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OPERATOR'S MANUAL

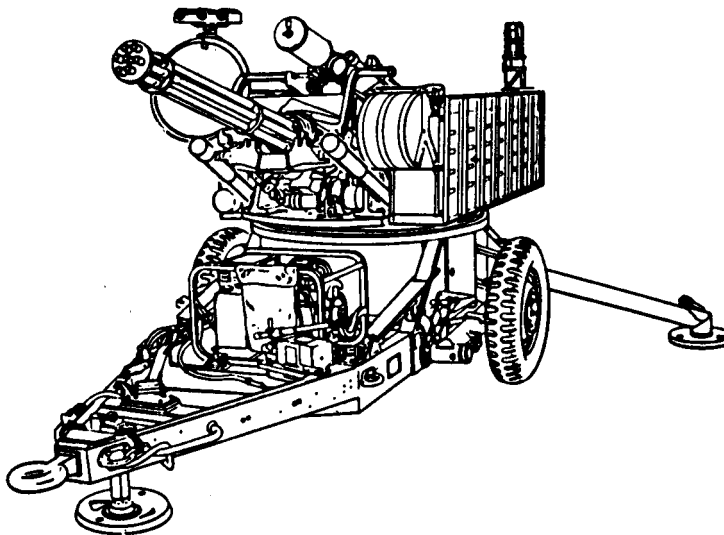
FOR

**MULTIPLE INTEGRATED LASER
ENGAGEMENT SYSTEM
(MILES)**

**SIMULATOR SYSTEM, FIRING LASER: M76
(NSN 1265-01-159-0483)**

FOR

**VULCAN/PRODUCT IMPROVED VULCAN
AIR DEFENSE SYSTEM, TOWED**



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HEADQUARTERS, DEPARTMENT OF THE ARMY

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HEADQUARTERS
DEPARTMENT OF THE ARMY
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 FOR
 MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM
 (MILES)
 SIMULATOR SYSTEM, FIRING, LASER: M76
 NSN 1265-01-159-0483
 FOR
 VULCAN/PRODUCT IMPROVED VULCAN AIR
 DEFENSE SYSTEM, TOWED

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 back of this manual direct to: Commander, US Army Armament, Munitions and Chemical Command, ATTN: AMSMC-MAS, Rock Island, IL 61299-6000. A reply will be furnished to you.

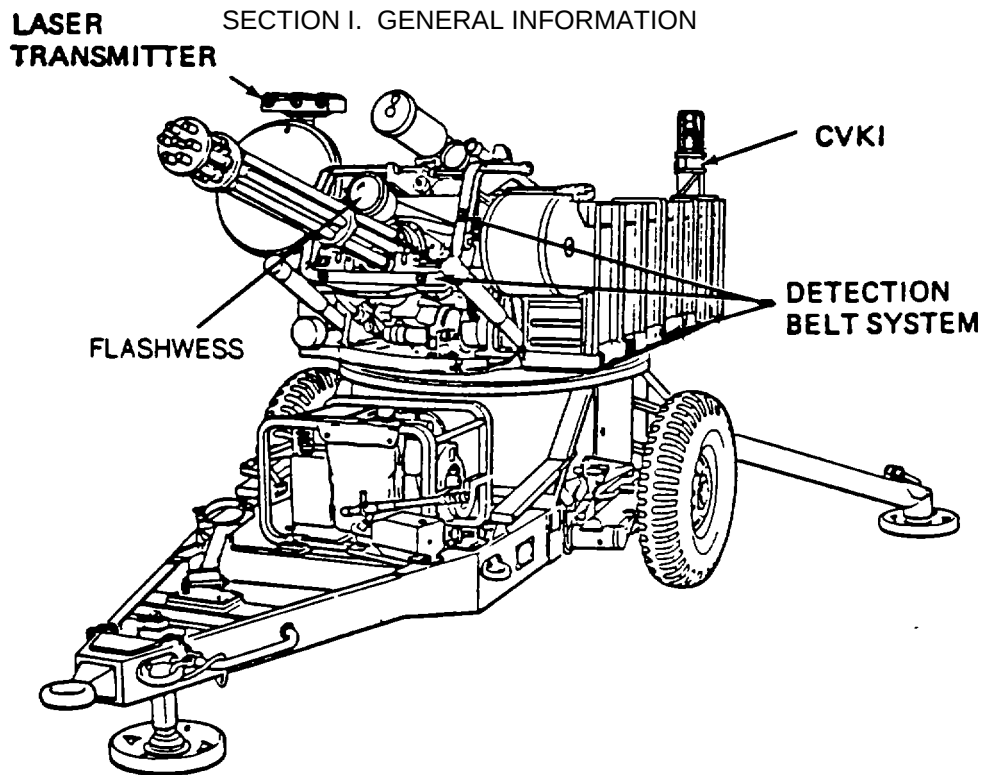
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*Supersedes TM 9-1265-207-10 dated 22 October 1984

