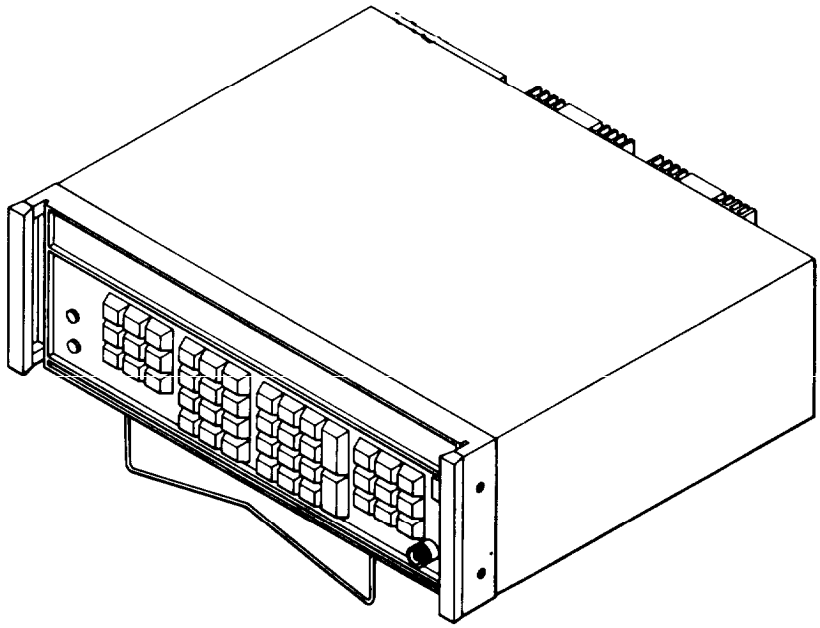
TM 11-6625-2975-12

TECHNICAL MANUAL

OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL



TEST SET, RECEIVER AN/ARM-180 (NSN 6625-01-041-4161)

HEADQUARTERS, DEPARTMENT OF THE ARMY 1984

27 AUGUST 1984

TECHNICAL MANUAL

No. 11-8825-2975-12

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 27 August 1984

Operator's and Oranizational Maintenance Manual

TEST SET, RECEIVER AN/ARM-180 (NSN 6625-01-041-4161)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703. A reply will be furnished to you.

*This manual supersedes so much of TM 11-6625-2975-14&P, 30 December 1980, as pertains to operator's and organizational maintenance.

HOW TO USE THIS MANUAL

This manual is designed to help you operate as well as maintain (both at the operator and organizational level) Test Set, Receiver AN/ARM-160.

A front cover index is provided for quick reference to information contained in this manual. Each item appearing on the front cover is boxed and identified by topic, with the page number where the information is located.

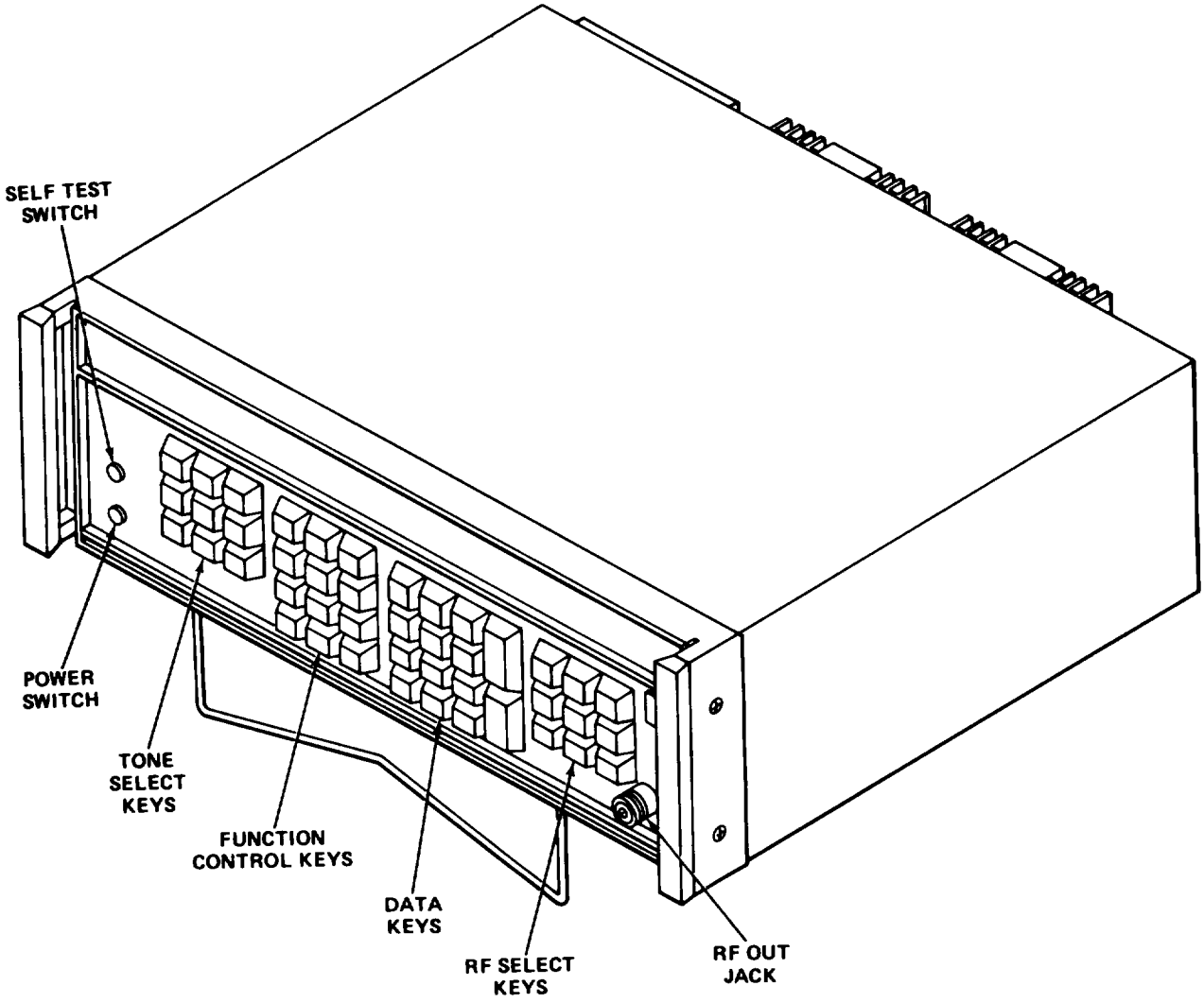
Paragraphs in this manual are numbered by chapter and order of appearance within a chapter. A subject index appears at the beginning of each section to help you find the exact paragraph you are looking for.

