TRAIN AS YOU FIGHT



OVER 275,000 WARFIGHTERS TRAINED

INCE 2009 -



Laser Shot has developed cutting-edge virtual firearm training and simulations since 1999. The key to the full-spectrum immersive experience is the attention to detail dedicated to every aspect of the simulator – from the vivid HD projection system to the true-to-life look, feel, and function of Laser Shot simulated weapons.

The Laser Shot team of software engineers, live-fire range specialists, and firearm engineers provide virtual training solutions to all services of the US and allied foreign militaries while strictly adhering to training doctrine.

Laser Shot simulators feature the smallest footprint, fastest setup time, and most options in the industry and are utilized by every branch of the US Military. These systems are designed from the ground up for ease-of-use by the end user with no contractor support required.

The following summarized list of products and services will serve to demonstrate how Laser Shot represents a low-risk, best-value solution to the training needs of modern fighting forces.

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MMTS

MOBILE MARKSMANSHIP TRAINING SIMULATOR

Laser Shot's Mobile Marksmanship Training Simulator (MMTS) is a multifunctional firearms simulator designed to address both basic and advanced firearms training requirements for both small arms and crew-served weapon systems. Optional add-on modules of mission-specific training courseware or specialized weapon systems can elevate standard weapons training to address all individual and collective training requirements.

All critical system hardware (projector, laser hit detection camera, computers, speakers, and networking hardware) are mounted in fixed positions inside a rugged portable case for easy setup and operation. The operator station can be set up close or away from the MMTS to provide more room or discretion for the instructor. The MMTS is considered a plug-and-play solution that is designed specifically for the training needs of military and law enforcement professionals.

The MMTS is designed to have the projector with hit detection camera placed on the floor. The operator station components can be positioned out of the way to allow shooters more floor space in front of the screen, while all components integrate within the MMTS as a single unit.

Courseware can be customized to meet specific training requirements with titles that specialize in individual marksmanship training, reflexive fire, use-of-force, immersive collective scenarios, mission rehearsal, and firearms skill building.

The MMTS is scalable and training can be conducted in multiples of up to four lanes per screen and networked together for higher training throughput. Courseware replicates actual training and qualification standards.

B 14'

ROOM REQUIREMENTS

- A. ROOM LENGTH
- B. SCREEN LENGTH
- C. PROJECTION THROW LENGTH
- D. MMTS
- E. SHOOTER AREA
- F. INSTRUCTOR STATION

FEATURES

- MIL STD 810G (highest shockmount rating) durable rolling case
- Dual-console performance
- Integrated instructor control station (ICS)
- Vivid 1080p projection

A 20' 9"



4 LASER SHOT TRAINING SOLUTIONS

S



MMTS SCALABILITY//

TIER 4 -

- Individual Weapons, Table II Pre-Live Fire Simulations
- Crew-served Weapons, Table II Pre-Live Fire Simulations
- Special Purpose Weapons, Table II **Pre-Live Fire Simulations**





TIER 3

- Call for Fire, Table II, Pre-Live Fire Simulations
- **Crew Platforms** (Table II Crew Gunnery)
- Squad Situational Training Exercise (STX), Virtual Table II
- Section Gunnery, Virtual Rehearsal
- Section Situational Training Exercise (STX)





TIER 1 & 2-

- Platoon Gunnery, Virtual Rehearsal
- Platoon Situational Training Exercise (STX)
- Company / Troop Situational Training Exercise - Virtual
- Battalion / Squadron Situational Training Exercise - Virtual





WST

WARRIOR SKILLS TRAINER

Perhaps the ultimate configuration of the MMTS, the Warrior Skills Trainer is a comprehensive system comprised of all of Laser Shot's training technology in the fields of software, simulators, mock vehicles, recoil weapons, and simulated magnified optics into a 360° training "pod" for crew gunnery and convoy simulations. The WST is an immersive training environment that places trainees in high fidelity virtual environments in order to train effectively on a variety of crew level operational tasks. The advanced training courseware of Virtual Battlespace® 3's Tactical Weapon Simulator, combined with exclusive laser-based individual and crew served training weapons, enable Laser Shot to deliver the most realistic and immersive conditions possible in a virtual training environment.

