

ATRICS AVATOR

3D-tower simulator for training and validation

In safety-critical ATM environments, effective controller training needs to ensure flexible and easy access to top-quality simulation environments, while respecting the practical limitations of facilities which may be quite small, local or remote. The same conditions apply to many remote tower environments. AVATOR requires fewer training staff, has quick and flexible exercise setup, and offers stress-free integration with modern ATM systems. It is a highly flexible 3D-tower simulation platform that airports and air traffic controllers can rely on. Based on artificial intelligence (AI) principles, AVATOR has unrivalled capabilities in integrating any mix of the latest technologies and/or legacy systems for validation purposes, as proven in operational service as well as in SESAR exercises.

Key features

Simulation server

The powerful simulation engine generates aircraft and vehicle movements on the ground and in the terminal manoeuvring area, as well as FPL data.

Out-of-the-window view

The realistic 3D engine renders traffic situation on any type of display – for example, rear/front projectors or LCD displays – including realistic light conditions, weather, buildings, airfield lighting, signs, etc.

Interactivity mode

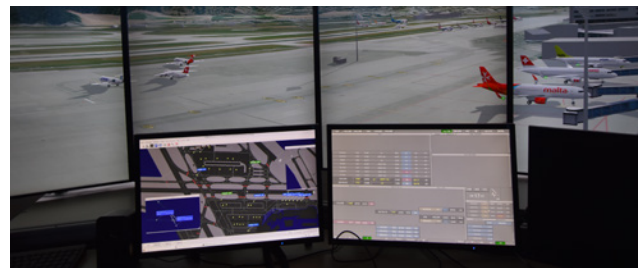
Real-time interaction, plus a rewind feature to return to a past traffic state and instantly repeat the exercise from there, enabling realistic training situations.

Touch-based input

For ATC clearances and taxi routes by pseudo pilots or directly by controllers.

Tower Automation Suite

AVATOR seamlessly combines its capabilities with automation systems (iCWP, EFS, DMAN, AMAN etc.) for validation campaigns on new procedures and systems, like remote digital towers.



AVATOR at a glance

- Scalable from simple basic computer based training (CBT) up to 360° multi-tower flexible set up
- Remote digital tower support
- Pseudo pilots not required
- User-friendly traffic generator to interactively prepare and modify traffic scenarios
- Highly configurable
- Easy replay/rewind function
- Combines with cockpit simulators
- Comprehensive visual effects (weather conditions, light, dynamic/static objects)



Benefits

Operating cost savings

The use of electronic clearance input on ATCO side handles high traffic volumes at very large hub airports. Therefore usage without pseudo pilots is equally possible, while easy scenario-generation and rewind/replay functions saves time and operating costs.

Flexibility

The system can be installed virtually anywhere on site for individual flexibility and even remote access 24/7/365.

Cost-effectiveness and innovation

AVATOR does not require extra effort for development or integration with operational systems such as A-SMGCS, ICWP, EFS, or A-CDM solutions, so realistic training on a new set of tools is easy, innovative and cost-effective.

Operational know-how

The simulator set up is driven by know-how from operational systems and requirements, and is therefore much more multipurpose-oriented than traditional simulators.

Technical specifications

Operating System	Linux
Interfaces/Protocols	Surveillance (ASTERIX), FPL data, airfield lighting, MQ Series, Rabbit-MQ
Hardware Options	Supports various forms of displays: LCD, projectors, any scale up to 360°

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