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Panagiotis Manolios (Northeastern University, USA)

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Andrew Crapo (GE Global Research, USA)

Meng Li (General Electric Research, USA)

Han Yu (GE Global Research, USA)

Craig McMillan (General Electric Aviation Systems, USA)

Heber Herencia-zapana (General Electric Research, USA)

Mauricio Castillo-Effen (GE Global Research, USA)

Shiraj Sen (General Electric Research, USA)

Daniel Russell (General Electric Aviation Systems, USA)

Sundeep Roy (General Electric Aviation Systems, USA)

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Wilfred Rouwhorst (Netherlands Aerospace Centre - NLR, The Netherlands);

Ronald Verhoeven (Netherlands Aerospace Centre - NLR, The Netherlands)

Marieke Suijkerbuijk (Netherlands Aerospace Centre - NLR, The Netherlands)

Tanja Bos (Netherlands Aerospace Centre - NLR, The Netherlands)

Anneloes Maij (Netherlands Aerospace Centre - NLR, The Netherlands)

Mick Vermaat (Netherlands Aerospace Centre - NLR, The Netherlands)

Roy Arents (Netherlands Aerospace Centre - NLR, The Netherlands)

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Christopher Nusbaum (Gulfstream Aerospace, USA)

Daniela Kratchounova (Federal Aviation Administration, USA)

Jason Merret (Gulfstream Aerospace, USA)

Albert Helfrick (Embry-Riddle Aeronautical University, USA)

James Ladesic (Embry-Riddle Aeronautical University, USA)

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Tom Schnell (University of Iowa Operator Performance Lab, USA)

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Vladimir Smrz (University of Defence, Czech Republic)

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Erik Blasch (Air Force Research Lab, USA)

Session IMA-3: Model-Based System Engineering**Room: HTC-4****Chairs: Björn Annighöfer (University of Stuttgart, Germany), Harold Tiedeman, Jr (Rockwell Collins, USA)**

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Oliver Marquardt (University of Stuttgart, Germany)

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Joe Yin (Aviage Systems, P.R. China)

Ben Lawler (Aviage Systems, P.R. China)

Haojie Jin (Aviage Systems, P.R. China)

A Model-based Multi-Dimensional Optimization Method for IMA System Configuration N/A

Kui Li (China Aeronautical Radio Electronics Research Institute)

Shihai Wang (Beihang University, P.R. China)

Qing Zhou (China National Aeronautical Radio Electronics Research Institute & Science and Technology on Avionics Integration Laboratory, P.R. China)

Siyuan Zhou (Beihang University, P.R. China)

Rong Hong (Science and Technology on Avionics Integration Laboratory, P.R. China)

Tieying Li (China National Aeronautical Radio Electronics Research Institute, P.R. China)

Optimization Design of ARINC-653 Partition Strategy Based on Time-Triggered Ethernet N/A

Cong Chen (Chinese Aeronautical Radio Electronics Research Institute & Key Laboratory of Avionics System Integration, P.R. China)

Qingchun Liu and Minyang Kang (Chinese Aeronautical Radio Electronics Research Institute, P.R. China)

Shuo Wang (Science and Technology on Avionics Integration Laboratory, P.R. China)

Session UAS-4: Guidance and Navigation

Room: Skyway + Pier

Chair: Thomas Dautermann (German Aerospace Center (DLR), Germany)

Internal Redundancy in future UAV FCCs and the Challenge of Synchronization 710

Sebastian Hiergeist (Technische Hochschule Ingolstadt, Germany)

Georg Seifert (Technische Hochschule Ingolstadt, Germany)

An Adaptive Sensor-switching Framework for Urban UAS Navigation 719

Suraj Bijjahalli (RMIT University & RMIT University, Australia)

Yixiang Lim (RMIT University, Australia)

Subramanian Ramasamy (RMIT University, Australia)

Roberto Sabatini (RMIT, Australia)

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Maarten Uijt de Haag (Ohio University, USA)

Joel Huff (Ohio University, USA)

Adam Schultz (Ohio University, USA)

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Session ATM-8: Efficient Arrival Operations I

