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DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR SPECTRUM ANALYZER HEWLETT-PACKARD, MODEL 3580A

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*This bulletin supersedes TB 9-6625-2009-35, dated 27 March 1981, including all changes.

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SECTION I IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of Spectrum Analyzer, Hewlett-Packard, Model 3580A. 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 4 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. When adjustments are in tables the (R) follows the designated adjustment. 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
Frequency	Range: 5 Hz to 50 kHz Accuracy: ± 100 Hz
Display	Range: Frequency error between any two points Accuracy: $< \pm 2\%$ of indicated separation
Bandwidth	Range: 1, 3, 10, 30, 100, and 300 Hz Accuracy: $\pm 15\%$ at 3 dB
Amplitude display	Range: 10 kHz CAL signal Accuracy: ± 2 dB LOG $\pm 2\%$ LIN
Frequency response	Range: 20 Hz to 20 kHz Accuracy: ± 0.3 dB LOG $\pm 3\%$ LIN Range: 5 Hz to 50 kHz Accuracy: ± 0.5 dB LOG $\pm 5\%$ LIN
Amplitude reference level	Range: IF attenuator at 10 kHz Accuracy: ± 1 dB LOG $\pm 10\%$ LIN