

Successful R&I in Europe: 14-15 March 2019



INSTYTUT TECHNICZNY WOJSK LOTNICZYCH

**Air Force Institute of Technology
Warsaw, POLAND**

www.itwl.pl

COLLABORATION PROPOSAL

Project: VR Pilot Emergency – Model of Education





AIM

Main objectives:

- Virtual reality simulator (VRS) and 2 – online training.
- The specialist “hard” skills will be accompanied by some social abilities – the “soft” ones.
- A big picture of processes will be embraced in the form of a cybernetic model of education.

The analysis of events in civil and military aviation confirms that the human factor is still the primary cause of air accidents and crashes.

The often held emergency procedure does not come up with the safety and cost requirements. It is put into action by either real aircraft (on the ground or in operation) or with the use of full mission simulators (FMS).

The project aims at the design, implementation, and evaluation of the pilot emergency procedure.

- Specialist skills will be developed with the usage of information technology:

TECHNOLOGY

Technologically the system comprises 2 units in 3 parts.



Unit 1: Virtual Reality

Phase A: Emergency Situations

Phase B: Mission Scenarios

Unit 2: Online Training

EDUCATION

- Nowadays students – digital natives: “Generation Y” – enjoy learning by means of activating methods and with information technology. In the Network Society, there is a need to learn quickly and with efficient management of a massive data flow.
- Apart from specialist skills, the emergency training process should include specific social abilities, e.g. working in a team, self-evaluating (reflexive practitioner) and coping with stressful situations
- A handy and ready-to-use educational tool will be the outcome of the project. Processes will be described and delivered in the form of a cybernetic model of education. It will include the aspects of technology and methods of teaching and learning – in the context of aviation emergency situations.

GENERATION



THE TEAM

We constitute an interdisciplinary team of specialists – doctoral and postdoctoral researchers – in the fields of:

- L&D processes and models of education in the Network Society,
- R&D project management and business development,
- VR aviation simulation systems and online training.

You are very welcome to join us in the scope of scientific and business cooperation.

We are looking for INDUSTRY and SME Partners for FTI or the Consortium for RIA/IA calls.

We are eager to hear from you – **contact**

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Air Force Institute of Technology – website: [LINK](#)





PREVIOUS EUROPEAN PROJECTS

Framework Programs

WiMA²S – Wide Maritime Area Airborne Surveillance (7FP - RIA)

OPARUS - OPen ARchitecture for Uav-based Surveillance system (7FP - RIA)

CAESARIS - Cognitive Airborne multisensor System for Aerial Reconnaissance Intelligence and Surveillance (7FP- SME Instrument)

ACTTIVATE - PAn-European Clusters for Technology Transfer and new Value chains (H2020 - CSA)

AERO.UA - Stimulating aviation research collaboration between the European Union and Ukraine (UA) through strategic and targeted support (H2020 - CSA)



PREVIOUS EUROPEAN PROJECTS

European Defence Agency

AHEAD - Advanced helmet and devices for individual protection (EDA)

ASTYANAX - Aircraft fuselage crack monitoring system and prognosis through on-board expert sensor network (EDA)

SAMAS - SHM Application to Unmanned Aircraft Systems (EDA)

ERA – Enhanced RPAS Automation (EDA)



External Cooperation Department

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