Room: Demens

Chair: Todd Callantine (NASA Ames Research Center, USA)

Quantification of Midair Collision Risk for Established on Required Navigation Performance Operations 739

Logan Branscum (Federal Aviation Administration, USA)

Cody Nichols (Federal Aviation Administration, USA)

Feasibility Study on Efficient Arrival Operations via the Integration of Fixed-Flight Path Angle Descent and GBAS Landing System 748

Navinda Wickramasinghe (National Institute of Maritime, Port and Aviation Technology & Electronic Navigation Research Institute, Japan)

Eri Itoh (Electronic Navigation Research Institute, Japan)

Daichi Toratani (Electronic Navigation Research Institute, Japan)

Jendrick Westphal (Boeing, Germany)

Hendrik Schoniger (Boeing, Germany)

Thomas Feuerle (Technische Universität Braunschweig, Germany)

Mirko Stanisak (Technische Universität Braunschweig, Germany)

Per Schachtebeck (Technische Universität Braunschweig, Germany)

Sonosuke Fukushima (Electronic Navigation Research Institute, Japan)

Susumu Saito (Electronic Navigation Research Institute, Japan)

Takayuki Yoshihara (Electronic Navigation Research Institute, Japan)

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Brian Baxley (NASA & Langley Research Center, USA)

Kurt A Swieringa (NASA Langley Research Center, USA)

Roy D. Roper (NASA Langley Research Center, USA)

Clay Hubbs (National Institute of Aerospace & All Aspect Aerospace Innovations LLC, USA)

Paul Goess (AAAIInnovate, USA)

Richard Shay (Double Black Aviation, USA)

Session ATM-9: Trajectory Automation II

Room: Williams

Chair: Alexander Kuenz (German Aerospace Center (DLR), Germany)

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Sergio Torres (Leidos, USA)

Jon Dehn (University of Maryland, USA)

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Mauricio Castillo-Effen (GE Global Research, USA)

Liling Ren (GE Global Research, USA)

Han Yu (GE Global Research, USA)

Corey Ippolito (NASA Ames Research Center, USA)

Wind Optimal Trajectories for UAS and Light Aircraft 782

Sergio Torres (Leidos, USA)

Jon Dehn (University of Maryland, USA)

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Marvic Attard (University of Malta, Malta)

David Mangion (University of Malta, Malta)

Brian Zammit (University of Malta, Malta)

Session CNS-4: Navigation 2

Room: HTC-3

Chair: Kurt A Swieringa (NASA Langley Research Center, USA)

Geometric Approach for RNP Transition to xLS Procedure Design 800

Sonosuke Fukushima (Electronic Navigation Research Institute, Japan)

Ryota Mori (Electronic Navigation Research Institute, Japan)

Shinji Saitoh (Electronic Navigation Research Institute, Japan)

Performance Comparison of Graphical Processing Unit Driven Time-Domain and FFT-based Correlators for Aircraft Positioning System 808

Josef Bajer (University of Defence Brno, Czech Republic)

Rudolf Schreiber (University of Defence, Czech Republic)

Petr Bojda (Czech Technical University in Prague, Czech Republic)

A Bio-inspired Acoustic Sensor System for UAS Navigation and Tracking 813

Rohan Kapoor (RMIT University, Australia)

Subramanian Ramasamy (RMIT University, Australia)

Alessandro G. M. Gardi (RMIT University, Australia)

Roberto Sabatini (RMIT University, Australia)

Feasibility Study on Modeling of Cruise Flight Time Uncertainty 820

Noboru Takeichi (Tokyo Metropolitan University, Japan)

Akihiro Motodani (Tokyo Metropolitan University, Japan)

Session CSS-4: CNS/ATM Security**Room: Bayboro****Chair: Miroslav Velev (Aries Design Automation, USA)**

Air Navigation Security Situation Management: "Houston, we have had a problem"!

