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**Ben Levy, MCR, LLC and Bernd Korn, German Aerospace Center (DLR)**

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## Session B - Aircraft

**Tim Etherington, Rockwell Collins**

<a href="#"><u>7B1</u></a>	1562	Evolution of the Systems Integrator Role and Change Management Process within Highly Integrated Aircraft Systems	Christopher Watkins, Timothy Burns
<a href="#"><u>7B2</u></a>	1578	A Rule-Based Approach for Safety Analysis Using STAMP/STPA	Danilo Gurgel, Celso Hirata, Juliana Bezerra
<a href="#"><u>7B3</u></a>	1586	Eliminating Visibility Problems from Low Visibility Operations	Tim Etherington

## Track 8 - Software Engineering

**Luc Marcil, CAE**

### Session A - Open Architectures

**Niklas Peinecke, German Aerospace Center (DLR)**

<a href="#"><u>8A1</u></a>	1595	Applying SpaceVPX Modular Open Systems Interconnect Concepts	Harry Goedeke, Charles Collier
<a href="#"><u>8A2</u></a>	1609	A Real-Time Orbit Satellites Uncertainty Propagation and Visualization System Using Graphics Computing Unit and Multi-Threading Processing	Kui Liu, Bin Jia, Genshe Chen, Khanh Pham, Erik Blasch
<a href="#"><u>8A3</u></a>	1619	Analysis and Architecture Design of Time-Triggered Avionics WDM Network	Ying Xiong, Cheng Liu, Feng He, Zhong Zheng

## Session B - Software for Avionics

### Lars Ebrecht, German Aerospace Center (DLR)

<a href="#">8B1</a>	1627	Automatically Cross-Checked Design for Multidisciplinary Development of Avionics Systems	Carlos C. Insaurralde
<a href="#">8B2</a>	1636	Risk-Based Alternatives to the DO-178C Software Design Assurance Process	Edward Lester
<a href="#">8B3</a>	1649	Partitioning Strategy of Flight Software for the IMA System	Yongjin Seo, Hyeon Soo Kim
<a href="#">8B4</a>	1660	Applying Use Case Driven UML-Based Comet Method for Autonomous Flight Management on IMA Platform	Francesca Maria Pisano

## Session C - Applications

### Uma Ferrell, Ferrell & Associates Consulting

<a href="#">8C1</a>	1675	Benefits of Security-Informed Safety-Oriented Process Line Engineering	Barbara Gallina, Laurent Fabre
<a href="#">8C2</a>	1684	A CNL for Requirements as the Basis to Automate Tasks of Critical System Development	Marcelo Castro, Juliana Bezerra, Celso Hirata
<a href="#">8C3</a>	1693	An Interdisciplinary Academic Project for Spatial Critical Embedded System Agile Development	Gildarcio Sousa Goncalves, Adilson Marques da Cunha, Glaydson Luiz Bertoze Lima, Ramiro Tadeu Wisnieski, Mayara Valeria Moraes dos Santos
<a href="#">8C4</a>	1704	A Credible Autocoding Application within a Rocket and Its Payload	Raphael Cohen, Ahn-Toan Bui long, Romain Jobredeaux, Eric Feron
<a href="#">8C5</a>	1714	Using Template Matching for Object Recognition in Infrared Video Sequences	Pham Ich Quy, Jalovecky Rudolf, Polasek Martin
<a href="#">8C6</a>	1723	Single Event Effects Test Facility at Oak Ridge National Laboratory	Bernard Riemer, Franz Gallmeier, Laura Dominik

## Session D - Development

### Tom Ferrell, Ferrell & Associates Consulting

<a href="#">8D1</a>	1735	Use of the RTCA DO-330 in Aeronautical Databases	Johnny Marques, Adilson Marques da Cunha
<a href="#">8D2</a>	1741	A Set of Metrics to Assess and Monitor Compliance with RTCA DO-178C	Sarasuaty Megume Hayashi Yelisetty, Johnny Marques, Paulo Marcelo Tasinaffo
<a href="#">8D3P</a>	1747	Integrating An Assurance Case Into DO-178B Compliant Software Development	John Knight, Jonathan Rowanhill, Uma Ferrell, Alec Bateman, Neha Gandhi
<a href="#">8D4</a>	1758	Deterministic Platform Software for Hard Real-Time Systems Using Multi-Core COTS	Sylvain Girbal, Xavier Jean, Jimmy Le Rhun, Daniel Gracia Pérez, Marc Gatti
<a href="#">8D5</a>	1773	Distributed IMA: Use Cases for Embedded Platforms	Mirko Jakovljevic, Astrit Ademaj

