

AAI's SHADOW® CREW TRAINER

TEXTIRON Systems



A high-fidelity, system-level training suite

AAI's Shadow Crew Trainer (SCT) blends operational hardware and vehicle control software with instructional systems design, creating a virtual environment that delivers mission-level training to Shadow crew members. Partnering with the U.S. Army Joint Technology Center/Systems Integration Laboratory (JTC/SIL), AAI has integrated multiple unified simulation environment (MUSE) technology into the SCT to achieve rapid concurrency and accreditation.



AAI's FULLY INTEGRATED SCT

The SCT was developed for the Army National Guard to provide operator-, crew- and mission-level sustainment training in order to maintain Shadow Tactical Unmanned Aircraft System proficiency.

A comprehensive Shadow system trainer

Instructor Operator Station



Features

- Includes a plan view display (PVD) for scenario monitoring
- Offers scenario initialization and control, including faults and initial condition setup
- Enables radio communication monitoring and control
- Incorporates crew record-keeping, in conjunction with performance monitoring
- Delivers after-action review recording

Two Ground Control Stations



Features

- Incorporates actual vehicle control software
- Utilizes JTC/SIL MUSE for aircraft, Tactical Automatic Landing System and Ground Data Terminal simulation
- Uses an enhanced MUSE Instructor Operator Station
- Includes actual keyboard and joystick for vehicle and payload control
- Accommodates full radio communications
- Provides realistic electro-optic/infrared simulation

Launch and Recovery Computer Based Training



Features

- Provides a high-resolution, interactive and immersive 3-D environment
- Operates independently or integrated with the Ground Control Station mode of operation
- Delivers communications and aural queuing in both operational modes

Staff/Leader Role-Player Station



Features

- Provides a PVD for scenario monitoring
- Enables communications with students, as well as private instructor communications
- Delivers live video feeds from the Ground Control Station
- Incorporates FalconView™ Aviation Mission Planning System software

Concurrency, Accreditation and Interoperability

Features

- Uses same versions of MUSE and vehicle control software as deployed systems for concurrency
- Achieves accreditation for recording of training hours as a result of using an accredited version of MUSE
- SCT and trailer are Information Assurance, or IA, compliant
- Incorporates a Distributed Interactive Simulation (DIS) gateway and an authority to operate certificate for interoperability with the Aviation Combined Arms Tactical Trainer, as well as other DIS-compatible devices

Two configuration options

The SCT can be housed in an air ride-equipped trailer or in a traditional classroom setting for a flexible training experience.

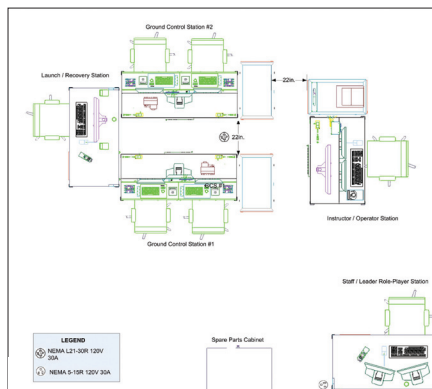
Trailer



Features and Specifications

- Dimensions 8 feet (ft.), 6 inches (in.) by 46 ft.
- Overall length 50 ft. with heating, ventilation and air conditioning (HVAC), as well as a generator set
- Two 3-ft., slide-out expansion units, increasing classroom width to 14 ft.
- Service pad 20 ft. by 54 ft., with level deviation not to exceed 2 in. in 10 ft.
- Powered by 208 volts alternating current (VAC) 3 PH 200A 5 wire or an internal 45-kilowatt generator with a 70-gallon diesel supply
- HVAC provided by dual 4-ton units, with a humidifier capable of maintaining 68 degrees at -20 to 120 degrees outside air temperature
- Separate training and after-action review rooms
- Storage room 8 ft. by 5 ft., 6 in. — main circuit breaker panel and SCT monitor storage during transport

Classroom



Features and Specifications

- Dimensions 20 ft. by 24 ft.
- Entry doors must be 36 in. wide or greater
- Role-Player Station can be located in an adjacent room
- Powered by 208 VAC 3 PH 200A 5 wire
- HVAC provided by an approximately 3-ton unit with humidity control (depending on actual room size)
- Standard classroom lighting
- Carpeted, tiled or painted floor
- Finished and painted walls

For additional information, please contact:

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