

SKYANGELS

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SkyAngels is a Walloon "Young Innovative Company" incorporated in 2014. Its mission is the design, the development and the D0178C certification of "intelligent" avionics software embedded in autonomous drones supporting the critical missions of military, police and civil security forces.

SkyAngels current research themes are:

- 1. The design, the development and the D0178C certification of "intelligent" (i.e. based on artificial intelligence) embedded avionics software implementing critical functions (ex sense-and-avoid) for enabling the autonomy of Unmanned Aerial Vehicles used to support the critical missions of military, police and civil security forces. This research is led in the scope of a PhD thesis initiated at the Namur University, in collaboration with the Belgian Royal Military Academy and the "Centre d'Excellence Drone" of the French Air Force.
- 2. The threat modelling of terrorist attack scenarios led with commercial micro-drones and the integration of mitigating technologies within systems aimed to detect, classify, track and neutralize, with electronic and kinetic means, a swarm of hostile drones. The research also includes the design of "intelligent" software controlling those Counter-UAVs systems.

- 3. The cybersecurity measures protecting governmental UAVs from cyberattacks.
- The applications of UAVs for Search-And-Rescue and the transport of emergency medical equipment.
- 5. The concept of "UAVs-carrier airship" (Zeppelin like) used for military missions.



