

Radar Set AN/APT-3 is an airborne spot jamming transmitter using an amplitude noise-modulated carrier signal. Similar to Radio Transmitting Equipment RC-183-A, it is used to confuse or obliterate the information presented by the German Freya, Hoarding, Wasserman and Japanese Early Warning radars operating in the 85-135 mc. frequency range. TO-08-40-RC-183-21 has been issued by AAF to enable modification of the frequency to cover the 95-150 mc. range.

The equipment is sufficient to screen a heavy bomber to within six miles from a spot-jammed-Freya. It is most useful in the spot jamming of early warning sets to disguise the exact size of the incoming raid. For operation as a barrage jammer, the set is pre-tuned to the frequency band desired prior to take-off. The only adjustment required thereafter for this use is to adjust the modulator knob for maximum modulation. For spot-jamming, however, the transmitter must be tuned to the enemy frequency during flight. This is now done by means of a remote control tuning arrangement. Work is now in process on the production of a new control unit, C-85/APT-3, to replace the existing remote control and afford operation directly from the panel of the transmitter. Higher output can be obtained by use of Power Amplifier AM-14/APT with this set.

Antennas used with this equipment are quarter-wave stub antennas, AT-37/APT and AT-38/APT, and are mounted 45 degrees from the vertical to jam sta-

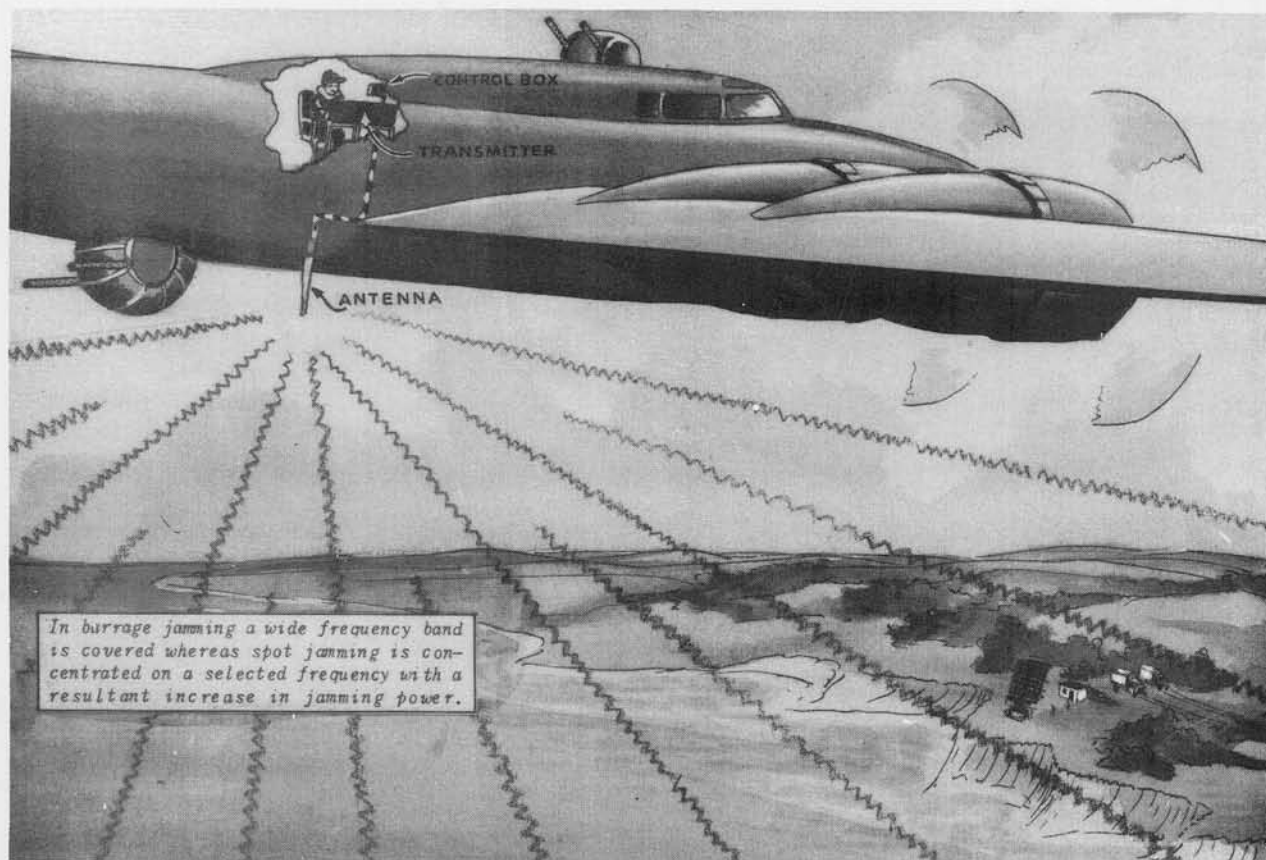
tions polarized other than vertically. The latter method of mounting results in some loss in jamming efficiency but permits more general use.

