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DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR SPECTRUM ANALYZER HEWLETT-PACKARD, MODEL 3585B

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REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

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SECTION I IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This procedure provides instructions for the calibration of Spectrum Analyzer, Hewlett-Packard, Model 3585B. The manufacturer's manual was used as the prime data source in compiling these instructions. The equipment being calibrated will be referred to as the TI (test instrument) throughout this bulletin.

a. Model Variations. None.

b. Time and Technique. The time required for this calibration is approximately 6 hours, using the dc and low frequency technique.

2. Forms, Records, and Reports

a. Forms, records, and reports required for calibration personnel at all levels are prescribed by TB 750-25.

b. Adjustments to be reported are designated (R) at the end of the sentence in which they appear. Report only those adjustments made and designated with (R).

3. Calibration Description. TI parameters and performance specifications which pertain to this calibration are listed in table 1.

Table 1. Calibration Description

Test instrument parameters	Performance specifications
Marker frequency	Range: 20 Hz to 40.1 MHz Counter accuracy: ± 0.3 Hz Readout accuracy: $\pm 0.2\%$ of frequency span $\pm$ resolution bandwidth setting
Range calibration	Frequency: 150 kHz Range: -25 to +30 dB Accuracy: ± 0.4 dB
Amplitude linearity	Range: 0 to -95 dB Accuracy: 0 to -20 dB: ± 0.3 dB -20 to -50 dB: ± 0.6 dB -50 to -80 dB: ± 1.0 dB -80 to -95 dB: ± 2.0 dB
Reference level	Range: +10 to -90 dBm Accuracy: +10 to -50 dBm: ± 0.4 dB -50 to -70 dBm: ± 0.7 dB -70 to -90 dBm: ± 1.5 dB
50 Ω flatness	Frequency: 20 Hz to 40.1 MHz Flatness: ± 0.5 dB