

Recording Assembly AN/APA-23 is an airborne recorder for use with Radio Receiving Equipment AN/APR-4, Radio Receiving Set AN/ARR-5 and Radio Receiving Set AN/ARR-7 and other similar radar search and radio receivers.

The recorder is coupled to the receiver by means of a mechanical link to provide the proper speed of rotation for the tuning dial. An electrical link is provided to feed the received signals into the recorder. By proper calibration the recorder provides a permanent record of the frequencies received and the time of reception. The recorder is calibrated for frequency by impressing a known frequency on the recorder and marking the stylus impression with that frequency.

In operation the stylus on the recorder makes an impression on the tape only when a signal is picked up in the accompanying receiver. The time is indicated on the tape by marks at one minute intervals by means of a timing mechanism. The stylus is synchronized with the tuning dial and sweeps back and forth. An input signal of about 80 millivolts is sufficient to activate the

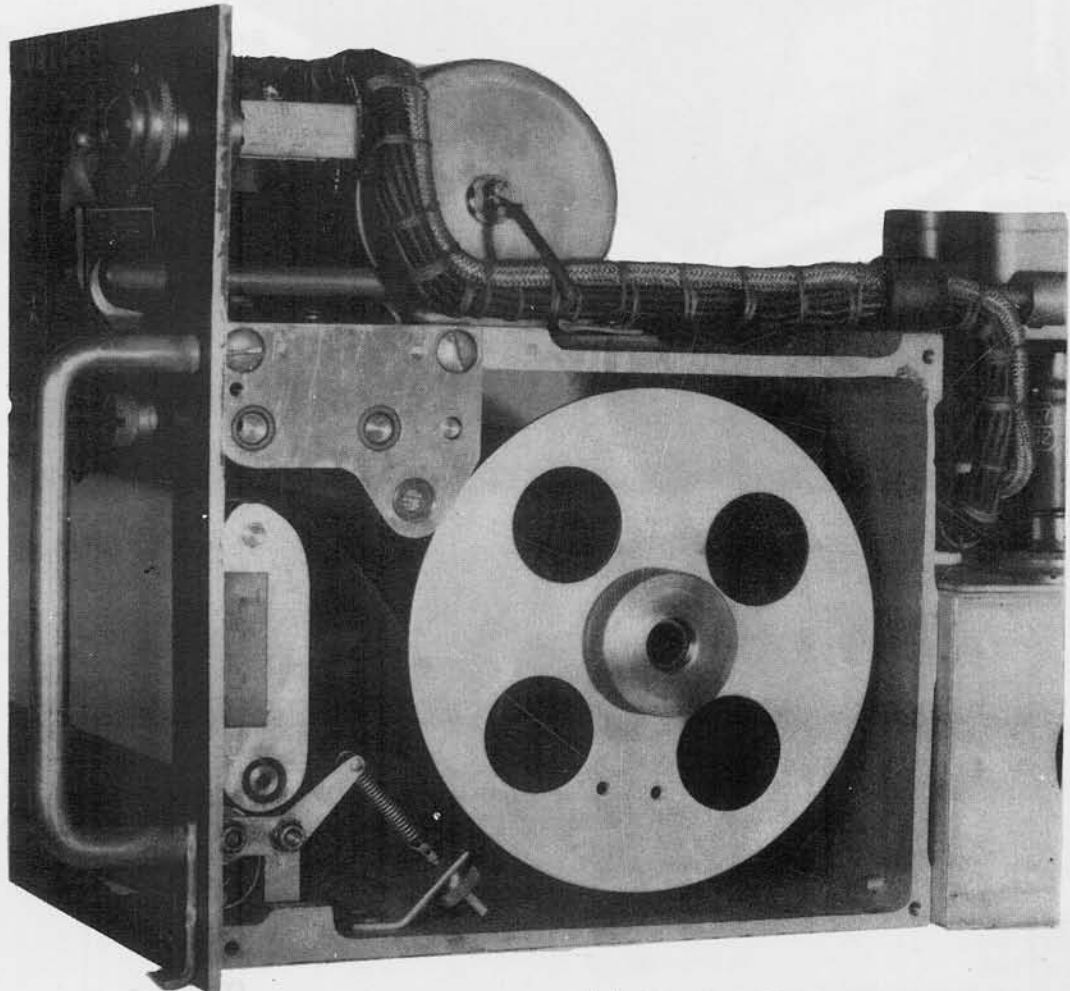
stylus and mark the tape. Thus with the equipment in operation constant listening by an operator is unnecessary, leaving him free to investigate new signals. When a new signal appears on the tape the operator can switch to manual operation and tune to the signal for observation.

