

READ/EWADE 2020 Online-Conference

21st and 22nd of October 2020 – Webinar on MS Teams (start with "[CLICK HERE](#)")

Session 1 and Session 3 are READ/EWADE Sessions on Aircraft Design.

Other sessions are by READ.



Day 1 - 21.10.2020		
09.00 - 09.15	Opening Tomasz Goetzendorf-Grabowski	CLICK HERE
09.15 - 11.15	Session 1 – READ/EWADE – Aircraft Design (I) Tomasz Goetzendorf-Grabowski	CLICK HERE
1	Simulation of a Passenger Aircraft Flight With the Wing Tip Cut	Zdobyslaw Goraj, Mariusz Kowalski, Łukasz Kiskowski, Aleksander Olejnik
2	Aircraft Design for Future Air Combat Training Offering High Specific Excess Power, Lowering the Energy Consumption and Operational Cost and Having the Lowest Environmental Impact	Georges Bridel, Jean-Georges Brevot, Jean-Pierre Devaux, Zdobyslaw Goraj, Łukasz Kiskowski, Petr Vrchota, Marc Immer
3	Dark Sky Outpost: A Concept of High Altitude Aerostatic Universal Platform	Piotr Strzelczyk
4	The Aileron Gap Sealing Modification for Improved Aileron Effectiveness	Anna Szewczak
5	The Use of Finite Element Method and Semi-Empirical Equations for Weight Estimation of the Passenger Aircraft Utilizing Innovative Technological Solutions.	Zdobyslaw Goraj, Mariusz Kowalski, Bartłomiej Goliszek
6	Analysis of Thermal Comfort on Planes	Natalia Krawczyk
11.15 - 11.30	Coffee Break	
11.30 - 12.00	MEsco Presentation	CLICK HERE
12.00 - 14.15	Session 2 – Aircraft Control Jacek Pieniążek	CLICK HERE
1	Control of the Aircraft With the Use of Model Reference Adaptive Control	Grzegorz Kopecki
2	Development and Implementation of a Guidance and Control System for a Micro Air Vehicle	Jakub Popielarz
3	Unmanned Aircraft Automatic Flight Control Algorithm in a Immelmann Turn Maneuver	Tomasz Rogalski, Jacek Prusik, Paweł Rzucidło, Stanisław Noga
4	In-Flight Tests of Intruder Detection Vision System	Paweł Rzucidło, Grzegorz Jaromi, Damian Kordos, Tomasz Rogalski, Piotr Szczerba, Tomasz Kapuściński
5	Development of Wide Band Spectrograph Systems for Observation of Land Objects by Unmanned Aerial Vehicle (UAV)	Elna Sharma
6	Impact of Actuators Slack on the Helicopter Control During Landing	Sebastian Topczewski, Marcin Żugaj, Przemysław Bibik
7	Analysis of the Strapdown Inertial Navigation System Structure	Anvar Zabirov, Pjotrs Trifonovs-Bogdanovs, Vladimir Shestakov, Zarif Zabirov, Tomasz Rogalski

14.15 - 14.30	Coffee Break	
14.30 - 16.30	Session 3 – READ/EWADE – Aircraft Design (II) CLICK HERE Dieter Scholz / Cezary Galiński	
1	Mechanical Aspects of Mothership Plane With Sensing Drones System	Michal Modzelewski, Grzegorz Muchla, Aleksandra Pakula, Bartosz Zalecki
2	Understanding the Aircraft Mass Growth and Reduction Factor	Dieter Scholz
3	Using Surrogate Models to Speed up the Creation of Aerodynamic Databases in CEASIOMpy	Aidan Jungo, Vivien Riolo, Jan B. Vos
4	Experimental Validation of Take-off Distance and Rate of Climb of a Light Unmanned Aircraft	Members of the SAE AeroDesign student club
5	Sensitivity Factors of Aircraft Mass for the Conceptual Design	Anatolii Kretov
6	Results of Simulation and Scaled Flight Tests Performed on a Rocket-Plane At High Angles of Attack	Agnieszka Kwiek, Cezary Galiński, Krzysztof Bogdański, Jarosław Hajduk, Andrzej Tarnowski



The conference is free for everyone to attend.

