



# FATS® 180MIL VIRTUAL TRAINING SYSTEM



## Meggitt's FATS® 180MIL provides a 180° immersive training environment with high-definition and 5.1 surround sound.

**M**eggitt introduces the next generation of immersive training — the FATS® 180MIL. The 180° high definition projection and 5.1 surround sound increases the realism of training, heightening awareness and proper use of force responses.

### System Components

The FATS® 180MIL delivers true-to-life, comprehensive training and includes:

- **Screens** – 3 Borderless screens. Each screen provides 150" X 84" (16:9 aspect ratio) with borderless projection surface.
- **Hit Detection System** – 3 digital cameras interface directly with the same Off-CPU real-time (OCR) processor used by the FATS® 100 system.
- **Projectors** – Ultra short throw projectors provide the user greater freedom of movement within the training space while displaying stunning visuals in a 180° environment.
- **Low-Light Subsystem (optional)** – Allows users to practice in simulated low-light conditions with both hand-held and weapon-mounted flashlights.
- **Rack** – The FATS 180MIL is configured for a single rack system design.
- **Surround Sound** – The self-powered audio system plays scenarios in 5.1 surround sound. Using the directional sound effects board, the instructor can incorporate unsettling sounds from any direction, including a barking dog, crying baby, gunshots and more to elevate situational awareness.

### Supported Gun/Ammo Types

The FATS 180MIL supports up to 30 simulated weapons, including FATS weapons and ammunition types. Up to 2



Judgmental training highlights verbal de-escalation with lethal/less-lethal force options

simulated weapons can be assigned to a single user. These include:

- Rifles
- Pistols
- Shotgun
- Machine gun
- Less-lethal – OC spray and TASER® (supported in Judgmental training only)

## Training Modes

The FATS 180MIL supports 3D Marksmanship, Collective and Judgmental training.

- **Marksmanship** – Displaying a vivid, realistic 3D indoor and outdoor range. The marksmanship application lets you engage close and distant targets for reactionary and/or precision shooting. The FATS 180MIL supports 3D targets to include Qualification, Competition, Commercial and steel reactive targets. These targets have the ability to turn, pop-up and move around the screen.
- **Judgmental** – High-definition imagery is projected on every screen. As the scenario eye point moves, all screens reflect the motion. This provides an amazing immersive

experience that highlights realistic conflict situations and awareness in a training environment.

- **Collective** – Using third-party game engines for squad level instruction provides flexible simulation solutions. Using scenario training and mission rehearsal, the stunning realism prepares trainees for effective decision-making within a safe, non-lethal, immersive environment. While virtual game engines are typically used for Virtual and Constructive training, Collective training can now be incorporated with Meggitt's small arms training solution.

## Courseware

The FATS 180MIL is delivered with a set of training courseware.

- **Marksmanship** – The system comes with several courses of fire, including qualification courses and marksmanship skill builders using rifles and pistols.

Available course types:

- US Army, USMC, USAF, USN and all-encompassing qualification courses of fire.

- Military Security / Police
- Skill builders
- Hand and eye coordination drills
- Reflexive fire
- Threat identification
- Competition courses

3D realistic targets include:

- Military and law enforcement
- Qualification targets
- Accuracy and skill building
- Competition targets
- Steel reactive targets
- Standard vehicles
- Armored vehicles

- **Judgmental** – The system comes pre-loaded with a variety of immersive HD training scenarios.

- De-escalation training
- Training rules of engagement
- Base and gate security
- Active shooter response
- Less lethal weapons

- **Marksmanship Authoring** - This tool allows the user to create a variety of marksmanship courses, including:

- Indoor and outdoor ranges from 7m to 1900m.
- Users can select timed target exposure, multiple hits, pop-up targets, turning targets and multi-

directional moving targets at any speed, including custom scoring zones.

## High-Fidelity Ballistics

Meggitt's FATS 180MIL utilizes the same high-fidelity ballistic engine validated by the U.S. Army, U.S. Marine Corps and other military customers. This provides accurate ballistic characteristics in flight. This capability supports and enforces the proper fundamentals of marksmanship.

## System Size

Large 16 'X 9' screens provide a wider viewing area with a smaller footprint. The large footprint is 25' X 17' X 10', while the optional small screen has a footprint of 24' X 15' and fits into 9' tall ceiling.