CHAPTER 1 INTRODUCTION



NOTE

Unless otherwise specified in this manual, the term **VULCAN** refers to Vulcan Air Defense System (VADS) and Product Improved Vulcan Air Defense System (PIVADS), Towed

SCOPE

TYPE OF MANUAL. This manual shows you how to Inspect, install, operate, and maintain MILES AGES/AD equipment for the VULCAN, Towed, Weapon System. Step by step instructions are given in the procedures necessary to use the MILES system.

This manual covers only authorized Operator maintenance. Any maintenance problems not covered should be referred to Organizational ("O" Level) maintenance personnel.

NOTE

To use this manual you should be able to:

- 1 **Boresight, aim, and fire the Vulcan weapon (Ref TM 9-1005-286-10 (VADS), TM 9-1005-318-10 (PIVADS))**
- 2 **Complete DA Form 2402 and 2404.**

If you cannot do these tasks, ask your NCOIC or Instructor to show you how. When you can do these tasks, proceed with the instructions in this manual.

PURPOSE OF EQUIPMENT. MILES AGES/AD VULCAN simulator system equipment (M76) for the /ULCAN, Towed, Weapon System consists of a laser transmitter and detection system. It permits realistic: combat training without the hazards of using live ammunition. A weapon signature simulator (flash device) is provided to simulate light flashes from actual weapon firing.

LIMITATIONS OF EQUIPMENT. MILES-equipped weapons have the same range and operational capabilities as the real weapons. A dirty laser transmitter lens may reduce the effective range of a transmitter. Mission profiles for the MILES VULCAN system cover both air defense and ground targets. Ground targets may only be engaged with weapon in the MANUAL mode. The MILES VULCAN system is ;effective against all MILES-equipped aircraft, vehicles, and personnel

MAINTENANCE FORMS AND RECORDS. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750, The Army Maintenance management System (TAMMS).

HAND RECEIPT MANUAL.. This manual has a companion document with a TM number followed by '-HR' (which stands for Hand Receipt). The TM 9-1265-207-10-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 following source in accordance with procedures in Chapter 3, AR 310-2

Commander

The U.S Army Adulterant General Publications Center

2800 Eastern Boulevard

Baltimore, MD 21220

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs) If your MILES equipment for the VULCAN, Towed, Weapon System 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 or performance. Put it on an SF 368 (Quality Deficiency Report). Mail the Quality Deficiency Report to us at Commander, U.S Army Armament, Munitions and Chemical Command, ATTN: AMSMC-QAD, Rock Island, IL 61299-6000. We'll send you a reply.

REFERENCE INFORMATION

This listing includes the Nomenclature Cross Reference List , List of Abbreviations, and explanation of terms (Glossary) used in this Technical Manual.

Nomenclature Cross Reference List

<u>Common Name</u>	<u>Official Nomenclature</u>
Adapter Set	Adapter Set, Simulator System, Laser: VULCAN, Towed
Battery Box	Battery Box Assembly
Control Indicator Assembly (CIA)	Console, Simulator System, Laser For MI13 APC
Detector Belt	Detector Belt Assembly, Segment No. 1; Segment No. 2
Interface Control Assembly (ICA)	Adapter Assembly, Simulator System, Laser: Console, Vehicle Interface
Kill Indicator (CVKI)	Indicator, Simulator System, Laser: Combat Vehicle KILL/HIT/MISS
VULCAN, Towed, Simulator (MILES VULCAN)	Simulator System, Firing, Laser: VULCAN Towed
VULCAN (20 mm Cannon) Transmitter	Transmitter Assembly, Simulator System, Laser: SP and Towed
20 mm Cannon FLASHWESS	Adapter Assembly, Simulator, Weapon Fire

List of Abbreviations

AGES/AD	Air-to-Ground Engagement System/Air Defense
CIA	Control Indicator Assembly
CVKI	Combat Vehicle Kill Indicator
ICA	Interface Control Assembly
IR	Infrared Radiation
MILES	Multiple Integrated Laser Engagement System
PMCS	Preventive Maintenance Checks and Services
ROR	Range Only Radar
XMTR	Transmitter