



NTAD 2024

New Trends in Aviation Development 2024

The XIX. International Scientific Conference
High Tatras – Starý Smokovec
28 – 29 November, 2024

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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: CubeSats, 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: August 25, 2024

Notification deadline: September 22, 2024

Final paper submission: October 27, 2024

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