

# TM 11-6625-820-45

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

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**GS AND DEPOT MAINTENANCE MANUAL**  
**TEST SET, RADIO AN/ARM-92**



HEADQUARTERS, DEPARTMENT OF THE ARMY

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GS AND DEPOT MAINTENANCE MANUAL

TEST SETS, RADIO AN/ARM-92 AND AN/ARM-92A

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\*This manual supersedes TM 11-6625-820-45, 15 February 1966.

## CHAPTER 1

### FUNCTIONING

#### Section I. GENERAL FUNCTIONING OF TEST SETS, RADIO AN/ARM-92 AND AN/ARM-92A

##### 1-1. Scope

*a. General.* This manual contains general support and depot maintenance instructions for Test Sets, Radio AN/ARM-92 and AN/ARM-92A. It includes instructions appropriate to these categories of maintenance for troubleshooting, testing, aligning, and repairing the equipment. The manual also lists tools, materials, and test equipment for maintenance. Detailed functions of the equipment are also covered.

*b. Reporting of Equipment Manual Improvements.* The direct reporting of errors, omissions, and recommendations for improving this equipment manual by the individual user is authorized and encouraged. DA Form 2028 (Recommended Changes to DA Publications) will be used for reporting these improvements. This form may be completed using pencil, pen, or typewriter and forwarded direct to Commanding General, U. S. Army Electronics Command, ATTN: AMSEL-MR-NMP-AD, Fort Monmouth, N. J. 07703.

*Note:* For other applicable forms and records, see paragraph 1-3, TM 11-6625-820-12.

*c. Index of Equipment Publication.* 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. DA Pam 310-4 is a current index of technical bulletins, supply bulletins, lubrication orders, and modification work orders available through publications channels. The index lists the individual parts (-10, -20, -35P, etc) and the latest changes and revisions of each equipment publications.

##### 1-2. Block Diagram Functioning of Test Set, Radio AN/ARM-92

*a. General.* Test Set Radio, AN/ARM-92 provides for the complete testing of Radio Receiving Set AN/ARN-82 (receiving set) when used with external test equipment. The test set can also be used to test a glide-slope receiver, and provides for flag and deviation loading. The glide-slope test requires a special cable that is not supplied with this unit. The functions of Test Set, Radio AN/ARM-92 are:

- (1) Power distribution.
- (2) Phase shifting.
- (3) Current measuring.
- (4) Compass simulation.
- (5) Self-test of control unit and functions of the test set.

*b. Power Distribution Circuits.* Control, Radio Set C-6873/ARM-82 (control unit), power relay K1, and power transformer T1 comprise the power distribution circuits. The test set connects 27.5 volts direct current (dc) from an external power source to the control unit which applies or removes the 27.5 volts dc from the remaining power circuits. When the control unit applies this voltage to the remaining power circuits, 27.5 volts dc is applied to Radio Receiver R-1388/ARN-82 (radio receiver), or to the glide-slope receiver, and to power relay K1. The relay then energizes and connects 115 volts, 400 cycles per second (cps) to power transformer T1. Transformer T1 steps the voltage down to 26 volts, 400 cps, which is applied to the radio receiver. The control unit also supplies the tuning information required by the radio receiver, or the glide-slope receiver.