

DATE 18/10/73

SH. 1 OF 3

COMPILED BY
J. LACROIX

TMC SPECIFICATION NO. S 10240

TITLE: Final Acceptance Test Procedure for

JOB

APPROVED

PAL-500/STE-5

A - INTRODUCTION

The PAL-500/STE-5 is a general purpose radio transmitter system providing 500 watt PEP throughout the frequency range of 2 to 24 MHz.

B - MAIN COMPONENTS

The Model PAL-500 is composed of two units, the linear power amplifier, model RFE-1 and the power supply, model PSP-500.

The model STE-5 is also composed of two units, the exciter frame and the converter module, model TTRT-()F.

C - TEST PROCEDURE

The test procedure for the PAL-500/STE-5 system is outlined on the following pages. Before the system can be tested correctly, all components must be tested and passed by the test department as per the specific test requirements for each unit.

D - EQUIPMENT REQUIRED

- | | | |
|----|---------------------------------------|---------------|
| 1- | 52 ohms dummy load, 1 kw dissipation. | |
| 2- | Two tone generator | TMC TTG-1 |
| 3- | VTVM | H.P. 410B |
| 4- | AUDIO VTVM | HEATHKIT AV-2 |
| 5- | AUDIO GENERATOR | H.P. 200 CD |
| 6- | DISPLAY ANALYSER | H.P. 141 T |
| 7- | RF SECTION | H.P. 8553B |
| 8- | IF SECTION | H.P. 8552B |
| 9- | FREQUENCY COUNTER | H.P. 5326B |

E - PROCEDURE

- 1- Connect equipment as per Figure 1.
- 2- The procedure outlined in the Department of Communications, Radio Standards Specification 181 shall be used.

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SH. 2 OF 3

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F - TEST RESULTS

- 1) Power output _____ watts PEP
- 2) Distortion products _____ DB below PEP
- 3) Carrier Suppression A3J _____ DB below PEP
A3H _____ DB below PEP
A3A _____ DB below PEP
- 4) Sideband Suppression _____ DB below PEP
- 5) Harmonics "worst case" _____ DB below PEP
- 6) Spurious emissions _____ DB below PEP
- 7) Noise ratio _____ DB below PEP
- 8) Frequency accuracy _____ +5 Hz MAX.
- 9) Frequency stability _____ Hz
- 10) Power output stability _____
- 11) Audio response - plot graph on Fig. 2.
specification 181

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PAL-500/STE-5

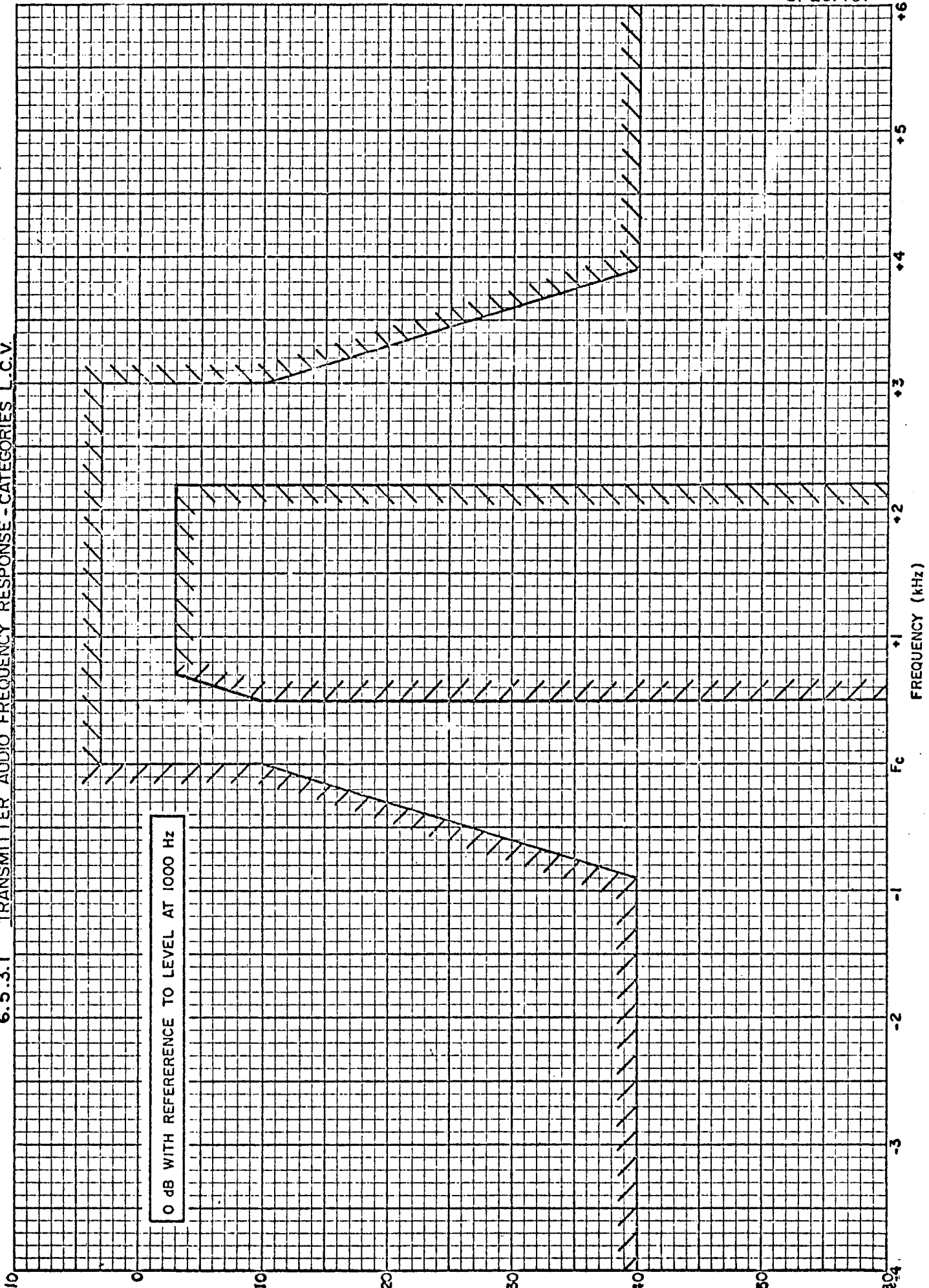
PSP-500 MFG.# _____
RFE-1 MFG.# _____
STE-5 MFG. # _____
TTRT () F MFG.# _____

