

**DEPARTMENT OF THE ARMY TECHNICAL MANUAL**

---

**OPERATOR AND ORGANIZATIONAL**

**MAINTENANCE MANUAL**

**TEST SET, RECEIVER, RADIO**

**AN/ARM-71**

**This reprint includes all changes in effect at the time of publication; changes 1 and 2.**

---

**HEADQUARTERS, DEPARTMENT OF THE ARMY\***

**22 JUNE 1964**

Technical Manual  
No. 11-6625-583-12 }

HEADQUARTERS,  
DEPARTMENT OF THE ARMY  
WASHINGTON 25, D. C., 22 June 1964

## TEST SET, RECEIVER, RADIO AN/ARM-71

CHAPTER	Paragraph	Page	
CHAPTER Section	1. INTRODUCTION		
	I. General		
	Scope .....	1	3
	Index of publications .....	2	3
	Forms and records .....	3	3
	II. Description and data		
	Purpose and use .....	4	3
	Technical characteristics .....	5	4
	Components of Test Set, Receiver, Radio AN/ARM-71 .....	6	4
	Common names .....	7	5
CHAPTER Section	Description of test panel and receiver simulator .....	8	5
	Description of minor components .....	9	5
	Additional equipment required .....	10	7
	2. OPERATION		
	I. Service upon receipt of equipment		
	Unpacking .....	11	8
	Checking unpacked equipment .....	12	9
	II. Operator's controls and indicators		
	Test panel .....	13	9
	Receiver simulator .....	14	11
III. Operation of test panel			
Types of operation .....	15	13	
Starting procedure .....	16	13	
Glide slope receiver alignment and instrumentation adjustments .....	17	13	
Marker beacon receiver alignment .....	18	14	
General performance tests .....	19	15	
Input current .....	20	15	
Glide slope selectivity .....	21	15	
Glide slope linearity .....	22	15	
Glide slope automatic gain control .....	23	16	
Glide slope rf sensitivity .....	24	16	
Marker beacon selectivity .....	25	16	
Marker beacon audio output .....	26	17	
Marker beacon audio frequency response .....	27	17	
Marker beacon automatic gain control .....	28	17	
Marker beacon input threshold ratio .....	29	17	
Marker beacon no-signal audio noise level .....	30	17	
Marker beacon audio noise level with signal .....	31	17	
Marker beacon lamp activation. ....	32	18	
Stopping procedure .....	33	18	
IV. Operation of receiver simulator			
Types of operation .....	34	18	
Starting procedure .....	35	19	
Test procedures .....	36	19	
Stopping procedure .....	37	20	
CHAPTER Section	3. MAINTENANCE INSTRUCTIONS		
	Scope of maintenance .....	38	21
	Tool and materials required for maintenance .....	39	21
	Preventive maintenance .....	40	21
	Daily preventive maintenance checks and services .....	41	21
	Daily preventive maintenance checks and services chart .....	42	21
Cleaning .....	43	22	

		Paragraph	Page
CHAPTER	Monthly preventive maintenance checks and services .....	44	22
	Monthly preventive maintenance checks and services chart .....	45	22
	Preservation .....	46	24
	Quarterly preventive maintenance checks and services .....	47	24
	Quarterly preventive maintenance checks and services chart .....	48	25
	Replacement of pilot lamps. ....	49	25
CHAPTER	<b>4. SHIPMENT, LIMITED STORAGE, AND DEMOLITION TO PREVENT ENEMY USE</b>		
Section	I. Shipment and limited storage		
	Disassembly of equipment.....	50	26
	Repackaging for shipment and limited storage .....	51	26
	II. Demolition of materiel to prevent enemy use		
	Authority for demolition .....	52	26
	Method of destruction .....	53	26
APPENDIX	I. REFERENCES .....		28
	II. MAINTENANCE ALLOCATION .....		29
	III. BASIC ISSUE ITEMS LIST .....		33

