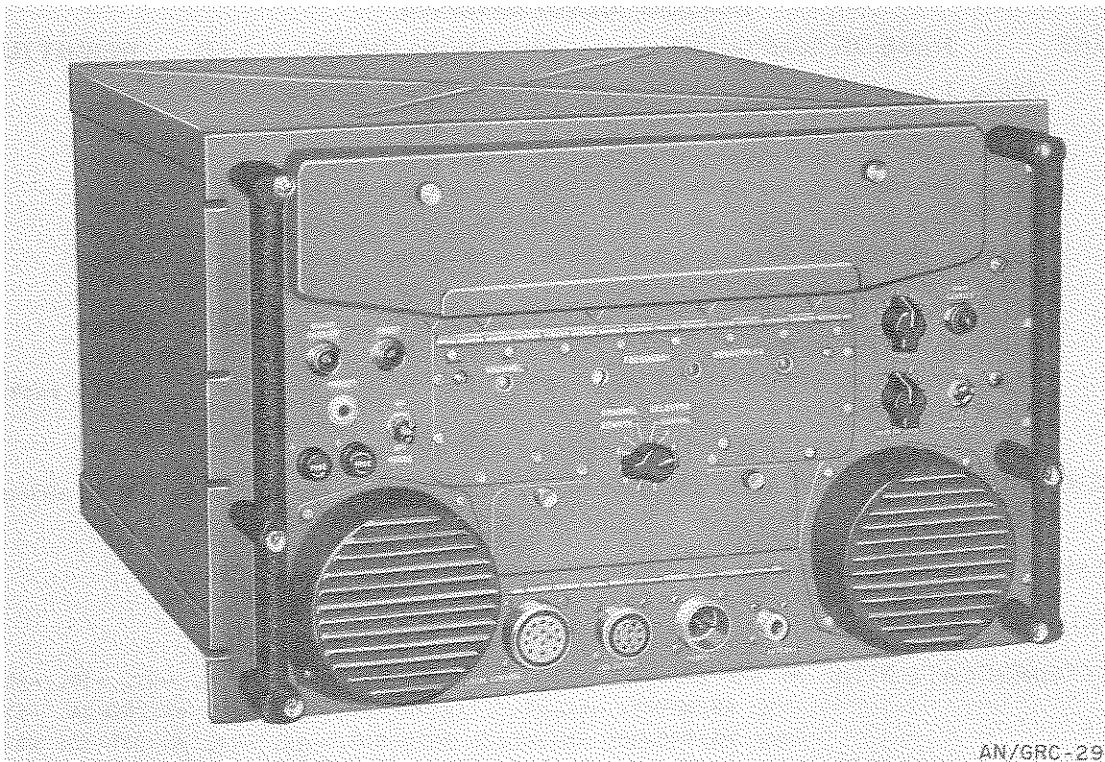


STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force, Navy
DATE OF THIS SHEET: 10 Jun 52

AN/GRC-29

RADIO SET



AN/GRC-29

Radio Set AN/GRC-29 is a two-way, u-h-f, (am, voice or tone) communication equipment for advanced Air Base Traffic Control ground-to-air or point-to-point communication. It is an adaptation of the AN/GRC-27, for amphibious use; having water tight container, and an adaptable mobile power unit.

This equipment consists of a radio transmitter, modulator-power supply, radio receiver, radio set controls, two antennas, power units, and related items.

It operates in the frequency range 225.0 to 399.9 mc, and Radio Receiver R-278/GR (illustrated above) also monitors either one of two crystal-controlled, preset, stand-by guard channels from 238 to 248 mc.

Modulator Power Supply MD-129/GR supplies power for Radio Transmitter T-217/GR in cycles of one minute ON and five minutes OFF.

This set can be operated from a distance up to 10 miles away by means of Radio Set Control C-566/GR, over two telephone pairs.

The antenna system uses low impedance 52-ohm transmission lines and has switching facilities for selecting directional, or omni-directional, broadband operation.

Power requirements (2.5 kw) are supplied by Power Unit 5JB, or an equivalent power source.

AN/GRC-29	INSTRUCTION LITERATURE: Not Available
	CLASSIFICATION OF EQUIPMENT: Restricted
RADIO SET	USING SERVICE: Air Force, Navy
	DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter T-217/GR	19 x 12-1/4 x 22-5/8	150.0
1	Modulator Power Supply MD-129/GR	19 x 12-1/4 x 22-5/8	180.0
1	Radio Receiver R-278/GR	19 x 12-1/4 x 22-5/8	145.0
1	Radio Set Control C-565/GR	19 x 12-1/4 x 11-1/2	85.0
1	Radio Set Control C-566/GR	19 x 8-3/4 x 11-1/2	45.0
1	Antenna AS-450/GR	23 x 17 x 29	65.0
1	Antenna AT-197/GR	19 x 26 x 19	7.5
1	Antenna Mast AB-159/GR	50 to 90 feet long	650.0
1	Power Unit Type 5JB	73 x 39 x 27	1,400.0
8	Cases CY-722/GR and CY-724/GR to CY-73/MRQ-2 inclusive	23 x 17 x 29	70.0 each

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued to advanced air bases for air field traffic control and for airways communication.

INSTALLATION: Ground, semi-fixed.

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

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-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1,750 channels, spaced 100 kc apart, in the frequency range 225.0 - 399.9.

Operates on 10 preset channels.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 100 w.
Receiver: 3 w into 600 ohm resistive load.

POWER REQUIREMENTS: 2.5 kw, 115 or 230 v, 50/60 cyc, 1 phase, ac. (Supplied by Power Unit Type 5JB.)

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-29 measures 39 x 29 x 233 inches, net weight 3,042 pounds, volume 73.3 cu ft. Packed for domestic or export shipment: total weight 3,954 pounds, total volume 87.9 cu ft, 2.1 ship tons. Shipped in 21 packages.