AIR TRAFFIC CONTROL SIMULATOR

Fully Scalable, High Fidelity Simulator Solution
The AGIL™ Air Traffic Control (ATC) Simulator is a fully scalable, high fidelity simulator solution for ATC Training, Testing and Procedures Development.

The 2D & 3D immersive simulator supports training in the development of practical ATC skills required for day-to-day operations and simulation of emergency scenario management.

Realistic radar, procedural and airport tower simulation environments are provided for the training of en-route, approach and tower controllers.

The solution is highly customisable and adaptable, offering the full training spectrum, from ab-initio to operations, and refresher training in a realistic airport and airspace environment.
Virtual Tower Simulator
- Seamless 360° visual environment
- Airport visual database with 3D models of all buildings and airside structures, runways, taxiways and aprons including an accurate rendering of markings
- Interactive control simulation
- 3D models for aircraft, vehicles and ships
- Generates day and night scenarios as well as different weather conditions
- Simulation of aircraft emergencies

Radar and Surveillance Simulator
- Facilitates full training spectrum in air traffic control surveillance operation
- Allows flexible distribution of processes across computer elements:
  - Surveillance Detection
  - Radar Data Processing
  - Flight Data Processing
  - Automatic Dependent Surveillance – Broadcast (ADS-B)
  - Wide Area Multilateration (WAM)

Procedural Non-Radar Simulator
- Provides comprehensive procedural control operations training
- Available as a standalone or integrated module with the virtual tower or radar simulator to create complex scenarios
- Oceanic Control

Voice Communications Control System
- Integrated voice communications network with realistic simulation of all ATC Air-Ground and Ground-Ground communication functions and facilities
- Integrated voice recording and replay synchronised with the ATC simulation exercise
- Customisable voice recognition feature

Additional capabilities:
- ATC ConOps development and validation
- Airspace design and optimisation (sectors, routes, approach procedures)
- Remote tower camera positioning
- Airport or airspace visualisation tools
- Electronic Flight Strips
- ADS-C/CPDLC
- Safety Nets
- Approach Sequencing
- Sector workload display

Features
- User-friendly data preparation facility
- Supports flight data processing simulation
- Aerodrome lighting panel simulation
- Advanced Instructor and Simulation Tools
  - Advanced replay capabilities & instructor debriefing tools
- Simulation of Aircraft Emergency Scenarios
- Electronic flight strips for IFR/VFR/Military flights
- User-friendly Voice Recognition editor for easy addition or modification of phraseologies
- Civil and military aircraft manoeuvres
  - Formation form and break including military approaches