Rainer Koelle (Lancaster University & Eurocontrol, Directorate Pan-European Single Sky, Belgium)

A Comprehensive Approach for Validation of Air Traffic Management Security Prototypes 828

Tim Stelkens-Kobsch (German Aerospace Center (DLR), Germany)

Michael Finke (German Aerospace Center (DLR), Germany)

Nils Carstengerdes (German Aerospace Center (DLR), Germany)

Security Requirements for SATCOM Datalink Systems for Future Air Traffic Management 838

Karin Bernsmed (SINTEF Digital, Norway)

Christian Frøystad (SINTEF Digital, Norway)

Per Håkon Meland (SINTEF Digital, Norway)

Tor A Myrvoll (SINTEF Digital, Norway)

Session IMA-4: Interpartition Communication**Room: HTC-4****Chairs: Thomas Gaska (Lockheed Martin & Binghamton University, USA), Emmanuel Letsu-Dake (Honeywell Aerospace, USA)**

Comparison of AFDX and Audio Video Bridging Forwarding Methods Using Network Calculus Approach 848

Lin Zhao (Beihang University, P.R. China)

Feng He (Beihang University, P.R. China)

Jun Lu (Beihang University, P.R. China)

Direct RF Sampling Transceiver Architecture Applied to VHF Radio, ACARS and ELTs 855

Anh-Quang Nguyen (École de Technologie Supérieure & LASSENA, Canada)

Alireza Avakh Kisomi (École de Technologie Supérieure & LASSENA, Canada)

Abdessamad Amrhar (École de Technologie Supérieure & LASSENA, Canada)

Rene Jr. Landry (École de Technologie Supérieure & LASSENA, Canada)

Reduction of Frames Storage Size in AFDX Reception End-System using a Lossless Compression Algorithm 865

Yohan Baga (University of Cergy-Pontoise & Zodiac Aero Electric, France)

Fakhreddine Ghaffari (ENSEA, France)

David Declercq (ETIS ENSEA/univ. of Cergy-Pontoise/CNRS, France)

Etienne Zante (Zodiac Aerospace, France)

Michael Nahmiyace (Zodiac Aerospace, France)

Session UAS-5: Separation Assurance and Assured Containment

Room: Skyway + Pier

Chair: Niklas Peinecke (German Aerospace Center (DLR), Germany)

Safeguard - Progress and Test Results for a Reliable Independent On-board Safety Net for UAS 873

Russell Gilabert (NASA, USA)

Evan Dill (NASA, USA)

Kelly Hayhurst (NASA Langley Research Center, USA)

Steven Young (NASA Langley Research Center, USA)

Dynamic Geo-Fence Assurance and Recovery for Nonholonomic Autonomous Aerial Vehicles 882

Giovanni Miraglia (University of Tulsa, USA)

Lloyd Hook, IV (University of Tulsa, USA)

Applying LVC to Testing and Evaluation of DAA Systems 889

Eric Theunissen (Netherlands Defence Academy, The Netherlands)

Tatsuya Kotegawa (GA-ASI, USA)

Special Session II: Future Architectures for the National Airspace System: A Fresh Look

Room: HTC-1

Chair: David W Matolak (University of South Carolina, USA)

State model-driven, ab initio architecture design for the air transportation system N/A

Steven Landry (Purdue University, USA)

An Ontology for Future Airspace System Architectures 896

David Miller (Intelligent Automation, Inc., USA)

Future Architectures for Autonomous National Airspace System Control: Concept of Operation and Evaluation 904

Frederick Wieland (Intelligent Automation Inc, USA)

Collision Risk Analysis for Alternate Airspace Architectures 912

John Shortle (George Mason University, USA)

Seungwon Noh (George Mason University, USA)

Lance Sherry (George Mason University, USA)

Wednesday, September 20, 16:00 - 18:00

Session ATM-10: Efficient Arrival Operations II

Room: Demens

Chair: Todd Callantine (NASA Ames Research Center, USA)

Analysis of an ADS-B In Method for Calculating the Interval Management Paired Approach Collision Safety Limit 920

Stephanie Priess (MITRE, USA)

Automatic Speed Profiling and Automatic Landings during Advanced RNP to xLS Flight Tests 928

Thomas Dautermann (DLR, Germany)

Robert Geister (DLR, Germany)

