

TECHNICAL MANUAL

OPERATOR'S, ORGANZATIONAL, DIRECT SUPPORT AND

GENERAL SUPPORT MAINTENANCE

FOR

GENERATOR, SIGNAL

AN/GRM-50

(FSN 6625-868-8353)

HEADQUARTERS, DEPARTMENT OF THE ARMY

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**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND
 GENERAL SUPPORT MAINTENANCE MANUAL
 GENERATOR, SIGNAL AN/ GRM-50**

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*This publication supersedes TM 11-6625-573-15, 19 February 1964, including all changes.

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GENERATOR, SIGNAL
SG-479/G



DUMMY LOAD, ELECTRICAL
DA-296/GRM-50

EL6625-573-14-TM-1

Figure 1-1. Generator, Signal AN/GRM-50 (less running spares).

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes Generator, Signal AN/GRM-50 and covers instructions for installation, operation, and operator, organizational, direct support, and general support maintenance.

b. A list of references is contained in appendix A.

c. The maintenance allocation chart (MAC) appears in appendix C.

1-2. Indexes of Publications

a. *DA Pam 310-4*. Refer to the latest issue of DA Pam 310-4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. *DA Pam 310-7*. Refer to DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

1-3. 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 (Report of packaging and Handling Deficiencies) as prescribed in AR 700-58 (Army)/NAVSUP

PUB 378/AFR 71-4 MCO P4030.29 (Marine Corps), 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 4610.33/AFM 75-18/MCO P4610.19A, and DSAR 4500.15.

1-4. Reporting of Equipment Publication Improvements

The reporting of errors, omissions, and recommendations for improving this publication is authorized and encouraged. Submit reports on DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to *Commander, US Army Electronics Command, ATTN: AMSEL-MA-DS, Fort Monmouth, NJ 07703*.

1-5. Administrative Storage

The procedures for administrative storage are outlined in TM 740-90-1; however, the exact procedure in repacking for limited storage depends on the materials available and the conditions under which the equipment is to be stored.

1-6. Destruction of Army Materiel to Prevent Enemy Use

Demolition and destruction of this equipment will be under the direction of the commanding officer and in accordance with TM 750-244-2.

Section II. DESCRIPTION AND DATA

1-7. Purpose and Use

The AN/GRM-50 is a general-purpose, high-frequency signal generator set (fig. 1-1), that provides radio frequency (rf) signals used to test, evaluate, and align radio receivers, filters, amplifiers, and similar electronic networks. It provides continuous wave (cw) or amplitude modulated (am.) signals in the frequency range of 50 kHz to 65 MHz at calibrated output levels from 0.1 microvolt to 3.0 volts. A direct reading frequency dial is calibrated to an accuracy of one percent. An internal crystal calibrator provides

check points at 100 kHz and 1 MHz intervals with an error of less than 0.01 percent. It can be internally modulated at 400 Hz and externally modulated from dc to 20 kHz or more depending on rf carrier frequency being used. When the DA-296/GRM-50 is connected between the SG-479/G RF OUTPUT 50-ohm connector and the network under test, the SG-479/G operates into a 50-ohm resistive load regardless of the input impedance of the network under test. This maintains a calibrated rf output.