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NTAD 2020

New Trends in Aviation Development 2020

The XV. International Scientific Conference

High Tatras – Starý Smokovec 17 – 18 September, 2020

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Topics include but not limited to:

Avionic systems: navigation systems, digital aircraft systems, aircraft communication systems, flight and engine control systems, on-board digital systems, electronic instrument systems, aircraft electrical systems, management of on-board systems, progressive avionic systems, human machine interfaces, advanced warning systems

Aircraft design and construction: CAD, CAM, CAX, CAE - technologies in aviation, progressive construction technologies, composite materials, advanced simulation methods, constructive design

Aerodynamics: computational fluid dynamics, aircraft stability, measurement of

aerodynamic characteristics, progressive aerodynamic design and calculations **Air Traffic Management and Operations**: air traffic control, air traffic flow management, aeronautical information services, piloting the aircraft, air navigation, aviation meteorology, human factor and performance, training and education

Air Transport Management: security management, environmental factors, logistic systems, progressive information systems

Aviation safety: modeling and simulation of safety systems, technical reliability analysis, virtual simulation technologies, safety legislation, certification process, human factor, safety risks, accidents' analysis

Aircraft propulsion systems: gas turbine engines, aviation piston engines, engine control systems, engine diagnostic systems, simulation and modeling, progressive materials in aviation engines, electric propulsion systems

Sensors: magnetic sensors, digital measurement equipment, MEMS Technologies, intelligent sensors, aerometric computers, inertial reference systems, analogue

sensing techniques, hybrid sensors, sensor networks, sensors modeling Unmanned aerial systems: modeling, control and diagnostics, virtual simulation, navigation, detection of UAV systems, UAV security, anti UAV systems, legislation processes, certification, swarming, propulsion, energy storage, commercial applications, ground control stations

Airport operations: airport management, airport economics and logistics, airport security, airport transportation systems, aircraft ground handling management, aircraft ground navigation, surface movement guidance and control systems

Space systems: cube-sats, propulsion systems, space navigation, orbital control, communication systems, safety and security of space vehicles, control systems, space applications

Submission of Papers

The working language of the conference is English. Prospective authors are invited to submit full papers.

Paper Acceptance

Each accepted paper has to be presented by one of the authors at the conference and must be accompanied with a registration fee. Accepted papers will be submitted for inclusion into IEEE-Xplore Database, SCOPUS and WoS.

https://ntad.lf.tuke.sk/

Full paper submission: June 15, 2020 **Notification deadline:** July 15, 2020 **Final paper submission:** August 15, 2020

Event Partner: Slovak Training Academy, University

> of Pardubice, Česká letecká servisní a.s., AeroJOB, s.r.o., Slovenská federácia ultral'ahkého lietania, European Air Services, s.r.o., Heli

Company, s.r.o.

Organizer: Faculty of Aeronautics, Technical

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Technical co-sponsor: IEEE Czechoslovakia Section