

***TB 9-6625-2287-35**

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR ELECTRONIC VOLTMETERS AN/URM-145 (ME-247/U) AND AN/URM-145A (ME-247A/U) (BOONTON, MODEL 91CA)

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*This technical bulletin supersedes TB 9-6625-2287-35 dated 16 November 1992.

SECTION I IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of Electronic Voltmeters, AN/URM-145 (ME-247/U) and AN/URM-145A (ME-247A/U) (Boonton, Model 91CA). The manufacturer's manual, TM 11-6625-524-15-1 and TM 11-6625-524-14 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 indicated in text.

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 parameter and performance specifications which pertain to this calibration are listed in table 1.

Table 1. Calibration Description

Test instrument parameters	Performance specifications ¹		
	Voltage ranges (V)	Range accuracy (FS)	Frequency response
AN/URM-145 (ME-247/U)	.003 to 3	±10% ±5%	20 to 50 kHz 50 kHz to 400 MHz
AN/URM-145A (ME-247A/U) (Boonton, Model 91CA)	.003 to 3	±5% ±10%	10 kHz to 200 MHz 200 to 400 MHz

¹Verified to 100 MHz for all systems codes except COO; for COO, verify to 400 MHz.

SECTION II EQUIPMENT REQUIREMENTS

4. Equipment Required. Table 2 identifies the specific equipment to be used in this calibration procedure. This equipment is issued with Secondary Transfer Calibration Standards Set AN/GSM-287 or AN/GSM-705. Alternate items may be used by the calibrating activity. The items selected must be verified to perform satisfactorily prior to use and must bear evidence of current calibration. The equipment must meet or exceed the minimum use specifications listed in table 2. The accuracies listed in table 2 provide a four-to-one ratio between the standard and TI.