REPRINT INCLUDES CHANGES 1 THROUGH 3

*TB 9-6625-2146-35

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR AC AND DC VOLTMETERS AND AC AND DC AMMETERS (GENERAL)

Headquarters, Department of the Army, Washington, DC
14 February 1985

REPORTING OF ERRORS

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*This bulletin supersedes the technical bulletins listed below, including all changes: TB 9-6625-001-35, 5 August 1977; TB 9-6625-005-50, 4 March 1970; TB 9-6625-008-50, 26 October 1966; TB 9-6625-068-50; 13 December 1974; TB 9-6625-375-50, 28 September 1970; TB 9-6625-386-50, 10 August 1971; TB 9-6625-797-50, 5 August 1977; TB 9-6625-984-50, 29 August 1969; TB 9-6625-988-50, 3 December 1970; TB 9-6625-1001-50, 1 June 1973; TB 9-6625-1045-35, 22 January 1982; TB 9-6625-1317-50, 18 October 1974; TB 9-6625-1318-50, 27 October 1970; TB 9-6625-1322-50, 12 February 1969; TB 9-6625-1439-50, 20 October 1969; TB 9-6625-1479-50, 13 July 1978; TB 9-6625-1889-50, 10 May 1979; TB 9-6625-1895-50, 3 November 1970; TB 9-6625-2007-35, 3 November 1980; TB 11-6625-314-35, 12 March 1976; TB 11-6625-633-35/1, 27 June 1966.

SECTION I
IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of Ac and Dc Voltmeters and Ac and Dc Ammeters listed in table 1. The manufacturers manuals and/or TM's 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 listed in the text.

b. Time and Technique. The time required for each calibration is approximately 1 hour, using the dc/low frequency technique.

2. DA Form 2416 (Calibration Data Card). Forms, records, and reports required for calibration personnel at all levels are prescribed by TB 750-25-1. DA Form 2416 must be annotated in accordance with TB 750-25-1 for each calibration performed.

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

Table 1. Calibration Description

Test instrument		
Manufacturer and model	Parameters	Performance specifications
General Electric, Model AK-4	Ac volts	Range: 0 to 750 V Accuracy: ±3% FS at 60 Hz
	Ac amps	Range: 0 to 800 A Accuracy: ± 3% FS at 60 Hz
Sensitive Research Instrument Corporation (SRI), Model C-CILKI (horizontal position)	Dc milliamps	Range: 0 to 100 mA Accuracy: ± 0.25% of FS
Sensitive Research Instrument Corporation (SRI), Model C-CILORD (horizontal position)	Dc amps	Range: 0 to 30 A Accuracy: ±0.25% of FS
ME-221/U (horizontal position)	Dc milliamps	Range: 0 to 500 mA Accuracy: ± 0.5% of FS
ME-489/U (clamp-on ammeter)	Ac volts	Range: 0 to 150, 300, 600 V Accuracy: ±3% of FS at 50 or 60 Hz
	Ac amps	Range: 0 to 6, 15, 60, 150, 300 A Accuracy: ±3% of FS at 50 or 60 Hz
ME-65/U and ME-65A/U (horizontal position)	Ac amps	Range: 0 to 200 A Accuracy: ± 0.5% of FS, 20 to 500 Hz
Westinghouse, Model PA-5 (horizontal position)	Ac amps	Range: 0 to 200 A Accuracy: ± 0.5% of FS, 20 to 135 Hz
Westinghouse, Model PY-4 Style 936-368 (horizontal position)	Ac volts	Range: 0 to 450 V Accuracy: ± 0.75% of FS, 5 to 200 Hz
TS-340/U (horizontal position)	Ac volts	Range: 0 to 750 V Accuracy; ± 0.5% of FS, 25 to 400 Hz
	Dc volts	Range: 0 to 750 V Accuracy: ± 0.5% of FS