An Instructor Control Station (ICS) and After Action Review center is positioned within the training footprint and serves as the central network hub for each MMTS. Each mock vehicle is equipped with simulated communication and mission command systems. Various vehicle cabins can be created, including HMMWV, Stryker, LAV, or JLTV, and each will come with a fully functional turret.

Currently in use at Ft Hood, Ft Riley, Ft Carson, Ft Bliss, Ft Knox and Ft Hunter Liggett



MMTS COMPACT

POWERFUL MILSPEC PORTABLE SIMULATOR

The compact version of the MMTS houses many of the same features as the full size model, while reducing footprint size, weight, and cost. This single-console simulator utilizes a similar MIL STD 810G case with a slightly smaller stature and a projector with shorter throw. The MMTS Compact's single console design utilizes a laptop as an instructor station.

FEATURES

- ▶ MIL STD 810G durable rolling case (highest shockmount rating)
- ▶ Single-console performance
- Integrated instructor control station (ICS)
- Vivid 1080p projection



SIMRANGE

ULTRA SHORT THROW SIMULATOR

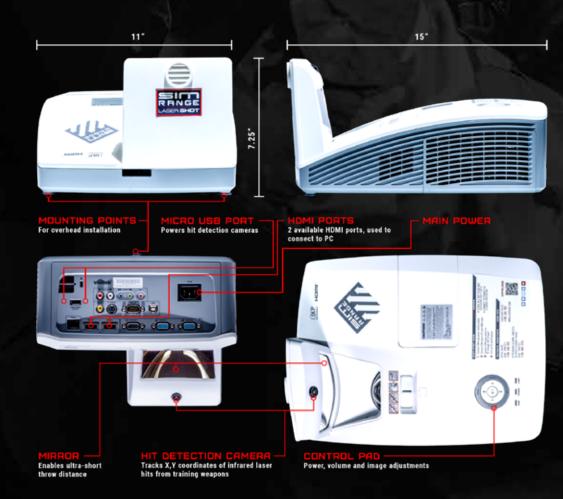
Laser Shot's SIMrange™ enables ultra The SIMrange™ can be placed within 18" of Ultra short throw capability within short throw projectors with integrated hit the projection surface due to its ultra short 18" of the projection surface detection cameras to be installed within 18" throw technology. This enables smaller of the projection surface reducing the overall rooms or spaces to be converted into footprint required. The SIMrange™ is scalable virtual ranges for safe, effective training and can be delivered in multiples of three without the need for ballistic facilities or lanes per screen allowing for expansion to live weapons and ammunition. meet throughput requirements.

