

VCTS

VIRTUAL CLEARANCE TRAINING SUITE



Real Experience for Explosive Hazard Defeat Missions

FAAC provides state-of-the-art simulators to train engineer vehicle and equipment operators for the explosive hazard defeat mission. Configured in self-contained 53' semi-trailers, the VCTS allows individuals and crews to learn and master all tasks likely to be encountered during clearance missions without risk to man or machine.

Specific features include:

- Full suite of simulated vehicles and equipment:
- Mine Protected Clearance Vehicle (MPCV – Buffalo)
- Vehicle Mounted Mine Detector (VMMD – Tractor, Wheeled, High Speed (TWHS): Husky)
- Medium Mine Protected Vehicle (MMPV – Type I Panther and Type II RG-31MK5E)
- Man Transportable Robotic System II (MTRS II)
- Four Instructor/Operator Stations with classroom/AAR/mission planning areas
- Unparalleled realism and high fidelity vehicle dynamics for believable operational experience
- Physics-based Interrogation Arm simulation for the Buffalo and MMPV Type II
- Husky operations with or without HMDS GPR
- One Gunner's Station (GS) or Common Remotely Operated Weapon Station (CROWS) per MMPV Variant
- VOSS – Vehicle Optics Sensor System
- Individual/Crew training curriculum, including Gunnery Tables



**Instructor Operator Station (IOS),
After Action Review Classroom**



MPCV Buffalo



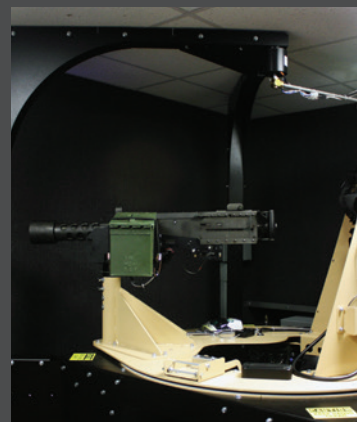
MMPV



VMMD Husky



MTRS Talon



Gunner Station



**Vehicle Optics Sensor System
(VOSS)**

Smart Options for the Most Effective Training

In May 2011, the U.S. Army selected FAAC Incorporated to supply its Counter-Improvised Explosive Device (C-IED) / Explosive Hazard Defeat Training Simulation Suite. The program designated Virtual Clearance Training Suite (VCTS)—is modular by design and builds on the simulator technology developed for the US Army Operator Driving Simulator (USA ODS) and US Army Common Driver Trainer (CDT) programs. FAAC received a contract modification in May 2014 adding a 5th trailer, two VMMDs, and multiple system upgrades including integration of One SAF 6.0, a One SAF HEMTT Recovery Vehicle, a Buffalo Air Digger and conversion of MPCV & MMPV cabs to a Common Dual Cab (CDC) configuration. In March 2017, FAAC was awarded a new 5-year contract (VCTS II) to deliver concurrency, technology refresh, and cybersecurity upgrades. FAAC provides interim contractor logistics support as required.

Each fielded VCTS is a self-contained, mobile system mounted in five networked 53' semi-trailers, located at Active, Guard, and Reserve sites around the world. The suite consists of:

Trailer 1: Instructor Operator Station (IOS) / After Action Review (AAR) / Classroom

- Four IOSs, each can control up to 18 Student Training Stations (STSs) and enables individual, crew and collective training
- Advanced communications, direct to one or all associated STSs; or via one of three assigned simulated networks (PLT/CO, CO/BN, Fire Support)
- Curriculum includes 40 hours of basic and advanced training scenarios (including gunnery tables) with auto or instructor scoring, jump-back, and AAR capture
- Scenario generation capability; can add complexity or adapt scenarios to unit TTPs
- Geo-typical and geo-specific terrain, plus varied environment conditions (day, night, rain, snow, fog and storm) enable training under any conceivable condition
- Classrooms provide seating for 5, 10 or 25 students – facilitate planning, mission briefings, and detailed AARs

Trailer 2: 2-MPCV (Buffalo), 2-MMPV Type II

- Four high fidelity open cab STSs provide realistic individual and crew training
- Dash panels replicate current vehicle and include MPCV/MMPV OEM Interrogation Arm controls
- Physics based arm model enables realistic interrogation of possible IEDs
- Three simulated networks, intercom, plus direct communication with the instructor from each STS