Costs are covered by presenting authors.

More information on our web pages:

<http://www.read.edu.pl>

<http://EWADE.AircraftDesign.org>

Day 2 – 22.10.2020		
09.00 - 10.30	Session 4 – Aviation Safety and Security CLICK HERE Tomasz Rogalski	
1	Using the Heinrich's (Bird) Pyramid of Adverse Events to Assess the Level Of Safety in an Airline	Aleksandr Bitin, Juri Maklakov, Ruta Bogdane, Vladimir Shestakov
2	Analysis of Possible Risks in Aviation Safety Issues Associated With the Massive Introduction of Unmanned Aerial Systems	Juris Maklakovs, Jūlija Soldatova, Vladimirs Sestakovs, Rafal Chatys
3	A Tool for Pilot's Performance and Engagement Assessment in Helicopter Flight Simulator	Antoni Kopyt , Przemysław Bibik , Paulina Tomaszewska
4	Safety Consideration Of the Optionally-Piloted Airplane Landing	Jacek Pieniążek, Piotr Cieciński
5	Risk Assessment of the Adverse Events in Air Transportation	Jevgēnijs Tereščenko, Juris Maklakovs, Vladimirs Sestakovs, Rafał Chatys
10.30 - 10.45	Coffee Break	
10.45 - 12.45	Session 5 – Manufacturing CLICK HERE Stanisław Noga	
1	Polymer Composites with the Addition of Selected Metallic Fillers Used In Additive Manufacturing Technologies	Bulanda Katarzyna, Oleksy Mariusz, Oliwa Rafał, Przeszłowski Łukasz, Budzik Grzegorz
2	Carbon Fiber-Reinforced Epoxy Composites with Improved Flame Resistant and Electrical Conductivity	Rafał Oliwa, Katarzyna Bulanda, Mariusz Oleksy, Kamil Filik, Grzegorz Karnas, Grzegorz Masłowski, Maciej Pytel
3	Influence of Pressure and Temperature on the Strength Properties of a Laminate Produced by the RTM Method	Krzysztof Piernik
4	Use of Structural Stress Rate (SSR) Factors for Fatigue Properties Assessment Of Aeronautical Composite Structures	Mirosław Rodzewicz
5	Hydraulic Calculation Methodology for Cryogenic Systems of Space Environment Simulators	S. Kravchenko, I. Blumberg, N. Kuleshov, V. Shestakov
6	Transformative Use of Additive Technology in Design and Manufacture of the Aircraft Flight Control Actuator	Krzysztof Warzocha, Jerzy Szura, Piotr Bąk, Tomasz Rogalski, Paweł Rzucidło, Grzegorz Kopecki, Grzegorz Budzik



12.45 - 13.15	Lunch Break	
13.15 - 14.15	Session 6 – Aviation Transport CLICK HERE Andrzej Majka	
1	Verification and Validation of the Graph-Based Airspace Model	Andrzej Majka
2	Assessment of Achievement of the ACARE Goals From the Perspective of Beyond Europe’s Borders Cooperation	Andrzej Majka
3	Regular Graph Based Free-Route Flight Planning Approach	Sławomir Samolej, Grzegorz Deca, Dariusz Rzońca, Andrzej Majka, Tomasz Rogalski
14.15 - 14.30	Coffee Break	
14.30 - 15.50	Session 7 - Propulsion CLICK HERE Mirosław Rodzewicz	
1	CFD Simulation of Piston Engine Nacelle Cooling on Pusher Configuration Aircraft	Aleksander Olejnik, Adam Dziubiński, Łukasz Kiskowskiak
2	Leading Edge Distributed and Non-Distributed Electric Propulsion Comparison on a Moving Vessel Deck	Rafał Topolewski
3	Selection of Blade Geometry for Aero Engine Turbine, Based on Modal Analysis	Grzegorz Budzik, Małgorzata Zaborniak, Damian Seremak, Maciej Cader
4	Vibration Analysis of An Aviation Engine Turbine Shaft Shield	Stanisław Noga, Kaja Maciejowska, Tomasz Rogalski
15.50	Closure CLICK HERE Tomasz Goetzendorf-Grabowski	