2012 Integrated Communications, Navigation and Surveillance Conference

(ICNS 2012)

Herndon, Virginia, USA
24-26 April 2012

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IEEE

Tuesday April 24, 2012

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Chair: Todd Lovell, Raytheon

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3	Integrated Surveillance Capability Gap Analysis	Leslie Crane, Duncan Thomson, Katie Bolczak, The MITRE Corporation
3;	Requirements, Architecture, and Technology for NextGen Surveillance and Weather Radar Capability (NSWRC)	Peter Drake, Raytheon Company, David McLaughlin, UMASS, Chris McCarroll, Raytheon Company
4;	GPS Accuracy under Varying Ionospheric Conditions for Surface ADS-B Applications	Peter Moertl, Brian Bian, The MITRE Corporation
7;	An Enhanced Altitude Correction Technique for Improvement of WAM Position Accuracy	Michael Garcia, Rob Mueller, Eric Innis, Boris Veytsman, ITT Exelis
: 6	Airborne TIS-B to TIS-B Track Correlation for Reduction of Cockpit Display Shadows	Brock Lascara, Robert Eftekari, The MITRE Corporation
325	Wide Area Multilateration and ADS-B Proves Resilient in Afghanistan	Jerry Johnson, Thales ATM, Inc., Holger Neufeldt, Thales Air Systems GmbH, Jeff Beyer, Clairus LLC
344	Long Term Performance Evaluation of Wide Area Multilateration	Jeff Beyer, Clairus LLC, Khalid El Seed, NATS

Session B – CNS Systems Architectures and Interfaces

Chairs: Edward Holman and John Moore, The Boeing Company

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384	Collecting, Managing, and Analyzing Avionics Equipage Information	Douglas Vandermade, The MITRE Corporation
429	Dependence of AeroMACS Interference on Airport Radiation Pattern Characteristics	Jeffrey Wilson, NASA Glenn Research Center
448	Network Enabled Operations Spiral II	Paul Comitz, The Boeing Company
45;	A Method for Universal Beacon Code Allocation	Vivek Kumar, Lance Sherry, George Mason University
482	The Effects of Limited Intent Information Availability on Self-Separation in Mixed Operations	Timothy Lewis, Nipa Phojanamongkolkij, David Wing, NASA Langley Research Center

4: 5	A Domain Specific Language for Aviation Interoperability	Paul Comitz, The Boeing Company, Advanced Air Traffic Management
4; 6	Modeling for Spectrum Congestion Analysis of Air-to-ground Voice Communications in China	Han Zhou, Haoyu Xu, Jiangnan Bian, Shanghai Advanced Research Institute, Chinese Academy of Sciences, Shanghai, China

Session C – NextGen Integrated Air/Ground Concepts

Chairs: Mary Ellen Miller, Mosaic ATM and Tom Becher, The MITRE Corporation

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53:	Operational Incentives in Traffic Flow Management	Shervin AhmadBeygi, Emily Bromberg, Matthew Elliott, Shubh Krishna, Taryn Lewis, Metron Aviation Inc.
56:	Rapid En-Route Response to Terminal Operations	Sanjiv Shresta, Alex Tien, Conroy Jay, Katkin Rafe, Topiwala Tejal, The MITRE Corporation
584	Flow Monitor for Congested Taipei Terminal Control Area	Chin Lin, Wan-Ju Hsieh, AA Dept., National Cheng Kung University
5; 9	Flight Deck Automation Support with Dynamic 4D Trajectory Management for ACAS: AUTOFLY-AID	Emre Koyuncu, Istanbul Technical University, Faculty of Aeronautics and Astronautics, Eduardo Garcia, CRIDA and Polytechnic University of Madrid, Air Navigation Department, Gokhan Inalhan, Istanbul Technical University, Faculty of Aeronautics and Astronautics
649	AeroMACS Prototype Test Results Summary	Ward Hall, ITT Exelis, Brent Phillips, FAA, Rafael Apaza, NASA, James Magner, ITT Exelis, Natalie Zelkin, ITT Exelis
657	C-Band Airport Surface Communications System Standards Development - AeroMACS Mobile Application Testing	Stephen Henriksen, Natalie Zelkin, Ward Hall, James Magner, ITT Exelis
665	Quantitative Risk Assessment to Enhance AeroMACS Security in SESAR	Mohamed Slim Ben Mahmoud, Nicolas Larrieu, Alain Pirovano, ENAC (Ecole Nationale de l'Aviation Civile)

