



weSim

Thanks to weSim UAS simulator, the operational teams operating SURVEY Copter UAV can be easily trained under real-time conditions.

Composed of real UAS subsystems, as well as a simulation tool which allows to perform a comprehensive operational mission (take-off, flight, landing), weSim provides the operators with the capability to simulate flights, including for instance day/night observation phases of targets or areas of interest, in a fully virtual environment.

Ideal tool to perform training and mission planning, weSim allows to train operators without considering constraints and risks of a flight in real conditions.

All the simulated flight phases (take off, waypoints, automatic or manual flight, landing..) are performed in a hardware-in-the-loop configuration using the UAV real autopilot, as well as the payload control which is carried out by the ground station.

Thus, weSim allows to provide the operators with a maximal, continuous and cost-effective training. weSim is the ideal and obligatory complement of SURVEY Copter UAS.

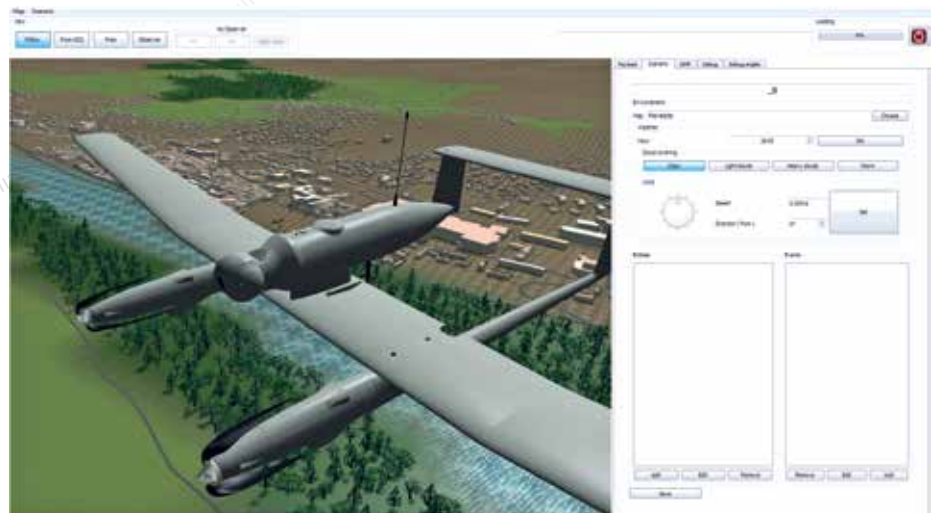


weSim system



Main Strengths

- Training tool
- Mission planning tool
- Cost effective solution
- Real time simulation



screen shoot





Operational use

- UAV operators training
- Expertise updating
- Operational mission planning
- Operational concepts validation

Functionnalités

- Real Time Simulation mode
- Replay mode
- Lighting model :
To simulate the environment under different light conditions depending on time and weather (fog, rain, sun, mission time,...), lighting models are used and contribute to optimise the objects rendering.

- Environment data base, to integrate the following items :
 - *Landscape relief*
 - *Nature of ground and vegetation*
 - *Representation of rivers, roads, railroads,...*
 - *Contour of cities, buildings, vehicles,...*
 - *Weather conditions (clouds, rain, fog,...)*
- UAV shape simulation
- Flight instruments display
- Payloads images simulation
- Tactical simulation: introduction of virtual elements (vehicles, airplanes, ships,...) in the scenery