Combat Skill Enhancement Trainers

Systems to enhance firearms skills, marksmanship, threat identification, target acquisition and mission procedures

VSD Corporate Capability and Simulator Products Introduction





VSD – Who we are and what we do

Company	VSD, LLC (U.S.A.)		
Founded	2001	Standards:	DTM is ISO 9001:2007 Quality Control Ac
Subsidiaries	VSD Global (KSA)	Simulator & Training	Simulator-based learning systems
	VSD Global Reg. Office (UAE)	Solution range:	Computer-based training solutions
	VSD International, LLC (US-DE)		Instructor-led training solutions
	DTM Global, WLL (UK)		On the job/ live training solutions
	Proven Publications, LLC (US)		 Blended training solutions
			Performance improvement solutions
Major Areas of Expertise	 Engineering & Auxiliary Training (power, generation, electrical, propulsion) 	VSD training course availability	2,000,000 student granted access to VSE online courses worldwide every year.
	 Special Systems Training (communications, weapons, sensors) 		
	Operations & Maintenance Training	Number of students using	~ 81,600 individuals in 2011
	Sourcing & Procurement	VSD training products:	
Employees	80, with resource pool of over 100 additional subject matter experts, instructors, designers, & developers	Number of students trained since inception	~ 550,000 individuals trained
Additional Resources	Teaming agreements with subject matter experts for	Number of courses in VSD's	~ 85 complete courses in the current invo
	Specific OEM equipment training	CBT inventory	
	CONOP-specific defense & security training		
	 Expertise in identifying and screening international equipment OEMs and specialty subcontractors 	CBT & ILT curriculum hrs	~ 2,150 hrs of courseware in the current

Accredited

SD I DTM

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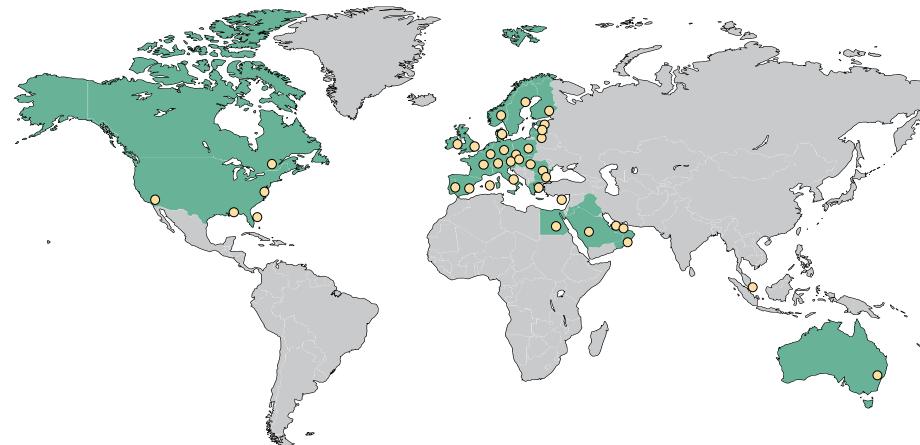
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VSD – Who we are and what we do

Countries/Multilateral Security Organizations we have served:

VSD's group of companies have delivered in 38 countries on 5 continents



Program Delivery Partner Organizations:

BAE Systems	Computer Science Corp	Lasershot	Raytheon	APC/Saudi Aramco
Boeing	DAS	Lockheed Martin	RiverHawk Marine	Sperry Marine (NG)
Booz Allen Hamilton	DTM Global	Northrop Grumman	Rolls Royce	Swiftships
Chemring	L3 Communications	Q.E.D. Systems	SAIC	Westland Helicopte



Combat Skill Enhancement | Weapons | Small Arms Trainers

The simulators and training solutions we build are among the most advanced in the world and incorporate stateof-the-art training technologies, scalable/upgradable componentry, and in-depth systems integration expertise.

Our approach to Weapons Training Simulators

VSD designs, builds, implements and supports virtually any form of training and training system. VSD supplies simulators and training to governments and their militaries, security organizations and corporations. We excel in designing simulators for demanding operations and exacting skills; skills ranging from basic marksmanship to combat effectiveness with small arms under adverse conditions.

All of our simulators can be incorporated into existing training programs and, in many cases, we can aid in the integration of the weapons training simulator into force training plans.

Our simulators can be a simple as an independent, small firearm trainer (SAT) or as complex as a multi-component, team-based simulator for the training of new crews or squads on the safe and effective operation of a major combat assets (like crew-served weapons on a warship).

In the basic firearm operation and marksmanship arenas, we can tailor courseware based on specific CONOPS, or develop unique courseware to reflect the precise missions at hand.

Functionality of our Weapons Training Solutions

- · Supports individual small arms / crew-served weapons fighting qualification
- · Supports individual, small team and force-on-force team training
- Supports reconfiguration to various gun systems
- · Accurately reflects the ballistic characteristics of each of the various gun systems
- · Provides targets under a range of simulated lighting and environmental conditions
- · Accurately simulates recoil and live fire sounds
- · Accurately displays damage done based on simulated fire
- Offers instructors a variety of tools to assess individual and team performance
- · May be upgraded with additional weapons, teaching aids, or display arrangements
- · Built utilizing best engineering and simulator development principles and processes
- · Operates through a virtual environment that may be connected to other trainers (such as a field command trainer, naval bridge trainer, etc.)



