

SITTAL – Small Arms Technical Training Simulator



The SITTAL is a professional simulator for classroom shooting (indoor) dedicated to the training of small arms operators at the individual and collective levels. The SITTAL is the shooting simulator widely used by French Forces for initial and refresher training.

The SITTAL provides a solution to the need for more intense training by:

- Improved realism (artificial intelligence, special effects, environment)
- Fire precision and speed (double tap)
- Multiple sensing of weapons status
- Compatible with tetherless and tethered weapons
- From 5.56 to 20 mm calibres
- Wired or wireless optical sights
- Wired or wireless observation goggles

The use of different weapons and the mastery of technique in complex situation requires shooters to assimilate precise movement patterns both as well as individual and collective procedures which can only be acquired by manipulation and repetition.

The SITTAL meets this need perfectly. It places shooters in realistic conditions while taking into account weapons' ballistic characteristics, without limits on ammunition, and without deterioration of the weapons and no risk for the personnel.

The SITTAL enables to conduct the following firing sequences:

- Progressive
- Alternating between execution and correction
- Repetitive
- Results-controlled (assessment)



The SITTAL offers:

- Highly realistic 3D worlds including a wide variety of environments (semi-desert, desert, urban, or other)
- Combat-relevant situations and scenarios, and total interactivity with the entities from the scenario (behaviours are controlled by artificial intelligence)
- Instructor role optimization (simultaneous and real time following of different parameters of the shooting sequence, aid and evaluation of the shooters actions)

The SITTAL is available:

- In a stationary version with a 5 to 10 shooters capacity: the trainees get to the simulator facility
- In a compact transportable version with a 5 shooters capacity: the simulator reaches the trainees without any dedicated extensive infrastructure

The SITTAL offers 2 major possible uses:

- Instruction exercises at individual level:
 - Instruction on the servicing of the weapon and shooting technique at night or during daytime
 - Shooting analysis (replay) to progress (aim, cant, breathing, pressing the trigger)
- Training exercises ("scenarios") for the collective (group and 3-man group):
 - Shooting coordination development when facing a reactive adversary
 - Analysis of shots (replay) to progress (shots fired /shots on target, reactivity, coordination, friendly fire)

The SITTAL is structured around:

- 5 or 10 firing lanes enabling shooters to operate real transformed weapons: 100 % functional, neutralized, integrating an aiming system, recoil, sensors measuring rifle-butt pressure, trigger, cant):
 - PA MAC 50 ▪ 20 mm cannon
 - FAMAS ▪ AT4CS
 - MINIMI ▪ Other weapons (M4, HK416, AK47,
 - FRF1 M2, Riot gun, MAG58, ...),
- an instructor station (1 desk with 3 computer monitors and 1 printer) enabling the instructor to prepare, conduct and analyse the firing exercises,
- a video projection system allowing the projection on a flat 8 m x 2.25 m screen of targets and 3D environments, but also on curved projection screens enabling to shoot on a 270° angle immersive environment,
- the system of impact detection (invisible class 1 lasers, fixed on the weapons, cameras and real time image treatment), enabling to detect shot impacts on the projection screen with great accuracy.

The SITTAL is compatible with:

- Tetherless weapons that provide a full mobility to the shooters
- Tethered weapons that enable to use large calibre weapons on mounting

Scenario creation:

An optional tool to create scenarios enables the instructor to enrich by himself the library of exercices. The instructor can define:

- Pedagogical objective
- Choice of a terrain
- Choice of entities (characters with behaviour, objects, vehicles)
- Events scripting

RUAG is available to realise the scenarios that meet your needs.

The SITTAL is open and scalable:

- Integration of new weapons (assault weapons, automatic weapons, handguns, riot guns, rocket-launchers, precision weapons)
- Integration of combat systems such as FELIN (optronic goggles, specific weapons)

