

ENGAGEMENT SKILLS TRAINER (EST) 2000

**Functional Description:**

Each EST 2000 subsystem consists of an Instructor Operator Station (IOS), modified weapons, floor boxes, high-resolution projector, speakers, camera-detection system, air compressor, screen, and associated cabling and hoses. Weapon modifications include an eye-safe laser; sensors to measure trigger pressure, cant and ammunition magazine/belt status (as well as status of on-off or selector switches); and a compressed air operating system. The RDU located in the IOS serves as the main signal interface between components. Modified rifles, pistols, machine-guns, and shotguns will be modified to work with the systems and rendered incapable of firing live ammunition. Shoot/Don't Shoot, Collective, and Marksmanship scenarios are pre-loaded onto each I/O station that will be delivered with each subsystem.

Purpose of Trainer:

The Engagement Skills Trainer (EST) is used as a unit and institutional, indoor, multipurpose, multilane, small arms, crew served and individual antitank training simulator. The EST is an industry proven, commercially available, computer operated simulator. The EST provides audio and visual presentations and feedback during training scenario exercises simulating the operation of a variety of small arms weapons. The EST simulator utilizes visual display systems, audio system(s), aiming detection system(s), and pseudo or modified real weapons with weapon power source interfaced by computer to provide Marksmanship, Shoot/Don't Shoot decision training, and Unit Collective Squad Level training scenarios. These trainers safely replicate weapon training events which lead to live fire individual and weapon crew qualification and that contribute to increased weapon, crew, fire team, and squad combat effectiveness training in Army defined scenarios. The EST is used primarily to:

- a. Train and evaluate individual marksmanship training for initial entry soldiers at the Army Training Centers.
- b. Provide active and Reserve Component unit sustainment training in preparation for individual and crew small arms live fire weapons' qualification.
- c. Provide Active and Reserve Component units a capability to train in Shoot/Don't Shoot situations currently not resourced.
- d. Provide unit collective gunnery and tactical training for static dismounted Infantry, Scout, Engineer, Military Police Squads, and Combat Support/Combat Service Support (CS/CSS) elements.

DVC 07-129

Physical Information:

The EST 2000 components are of different sizes and weight. All components are protected during transit by transit cases.

Facility size limit for the EST 2000:

<u>5 Lane</u>	<u>10 Lane</u>	<u>15 Lane</u>
35.0' length	35.0' length	35.0' length
17.5' width	35.0' width	52.5' width
8.0' height	8.0' height	8.0' height

Equipment Required, Not Supplied:

CCO	Close Combat Optics
MGO	Machine Gun Optics
PVS-4	Night Vision Scope
TVS-5	Night Vision Scope
M3	Tripod and pintle with Traverse and Elevation Mechanism Weapons interface mounting hardware.

Special Installation Requirements:

Facility A/C

Power Requirements:

Power requirements for each EST 2000 5 lane subsystem:

IOS

110vac, 60 Hz, 15amp circuit or, 220vac, 50 Hz, 7.5amp circuit
Outlet located within 20 ft. (6m) of IOS

Compressor

110vac, 60 Hz, 20amp circuit or, 220vac, 50 Hz, 10 amp circuit
Outlet located within 8 ft. (2.5m)

Training Category/Level Utilized:

Small arms/Level 3

Training Requirements Supported:

Small arms

Applicable Publications:

- Engagement Skills Trainer (EST) Operator's Manual
- TM 07-6920-704
- Engagement Skills Trainer (EST) System Maintenance Manual (SMM) - SMM 07-6920-704
- Engagement Skills Trainer (EST) COTS Manuals (As Required) - TD 07-6920-704

Reference Publications:

N/A

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Source and Method of Obtaining:

Available through local TSC

Logistic Responsible Command, Service, or Agency:

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