



TM 295-3

Figure 2. Radio Receiving Set AN/GRR-5, typical system application, simplified block diagram.

## 5. Technical Characteristics of Radio Receiving Set AN/GRR-5

Receiver type.....Superheterodyne.

Types of signals which can be received.....A-m, c-w, or m-c-w (modulated continuous wave).

Frequency range:  
 Band 1.....1.5 mc to 2.7 mc.  
 Band 2.....2.7 mc to 5 mc.  
 Band 3.....5 mc to 9.5 mc.  
 Band 4.....9.5 mc to 18 mc.

Type of tuning.....Continuous, with provision for presetting detents for any 10 channel frequencies.

Number of tubes:  
 Receiver.....8.  
 Power supply.....4.

Intermediate frequency.....455 kc (kilocycle).

Method of calibration.....Built-in crystal frequency calibrator.

Calibration points.....Every 200 kc.

Audio output:  
 High.....90 mw (milliwatt).  
 Low.....20 mw.

Distortion.....10 percent or less for 70 mw output, measured at 5 mc with 400-cycle, 30 percent modulation.

Sensitivity:  
 a-m.....5 uv (microvolt) or better for 10 mw output, with a signal-plus-noise to noise ratio of 10 to 1.

c-w.....2 uv or better for 10 mw output, with a signal-plus-noise to noise ratio of 10 to 1.

I-f selectivity:

6 db (decibel) down.....6.5 kc.  
 20 db down.....13 kc.  
 40 db down.....20 kc.  
 60 db down.....28 kc.

Power input:

For vehicular operation:  
 6 volts.....6.9 amperes, 41.4 watts.  
 12 volts.....3.22 amperes, 38.6 watts.  
 24 volts.....2.55 amperes, 61.2 watts.

For field operation:  
 90 volts (2 Battery BA-419/U) .. 27 ma (milliamperes).

1.5 volts (1 Battery BA-405/U) .. 350 ma.

For fixed installation:

115 volts ac, 50 or 60 cyc... 455 ma, 52.4 watts.

Antenna.....Mast Sections MS-116-A (2 ea), MS-117-A, and MS-118-A or any suitable reel antenna.

Weight of receiver and power supply in cabinet.....60.5 lb.

Weight of accessories...15.05 lb.

## 6. Packaging Data

a. When packaged for export shipment, the components of Radio Receiving Set AN/GRR-5 are placed in waterproof containers and are packed in a wooden export crate. Typical packaging is illustrated in figure 3. The size, weight, and volume of the crate are indicated in the following chart:

Note. Items may be packaged in a manner different from that shown, depending on supply channel.

Type of packaging	Number of crates	Height (in.)	Width (in.)	Depth (in.)	Volume (cu ft)	Total weight (lb)
Domestic	1	27 $\frac{1}{4}$	15 $\frac{1}{4}$	46 $\frac{1}{4}$	11.1	110
Export	1	31	19	50	17	162

b. The following list indicates the contents of the cartons within the crate. See the packing list attached to the crate for the exact contents.

Carton dimensions (in.)	Contents	Notes
10 x 6 x 44 $\frac{1}{2}$	<p>Bag CW-206/GR containing:                      Electron Tube Case                      CY-1031/URR.</p> <p>Mast Sections                      2 MS-116-A                      1 MS-117-A                      1 MS-118-A</p> <p>Power Cable Assemblies                      CX-1358/U                      CX-1359/U                      CX-1360/U</p> <p>Bag CW-212/U                      Headset Cord CX-1334/U                      Headset CW-49507-A                      (Navy type)</p>	<p>See packing list for items in Electron Tube Case CY-1031/URR.</p>
18 x 14 x 18 $\frac{1}{2}$	<p>Cover CW-211/U containing:                      Electrical Equipment Cabinet                      CY-615/URR                      Radio Receiver R-174/URR                      Power Supply PP-308/URR                      Mounting MT-768/URR                      Receiver-power supply interconnecting cable</p>	<p>Receiver and power supply are secured into the case. Shock mounting is secured to the case.</p> <p>Shipped already connected.</p>

## 7. Table of Components

Component	Required No.	Height (in.)	Depth (in.)	Length (in.)	Volume (cu ft)	Unit weight (lb)
Electrical Equipment Cabinet CY-615/URR.	1	13 $\frac{7}{8}$	8 $\frac{1}{8}$	12 $\frac{1}{2}$	1.1	8.6
Radio Receiver R-174/URR.	1	5 $\frac{1}{8}$	7 $\frac{1}{2}$	12	.3	18.9
Power Supply PP-308/URR.	1	5 $\frac{1}{2}$	8	12	.3	26.
Mounting MT-768/URR	1	5 $\frac{1}{2}$	9 $\frac{1}{8}$	13 $\frac{1}{8}$	.13	7.
Cover CW-211/U	1	15 $\frac{3}{4}$	11	14 $\frac{1}{2}$	2.3	1.75
Bag CW-206/GR	1		27	44		3.5
Electron Tube Case CY-1031/URR.	1	3	9 $\frac{1}{2}$	4 $\frac{1}{4}$	.07	2.9
Mast Section MS-116-A	2			39 $\frac{1}{2}$		.15
Mast Section MS-117-A	1			39 $\frac{1}{2}$		.15