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TECHNICAL MANUAL

OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL

FOR

WATTMETER ME-497/U

(BIRD ELECTRONIC MODEL 6104)

(NSN 6625-01-064-3555)

HEADQUARTERS, DEPARTMENT OF THE ARMY
13 MAY 1982

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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, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Communications-Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, New Jersey 07703.

In either case, a reply will be furnished direct to you.

This manual is an authentication of the manufacturer's commercial literature which, through usage, has been found to cover the data required to operate and maintain this equipment. Since the manual was not prepared in accordance with military specifications, the format has not been structured to consider levels of maintenance.

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CHAPTER 0
INTRODUCTION

0-1. SCOPE. This manual describes Wattmeter ME-497/U and provides instructions for operation and maintenance. The ME-497/U is a Termaline Model 6104 Radio Frequency Wattmeter manufactured by Bird Electronic Corporation.

0-2. INDEXES OF 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 modification work orders (MWO'S) pertaining to the equipment.

0-3. 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 (Army).

b. *Report of Item and Packaging Discrepancies.* Fill out and forward SF 364. [Report of Discrepancy (ROD)] as prescribed in AR 735-11-2/DLAR 4140.55/NAVMATINST 4355.73/AFR 400-54/MCO 4430.3E.

c. *Discrepancy in Shipment Report (DISREP) (SF 361).* Fill out and forward Discrepancy in Shipment Report (DISREP) (SF 361) as prescribed in AR 55-36/ NAVSUPINST 4610.33B/AFR75-18/MCOP4610.19C and DLAR 4500.15.

0-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR). If your ME-497/U 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. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to Commander, US Army Communications — Electronics Command, ATTN: DRSEL-ME-MQ, Fort Monmouth, New Jersey 07703. We'll send you a reply.

0-5. ADMINISTRATIVE STORAGE. To prepare the equipment for administrative storage, ascertain its operability and reliability. In addition, use the proper packing materials.

0-6. DESTRUCTION OF ARMY ELECTRONICS MATERIEL. Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

0-7. PURPOSE AND FUNCTION. Wattmeter ME-497/U (see figure 0-1) is designed to measure radio frequency (RF) power under non-radiating conditions, and has the following specific uses:

a. Troubleshooting and routine maintenance.

b. Transmitting tests.

c. Transmission line loss measurements.

d. Testing of coaxial line insertion devices such as connectors, switches, relays, filters, tuning stubs, patch cords, etc.

e. As an RF load resistor.

f. As a modulation monitor (audio frequency AM may be monitored by connecting phones, amplifiers, or audio voltmeters to the DC meter circuits).

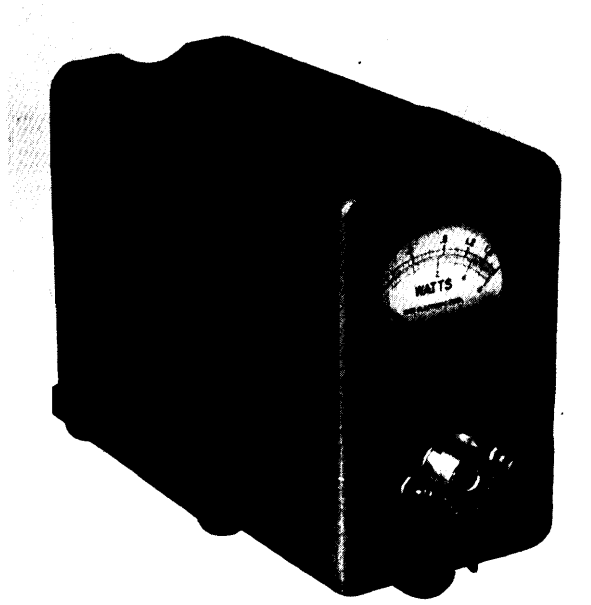

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Figure 0-1. Wattmeter ME-497/U