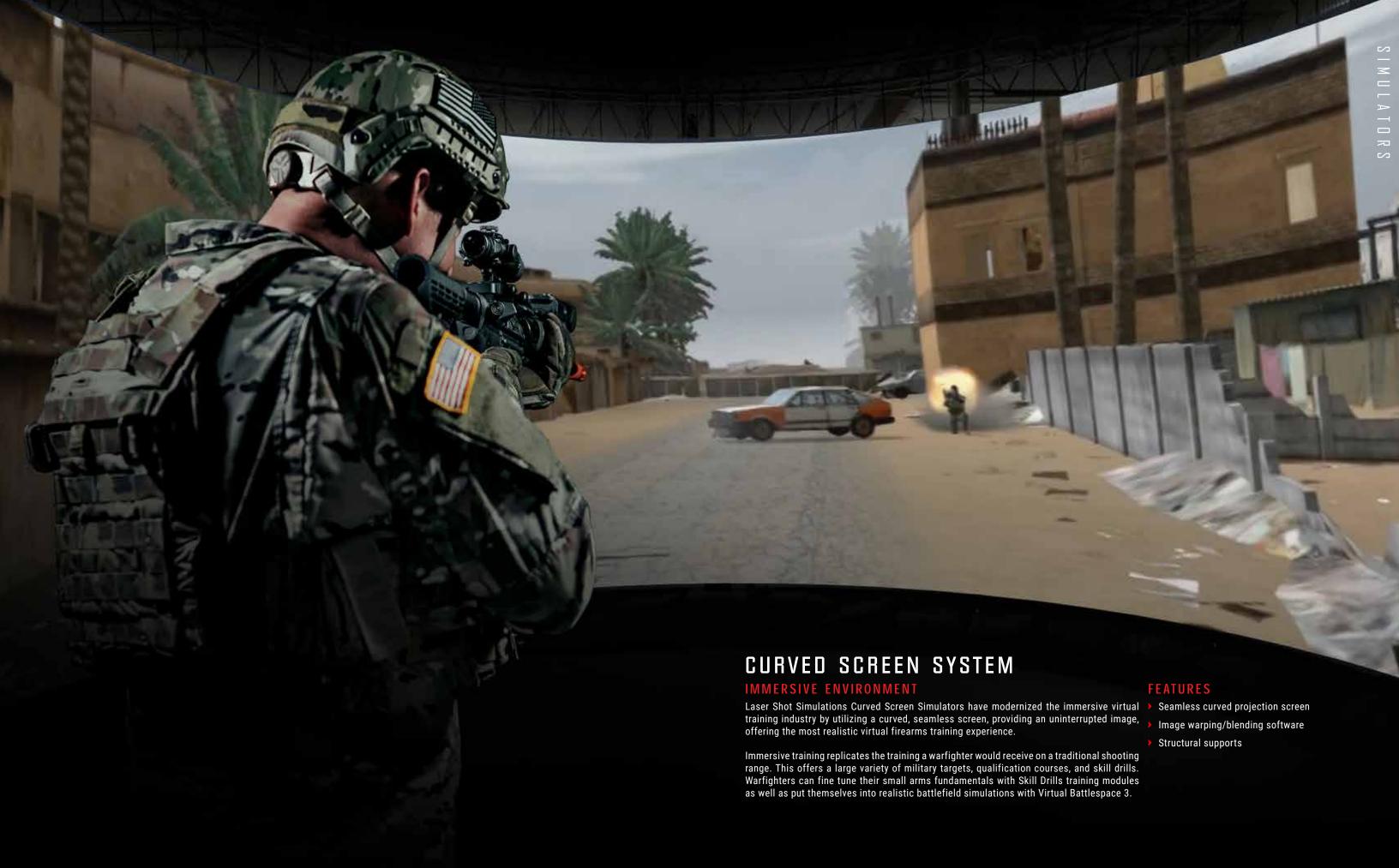
installing an independent laser hit detection camera adjacent to the projector, requiring training. These packages include various careful positioning and calibration during training devices, such as simulated tasers each setup. The SIMrange™ eliminates this or other non-lethal weapons. task by integrating the laser hit detection camera inside the projector, ensuring constant alignment and readiness to begin training.

