

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)

TEST SET,

MOTOR-GENERATOR

AN/GSM-65A

(NSN4920-00-348-5793)

This copy is a reprint which includes current pages from Changes 1 and 2.

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**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT
 AND GENERAL SUPPORT MAINTENANCE MANUAL
 TEST SET, MOTOR-GENERATOR AN/GSM-65A
 (NSN 4920-00-348-5793)**

REPORTING OF ERRORS

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 Communications and Electronics Materiel Readiness Command. ATTN: DRSEL-ME-Q, Fort Monmouth, NJ 07703. A reply will be furnished direct to you.

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Figure 1-1. Test Set, Motor-Generator AN/GSM-65A.

CHAPTER 1 INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes Test Set, Motor-Generator AN/GSM-65A (fig. 1-1). It includes instructions for installation, operation, and maintenance of the equipment.

b. Appendix A contains a list of references and appendix B contains the maintenance allocation chart.

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 (Packaging Improvement Report (as prescribed in AR 700-

58/NAVSUPINST 4030.29/AFR 71-13/MCO P4030.29A, and DLAR 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 4610.33B/AFR 75-18/MCO P4610.19C and DLAR 4500.15.

1-4. Reporting Equipment Improvement Recommendations (EIR)

EIR's will be prepared using DA Form 2407, Maintenance Request. Instructions for preparing EIR's are provided in TM 38-750. The Army Maintenance Management System. EIR's should be mailed direct to Commander, US Army Communications, and Electronics Material Readiness Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. A reply will be furnished direct to you.

1-5. Administration Storage

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

1-6. Destruction of Army Material

requirements for destruction will be those prescribed in TM 750-244-2.

Section II. DESCRIPTION AND DATA

1-7. Purpose and Use

Test Set, Motor-Generator AN/GSM-65A (tester) is used to test aircraft inverters that have up to a maximum output of 2,500 volt-amperes at unity power factor. Testing is accomplished by applying a load to the inverter under test while metering the input voltage and current and the output voltage, current, and frequency. A source of power capable of providing up to 180 amperes at 28 volts direct current (dc) is required to test inverters having a maximum output of 2,500 volt-amperes.

1-8. Description

a. The tester (fig. 1-2) consists of a panel assembly (1), a cabinet assembly (2), a load bank (3),

and eight cable set assemblies (4). The panel assembly is mounted on the front of the cabinet assembly and the load bank is mounted on the rear. The cable set assemblies are stored in a compartment in the top of the cabinet.

b. Mounted on the panel assembly (fig. 1-3) are five meters, four fuses, three selectors, three switches, two indicators, one connector, one pair of 28 volts direct current (vdc) input connections, and one control.

c. The A.C. AMPS meters (2), A, C. VOLTS meter (3), FREQUENCY meter (5), and D.C. VOLTS meter (7) are protected by a sensitive-type relay connected in the circuit so that a meter overload from 10 to 30 percent will operate the