

CONFIDENTIAL



25X1

TEST REPORT

MILITARY RECORDER

25X1

Model MR-1

26 August 1959

1. Crosstalk

Specification: Minimum of 40 db

Test: Due to the noise level of the system, evaluation of the crosstalk figure was not obtainable on playback. Record amp crosstalk = more than -70 db.

2. Frequency Response

Specification: +6 db 250 ~ to 60 Kc

Test:	CH 1	1000 ~ = 0	Low -5
			High +1
	CH 2	1000 ~ = 0	Low -4
			High +1.5
	CH 3	1000 ~ = 0	Low -4.5
			High +1.3

3. Bias Frequency

Specification: 250 Kc

Test: 253 Kc

4. Wow & Flutter

Specification: .5% Peak to Peak

Test: .5% Peak to Peak

5. Power Drain

Specification: 5 amps Run



25X1

CONFIDENTIAL

CONFIDENTIAL

25X1

5. Power Drain (contd.)

Test:	Rewind	9 amps
	Amplifiers	.8 amps
	Start	
	Forward Play	5 amps
	Forward Record	5.3 amps

6. Signal to Noise

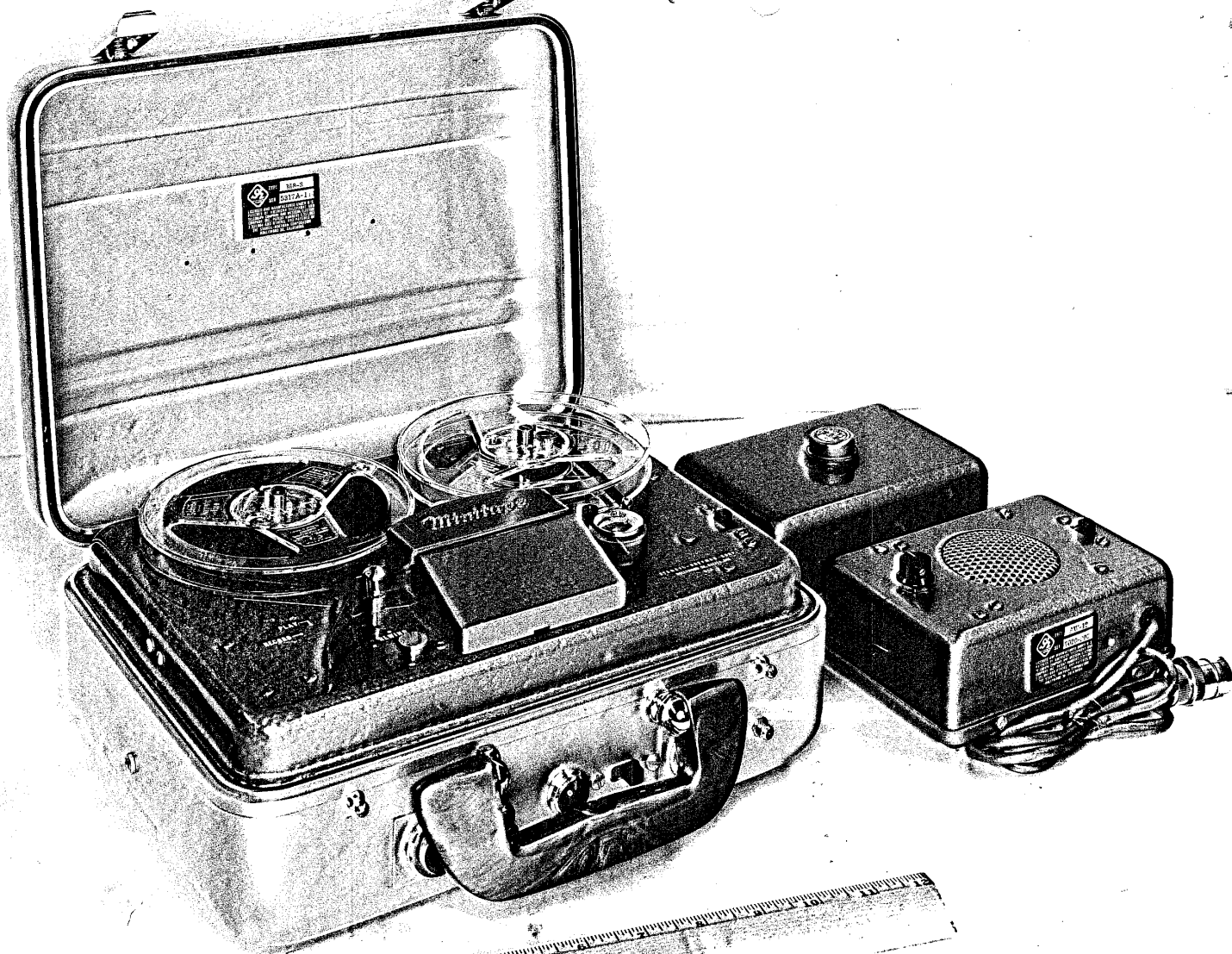
Specification: None

Test:	<u>Unit Stopped</u>		
	Noise	CH 1	.25 volts peak to peak
		CH 2	.13 volts peak to peak
		CH3	.5 volts peak to peak
	Noise rms	CH 1	-42 db
		CH 2	-43 db
		CH 3	-37 db
	<u>Unit Running</u>		
	Noise rms	CH 1	-34 db
		CH 2	-37 db
		CH 3	-34 db

CONFIDENTIAL

Sanitized Copy Approved for Release 2011/09/19 : CIA-RDP78-03424A002000060019-5

~~CONFIDENTIAL~~



CONFIDENTIAL

Sanitized Copy Approved for Release 2011/09/19 : CIA-RDP78-03424A002000060019-5

CONFIDENTIAL

Forwarded to Lab 22/Dec 1959

21D



*File 602
T.O.1*

25X1

TEST REPORT

22 Dec 1959

ENVIRONMENTAL CONDITIONS

Model MR-1

1 HEAT TESTS

