*TB 9-6625-047-35

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR AC VOLTMETER AN/USM-265 (HEWLETT-PACKARD, MODEL 400EL-02), ME-459/U (HEWLETT-PACKARD MODEL 400EL), AND ME-465/U (HEWLETT-PACKARD, MODEL 400E)

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REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

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*This bulletin supersedes TB 9-6625-047-35, 17 July 1992.

SECTION I
IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of Ac Voltmeter AN/USM-265 (Hewlett-Packard, Model 400EL-02), ME-459/U (Hewlett-Packard, Model 400EL), and ME-465/U (Hewlett Packard, Model 400E). The manufacturer's manuals were used as the prime data sources in compiling these instructions. The equipment being calibrated will be referred to as the TI (test instrument) throughout this bulletin.

a. Model Variations. Variations among models are described in text.

b. Time and Technique. The time required for this calibration is approximately 1.5 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	
Ac voltage	Range: 1.0 mV to 300 V Frequency: 10 Hz to 10 MHz Accuracy: ±(% of FS + % of reading)	
	Frequency	Range (V)[1 2]
	10 to 40 Hz	.001 to 300.....2.5 + 2.5
	40 Hz to 500 kHz	.001 to 300.....1.0 + 0.0
	500 kHz to 2.0 MHz	.001 .....2.5 + 2.5
	2.0 to 4.0 MHz	.003 to 300.....1.0 + 0.0
	4.0 to 10 MHz	.001 .....2.5 + 2.5
		.003 to 300.....1.5 + 1.5
		.001 .....N/A
		.003 to 30.....2.5 + 2.5[3]
		100 to 300.....N/A

See footnotes at end of table.