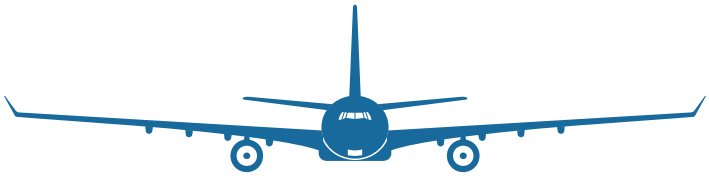
Department of Air Transport
Faculty of Transportation Sciences
Czech Technical University in Prague

MAD



Magazine of Aviation Development

ISSN 1805-7578

Volume 5
Issue 1
January 2017

CTU
CZECH TECHNICAL UNIVERSITY IN PRAGUE

Editorial Office

Czech Technical University in Prague
Faculty of Transportation Sciences, Department of Air Transport
Horská 3, 128 03 Prague 2
+420 224 359 185
mad@fd.cvut.cz

Publisher

Central Library of Czech Technical University in Prague
Technická 6, 160 80 Prague 6

Typesetting

Vladimír Socha, Lenka Hanáková
Czech Technical University in Prague

All published papers passed peer review process.

Volume 5 Issue 1
January 2017

ISSN 1805-7578

Head of Editorial Committee

Stanislav Szabo, Czech Technical University in Prague, CZ

Editorial Committee

Milan Džunda, Technical University of Košice, SK
Vadim V. Vorobyev, Moscow State Technical University of Civil Aviation, RU
Miroslav Kelemen, University of Security Management in Košice, SK
Milan Lánský, Czech Technical University in Prague, CZ
Andrej Novák, University of Žilina, SK
Stanisław Oszczak, University of Warmia and Mazury in Olsztyn, PL
Michal Tkáč, University of Economics in Bratislava, SK
Vojtech Jurčák, Armed Forces Academy of Gen. M.R. Štefánik in Liptovský Mikuláš, SK
Serhiy M. Shkarlet, Chernihiv National University of Technology, UA
Paweł Czarnecki, Warsaw Management University, PL
Aleksander Sładkowski, Silesian University of Technology Katowice, PL
Cristina C. Rejado, Technical University of Madrid, ES
Vladimír Němec, Czech Technical University in Prague, CZ
John Wensveen, School of Aviation & Transportation Technology Purdue University, US
Daniel Hanus, Czech Technical University in Prague, CZ
Marek Grzegorzewski, Polish Air Force Academy, Deblin, PL
Martin Bugaj, University of Žilina, SK
Antoni Olak,University College of Enterprise and Administration in Lubin, PL
Naqibullah Daneshjo, University of Economics in Bratislava, SK
Radovan Bačík, University of Presov, SK
María A. M. Prats, University of Seville, ES
Jarosław Kozuba, Polish Air Force Academy, Deblin, PL
Rastislav Kazanský, Matej Bel University in Banska Bystrica, SK
Beáta Gavurová, Technical University of Košice, SK
Radovan Soušek, University of Pardubice, CZ
Stanislav Pleninger, Czech Technical University in Prague, CZ
Martina Vitteková, Czech Technical University in Prague, CZ
Anna Stelmach, Politechnika Warszavska, PL
Jakub Hospodka, Czech Technical University in Prague, CZ
Luboš Socha, Technical University of Košice, SK
Róbert Rozenberg, Technical University of Košice, SK
Vladimír Socha, Czech Technical University in Prague, CZ

Secretary of Editorial Committee

Vladimír Plos, Czech Technical University in Prague, CZ
Šárka Hulínská, Czech Technical University in Prague, CZ

Editor-in-Chief

Jakub Kraus, Czech Technical University in Prague, CZ

Content

Editorial **5**
S. Szabo

Automation of Taxiing **6**
J. Bursík, J. Kraus, M. Štumper

Alternative Energy Sources in Air Transport **12**
L. Socha, V. Socha, P. Čekan, D. Čekanová, L. Hanáková, T. Puškáš

Methodology for Performance Evaluation of Pre-departure Sequencing Tools in Terms of A-CDM Concept **17**
H. Hrabik, M. Nesvadba, S. Pleninger

Easier Access for General Aviation Pilots to Instrument Flight Rules Flying **22**
I. Kameníková

Methodology of VFR night flying **26**
Ľ. Stanko, M. Sekelová, J. Sabo, R. Rozenberg