

STATUS: Not Assigned CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE: Air Force DATE OF THIS SHEET: 12 May 52	AN/PRC-20
	RADIO SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/PRC-20 provides voice communication for survivors, with aircraft in flight, advanced bases, mobile radio vehicles, and other ground-search parties. This equipment is used by ground-search parties (scouting) of any field service engaged in search for missing or wrecked aircraft, or for other emergencies which require a lightweight portable emergency transceiver.

It can be hand-carried, or stowed in aircraft, for parachuting to survivors, para-rescue teams, or ground-rescue parties.

Used, primarily, in regions of mountainous terrain, jungle, or where heavy snow, would prevent carrying heavy equipment, and where the mission requires separation of the members of ground-search parties, or other groups.

This radio set is used in conjunction with Radio Set AN/PRC-19, portable radio Direction Finder Set AN/PRD-4, and direction finding Radio Set SCR-291.

The set can be operated from batteries, a battery-vibrator combination or a hand generator.

AN/PRC-20

INSTRUCTION LITERATURE:
 (None Available) RADC
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RADIO SET

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transceiver	8 x 10 x 2-3/4	8
1 *	Batteries	8 x 10 x 2-3/4	14
1	Hand Generator	6 x 6 x 6	14
1	Submersion Bag for Transceiver	8-1/2 x 10-1/2 x 3-1/4	2
1	Submersion Bag for Batteries	8-1/2 x 10-1/2 x 3-1/4	2
1	Submersion Bag for Receiver	6-1/2 x 6-1/2 x 6-1/2	2

* Batteries in one pack.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used by ground-rescue search parties.

APPROXIMATE RANGE (IN MILES):

8.364 mc - 25.

121.5 mc - Line of sight.

243 mc - Line of sight.

INSTALLATION: Man-carried.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -25, -26; AN/ARR-15; AN/ART-13; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-5, -6, -15, -17, -19; 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, -13; AN/SRT-4; AN/TRO-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; MBS; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -398/URR; RAL; RAO; RAS; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -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; TBW; TCB; TCC; TCE; TCH; TCK; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-98 (RCA); Collins 19S-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: 8.364

121.5

243.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and tone on 8.364 mc.

Voice only on 121.5mc and 243 mc.

POWER OUTPUT: Transmitter: 2 w at 8.364 mc.

1 w at 121.5 mc and 243 mc.

Receiver: 1-1/2 w minimum.

POWER REQUIREMENTS: Total Wattage: 53

Voltages: 1.25 v, 6.3 v and 135 v.

Battery Life: Approximately 8 hours.

PHYSICAL CHARACTERISTICS

Radio Set AN/PRC-20 measures 8 x 10 x 2-3/4 inches (w/o batteries), net weight 22 pounds, volume 0.125 cu ft (w/o batteries).