



# NTAD 2023

## New Trends in Aviation Development 2023

The XVIII. International Scientific Conference  
**High Tatras –Starý Smokovec**  
**23 – 24 November, 2023**

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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, 2023**

**Notification deadline: September 22, 2023**

**Final paper submission: October 27, 2023**

### Event Partner:

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Transport Authority,  
TLM Trans s.r.o.,  
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