The equipment was in production prior to 1 Jan. 1944. Army Supply Program requirements as of 1 August 1944 were 1010 for the calendar year 1944.

Test equipments required for testing and tuning the equipment are: Test Set I-139-A; Radio Frequency Wattmeter TS-118/AP; Frequency Meter TS-174/UP; Test Set I-56K.

POWER INPUT	225 WATTS @ 80/115 VOLTS. 400-2600 C.P.S. AND 24 VOLTS D-C
POWER OUTPUT	12 TO 9 WATTS
FREQUENCY RANGE	85-135 MC.
OUTPUT BANDWIDTH	1-2 MC.
TYPE OF SIGNAL	AMPLITUDE NOISE MODULATED

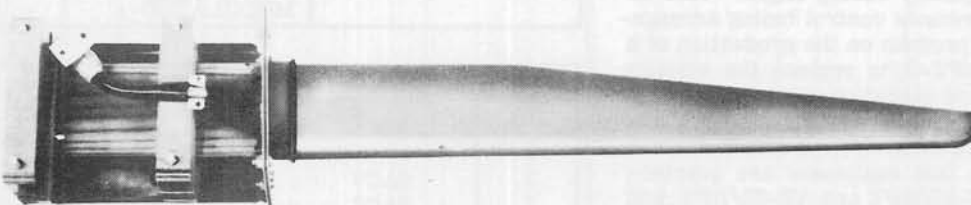
TUBE COMPLEMENT			
NO.	TYPE	NO.	TYPE
1	5R4GY	1	829B
2	6AC7	1	832
1	6AG7	1	931A



Radar Transmitting Equipment AN/APT-3 (Installed in B-17) may be used for spot or barrage jamming of enemy radars in the frequency range from 85 to 135 mc. (i.e. German Freya or Japanese equivalent types.)



Antenna Stub AT-42/APT



Antenna Stub AT-38/APT



Radar Transmitter T-27/APT-3



Control Unit C-85 APT/3

RADAR SET AN/APT-3

TOTAL WEIGHT 53 LBS.

Component	Nomenclature	Size	Weight
Radar Transmitter	T-27/APT-3	7 5/8" x 10 1/8" x 21 3/4"	35 Lbs.
Remote Control Unit	C-59/APT-3	2 3/4" x 4 1/8" x 2 1/4"	1/2 Lbs.
or			
Control Unit	C-85/APT-3	2 3/4" x 1 1/2" x 1 1/2"	1/2 Lbs.
Antenna Stub	AT-37/APT or AT-42/APT	Height 22 1/2"	6 1/2 Lbs.
Antenna Stub	AT-38/APT or AT-43/APT	Height 29"	6 1/2 Lbs.
Mounting	MT-23/A or MT-171/U	2 1/4" x 10 5/8" x 22"	3 1/4 Lbs.
Mounting	MT-80/ARC-5	1/16" x 3" x 4"	1/4 Lbs.

and plugs, adapters and cables.