1.1 Test on Circuit Cards Only

60 cycle frequency sub-system. AO-49 (3600 cps oscillator) connected to FD-1 (frequency divider) for 60 cps output.

<u>Temperature</u>	<u>Gain</u>	<u>Remarks</u>
70° F	0 db	Ambient reference setting
120° F	-1 db	Rising temperature - heat chamber
140° F	-1.5 db	Rising temperature - heat chamber
150° F	-2 db	Rising temperature - heat chamber
150° F	-3 db	Stabilized temperature 15 mins. - heat chamber

1.2 Test on Entire Unit

Removed from case to allow faster stabilization at temperatures.

<u>Temperature</u>	<u>Operation</u>	<u>Remarks</u>
120° F	Normal	Drive motor comes to sync in normal time
125° F	Normal	Drive motor comes to sync in normal time
125° F	Normal	Runs sync speed through 1800 ft. reel of tape
125° F	Normal	Stabilized 15 mins. ; then repeated 1800 ft. run

2 COLD TEST

Entire unit in case (to prevent frost condensation on components).

<u>Temperature</u>	<u>Starter</u>		<u>Drive Motor</u>		<u>Remarks</u>
	<u>Motor</u>	<u>Solenoids</u>	<u>Runs</u>	<u>Sync</u>	
-40° F	OK	OK	No	No	
-20° F	OK	OK	No	No	
-0° F	OK	OK	No	No	
+20° F	OK	OK	No	No	
+30° F	OK	OK	No	No	
+32° F	OK	OK	Yes	No	Would not quite pull in
+40° F	OK	OK	Yes	Yes	Normal operation

CONFIDENTIAL

CONFIDENTIAL

25X1



3 ROOM AMBIENT TESTS

3.1 Frequency Response

Within specification.

3.2 Output Level

Within specification.

3.3 Record Level

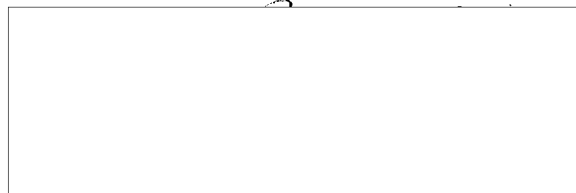
Within specification.

3.4 50 K cps Record

Normal.

3.5 Operational Check

Normal operation.



25X1

CONFIDENTIAL