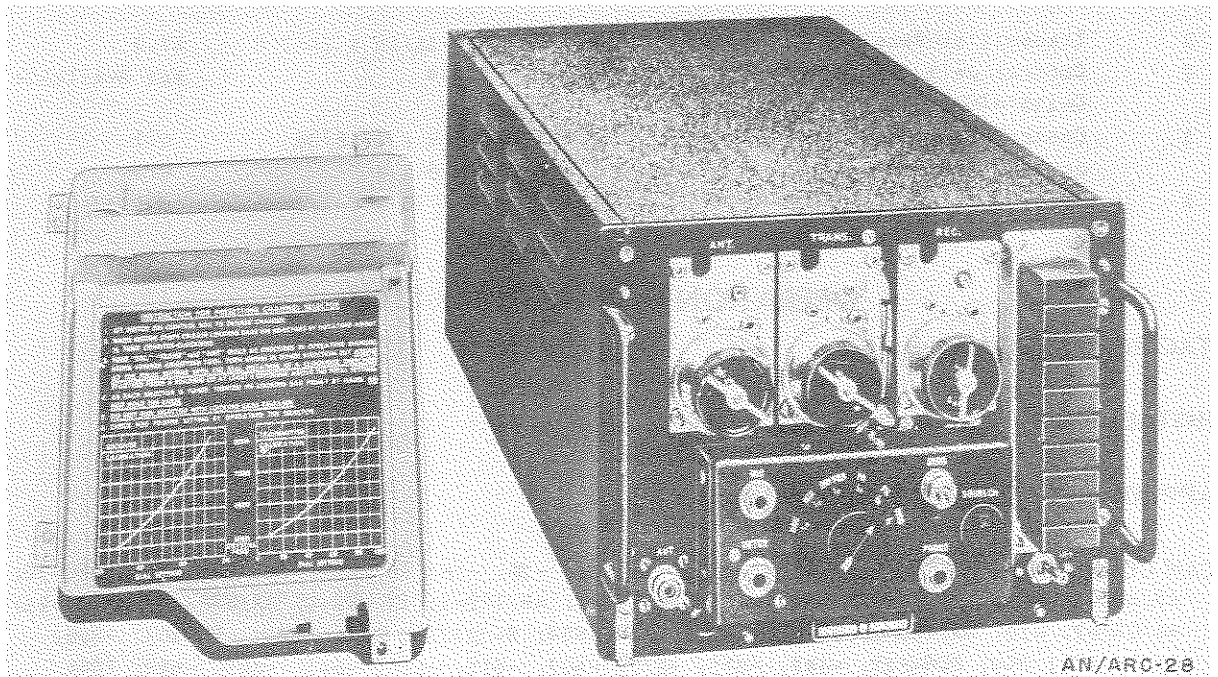


STATUS: Standard
 CLASSIFICATION OF EQUIPMENT: Restricted
 USING SERVICE: Navy
 DATE OF THIS SHEET: 2 Jun 52

AN/ARC-28

RADIO SET



Radio Set AN/ARC-28 is an airborne v-h-f automatic relay station equipment for extending the range of a-m (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 10 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 allows the operator to monitor both sides of the conversation.

Remote controls are employed to permit individual transceiver operation as well as the control of the automatic relay system.

AN/ARC-28	INSTRUCTION LITERATURE: AN 16-30ARC28-3
	CLASSIFICATION OF EQUIPMENT: Restricted USING SERVICE : Navy DATE OF THIS SHEET : 2 Jun 52
RADIO SET	

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Transmitter-Receiver RT-19/ARC-1	9-1/32 x 11-11/16 x 24-3/8	47.0
2	Control Unit C-45/ARC-1 or C-115/ARC-1	Not Available "	Not Available "
1	Control Unit C-333/ARC-28 or C-390/ARC-28	4-1/4 x 4-1/4 x 2-15/16 6 x 2-1/4 x 5-1/8	0.7 0.9
1	Relay Unit RE-51/ARC-28	10-1/2 x 6-5/16 x 7-1/8	5.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -19, -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, 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 d-c.

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/ARC-28 not available.