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DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR OSCILLOSCOPE TEKTRONIX, TYPES 5403D40,5440 R544L, R5440, AND R5441

Headquarters, Department of the Army, Washington, DC
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REPORTING OF ERRORS

You can help improve this publication. If you find any mistakes or if you know of a way to improve the procedure, please let us know. Mail your letter or DA Form 2028 to: Commander, U. S. Army Aviation and Missile Command, ATTN: AMSAM-MMC-MA-NP, Redstone Arsenal, AL 35898-5230. A reply will be furnished to you. You may also send in your comments electronically to our e-mail address: 2028@redstone.army.mil or FAX 256-842-6546/DSN 788-6546.

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SECTION I
IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of Oscilloscope, Tektronix Types 5403D40, 5440, 5441, R5440, and R5441. The manufacturer's manuals were used as the prime data source in compiling these instructions. The above equipment 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 (direct current) and low frequency technique.

2. Calibration Data Card, DA Form 2416

a. Forms, records, and reports required for calibration personnel at all levels arc prescribed by TM 38-750. DA Form 2416 must be annotated in accordance with TM 38-750 for each calibration performed.

b. Adjustments to be reported on DA Form 2416 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
Vertical amplifier:	
Bandwidth	Dc to 90 MHz (2/067-0680-00) Dc to 60 MHz (w/calibrated 5A48)
Risetime	3.9 ns or less (w/067-00680-00) [1] 5.8 ns or less (w/calibrated 5A48)
Aberrations	6% or less (w/067-0680-00) 3% or less (w/calibrated 5A48)
Vertical centering	Within ±0.5 division of graticule center
Horizontal amplifier:	
Bandwidth	Dc to 2 MHz

See footnote at end of table.