

TECHNICAL MANUAL

**OPERATOR'S AND ORGANIZATIONAL
MAINTENANCE MANUAL INCLUDING**

**REPAIR PARTS AND SPECIAL
TOOL LISTS**

RADAR SURVEILLANCE SETS

AN/APS-94B AND AN/APS-94C

AND

TEST FACILITIES KIT

MK-652/APS-94

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

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AND TEST FACILITIES KIT MK-652/APS-94

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* This manual supersedes TM 11-5895-284-12, 14 August 1961, including all changes, and section II, First Echelon Functional Parts List, section IV, Maintenance Allocation , section V, Maintenance Allocation Chart, and section VI, Allocation of Tools for Maintenance Functions of TM 11-5995-20-15P, 13 February 1964.

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes Radar Surveillance Sets AN/APS-94B and AN/APS-94C (radar sets) and covers operation and operator and organizational maintenance. It includes operation, cleaning, inspection of the equipment, and replacement of parts available to the operator and the organizational maintenance personnel. The maintenance allocation chart (MAC) is in appendix C and the basic issue items list is in appendix B.

b. Official nomenclature followed by (*) is used to indicate all models of the item of equipment included in this technical manual. Thus, Radar Surveillance Set AN/APS-94(*) represents Radar Surveillance Sets AN/APS-94B and AN/APS-94C. Recorder-Processor-Viewer, Radar Mapping RO-166(*)/UP indicates Recorder-Processor-Viewers, Radar Mapping RO-166/UP, RO-166A/UP, RO-166B/UP, RO-166C/UP, and RO-166D/UP.

1-2. Indexes of Equipment Publications

a. *DA Pam 310-4.* 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.

b. *DA Pam 310-7.* Refer to DA Pam 310-7 to determine whether there are any 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 (Report of Packaging and Handling Deficiencies) as prescribed in AR 700-58 (Army)/NAVSUP PUB 378 (Navy)/AFR 71-4 (Air Force)/and MCO P4030.29 (Marine Corps).

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 (Army)/NAVSUP PUB 459 (Navy)/AFM 75-34 (Air Force)/and MCO P4610.19 (Marine Corps).

1-3.1. Reporting of Equipment Publication Improvements

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 forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MASS, Fort Monmouth, NJ 07703.

Section II. DESCRIPTION AND DATA

1-4. Purpose and Use

a. *Basic Use.* Radar Surveillance Sets AN/APS-94B and AN/APS-94C are side-looking airborne radar (SLAR) sets. The sets provide permanent aerial photoradar maps of terrestrial (ground) targets to ranges of 25, 50, or 90 kilometers (km) on either or both sides of the flightpath of the aircraft in which the set is installed. The aerial photoradar maps provide information on fixed and moving targets within the maximum range of 90 kilometers. The AN/APS-94(*)

provides photographic maps which are recorded by Recorder, Radar Mapping RO-225A/APS-94A on 5-inch strip film (standard film only) or by Recorder-Processor-Viewer, Radar Mapping RO-166(*)/UP (TM 11-5820-680-12), which records maps on 9-inch film (standard film only).

b. *Maps.* Separate films are exposed simultaneously. One film records the fixed-target (ft)