

SAE 2011 **AeroTech** Congress & Exhibition

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18-21 October 2011

Centre de Congrès Pierre Baudis & Toulouse Expo
Toulouse, France



EVENT GUIDE

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September 24-26, 2013
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FRIDAY, 21 OCTOBER - MORNING
Technical and Business Sessions

TIME	SESSION TITLE, DESCRIPTION, AND ROOM			
	Argos	Saint-Exupéry Auditorium	Guillaumet 1	Guillaumet 2
	<p>Unmanned Aerial Systems - Materials, Structures and Manufacturing (ATC1104)</p> <p>This session discusses manufacturing aspects related to unmanned aerial vehicle systems. Full and prototype scales and their testing are considered along with development of the manufacturing tools specific of UAV. Verification of manufacturing methodologies and process capabilities are addresses. Less expensive and faster manufacturing methods using rapid prototyping technology are of interest. 08:00 - 10:00</p> <p>Organizers: Enrico Cestino; Piergiorgio Marzocca, Clarkson Univ.; Michele Trancossi, Università di Modena e Reggio Emilia</p> <p>Chairpersons: Enrico Cestino, Politecnico di Torino; Michele Trancossi, Università di Modena e Reggio Emilia</p>	<p>Auto Fastening / Assembly & Tooling (AeroFast) - New and Enhanced Fasteners (ATC203)</p> <p>New fastening systems pursue the complementary goals of reducing cost, weight, assembly time, field maintenance, and environmental impact. Improved design strength, materials, ergonomics, and feeding/driving systems have enabled many of these goals to be met without sacrificing performance. 10:30 - 12:00</p> <p>Organizers: Alex Cuthell, Benoit Marguet, Airbus; Peter Zieve, Electroimpact Inc</p> <p>Chairpersons: Alex Cuthell, Airbus; Peter B. Zieve, Electroimpact Inc.</p>	<p>Aviation Cyber-Physical Security - Aeronautical Network and Applications Security (ATC300)</p> <p>Security and high assurance of aeronautical data networking and applications. Main topics of interest include air traffic management, airplane health management, airport surface area communications, field-loadable software distribution, cabin systems and wireless, Transmitting Personal Electronic Devices, security infrastructures, and multi-level security 10:30 - 12:00</p> <p>Organizers: Pascal Andrei, Airbus; Radhakrishna G. Sampigethaya, Boeing Co.</p> <p>Chairpersons: Pascal Andrei, Airbus; Radhakrishna G. Sampigethaya, Boeing Co.</p>	<p>Avionics - Aviation Model-Based Systems and Software Engineering - Models for V & V (Part 2 of 3) (ATC407)</p> <p>Model-based development is the key paradigm for simplified design, verification and validation of complex real-time and safety-critical systems. This session targets model-based development for avionics software and system architectures and covers different methodologies, tools, and their practical application. 10:30 - 12:00</p> <p>Organizers: Bernard Dion, Esterel Technologies; Patrick Farail, Airbus; Mirko Jakovljevic, TTTech. Computertechnik AG; Bruce Lewis, US Army</p> <p>Chairpersons: Bernard Dion, Esterel Technologies; Patrick Farail, Airbus; Bruce Lewis, US Army</p>
08:00	<p>Design, Manufacturing, and Testing of a Research Unmanned Aerial Vehicle (2011-01-2721)</p> <p>Jordan Janas, Piergiorgio Marzocca, Daniel Valyou, Matthew Abell, Clarkson University</p>			
08:30	<p>Non-linear Dynamic Loads Due to the Landing Impact of a Joined-Wing UAV (2011-01-2720)</p> <p>Nicola Paletta, Marika Belardo, Luigi Di Palma, CIRA</p>			
09:00	<p>Theoretical and Experimental Flutter Predictions in High Aspect Ratio Composite Wings (2011-01-2722)</p> <p>Enrico Cestino, Giacomo Frulla, Edoardo Perotto, Politecnico di Torino; Piergiorgio Marzocca, Clarkson Univ</p>			
09:30	<p>Rotary Friction Welding Thermal Prediction Model (2011-01-2723)</p> <p>Michele Trancossi, Antonio Dumas, Università di Modena e Reggio Emilia</p>			
10:30		<p>Blind Bolts Developments (2011-01-2755)</p> <p>Cesar Serrano Velaz, Sophie Gourdon, Clement Chiroi, Airbus</p>	<p>IT Security Management of Aircraft in Operation: A Manufacturer's View (2011-01-2717)</p> <p>Gernot Ladstaetter, Nicolas Reichert, Thomas Obert, Airbus</p>	<p>Integrating Formal Model Checking with the RTEdge™ AADL Microkernel (2011-01-2531)</p> <p>Serban Gheorghe, Edgewater Computer Systems Inc.</p>
11:00		<p>Rivetless Nutplate Developments for Aerospace Applications (2011-01-2756)</p> <p>Björn Knickrehm, Airbus</p>	<p>Challenges of the Connected Aircraft (Oral Only)</p> <p>John Craig, The Boeing Company</p>	<p>Incremental Modeling and Validation of Space Mission Using AADLv2 (2011-01-2529)</p> <p>Julien Delange, European Space Agency; Jerome Hugues, ISAE</p>
11:30		<p>LTD Bolt Injection System (2011-01-2776)</p> <p>Cosmos Krejci, Electroimpact Inc.</p>	<p>Advancing Aircraft Cyber Security - Potential New Architectures and Technologies (Oral Only)</p> <p>Terry Lee Davis, iJet Onboard</p>	<p>Verification and Validation of Complex Systems (2011-01-2530)</p> <p>Hussein Youssef, Lockheed Martin</p>
12:00		<p>Automated Coaxial Squeeze Riveter (2011-01-2774)</p> <p>Reese Allen, Electroimpact Inc.</p>	<p>Enhanced Offboard Communications (Oral Only)</p> <p>Timothy M. Mitchell, Boeing Co.</p>	
			<p>Common Firewall Approach to Aviation Architecture (Written Only -- No Oral Presentation) (2011-01-2718)</p> <p>Benjamin Knoblauch, Patricia Best, Vijay Ragothaman, Ravi Pendse, Wichita State University</p>	
	Planned by Unmanned Aerial Systems Committee / EMB Air and Space Group	Planned by AeroFast International Committee / EMB Air and Space Group	Planned by Aviation Cyber Security Committee / EMB Air and Space Group	Planned by Avionics Committee / EMB Air and Space Group

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