Session D – NAS-Wide Simulation

Chairs: Lance Sherry and Vivek Kumar, George Mason University

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743	The Airspace Concepts Evaluation System: Recent Improvements and Analysis Results	Frederick Wieland, Intelligent Automation, Inc.
753	NAS Wide Simulations: Modeling Features, Benefits, and Applications	Kenneth Martin, Ian Crook, Zak Tibichte, ISA Software
773	NAS-Wide Vertical Profile Analysis: Level Segments in Arrival and Departure Flows	Saul Dorfman, Jeff Daily, Travis Gonzalez, Genki Kondo, The MITRE Corporation
792	Studies of Perturbations to Flight Traffic and Routes on Simulated M&S Operations at KATL	Michel Santos, Intelligent Automation, Inc., Patricia Glaab, NASA Langley Research Center, Yunshen Tang, Yun Teng, and Art Feinberg, Intelligent Automation, Inc.
7: 6	Efficient Searching of a NAS-Wide Analysis Space	Brian Wickham, Seli Agbolosu-Amison, William Baden Jr., Laurie Litwin, Lorrie Smith, The MITRE Corporation

Session E – Global eEnabled Airborne Network Security for NextGen and SESAR

Chairs: Lance Sherry and Vivek Kumar, George Mason University

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7; 9	Design and Development of an Embedded Aeronautical Router with Security Capabilities	Antoine Varet, Nicolas Larrieu, Ecole Nationale de l'Aviation Civile (ENAC)
844	Air Force E-Mail Enabling of the Apple iPad	William Blanchette, US Air Force Cryptologic Systems Division (Booz Allen Hamilton)
P lC	Cyber Security Assessment Methods with UML	Chris Riley, U.S. DOT / Volpe Center
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857	International Collaboration on Aviation Security	Andy Jackson, CESG
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87;	Aviation Communication Infrastructure Security	Aniruddha Karmarkar, Lockheed Martin, IS&GS-Civil
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Chairs: Paul Comitz, The Boeing Company and Michael Schnell, German Aerospace Center (DLR)

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92;	The Benefits of Alternative Position, Navigation, and Timing System to Aviation and Other User Communit	Mitch Narins, Federal Aviation Administration, Sherman Lo, Stanford University
94:	Surveillance and Data Link Communication Performance Analysis for NextGen	William Chung, Dennis Linse, Omeed Alaverdi, Carlos Ifarragurrie, Dan Salvano, Science Applications International Corporation
97;	Simple and Efficient Integration of Aeronautical Support Tools for Human-in-the-Loop Evaluations	Thomas Gräupl, Barbara Jandl, Carl-Herbert Rokitansky, University of Salzburg
9: 2	Distributing Non-Cooperative Surveillance Data: A Preliminary Model and Evaluation of Potential Use Cases	Xiaochen Yuan, Jonathan Histon, Steve Waslander, University of Waterloo
N/A	WAM/SBS System Design and Implementation in Colorado Phase II	Tricia Gilbert, Robert Mueller, Michael Garcia, Ronald Bruno, ITT Exelis
: 2:	Over-the-Horizon Space Based ADS-B	Skip Nelson, ADS-B Technologies

Session G – Future Communications, SWIM 1

Chairs: Tyler Smith, The MITRE Corporation and Kevin Clark, Volpe National Transportation Systems Center

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: 62	Application of Multihop Relay for Performance Enhancement of AeroMACS Networks	Behnam Kamali, Mercer University, Jeffrey Wilson, NASA Glenn Research Center, Robert Kerczewski, NASA Glenn Research Center
: 82	MIMO Effect Evaluation for Aeronautical WiMAX in Airport at 5.1GHz	Naoki Kanada, Yasuto Sumiya, Naruto Yonemoto, Shunichi Futatsumori, Eiju Isozaki, Electronic Navigation Research Institute
: 9:	Minimizing Self-Interference in an Aeronautical Data Communications Network	Frank Box, Leone Monticone, Leila Ribeiro, Richard Snow, The MITRE Corporation

: ; 6	Cloud Based Services in Air Traffic Management	Wolfgang Kampichler, Frequentis AG, Dieter Eier, Frequentis USA, Inc.
; 3:	Experience Report on Successful Demonstration of SWIM by Three Industry Partners	Georg Trausmuth, Eduard Gringinger, Aleksandar Balaban, Josef Jahn, Harald Milchrahm, Frequentis AG
; 57	Modeling DME Interference Impact on LDACS1	Ulrich Epple, Felix Hoffmann, Michael Schnell, German Aerospace Center (DLR)
; 7;	SWIM Segment 2 Deployment and Utilization in NextGen R&D Programs	Jonathan Standley, Federal Aviation Administration, Victor Brown, IBM Corporation, Paul Comitz, The Boeing Company, Joe Schoolfield, Harris Corporation