Thomas Ludwig (DLR, Germany)

Lina Altenscheidt (DLR, Germany)

Performance comparison of different guidance strategies to accomplish CTA during a CDO 938

Ramon Dalmau (Technical University of Catalonia, Spain)

Xavier Prats (Technical University of Catalonia, Spain)

Ronald Verhoeven (Netherlands Aerospace Centre, The Netherlands)

Frank Bussink (Netherlands Aerospace Centre, The Netherlands)

Bart Heesbeen (Netherlands Aerospace Centre, The Netherlands)

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Cody Nichols (Federal Aviation Administration, USA)

Logan Branscum (Federal Aviation Administration, USA)

Session ATM-11: System Modeling and Analysis

Room: Williams

Chair: Frank Aguilera (NASA Ames Research Center, USA)

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Deepak Kulkarni (NASA, USA)

Modeling of Runway Assignment Strategy by Human Controllers using Machine Learning 964

Yoichi Nakamura (Electronic Navigation Research Institute, Japan)

Ryota Mori (Electronic Navigation Research Institute, Japan)

Hyuntae Jung (Korea Aerospace University, Korea)

Hisae Aoyama (Electronic Navigation Research Institute, Japan)

From Preparation to Evaluation of Integrated ATM-Security-Prototype Validations 971

Meilin Schaper (German Aerospace Center (DLR), Germany)

Tim Stelkens-Kobsch (German Aerospace Center (DLR), Germany)

Nils Carstengerdes (German Aerospace Center (DLR), Germany)

Aircraft Conflict Resolution Cataloguer 979

Chu Yao (Federal Aviation Administration, USA);

Adrian Rusu (Fairfield University, USA)

Andrew Danick (Fairfield University, USA)

Ravina Hingorani (Fairfield University, USA)

Ryan Toner (Fairfield University, USA)

Session CNS-5: System Aspects and Validation

Room: HTC-3

Chair: Thomas Gräupl (German Aerospace Center (DLR), Germany)

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Luca Garbarino (CIRA, Italy)

Federico Corrado (CIRA, Italy)

Ezio Bove (CIRA, Italy)

Giovanni Cuciniello (CIRA, Italy)

Antonio Monteleone (NAIS, Italy)

Antonio Petrolino (MBI Srl, Italy)

A Novel Network Clustering Methodology of Multi-platform Avionics System N/A

Xueli Zheng (China National Aeronautical Radio Electronics Research Institute & Science and Technology on Avionics Integration Laboratory, P.R. China)

Tao Gu (Science and Technology on Avionics Integration Laboratory, P.R. China)

Shuo Wang (Science and Technology on Avionics Integration Laboratory, P.R. China)

Cong Chen (China National Aeronautical Radio Electronics Research Institute & Science and Technology on Avionics Integration Laboratory, P.R. China)

Jian-min Wu (China National Aeronautical Radio Electronics Research Institute & Science and Technology on Avionics Integration Laboratory, P.R. China)

Qing Zhou (China National Aeronautical Radio Electronics Research Institute & Science and Technology on Avionics Integration Laboratory, P.R. China)

Space Station External Wireless Communication System RF Coverage and Link Performance Analysis 999

Shian Hwu (Barrios Technology, USA)

Chatwin Lansdowne (NASA, USA)

Kanishka deSilva (Jacobs Technology, USA)

Session CSS-5: Aviation Network Security and Performance**Room: Bayboro****Chair: Rainer Koelle (Lancaster University & Eurocontrol, Directorate Pan-European Single Sky, Belgium)**

Enforcing Domain Segregation in Unified Cabin Data Networks 1005

Nils Tobeck (Airbus Defence and Space, Germany)

Iterative Design Space Exploration for Networks Requiring Performance Guarantees 1013

Bruno Cattelan (TU Kaiserslautern & UFRGS, Germany);

Steffen Bondorf (University of Kaiserslautern, Germany)

Session ST-2: Safety and Future Aviation Concepts**Room: HTC-4****Chair: Khanh D. Pham (Air Force Research Laboratory & Space Vehicles Directorate, USA)**