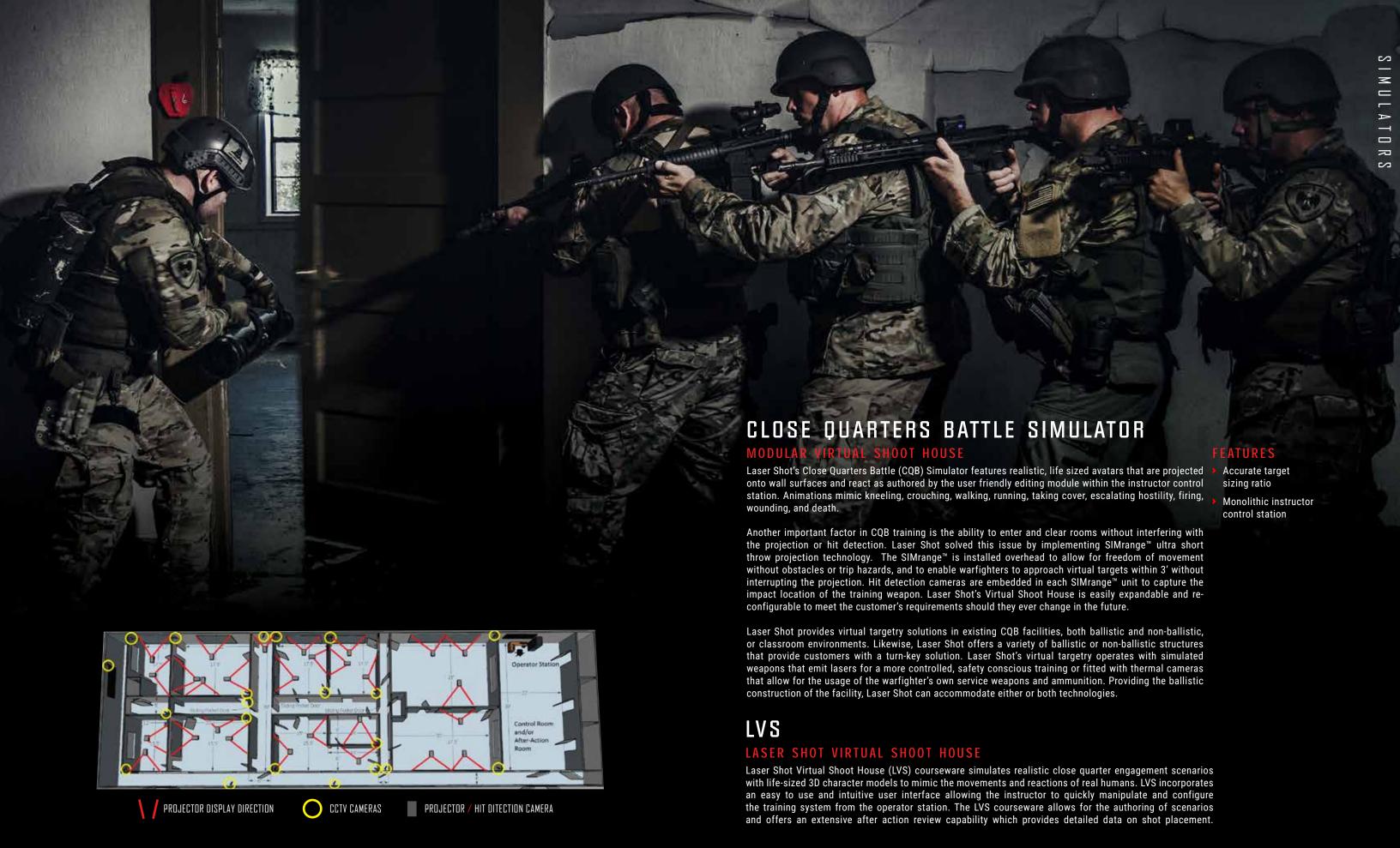
The SIMrange™ is typically sold in a In the past, firearms simulators required package with Laser Shot's Judgmental

FEATURES

- Integrated hit detection camera
- Fastest setup time of any simulator in its class
- Ceiling-mounted capability







NAVAL CREW & GUNNERY TRAINER

REALISTIC BOAT SIMULATOR

Laser Shot's Naval Crew & Gunnery Trainer (NCGT) consists of an immersive training on the places warfighters in geo-specific harbor, coastal, and riverine environments in order to train effectively on a variety of crew level operations and representations. Fully instrumented Coxswain station waterborne gunnery. Integration with VBS3, combined with individual and crew-served training weapons, enable Laser Shot to deliver the most realistic and immersive > Simulated recoil crew-served conditions possible in a virtual training environment.

The NCGT consists of a vessel hull with overall measurements of approximately ten' wide and fifteen' long. The vessel hull platform consists of: coxswain station (console and cabin assembly), handrails, and weapon mounts installed on a 3000lb payload, 3DOF motion platform.

Recommended is a total of six borderless projection screens to encompass the watercraft. This screen configuration provides a 360° target engagement area. The watercraft comes with a complete coxswain station including steering wheel, throttle, radar screen, comms/ICS, and gun positions on the bow, port and starboard sides for crew-served weapons.

