

STATUS: Standard

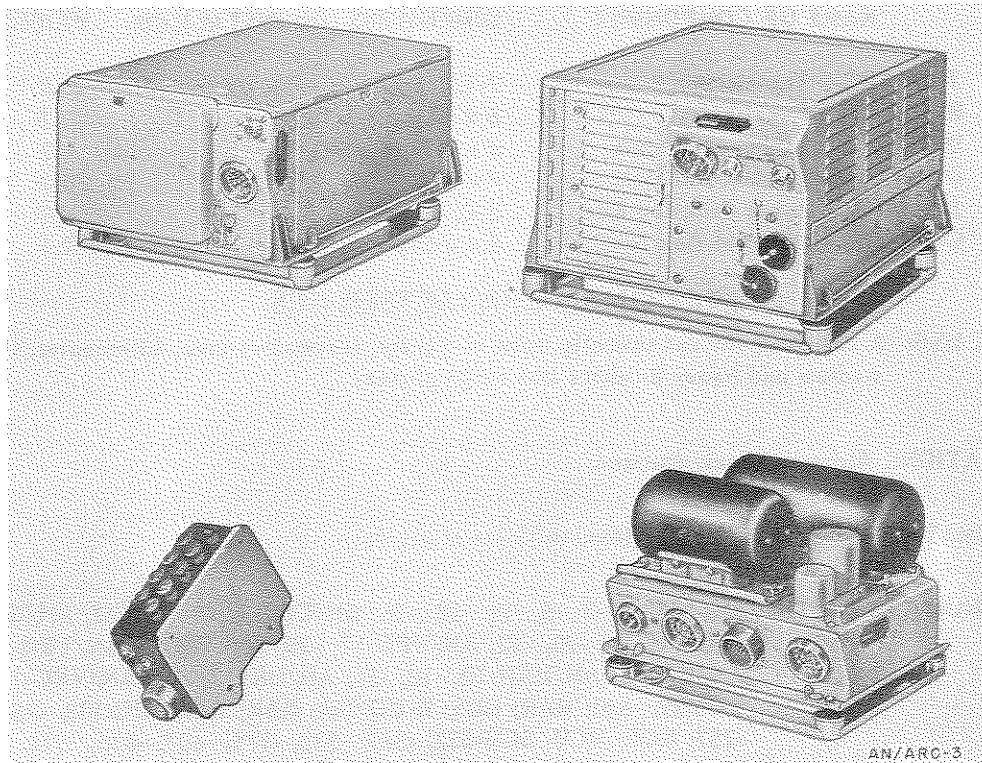
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force, Army, Navy

DATE OF THIS SHEET: 28 Apr 52

AN/ARC-3

RADIO SET



Radio Set AN/ARC-3 is an airborne command v-h-f communication system for air-to-air and air-to-ground communication. It operates on any eight preset crystal-controlled channels in the 100 to 156 mc range, by push buttons located on the transmitter and/or on the remote Control Box C-118/ARC-3.

The 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 is normally operated with Antenna Mast AN-104-B.

Power is supplied by aircraft batteries at 28 volts.

AN/ARC-3

INSTRUCTION LITERATURE:
TO 16-30ARC-3
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RADIO SET

MAJOR COMPONENTS

| QUANT | NAME OF COMPONENT | DIMENSIONS (IN) INSTALLED | WEIGHT (LBS) |
|-------|-------------------------------|---------------------------|--------------|
| 1 | T-67/ARC-3 Transmitter | 7-1/2 x 12-1/8 x 15-1/4 | 21.0 |
| 1 | R-77/ARC-3 Receiver | 6 x 11 x 14-5/16 | 20.5 |
| 1 | DY-22/ARC-3 Dynamotor Unit | 4 x 3-7/16 x 7-3/16 | 4.8 |
| 1 | DY-21/ARC-3 Dynamotor Unit | 4 x 3-7/16 x 7-1/2 | 8.4 |
| 1 | J-68/ARC-3 Power Junction Box | 5-3/16 x 8-3/8 x 10-11/32 | 6.7 |
| 1 | C-118/ARC-3 Control Box | 6 x 2-5/8 x 6-7/8 | 2.1 |

OPERATIONAL CHARACTERISTICS

TACTICAL USE: A command vhf set normally used in fighter, reconnaissance, interceptor, light, medium and heavy bombers and cargo planes.

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 on any 8 preset crystal-controlled channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: Transmitter: 8 w.

Receiver: 600 mw into 50 or 600 ohm load impedance.

POWER REQUIREMENTS: Starting; 3324 w, 28 - 32 v, (118 amp) dc.
Continuous operation; 385 w, (13.75 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Set AN/ARC-3 measures 7-1/2 x 25-1/2 x 15-1/4 inches (approximate), net weight 68.1 pounds, volume 2 cu ft (approximate). Packed for domestic or export shipment: total weight 96 pounds, total volume 5 cu ft. Shipped in 1 package.