



MILO Marksmanship Trainer

Weapons Skills Development

MMT

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The MILO Marksmanship Trainer (MMT) is a state-of-the-art weapon skills development (WSD) solution tailored to meet the rigorous training needs of military, law enforcement, and commercial clients. It is based upon MILO’s 30 years of expertise in firearms training simulators and offers a broad range of customizations to meet end-user requirements.

The MILO MMT will help military units comply with the Army’s Integrated Weapons Training Strategy (IWTS), particularly Table II, which requires units to use simulators to train on weapons systems prior to moving on to Table III and higher, as described in Training Circular (TC) 3.20.40.

The MMT system delivers advanced training solutions such as laser and optical tracking systems, drop-in kits, and surrogate or synthetic weapons, providing ideal fidelity where it’s needed most. It ensures precise adaptability to meet varied training demands, with options ranging from single-screen fixed setups to multi-screen portable systems.

With a design focused on versatility, the MMT system is both portable and easy to install, allowing smooth setup across various training locations. The flexible multi-screen configurations—180-degree, 300-degree, and linear—allow trainees freedom of movement within the engagement area, accommodating distances from 8 to 40 feet based on space and specific training needs.



Weapon Aimpoint Tracking Options

MILO Vision: FAAC’s proprietary optical tracking solution includes custom IR projection and a compact, all-in-one weapon-mounted module that integrates a camera, IMU, Wi-Fi, and processor. With advanced calibration and image processing software, MILO Vision achieves exceptional accuracy at 0.2 mils.

Industry-Leading IR Laser Tracking: A trusted solution with 0.14 mils accuracy, widely deployed on over 3,200 MILO simulators, including the US Marine Corps Combat Convoy Simulator.



Scenario Development

MILO Focus 3D: An intuitive UI enables precise marksmanship range development with customizable placement of targets, barriers, lane markers, and other range elements. Instructors can script vehicles, lifeforms, and dynamic threats for advanced, non-lane-based training scenarios. MMT’s library includes over 100 training scenarios, covering all qualification courses in the U.S. Army Training Circular (TC) 3-20.40 and more than 20 collective training scenarios for force escalation, tactics, techniques, and crew communication. Additionally, MMT provides MILO’s comprehensive Use of Force library with over 1,000 scenarios widely utilized by military, federal, and local law enforcement.

» Advanced Performance and Biometric Data



High-Quality Graphics and Immersive Experience

Unity Graphics Engine: Delivers gaming-level visuals for a realistic training environment.

Pose & Location Estimation: Trainee location within the training space is calculated using “pose” data from optical tracking sensors or Ultra-Wide Band sensors for laser-based tracking. Trainees can engage with any screen and target, supporting collective training.



Comprehensive After-Action Review (AAR) & Scoring

Produces automated Army qualification scorecards based on trainee performance, captures audio and video for review, overlays data such as fall of fire, shot grouping, aim trace, and biometrics on the interface, and continuously monitors each weapon’s aim-point to display aiming, trigger press, and recoil recovery for detailed AAR.

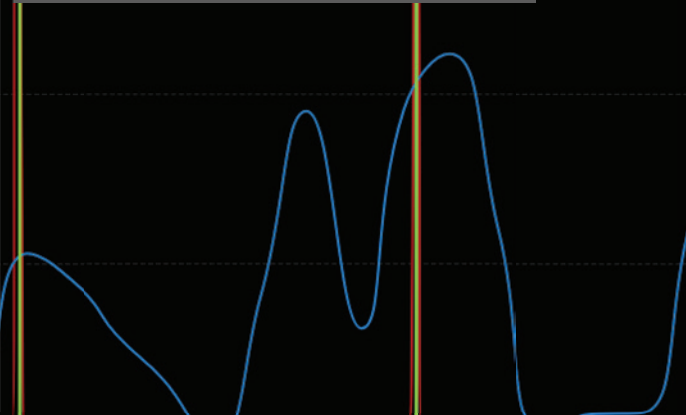


Integrated Biometric Analysis

Tracks trainee performance against the Army Shot Process with sensors for acceleration, breathing waveform, heart rate, posture, trigger pressure, and weapon cant.

Detailed data is provided on pre-shot target acquisition and shot setup (muzzle trace, point of aim and hold), shot execution (aim refinement, breath control, and trigger squeeze), and post-shot recovery (recoil management, shot placement, and scoring evaluation).

00:31.1 - Enemy shot [23m] (TTA: 1.27, TTE: 2.08)
00:36.7 - Enemy shot [31m] (TTA: 0.02, TTE: 0.64)
00:45 - Enemy shot [10m] (TTA: 1.03, TTE: 1.95)
00:51.5 - Enemy shot [16.5m] (TTA: 0.48, TTE: 1.43)



» Weapon Solutions and Ballistic Accuracy



Validated Ballistics Modeling

Validated ballistics modeling with accuracy to within 0.05 mils of ARDEC for direct-fire weapons (e.g., M17/M18, M2A1, M4A1, M249 short and long, M240L, and M240B) and 0.28 mils for indirect-fire weapons (e.g., M320, Mk19).



Weapon Solutions

The MMT offers various weapon solutions, from SIRT systems to surrogate and drop-in/ pneumatic and electric models incorporating recoil (Haptech/GBLS), sensory feedback, and simulated faults, providing comprehensive training scenarios. Airsoft Weapons and compressed air/CO2 drop-in kits feature recoil and sensor feedback for enhanced realism. This spectrum of weapon options allows for scalable and customizable training solutions, addressing different training needs across various military and law enforcement units.

Haptech kits: The Haptech kits provide the most sophisticated instrumentation with bi-directional communications, allowing for sensing the weapon's controls and injection of failures. The kits report the status of the trigger position, magazine release, bolt/slide position, fire select position, charging handle, and orientation.

