



**Master the
Mission
Before It Begins**

Simulator & Mission Training

BlueBird's advanced simulation system provides operator certification, ongoing proficiency maintenance, and pre-mission rehearsals in a realistic 3D environment with dynamic weather and time-of-day transitions. The system supports high-fidelity flight models for both fixed-wing and VTOL UAVs and is compatible with all BlueBird platforms – **ThunderB-VTOL, WanderB, SpyX, and BarB-X.**

Featuring sophisticated systems modeling, including accurate EO/IR projection, as well as simulation of other sensors, GPS, and communications, the system enables the real-time injection of structural failures and emergency scenarios.

Designed for comprehensive training, the system includes an instructor station for live trainee monitoring and multi-user shared scenarios, ensuring a highly realistic and precise mission training environment.

Key Features

Acquire Investigate & Attack Training Missions

Integration of different UAS types and multi-VTOL operations for joint mission practicing within a single virtual battlespace for sensor-to-shooter objectives

Individual or Collective Training Modes

Individual Training: One-on-one sessions with detailed briefings, prioritizing emergency procedures, core flight skills, and checklists

Group Training: One instructor leads multiple trainees, focusing on peer learning and collective teamwork

Environment

Realistic 3D Environment

Configurable Weather and atmospheric conditions

Dynamic Time-of-Day transitions

Advanced Aerodynamics and Systems Modeling

Accurate Flight Models for VTOL and Fixed Wing

Failures and System Simulation

Structural failures injection capabilities

Emergency scenarios with real time alert triggering

High precision visual and mission environment modeling

Sensors and System Simulation

Accurate EO/IR simulation

Simulation of multiple sensors

Realistic communications coverage modeling

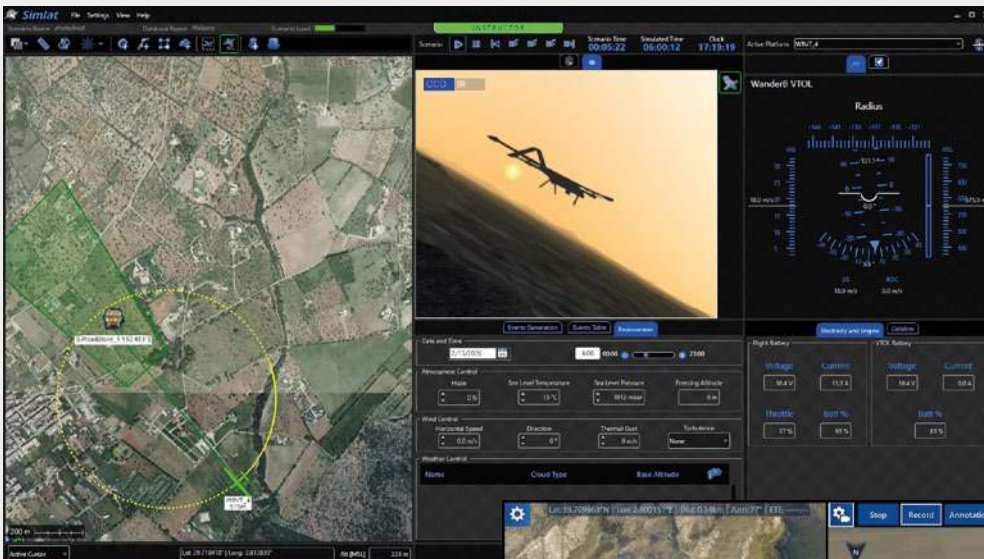
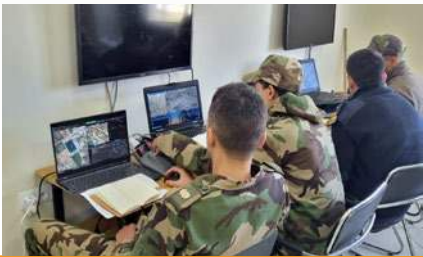
GPS simulation

Avionics system emulation

Instructor Station

Real-time trainee view mirroring

Multi-trainee shared scenario simulation



Instructor Station

Full real-time visibility of trainee actions

Ability to inject system failures and malfunctions

Control environmental conditions (time, wind, weather)

Create dynamic training events and scenarios

Trainee/Operator Station

Replicates the real UAV operational environment

Enables training for routine and emergency scenarios

Supports mission planning and system familiarization

Provides safe, realistic hands-on training

