

PROGRAM - READ & EWADE 2018

6. 11. 2018 TUESDAY

REGISTRATION

Welcome drink - Faculty of Mechanical Engineering

7. 11. 2018 WEDNESDAY

REGISTRATION

		Neo-baroque hall		Conference room A		Conference room B	
Session	Authors/ Title	Session	Authors/ Title	Session	Authors/ Title	Session	Authors/ Title
9:00	9:20	-	Introduction and welcome speech	-	-	-	-
9:20	10:20	Plenary Lecture	Milan Šlapák GE Aviation Czech Taking off with 3D print	-	-	-	-
10:20	10:40	Coffee break					
		Session I-A	Student session : Aerodynamic and Flight Mechanics	Session I-B	Aircraft Design	Session I-C	Aircraft Systems and Security
		Chairman:	Tomasz Goetzendorff-Grabowski	Chairman:	Jaroslav Juračka	Chairman:	Jiří Hlinka
10:40	11:00	AERO-S	Pratik Meghani A 2D Aerodynamic Study on Morphing in the NACA 2412 Airfoil	DESIGN	Agnieszka Kwiek Conceptual Design of an Aircraft for Mars Mission	SYS	Luboš Janhuba, Rostislav Košťál and Jiří Hlinka Integrated Method utilizing Graph Theory and Fuzzy Logic for Safety and Reliability Assessment of Airborne Systems
11:00	11:20	AERO-S	Katarzyna Pobikrowska and Tomasz Goetzendorff-Grabowski Stability Analysis of the Experimental Airplane Powered by a Pulsejet Engine	DESIGN	Petr Augustin Simulation of Fatigue Crack Propagation in the Wing Main Spar Flange	SYS	Sebastian Topczewski, Antoni Kopyt, Przemysław Bibik and Marcin Żugaj Development of an Automatic System for Helicopter Autopilot Performance Evaluation
11:20	11:40	AERO-S	Jiří Matějů Simple Universal Nonlinear Longitudinal Flight Simulation with avoiding of Static and Dynamic Derivatives	DESIGN	Jakub Šedek Numerical Analysis of Magna-Lok Rivet Joint and the Technique for Its Stiffness-Equivalent FE Substitution	SYS	Karel Třetina Diagnostic Parameters Determination of Aircraft Hydraulic System
11:40	11:50	Break					
11:50	12:10	AERO-S	Ugyen Wangchuk Finding the Optimum Active Laminar Flow Control Design Using Continuous Suction for Airbus A380 Wings	DESIGN	Miroslav Červenka and Rostislav Košťál Layout Optimisation for Active Structure Health Monitoring	SYS	Antoni Kopyt, Przemysław Bibik and Grzegorz Świętoń An Implementation and Verification of the Objective Assessment Tool for Pilots' Performance Measurement
12:10	12:30	AERO-S	Jafar Masri A Review of the Analytical Methods used for Seaplanes Performance Prediction	DESIGN	Wojciech Grendysa Multidisciplinary Wing Design of a Light, Long Endurance Unmanned Aerial Vehicle	SYS	Vladimír Oplustil Advanced Technologies and Methodologies for Engine Control Design
12:30	12:50	AERO-S	Yanina Berdnik and Alexey Beskopylny The Approximation Method in the Problem on a Flow of Viscous Fluid Around a Thin Plate				
12:50	13:50	Lunch					
13:50	14:20	Plenary Lecture	Zdobysław Goraj Politechnika Warszawska Stress, Strain and Displacement Analysis of Geodetic and Conventional Fuselage Structure for Future Passenger Aircraft	-	-	-	-
		Session II-A	Aerodynamic and Flight Mechanics	Session II-B	Student session: Aircraft Design		
		Chairman:	Robert Popela	Chairman:	Ivo Jebáček		
14:30	14:50			DESIGN-S	Viktor Karabut, Vitaly Dudnik and Ilya Samsonov Preliminary Optimization of Composite Blades for "Shmel" Light Helicopter		
14:50	15:10	AERO	Marco Evangelos Biancolini, Ubaldino Cella, Corrado Groth and Emiliano Costa Fast High Fidelity CFD/CSM Fluid Structure Interaction Using RBF Mesh Morphing and Modal Superposition Method	DESIGN-S	František Löffelmann and Jan Šplichal Design Study of the Heat Switch Base Plate with Help of Topology Optimization		
15:10	15:30	AERO	Marcin Figat The Aerodynamic Design of the Aircraft in Tandem Wing Configuration	DESIGN-S	Peter Deak and Michal Kowalik Composite Aircraft Joint Experimental Testing with Digital Image Correlation		
15:30	16:00	Coffee break					
16:00	16:20	AERO	Robert Kulhánek Identification of a Degradation of Aerodynamic Characteristic of a Paraglider due to its Flexibility from Flight test	MAT-S	Igor Skawiński and Tomasz Goetzendorff-Grabowski FDM 3D Printing Method Utility Assessment in Small RC Aircraft Design		
16:20	16:40	AERO	Jacek Mieloszyk and Andrzej Tarnowski Improvements in Conceptual Electric Aircraft Design	MAT-S	Matteo Pontecorvo Design of Manufacturing Simulations of a Flatplate Pulsating Heat Pipe		
16:40	17:00			SYS-S	Nina Malalan and Pavel Zikmund Haptic Aircraft-pilot Interaction Device for Spatial and Movement Guidance: a Research of the Encoding Possibilities of the Distance Information with Vibrotactile Feedback		
19:00	23:00	Social event- Rectorate atrium					