The NCGT is currently utilized by NECC in California, Virginia, Guam, and Bahrain.

FEATURES

IO

abla2

- Fully instrumented Coxswain station
- weapons and mounts
- Virtual Battlespace 3





KDR

KNOWN DISTANCE RANGE

Featuring milspec targetry in vivid 1080P virtual immersion, KD Range is a A KD range has three primary objectives: fire fundamental element of Laser Shot's comprehensive marksmanship instruction tight shot groups at a known distance, make curriculum, adhering to the doctrinal standards of military field manuals. This sight adjustments at range while experiencing the virtual version of real-world marksmanship instruction includes functions effects of wind and gravity, and marksmanship designed to enhance the warfighter's training experience and provide instant testing. The firing task on a KD range is an feedback to the instructor, such as a responsive LOMAH indicator (Location of intermediate step toward the firing task of a Misses and Hits) in the peripheral view of the warfighter, which displays instant warfighter. Information concerning the precise hitshot placement without the need to interrupt the sight picture.

Additionally, this powerful courseware visualizes both POA and POI (point-of-aim target at a known distance, and the warfighter can and point-of-impact) to the warfighter to clearly conceptualize the relationship establish a position that provides a natural point between where the weapon is aimed and the impact location of the virtual bullet of aim on that single target. based on the type of firearm / round type ballistics and distance in the virtual environment. These added features greatly reduce the amount of time required for a warfighter to become proficient with their weapon system at varied distances.

CURRICULUM

or-miss location of every bullet fired is provided. KD firing is conducted with a single, clearly visible

PMI

PRELIMINARY MARKSMANSHIP INSTRUCTION

A self-paced interactive courseware designed specifically for small arms development, sustainment and qualification, and adheres strictly to the doctrines of all services. Warfighters practice grouping and advance to the zeroing. When the warfighter achieves an optimum shot group, the zeroing proczess will walk them through adjusting physical sights on simulated weapons. Upon successful zeroing, the shooter will transition to a qualification course and qualify using all tables and appropriate rounds.

An AAR will illustrate each shot location and differentiate tables by color. Final scores will post for review and results can be printed or exported to a spreadsheet for training records. PMI features a comprehensive library of training courses, such as standard BRM popup ranges, pistol qualification ranges, KD practice ranges, ALT-C, and Military Police qualification ranges. With a 14' portable screen four lanes can be simulated simultaneously. Laser Shot maintains accurate perspective calculated for exact target size to distance ratio. Additional lanes can be added by networking more systems.

JTS

JUDGMENTAL TRAINING SOFTWARE

Laser Shot's Judgmental Training Software (JTS) improves effective use of force procedures using high definition interactive simulation scenarios. These scenarios are created from anticipated threats or previous real-world situations. Leaders can evaluate performance with comprehensive AAR

features within JTS and coach based on current engagement policies. While training, the instructor can manually direct the scenario to create multiple outcomes based on the student's interaction, reinforcing communication and deeper understanding of the use-of-force continuum.









SIMULATED SMALL ARMS

OVERVIEW

Laser Shot's in-house team of firearm engineers has created simulated versions > Reliable through countless shots of countless small arms and are constantly adding more models to the available

DRY-FIRE & ReCOIL

Dry-Fire weapons emit a visible or infrared laser when the trigger is pressed. Recoil weapons cycle the bolt through CO2 or compressed air via refillable barrel reservoirs > IR or visible laser for tetherless weapons or air compressor systems for crew-served models. Laser Shot's recoil weapons are built around real weapon components, such as triggers or feed tray covers, but are modified and stamped "not a firearm".

