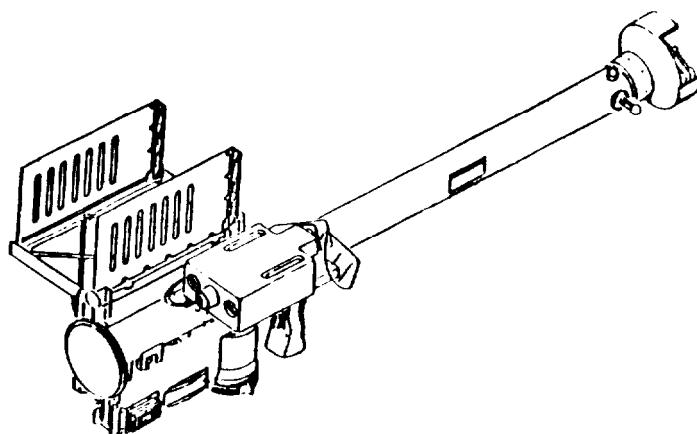


TECHNICAL MANUAL
OPERATOR'S MANUAL
FOR
MULTIPLE INTEGRATED LASER
ENGAGEMENT SYSTEM
(MILES)
SIMULATOR SYSTEM, FIRING, LASER: M74
NSN 1265-01-159-0485
FOR
STINGER WEAPON SYSTEM



HEADQUARTERS, DEPARTMENT OF THE ARMY
OCTOBER 1984

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No. 9-1265-209-10

HEADQUARTERS
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WASHINGTON, D. C., 22 October 1984

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

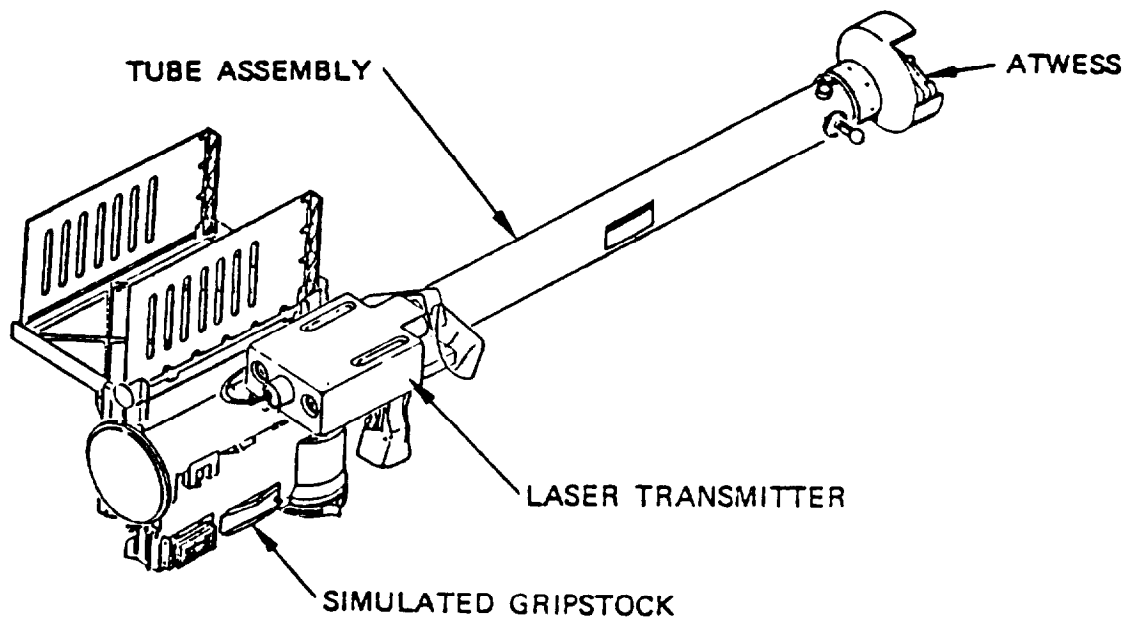
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CHAPTER 1

INTRODUCTION

SECTION I. GENERAL INFORMATION



SCOPE

TYPE OF MANUAL. This manual shows you how to install, operate and maintain Multiple Integrated Laser Engagement System (MILES)/Air-to-Ground Engagement System/Air Defense (AGES/AD) for the Stinger Weapon system. Step-by-step instructions are given for all procedures necessary to use the MILES system.