## Track 9 - Special Topics and Space Systems

### George Andrew, GNA Aerospace Consulting Group

## Session A - Special Topics

### Maarten Uijt de Haag, Ohio University

<a href="#">9A1</a>	1782	Immunity Testing in an Airborne Radio-Communication System	Jan Leuchter, Petr Bojda, Josef Bajer, Eric Blasch
<a href="#">9A2</a>	1796	Aviation Simulation Training in the Czech Air Force	Jan Boril, Jan Leuchter, Vladimir Smrz, Eric Blasch
<a href="#">9A3</a>	1809	Aviation Mandates in an Automated Fossil-Free Century	Hugh Blair-Smith

## Session B - Space Systems

### George Andrew, GNA Aerospace Consulting Group

<a href="#"><u>9B1</u></a>	1818	Optimal Aircraft Rerouting during Commercial Space Launches	Rachael Tompa, Mykel Kochenderfer, Rodney Cole, James Kuchar
<a href="#"><u>9B2</u></a>	1827	Assessing Impact of Space Operations using Historical Traffic Patterns	Amal Srivastava, Thomas St. Clair, Steven Zobell, Dean Fulmer
<a href="#"><u>9B3</u></a>	1841	Getting to "Yes": Managing ATM Planning through an Open Collaboration App	Catherine Bolczak, Thomas St. Clair, Constance Morgan, Amanda Staley
<a href="#"><u>9B4</u></a>	1853	SESAR SatCom System Identification and Verification Strategy	Stefano La Barbera
<a href="#"><u>9B5</u></a>	1863	Antares VTB Integration and Verification Results	Stefano La Barbera

## Track 10 - Poster Presentations

### Dave Motolak, University of South Carolina

<a href="#"><u>10A1</u></a>	1873	Design and Realization of IMA Simulation Platform Based on CPCI Bus Using VxWorks653 RTOS	Gang Xiao, Zhe Qu, Fang He
<a href="#"><u>10A2</u></a>	1881	Layered-V	Thomas Driessen, Benjamin Honke, Marcus Kuhnmünch, Bernhard Bauer
<a href="#"><u>10A3</u></a>	1890	Network Performance Analysis of Time-Triggered Ethernet Based on Network Calculus for DIMA	Xiaomin Liu, Chen Cao, Xiaohu Zhao, Jinping Sun, Jianliang Zhu
<a href="#"><u>10A4</u></a>	1897	Partitioning: How Far Do You Need to Go?	Olivier Charrier
<a href="#"><u>10A5</u></a>	1911	Dimensioning Buffers for AFDX Networks with Multiple Priorities Virtual Links	Rodrigo Coelho, Gerhard Fohler, Jean-Luc Scharbarg

## Additional Papers

<a href="#"><u>ymp1p</u></a>	1923	Challenges and Opportunities in Transition to a Digital Airspace System	Mike Ball
<a href="#"><u>ymp2p</u></a>	1927	International Data Standardization: A Multi-Dimensional Challenge	Stephane Mondoloni
<a href="#"><u>yp1p</u></a>	1936	NASA Glenn Aerospace Technologies: Pushing Aviation & Space Exploration to New Heights	Janet L. Kavandi
<a href="#"><u>yp2p</u></a>	1946	Mandates Versus Standardisation: The Right Balance?	Pierre Andribet
<a href="#"><u>yp3p</u></a>	1950	NextGEN: Now and Into the Future	Michele Merkle
<a href="#"><u>yp4p</u></a>	1959	Executive Plenary "Impact of Global Mandates on Avionics Research and Development"	Dirk Kugler
<a href="#"><u>yp5p</u></a>	1966	NASA Aeronautics Vision, Strategy & Program Alignment	John A. Cavolowsky
<a href="#"><u>yp6p</u></a>	1976	Airbus and ATM: A Global Perspective	Patrick Lelievre
<a href="#"><u>yp7p</u></a>	1983	Impact of Global Mandates on Avionics R&D	Stephane Marche
<a href="#"><u>yp8p</u></a>	1989	Mandates and Avionics R&D: An Airborne Perspective	Chip Meserole