MS Instruments

LOCATION OF MISS AND HIT (LOMAH) [ADVANCED INFANTRY] TYPE 242-001

Precision Shooting for Infantry Targets

LOCATION OF MISS AND HIT (LOMAH) – ADVANCED INFANTRY TYPE 243-001

The 3D, Wide-Angle LOMAH system is a training and zeroing system for precision shooting ranges. It provides immediate performance feedback for supersonic ammunition and specifies the positions of shots with exceptional accuracy.

It is designed to register the location of hits on a target location or near misses beside the target.

The MSI LOMAH system can be installed on existing targets, and enables interaction with a target mechanism. The system is powered through the target appliance to which it is connected.

Simultaneously robust and sleek, LOMAH is designed to save time and effort with efficient and safe scoring.

ROBUST AND SLEEK

Long-lasting and Robust Operation:

- Finest materials.
- Outstanding, wide-angle, 3D performance.
- Usable in difficult environmental conditions.

Efficient and Safe Scoring:

- Eliminates data loss
- Reduces errors.
- Automated information retrieval.

Time and Effort Saving:

- Trouble free functionality.
- Reduced required access to target area.
- Immediate performance feedback

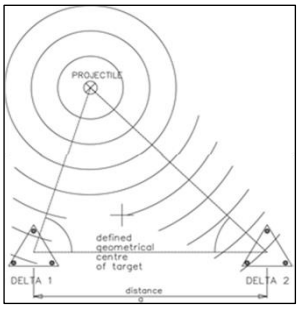
HARDWARE

- Automatic Scoring System reduces errors made by manual measurement and analysis of shots, omits the need for repeated access to the target area for information, and eliminates data loss from identically placed rounds.
- Hit registration is achieved by two registration units in the target area installed in front of the target unit. All units are protected against direct hits by a respective cover.
- Calculated position of the shot is transmitted to the range control (desktop, handheld controller, and shooter's monitor).

SOFTWARE

- A Range Control System supplied by MSI controls LOMAH.
- Shots fired at the target system are displayed on the controller during firing, before the mean point of impact and extreme dispersion are recalculated.
- Registered hits or misses can be displayed graphically as well as in Cartesian coordinates in relation to the respective target silhouettes on the monitor of the central control console.

THEORY OF OPERATION



- The registration unit is installed close in front of the target and locate any projectile, passing with a speed of minimum Mach 1.3 by registering the supersonic shock wave.
- The projectile registration unit consists of the two LOMAH sensor bars and the target electronics. The integrated software calculates the position of the projectile due to the sound wave of the projectile itself.
- 3D LOMAH uses eight precision sensors installed on the base plate (made from a special plastic material) by means of a sealant to ensure that only the supersonic shock wave that is coming through the air is registered.
- The sensors are installed in a triangular position with greatest accuracy, which is also true for the defined distance between the two arrays and the sensor bars.

SPECIFICATION

CONFIGURATIONS	
Installation	Fix-installed/Portable
Power Supply	Hardwired/Battery-powered
Power	9 - 36 VDC from Target Controller
Communication	Hardwired via RS-232 interface or as required.
HIT SENSORING	
Type of Weapons	• Rifle (Supersonic) • Machine Gun
Projectile Velocity	At least 440 ms^{-1} at the target
Hit Frequency	1200 rpm
Detecting Window (W x H)	3m x 2.5m [*118.1in x 98.4in*]
Calibre Type	Full Metal Jacket, Hollow Point 5.56mm to cal. 120mm
Supported Firing Modes	Single & Rapid Fire
Shooting Angle	• Azimuth: ± 30° • Elevation: ± 10°
ENVIRONMENT	
Operating Temperature	-25°C - +72°C [*-13°F - +161.6°F*]
Storage Temperature	-25°C - +72°C [*-13°F - +161.6°F*]
Enclosure Type	IP 67
DIMENSIONS	
L x W x H	760mm x 246mm x 172mm [*29.92in x 9.68in x 6.77in*]
Weight	7.40kg [*16.31lbs*]

USED WITH

Mobile Tablet PC Type 274-001

Stationary Infantry Target (SIT) Type 282 – Type 287

Shooters Monitor Type 292-001

MS Instruments Ltd.
Unit 4, Ravensquay Business Centre, Cray Avenue
Orpington, Kent, BR5 4BQ, United Kingdom
Tel: +44 (0)1689 883 020
Fax: +44 (0)1689 871 392
contact@msinstruments.co.uk
www.msinstruments.co.uk

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