

**TECHNICAL MANUAL
OPERATOR'S, ORGANIZATIONAL,
DIRECT SUPPORT
AND GENERAL SUPPORT
MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND
SPECIAL TOOLS LISTS
(INCLUDING DEPOT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS)
FOR
FREQUENCY METERS AN/USM-159,
AN/USM-159A, AND AN/USM-159B
(NSN 6625-00-892-5360)**

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HEADQUARTERS
 DEPARTMENT OF THE ARMY
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**OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT,
 AND GENERAL SUPPORT MAINTENANCE MANUAL
 INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS
 (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)
 FOR
 FREQUENCY METERS AN/USM-159, AN/USM-159A,
 AND AN/USM-159B
 (NSN 6625-00-892-5360)
 Current as of June 1975**

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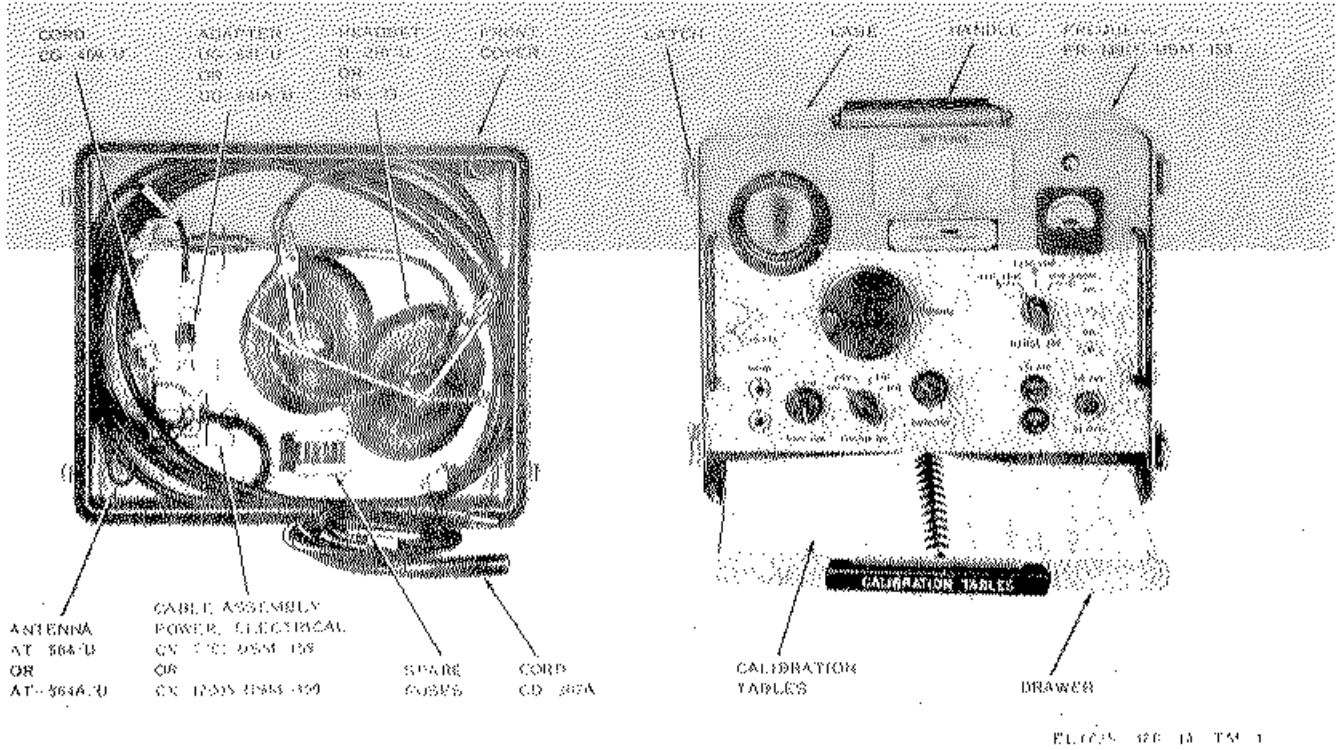


Figure 1-1. Frequency Meters AN/USM-159, AN/USM-159A, and AN/USM-159B

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

This manual describes Frequency Meters AN/USM-159, AN/USM-159A, and AN/USM159B, and covers their installation and operation, and operator, organizational, and general support maintenance. There is no direct support maintenance authorized for this equipment. Official nomenclature followed by (*) refers to all models of the equipment; therefore, the above equipment will hereinafter be referred to as Frequency Meter AN/USM-159(*), and Frequency Meters FR-149/USM-)59, FR-149A/USM-159, and FR149B/USM-159 will be referred to as Frequency Meter FR-149(*)/USM-159, unless otherwise specified.

1-2. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Maintenance forms, records, and reports which are to be used by maintenance personnel at all maintenance levels are listed in and prescribed by TM 38-750.

b. Report of Packaging and Handling Deficiencies. Fill out and forward DD Form 6 (Packaging Improvement Report) as prescribed in AR 700-58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A, and DSAR 4145.8.

c. Discrepancy in Shipment Report (DISREP) (SF 361). Fill out and forward Discrepancy in Shipment

Report (DISREP) (SF 361) as prescribed in AR 55-38/NAVSUPINST 4610.33A/AFR 75-18/MCO P4610.19B, and DSAR 4500.15.