Why our simulators and systems produce better training results

These simulators produce better training results on account of four very specific reasons:



simulation

Simulators come into play when new technologies, new processes, and new configurations are being introduced. What few outside of this industry realize is that the simulation models and training materials are often being developed while the new equipment's functionality and user/ interfaces are not yet finalized. Without guru-level expertise in such new product development settings, it is nearly impossible to design an accurate simulation.

VSD is a new military equipment and new process development expert in its own right. It is because of this in-house competency that VSD's simulators are significantly more accurate at depicting the full functionality of the new equipment.

Speed and superiority of implementation

VSD can progress a simulator from concept through delivery in as much as 50% less time than the typical provider. How? VSD' s lean production efficiency is a result of four very formidable engineering and production skill sets: VSD's capacity to rapidly grasp the intricacies of new technologies and their training implications; our engineering team's strengths in component manufacturing logistics; our design team's ability to provide detailed designs early in the production process, thereby reducing integration uncertainties; and our ability to manage the parallel production of components, especially as design changes flow through the myriad of programmers, component manufacturers, and fabricators.

Superior balance in the system being created

Simulators are systems with five primary components: the technology platform, the simulation model, the mission play, the user interfaces, and the user's mental models. Too often OEMs overemphasize the hardware and software, missing the mark on the users, the team learning and training system components. VSD' s engineers are total performance improvement experts; they delve into the intricacies of each of these components and the overall performance problem/solution equations so that a superior learning system is developed.



VSD replicates a high fidelity live fire setting displays and emulations built within a safe virtual environment. Our simulators run the same software and feature the same tactical equipment as found on livefire ranges. We pay close attention to the physical environment surrounding the range, from the firing points to overhead.

& environment



Configuration 1: Modular 6-weapon Trainer with 4 Stations

1. Weapons Systems & Trajectories

- · Based on true weapons with same dimensions, weight, size, trigger, trigger pressure, etc.
- · Over 20 Off-the-shelf wireless recoil and laser targeting kits available - 9mm, .357, .40, .45, 5.56 (custom kits also possible for other gun systems)
- · Dry-fire laser, recoil laser, and full simulated fire options
- · Wireless connection to the simulation server option
- · Command and control Interface allows weapon's fault introductions, i.e. overheats, runaways, jams, etc.
- · Trajectories based on chosen weapon/bullet's true external ballistic characteristics

2. Instructor Controls

- Full command and control to select different training modes and to introduce different scenarios under different environmental and lighting conditions
- · Large library of HD aggressor targets, firing range and training video scenarios
- Tools to create new targets and new scenarios; even HD video scenarios
- · Instructor controls over timing, distance and scoring
- · Easy-to-master tools to support after action reviews
- · Audio and video recording of trainees for review
- Real-time hit recording, shot feedback and analysis
- · Multiple pre-set reports and record keeping software for group and individual proficiency tracking

3. Four Trainee Stations

- · Interchangeable weapons all with laser sighting
- · Variety of easy-to-set training modes
- Supports multiple weapons per trainee in one scenario
- · Ample spacing around each trainee to allow for better interaction with scripted and unscripted aggressors

4. Visual & Audio Simulation

- · Full HD image and target quality supporting up to 300m target distance
- · Realistic backgrounds and sounds
- Variable firing size and and effect ratio Integrated display of background and target images
- · Overhead projection system
- · Lowlight and flashlight training settings
- · 160 degree or greater field of view

5. System Software

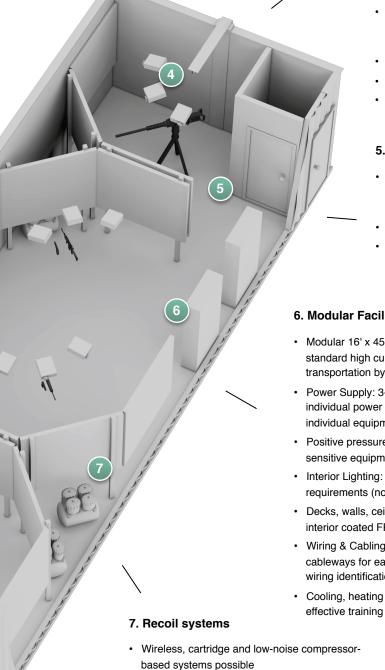
- · Simultaneous supporting of multiple individuals on separate scenarios of team training in a shared scenario
- Supports force-on-force or dueling
- · Operates on off-the-shelf operating systems

