TECHNICAL MANUAL

OPERATOR AND ORGANIZATIONAL MAINTENANCE MANUAL, INCLUDING REPAIR PARTS AND SPECIAL TOOL LISTS

RADIO SET AN/GRC-165
(NSN 5820-00-935-8038)
AND
CONTROL, RADIO SET C-7648/GRC-165
(NSN 5820-00-931-9139)

This copy is a reprint which includes current pages from Changes 1 through 4. Title was changed by Change 4 as shown above.

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OPERATOR AND ORGANIZATIONAL MAINTENANCE MANUAL, INCLUDING REPAIR PARTS AND SPECIAL TOOL LISTS RADIO SET AN/GRC-165 (NSN 5820-00-935-8038) AND CONTROL, RADIO SETI C-7648/GRC-165 (NSN 5820-00-931-9139)

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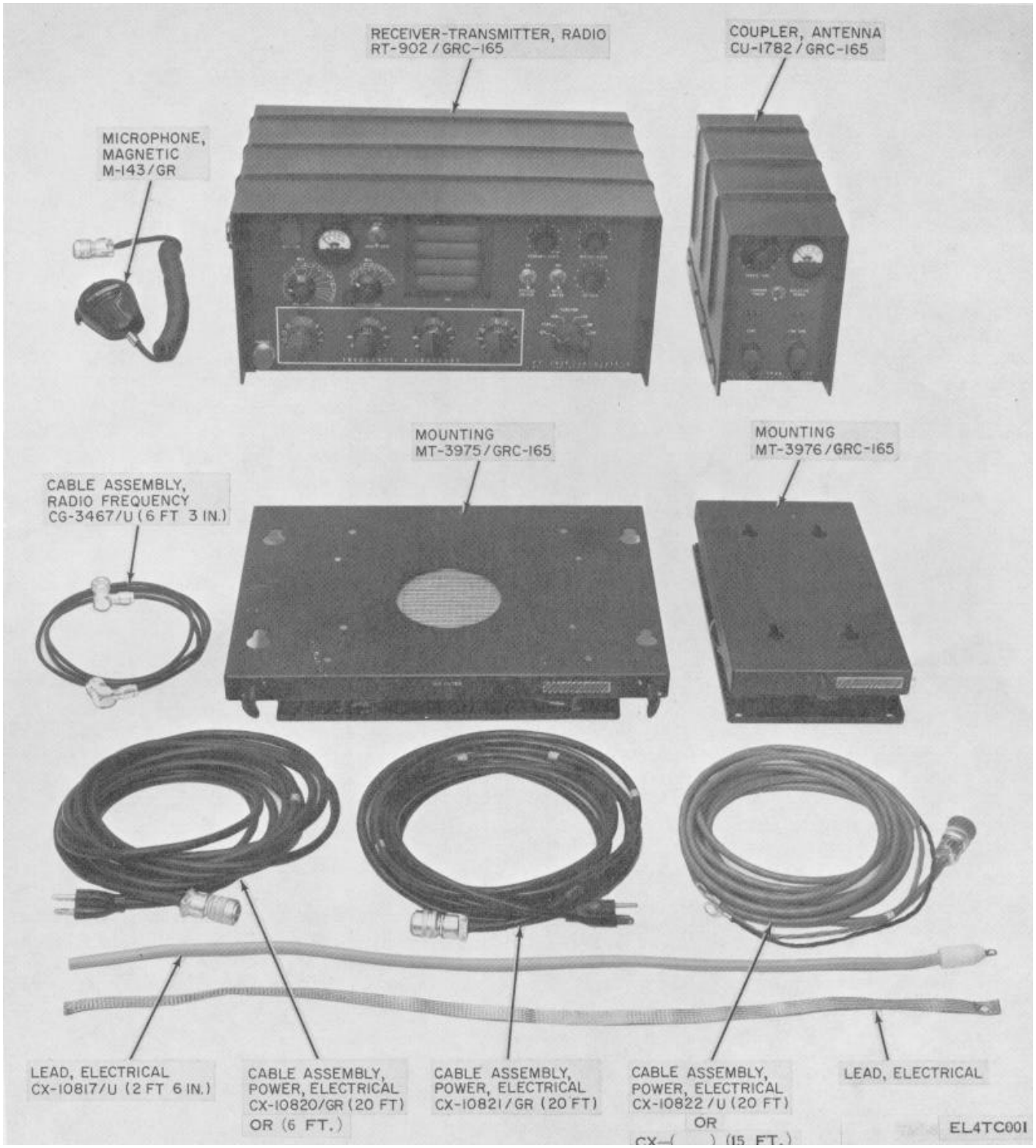

Figure 1-1. Radio Set AN/GRC-165, including optional power cables.

CHAPTER 1
INTRODUCTION

Section I. General

1-1. Scope

a. This manual describes Radio Set AN/ GRC-165 (radio set) (fig. 1-1) and Control, Radio Set C-7648/GRC-165 (fig. 1-2), and covers their installation, operation, troubleshooting, and organizational maintenance. It also includes instructions for using the radio set in usual and unusual conditions and for extending the transmission distance beyond the normal range.

b. The maintenance allocation chart appears in appendix C and the repair parts and special tool lists appear in appendix D.

NOTE

Appendix D is current as of 22 May 1970.

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 the latest issue of DA Pam 310-7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

WARNING

Voltages of up to 1,035 and 230 volts ac and +800 volts dc exist in Receiver transmitter, Radio RT-902/GRC-165.Be extremely careful not to come in contact with these voltages. DEATH ON CONTACT can result if operating personnel fail to observe safety precautions. DO NOT operate the RT-902/ GRC-165 without an RF load; a lethal shock hazard will exist and damage to the equipment can result.

CAUTION

Do not make resistance measurements in transistorized circuits of this equipment except as specified; the voltages present in the ohmmeter may destroy transistor.

NOTE

Throughout this manual references to RT-902/GRC-165 (rt unit) also refers to RT-902A/GRC-165; references to CU1782/GRC-165 (antenna coupler) also refers to CU-1782A/GRC-165; and references to C-7648/GRC-165 (remote control) also refers to C-7648A/GRC-165.

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 7113/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.

1-3.1. 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 Electronics Command, ATTN: DRSELMA-Q, Fort Monmouth, New Jersey 07703.

1-3.2. Administrative Storage

Administrative storage of equipment issued to and used by Army activities shall be in accordance with TM 740-90-1.

1-3.3. Destruction of Army Electronics Materiel

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with