

23–24 April 2026, Prague

NTCA 2026

New Trends in Civil Aviation 25th International Conference

Day 1: Thursday, April 23, 2026

08:00	Location Opens / Registration Starts
09:00–09:30	Opening Speech
09:30–10:10	Keynote Speaker: Frédéric Dehais (Institut Supérieur de l'Aéronautique et de l'Espace, ISAE-SUPAERO)
10:10–10:20	Refresh Break
10:20–11:40	NTCA Session 1: Human Factors and Ergonomics in Aviation Vision-Based Fatigue Risk Detection in Air Traffic Control (Blaha B.) Autonomic Regulation under Cognitive Stress and Hypoxia in Aviation Context (Hanáková L.) Learning from "One-and-Done" Exercises on a Complex Uncrewed Aircraft System (Hagl M., Voigt A.) From Classroom to Cockpit: Experiential Learning in Early Pilot Training (Saavedra-Orellana E.)
11:40–12:00	Coffee Break & Poster Discussion (Human Factors, Safety & Security)
12:00–13:00	NTCA Session 2: Unmanned Aerial Systems Unsteady Vortex Lattice Method for Real-Time Aeroelastic Modeling (Dagilis M.) Comparison of Stroke and Stroke Plane Modulation in Insect-Like Flapping Wing Forward Flight Control (Melis A.) High-Resolution Spatiotemporal Deformation Measurements of an Insect-Like Flapping Wing (Vanpoucke J.)
13:00–14:00	Lunch
14:00–14:25	Partners' Presentation AERO Vodochody Aerospace (Pšenička M.) Prague Airport (Štumbauer O.) Prague Innovation Institute (Havlíčková V.)
14:25–14:50	Keynote Speaker: Andrew Hladký (IP Lab Ventures)
14:50–15:30	Keynote Speaker: John P. Thomas (Massachusetts Institute of Technology, MIT)
15:30–15:50	Coffee Break & Poster Discussion (Air Transport Operations & Aircraft Technologies and Advanced Materials)
15:50–17:10	NTCA Session 3: Environment & Air Transport Operations Impact of Fuel-Cell Stack Size and Atmospheric Conditions on Contrail Formation (Rosenow J.) Evaluation of Climate Change Effect on Adverse Meteorological Conditions for Air Traffic in the Czech Republic (Merta V.) Case Study of Ionospheric Impact on GNSS Surface Position Deviations Using ADS-B Data at LKPR (Hospodka J.) Impact of GNSS Interference on Departures from Helsinki Airport (Steiner J.)
17:10–17:15	Closing of the First NTCA Day, Instructions from the Organizers
17:30–18:50	Join Us for a Walk to the Gala Dinner (Vittek P.)
19:00	Social Event – Conference Dinner (Czech Institute of Informatics, Robotics and Cybernetics, Jugoslávských partyzánů 1580/3, Prague – Penthouse, 10th Floor)



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Day 2: Friday, April 24, 2026

09:20	Location Opens / Registration
09:40–10:40	NTCA Session 4: Air Traffic Management Hotspot Capacity-Driven Scheduling Strategies for Reducing Airborne Delays in TMAs (Demirel S.) Traffic Flow Optimization in TMAs: Modeling and User Interface Implementation (Demirel S.) A Speech-Driven AI Pseudopilot Integrated into a Locally Executable ATC Simulator (Pojhan D.)
10:40–11:00	Coffee Break & Poster Discussion (Air Traffic Management and Economic Aspects & Unmanned Aerial Systems)
11:00–11:40	Keynote Speaker: Simon Rabillé (Airbus Protect)
11:40–12:20	Keynote Speaker: Andreas Bierig (German Aerospace Center, DLR)
12:20–12:30	Refresh Break
12:30–13:50	NTCA Session 5: Unmanned Aerial Systems Reinforcement Learning for UAV Adaptive Conflict Detection and Resolution with VFR-dominated Aircraft (Luo M.) Design and Experimental Evaluation of Flow Straightening Grids for Wind Wall Used in UAS Propulsion Testing (Urban D.) Aerodynamic Design of Propellers for Small UAVs (Klesa J.) From Principles to Formulas: Measuring and Quantifying Fairness in UTM (Hlavatá M.)
13:50–14:40	Lunch
14:40–16:20	NTCA Session 6: Air Transport Operations Towards Smart and Sustainable Airfields: A Machine Learning Approach for Automated Runway Lighting Control (Bin Jamaludin W. M. R.) The electrification of air travel: an overview of the technical development needed including business perspectives (Lindahl O.) Optimization of the Usage of Ground Handling Equipment at the Airport (Ječmen K.) Analyzing the Duration of Aircraft Pushback Operations at Václav Havel Airport Prague Using ADS-B Data (Stloukal B.) Assessing the Efficiency and Sustainability of Flight Transfers (Vittek P.)
16:20–17:50	Coffee Break & Poster Session
17:50	Closing Session
20:00	Informal Afterparty



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Poster Session

Human Factors, Safety & Security

- Induction Mechanisms of the Somatogravic Illusion (Socha V.)
- Identifying Risks in UAV Operations using the HFACS Model (Yakovlieva A.)
- Developing Systemic Safety Recommendations for Remote AFIS (Černotík M.)
- Conceptual Design of Ground-Based Training Procedures for Helicopter Operations in Degraded Visual Environments (Mach O.)
- Comprehensive Assessment of Airport Perimeter Security Using a Multi-Layer Evaluation Methodology (Socha L.)

Air Transport Operations & Aircraft Technologies and Advanced Materials

- Navigating the Future of Space Exploration: An Overview of Reusable Launch Vehicles (Walton R. O.)
- Runway Occupancy Time and Exit Utilization Before and After the Construction of Rapid Exit Taxiway J at Prague Airport (Had P.)
- Dynamic Charging for Electric taxi Operations (Bínová H.)
- Perspective of Hydrogen-Powered Tractors (Hrešková K.)
- Comparative Analysis of Modern SAF Production Pathways (Yakovlieva A.)
- The Space Based Aircraft Power (Šplíchal M.)
- Design of an Experimental Solid-Propellant Rocket (Čatloš R.)
- Potential Use of Additive Technologies and Polymer Materials in Environments with Chemical De-Icing Agents (Demydenko D.)

Air Traffic Management and Economic Aspects & Unmanned Aerial Systems

- Toward Intelligent and Sustainable Airport Operations: Digital Twins and AI-Based Slot Capacity Optimization and Resource Flows (Gajdušková T.)
- Limitations of BVLOS Operations: Crossing Roads and Railways (Černý M.)
- Incremental Nonlinear Dynamic Inversion-Based Attitude Control for a Morphing Wing UAV with CESCA (Pollák J.)
- High-speed UAV: The Challenges (Jackuliak J.)
- Comparative Analysis of SPECIFIC Category Operational Approvals Under Harmonized European Legislation: Belgium, Croatia, Czechia and Finland (Tluchoř T.)

Venue

Conference Venue:

Hermitage Hotel Prague
Svobodova 1, 128 00 Prague – Nové Město

Social Event – Conference Dinner Venue:

Czech Institute of Informatics, Robotics and Cybernetics
Jugoslávských partyzánů 1580/3, Prague
Penthouse, 10th Floor

Contact information

In case of any questions or suggestions do not hesitate to contact the conference Organizing committee:

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<http://ntca.fd.cvut.cz>



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