Multi-Aviation Airspace - Insights into Knowledge Technologies for Comprehensive Air Navigation 1023

Carlos C. Insaurralde (Teesside University, United Kingdom (Great Britain))

Valentin Polishchuk (Linköping University, Sweden)

Model based Safety Analysis: Automatic Generation of safety validation test cases 1032

Gracy Philip (International Institute of Information Technology, India);

Meenakshi DSouza (IIIT-Bangalore, India)

Abidha Vadakini Purakkal (IIIT-Bangalore, India)

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Pavel Paces (Czech Technical University in Prague, Czech Republic)

Robert Theiner (Czech Technical University in Prague, Czech Republic)

Jiri Brabec (Czech Technical University in Prague, Czech Republic)

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Max Schulze Schwienhorst (RWTH Aachen University, Germany);

Dash Roberts (UPS Airlines, USA);

Vilmar Mollwitz (German Aerospace Center, Germany);

Nora Metzner (RWTH Aachen University, Germany);

Athanasios Titonis (Cologne/Bonn Airport, Germany)

Session UAS-6: Communications and Surveillance**Room: Skyway + Pier****Chair: Jaewoo Jung (NASA Ames Research Center, USA)**

C-Band Digital Aeronautical Communication for Unmanned Aircraft Systems 1054

Daniel M. Mielke (German Aerospace Center DLR, Germany)

Suitability of LTE for Drone-to-Infrastructure Communications in Very Low Level Airspace 1061

Lukas Marcel Schalk (German Aerospace Center (DLR), Germany)

Martin Herrmann (Ulm University, Germany)

Serverless Protocols for Inventory and Tracking with a UAV 1068

Collins Mtita (Télécom SudParis & Traxens S.A.S, France)

Maryline Laurent (Institut Mines-Télécom, Télécom SudParis, France)

Damien Sauveron (University of Limoges, France)

Raja Naeem Akram (Royal Holloway, University of London, United Kingdom (Great Britain))

Konstantinos Markantonakis (Royal Holloway, University of London, United Kingdom (Great Britain))

Serge Chaumette (University of Bordeaux, France)

Design and Use of "Drone" to Support the Radio Navigation Aids Flight Inspection 1079

Kittipol Horapong (Civil Aviation Training Center, Thailand)

Disapong Chandrucka (Civil Aviation Training Center, Thailand)

Narupon Montree (Civil Aviation Training Center, Thailand)

Punyawee Buaon (Civil Aviation Training Center, Thailand)

Thursday, September 21, 10:30 - 12:30

Poster Session

Room: Pre-Assembly

Development of a Ground Station Software for a Vertical Take-Off/Landing Unmanned Aerial Vehicle 1085

Himanshu Sharma (Embry-Riddle Aeronautical University, USA)

Frederick Lüthcke (Embry-Riddle Aeronautical University, USA)

Amay Desai (Embry-Riddle Aeronautical University, USA)

Ilteris Demirkiran (Embry-Riddle Aeronautical University, USA)

Analysis of the voice communication capacity for a free-route sectorless airspace 1093

Hee Wei Gary Foo (Nanyang Technological University, Singapore)

Zhao Wei Zhong (Nanyang Technological University, Singapore)

Validating the Correctness of Outsourced Computational Tasks using Pseudorandom Number Generators N/A

Yaohang Li (Old Dominion University, USA)

Ravi Mukkamala (Old Dominion University, USA)

Michael Mascagni (Florida State University, USA)

An Interconnected Architecture for an Emergency Medical Response Unmanned Aerial System 1098

Karanam Dayananda (North Dakota State University, USA)

Rahul Gomes (North Dakota State University, USA)

Jeremy Straub (North Dakota State University, USA)

Power supply networks for the airport LED lights systems 1104

Radim Bloudicek (University of Defence, Czech Republic)

A System for Real-time Monitoring of Cybersecurity Events on Aircraft 1109

Mohammed Waheed (AVIAGE Systems, USA)

Michael Cheng (AVIAGE Systems, P.R. China)

An online priority-configuration algorithm for obstacle avoidance of the UAV swarm N/A

