Introducing BlueRail™: Now you can use your own live-fire weapons in an affordable, virtual environment.

Combining live-fire and virtual training has traditionally required costly and time-consuming customization. That’s why Meggitt Training Systems is pleased to introduce our new BlueRail™ technology. The small BlueRail device instantly converts existing weapons for use with simulators like Meggitt’s advanced FATS® 100P system, and provides realistic recoil for accurate training.

Knowledge transfer happens best when the real weapon is used during training. BlueRail offers a groundbreaking solution, providing the same high fidelity simulated training using an assortment of weapons conjointly. Simultaneously it limits the resources required to train, and broadens the locations where training can occur.

This cost-effective measure allows trainees to use their own live weapon in realistic, high fidelity simulated scenarios. The BlueRail module is the size of a tactical flashlight and can be attached to any weapon that has a Picatinny rail mounting platform. With appropriate adapters, BlueRail can also support other rail types.

As with Meggitt’s successful tetherless BlueFire® weapon simulators, you can pair your BlueRail device with an adapter connected to Meggitt’s virtual training system. The adapter facilitates bi-directional communications with the system so instructors and trainees have access to the capabilities they need to ensure accurate marksmanship feedback. This includes:

- Shot detection
- Reporting of weapon cant
- Aimpoint
- Trace to provide:
  - Acquisition of target
  - Trigger pull analysis
  - Recoil management analysis
The BlueRail system is also available in a variety of options to fit your training needs.

BlueAir
Meggitt’s BlueAir recoil solution joins breathable high-pressure air and a quick filling BlueFire® fill station. This allows easy live weapon conversion with a first-in-industry, high pressure drop-in kit. BlueAir uses SCUBA air to conveniently charge magazines, eliminating the need for costly CO₂ canisters that require extensive maintenance in other drop-in kits.

BlueRACK™
When BlueRail is paired with Meggitt’s BlueAir, the BlueRACK (Recoiling Air Conversion Kit) device provides additional capabilities normally available only in system-controlled weapon simulators:
• No false triggers (since firing is not based on weapon recoil)
• Programmable ammunition load
• Capability to have weapon malfunction injected or programmed by the system operator
• Reporting of magazine state (in or out)
• Reporting the status of additional weapon controls (weapon-dependent)

Recoil Options
You can use any of the following recoil methods with your BlueRail device:
• Meggitt’s BlueAir Drop-In Recoil Kit
• Third party tetherless recoil system
• Live-fire ammunition (for use on live-fire screen or in indoor live-fire range environment)
• Blanks (provided they can cycle the action)
• Simunition Conversion Kits and SecuriBlank
• UTM Silent Blank Rounds (SBR) and associated Conversion Kits

BlueRail products are an ideal solution for customers who want reliable tetherless training without the high cost and long wait of specialized devices and customization. It provides impressive fidelity with live-fire capabilities on a virtual system so users can distinguish between multiple trainees shooting on the same screen. Weapon trace is provided for more advanced shooter/marksmanship diagnostics, a feature other systems do not offer.

To utilize weapon trace, simply mount a small electronics box to the gun. BlueRail electronic modules must be used in conjunction with other components that provide recoil and weapon cycling: including live rounds, Simunition, UTM blanks or other recoil kits.

Meggitt’s new family of BlueRail™ products are a game changer. For the first time, you can combine the realism of your own weapons with virtual training. Find out today how BlueRail can revolutionize tomorrow’s virtual training.