Laser Shot was the first to utilize barrel reservoir technology instead of magazine reservoirs for many reasons. Not only can a barrel reservoir fire a complete combat load without refilling, but simulated magazine reloads become more realistic (and less maintenance-prone) without the air seal between the magazine and the weapon

FEATURES

- Familiar ergonomics and assembly
- Moving action
- Milspec durability
- Compatible with issued accessories Functions with real firearm components, such as a striker (SIM17/SIM18) to provide true-to-life trigger:
 - Weight
- Take-up - Reset

M4 Recoil

A training weapon is only as realistic as its trigger pull weight, take-up, and reset. Laser Shot is the first simulator company to design our pneumatic recoil to be filled inside barrel reservoirs instead of the magazines. The barrel reservoirs can be filled with a CO2 adapter on a CO2 tank with siphon tube. Since magazine changes are required more frequently during normal training, the seals are commonly worn out and cause increase air leaks. Laser Shot improved this feature by leaving the magazines inert and constructed air reservoirs inside the barrels.

No additional accessories to the weapon are required that would not normally be standard issue. This design allows for a higher fidelity simulated weapon. Synthetic audio is not necessary because the mechanical action is sufficient to replicate the cracking of the weapon begin fired. All assist in working towards mitigating flinching or anticipation of recoil.



SIM M17 / SIM M18

Designed by firearm engineers to replicate the form, fit, and function of prolific polymer-framed sidearms, the SIM M17 / SIM M18 instills unforgettable muscle memory into the user with its true-to-life trigger weight, take-up, and reset. This simulated firearm can be outfitted with the user's choice of a visible laser for standard dry-fire training or an 850nm infrared laser for integration with Laser Shot virtual firearm training

Laser Shot understands that a good training tool requires more than realism and took the development of this product several steps further by receiving ATF Certification #3311/304559 "non-firearm" status for international (non-ITAR) shipping and answered the market's demand for a maintenance-free device by ensuring the simulated trigger will function flawlessly through trigger pulls numbering in the hundreds of thousands - if not millions.



COUNTING MAGAZINES

OVERVIEW

Laser Shot has developed simulated magazines capable of adjustable round counts. When the number of shots fired equals the round count setting, a follower is actuated to lock the bolt or slide to the rear, replicating the physical characteristics of an empty weapon.

Officers must physically eject the magazine and press down on the actuator to reset/reload and re-insert in to the magazine well to resume firing. Each magazine replicates the weight and feel of a real magazine and feature true-to-life dimensions for seamless carrying in tactical gear or duty belts for reload drills.

FEATURES

- Micro USB charging port
- Adjustable round counts







CREW-SERVED WEAPONS

OVERVIEW

Laser Shot manufactures high fidelity crew-served simulated weapons that can be added to a simulator package for marksmanship fundamentals or unstabilized gunnery training at the unit level. Simulated recoil weapons transmit weapon data back to the system and accept compressed air for the recoil system through a single umbilical into the weapon along with a data cable. Instructors can monitor operation of simulated weapon and induce malfunctions as needed to evaluate trainee skill levels and conduct remedial training prior to live-fire exercises.

Crew-served weapons training is provided through the use of the SMART™ weapons and the Weapons Interface software. SMART™ weapons allow for the mandatory changing of fed rounds and proper cycling of weapons before bringing weapon back online. Logic is programmed into the Weapon Interface that ensures proper reloading or clearing procedures are performed. SMART™ weapons allow trainers to count rounds as well as create specific malfunctions.

CREW-SERVED DATA TRANSMITTAL CAPABILITIES AND MALFUNCTIONS

- Fire event
- ▶ Feed tray open / closed
- Ammo present / absent
- Jam
- Out of ammunition
- Overheat
- Bolt position
- Runaway

CROSSHAIR

MAGNIFIED OPTICS SIMILIATOR

Crosshair™ Magnified Optics Simulator is a unique, high-fidelity training simulator for distance shooting and the use of long-range optics. By utilizing microdisplays embedded in a variety of optic housings, Laser Shot is able to offer snipers, marksmen, and observers the ability to use virtual magnified optics to execute tactical scenarios incorporating observation, cover, and engagement.

Crosshair simulated weapons or optic devices contain an always-on infrared laser that the detection camera tracks for aim data. This aim data is used to produce the magnified image that is displayed in the virtual scope. In the case of weapons, when a trigger pull is sensed, a shot will be created at the aim point. Crosshair's simulated rifle scope has functioning elevation and windage turrets along with adjustable focus and zoom rings.