6. Modular Facility Enclosure

- Modular 16' x 45' space comprised of two 8' x 45' ISOstandard high cube containers (suitable for transportation by marine, road, or rail)
- Power Supply: 3-phase 380V/50Hz/60Hz AC to individual power panels 220V/50Hz/60Hz AC for individual equipment sets (with UPS backup)
- · Positive pressured interior reduces dust and prolongs sensitive equipment life
- Interior Lighting: Variable lighting for different operating requirements (normal, training, off)
- · Decks, walls, ceiling: Insulated exterior steel walls and interior coated FRP walls colored and coated
- Wiring & Cabling: Heavy duty wiring with exposed cableways for easy identification and access; standard wiring identification schema
- · Cooling, heating and ventilation system to maintain an effective training environment
- based systems possible
- Easy refit to a number of common gun systems with guick recharge systems for wireless and cartridge recoil options
- · Custom refits or systems for specialty guns



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SUMMARY INFORMATION

Training System Objectives

- ☑ Teaching basic marksmanship
- ☑ Training basic firearms skills and trouble shooting
- ☑ Teaching basic decision making
- ☑ Maintaining and improving firearms skills timing, accuracy, acquisition, and threat identification
- ☑ Executing mission procedures in a realistic tactical environment

Basic System Configuration

- ☑ Design features for individual training and small team training (4 stations)
- ☑ Integrated virtual environment providing interactive highdefinition video and computer-generated graphics content
- ☑ High definition 2D and 3D HD visual display systems ☑ Large variety of scenario, firing line, and interactive
- taraeting modes
- ☑ Number of different recoil systems available wireless, cartridge and low-noise compressor.
- Quick reconfiguration to different weapons and easy introduction of new weapons
- ☑ Dry-fire laser, recoil laser, and simulated live fire options
- ☑ Audio & video recording plus trainee performance reporting ☑ Instructor tools to generate new training scenarios, alter
- conditions, and introduce new backgrounds and objects ☑ All simulation hardware and software including operations
- and maintenance documentation
- ☑ Large library of individual and force training scenarios
- On-site installation and testing
- ☑ Train-the-trainer handover to the training operators
- ☑ Modular and mobile facility allowing for rapid relocation
- ☑ One year parts and service warranty packages

Additional Training System Options

- Force-on-force training mode option (trainee versus actor)
- Recoil systems for specialty weapons
- Full shot analysis and outcome briefing capabilities
- Advanced tools for scenario generation

Training Delivery Options

- Advanced target acquisition skill building exercises
- П Customized models and landscapes
- Classroom curricula (weapon theory, firing theory)
- Certified instructors
- On-site operations and maintenance service

COMBAT SKILL ENHANCEMENT SIMULATORS

MODULAR 6-WEAPON TRAINER WITH 4 STATIONS (2 CONTAINERS)

> VSD. LLC TRAINING & SIMULATION VIRGINIA BEACH, VIRGINIA

Configuration 2: Modular 10-weapon Trainer with 6 Stations

1. Instructor Controls

- Full command and control to select different training modes and to introduce different scenarios under different environmental and lighting conditions
- Large library of HD aggressor targets, firing range and training video scenarios
- Tools to create new targets and new scenarios; even HD video scenarios
- · Instructor controls over timing, distance and scoring
- Easy-to-master tools to support after action reviews
- Audio and video recording of trainees for review
- Real-time hit recording, shot feedback and analysis
- Multiple pre-set reports and record keeping software for group and individual proficiency tracking

2. Six Trainee Stations

- · Interchangeable weapons all with laser sighting
- Variety of easy-to-set training modes
- Supports multiple weapons per trainee in one scenario
- Ample spacing around each trainee to allow for better interaction with scripted and unscripted aggressors

3. Weapons & Trajectories

- Based on true weapons with same dimensions, weight, size, trigger, trigger pressure, etc.
- Over 20 Off-the-shelf wireless recoil and laser targeting kits available – 9mm, .357, .40, .45, 5.56 (custom kits also possible for other gun systems)
- Dry-fire laser, recoil laser, and full simulated fire options
- Wireless connection to the simulation server option
- Command and control Interface allows weapon's fault introductions, i.e. overheats, runaways, jams, etc.
- Trajectories based on chosen weapon/bullet's true external ballistic characteristics

4. System Software

- Supports multiple individuals on separate scenarios or team training in a single shared scenario
- Supports force-on-force or dueling
- · Operates on off-the-shelf operating systems

5. Visual & Audio Simulation

- Full HD image and target quality supporting up to 300m target distance
- Realistic backgrounds and sounds
- Variable firing size and and effect ratio Integrated display of background and target images
- Overhead projection system
- Lowlight and flashlight training settings
- 160 degree or greater field of view

6. Recoil systems

- Wireless, cartridge and low-noise compressorbased systems depending on weapon type
- Easy refit to a number of common gun systems with quick recharge systems for wireless and cartridge recoil options
- Custom refits or systems for specialty guns

7. Modular Facility Enclosure

- Modular 24' x 45' space comprised of three 8' x 45' ISO-standard high cube containers (transportable by marine, road, or rail)
- Power Supply: 3-phase 380V/50Hz/60Hz AC to individual power panels 220V/50Hz/60Hz AC for individual equipment sets
- Positive pressured interior reduces dust and prolongs sensitive equipment life
- Interior Lighting: Variable lighting for different operating requirements (normal, training, off)
- Decks, walls, ceiling: Insulated exterior steel walls and interior coated FRP walls colored and coated
- Wiring & Cabling: Heavy duty wiring with exposed cableways for easy identification and access; standard wiring id. schema
- Cooling, heating and ventilation system to maintain an effective training environment



