

29 August 1962

RADIO RECEIVING SET AN/ARR-3

Cog Service:

FSN:

Functional Class:

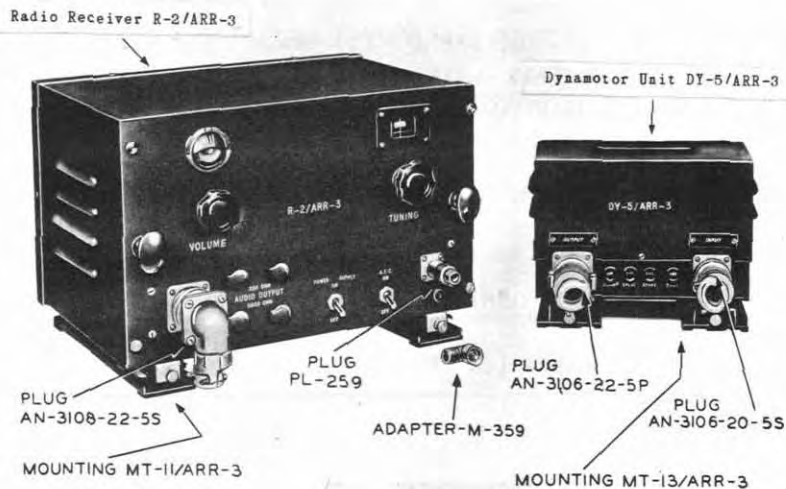
USA

USN

USAF

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Freed Radio Corp.



Radio Receiving Set AN/ARR-3

FUNCTIONAL DESCRIPTION:

The Radio Receiving Set AN/ARR-3 is designed as an airborne radio receiver with an extended audio frequency range, and is capable of receiving frequency modulated (FM) signals throughout the range of 67.2 to 72.2 megacycles (MC), in the 150 kilocycles (KC) band.

No field changes in effect at time of preparation (14 December 1961).

TECHNICAL CHARACTERISTICS:

TYPE OF EQUIPMENT: Airborne.

EQUIPMENT PURPOSE: The reception of FM signals.

NUMBER OF BANDS: 2 bands.

OPERATING FREQUENCY RANGE: 67.2 to 72.2 mc; 150 kc band.

OPERATING POWER RQMT: 12 v dc, or 24 v dc.

AN/ARR-3 RADIO RECEIVING SET

RELATION TO OTHER EQUIPMENT:

The AN/ARR-3 is designed to be used with, but not part of, Radio Transmitting Set AN/CRT-1.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Radio Receiving Set AN/ARR-3 consists of:			
1	Antenna AT-3/ARR-3			2-1/4
1	Antenna Coupling Unit CU-1/ARR-3		3/4 x 3-7/8 x 4-9/16	1/4
1	Antenna Plug PL-259			0.05
1	Cable (Battery to Dyn. Unit)			
1	Cable (Dyn. Unit to Receiver)			
1	Coaxial Cable WC-562			
2	Cords CD-307-A			0.80
1	Dynamotor Input Plug AN-3106-20-5S W/AN-3057-12 Clamp			
1	Dynamotor Output Plug AN-3106-22-5P W/AN-3057-12 Clamp			
1	Dynamotor Unit DY-5/ARR-3		4-11/16 x 8-3/32 x 8-11/16	10
2	Headsets H-3/ARR-3			1-1/2
1	Mounting (Dyn. Unit) MT-13/ARR-3		3/4 x 4-11/16 x 8-11/16	1/2
1	Mounting (Receiver) MT-11/ARR-3		3/4 x 10-1/4 x 13	3/4
1	Radio Receiver R-2/ARR-3		9-1/2 x 11-1/4 x 14-5/8	16
1	Receiver Power Input Plug AN-3108-22-5S W/AN-3057-12 Clamp			
1	Right Angle Adapter M-359			

REFERENCE DATA AND LITERATURE:

Technical Order No. 08-10-160: Technical Manual for Radio Receiving Set AN/ARR-3.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