Lihua Zhu (Nanjing University of Science and Technology, P.R. China)

Jianfeng Du (Shanghai Aerospace Control Technology Institute, P.R. China)

Yu Wang (Nanjing University of Science and Technology, P.R. China)

Zhiqiang Wu (Nanjing University of Science and Technology, P.R. China)

Agile Model-Driven Software Development of Avionics Systems - An Industrial Case Study N/A

Xin Zhang (China Aeronautical Radio Electronics Research Institute, P.R. China)

Wansheng Miao (China Aeronautical Radio Electronics Research Institute, P.R. China)

Jin Ma (China Aeronautical Radio Electronics Research Institute, P.R. China)

Yang Tao (China Aeronautical Radio Electronics Research Institute, P.R. China)

Ruonan Rao (Shanghai Jiao Tong University, P.R. China)

Wei Yin (China Aeronautical Radio Electronics Research Institute, P.R. China)

Commercial Power Line Communication Adaptation for Avionic Applications 1112

Mickael Brison (Thales Avionics & Geeps, Génie Electrique et Electronique de Paris, France)

Mohamed Bensetti (Geeps, France)

Filipe Vinci Dos Santos (Advanced Analog Design Group, CentraleSupélec, France)

Christophe Taurand (Thales Avionics, France)

Raul de Lacerda (Laboratoire de Signaux et Systèmes (L2S, CNRS), CentraleSupélec, France)

Application of Human-Autonomy Teaming to an Advanced Ground Station for Reduced Crew Operations 1116

Nhut Ho (Human Automation Teaming Solutions, Inc., USA)

Walter Johnson (Human Automation Teaming Solutions, Inc., USA)

Joel Lachter (NASA Ames Research Center, USA)

Summer Brandt (San Jose State University Research Foundation, USA)

Karanvir Panesar (Human Automation Teaming Solutions, Inc., USA)

Kenny Wakeland (Human Automation Teaming Solutions, Inc., USA)

Garrett Sadler (Human Automation Teaming Solutions, Inc., USA)

Nathan Wilson (Human Automation Teaming Solutions, Inc., USA)

Bao Nguyen (Human Automation Teaming Solutions, Inc., USA)

A Dynamic Airspace Planning Framework with ADS-B Tracks for Manned and Unmanned Aircraft at Low-altitude Sharing Airspace 1120

Zhiyuan Shen (Nanjing University of Aeronautics and Astronautics & College of Civil Aviation, P.R. China)

Xinmiao Cheng (Nanjing University of Aeronautics and Astronautics, P.R. China)

Siyao Zhou (Nanjing University of Aeronautics and Astronautics, P.R. China)

Xin-Min Tang (Nanjing University of Aeronautics and Astronautics, P.R. China)

Han Wang (Nanjing University of Technology, P.R. China)

A Novel Simulation Environment for Cognitive Human Factors Engineering Research 1127

Yixiang Lim (RMIT University, Australia)

Alessandro G. M. Gardi (RMIT University, Australia)

Subramanian Ramasamy (RMIT University, Australia)

Julian Vince (DST Group, Australia)

Helen Pongracic (DST Group, Australia)

Trevor Kistan (THALES Australia, Australia)

Roberto Sabatini (RMIT University, Australia)

Thursday, September 21, 14:00 - 16:00

Session ATM-12: Design and Integration

Room: Demens

Chair: Valentin Polishchuk (Linkoping University, Sweden)

An Analysis Programming Language Applied to the Double Delay Problem in Aviation 1135

Kleoniki Vlachou (Intelligent Automation Inc, USA)

Rohit Sharma (Intelligent Automation Inc, USA)

Frederick Wieland (Intelligent Automation Inc, USA)

Innovative design principles applied to the conception of a sequencing manager working position 1145

Vincent Kapp (DSNA, France)

David Duprat (SOPRA-STERIA, France)

Florian Lefebvre (DSNA, France)

Recommendations for Next Generation Air Traffic Control Training 1155

Jessica Updegrove (Embry-Riddle Aeronautical University, USA)

Shafagh Jafer (Embry-Riddle Aeronautical University, USA)