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SUMMARY INFORMATION

Training System Objectives

- ☑ Teaching basic marksmanship
- ☑ Training basic firearms skills and trouble shooting
- ☑ Teaching basic decision making
- ☑ Maintaining and improving firearms skills timing, accuracy, acquisition, and threat identification
- ☑ Executing mission procedures in a realistic tactical environment

Basic System Configuration

- ☑ Design features to support larger training volumes and force-on-force exercises (6 stations)
- ☑ Integrated virtual environment providing interactive highdefinition video and computer-generated graphics content
- High definition 2D and 3D HD visual display systems
 Large variety of scenario, firing line, and interactive
- targeting modes
- ☑ Number of different recoil systems available wireless, cartridge and low-noise compressor.
- Quick reconfiguration to different weapons and easy introduction of new weapons
- $\ensuremath{\boxdot}$ Dry-fire laser, recoil laser, and simulated live fire options
- Audio & video recording plus trainee performance reporting
 Instructor tools to generate new training scenarios, alter
- conditions, and introduce new backgrounds and objects ☑ All simulation hardware and software including operations
- All simulation naroware and software including operations and maintenance documentation
- $\ensuremath{\boxtimes}$ Large library of individual and force training scenarios
- $\ensuremath{\boxtimes}$ On-site installation and testing
- $\ensuremath{\ensuremath{\boxtimes}}$ $\ensuremath{\ensuremath{\square}}$ Train-the-trainer handover to the training operators
- $\ensuremath{\boxtimes}$ Modular and mobile facility allowing for rapid relocation
- $\ensuremath{\boxtimes}$ One year parts and service warranty packages

Additional Training System Options

- □ Force-on-force training mode option (trainee versus actor)
- □ Recoil systems for specialty weapons
- $\hfill\square$ Full shot analysis and outcome briefing capabilities
- $\hfill\square$ \hfill Advanced tools for scenario generation

Training Delivery Options

- □ Advanced target acquisition skill building exercises
- □ Customized models and landscapes
- □ Classroom curricula (weapon theory, firing theory)
- □ Certified instructors
- $\hfill\square$ On-site operations and maintenance service

COMBAT SKILL ENHANCEMENT SIMULATORS

MODULAR 6-WEAPON TRAINER WITH 6 STATIONS (3 Containers)

> VSD, LLC TRAINING & SIMULATION VIRGINIA BEACH, VIRGINIA

Configuration 3: Mobile / Modular 6-weapon Trainer with 2 Stations

4. Recoil systems

- · Wireless, cartridge and low-noise compressor-based systems depending on weapon type
- · Easy refit to a number of common gun systems with quick recharge systems for wireless and cartridge recoil options
- Custom refits or systems for specialty guns

5. Visual & Audio Simulation

- Full HD image and target quality supporting up to 300m target distance
- Realistic backgrounds and sounds
- · Variable firing size and and effect ratio Integrated display of background and target images
- Overhead projection system
- Lowlight and flashlight training settings
- 120 degree or greater field of view

(3)

6. System Software

- Supports multiple individuals on separate scenarios or team training in a single shared scenario
- Supports force-on-force or dueling
- · Operates on off-the-shelf operating systems

7. Mobile Facility Enclosure

- Modular 8' x 45' space comprised of one 8' x 45' ISO-standard high cube containers (transportable by marine, road, or rail)
 - Power Supply: 220V/50Hz/ 60Hz AC power generation set
 - Positive pressured interior reduces dust and prolongs equipment life
 - Interior Lighting: Variable
 lighting for different ops req.
 - Decks, walls, ceiling: Insulated exterior steel walls and interior coated FRP walls colored and coated
 - Wiring & Cabling: Heavy duty wiring with exposed cableways for easy identification and access; standard wiring id. schema
 - Cooling, heating and ventilation system to maintain an effective training environment



1. Two Trainee Stations

- · Interchangeable weapons all with laser sighting
- · Variety of easy-to-set training modes
- · Supports multiple weapons per trainee in one scenario
- Ample spacing around each trainee to allow for better interaction with scripted and unscripted aggressors

2. Instructor Controls

- Full command and control to select different training modes and to introduce different scenarios under different environmental and lighting conditions
- Large library of HD aggressor targets, firing range and training video scenarios
- Tools to create new targets and new scenarios; even HD video scenarios
- · Instructor controls over timing, distance and scoring
- · Easy-to-master tools to support after action reviews
- Audio and video recording of trainees for review
- · Real-time hit recording, shot feedback and analysis
- Multiple pre-set reports and record keeping software for group and individual proficiency tracking

3. Weapons & Trajectories

- · Based on true weapons with same dimensions, weight, size, trigger, trigger pressure, etc.
- Over 20 Off-the-shelf wireless recoil and laser targeting kits available 9mm, .357, .40, .45, 5.56 (custom kits also possible for other gun systems)
- · Dry-fire laser, recoil laser, and full simulated fire options
- · Wireless connection to the simulation server option
- · Command and control Interface allows weapon's fault introductions, i.e. overheats, runaways, jams, etc.
- · Trajectories based on chosen weapon/bullet's true external ballistic characteristics

