



SYMPOSIUM: OPTIMIZING PILOT WELLBEING: A MULTI-TOOL APPROACH FOR AVIATION HEALTH ANALYTICS

Chairs

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Short description

The symposium will focus on tools for the detection and the intervention methods of pilot wellbeing. The presentations of the session will emphasize the need for new tools to address health analytics in aviation in order to enhance data and safety management. Because of the need for new sources of data through novel applications, the session aims to discuss available methods and to present exciting alternatives in development that could make a difference in the future of proactive aviation safety.

The symposium presentations will start from an investigation of how physical activity and fitness issues may impact aviation safety. Then, contemporary tools for objectively and unobtrusively assessing pilots' fatigue will be described. Methodological approaches for quantifying mental health and early detection of mood disorders will be presented. Human performance and fatigue issues in relation to flight difficulty in helicopter pilots will be also addressed. Finally, an integrative aspect of how neurosciences and big data analytics may be adopted in aviation industry for enhancing safety and boosting human performance will be presented.

Objectives and Outline

The symposium is hypothesized to link aviation industry with the neuroscientific community towards the employment of novel tools for early identification of fatigue, cognitive and mood disorders. It also focuses on contemporary tools derived from data science (big data analytics and deep learning) for providing robust neuroergonomic features of pilots' wellbeing.

Keywords

pilot wellbeing, aviation, physical activity, mood disorders, neurosciences

Presenters

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