1-3. Destruction to Prevent Enemy Use

For destruction procedures for electronics equipment, refer to TM 750-244-2.

1-4. Administrative Storage

For procedures, forms and records, and inspections required during administrative storage of this equipment, refer to TM 740-90-1.

1-5. Calibration

For calibration procedures, refer to TB 11-6625-486-35/1.

1-6. Reporting of Equipment Publication Improvements

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-Q, Fort Monmouth, NJ 07703

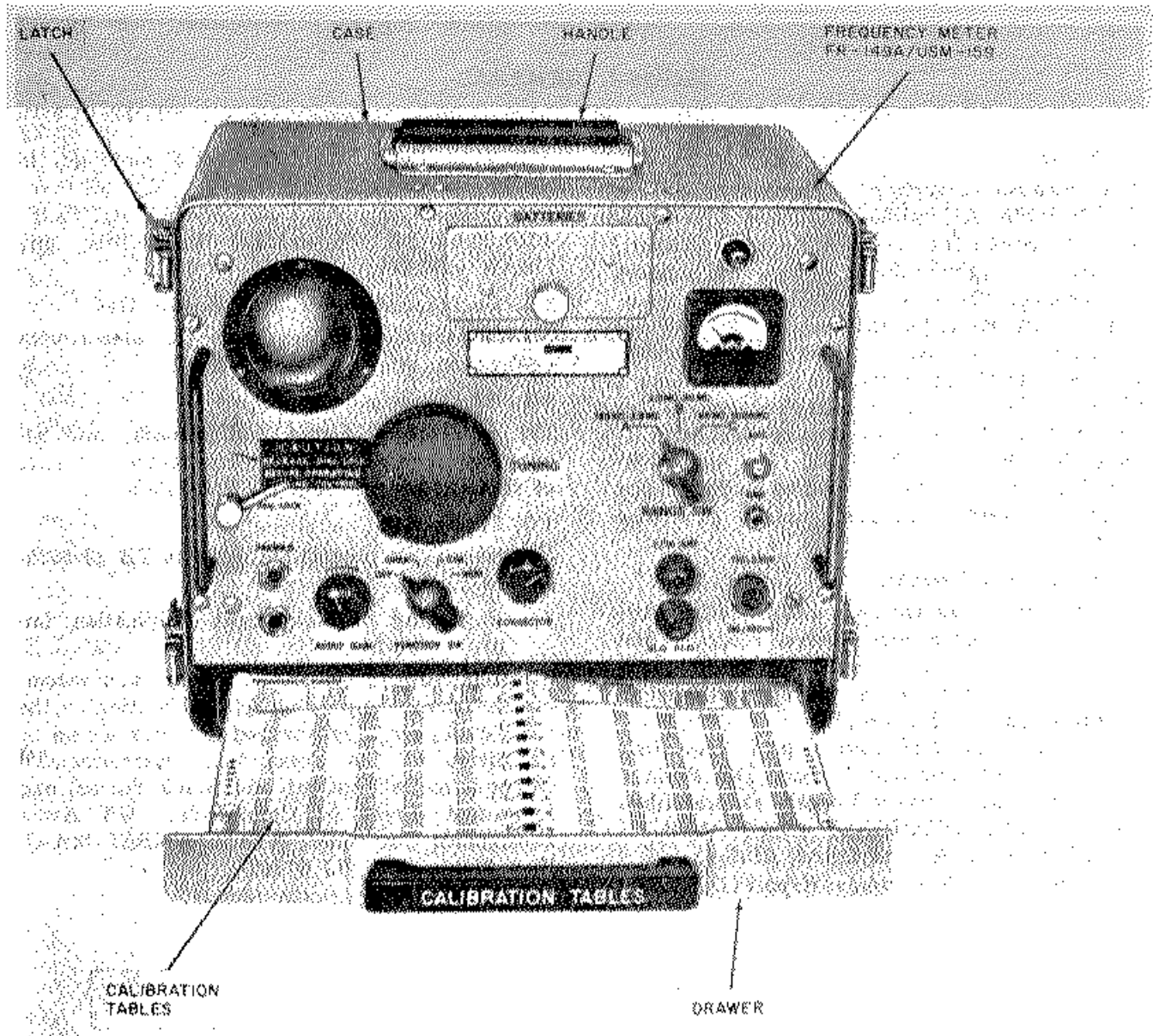


Figure 1-2. Frequency Meters FR-149/USM-159, FR-149A/USM-159, and FR-149B/USM-159.

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Section II. DESCRIPTION AND DATA

1-7. Purpose and Use

Frequency Meters AN/USM-159, AN/USM159A, and AN/USM-159B (fig. 1-1) are precision instruments used to measure radiofrequencies (rf) in the range from 125 kilohertz (kHz) to 1,000 megahertz (MHz). They can also be used as signal generators to provide modulated

or unmodulated signals for testing and calibrating radio equipment. A system of checkpoints is provided to check the calibration of the instrument throughout its operating range.