

DATE <u>1-19-62</u>		TMC SPECIFICATION NO. S 627	A
SHEET _____ OF _____			
<i>AA</i> A.A. COMPILED	CHECKED	TITLE: TEST PROCEDURE TER-18K-50	
<i>DB</i> APPROVED			

TEST PROCEDURE

TER-18K-50

DATE <u>1-19-62</u>		<b>TMC SPECIFICATION NO. S</b> 627	A
SHEET <u>1</u> OF <u>3</u>			
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**A. General**

The TER-18K is a dummy load capable of dissipating 18kw of energy over the range of DC to 30mc. With an input of 18kw average power, the peak input must not exceed 36kw peak to peak. Input power and reflected power are monitored with a 0-60kw directional radio-frequency wattmeter with an accuracy of plus or minus five percent.

Basically, the TER-18K consists of 6 (six) 300 ohm, 3 kw, plus or minus five percent resistors. The resistors are special glass cylinders with a resistive element electro-fused into the glass. The protective coating is a baked on silicone film. Electrical connections are made positive by fired-on silver bands.

**B. Mechanical Inspection:**

1. Inspect for any damage incurred during installation.
2. Inspect straps holding resistors to see that they are tight enough to prevent movement.
3. Check tightness of all other nuts and screws.

**C. Electrical Inspection:**

1. Check all solder connections.
2. Inspect resistor contacts for good electrical connection.
3. Measure D.C. resistance of resistor from center connector of output termination to ground (should be +5% 50 ohms).
4. Measure interlock circuit continuity at the interlock connector; check switches S101, and S102, for proper performance.
5. Check ~~ant~~ pilot light continuity through interlock indicator.

**D. Frequency Response:**

Equipment required.

1. GPT-40K Transmitter

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# TMC SPECIFICATION NO. S-627

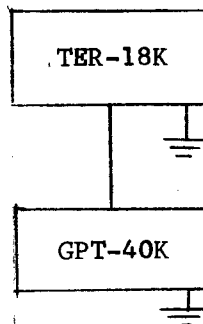
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TEST SET UP

### E. Procedure:

1. Test set up.
2. Set capacitor plate distance 16 inches from front edge of frame.
3. Connect the input of the TER-18K to the output of the GPT-40K. At half power and 24MC tune the capacitor plate for minimum SWR using the SWR meter on the GPT-40K. Do not drive the transmitter over 18KW average power.
4. After tuning for minimum SWR at 24MC, check to see that the SWR at 2MC and 30MC is under 1.2:1

### F. Power Check:

Drive the output of the transmitter to 18KW average power two tones. Check the operation of the directional wattmeter at any test frequency if the TER-25K-50 is supplied with one. Check the power consumption for at least ten minutes. Check the operation of all control circuits.

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**TER-18K**

**CHECK OFF SHEET**

- (A) \_\_\_\_\_ (1) Mechanical Connections Secure.
- \_\_\_\_\_ (2) All straps connected in proper position.
- (B) \_\_\_\_\_ (1) Wire connections mechanically strong with no cold solder joints.
- \_\_\_\_\_ (2) DC Resistance \_\_\_\_\_ (must be between 47.5 and 52.5 ohms.)
- \_\_\_\_\_ (3) Interlocks working properly.
- \_\_\_\_\_ (4) Pilot light continuity.
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- (C) \_\_\_\_\_ (1) Power Check.

FREQUENCY	SWR
2	_____
24	_____
28	_____
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