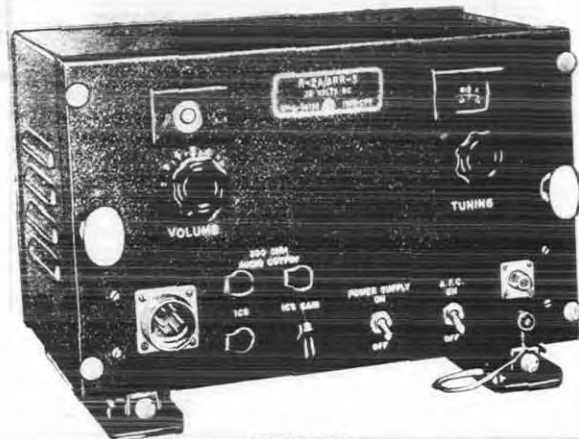
TUBES: (1) 12A6 (1) 12H6 (6) 12SG7Y (3) 12SH7 (1) 12SQ7 (1) 1629

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

RADIO RECEIVING EQUIPMENT

AN/ARR-3B

ANTENNA
AT-3A/ARR-3RECEIVER
R-2A/ARR-3DYNAMOTOR
DY-5A/ARR-3*Radio Receiving Equipment AN/ARR-3B***FUNCTIONAL DESCRIPTION**

The AN/ARR-3B is a frequency-modulated (FM), airborne, radio receiving equipment designed for use in conjunction with Radio Transmitting Equipments AN/CRT-1A and AN/CRT-1B. The transmitters have hydrophones for detecting sounds of submarines. These sounds are transmitted on frequency bands to which the receiving equipment is tuned. These receivers together with their associated transmitters enable an airplane in flight to ascertain the approximate positions, within a given area, of a submerged submarine.

No field changes in effect at time of preparation (29 August 1960).

RELATION TO OTHER EQUIPMENT

The AN/ARR-3B is similar to Radio Receiving Equipment AN/ARR-3A.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

NUMBER OF BANDS: 2 bands.
OPERATING FREQUENCY RANGE: 62 to 72 mc.
OPERATING POWER RQMT: 12 or 26 v DC.

MANUFACTURER'S OR CONTRACTOR'S DATA

Freed Radio Corp., New York, N.Y.
Contract NXsa-66738.
Contract NXsa-60026.

TUBE AND/OR CRYSTAL COMPLEMENT

(6) 12SG7	(3) 12SH7
(1) 12A6	(1) 1629
(1) 12SQ7	(1) 12H6

Total Tubes: (13)
No Crystals used.

June 1961

Radio-Receivers

AN/ARR-3B

RADIO RECEIVING EQUIPMENT

REFERENCE DATA AND LITERATURE

CO-ANO8-30 ARR 3-2: Technical Manual for
Radio Receiving Equipment AN/ARR-3A, AN/
ARR-3B.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE NAVY BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

SHIPPING DATA

NUMBER OF BOXES	CONTENTS AND IDENTIFICATION	VOLUME (Cu.Ft.)	OVERALL DIMENSIONS (inches)	WEIGHT PACKED (lbs.)
1	Radio Receiver R-2/ARR-3	1.159	12-3/4 x 12-3/4 x 17	23
1	Dynamotor Unit DY-SA/ARR-3	0.572	8 x 11 x 11-1/4	10
1	Antenna AT-3/ARR-3 or AT-3A/ARR-3	1.104	6 x 6 x 53	16
2	Headset H-3A/ARR-3			
1	Mounting MT-11/ARR-3			
1	Mounting MT-13/ARR-3			
1	20 ft of Radio Frequency Cable RG-11/U			

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radio Receiver R-2/ARR-3	9-1/2 x 11-1/4 x 14-5/8	18.72
1	Mounting MT-11/ARR-3	3/4 x 10-1/4 x 13	1.22
1	Dynamotor Unit DY-5A/ARR-3	5-1/16 x 6-11/16 x 8-7/16	6.91
1	Mounting MT-13/ARR-3	3/4 x 4-11/16 x 8-11/16	0.84
1	Antenna AT-3A/ARR-3		2.23
2	Headsets H-3A/ARR-3		1.06
2	Cords (for headsets) CX-3/AR(5' 0")		0.31
1	Plug, Receiver Power Input AN-3108-22-5S		0.23
1	Plug, Dynamotor Output AN-3106-22-5P		0.14
2	Plug, Coaxial C-49195		0.05
1	Adapter, Angle Coaxial Plug C-49192		0.08
1	Cable, 2-Wire NAF-47024-216		
1	Cable, 4-Wire NAF-47024-405		