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SUMMARY INFORMATION

Training System Objectives

- ☑ Teaching basic marksmanship
- ☑ Training basic firearms skills and trouble shooting
- ☑ Teaching basic decision making
- ☑ Maintaining and improving firearms skills timing, accuracy, acquisition, and threat identification
- Executing mission procedures in a realistic tactical environment

Basic System Configuration

- ☑ Transportable or deployable, design features for full portability (road, rail, onboard ship, remote or forward operating location)
- ☑ Integrated virtual environment providing interactive highdefinition video and computer-generated graphics content
- High definition 2D and 3D HD visual display systems
 Large variety of scenario, firing line, and interactive
- targeting modes ☑ Number of different recoil systems available – wireless, cartridge and low-noise compressor.
- ☑ Quick reconfiguration to different weapons and easy introduction of new weapons
- Dry-fire laser, recoil laser, and simulated live fire options
- ☑ Audio & video recording plus trainee performance reporting
- ☑ Instructor tools to generate new training scenarios, alter conditions, and introduce new backgrounds and objects
- ☑ All simulation hardware and software including operations and maintenance documentation
- $\ensuremath{\boxtimes}$ Large library of individual and force training scenarios
- ☑ On-site installation and testing
- $\ensuremath{\ensuremath{\boxtimes}}$ $\ensuremath{\ensuremath{\square}}$ Train-the-trainer handover to the training operators
- ☑ Modular and mobile facility allowing for rapid relocation
- ☑ One year parts and service warranty packages

Additional Training System Options

- □ Force-on-force training mode option (trainee versus actor)
- □ Recoil systems for specialty weapons
- $\hfill\square$ Full shot analysis and outcome briefing capabilities
- $\hfill\square$ Advanced tools for scenario generation

Training Delivery Options

- □ Advanced target acquisition skill building exercises
- $\hfill\square$ Customized models and landscapes
- □ Classroom curricula (weapon theory, firing theory)
- □ Certified instructors
- On-site operations and maintenance service

COMBAT SKILL ENHANCEMENT SIMULATORS

MOBILE & MODULAR 6-WEAPON TRAINER WITH 2 STATIONS (1 CONTAINER)

> VSD, LLC TRAINING & SIMULATION VIRGINIA BEACH, VIRGINIA

Configuration 4: Modular 4-weapon Trainer on RHIB Platform

1. Rigid Hull Inflatable Boat (RHIB) Mockup Station

- · Mockup integrated within the Weapons Trainer
- · Interchangeable weapons all with laser sighting
- · Supports multiple weapons per trainee in one scenario
- True RHIB configuration with motion capability ranging from visual simulation through full 6 axis platform

2. Weapons & Trajectories

- Based on true weapons with same dimensions, weight, size, trigger, trigger pressure, etc.
- Customized recoil system for special forces weapons
- Dry-fire laser, recoil laser, and full simulated fire options
- Wireless connection to the simulation server option
- Command and control Interface allows weapon's fault introductions, i.e. overheats, runaways, jams, etc.
- Trajectories based on chosen weapon/bullet's true
 external ballistic characteristics

3. Instructor Controls

- Full command and control to select different training modes and to introduce different scenarios under different environmental and lighting conditions
- Large library of marine-based aggressor targets
- Tools to create new targets and new scenarios; even HD video scenarios
- Instructor controls over sea state, environmental and lighting conditions
- Easy-to-master tools to support after action reviews
- Audio and video recording of trainees for review
- Real-time hit recording, shot feedback and analysis
- Multiple pre-set reports and record keeping software for group and individual proficiency tracking

4. Visual & Audio Simulation

- Full HD image and target quality
- Realistic marine environment and sounds
- Overhead projection system
- Lowlight training settings
- 270 degree field of view

5. System Software

- Integrates a marine environment with a small weapons training environment.
- Supports individual or team training in a single shared scenario
- Operates on off-the-shelf operating systems

6. Modular Facility Enclosure

- Modular 8' x 45' space comprised of one 8' x 45' ISO-standard high cube containers (transportable by marine, road, or rail)
- Power Supply: 220V/50Hz/60Hz AC power generation set
- · Positive pressured interior reduces dust and prolongs equipment life
- Interior Lighting: Variable lighting for different ops req.
- Decks, walls, ceiling: Insulated exterior steel walls and interior FRP coated walls
- Wiring & Cabling: Heavy duty wiring with exposed cableways for easy identification and access; standard wiring identification schema
- Cooling, heating and ventilation system to maintain
 an effective training environment



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SUMMARY INFORMATION

Training System Objectives

- Maintaining and improving marine combat skills timing, accuracy, acquisition, threat identification all in a marine environment
- ☑ Teaching marksmanship on a constantly moving platform (RHIB platform shown)
- ${\ensuremath{\boxtimes}}$ Teaching coordination between navigation and combat team
- ☑ Teaching advanced team-based combat effectiveness in a simulated marine engagement environment
- Executing mission procedures in a realistic tactical environment