DATE _____

TESTER _____

WITNESS _____

FIG.-2
6.5.3.1 TRANSMITTER AUDIO FREQUENCY RESPONSE - CATEGORIES L.C.V.



FREQUENCY (kHz)

Fc

+6

+5

+4

+3

+2

+1

0

-1

-2

-3

-4

10

0

10

20

30

40

50

60

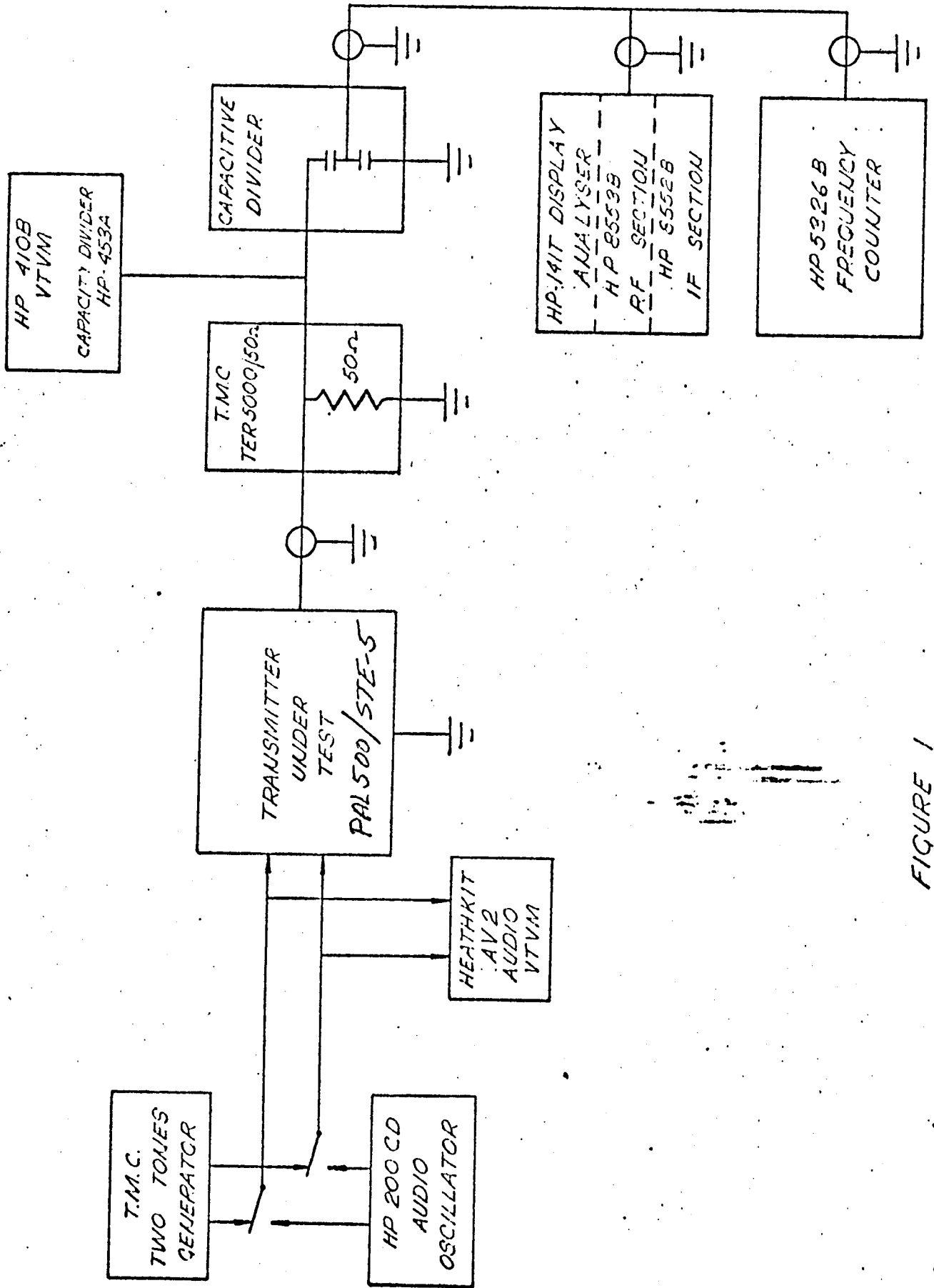


FIGURE 1