

TACTICAL/STRATEGIC SIMULATION & TRAINING

SELEX Galileo, through its Tactical Scenarios, provides additional support to the highest level decision makers of Joint Armed Forces.

Tactical Scenarios train Commanders to plan, rehearse and optimise mission effectiveness, combining operational and logistic aspects where mission planning is performed using digital maps.

A flexible and rapidly reprogrammable interface will position friendly/ hostile troops and vehicles/ aircraft in a pyramidal architecture on the map.

SELEX Galileo's Product Support Policy, aims to supply customers with cost effective support and is provided by a dedicated Logistics and Services Business Unit. The high quality standard of the after sales service, guarantees the products quality and performance, for the entire scheduled service life.

The SELEX Galileo Product Support Services catalogue includes traditional services such as maintenance, spares, Ground Support Equipment, technical publications, training and field service engineering.

SIMULATION AND TRAINING SYSTEMS

SELEX Galileo provides state-of-the-art simulation and training solutions, with a wide range of products from Computer Based Training to Full Mission Simulation, from tactical scenarios to BattleLabs, for present and future customer requirements.

SELEX Galileo is the Italian leader in simulation and training systems, with more than 20 years of consolidated experience, continuous research and development, timely deliveries and after sales service.

The Company has a unique knowledge of sensor's behaviours and co-operates with a military simulation for the following programmes:

- > EH101 Full Crew Mission Simulator
- > M-346 Ground Based Training System
- > Eurofighter/ Typhoon Simulator (ASTA - International joint programme)
- > Tornado Full Mission Simulator for Italian Air Forces (IAF)
- > AV8B Plus Harrier Mission Simulator.

These programmes enable SELEX Galileo to demonstrate its skills, flexibility and products to international markets.

Thanks to a long-standing and consolidated acquaintance with platform manufacturers and to its systems integration capability, SELEX Galileo can provide Simulation and Training Systems, that comply with any customer operational requirement including:

- > Crew training, from cockpit familiarisation to fully operational missions in any environment
- > Training of maintenance personnel, who are made aware of the system architecture and maintenance procedures
- > Training of radar, tactical room operators and commanders, who require active operational scenarios to elaborate doctrines, strategies and tactics.

All hardware and software is developed in-house and allow continuous upgrading of the system in order to maximise performance and lead on any emerging platform developments.



OPERATIONAL FLIGHT SIMULATION & TRAINING

At SELEX Galileo, the first stage of the training process is with Computer Based Training (CBT). The CBT is the comprehensive result of both mission and platform know-how, developed to supply procedures and theoretical information of system architectures to crew and maintenance personnel, using the most advanced software technology, a large number of media, a proven didactical method in an easy and user-friendly interface.

The use of a stand-alone CBT is particularly beneficial to save the time of trainer/ trainee personnel and to allow an extensive use of training facilities, thus optimising the training effect and end result.

Through different intermediate civil and military products specifically designed for transition and familiarisation, the highest level of simulated training is achieved whilst using CBT by SELEX Galileo Full Mission Simulators (FMS).

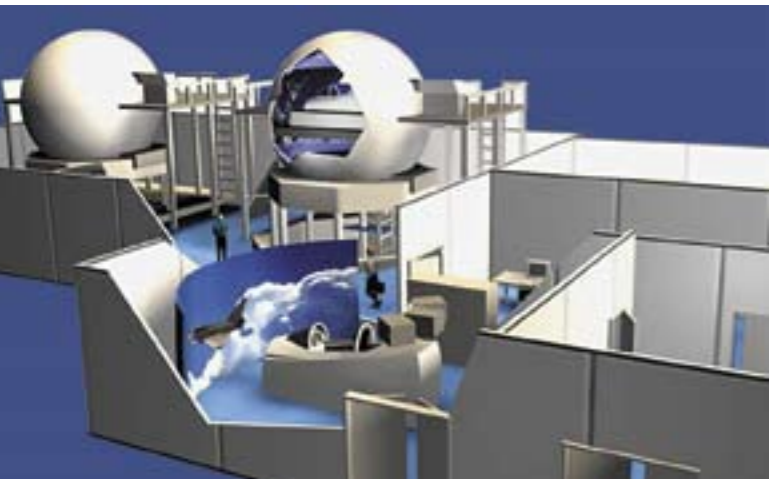


The Full Mission Simulators reproduce every possible training scenario for fast-jet, military aircraft, from routine emergency procedures through to combat missions. Pilots are faced with the most realistic training situations, learning to fly in extreme weather conditions, coping with aircraft failure and acquiring confidence in tactical environments.

Today's pilots need to acquire technical knowledge to manage avionic systems with an increased level of sophistication. Should the assigned mission require formation flight, multiple Full Mission Simulators can be interlinked and concurrently operate in an integrated environment just as a real task force.

Full Mission Simulators offer:

- > Site engineering
- > Customised simulation models and tactical scenarios
- > Installation and integration activities
- > Air and ground crew training programmes
- > Turnkey Integrated Logistic Support
- > Customised sensors databases.



UAV BATTLELAB (UAVBL)

The SELEX Galileo BattleLab is an advanced simulation tool, designed to provide a complex virtual environment to develop new operational concepts (CONOPS), doctrines, tactics and procedures.

The BattleLab has been conceived by SELEX Galileo to support the operational sites of the Joint Armed Forces to co-ordinate and organise airborne, land and surface collected data, from both manned and unmanned sensor systems, for subsequent tactics evaluation.

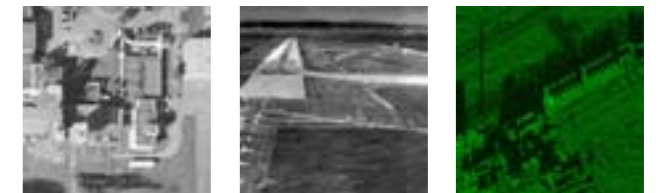
The UAVBL is a cost effective solution for:

- UAV missions Operational Analysis
- System Requirements Definition / Simulation Based Acquisition (SBA). According to the mission needs, the UAVBL can be used to define the requirements for UAV sensors and equipment to be developed or integrated
- Analysis and demonstration of innovative solutions/ technologies
- Training
- Mission rehearsal of real mission plans.

The UAVBL can be linked directly to a Ground Control System (GCS). Alternatively a simulated UAV GCS is available. The UAVBL network enabled capability allow it to be readily connected to any other existent or simulated platform, allowing data fusion and communication.

The system supports a wide range of tasks including the simulation and validation of:

- Route plans
- Terrain avoidance/ obstacle avoidance
- Sensors Scan coverage verification
- Radio link verification
- LOS verification
- Sensor/ multi sensor comparison (Platform Optimisation)
- UAS pilot and co-pilot briefing/ debriefing.



Electro-optical, Infrared, SAR high fidelity sensor simulation

The main elements of the UAVBL are:

- UAV simulator. Simulation of UAV dynamics and sub-systems (engine, fight management system, etc.)
- UAV ground control station
- Sensors simulator, including the simulation of the sensor logic and tracking functionalities for electro-optics, infrared, radar (RBGM & SAR)
- Synthetic Environment for Computer Generated Forces (CGF) and Environment Simulation (ES)
- Geographic database. Geographic data, maps and the libraries of CGFs
- 2D Tactical Situation Display (TSD)
- 3D visualisation of the tactical scenario (Stealth View).
- Interface to other simulation networks.

