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DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S MANUAL

RADIO SETS AN/GRC-87 AND AN/VRC-34



HEADQUARTERS, DEPARTMENT OF THE ARMY
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**RADIO SETS AN/GRC-87 AND AN/VRC-34**

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*This manual supersedes so much of TM 11-263, 20 June 1956¹ including C1, 15 October 1957; C2, 29 April 1960; C3, 15 November 1960; C4, 21 December 1961; C5, 23 November 1962, and C6, 17 April 1963, as pertain to the operation of subject equipment.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

a. This manual describes Radio Sets AN/GRC-87 and AN/VRC-34 (fig 1 and 2) and covers operation and operator's maintenance. It includes operation under usual and unusual conditions, cleaning and inspection of the equipment, and replacement of parts available to first echelon maintenance.

b. Official nomenclature followed by (*) is used to indicate all models of the equipment item covered in this manual. Thus, Receiver-Transmitter RT-77 (*)/GRC-9 represents Receiver-Transmitters RT-77/GRC-9 and RT77A/GRC-9; Dynamotor-Power Supply DY105 (*)/GRC-9X (power supplies) represents Dynamotor-Power Supplies DY-105/GRC-9X, DY-105A/GRC-9X, and DY-105B/GRC-9X; Power Units PE-162-(*) represents PE-162A, PE-162-B, and PE-162-C; Power Supply PP-327 (*)/GRC-9Y represents Power Supplies PP-327/GRC-9Y, PP-327A/GRC-9Y, and PP-327B/GRC-9Y.

2. Forms and Records

a. *Report of Maintenance and Unsatisfactory Equipment.* Use equipment forms and records in

accordance with instructions in TM 38-750.

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

c. *Comments on Manual.* Forward all comments on this publication direct to: Commanding Officer, U. S. Army Electronics Material Support Agency, ATTN: SELMS-MP, Fort Monmouth, New Jersey, (DA Form 1598 (Record of Comments on Publications), DA Form 2496 (Disposition Form), or letter may be used.)

d. *Index of Publications.* Refer to the latest issue of DA PAM 310-4 to determine whether there are new editions, changes, or additional publications pertaining to your equipment. Department of the Army Pamphlet No. 310-4 is a current index of Technical Manuals, Technical Bulletins, Supply Bulletins, Lubrication Orders, and Modification Work Orders that 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.

Section II. DESCRIPTION AND DATA

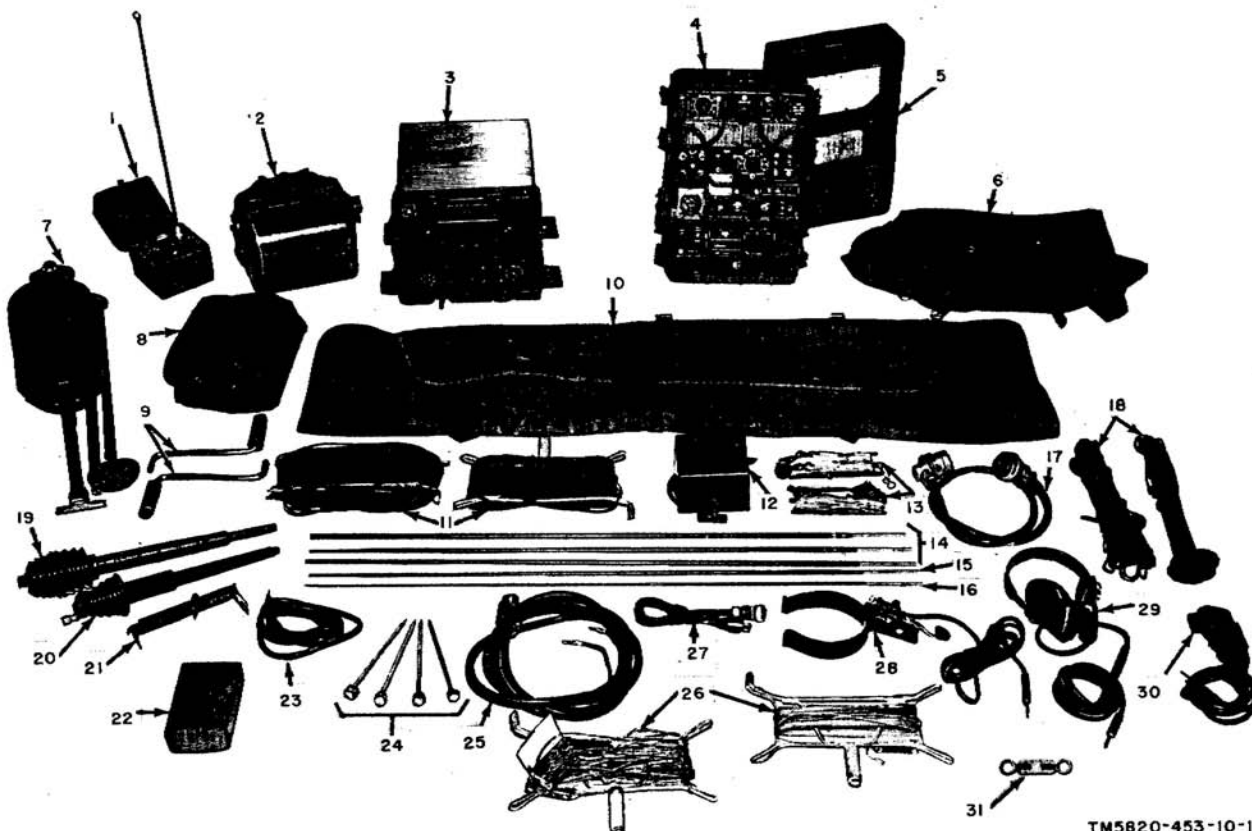
3. Purpose and Use

a. The radio sets covered in this manual provide low-power, short-range (10- to 30-mile) communications capable of transmitting and receiving radio signals in the frequency range of 2 to 12 megacycles (mc). Each radio set can transmit and receive (not simultaneously) continuous-wave (cw), modulated continuous-wave (mcw), and amplitude-

modulated (am.) radio signals.

b. The AN/GRC-87 (fig. 1) may be used for ground (man-transportable) or vehicular installations. The radio set may be operated as an isolated unit or in a net group.

c. The AN/VRC-34 (fig. 2) is installed and operated in a vehicle and may be operated as an isolated unit or in a net group



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Figure 1. Radio Set AN/GRC-87.