

Tank simulators are highly technologically advanced teaching and training devices. Simulators enable crews to both familiarize themselves with wide scope of different situations and to perfect their skills. Records show that tank crews that use simulators in addition to actual tank training perform considerably better as they have unlimited amount of virtual shells, drive endlessly and train for every possible weather condition independent of actual weather outside. Modern simulator concept provides training of:

- ✓ familiarization and proper use of devices in fighting compartments of the tank;
- ✓ procedures of tank driving, both in combat and out of it;
- ✓ target detection, identification, ammunition choosing and proper engaging procedure;
- ✓ range calculation and following aiming procedures;
- ✓ precision shooting and fire correction procedures.



*Tank gunner compartment of tank M-84 simulator*



*Instructor position of tank M-84 simulator*



*Tank driver compartment of tank M-84 simulator*

## Tank driver simulator module

- Realistic mathematical model (with 20 years of army service) manages all three types of tank's startup procedures and tank's movement across terrain and driving lessons range.
- Rich 3D environment complete with hills, forests, rivers, fields, houses, bridges, civilian and military vehicles.
- Full driver's fighting compartment including all switches, levers, pedals and valves.
- Driver's control panel with all instruments working.
- Complete audio experience recorded on actual tanks.
- Driving prism trough which virtual environment is observed.



*Interior of tank driver compartment of tank M-84 simulator*

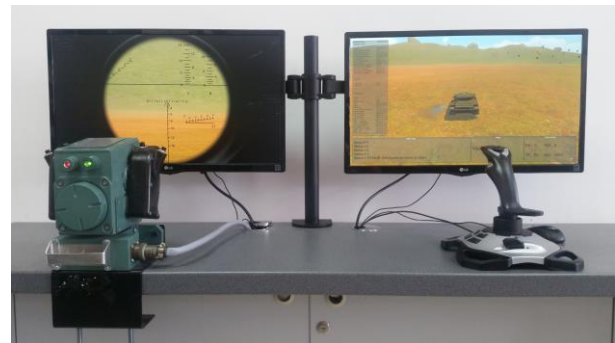


## Tank gunner simulator module

- Exact replicas of gunner fighting compartment devices including working switches and knobs.
- Aiming device looking into virtual terrain trough authentic scope complete with LEDs and displays.
- Working fire control system panel, supported in simulation with actual ballistic tables.
- Authentic working cannon autoloader with visual and audio effects.
- Gunner's yoke replica with working laser and stabilization in simulation.
- 3D environment including targets like tanks, jeeps, trench lines, different kinds of infantry, rocket systems, and armored personnel carriers.
- Software that enables and requires exact procedures for calibration of aiming device, aiming at stationary and moving targets.
- Complete audio experience recorded on actual tanks.



*Gunner's cabin M-84 simulator*



*Simplified tank T-55 gunner simulator*

## Instructor workstation



*3<sup>th</sup> person view for instructor*

- Fully customizable scenarios inside the virtual environment. Instructor selects: weather conditions, locations of forests, villages, bridges, etc.(stationary objects), as well as disposition, movement and behavior of targets.
- Complete lists of all hardware device statuses with simulation meaning.
- Real-time evaluation of both driving (mistakes made) and gunnery (every shot result and status).
- Automatic training scoring according to predefined rules.
- Soldier/trainee administration and logging.

## Simulator based training advantages

- Heavily improved quality and efficiency of tank crews training.
- Sharp reduction of training costs (ammunition, fuel, maintenance of tank's engine and gun barrel).
- Dangerous situations training without risk to crews and assets.
- Dramatically reduced impact on environment (roads, noise, air pollution, etc.).
- Ability to train anytime and anyplace under specific conditions.
- Professional soldiers can maintain and perfect their skills without additional cost.



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