The frequency range of the recorder depends on the range of the associated receiver. Power is obtained from an 80/115 volt, 400-2600 c.p.s., a.c. source and a 28 volt d.c. source.

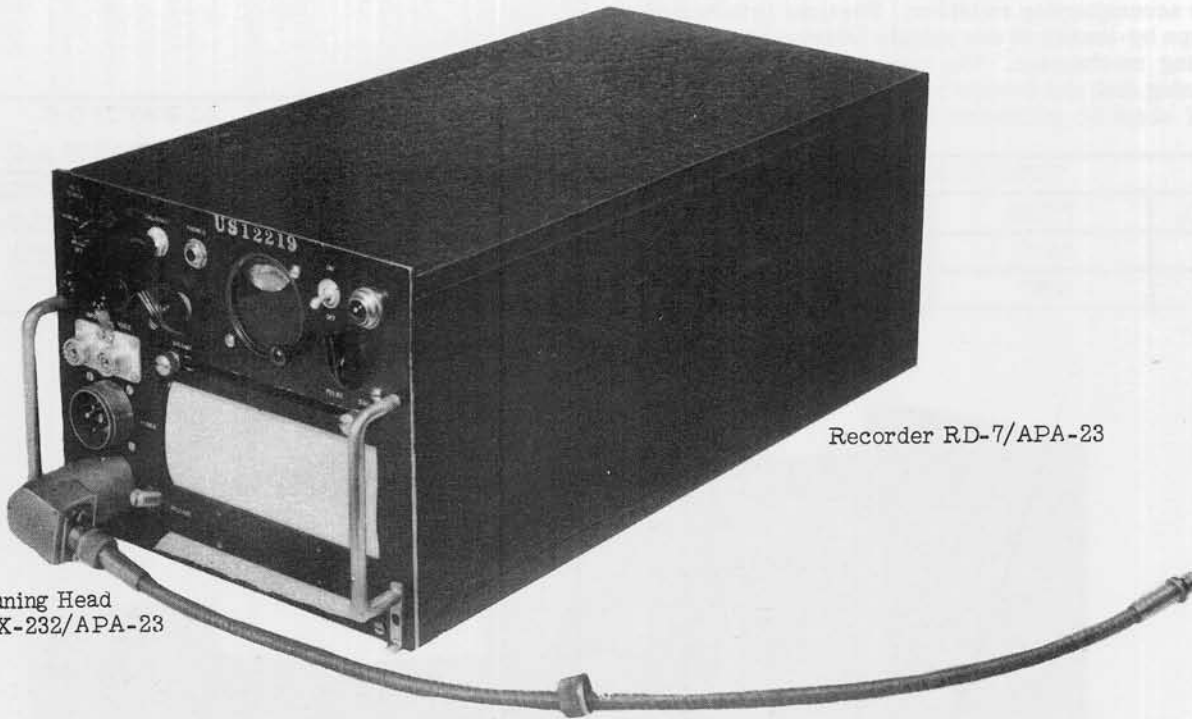
Army Supply Program requirements as of 24 August 1944 were 450 equipments for the calendar year 1944 and 2,078 for 1945. Procurement for the army is limited to 450 for the calendar year 1944 and 575 for 1945.

TUBE COMPLEMENT			
NO.	TYPE	NO.	TYPE
1	6AC7	2	2050
1	6SN7	1	5Y3GT

POWER INPUT	50 WATTS D.C. 60 TO 80 WATTS A.C.
SENSITIVITY	80 MILLIVOLTS FOR PULSES. 280 TO 70 MILLIVOLTS FOR SINE WAVES AT 50 TO 10,000 c.p.s.



Interior view, showing recording tape.



Tuning Head
MX-232/APA-23

Recorder RD-7/APA-23

RECORDING ASSEMBLY AN/APA-23

TOTAL WEIGHT 54 LBS.

Component	Nomenclature	Size	Weight
Recorder	RD-7/APA-23	7 3/4" x 10 1/4" x 21 3/4"	50 Lbs.
Mounting Base	MT-171/U	2 1/4" x 5 1/4" x 22 "	3 Lbs.
Tuning Head	MX-232/APA-23		1 Lb.
Adapter Kit (4 rolls, 400 ft. x 6 in. tape)			