Basic System Configuration

- ☑ Combination design featuring maritime navigation and special forces fighting in marine settings
- ☑ Integrated virtual environment providing interactive computer-generated graphics content
- High definition 3D HD visual display system
- ☑ Large variety of scenario and interactive targets possible, including system dueling or instructor-controlled aggressor settings
- $\ensuremath{\boxdot}$ Customized recoil and audio systems
- Quick reconfiguration to different weapons
- ☑ Audio & video recording plus trainee performance reporting
- Instructor tools to generate new training scenarios, alter conditions, and introduce new objects
- $\ensuremath{\boxtimes}$ All simulation hardware and software including operations and maintenance documentation
- $\ensuremath{\boxtimes}$ On-site installation and testing
- ☑ Train-the-trainer handover to the training operators
- ☑ Modular and mobile facility allowing for rapid relocation
- One year parts and service warranty packages

Additional Training System Options

- □ Force-on-force training mode option (trainee versus actor)
- □ Recoil systems for specialty weapons
- □ Full shot analysis and outcome briefing capabilities
- □ Advanced tools for scenario generation

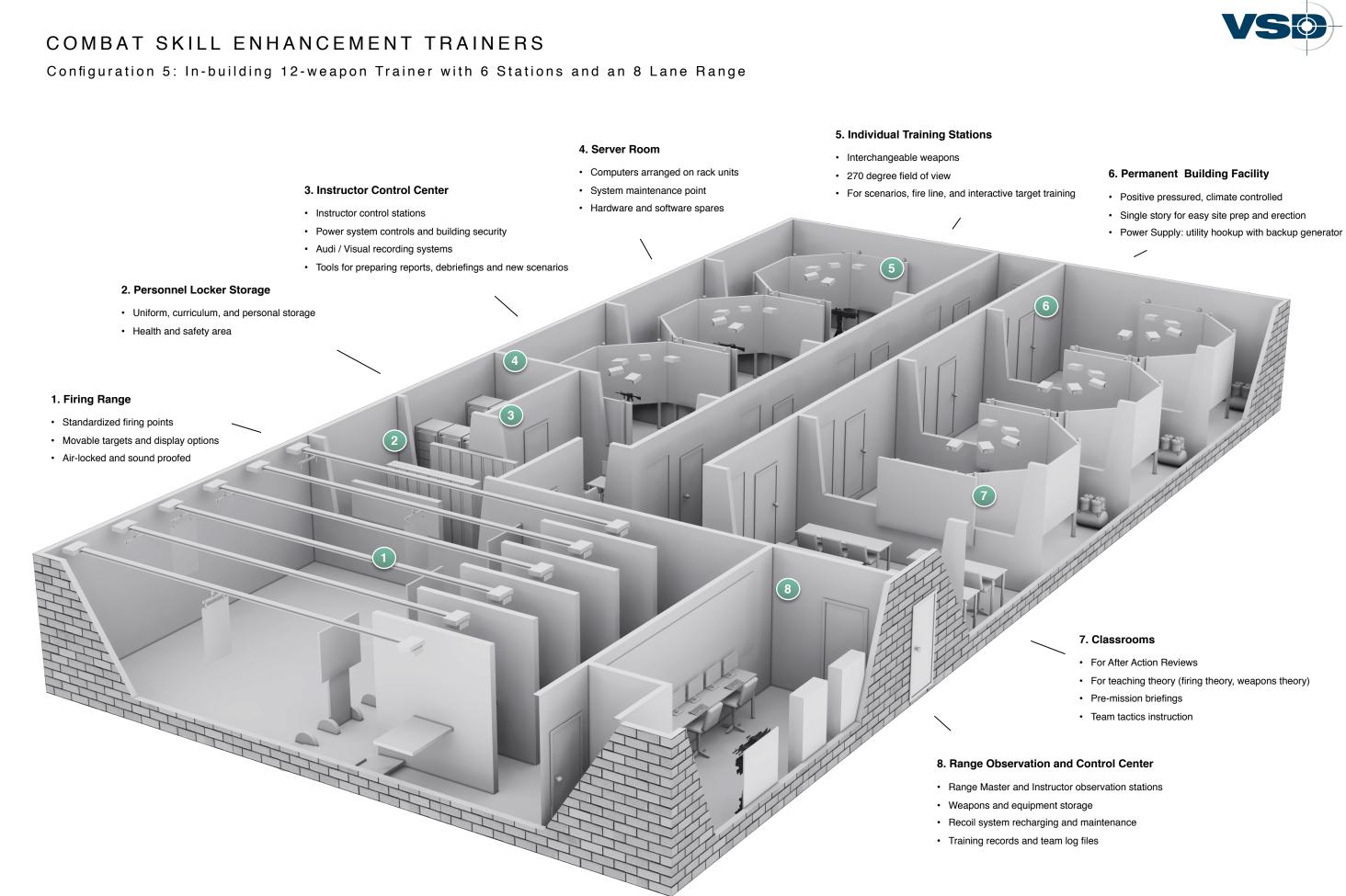
Training Delivery Options

- Advanced combat effectiveness skill building exercises
- Customized models and marine / coastal landscapes
- Classroom curricula
- □ Certified instructors
- On-site operations and maintenance service

