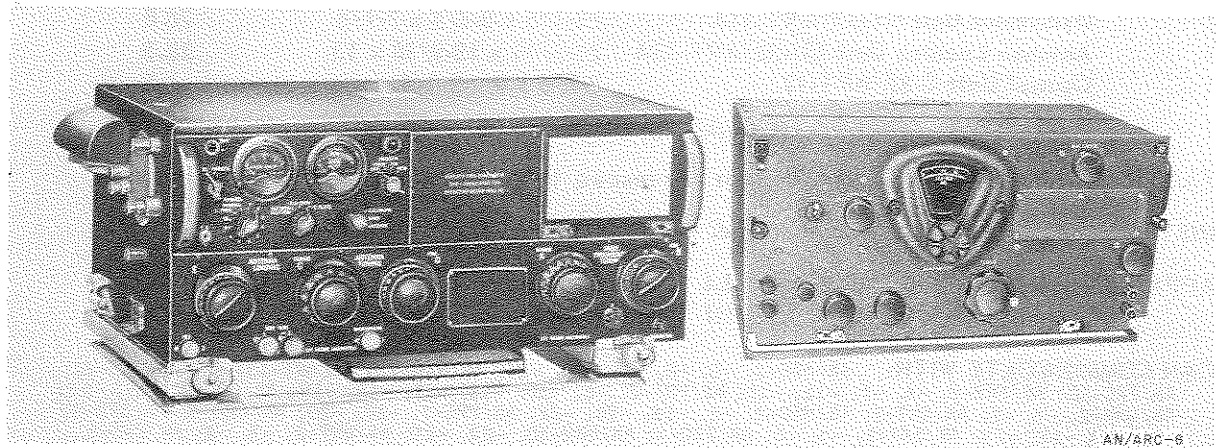


STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Unclassified
 USING SERVICE: Air Force
 DATE OF THIS SHEET: 7 Jun 52

AN/ARC-8

RADIO SET



AN/ARC-8

Radio Set AN/ARC-8 is an airborne high power, long range, a-m, h-f, transmitting and receiving set designed for two-way air-to-ground and air-to-air communication. The transmitter and receiver will operate on voice, tone or telegraph signals. (These components are illustrated above.)

This set consists of a radio transmitting set, a control unit, a radio receiving set, and interconnecting cables.

Radio Transmitting Set AN/ART-13 covers two frequency ranges; 200 to 500 kc and 2 to 18 mc. The power output varies from 4 w at 200 kc to 90 w at 13.5 mc.

It operates on 11 preset channels which can be crystal calibrated but not crystal-controlled.

Radio Receiving Set AN/ARR-11 consists of a Radio Receiver BC-348-Q (or-R) shock mounting and necessary plugs, and interconnecting cables. It is designed for continuous tuning over the 200 to 500 kc and 1.5 to 18.0 mc ranges. The receiver can be locally tuned only.

Radio Transmitting Set AN/ART-13 may be remotely controlled by means of Control Unit C-87/ART-13 which utilizes the Collins Auto-tune System of automatic remote control.

Antenna requirements vary with the frequency on which the equipment is operating. Normally a fore-and-aft inverted L or T type antenna is used for h-f operation; for l-f a trailing wire and Antenna Loading Unit CU-32/ART-13A are used.

<h1>AN/ARC-8</h1>	INSTRUCTION LITERATURE: TO 16-30ART-13 & 16-30ARR-11
	CLASSIFICATION OF EQUIPMENT: Unclassified
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MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN)	INSTALLED	WEIGHT (LBS)
1	Radio Transmitting Set AN/ART-13	23-5/8 x 13-5/8 x 10-3/4		103.6
1	Radio Receiving Set AN/ARR-11	18 x 10-1/2 x 9-1/2		41.8
1	Dynamotor Unit DY-17/ART-13A	13-1/5 x 8-4/5 x 7-1/5		28.0
1	Antenna Loading Unit CU-32/ART-13A	25-7/10 x 13-9/10 x 13		28.3
1	Control Unit C-87/ART-13	3-3/5 x 8 x 3-1/5		1.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used in all bombers, air sea rescue, trainer and cargo aircraft.

INSTALLATION: Airborne, shock-mounted.

APPROXIMATE RANGE (IN MILES): Lf short,
Hf medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ARR-15; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRR-3, -4, -7, -12, -29; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -329, -339, -342, -348, -365, -401, -447, -453, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -90/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -389/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); 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: Transmitter: 11 preset channels, 200 - 500 kc and 2 - 18 mc.
Receiver: Continuous tuning, 6 bands, 0.2 - 0.5 and 1.5 - 18 mc.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone cw.

POWER OUTPUT: Varies with frequency.

Transmitter:	200 kc 4.0 w	600 kc 18.0 w	5.5 mc to
	300 kc 7.5 w	2.0 mc 30.0 w	13.5 mc 90 w
	400 kc 11.0 w	3.0 mc 60.0 w	15.5 mc 75 w
	500 kc 14.0 w	4.0 mc 80.0 w	18.1 mc 65 w
Receiver:	3 w (maximum) into 300 or 4000 ohm resistive load.		

POWER REQUIREMENTS: Input 28 v at (37 amp) dc, 1036 w.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-8 measures 84-1/5 x 13-9/10 x 10-3/4 inches, net weight 203.2 pounds. Packed for either domestic or export shipment: total weight 243.8 pounds, total volume 3.64 cu ft. Shipped in 4 packages.