Trailers 3 & 4: Each contain 2-MMPV, 2-GS / 1-GS & 2-CROWS, 1-VMMD, 1-MTRS

- MMPV features FAAC interchangeable self-recognizing dash panels, enabling rapid change between Panther or RG-31 variants – Cougar also available
- GS features head-mounted displays and .50 caliber or MK 19 simulated weapon
- CROWS features touch screen Fire Control Unit & Display, OEM Control Grip
- VMMD features metal detection, high-fidelity realistic sound replication, simulated marking, Husky Mine Detection System (HMDS) with Ground Penetrating Radar (GPR)
- MTRS II, actual OEM controls modified for simulation use, replicates all MTRS II behaviors: realistic movement, visual inspection, IED interrogation and detonation
- Three simulated networks, intercom, plus direct communication with the instructor from each STS

Trailer 5: 2-VMMD & 1-CROWS with same capabilities as in trailers 3 & 4; 2-VOSS with:

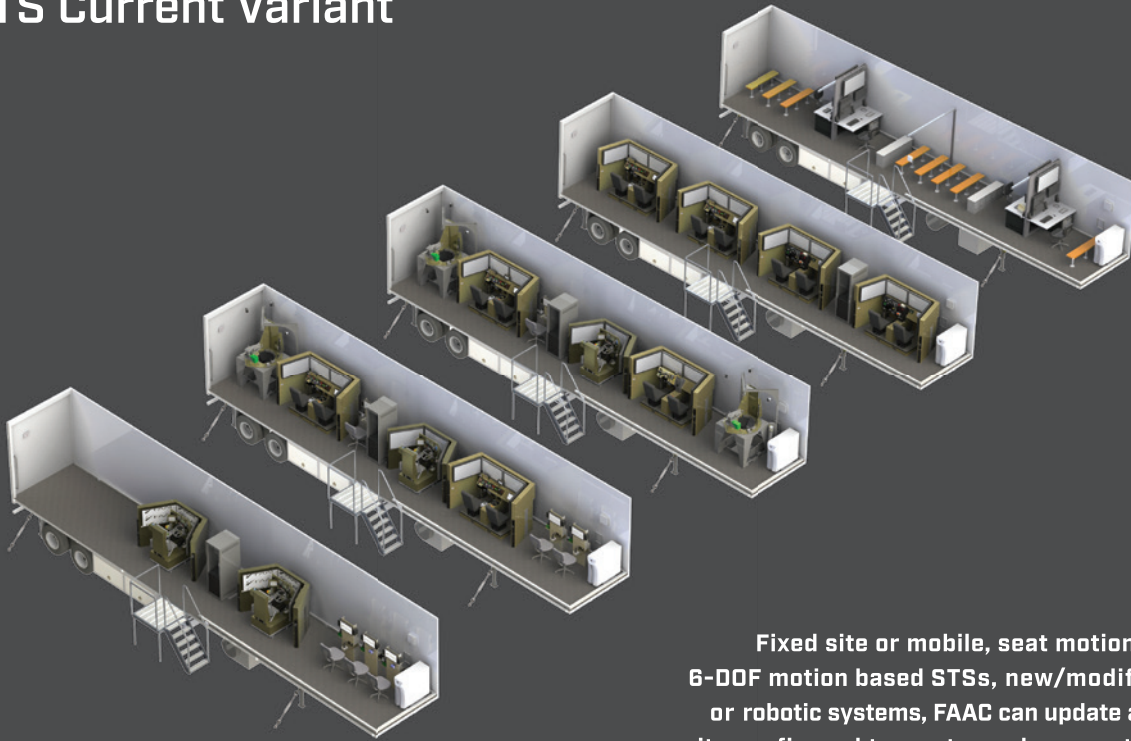
- Vehicle-mounted sensor package, Day, IR, and I2
- Laser range finder and laser illuminator on a telescoping mast



Variety of Configurations for Realistic and Affordable Training

The advanced IOS, multi-net communications, scenario generation system and updated databases ensure the VCTS is the Army's most configurable and flexible ground simulation training suite. In addition, FAAC designed the VCTS with a modular upgrade/modification capability to meet evolving requirements.

VCTS Current Variant



Fixed site or mobile, seat motion through full 6-DOF motion based STSs, new/modified vehicles or robotic systems, FAAC can update and deliver a suite configured to meet any clearance training need.

For over 50 years, FAAC Incorporated has been providing systems engineering services and simulation products for military, government, and private industry use. We are committed to the principles of customer satisfaction, concern for employees, and community involvement. Our philosophy is to develop effective, high quality products and to provide proactive, timely support for our customers while maintaining high ethical standards. References, studies, and customer findings confirm high marketplace satisfaction with FAAC products.

MILITARY
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