Development and Evaluation of a Speed Guidance Interface for Trajectory-Based Dispatch Towing 1161

Torben Bernatzky (Technische Universitaet Darmstadt, Germany)

Per Schachtebeck (Technische Universitaet Darmstadt, Germany)

Marco Kemmerzell (Technische Universitaet Darmstadt, Germany)

Uwe Klingauf (Technische Universitaet Darmstadt, Germany)

Session ATM-13: Weather

Room: Williams

Chair: Brian Baxley (NASA & Langley Research Center, USA)

Enabling Aircraft-Based Observation of Winds in the U.S. and Europe: Progress and Benefits 1169

Cynthia Engholm (MIT Lincoln Laboratory, USA)

Clark Lunsford (The MITRE Corporation, USA)

Edward Johnson (FAA, USA)

Estimation of weather variables from surveillance broadcast data using spatio-temporal Kriging 1177

Ramon Dalmau (Technical University of Catalonia, Spain)

Marc Pérez-Batlle (Technical University of Catalonia, Spain)

Xavier Prats (Technical University of Catalonia, Spain)

Weather Impact on Airport Arrival Meter Fix Throughput 1185

Yao Wang (NASA Ames Research Center, USA)

Large Scale Aircraft Conflict Resolution Based on Location Network 1195

Zhaoxuan Liu (Beihang University, P.R. China)

Kaiquan Cai (Beihang University, P.R. China)

Xi Zhu (Beihang University, P.R. China)

Yan-wu Tang (Beihang University, P.R. China)

Session CNS-6: CNS Synergies

Room: HTC-3

Chair: Gregory Saccone (The Boeing Company, USA)

Placement strategies of LDACS Stations for RNP 1 1203

Giuseppe Battista (Deutsches Zentrum für Luft- und Raumfahrt & German Aerospace Center, Germany)

Rachit Kumar (Deutsches Zentrum für Luft- und Raumfahrt & German Aerospace Center, Germany)

Leveraging New Data Exchange Capabilities to Improve Trajectory Predictions 1212

George Hunter (Mosaic ATM, USA)

Alicia Fernandes (Mosaic ATM, USA)

Dynamic Multi-Arm Bandit Game Based Multi-Agents Spectrum Sharing Strategy Design 1220

Jingyang Lu (Virginia Commonwealth University, USA)

Lun Li (Intelligent Fusion Technology, USA)

Erik Blasch (Air Force Research Laboratory, USA)

Khanh D. Pham (Air Force Research Laboratory & Space Vehicles Directorate, USA)

Dan Shen (Intelligent Fusion Technology, Inc, USA)

Genshe Chen (Intelligent Fusion Technology, Inc, USA)

Bin Jia (Intelligent Fusion Technology, Inc, USA)

Session CSS-6: Innovative Solutions for Aviation

Room: Bayboro

Chair: Jan Leuchter (University of Defence, Czech Republic)

A Machine Learning Approach for Prediction of On-time Performance of Flights 1226

Balasubramanian Thiagarajan (Sri Venkateswara College of Engineering, India)

Lakshminarasimhan Srinivasan (SRM University, India)

Aditya Vikram Sharma (College Of Engineering Guindy, India)

Dinesh Sreekanthan (SRM University, India)

Vineeth Vijayaraghavan (Solarillion Foundation, India)

Consideration on Componentized Division of Open Avionics System Services Based on SOA N/A

Shuo Wang (China National Aeronautical Radio Electronics Research Institute, P.R. China)

Pingyu Deng (China National Aeronautical Radio Electronics Research Institute, P.R. China)

Jian-min Wu (China National Aeronautical Radio Electronics Research Institute & Science and Technology on Avionics Integration Laboratory, P.R. China)

Qing Zhou (China National Aeronautical Radio Electronics Research Institute & Science and Technology on Avionics Integration Laboratory, P.R. China)

A SoS(System of Systems) Oriented Avionics Architecture N/A

Jinyan Wang (China National Aeronautical Radio Electronics Research Institute, P.R. China)

