MOTION INTEGRATED TRAINING SYSTEM (MITS)

Meggitt offers a line of Motion Integrated Training Systems (MITS) that provide enhanced readiness for trainees in a variety of situations, utilizing a myriad of systems to fit the needs of tomorrow’s military. The MITS are multipurpose simulators capable of being configured for realistic naval, convoy and gunnery training (i.e. crew training and collective tactical training).

The MITS combines the wide range of features and benefits of Meggitt’s Small Arms Trainer with a Motion Platform Module that is available in large, mid, and compact sizes (dependent on vehicle/vessel size). The motion platform module simulates real world movement of waterborne vessels and land-based vehicles. Coupled with vehicle/vessel motion, the wide panoramic display system and realistic scenario sounds immerse the trainees into the scenario. The MITS is delivered with Meggitt’s libraries of computer-generated 3D terrains, models and scenarios that support a wide range of training engagements. The MITS can be purchased in various configurations to replicate sea vessels and various wheeled land vehicles.

**Boat Simulators:**
The MITS can be delivered as a Boat Trainer (e.g. Patrol Boat Trainer) that supports bridge maneuvering training, gunner training, radar training and command and Control training as applicable to specific types of boats. Meggitt’s Boat Simulators realistically simulate boat motion including boat maneuvering and boat reaction to various sea states and waves created by other vessels. Realistic bridge mockups can be provided and mounted on the motion platform. Bridge controls typically include a combination of real and simulated instrument panels that allow the bridge crew to practice navigation, radar and command and control skills. Gunners can fire against static and moving targets using Meggitt’s high fidelity weapon simulators. The entire crew can engage another vessel for interception training, requiring a combination of coordinated maneuvering, weapon firing and communication between the crew.
Vehicle Simulators:
The MITS can be delivered as a land-based vehicle trainer (e.g. HMMWV Trainer) to support driver training, vehicle commander training, turret gunner training and crew training. The vehicle crew can train in a wide variety of computer-generated scenarios provided for the system. Realistic vehicle mockups can be provided and are mounted on the motion platform. Vehicle driver controls typically include a combination of real and simulated instrument panels allowing the driver to maneuver through the terrain. Vehicle motion is correlated to the motion of the VBS software vehicle model for realistic movement through the terrain. The vehicle can engage hostile forces, requiring a combination of coordinated maneuvering, weapon firing and communication among the crew. Gunners can fire from the turret (as applicable to the vehicle type) against static and moving targets using Meggitt’s high fidelity weapon simulators.

Supported Simulated Weapons:
The MITS supports crew and collective gunner training against hostile forces using a wide variety of Meggitt’s high fidelity weapon simulators ranging from pistols to 20mm cannons. Meggitt offers both tethered and tetherless weapon simulators depending on weapon type. For example, Meggitt offers tetherless BlueFire® weapon simulators for typical service weapons (e.g. rifles and pistols). These weapons offer the widest range of flexibility in training. Larger weapons (e.g. machine guns, grenade launcher, anti-armor weapon simulators) that require a higher volume of air are delivered in a tethered configuration. All Meggitt weapons provide a high fidelity physical and functional simulation of the corresponding live weapons to provide realistic weapons training that translates effectively to real live fire engagements. Meggitt offers a large inventory of weapon simulators that typically fit most customer training needs. If weapons are required that are not in Meggitt’s weapon simulator inventory, Meggitt can develop the corresponding new weapon simulator types for use on the vehicle/vessel trainer.

MITS solutions are available in a variety of packages ranging from small, single-platform configurations to multi-platform configurations that are synchronized and offer command, control and communications functions for leadership and command training. Pricing for the various configurations are available upon request.