

STATUS: Standard

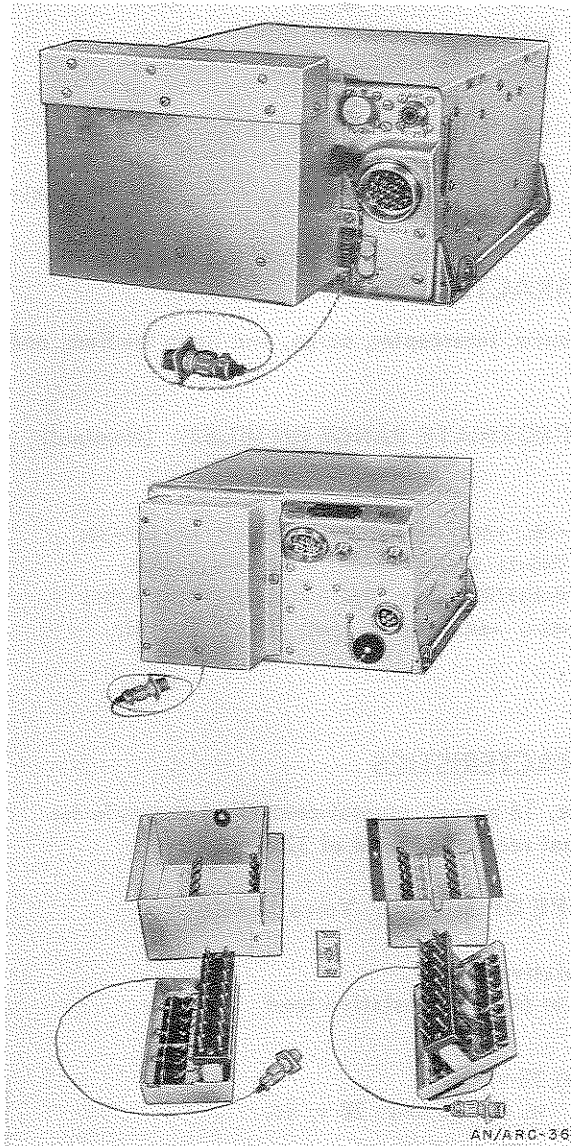
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force

DATE OF THIS SHEET: 7 Jun 52

AN/ARC-36

RADIO SET



Radio Set AN/ARC-36 is an airborne v-h-f command, two-way, radiotelephone set, for air-to-air and air-to-ground communication. This set is similar to Radio Set AN/ARC-3 except for Modification Kit MX-1131/ARC used to provide 16 channels for the AN/ARC-36 as compared to 8 channels for the AN/ARC-3. Set consists of a radio transmitter, radio receiver, two dynamotors, control box, antenna, and interconnecting cables.

The transmitter and receiver each operate on 16 independent crystal-controlled, preset channels in the v-h-f range 100 to 156 mc. Thirty-two crystals are required for operation of both transmitter and receiver on these 16 channels. Channel selection may be made locally by push buttons on the equipment, or remotely by push buttons on remote Control Box C-118/ARC-3. Crystals are capable of operating under conditions of high humidity and temperature.

The transmitter has an output impedance of 52 ohms matching low-impedance transmission lines such as RG-8/U. It normally operates with Antenna Mast AN-104-B. Radio Receiver R-428-A/ARC-36 has an external i-f receptacle which permits injection of a 12-mc signal from a guard channel converter (not supplied), when desired.

AN/ARC-36

INSTRUCTION LITERATURE: Not Available

CLASSIFICATION OF EQUIPMENT: Unclassified

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RADIO SET

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-312-A/ARC-36 (w/mtg)	7-1/2 x 12-1/8 x 16-1/4	22.0
1	Radio Receiver R-429-A/ARC-36 (w/mtg)	6-5/8 x 11 x 17-1/8	23.0
1	Dynamotor Unit DY-22/ARC-3	4 x 3-7/16 x 7-3/16	4.8
1	Dynamotor Unit DY-21/ARC-3	4 x 3-7/16 x 7-1/2	8.4
1	Power Junction Box J-68/ARC-3	5-3/16 x 8-7/16 x 10-11/32	6.7
1	Control Box C-118/ARC-3	6 x 2-5/8 x 6-7/8	2.1
1	Antenna Mast AN-104-B	31 long	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used in fighter, reconnaissance, interceptor, cargo, and light, medium, and heavy bombers.

INSTALLATION: Airborne, shock mounted.

APPROXIMATE RANGE (IN MILES): (Nominal)
Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 mc, 16 preset, crystal-controlled channels for the transmitter and 16 for the receiver; equipment requires a total of 32 crystals.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: Transmitter: 8 w into a 50 ohm resistive load.

Receiver: 600 mw into 50 ohm, or 600 ohm resistive load.

POWER REQUIREMENTS: Starting: 3,324 w, (118 amp) 28 v, dc.

Continuous operation: 385 w, (13.75 amp) 28 v, dc.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-36 measures 32-5/16 x 12-1/8 x 17-1/8 inches, net weight 68.1 pounds, volume 3 cu ft. Packed for either domestic or export shipment: total weight 96 pounds, total volume 3.5 cu ft. Shipped in 4 packages.