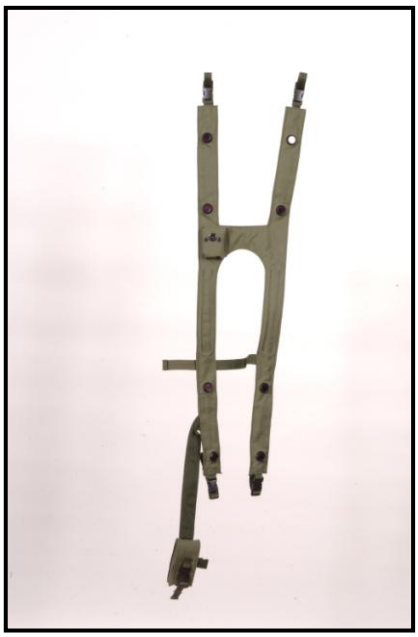
MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM INDIVIDUAL WEAPONS SYSTEM (MILES IWS) M240 MACHINE GUN KIT, INSTRUMENTABLE



Training Category/Level Utilized:
Combat Arms/Level 3

Logistic Responsible Command, Service, or Agency:
PEO STRI

Source and Method of Obtaining:
Available through local TSC.

Purpose of Trainer:
The purpose of this trainer is to replace Basic MILES and MILES 2000 systems at home-station and the Combat Training Centers (CTCs) due to age of technology and cost to maintain. The major differences between MILES Individual Weapons Systems (MILES IWS) and predecessor devices is in battery selection; the use of 2.4GHz ZigBee to communicate between the vest and Small Arms Transmitter (SAT); the use of a red laser, alignment knobs, and reflective paper targets to align the SAT. Weight of the device is also reduced from earlier devices. The MILES IWS kits are instrumentable for use in instrumented ranges.

This device is a component of the Multiple Integrated Laser Engagement System Individual Weapons Systems (MILES IWS). MILES IWS is a family of training systems, which simulate the effects of direct-fire weapons at their operational ranges. MILES IWS is primarily used for force-on-force training from squad up to and include Brigade level.

Functional Description:
The MILES IWS consists of 6 fielded distinct weapon firing systems, employs eye-safe lasers and microelectronics to realistically simulate the firing capabilities of rifles, machine guns, and other direct-fire weapons. The laser firing SATs attach easily to conventional field weapons, allow ground troops to fired coded (to distinguish weapon type and player ID) laser signals. Soldiers fire blank ammunition, the “flash and bang” triggers the SAT. The receiving laser detectors determine, Hit, Near Miss,

or Kill status of received fire. If Killed, the receiving target disables the system preventing the "killed" player from firing his/her weapon.

Physical Information:

The Manworn Harness consists of an infrared detector array attached to a vest that contains a sound transmitting device and a Harness Control Unit (HCU). The HCU has a local Radio Frequency (RF) transceiver that allows it to communicate to the Small Arms Transmitter (SAT). The HCU receives encoded messages from the detectors.

The Halo consists of an electronic module and a set of infrared detectors mounted on a durable fabric. The Halo encircles the head providing 360 degrees coverage as a target. The Halo electronics receives encoded messages from the detectors and repeats the message to the Harness through embedded inductive loops.

The Small Arms Transmitter (SAT) is mounted on the barrel of personnel weapons and transmits MILES Laser messages to a target. When the Harness is killed, the SAT is automatically disabled.

Transit case dimensions:
37.3" (L) x 35.3" (W) x 17.5" (H)

Equipment Required, Not Supplied:

None

Special Installation Requirements:

None

Power Requirements:

SAT and Halo: ½ AA, 3.6v, lithium-thionyl chloride battery.
HCU: AA, 3.6v, lithium-thionyl chloride battery.

Applicable Publications:

TM 23-6920-706-10 - Operator Manual, Multiple Integrated Laser Engagement System (MILES), Individual Weapons System (IWS)

TM 23-6920-706-24 - Maintenance Manual, Multiple Integrated Laser Engagement System (MILES), Individual Weapons System (IWS)

TM 23-6920-707-10 - Operator Manual, Multiple Integrated Laser Engagement System (MILES), Individual Weapons System (IWS), Training Data Transfer Device (TDTD)

Reference Publications:

None

Training Requirements Supported:

(Information not available)