COMBAT SKILL ENHANCEMENT SIMULATORS

MODULAR 2-WEAPON TRAINER ON A RHIB PLATFORM (2 CONTAINERS)

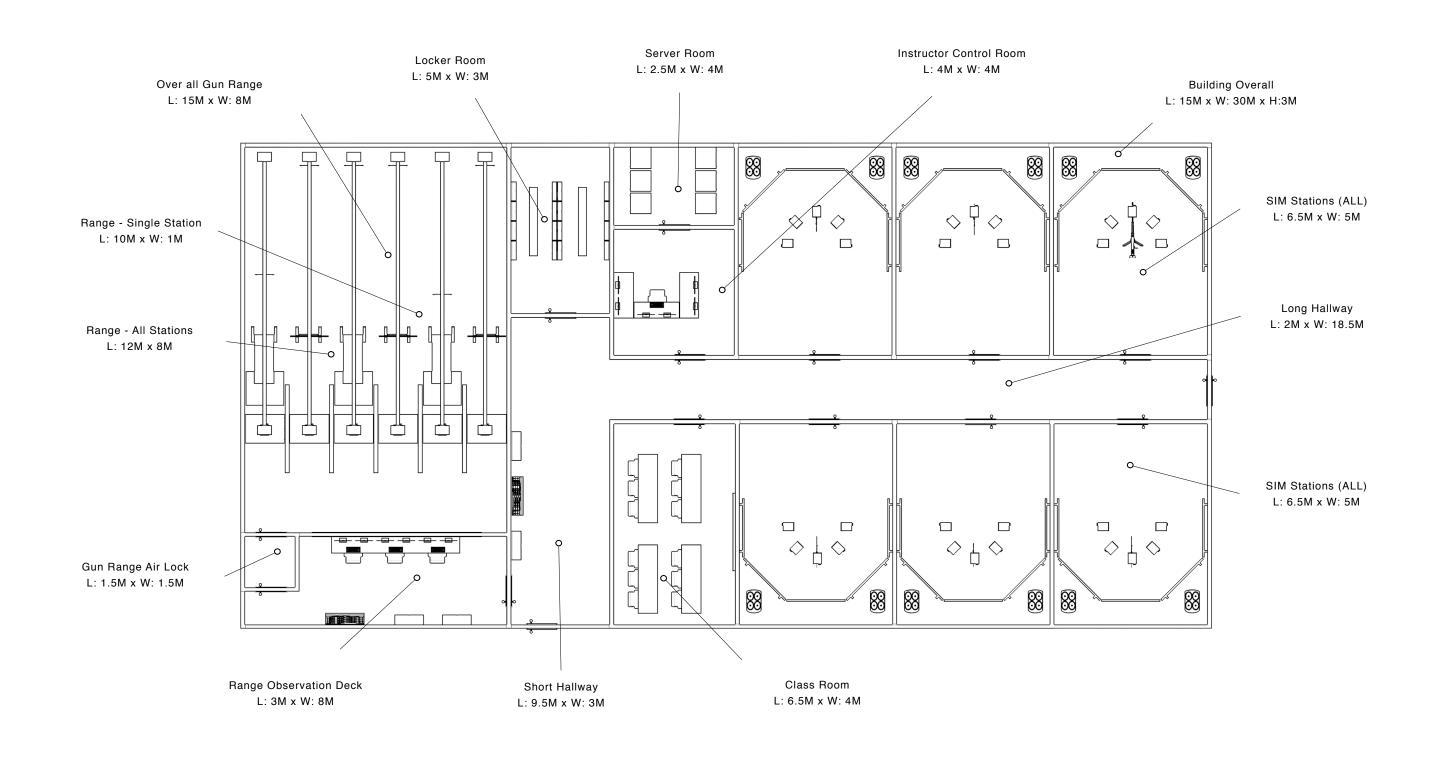
> VSD, LLC TRAINING & SIMULATION VIRGINIA BEACH, VIRGINIA





- For teaching theory (firing theory, weapons theory)

Configuration 5: In-building 6-weapon trainer with 6 stations and 8 lanes





Our Qualifications to develop Weapons | Combat Effectiveness Simulators & Training Solutions



Over a decade of comparable program delivery experience with training solutions installed in the defense and security forces of 38 nations including defense and security forces in the Kingdom of Saudi Arabia, UAE, Qatar, Oman, and Iraq.