FEATURES

- > Realistic ballistics engine
- Conduct mission rehearsal
- Can replicate long range engagement inside a classroom
- Train for windage, elevation and distance factors without the need for live-fire
- Multiple weapon and optic platforms can be networked together within the same scenario for collective training
- Multiple optic models available

CROSSHAIR SIMULATED WEAPONS & OPTICS

Crosshair™ technology can be adapted to any physical optic. Our team of firearm engineers are standing by to create custom training devices to meet specialized training requirements. Below are some of the most commonly used simulated optics and weapons.

PAS-13D

Features realistic, functional button controls that alter the thermal sight picture between black-hot / white-hot, as well as contrast. This optic is required for US Army Table-Il gunnery qualification.



RIFLE SCOPE

Features functional windage and elevation turrets, as well as standard eye relief for a long range optic of its size.



SIM RCO

Magnified view is achieved using specialized lenses within the mock optic body, allowing the shooter to focus on the projection surface.



SPOTTING SCOPE

Ideal for sniper / spotter team training and features realistic zoom and focus adjustments.



SIM4 RECOIL

When paired with the SIM RCO, this simulated weapon offers a tetherless option to train designated marksmen.



M22 BINOCULARS

Ideal for sniper / spotter team training and CFF (Call For Fire). Features realistic zoom and focus adjustments.



M24

This simulated weapon features a real M24/ Remington 700 action and Harris bipod for realistic precision marksmanship training.



M 110

Modified from a real weapon system, this training device mimics special purpose rifles found in all services and elite law enforcement units.



LIVE-FIRE RANGES CONTAINER RANGE // COMPACT LIVE-FIRE FACILITY MOBILE RANGE // TOWABLE SHOOTING SOLUTION MODULAR SMALL ARMS RANGE // MODULAR SHOOTING SOLUTION 37 THERMAL SHOT // LIVE-FIRE VIRTUAL TARGETRY SYSTEM SVALIN BULLET TRAP Shooting Range Technologies™ is a leading authority on live-fire range design, fabrication and equipment. With more than seventy combined years of industry experience, SRT personnel are uniquely qualified to take on your range project and complete it on time and within budget. We use the very latest in computer aided design technology, and operate some of the largest computer driven dualhead water jet cutting machines in North America. As the livefire division of Laser Shot, Inc., and previously operating solely under the Laser Shot name, SRT has been designing, fabricating and equipping specialized, 360° containment / zero SDZ live-fire shooting range facilities since 2005. RANGES TO FIT ANY NEED // Products include SRT's Modular Small Arms Ranges (MSAR), Mobile Ranges, Container Ranges, and Shoot Houses. We'll even help you with your custom conventional style range if you like. We have built and supplied range facilities for every branch of the U.S. military, including SOCOM; foreign militaries, including the Canadian Special Forces; DHS/ ICE / Border Patrol; and The Federal Reserve; as well as Law Enforcement Agencies and Civilian/Commercial customers, worldwide. Even Sturm, Ruger & Co., one of the world's largest firearms manufacturers, after exhaustive research, chose SRT to design, build and outfit their new, modular live-fire testing facilities in two of their manufacturing plants.



COMPACT LIVE-FIRE FACILITY

SRT installs the latest shooting range technologies in a compact self- > Bullet trap options (granulated rubber, snail, Svalin, etc) contained unit through the use of modified 40' shipping containers, which can be connected end-to-end for a maximum shooting distance of 100 meters. These ranges are in use by firearm manufacturers > Soundproofing who need a testing range, police and military units who have frequent > Exterior / interior training and qualification needs.

Optionally, Laser Shot's powerful Thermal Shot technology can transform each Container Range into a virtual training center featuring challenging software with moving targets at simulated distances.

