

DATE 26/4/1960

SH. 1 OF 3

COMPILED BY  
C.L.S.

TMC SPECIFICATION NO. S - 10042

TITLE: TEST PROCEDURE FOR PAL-1000

JOB CE-5075

APPROVED

*[Handwritten signature]*

TEST PROCEDURE

FOR

MODEL PAL-1000

SYSTEM

DATE <u>26/4/1960</u>	<b>TMC SPECIFICATION NO. S - 10042</b>	
SH. <u>2</u> OF <u>3</u>		
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SECTION I:

- 1) Perform complete visual examination of all units for physical and mechanical defects.
- 2) Check security of all components.
- 3) Check that all adjustments are locked.

SECTION II:

- 1) Check C. W. power at band edges and complete page 1 of test report.
- 2) Check sideband power, third order etc. and complete page 2 of test report.
- 3) Check harmonics at 4 frequencies chosen by DND IS.
- 4) Check frequency response and audio distortion and record results on page 3. Check distortion at 2 RF frequencies, at 95% modulation.

SECTION III:

- 1) Check stability, to be equal or better than .0002% 20°C to 40°C with  $\pm 10\%$  line voltage variation using 2270 M/c crystal.

- 2) Check, using analyzer for modes of operation.

(1) 6A3 Double side band amplitude modulation.

This test to be conducted as follows:

- (a) Adjust carrier insert to give 500 watts C. W.
- (b) Using analyzer adjust to show full screen amplitude on carrier.
- (c) Insert 1K/c tone on both side bands level to be - 6db relative to carrier.
- (d) Power output to be 750 watts minimum.
- (e) Complete page 3 of test report.

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- (f) Tune RX to TX output and note RX audio output level.
- (g) Cut modulation and measure A/F output level. Must be - 40db or better.

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SH. 3 OF 4

TMC SPECIFICATION NO. S- 10042

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TITLE: TEST REPORT FOR MODEL PAL-1000

JOB CE-5075

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SBE # \_\_\_\_\_ PAL-1K # \_\_\_\_\_

1)

- (a) AM Test power output \_\_\_\_\_ watts.
- (b) Residual carrier noise \_\_\_\_\_ db.
- (c) Using detector at monitor output measure frequency response and distortion.

RF	A/F	DIST.	FREQ. RESP.	RF	DIST.	FREQ. RESP.
	300					
	1000					
	3300					

AC RIPPLE AND REGULATION

1)

- (a) Measure with HP 410B across 220K resistor in bleeder.
- (b) Ripple voltage not to exceed 1.00 volts AC \_\_\_\_\_ V.
- (c) Change in D. C. level not to exceed 15% from no load to full load current. \_\_\_\_\_ %.

APPROVED *[Signature]*

SBE MODES

- 1) AM \_\_\_\_\_
- 2) ISB \_\_\_\_\_
- 3) SSB \_\_\_\_\_
- 4) SSB with intermittent carrier \_\_\_\_\_
- 5) Carrier ON/OFF RTT. keyed at 42 cps. \_\_\_\_\_

SBE Power output at \_\_\_\_\_ M/c. \_\_\_\_\_ watts PEP.

BANDWIDTH CHECK

Vary audio input to SBE and record 3 db points  
 relative to 1 k/cs bandwidth \_\_\_\_\_ k/cs

UNWANTED SIDE BAND

Using 500 c/s tone rejection \_\_\_\_\_ db.

SBE STABILITY TEST

After 24 hour warm up record frequency every  
 30 minutes for period of 4 hours.

TIME	F
00 . 00	
. 30	
1 . 00	
1 . 30	
2 . 00	
2 . 30	
3 . 00	
3 . 30	
4 . 00	

Stability to be .0002% or better.

Mains voltage + 10%	
Mains voltage - 10%	
Temperature 20°C	
Temperature 40°C	

\_\_\_\_\_  
 Tester  
 \_\_\_\_\_  
 1960.

(DNDIS)