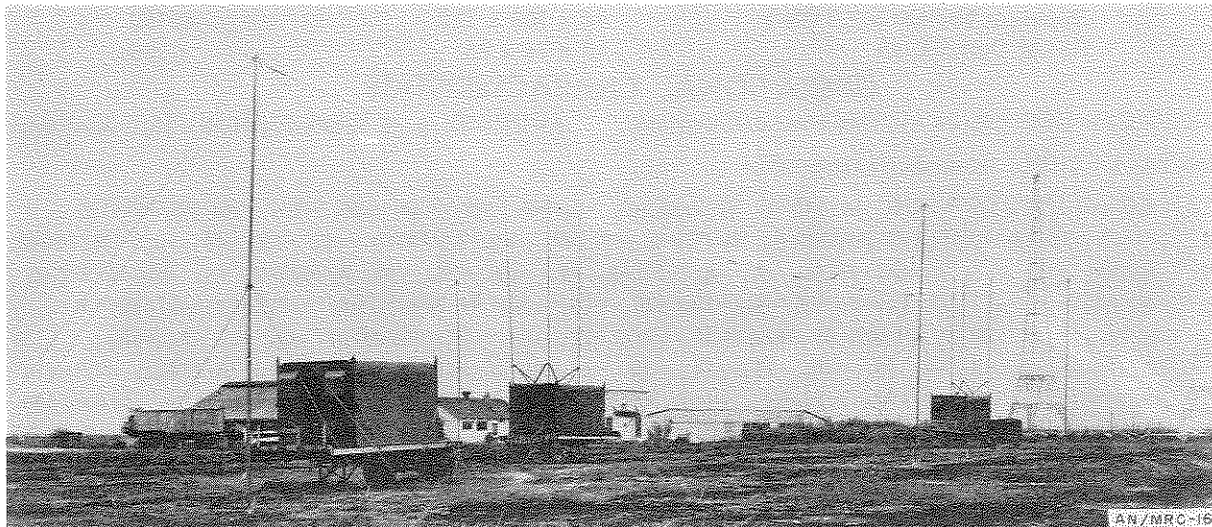
CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 14 May 52

AN/MRC-16

RADIO SET



Radio Set AN/MRC-16 is a mobile, m-f, h-f, and v-h-f receiving and transmitting equipment used as a ground radio command center in two-way communication with aircraft or with other ground radio stations. It has provision for a-m (voice, mcw, and cw) operation in general air warning, fighter air defense applications and in general air-to-ground and short-range ground-to-ground communication. An f-m radio set is included for communication with tactical ground elements.

This equipment consists of a receiver shelter, a transmitter shelter, a power shelter, 10 remote control stations, two trailer-drawn power units, and associated components and accessories. The transmitter shelter contains the following Radio Transmitting Equipments: two TCK's, one TBM, two TCS's, and three TDQ's.

The receiver shelter contains five Radio Receiving Equipments RAO and RCK and one Radio Set SCR-608.

In the power shelter are Power Unit PE-85-M, for supplying power to the transmitting shelter, and a motor generator for supplying power to Radio Transmitting Equipment TBM, which alone draws 5,000 w.

The receiver shelter is powered by one of the trailer-drawn Power Units PE-95, and the other serves as an auxiliary power supply for the transmitter shelter.

The remote control stations, which are not designed to be operated more than 1/2 mile distant from the main station equipment, consist essentially of a telephone set and a hand telegraph key, which are connected to any of the radio transmitting or receiving components by means of an adapter.

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INSTRUCTION LITERATURE:
NavShips 91607
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RADIO SET**MAJOR COMPONENTS**

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Shelter S-1/FM	98 x 100 x 173	9,700
1	Shelter S-2/MRN-3	98 x 100 x 173	9,950
1	Receiver Shelter S-3/TPS-1	98 x 100 x 173	8,150
2	Power Unit PE-95	75 x 74 x 95	4,200

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore aircraft command centers. APPROXIMATE RANGE (IN MILES): Medium.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -28, -36; AN/ARR-15;

AN/ART-13; AN/CRC-2, -3; AN/CRT-3; AN/FRC-6, -7, -9, -10; AN/FRT-5, -6, -15, -17, -18; AN/FRR-3, -4, -7, -12, -28; AN/GRC-3, -4, -5, -6, -7, -8, -9, -13, -26, -30; AN/GRR-2, -3, -5; AN/MRC-2, -5, -6, -16, -22; AN/PRC-7, -8, -9, -10, -17, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-40; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -22, -23, -28; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -2, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-2, -3, -4; AN/VRT-1; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -639, -640, -779, -787, -794, -1004; MAN; MAW; MBF; MBS; MN; MQ; OA-58/FRC, -59/FRC, -60/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/U, -274/FR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBK; RBM; RBO; RBP; RBQ; RBS; RCF; RCG; RCH; RCO; RDA; RDE; RDM; RC-52, -103, -256, -257; SCR-177, -188, -193, -244, -274, -281, -293, -294, -298, -399, -499, -506, -508, -509, -510, -522, -528, -536, -542, -543, -573, -574, -575, -585, -593, -607, -608, -609, -610, -616, -619, -624, -628, -641, -643, -644, -678, -694, -704, -808, -828; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FRT, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBS; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDG; TDH; TDN; TDO; TDQ; TDT; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 1.5 - 18.0, 27.0 - 38.9 (fm), and 115 - 156.
Receiving: 0.54 - 30, 27.0 - 38.9 (fm), and 115 - 156.

TYPE MODULATION: Am, Fm.

TYPE OF SIGNAL: Am: Voice, mcw, cw.
Fm: Voice.

POWER OUTPUT:TransmittersReceivers

TCK: 400 w on cw, 100 w on voice.

RAO: 0.3 w into 600 ohms.

TBM: 500 w on cw, 350 w on mcw and voice.

RCK: 15 mw into 600 ohms.

TDQ: 45 w on cw, 25 w on mcw and voice.

TCS: 6 mw.

TCS: 40 w on cw, 20 w on voice.

SCR-608: 2 w to loudspeaker, 200 mw to headset.

SCR-608: 20 w.

POWER REQUIREMENTS:

Transmitting: 13.6 kw, 220 v, 50/60 cyc, 3 phase. (Including TBM, which draws 5 kw.)

Receiving: (5 kw, 220 v, 50/60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Radio Set AN/MRC-16 weighs 36,200 pounds net, volume 3,550 cu ft, 88.6 ship tons. Packed for domestic shipment: total weight 36,200 pounds, total volume 3,550 cu ft, 88.6 ship tons.