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Chairs: Elida Smith, The MITRE Corporation and Ray Young, Saab Sensis Corporation

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; 9:	Improving Throughput at Airports with a Dependency between Arrival and Departure Operations	Paul Diffenderfer, David Osburn, The MITRE Corporation, Center for Advanced Aviation Systems Development
; ; 8	Development of Safety Metrics Using ASDE-X Surveillance Data for Evaluation of Ground Collision Risk	Eric Chang, The MITRE Corporation
3226	Managing Gate and Ramp Operations to Reduce Delay, Fuel Burn, and Costs	Michael Carpenter, Steven Stroiney, Saab Sensis Corporation
3259	Strategic Pre-Departure Coordination with Stochastic Trajectory Modeling	Tom Mitchell, Melissa Ohsfeldt, CSSI, Inc.
3282	Departure Queue Management in the Presence of Traffic Management Initiatives	Chris Brinton, Steve Lent, Mosaic ATM, Inc.
P lC	Collaborative Use of Aerobahn Between United Airlines Company Ramp Tower, Houston Center (ZHU), & Houston Tower (IAH ATCT) to Re-Reroute Aircraft On the Surface of IAH during SWAP (Severe Weather Avoidance Plan) Conditions	Scott Remillard, Saab Sensis
32; 2	Comparison of Efficiency of Slot Allocation by Congestion Pricing and Ration by Schedule	Saba Neyshabouri, Vivek Kumar, Lance Sherry, Center for Air Transportation Systems Research (CATSR)
3338	How NextGen Will Maintain Affordability of Air Travel in the Presence of Higher Energy Costs	Lance Sherry, Center for Air Transportation Systems Research at George Mason University

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337;	Analysis of Alternative Collaborative Route Selection Strategies Based on Cost and Throughput	Bojia Ye, Nanjing University of Aeronautics and Astronautics, Lance Sherry, George Mason University, Minghua Hu, Nanjing University of Aeronautics and Astronautics, Chun-Hung Chen, George Mason University
33: 9	A Methodology for Addressing Operational Shortfalls Associated with Terminal Operations	Zheng Tao, Mark Simons, The MITRE Corporation
P IC	Measuring NextGen Current and Forecasted Mixed Equipage	Sean McCourt, MITRE
3424	Alternate Position Determination for Aviation Using SBSS	Michael Garcia, John Dolan, Rob Mueller, Ralph Smith, ITT Exelis
3442	Change of Controller Tasks in a Sectorless ATM Concept - First Results	Bettina Birkmeier, Julia Schmid, Angela Rebecca Schmitt, Bernd Korn, DLR
3472	Detecting Weather Conflicts with Next Generation SOA	Kiran Chittargi, Lockheed Martin IS&GS
347;	Developing Standards For Time-Based Sequencing & Separation of Aircraft	Alan Bell, Systems Enginuity
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34; 2	Enhanced Flight Delay Data for ASQP Carriers	Derek Robinson, Daniel Murphy, Federal Aviation Administration
3526	NAS-Wide En-Route Air-Traffic Controller Modeling	David Sislak, Premysl Volf, Dusan Pavlicek, Michal Pechoucek, Agent Technology Center, Czech Technical University in Prague
3542	Measured Variability and Uncertainty in Flight Operations	Travis Gaydos, MITRE/CAASD

3564	FAA's System-Wide Analysis Capability: New Features and Recent Applications	Joseph Post, FAA
357;	SWAC Dynamic Simulation Architecture	Joseph Prete, Metron Aviation, Inc.
3594	Modeling Flight Delays in the Current U.S. Aviation System	Daniel Murphy, Federal Aviation Administration

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Chairs: Aloke Roy, Honeywell and Dieter Eier, Frequentis

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3635	Ontologies: Weather and Flight Information	Kajal Claypool and Kelly Moran, MIT Lincoln Laboratory
3652	Advanced Verification Methods and Safety Critical Hardware	Brian Butka, Embry-Riddle Aeronautical University

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Chair: Steve DeHart, Saab Sensis Corporation