Qing Zhou (China National Aeronautical Radio Electronics Research Institute & Science and Technology on Avionics Integration Laboratory, P.R. China)

Chang Liu (China National Aeronautical Radio Electronics Research Institute, P.R. China)

Rong Hong (Science and Technology on Avionics Integration Laboratory, P.R. China)

Tieying Li (China National Aeronautical Radio Electronics Research Institute, P.R. China)

Formal Modeling of Certification Processes 1232

Zamira Daw (United Technologies Research Center, USA)

Emeka Eyisi (United Technologies Research Center, USA)

Ebad Jahangir (United Technologies Research Center, USA)

Jeanne Larsen (UTC Aerospace Systems, USA)

Session ST-3: Hardware, Avionics, and Safety

Room: HTC-4

Chair: Sergio Torres (Leidos, USA)

Computer Aided Drafting Virtual Reality Interface 1240

Ilteris Demirkiran (Embry-Riddle Aeronautical University, USA)

David Roach (Embry-Riddle Aeronautical University, USA)

Electromagnetic Immunity of Aircraft Wires and Cables from Electromagnetic Interferences 1253

Jan Leuchter (University of Defence, Czech Republic)

Quang Huy Dong (University of Defence, Czech Republic)

Erik Blasch (Air Force Research Lab, USA)

Jan Boril (University of Defence, Czech Republic)

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Tomoko Iijima (Japan Aerospace Exploration Agency, Japan)

Tsuneharu Uemura (The University of Tokyo, Japan)

Naoki Matayoshi (Japan Aerospace Exploration Agency, Japan)

Jorg Entzinger (The University of Tokyo, Japan)

Jun Matsumoto (Japan Aerospace Exploration Agency, Japan)

Shoh Ueda (Japan Aerospace Exploration Agency, Japan)

Eiichi Yoshikawa (JAXA, Japan)

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Andreas Schwierz (Technische Hochschule Ingolstadt, Germany)

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Jeremy Straub (North Dakota State University, USA)

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Massood Towhidnejad (Embry-Riddle Aeronautical University, USA)

Jayson Clifford (Embry-Riddle Aeronautical University, USA)

Jake Neighbors (Embry-Riddle Aeronautical University, USA)

Michael Miller (Embry-Riddle Aeronautical University, USA)

Keith Garfield (Embry-Riddle Aeronautical University, USA)

Edward Verenich (Clarkson University, USA)

Gennady Staskevich (Clarkson University, USA)

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John Morgan (North Dakota State University, USA)

Santipab Tipparach (North Dakota State University, USA)

Aaron Sletten (North Dakota State University, USA)

Keonwoo Kim (North Dakota State University, USA)

David Loegering (North Dakota State University, USA)

Nicholas Feikema (North Dakota State University, USA)

Karanam Dayananda (North Dakota State University, USA)

Goutham Miryala (North Dakota State University, USA)

Andrew Jones (North Dakota State University, USA)

Andrew Gass (North Dakota State University, USA)

Kevin Setterstrom (North Dakota State University, USA)

Jacob Mischel (North Dakota State University, USA)

Dylan Shipman (North Dakota State University, USA)

Colleen Nazzaro (North Dakota State University, USA)

Jeremy Straub (North Dakota State University, USA)

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Leonardo Gomez (Aeronautical Sciences Studies Center CEA, Colombia)

Julio Parra (Aeronautical Sciences Studies Center CEA, Colombia)

Julieta Velez (Colombian Civil Aviation Authority, Colombia)

**Special Session III: Increasing Bandwidth Needs Present Data Transport Challenges: State of the Art
High-Speed Video and Data Transport with ARINC 818-2**

Room: HTC-1

Chair: Hilton Bateman (MITRE, USA)

Why ARINC 818? 1307

Paul Grunwald (Great River Technology & Great River Technology, USA)

Physical Considerations N/A

Ken Applebaum (Cotsworks, USA)

Avionics Bus Technology: Which Bus Should I Get on? 1311

Tony Ricker (Avionics Interface Technologies, USA)

Advanced Architectures for High Bandwidth Video Transport 1323

Paul Grunwald (Great River Technology, USA)