

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

**OPERATOR'S AND ORGANIZATIONAL
MAINTENANCE MANUAL (INCLUDING
REPAIR PARTS AND SPECIAL TOOLS LIST)**

TEST SET, RADIO AN/ARM-5A

(NSN 6625-00-926-7768)

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TEST SET, RADIO AN/ARM-5A
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*This manual supersedes so much of TM 11-6625-828-15, 21 July 1967, as pertains to operator and organizational maintenance.

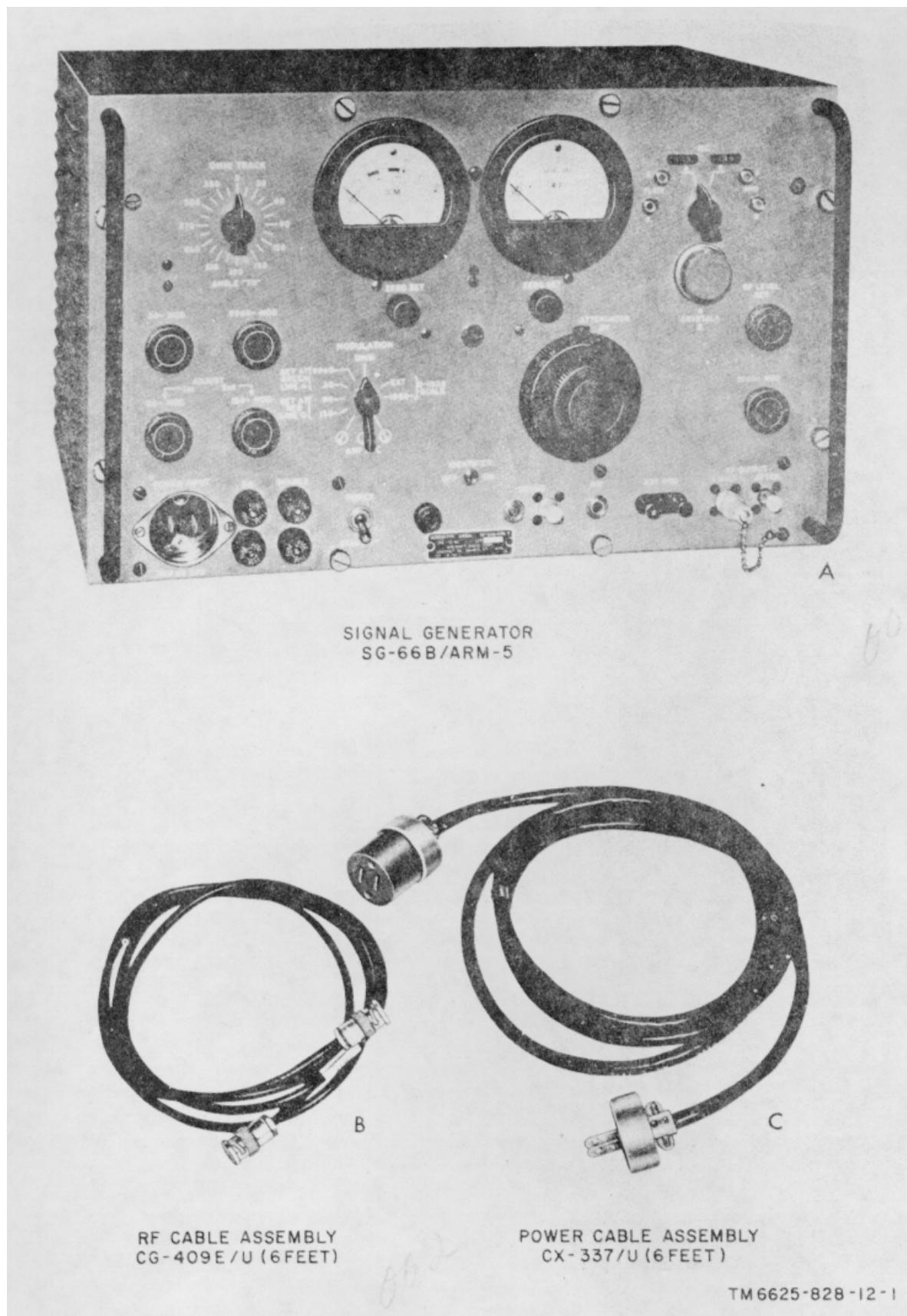


Figure 1-1. Test set, Radio AN/ARM-5A, less running spares.

CHAPTER 1 INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes Test Set, Radio AN/ARM-5A (fig. 1-1) and provides instructions for installation, operation, and operator and organizational maintenance. It includes instructions for operation under usual and unusual conditions, cleaning, and inspection of the equipment.

b. The maintenance allocation chart appears in appendix C.

NOTE

Appendix C is current as of 4 August 1976.

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 any 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 DSAR 4145.8.

1-7. Purpose and Use

a. Test Set, Radio AN/ARM-A is a portable signal generator with crystal-controlled frequencies within the 108- to 132-megacycle (me) band. It provides simulated omni and amplitude localizer signals of known frequency, amplitude, and modulation for testing of very high-frequency (vhf) navigational receiving equipment within the covered frequency range.

b. Two crystal-controlled frequencies are provided which may be anywhere within the 108- to 132-mc band. Normally, the signal generator is supplied with crystals which provide carrier frequencies of 110.9 me and 114.9 me, one frequency located in the localizer band and the other located in the omnifrequency band.

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.

1-4. Destruction of Army Electronics Materiel

Destruction of Army Electronics equipment to prevent enemy use shall be in accordance with TM 750-2442.

1-5. Administrative Storage

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

1-6. 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: DRSEL-MA-Q, Fort Monmouth, NJ 07703.

1-6.1. Reporting Equipment Improvement Recommendations (EIR).

EIR 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 the Commander, US Army Electronics Command, ATTN: DRSEL-MA-Q, Fort Monmouth, New Jersey 07703. A reply will be furnished direct to you.

Section II. DESCRIPTION AND DATA

Crystals for frequencies other than those normally covered may be used as desired within the range specified.

c. When used in conjunction with a 51-ohm antenna mounted on a hangar roof or other high and unobstructed location, the AN/ARM-A can be used to test aircraft radiated signals. The following may be performed on equipment in one aircraft of a squadron simultaneously; either on the flight line or in the air:

(1) 24 omniscourses.

(2) Left-center-right positions on the amplitude localizer, including sensitivity and flag alarm.

(3) Omnicourse width.

(4) Operation of TO-FROM meter.

(5) Operation of omniflag alarm.

d Simultaneously with the test signals, instructions