AEROB LTD.

Sk Skolkovo   **Sk Space**   **Аэроб** ™

FOUNDED

in 2011

CORE OF THE INNOVATION

Developing adaptive situational control system (ASCS) ensuring operations with automated unmanned aerial vehicles (UAVs) of different types.

KEY INNOVATIONS

– Adaptive situational control system with the elements of artificial intelligence.
– Innovative algorithms of navigation and intelligent flight control.
– Innovative technology of course control and positioning control
– Possibility to recognize obstacles and objects in the space.

IMPLEMENTATION OF THE INNOVATION

ALREADY IN **2013–2014**

PEOPLE

GENERAL DIRECTOR:
Boris L. Satovsky

DEPUTY GENERAL DIRECTOR FOR DEVELOPING UNMANNED AERIAL SYSTEMS:
Vladimir Y. Kulikov, Doctor in Engineering

HEAD SPECIALIST OF UAV CONTROL SYSTEM:
Vitaly P. Kharkov, Doctor in Engineering

Peculiarities of the product

1 Competitive advantages: reliability of the system. Elements of ASCS form a goal-seeking behavior of the system. As a result, the system continuously follows the defined target changing its behavior along with the changes of the environment with no interference of a man.

2 ASCS realizes this function due to instant dynamic analysis of the state of the unmanned aviation system and external influencing on it in order to promptly discover potentially hazardous situations and make decisions on finding the way out of them.

3 There are analyzed over 200 parameters and their combinations with the relevant risk rates. The decision is made in favor of the maximum probability of saving the system wholeness while keeping its goal-seeking behavior.

Advantages of the product

1 The technology used allows adequate UAV control for the vast majority of flight situations. It is a basis for low collision rate (and less damage) and therefore low price of the flight hour.

2 A new approach to designing control systems by creating databases of flight situations.

3 Increased reliability both of an individual UAV and of the unmanned aviation system as a whole.

4 Small size of the control system.

5 Standartized interaction interface between ASCS and executing parts of the UAV.

6 Availability of S&A functions in the control system.

7 Meeting the up-to-date requirements and trends in USAR development.