FEATURES

- **HVAC** system
- Exterior / interior paint
- Virtual targetry with Thermal Shot technology
- Interior lighting
- Instructor control station

MOBILE RANGE

SRT's Mobile Range is a completely self-contained live-fire training facility, transportable by standard over-the-road methods, without special permitting. Available in several target distances including 7, 10, and a 25 yards/meters. A 'drive-up' solution providing on-site, live-fire training. The Mobile Range can be customized to include monorail targets, shooting booths and/ or Laser Shot's Thermal Shot ™ live-fire simulator. Other custom options available.

rubber, snail, Svalin, etc.)

HVAC system

Soundproofing

Exterior / interior paint

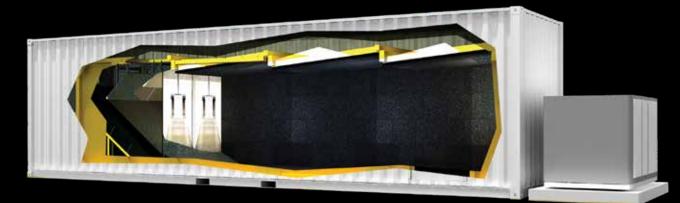
Bullet trap options (granulated Interior lighting Instructor control station

Simulated Weapons

Software

Screen

Virtual targetry with Thermal Shot technology







zero-surface-danger-zone alternative solution to the standard MILCON indoor firing range. The completed MSAR includes a weathertight enclosure, and all range systems such as OSHA/NIOSH/EPA/ASHRAE compliant HEPA-filtered ventilation, ballistic containment, sound isolation, target, lighting, communication, touchscreen controls and safety/emergency systems. Storage space and classrooms, as well as a choice in bullet trap and target styles; including patented Thermal Shot™ Live-fire Virtual Targetry are available. MSAR is a turnkey small arms training solution--Just provide a solid, level foundation/support for anchorage and utility connections and we do the rest! Modular prefabrication drastically shortens acquisition time and simplifies procurement requirements. Weapons cleaning and storage, as well as restroom/washing module options are also available.

Available with fixed or dynamic (tactical) firing lines; with full ballistic and splatter protection and NO interior dividing walls, columns or supports within the shooting area, MSAR offers a safe and affordable and small arms range solution which is superior to ranges constructed from shipping containers and to conventional indoor ranges constructed as permanent 'brick and mortar' buildings.

- No-Surface-Danger-Zone required
- 99.97% HEPA-filtered ventilation/HVAC available in Purge or Recirculating style
- Meets all applicable NIOSH, ASHRAE, OSHA & EPA requirements
- Only indoor range certified for use with new 7.62mm and 5.56mm EPR (M80A1 and M855A1) ammunition
- Modular assembly and training device classification simplify and shorten procurement
- "Green" Range with complete particulate and fragmented lead containment & management
- Noise pollution controls minimize the impact on neighbors and sound exposure to users
- Steel or rubber bullet trap choices using proven designs
- Multiple target options, including Thermal Shot™ Live-fire virtual targetry/video wall
- **Built-in Range Control Office with** touch-screen automation controls

Thermal Shot™ technology is the exclusive live-fire solution that ensures the entire target wall is tracked. This implies that all areas of the screen will accurately track and register projectiles, resulting in zero blind spots and roque shots. As a projectile passes through or strikes the Thermal Shot™ screen, the thermal camera detects and measures the locations of those strikes, instantly mapping the strikes to the projected images. The computer responds immediately with the correlating results which may include depictions of death, wounding, chipping, splintering, or other realistic bullet impacts.

- Live rounds
- Training munitions (UTM®/Simunition®)
- Soft Air
- **Rubber Projectiles**



The Svalin Bullet Trap is the latest addition to the options offered by Shooting Range Technologies in partnership with Odin Target. Designed to maximize shooting distance and contain bullets first from varying angles, the Svalin is virtually maintenance-free while withstanding high loads (Approx. 950,000 per square meter before maintenance is required).

The Svalin is covered with a self-healing rubber later that eliminates ricochets and provides a surface for virtual targetry to be projected upon. These bullet traps can be installed in 360°, creating an immersive shooting experience.



