

AIR TRANSPORT DEPARTMENT
UNIVERSITY OF ŽILINA

# INAIR 2015 Conference Provisional Program

### 12th, 13th November, Holiday Inn Amsterdam Arena Towers, The Netherlands

DAY 1: Thursday, 12<sup>th</sup> November

8:00-9:00 Registration & Coffee

9:00-9:20 Welcome speech: Geert Boosten, Aviation Academy, AUAS & Antonín Kazda,

University of Žilina

9:20 - 10:40 Keynote Session I. (Moderator: Geert Boosten)

Colin Meckiff, EUROCONTROL, France

"Research challenges in air traffic management"

John Stoop, TU DELFT, The Netherlands

"Safety, a system integrator"

Henk Hesselink, NLR, The Netherlands

"Airport Decision Support: capacity forecast"

Antonín Kazda, University of Žilina

"Airport Typology from Low Cost Airlines Ops Perspective"

10:40-11:00 Coffee break

11:00 - 12:20 Paper Session I. - Innovative Solutions in Aviation Industry (Chair: Idalia Flores)

Modelling flexible solutions at passenger terminals: an application to Terminal 2 of Lisbon Airport, Liliana Magalhães, Vasco Reis and Rosario Macario; Instituto Superior Técnico, Universidade de Lisboa, Portugal

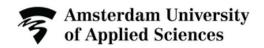
An Optimization Approach for Airport Ground Operations with A Shortest Path Algorithm, Orhan Eroglu, Zafer Altug Sayar and Guray Yilmaz TUBITAK BILGEM, U of Turkey

Mach Number Selection for Cruise Phase using the Ant Colony Optimization Algorithm With RTA Constrains, Alejandro Murrieta-Mendoza, Antoine Hamy and Ruxandra Mihaela Botez; University of Quebec / Ecole de Technologie Superieure/LARCASE Canada

Aircraft Lateral Flight Optimization Using Artificial Bees Colony, Alejandro Murrieta-Mendoza, Audric Bunel and Ruxandra Mihaela Botez; University of Quebec / Ecole de Technologie Superieure/LARCASE Canada

Optimization Techniques for Airlines, Idalia Flores; National University of Mexico/Operations Research Department

12:20-13:40 Lunch



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13:40 - 14:40 Keynote Session II. (Moderator: Benedikt Badanik)

John Wensveen, Purdue University, USA

"iPOP:An Innovative Education & Training Model"

Miroslav Bartos, Air Navigation Services, Slovakia

TBD

Gert Meijer, Aviation Academy, AUAS

**TBD** 

14:40-15:00 Coffee break

15:00-15:40 Signing the Memorandum of Understanding of the

**ATAERA Aviation University Network** 

15:40 - 17:00 Paper Session II. (Chair: Miguel Mujica Mota)

Synchronizing transportation of people with reduced mobility through airport terminals, Rene van Twist, Marjan Van Den Akker and Han Hoogeveen; Utrecht University, Netherlands

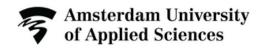
A new reactive algorithm for gate assignment problem in airport ground operations management, Mehmet Mutlu Yenisey\*, Tuncay Özcan, Betül Yağmahan\*\* and Abdullah Aktel\*\*\*; \*Istanbul University, Turkey \*\*\*Turkish Institute of Management Sciences, Turkey

*Identification of Operative Problems using a model-based approach for Lelystad Airport,* Miguel Mujica Mota, Aviation Academy, AUAS

TBD, Peter Mayerhoffer

17:00-19:00 Cultural program

19:00-21:00 Dinner



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Day 2: Friday, 13th November

9:00 - 10:00 Keynote Session III. (Moderator: Antonín Kazda)

Olivier Poulard, SITA, Switzerland

"Operational and Business Intelligence for the Air Transport Industry"

Daniel Guimarans, NICTA, Australia

"Simulation and Optimization: We are here to help"

**Thomas Hoff Andersson, Copenhagen Airports** 

"CPH: The efficient airport"

10:00-10:20 Coffee break

10:20 - 11:40 ROOM I. Paper Session III. - Trends in Airports (Chair: Edgar Jimenez/Roland Deroo)

