

TECHNICAL MANUAL

**Operator's and Organizational Maintenance Manual
RADAR SET
AN/PPS-4A
(NSN 5840-00-168-1566)**

**This copy is a reprint which includes current
pages from Changes 1 through 6.**

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Figure 1-1. Radar Set AN/PPS-4A, components and auxiliary battery.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes Radar Set AN/PPS-4A (fig. 1-1) and covers its installation, operation, and operator's and organizational maintenance. It includes operation under usual and unusual conditions, cleaning and inspection of the equipment, and replacement of parts available for operator and organizational maintenance.

b. The basic issue items list (BIIL) appears in appendix B. The maintenance allocation chart (MAC) appears in appendix C.

1-2. 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.

1-3. Maintenance Forms, Records, and Reports

a. *Reports of Maintenance and Unsatisfactory Equipment.* Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System.

b. *Report of Packaging and Handling Deficiencies.* Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 73511-2/DLAR 4140.55/NAVMATINST 4355.73A/ AFR 400-54/MCO 4430.3F.

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 4610.33C/AFR 75-18/MCO P4610.19D/DLAR 4500.15.

1-3.1. 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 or DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL- ME-MP, Fort Monmouth, New Jersey 07703. In either case, a reply will be furnished direct to you.

1-3.2. Reporting Equipment Improvement Recommendations (E I R)

If your Radar Set 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 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: DRSEL- ME-MP, Fort Monmouth, New Jersey 07703. We'll send you a reply.

1-3.3. 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 equipment from administrative storage the PMCS should be performed to assure operational readiness. Disassembly and repacking of equipment for shipment or limited storage are covered in chapter 6.

1-3A. Destruction of Army Electronics Materiel

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

Section II. DESCRIPTION AND DATA

1-4. Purpose and Use

Radar Set AN/PPS-4A (fig. 1-1) is a lightweight, portable, transistorized radar set. The AN/PPS-4A is capable of searching for and detecting moving targets, such as personnel or vehicles, only in the presence of fixed targets. The AN/PPS-4A can also

detect large fixed targets. The nominal maximum range at which large moving targets can be detected is 6,000 meters (19,685 feet). The nominal maximum range at which small moving targets, such as personnel, can be detected is 1,500 meters (4,921 feet). The AN/PPS-4A can be rotated through 6,400 mils (360°) in azimuth, and from