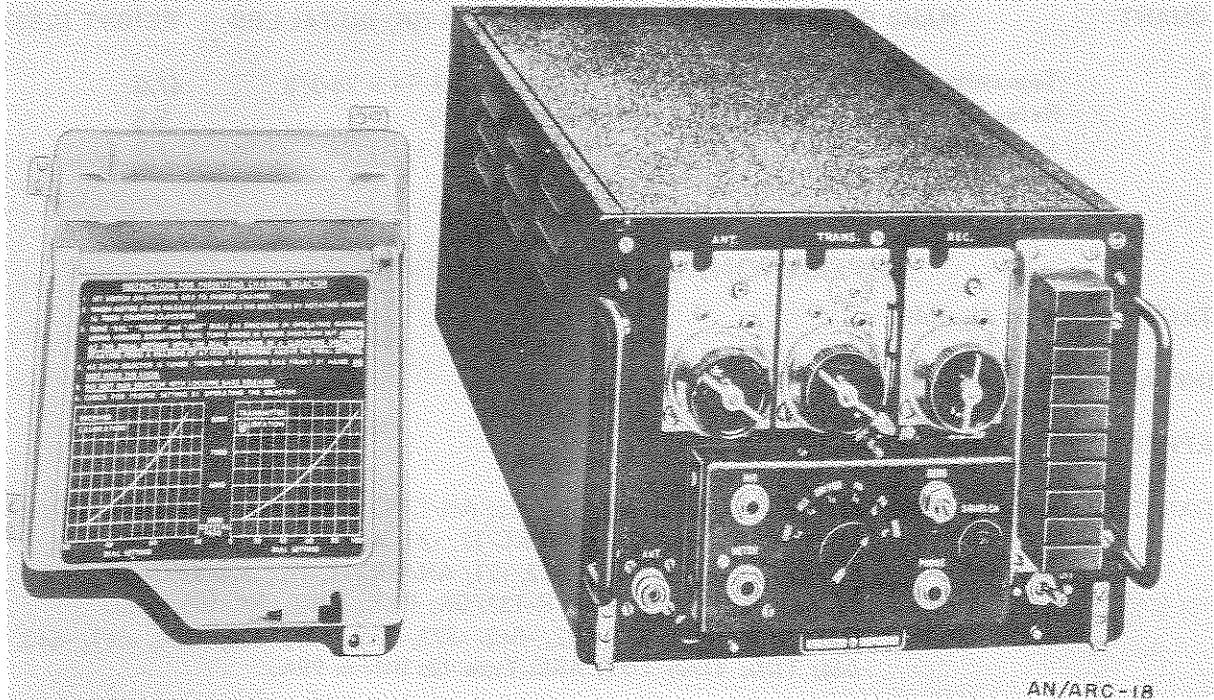


STATUS: Standard  
 CLASSIFICATION OF EQUIPMENT: Restricted  
 USING SERVICE: Navy  
 DATE OF THIS SHEET: 2 Jun 52

# AN/ARC-18

RADIO SET



Radio Set AN/ARC-18 is an airborne v-h-f, automatic relay station equipment for extending the range of am (voice) radio communication between a shore station, or ship, and other aircraft. A transmitted signal from a ship or shore station is received by one transceiver, and applied through a relay unit, to the second transceiver for relaying to the aircraft with which contact is desired.

This equipment consists essentially of two Radio Sets AN/ARC-1 interconnected by a relay unit. Each transceiver provides ten preset crystal-controlled channels, one of which is used as a guard channel.

The signal received on one frequency by either of the two transceivers is transmitted on a second frequency by the opposite transceiver; a certain minimum separation between receiving and transmitting frequencies is necessary to prevent interference, and permits the operator to monitor both sides of the conversation.

This equipment is very similar in makeup and operation to the AN/ARC-28. The primary difference is that the AN/ARC-28 allows individual transceiver operation.

|                  |  |
|------------------|--|
| <b>AN/ARC-18</b> | INSTRUCTION LITERATURE:<br>AN 16-30ARC18-4 |
|                  | CLASSIFICATION OF EQUIPMENT: Restricted    |
| RADIO SET        | USING SERVICE : Navy                       |
|                  | DATE OF THIS SHEET : 2 Jun 52              |

**MAJOR COMPONENTS**

| QUANT | NAME OF COMPONENT                | DIMENSIONS (IN) INSTALLED | WEIGHT (LBS) |
|-------|----------------------------------|---------------------------|--------------|
| 2     | Transmitter-Receiver RT-18/ARC-1 | 9-1/32 x 11-1/16 x 24-3/8 | 47.0         |
| 1     | Relay Unit RE-15/ARC-18          | Not Available             | 5.5          |
| 1     | Control Unit C-156/ARC-18        | 6-3/4 x 5-5/8 x 3-5/16    | 1.9          |

**OPERATIONAL CHARACTERISTICS**

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Medium.

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/YRC-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, 9 main channels and 1 guard channel.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 8 w.  
Receiver: Dual output, 400 mw into each 300 ohm load.

POWER REQUIREMENTS: 504 w, 28 v dc.

**PHYSICAL CHARACTERISTICS**

Information on Radio Set AN/ARC-18 not available.