This manual covers only authorized operator maintenance. Any maintenance problems not covered should be referred to organizational maintenance personnel.

NOTE

To use this manual you should be able to:

Aim and fire Stinger weapon (see FM 44-18-1).

Complete DA Forms 2402 and 2404.

If you cannot do these tasks, ask your NCO or instructor to show you how. When you can do all these tasks, go on with this manual.

PURPOSE OF EQUIPMENT. MILES Stinger Weapon System equipment consists of a battery-operated laser transmitter, tube-shaped Stinger simulator and ATWESS weapon signature simulator. It permits realistic combat training without the hazards of using live ammunition.

LIMITATION ON 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 the transmitters.

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 9-1265-209-10-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 Adjutant General Publications Center
2800 Eastern Boulevard
Baltimore, MD 21220

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs): If your MILES Stinger Weapon System equipment 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 SF368 (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 explanations of terms (glossary) used in this manual.

A. NOMENCLATURE CROSS REFERENCE LIST

<u>Common Name</u>	<u>Official Nomenclature</u>
ATWESS	Simulator, Antitank Missile Fire
ATWESS Cartridge	Cartridge, Practice, M22
"Dummy" Battery	Battery Coolant Unit (BCU)
MWLD	Detector Assembly, Simulator System, Laser: Man Worn
Stinger Simulator	Simulator System, Firing, Laser: Stinger

B. LIST OF ABBREVIATIONS

AGES/AD	Air-to-Ground Engagement System/Air Defense
ATWESS	Antitank Weapons Effect Signature Simulator
BCU	Battery Coolant Unit
CLP	Cleaner, Lubricant and Preservative
IR	Infrared
MILES	Multiple Integrated Laser Engagement System
PMCS	Preventive Maintenance Checks and Services
THT	Tracking Head Trainer

C. GLOSSARY

ATWESS	Device that simulates the flash, bang, and smoke of a Stinger Missile being fired.
Laser	Light Amplification by Stimulated Emission of Radiation
Laser Beam	Invisible beam of light which simulates weapon fire.
Laser Transmitter	Device that sends the laser beam.
Simulator	Training device which takes the place of real equipment and which has many of its characteristics.

SECTION II. EQUIPMENT DESCRIPTION

EQUIPMENT PURPOSE, CAPABILITIES, AND FEATURES

PURPOSE OF MILES SIMULATOR SYSTEM, FIRING, LASER: FOR STINGER WEAPON SYSTEM

The MILES Simulator System, Firing, Laser: For Stinger Weapon System, permits the weapon to take part in realistic combat training exercises. Actual firing conditions of the weapon are simulated using laser beams. An ATWESS firing device adds to the system's realism.

Laser detectors worn by the Stinger operator sense enemy fire. MILES system electronics determine the accuracy and simulated damage of enemy fire.

FEATURES AND CAPABILITIES

- Easily installed and removed.
- Simulates Stinger weapon system.
 1. Range
 2. Accuracy
 3. Weight
 4. Dimensions
- ATWESS firing device adds realism.
- Uses normal Stinger firing procedures.
- Stinger gunner wears Man Worn Laser Detector (MWLD).
 1. Detects opposing fire
 2. Attacking weapon accuracy
 - a. "NEAR MISS"
 - b. "KILL"
- Uses eye safe battery-powered laser transmitters.
- Operates in temperatures from -35°C (-31°F) to 62°C (144°F).
- Compatible with all other MILES training devices.