Meggitt Training Systems offers three realistic, tethered Mortar Simulators, easily integrated into the FATS® 100MIL small arms training system. These mortar simulators include:

- M224 60MM Mortar Simulator
- M252 81MM Mortar Simulator
- 120MM Mortar Simulator

Providing accurate training for mortar crews, Meggitt’s mortar simulators require mortar men to replicate the call for fire exactly as they would in the field. Each mortar includes three (3) each of High Explosive (HE), White Phosphorous (WP) and Illumination (ILLUM) simulated rounds, and use CFE bipods that have been modified for use on the system.

Meggitt’s mortar simulators do not require a direct line of sight with the SAT projection screen in indirect fire mode. However, mortar simulators need to be positioned within the maximum length of the weapon trunkline. The mortar base will be firmly mounted in a dedicated customer-furnished mortar firing platform (i.e. sensors mounted beneath the base for determining deflection and elevation of tube and for detecting round type, charge/fuze settings when round is dropped into tube).

In order to further enhance training value and gunnery skills, a Forward Observer (FO) or squad commander will view the small arms training scenario to make calls for fire and adjustments of fire based on target location and location of round impact. A crew member will perform the Fire Direction Center (FDC) function and can use any methodology of plotting. In accordance with firing commands, trainees can set proper mortar deflection and elevation, select appropriate round type, attach charge rings, set fuze position and fire the mortar. Simulated mortar rounds include safety pins as per the live rounds, and a cutout at the bottom of the tube supports trainee removal of the round after firing.
The mortar simulators provide sufficient recoil to disturb the operator’s sight picture, requiring the trainee to achieve a proper aligned or compensated sight picture during each adjustment. In addition, the mortar realistically simulates weapon ballistics for each mortar simulator and round type, with scaled aiming posts provided.

To provide follow up results for credible training, Meggitt’s after action review includes deflection, elevation and round details for every round fired and visual representation on where rounds landed. Other optional features include:

- **Binoculars** - Optional binoculars can be provided for use by the Forward Observer (FO) during mortar training. These optional binoculars have been optimized for the firing line distance of the SAT and include reticle patterns (either Commonwealth or US versions).

- **Laser Rangefinder** - Optional simulated laser rangefinders can be provided for use by the FO during training.

Meggitt Training Systems’ mortar simulators can be easily integrated into the FATS® 100MIL system, are scalable and provide additional preparation and valuable instruction for combat readiness.