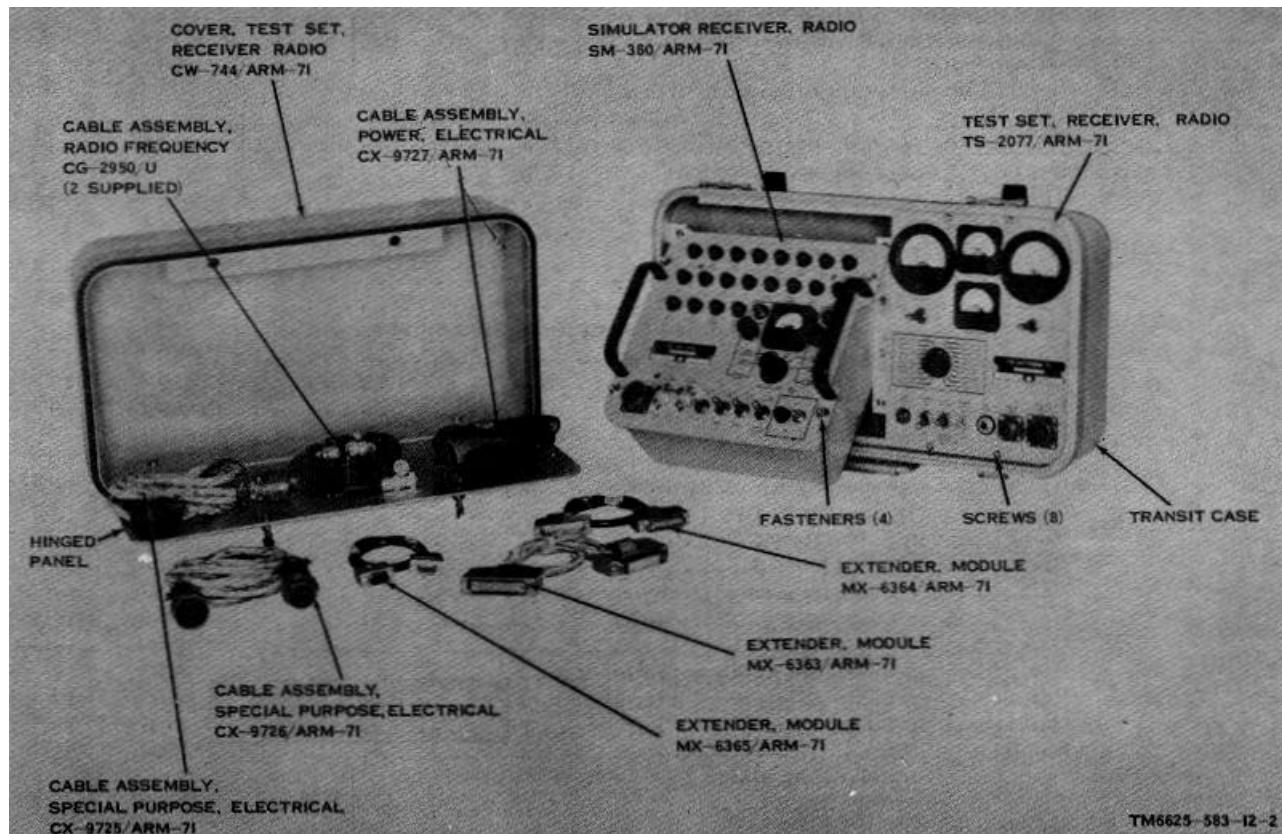


Figure 1. Test Set, Receiver, Radio AN/ARM-71.

## CHAPTER 1

### INTRODUCTION

---

#### Section I. GENERAL

##### **1. Scope**

This manual describes Test Set, Receiver, Radio AN/ARM-71 (fig. 1) and covers its operation and the operator's and organizational maintenance. The maintenance includes preventive maintenance checks and services, cleaning, preservation, and replacement of indicator lamps.

##### **2. Index of Publications**

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

Department of the Army Pamphlet 310-4 is an index of current technical manuals, technical bulletins, supply manuals, supply bulletins, lubrication orders, and modification work orders which are available through publications supply channels. The index lists the individual parts (-10, -20, -35P, etc) and the latest changes to and revisions of each equipment publication.

##### **3. Forms and Records**

a. *Reports of Maintenance and Unsatisfactory*

*Equipment.* Use equipment forms and records in accordance with instructions in TM 38-750.

b. *Report of Damage or Improper Shipment.* Fill out and forward DD Form 6, Report of Damage or Improper Shipment, as prescribed in AR 700-58 (Army), NAVSANDA Publication 378 (Navy), and AFR 71-4 (Air Force).

c. *Reporting of Equipment Manual Improvements.* The direct reporting, by the individual user, of errors, omissions, and recommendations for improving this equipment manual is authorized and encouraged. DA Form 2028 will be used for reporting these improvements. This form may be completed by the use of pencil, pen, or typewriter. DA Form 2028 will be completed in triplicate and forwarded by the individual using the manual. The original and one copy will be forwarded to: Commanding General, U. S. Army Electronics Command, ATTN: AMSEL-MR-MP-P, Fort Monmouth, New Jersey, 07703. One information copy will be provided to the individual's immediate supervisor (officer, noncommissioned officer, supervisor, etc).

#### Section II. DESCRIPTION AND DATA

##### **4. Purpose and Use (fig. 1)**

a. *Purpose.* Test Set, Receiver, Radio AN/ARM-71 includes Test Set, Receiver, Radio TS-2077/ARM-71 and Simulator, Receiver, Radio SM-380/ARM-71, mounted in a single transit case. These units provide simulated signals and metering facilities which are used to test and align Receiver, Radio R-844/ARN-58 (the glide slope and marker beacon receiver portion of Radio Receiving Set AN/ARN-58, T.O.12R5-2ARN58-2).

b. *Use.* The TS-2077/ARM-71 normally remains mounted in the transit case during operation and is used to troubleshoot and align the R-844/ARN-58 on a test bench. The SM-380/ARM-71 may be removed from the transit case and is used to troubleshoot the R-844/ARN-58 antennas, control panel, course indicator, and cabling in an aircraft. The TS-2077/ARM-71 and the SM-380/ARM-71 can also be connected together with the cables supplied so that a self-checkout procedure can be performed (para 45).