

DEPARTMENT OF THE ARMY TECHNICAL MANUAL **TM 11-6660-238-15**

DEPARTMENT OF THE AIR FORCE TECHNICAL MANUAL **TO 31-M1-2U-2**

ORGANIZATIONAL, DS, GS, AND DEPOT
MAINTENANCE MANUAL

**BALLOON INFLATION AND
LAUNCHING DEVICE
ML-594/U**

This copy is a reprint which includes current
pages from Changes 1 and 2

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AND THE AIR FORCE

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

BALLOON INFLATION AND LAUNCHING DEVICE ML-594/U

(NSN 6660-00-999-2663)

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 and Fort Monmouth, ATTN: DR-SEL-ME-MP, Fort Monmouth, New Jersey 07703.

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

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual describes the Balloon Inflation and Launching Device ML-594/U (fig. 1-1) and includes complete installation, operation, and maintenance instructions at all levels of maintenance at which maintenance is authorized. It includes instructions for operation under usual and unusual conditions, cleaning and inspection of the equipment, and replacement of parts available to the operator.

b. The Components of End item List (COEI) and Basic Issue Items (BII) appear in appendix B.

c. 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 DA Pam 738-750 as contained in Maintenance Management Update.

b. *Report of Packaging and Handling Deficiencies.* Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/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. 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 operation readiness. Disassembly and repacking of equipment for shipment or limited storage are covered in chapter 6.

1-3.2. Destruction of Army Electronics Materiel

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

1-3.3. Reporting Equipment Improvement Recommendations (EIR)

If your Balloon Inflation and Launching Device 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.

1-3.4. Hand Receipt

This manual has a companion document with a TM number followed by -HR (which stands for Hand Receipt). The TM 11-6660-238-15-HR consists of preprinted hand receipts (DA Form 2062) that list end item related equipment (i.e., COEI, BII, and AAL) you must account for. As an aid to property accountability, additional -HR manuals may be requisitioned from the US Army Adjutant General Publications Center, Baltimore, MD, in accordance with the procedures in Chapter 3, AR 310-2, and DA Pam 310-10-2.

Section II. DESCRIPTION AND DATA

1-4. Purpose and Use

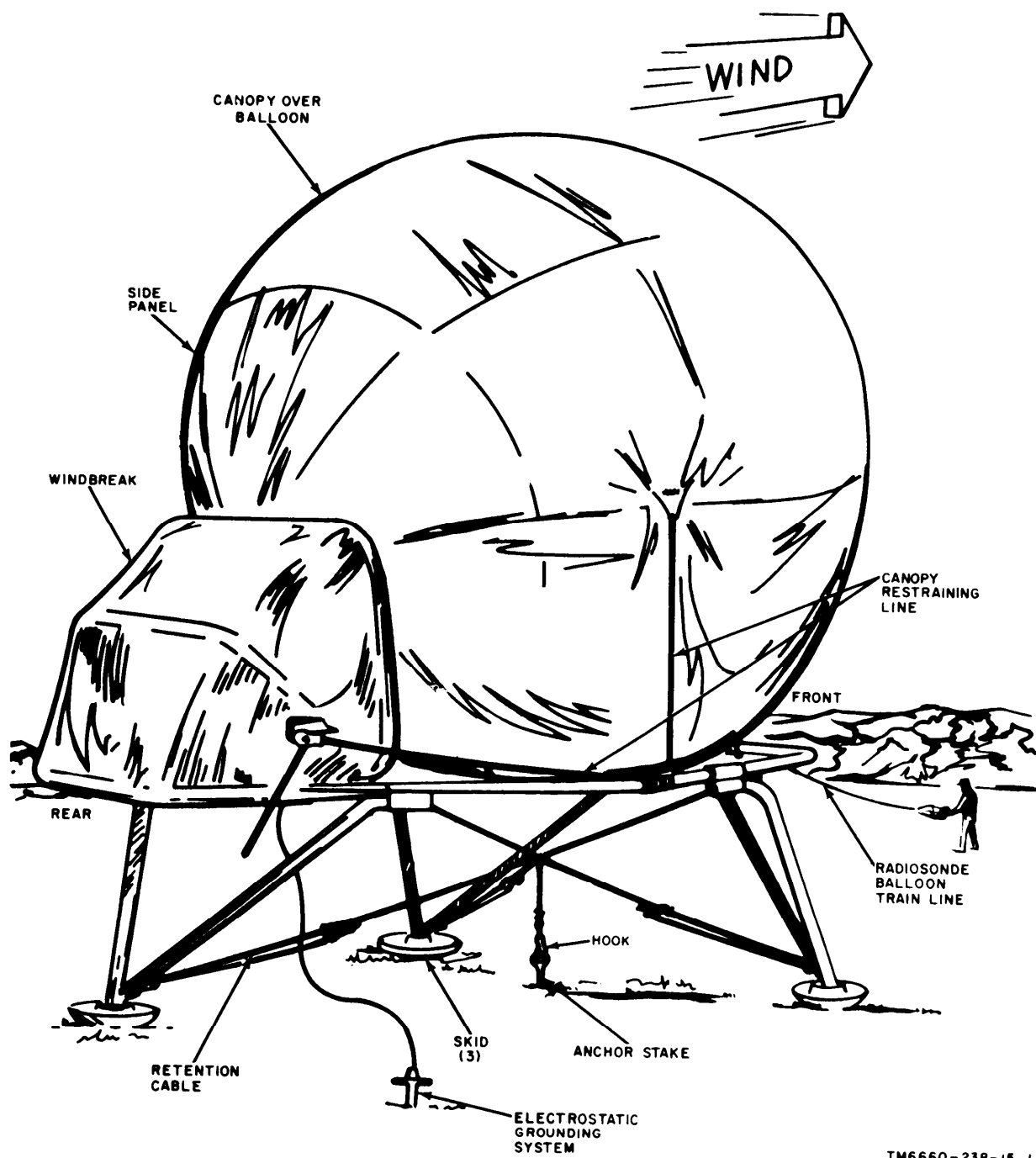
a. *Purpose.* Balloon Inflation and Launching Device ML-594/U (fig. 1-1) is designed to secure and protect meteorological balloons during inflation and

launching. Effective meteorological forecasting data from many levels of the earth's atmosphere is obtained with the help of meteorological balloons of various types and performance characteristics. The

meteorological balloons are fabricated of highly elastic compounds which are easily punctured; therefore, they are highly vulnerable to damage during inflation and launching operations, particularly when these operations are accomplished during extreme weather conditions such as strong winds, heavy rain, snow, ice, or other heavy precipitation.

b. Use. The MIL-594/U is a portable inflation shelter and launching platform designed for use in

the field in an inflation and launching system consisting of a gas cylinder supply, the Balloon Inflation and Launching Device ML-594/U, and a Hydrogen-Helium Volume Meter ML-605/U to accommodate and provide for successful inflation from ground elevation to 10,000 feet for balloon types ML-391, ML-518, ML-537, ML-541, and ML-566, which are currently in production, or other balloons of similar size and construction.



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Figure 1-1. Balloon Inflation and Launching Device ML-594/U.