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DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CALIBRATION PROCEDURE FOR SIGNAL GENERATOR, SG-13/ARN

Headquarters, Department of the Army, Washington, DC
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*This bulletin supersedes TB 9-6625-096-50, 21 November 1967, including all changes.

SECTION I
IDENTIFICATION AND DESCRIPTION

1. Test Instrument Identification. This bulletin provides instructions for the calibration of Signal Generator, SG-13/ARN. The manufacturer's instruction manual was used as the prime data source in compiling these instructions. The signal generator 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 3 hours, using the dc and low frequency technique.

2. Calibration Data Card (DA Form 2416). Maintenance forms, records, and reports which are to be used by calibration personnel at all calibration levels are listed in and prescribed by TM 38-750. Report all adjustments made in this technical bulletin.

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
Input power requirements	Voltage: 21 to 29 vdc Current rating: [1] 5.4 amps
Carrier frequency	Range: 108 to 335 MHz in two ranges: 108 to 135.9 and 329.3 to 335.0 in 100 kHz steps Accuracy: ±0.0065%
Modulator frequency	Range: 30 to 9,960 Hz in five ranges: 30, 90, 150, 1000, and 9960 Hz Accuracy: ±1% for 30, 90, and 150; ±2% for 9960, ±15% for 1000
Output	52 ohm output impedance; 4 μv to 0.2 v, continuously variable; amplitude or frequency modulation; RF level accuracy ±25%
Field strength	100 μv at 100 ft from antenna
VOR accuracy	±0.7° [2]

[1]This specification is for information only and is not verified in this bulletin.
[2]Certified to ±1° at 180° and to ±2° at other points.

SECTION II
EQUIPMENT REQUIREMENTS

4. Equipment Required. Table 2 identifies the specific equipment used in this calibration procedure. This equipment is issued with secondary transfer calibration standards set 4931-621-7877 and is to be used in performing this procedure. Alternate items may be used by the calibrating activity when the equipment listed in table 2 is not available. The items selected must be verified to perform satisfactorily prior to use and