PROGRAM - READ & EWADE 2018

8. 11. 2018 THURSDAY

9:00	9:30	REGISTRATION							
		Neo-baroque hall		Conference room A		Conference room B			
		Section	Authors/ Title	Section	Authors/ Title	Section	Authors/ Title		
9:00	10:00	Plenary Lecture	Stefan Klein AirCar	-	-	Conference New Trends in Civil Aviation			
10:00	10:30	Coffee break							
		Session III-A	Aircraft Design Materials and Technology in Aeronautics	Session III-B	Student session: Aircraft Systems and Security Aeronautical Transport				
		Chairman:	Zdobyslaw Goraj	Chairman:	Allan Nõmmik				
10:30	10:50	DESIGN	Tomáš Katrňák, Jaroslav Juračka and Ivo Jebáček	MAT-S	Jakub Mašek				
			Effect of Defects on Buckling of Stiffeners of Aircraft Structures		Thermal Conductivity of Cu7.2Ni1.8Si1Cr Copper Alloy Produced via SLM and Ability of Thin-Wall Structure Fabrication				
10:50	11:10	MAT	Radek Doubrava, Martin Oberthor, Milan	SYS-S	Łukasz Wolski				
			Verification and Numerical Simulation of Advanced Composite Inlet in Compliance of Airworthiness Impact Requirements		Beyond Visual Line of Sight UAV Communication System				
11:10	11:30	MAT	Ilmars Blumbergs, Martins Kleinhofs, Rafal Chatys and Alexander Panich	SYS-S	Marek Łukasiewicz, Przemysław Bibik and Konrad Łukasziuk				
			Destructive Process Models of Composite in Case of Coupled Environment Fracture Model		Precise Manoeuvre Guidance System for UAVs using Machine Visio				
11:30	11:50			TRAN-S	Anrieta Dudoit and Jonas Stankunas				
					Horizontal Conflict Resolution in Free Route Environment				
11:50	12:10			TRAN-S	Peter Kaľavský, Róbert Rozenberg, Pavol Petriček, Vladimír Socha and Luboš Socha				
					Rope Procedures for Extraction and Insertion of Persons Used by Helicopter Emergency Medical Service				
12:10	13:10	Lunch							
13:10	14:10	Plenary Lecture	Blanka Lenczowski Airbus	-	-	Conference New Trends in Civil Aviation			
			New Product Cision for Aerospace by Applying New Material Technologies						
		Session IV-A	Aircraft Design - Research and Education (EWADE) Aerospace Education (READ)	Session IV-B	Aircraft Systems and Security Aeronautical Transport				
		Chairman:	Oleksiy Chernykh	Chairman:	Luboš Janhuba				
14:10	14:30	EDU	Tomasz Rogalski	SYS	Pavel Zikmund				
			In-Flight Tests in Students Projects		Haptic feedback in Pilot-Aircraft Interaction				
14:30	14:50	EDU	Ingo Staack	SYS/DESIGN	Jan Šplíchal and Jiří Hlinka				
			Establishment of the Swedish Aeronautical Research Center (SARC) to Foster National Education, Research and Industry Cooperation		Modelling of Health Monitoring Signals and Detection Areas for Aerospace Structures				
14:50	15:10	EDU	Odile Tissier	SYS	Rostislav Košťál, Luboš Janhuba and Jiří Hlinka				
			Project-oriented Education: from Engineering School to Engineering Jobs		Aircraft Leading Edges Minor Damages Detection Based on Thermographic Survey of Electrical Anti-Icing Systém				
15:10	15:30	EDU	Agnieszka Kwiek	TRAN	Allan Nõmmik				
			Teaching Aircraft Design Through a Blended Learning Method in a Higher Education		Trends in Development of Aircraft for Regional Routes: Impact on the European Air Transportation System				
15:30	15:50	EDU	Pinqi Xia, Anatoly Kretov, Dmytro Tiniakov, Oleksiy Chernykh	TRAN	Miroslav Šplíchal				
			AWADE as the Asian Variant of a Workshop on Aircraft Design Education		Reduce Pilot Stress in the Landing Maneuver by Providing Accurate Height Information				
15:50	16:00	Coffee break							
16:00	16:20	Students awards ceremony							
16:20	16:40	Closing Ceremony							
16:40	17:10								
19:00	23:00	Formal/ Informal social evening							