

STATUS: Standard

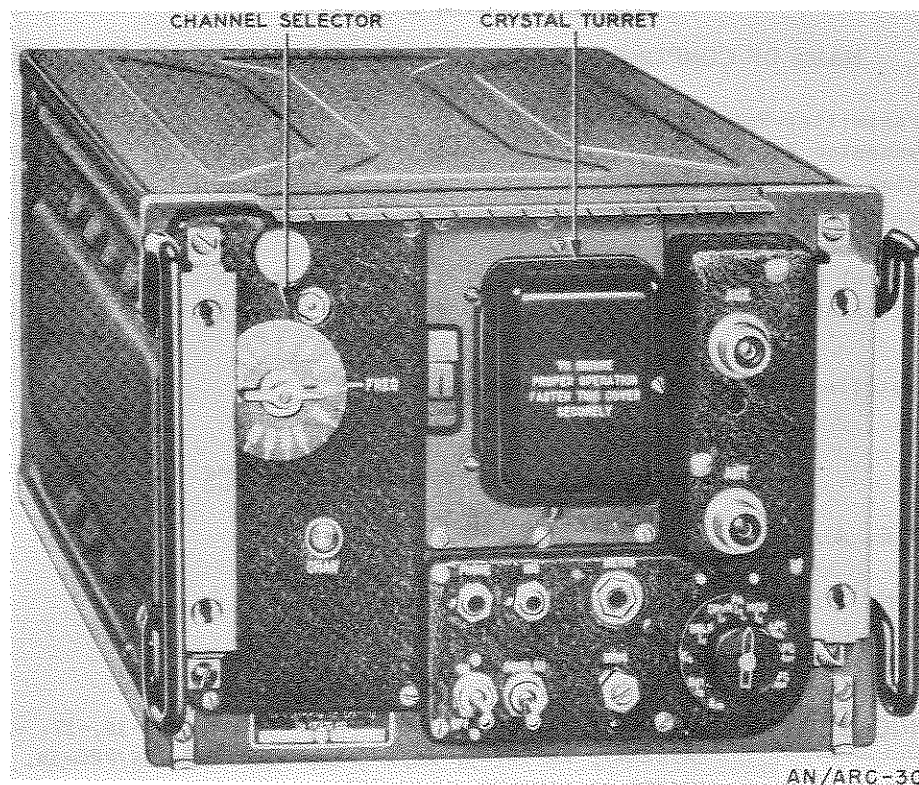
CLASSIFICATION OF EQUIPMENT: Restricted

USING SERVICE: Navy

DATE OF THIS SHEET: 29 May 52

AN/ARC-30

RADIO SET



Radio Set AN/ARC-30 is an airborne v-h-f and u-h-f automatic relay station equipment for extending the range of a-m (voice) radio communication between a ship or shore station and a second aircraft in flight. The 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.

The equipment consists basically of two Radio Sets AN/ARC-12 interconnected by a relay unit. Each transceiver employs 10 preset crystal-controlled channels, one of which is 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, and a certain minimum separation between receiving and transmitting frequencies is necessary to prevent interference. The operator or pilot can monitor both sides of the conversation.

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

AN/ARC-30	INSTRUCTION LITERATURE: AN 16-30ARC30-3 CLASSIFICATION OF EQUIPMENT: Restricted
RADIO SET	USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Transmitter-Receiver RT-58/ARC-12	9-1/32 x 10-7/8 x 24-1/2	45.3
2	Dynamotor DY-9B/ARC-1 *	3-1/2 x 5-1/4 x 9-3/16	5.7
1	Relay Unit RE-63/ARC-30	10-1/2 x 6-5/16 x 7-1/8	5.5
2	Control Unit C-45/ARC-1 or C-115/ARC-1	Not Available "	Not Available "
1	Control Unit C-333/ARC-29 or C-390A/ARC-28	4-1/4 x 4-1/4 x 2-15/16 6 x 2-1/4 x 4-1/8	0.7 0.9

* Installed within transmitter-receiver

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft.

INSTALLATION: Airborne.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32;
AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20;
AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY;
R-279/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 225 - 350 in 9 main channels and 1 guard channel.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 6 w.
Receiver: 500 mw into a 300 ohm resistive load.

POWER REQUIREMENTS: 363 w, 26.5 v dc.

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/ARC-30 not available.