

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/GRC-13

RADIO SET



Radio Set AN/GRC-13 is a general purpose low-power m-f, h-f, a-m (voice and cw) radio communication equipment. It is a complete transportable radio station, and is used in amphibious or field operations. Ten preset crystal-controlled channels are provided, and a remote control unit may be used at distances up to one mile. The remote operator cannot control operation of the radio set, but he can transmit or receive by code or voice, or communicate with the local operator.

The basic equipment employs a hand generator for power in transmission, and the hand generator or self-contained batteries for reception. The generator is suitable where transportation facilities are limited to man or pack carry.

The AN/GRC-13 may be installed in a vehicle by use of Installation Kit MX-1012/U, operated from 12- or 24-v d-c or 115-v a-c power sources by use of Power Supply Kit MX-1011/U, or operated with a gasoline driven power unit by use of Engine-Generator Kit MX-1010/U.

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INSTRUCTION LITERATURE:
NavShips 91235
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MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver-Transmitter RT-136/GRC-13	8-1/2 x 17-11/32 x 16-1/8	Not Available
1	Hand Generator G-28A/U	10 x 8-7/8 x 7-1/4	" "
1	Remote Control C-477/GRC-13	5-5/16 x 7-7/16 x 7-3/32	" "
1	Crystal Unit Container RT-10527-A with Crystal Unit CR-18/U	2 x 10-1/2 x 5-1/2	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field, shore stations, or advanced bases.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): Short.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13;
AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18;
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/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4;
AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794,
-1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; 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, -398/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52;
RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506,
-536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/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; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC;
TEF; AR-88 (RCA); Collins 1BS-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: 2.0 - 12.0 in 4 bands.

Band 1: 2.0 - 3.13
Band 2: 3.13 - 4.9

Band 3: 4.9 - 7.665
Band 4: 7.665 - 12.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw.

POWER OUTPUT: Transmitter: Voice, 4.5 w; cw, 12 w.
Receiver: 25 mw.

POWER REQUIREMENTS: Transmitter: Powered by Hand Generator G-28A/U.
Receiver: 3.15 w, 90 v dc; and 1.125 w, 1.5 v dc.
(Operates from Battery BA-48 or Hand Generator G-28A/U)
Remote Control Unit: 6 Batteries BA-30.

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-13 measures 8-1/2 x 17-11/32 x 16-1/8 inches, net weight 257 pounds, volume
9 cu ft. Packed for domestic shipment: total weight 485 pounds, total volume 36 pounds.