Measurements in this manual are given in both US standard and metric units.

There are warnings located at the beginning of this manual. Before doing maintenance on the equipment, learn the warnings and always follow safety procedures and precautions.

Step by step procedures with illustrations will give You all the necessary information needed to maintain the equipment. The steps must be followed in exact sequence. Do not attempt any short-cuts.

Instructions for performing PMCS tasks are located in paragraphs 3-5, 3-6, 3-7, and 3-8.



TEST SET, RECEIVER AN/ARM-180

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TEST SET, RECEIVER AN/ARM-180

CHAPTER 1
INTRODUCTION

OVERVIEW

This chapter supplies both general and specific information about Test Set, Receiver AN/ARM-180, and acquaints user with the equipment's purpose, basic principles of operation, and characteristics. Also furnished is information regarding proper forms used to document equipment maintenance and status, packaging and handling deficiencies, and discrepancies in shipment.

Section I GENERAL INFORMATION

1.1. SCOPE.

Type of Manual: Operator's and Organizational Maintenance.

Equipment Name and Model Number: Test Set, Receiver AN/ARM-180.

Purpose of Equipment: To generate modulated radio frequency (rf) signals for use in bench testing very high frequency omnidirectional range (VOR), Iocalizer (LOC), glidescope (GS), and marker beacon (MB) receivers.

1.2. MAINTENANCE FORMS, RECORDS, AND REPORTS.

REPORTS OF MAINTENANCE AND UNSATISFACTORY EQUIPMENT

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750 as contained in Maintenance Management Update.

REPORT OF PACKAGING AND HANDLING DEFICIENCIES

Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-1 1-2/DLAR 4140.55/NAVMATINST 4355.73A/AFR 400-54/MCO 4430.3F.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS. (CONT)

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 461O.33C/AFR 75-161MC0 P461O.19D/DLAR 4500.15.

1-3. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).

If your Test Set, Receiver AN/ARM-160 needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. put it on an SF 366 (Quality Deficiency Report). Mall it to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MP, Fort Monmouth, New Jersey 07703. A reply will be sent to you.

1-4. CONSOLIDATED INDEX OF ARMY PUBLICATIONS AND BLANK FORMS.

Refer to the latest issue of DA Pam 310-1 to determine whether there are new editions, changes or additional publications pertaining to the equipment.

1-5. DESTRUCTION OF ARMY ELECTRONICS MATERIEL TO PREVENT ENEMY USE.

Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

1-6. ADMINISTRATIVE STORAGE.

Administrative storage of equipment issued to and used by Army activities will have preventive maintenance performed in accordance with the PMCS charts before storing. When removing the equjpment from administrative storage, the PMCS shall be performed to ensure operational readiness. See chapter 3, section III for PMCS.

Administrative storage of equipment shall be done In accordance with TM 740-90-1, Administrative Storage of Equipment. Disassembly and repacking of equipment for shipment or limited storage are covered in chapter 3, section V.

1-7. NOMENCLATURE CROSS-REFERENCE LIST.

This list contains names used throughout this manual in place of official nomenclature.

COMMON NAME	OFFICIAL NOMENCLATURE
test set	Test Set, Receiver AN/ARM-160

1-8. SAFETY, CARE, AND HANDLING.

Observe all warnings, cautions and notes in this manual. This equipment can be extremely dangerous if these instructions are not followed. Make sure the following caution Is observed as well.

CAUTION

When operating the test set, do not restrict airflow through the blower filter.

After cleaning the blower filter, make sure it is completely dry before installing it In the blower filter cage.

Section II EQUIPMENT DESCRIPTION

1.9. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.

PURPOSE OF TEST SET

A solid-state signal generator designed for bench testing VOR, localizer, glideslope, and marker beacon receivers.

FEATURES

COMP BNC, AUX BNC and DEMOD BNC connectors
50/60 Hz operation
Input power identification plate
115 or 230 vac operation

NOTE

The test set is wired for 115 vac operation; however, the power transformer input wiring can be changed to permit 230 vac operation. This change is made at the next level of maintenance.

OPERATIONAL CAPABILITIES

Test set operational capabilities include:

VOR, localizer, glide slope, and marker beacon signals
Selectable VOR radials from 000.00 to 359.99 degrees
Deletion of modulation tone or tones for flag checks
1020 Hz audio tone for identification signal
Standard localizer and glide slope rf frequency pairings
Variable rf frequency to check receiver selectivity
Variable rf output level to check receiver sensitivity
Variable DDM in 0.001 increments.