

Radio Frequency Amplifier AM-33/ART is an airborne wide band power amplifier, designed primarily to amplify the output of Radio Set AN/ARQ-8, but may be used with other jamming transmitters such as AN/ARQ-1 and AN/ARQ-7 which operate over the same frequency range, thus enabling them to more effectively jam enemy radars operating in the 25-100 mc. frequency range. It also enables these transmitters to compete with the increased power employed by enemy ground stations and to aid in reducing the effectiveness of radio communications used by the enemy in the control of fighter aircraft, increasing the protection to our bomber formations against mass fighter attacks.

The amplifier is capable of normal operation on any frequency within the range of the AN/ARQ-8, and will operate over a 3 mc. frequency band without requiring retuning by the operator. Driver input of about 15 watts is amplified to an output of about 150 watts. Power is obtained from an 80/115 volt, 400-2600 c.p.s., a.c. source.

Production was expected to start during August 1944. Army Supply Program requirements as of 1

August 1944 were 1105 for the calendar year 1944 and 116 for the calendar year 1945.

Test equipments required for the maintenance and tuning of the equipment are Test Set I-139-A and Amplifier Alignment Unit TS-92/AP.

POWER INPUT	700 WATTS
POWER OUTPUT	150 WATTS
FREQUENCY RANGE	25-100 MC.
DRIVING POWER	10-15 WATTS
INPUT IMPEDANCE	50 OHMS.
OUTPUT BANDWIDTH	3 MC.

TUBE COMPLEMENT			
NO.	TYPE	NO.	TYPE
2	836	2	4E27



Radio Frequency Amplifier AM-33(XA)/ART

RADIO FREQUENCY AMPLIFIER AM-33/ART TOTAL WEIGHT 50 LBS.

Component	Nomenclature	Size	Weight
Radio Frequency Amplifier	AM-33/ART	8" x 10 1/2" x 21"	39 Lbs.
Mounting Base	MT-171/U	2 1/4" x 10 5/8" x 22"	3 1/4 Lbs.
Control Unit		2" x 2 3/4" x 3"	

1 Dec. 1944