#	VSD I VSDG Recent Project Descriptions	Client	Period of Performan
1	Coastal Patrol Boat Simulator with a Weapons Combat Effectiveness Trainer, Curricula, and Instructor Team	Iraqi Navy	2009 – pres
2	Naval Defense Offshore Support Vessel Simulator with a Weapons Combat Effectiveness Trainer, Curricula, and Instructor Team	Iraqi Navy	2010 – pres
3	Security Assessment (Oil & Gas Infrastructure)	Saudi ARAMCO	2011
4	Naval Operations & Communications SIM & Training	Royal Omani Navy	2010 – pres
5	Threat Recognition & Electronic Warfare System & Training	Royal Saudi Airforce	2008 – pres
6	Threat Recognition Simulator System & Training	UAE Naval Force	2009 – pres
7	Fast Missile Patrol Craft Training	Egyptian Navy	2009 – pres
8	Naval Operations, Communications, Electronic Warfare Simulators & Training	Royal Saudi Navy	2009 – pres
9	Threat Recognition Simulator & Training (through DTM subsidiary)	Royal Guard, Royal Army, Royal Airforce	2005 - pres
10	Threat Recognition Systems & Training (through DTM subsidiary)	Royal Saudi Airforce Intelligence	2010 - pres
11	Threat Recognition Simulator System & Training	Qatar Emiri Air Force	2001 – pres
12	Threat Recognition SIM Systems & Training	Royal Omani Armed Forces	2000 - pres



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Our Qualifications to develop Weapons | Combat Effectiveness Simulators Training Solutions



Integrated Defense and Security Operations and Combat Effectiveness Simulator with Curricula and Instructor Team for the Iraqi Navy

Country:	Iraq
Client:	Iraqi Navy, Ministry of Defense
Location:	Umm Qasr (Iraq), Morgan City (USA), Norfolk (USA), Totness (UK)
System Scope:	Integrated Simulator for Iraqi Navy Defense / Coastal Security Vessels
Students:	+225 Iraqi Navy personnel (officers and enlisted)
Main Components:	Multi-component simulator system for the new Patrol Craft Security Fleet
	Multi-component simulator system for the new Iraqi Offshore Support Fleet
	Turn-key training solution (from concept through implementation and operations) for Iraqi Navy Personnel
VSD's Role:	System Designer / Engineer
	Procurement & Logistics
	Implementation & Operating Support

Unique Challenges:

- Requirement to deliver full functional system in ~70% less time
- Lack of fully functional ships as a basis of systems design
- Mission criticality and the associated politics surround U.S. Congressio and Iraqi Council of Representatives oversight
- Integration of 50 cal weapon system into a dynamic marine combat environment for simultaneous weapon, navigation and sensor training

Solution Highlights:

- Training of +225 Iraqi military personnel
- On-time delivery of the complete system, with a superior degree of complexity and sub-system integration
- First cadre of Iraqi students graduated from the VSD programs in sever months (219 days) from contract award date
- Rapid sourcing, contracting and coordination of efforts among a large p OEMS, vendors, specialist subcontractors and the Iraqi Navy command operating from half a dozen work locations
- Recognized by U.S. Navy Command for working at the forefront of inno Training Systems design, systems integration and fast-tracked complex program delivery

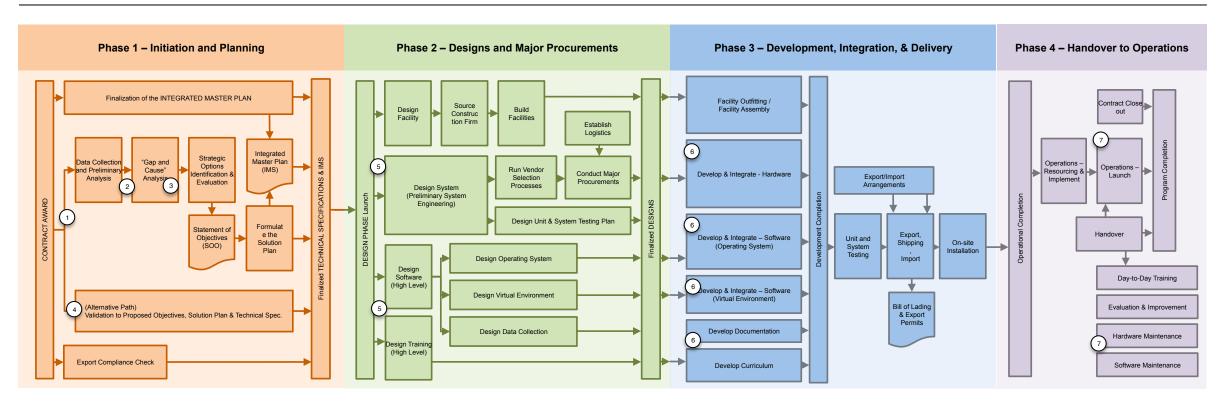


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Our Qualifications to develop Weapons | Combat Effectiveness Simulators Training Solutions

Over 4,000 individual task items and stage gates are reflected in the typical Integrated Master Schedule that we utilize to manage our client's complex simulator and training system development efforts

VSD I VSDG's Proprietary Systems Integration and Solution Development Process



Points in the process where VSD I VSDG creates unique value for its clients:

- 1. Capacity to engage with clients at their unique starting point in the program initiation process
- 2. Guru level understanding of how these systems increase capabilities and improve performance
- 3. Proprietary processes and knowledge for assessing performance issues and capability constraints
- 4. Significant international experience and deep knowledge of international regulations
- 5. Balanced emphasis on all components that drive system efficacy, and a lean production philosophy
- 6. VSD In-house capacity across multiple production and integration workstreams, reducing subcontractor risks



7. VSD-developed products and services that seamlessly integrate with system, and make the training operations concept a sustainable reality

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