

SELEX GALILEO FALCO BATTLELAB

The SELEX GALILEO Falco Unmanned Ariel Vehicle BattleLab (UAVBL) is a cost effective system used for:

- Operational Analysis of UAV missions
- System Requirements Definition / Simulation Based Acquisition (SBA)
- Analysis and demonstration of innovative solutions/technologies
- Training

The Falco UAVBL can be linked directly to a Ground Control System (GCS) or to a simulated UAV GCS.

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

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

The main elements of the Falco UAVBL are:

- UAV simulator
 - Simulation of UAV dynamics and sub-systems
- UAV ground control station
 - A real UAV ground control station can be connected, an alternative, simulated UAV ground control station is available
- Sensor simulator: EO, IR, Radar (RBGM & SAR)
 - Sensor simulation includes also the simulation of the sensor logic and tracking functionalities
- Synthetic Environment (SE) for environment and CGFs simulation
- Geographic database and libraries: geographic data, maps and the libraries of CGFs
- 2D Scenario Tactical Display (TDF)
- 3D visualization of the tactical scenario (Stealth View)
- Interface to other simulation networks

Continues:

Figure 1: Pictorial view of BattleLab visualization



Figure 2: Falco UAV BattleLab Composition