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3694	Network Enabled Operations Information Sharing	Ian Wilson, Boeing Advanced ATM, Florian Hafner, Hafner Engineering
369;	CDTI Enabled Delegated Separation (CEDS) In The Vertical Domain: Initial Feasibility	David Domino, Hilton Bateman, Dr. Anand Mundra, H. Peter Stassen, MITRE Corporation Center for Advanced Aviation System Development
372:	Compatibility of Airport Surface Wireless Networks in the 5091-5150 MHz Band	Izabela Gheorghisor, Alexe Leu, The MITRE Corporation
3748	iEMID: a Mobile Multi-Information Display for Surveillance Data	Mohamed Mahmoud, Johnathan Pesce, Embry-Riddle Aeronautical University
3766	Network Enabled Operations Spiral II	Paul Comitz, The Boeing Company
3779	ATC Data Link Triple Stack (FANS, ATN/OSI, ATN/IPS)	Frank O'Connor, Airtel ATN
3793	Satellite-Based ADS-B: The Next Quantum Leap in ATM	Om Gupta, Iridium Communications Inc.

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Chairs: Suzanne Porter, The MITRE Corporation and Fred Wieland, Intelligent Automation, Inc.
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3822	Evaluating Intervention Strategies for Metering in the Presence of Trajectory Uncertainty	Sanjiv Shresta, MITRE/CAASD
3834	Measuring the Time-Evolution of Flight Route Uncertainty	Phil Railsback, Worth Kirkman, Travis Gaydos, The MITRE Corporation
3847	Estimating Requirements and Costs of 4D ATM in High Density Terminal Areas	Gunnar Schwoch, Franz Knabe, Raimar Stump, DLR German Aerospace Center
386;	Bridging the Gap between Air Transportation System Simulations and Environmental Models for NextGen Benefits Assessment	Anuja Mahashabde, The MITRE Corporation
3879	Flight Management Computer (FMC), Navigation Database Capacity	Albert Herndon, MITRE Corporation
389:	Archival Service in the Aviation Domain	Samet Ayhan, Paul Comitz, Gary Gerberick, The Boeing Company
38; 9	A Comparison of Noise Abatement Procedures Using Radar Data and Simulated Flight Trajectories	Barbara Jandl, Thomas Gräupl, University of Salzburg

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Chairs: Ralf Mayer, The MITRE Corporation and Chris Brinton, Mosaic ATM
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3948	Workload Evaluation of Sectorized Air Traffic Control and Stream Management	Peng Wei, Chittayong Surakitbanharn, Steven Landry, Dengfeng Sun, Purdue University
3968	Modeling The Effect Of Weather Conditions In Sample Day Selection Using An Optimization Method	Feng Cheng, John Gulding, Bryan Baszczewski, Ruth Galaviz-Schomisch, Amy Chow, Federal Aviation Administration
3989	A Clustering Approach for Analysis of Convective Weather Impacting the NAS	Maria Asencio, Mosaic ATM, Inc.
39: :	Change-Oriented Aircraft Fuel Burn and Emissions Assessment Methodologies	Ralf H. Mayer, The MITRE Corporation

3: 32	Anatomy of Airline Passenger Trip Delays	Lance Sherry, Ashwin Samant, Center for Air Transportation Systems Research at George Mason University
3: 53	Implementing Airport Terminal Gates in NAS-Wide Simulations	Prabhakar Thyagarajan, FAA - ATO System Operations Services

Session O – Safe and Secure Air Transportation System

Chairs: Radhakrishna Sampigethaya, The Boeing Company and Yosef Gavriel Tirat-Gefen, Castel Research

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3: 6;	Hazardous Cargo Information Management Via the Flight Object	Robin Ghariani, Robert Cormier, The MITRE Corporation
3: 89	Safety and Sensitivity Analysis of the Advanced Airspace Concept for NextGen	John Shortle, Lance Sherry, George Mason University
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Chairs: Denise Ponchak, NASA Glenn Research Center and Chris Wargo, Mosaic ATM

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423;	Standards for Unmanned Aircraft System – Defining the "Manage" Requirements	Chris Wargo, Dr. Stephen Pledgie, Mosaic ATM, Inc.
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4266	Overview of Communication Portion of NASA's UAS in the NAS Project	Jim Griner, NASA GRC

4276	Air-Ground Channel Measurements of UAS Control Communication Spectrum	Jim Griner, NASA GRC
4284	UAS in the NAS: Control and Non-Payload Communications Technology Evaluation	Steven Bretmersky, MTI Systems
4295	UAS in the NAS: Control and Non-Payload Communications Modeling and Simulation Approach	Rafael Apaza, NASA GRC
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