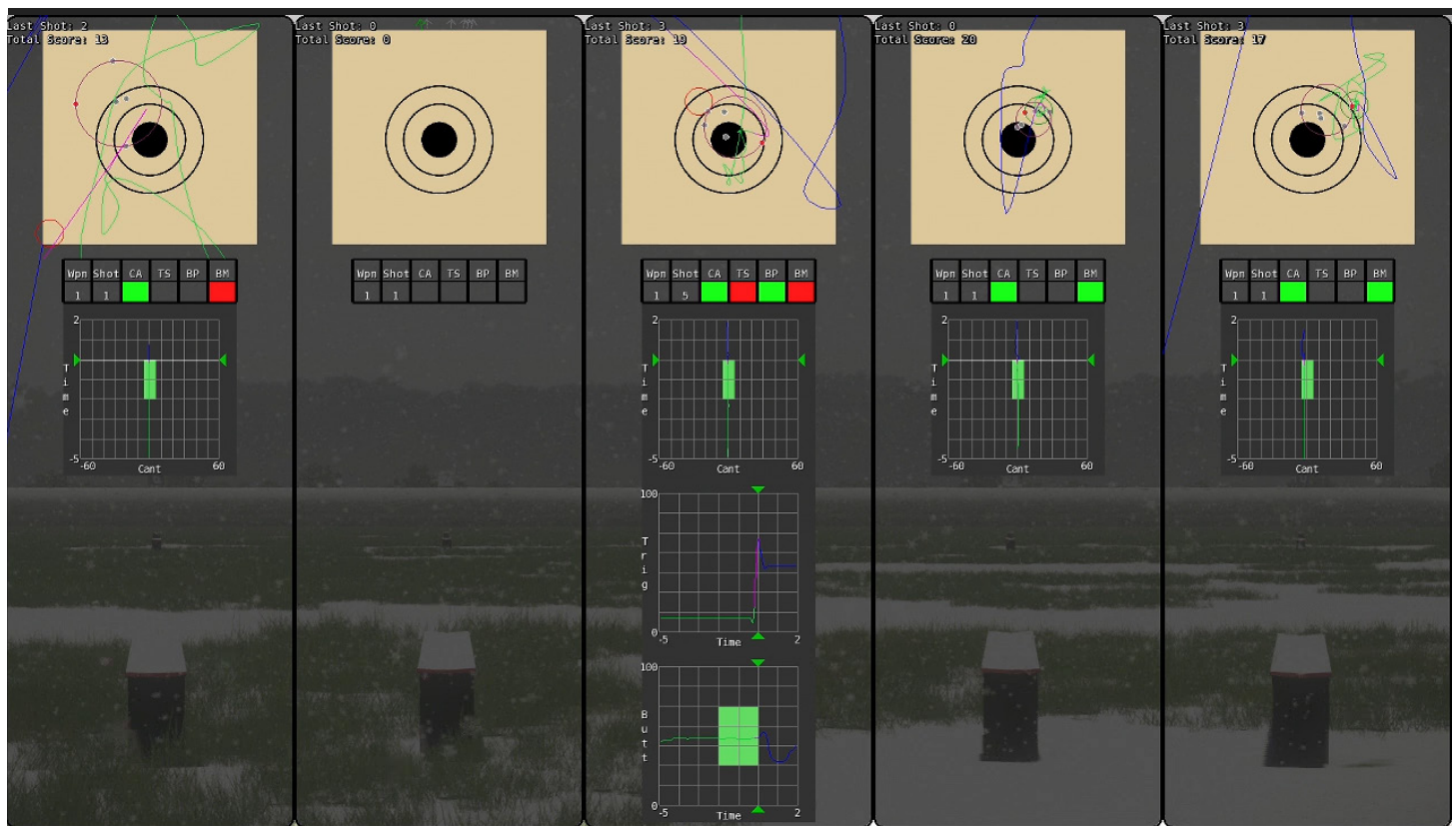
**Configurations** - The system can be configured in the 180 degree advance training mode. You can also configure the screens into a flat surface in order to support traditional marksmanship training range simulation. This configuration can easily support up to 15 shooting lanes.

## Options

The following options are available to compliment the FATS 180MIL:

- **Additional Flashlight** – One hand-held flashlight is supplied with the system. Additional flashlights (handheld or weapon-mounted) can be added as options with no quantity limitations.
- **Hostile Fire System** – Fires foam pellets to simulate hostile fire and force the trainee(s) to use cover.

- **Advanced biometric devices** - The FATS 180MIL supports biometric devices to capture a trainee's heart and respiratory rate in real time. This data can also be replayed in the analysis and after action review.



Marksmanship training and shot analysis identifies errors in shooting fundamentals