Trends in airport surface access in the London multi-airport system, Richard Moxon; Cranfield University, UK

Benchmarking of airports from Central and Eastern Europe, Sorin Eugen Zaharia; University POLITEHNICA of Bucharest, Romania

The Effects of Demographic Factors on CRM perception on Airline Pilots: Turkey Example, Mehmet Onur Balkan\*, Semih Soran\*\* and Ahmet Emin Serin\*;\*İnonu Universty, Turkey \*\*Ozyegin University, Turkey

10:20 - 11:40 ROOM II. Paper Session IV - Technical Innovation (Chair: Wenjing Zhao)

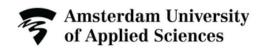
Development and Validation of an ATC Research Simulator, Tomislav Radisic, Doris Novak and Biljana; Juricic Faculty of Transport and Traffic Sciences, University of Zagreb, Croatia

Using Human-Machine Interaction Frequency as a Proxy Measure of Subjective Air Traffic Complexity, Bruno Antulov-Fantulin\*, Matthieu Rummens\*\* and Tomislav Radisic; \* \*Faculty of Transport and Traffic Sciences, University of Zagreb, Croatia \*\*French Air Force Academy, France

Cessna Citation X Pitch Rate Control Design using Guardian Maps, Georges Ghazi, Kevin Rezk and Ruxandra Botez; École de Technologie Supérieure, Canada

ATS capacity and efficiency improvements by HungaroControl air navigation service provider, Vilmos Somosi; HungaroControl Hungarian Air Navigation Service Provider, Hungary

11:40-12:00 Coffee break



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12:00-12:30 Book presentation: Applied Simulation and Optimization in Logistics, Industrial and

Aeronautical Practice; Miguel Mujica Mota, Idalia Flores, Daniel Guimarans, Geert

**Boosten** 

12:30-14:00 Lunch

14:00 - 15:20 Room I. Paper Session V. - Innovation in Education (Chair: Daniel Guimarans)

The Future Aerospace Workforce and Higher Education Institutions, William Muldoon\* and Robert Walton\*\*; \*Embry-Riddle Aeronautical University - Worldwide, USA \*\*Embry-Riddle Aeronautical University - Worldwide, Germany

Is economy of scale in Air Navigation Service provision really always the best choice?, Andrej Grebenšek and Tadej Kosel; University of Ljubljana, Faculty of Mechanical Engineering, Slovenia

Safety and Efficiency AB Initio Flight Training: Air Traffic – Control or Information, Indre Sveistryte; Baltic Aviation Academy, Lithuania

Present and future education and Training Needs for Aviation Engineers and Researchers in Europe, Karol Gőtz\* and Antonin Kazda\*\*; \* Winsland, Slovakia \*\*University of Zilina, Slovakia

#### 14:00 - 15:20 ROOM II. Paper Session VI - Technical Innovation 2 (Chair: Catya Zuniga)

*Identification of a Cessna Citation X Aero-Propulsive Model in Climb Regime from Flight Tests,* Georges Ghazi, Ruxandra Botez and Magdalena Tudor; École de Technologie Supérieure, Canada

Revisiting Mexican TMA Route Structure, Catya Zuñiga\*Daniel Delahaye\*\*, \*Universidad Aeronautica de Queretaro, Mexico \*\* Ecole Nationale de l'Aviation Civile, France

Innovative Baggage Delivery for Sustainable Air Transport, Pavel Loskot\* Peter Ball\*\*; \*Swansea University, United Kingdom of Great Britain and Northern Ireland \*\*Zafire Aviation Software Limited,, United Kingdom of Great Britain and Northern Ireland

Best practises: Design-in security controls in ATM, Karol Gőtz\* and Martin Hawley\*\* \*; Winsland, Slovakia \*\*Winsland, United Kingdom of Great Britain and Northern Ireland

The Analysis of Air Transport in Poland, Jerzy Merkisz, Jacek Pielecha; Jarosław Markowski; Marta Galant, Remigiusz Jasiński, Dawid Gallas; Institute of Internal Combustion Engines and Transport, Poznan University of Technology, Poland

15:20-15:40 Closing words