2008 ICNS Conference Agenda
"Information Takes Flight"

Monday, May 5, 2008		
07:30 – 08:45 am	**Registration/Continental Breakfast**	
08:45 – 09:00 am	Welcome/Overview Week	Chip Meserole, ICNS Conference Chair, The Boeing Company
09:00 – 09:30 am	**Keynote Speaker**	Fred Pease, Executive Director, Department of Defense Policy Board on Federal Aviation
Plenary Session – The Future of Airspace Session Chair: Robert Pearce, Deputy Director, Joint Planning and Development Office		
09:30 – 09:40 am	Panel Introductions	
09:40 – 09:50 am	NextGen – Where We Are	Robert Pearce, Deputy Director, Joint Planning and Development Office
09:50 – 10:10 am	SESAR – The Joint Undertaking	Colin Meckiff, Eurocontrol – Federal Aviation Administration Coordinator, Eurocontrol
10:10 – 10:30 am	DoD Views from Both Sides	Guy St. Sauveur, Department of Defense Policy Board on Federal Aviation
10:30 – 11:00 am	**BREAK – Exhibitors Reception**	
11:00 – 11:20 am	NextGen Architecture	Jay Merkle, Chief Architect, Joint Planning and Development Office
11:20 – 11:40 am	NextGen – The Case for Investments Across Stakeholders	Kris Burnham, Division Director of Portfolio Management, Joint Planning and Development Office
11:40 – 11:50 am	NextGen – The Next Steps	Robert Pearce, Deputy Director, Joint Planning and Development Office
11:50 – 12:00 pm	Questions & Answers	All
12:00 – 01:00 pm	**LUNCH**	
Session A – Integrated CNS Systems and Architectures – Research, Technology, Demonstrations and Evaluations Session Chair: Gene Hayman, The Boeing Company		
01:00 – 01:30 pm	Idealized Truth Data for System Modeling and Testing	Jeffrey Giovino, The MITRE Corporation
01:30 – 02:00 pm	The Joint NEO Spiral 1 Program: Lessons Learned Operational Concepts and Technical Framework	Paul Comitz, The Boeing Company; John Mazurkiewicz, Computer Sciences Corporation; Avinash Pinto and David Sweet, The Boeing Company
02:00 – 02:30 pm	The Integrated Airport – A NextGen Test Bed	Michael Burkle and Thomas Montgomery, Lockheed Martin Transportation and Security Solutions
02:30 – 03:30 pm	NextGen CNS Test Bed Status and Plans A New National Asset is Open for Business	Dana Hall, Sensis Corporation
03:00 – 03:30 pm	**BREAK**	
03:30 – 04:00 pm	System Dynamics Application in Air Traffic Management: A Case Study	Mike Ulrey and Arek Shakarian, Boeing Advanced Air Traffic Management
04:00 – 04:30 pm	ADS-B Service Delivery Point Emulation and Simulation	Russ Gorman, Sunhillo Corporation (presented by Ron Fulton)
04:30 – 05:00 pm	Low Altitude Emergency Management & Operations Control System (EMOCS) Study	Harold Brackett, Harris Corporation
05:00 – 05:30 pm	Joint Network Enabled Operations Spiral 1 Activities	John Zuna and Robert Avjian, Lockheed Martin Transportation and Security Solutions
06:30 – 09:00 pm	**Dinner at Hotel with Guest Speaker Donna McLean, Chairman of the Board of Amtrak and former CFO of DOT and FAA. "The Case of Bimodal Air-Rail Transportation Policy for Congested Corridors"**	

Monday, May 5, 2008		
Session B – Surveillance Systems Session Chair: Mark Ballin, NASA Langley Research Center		
01:00 – 01:30 pm	Prototype ADS-B System in the Midwest: Description and Lessons Learned	Timothy Hall and Allen Mackey, John A. Volpe National Transportation Systems Center; Bobby Nichols and John Marksteiner, Federal Aviation Administration
01:30 – 02:00 pm	Use of Multi-Sensor Fusion Tracking in Integrating Varied Air Traffic Control Surveillance Systems	Dominic Cheung, Jaime Lima and Mark Supko, Telephonics Electronic Systems Division
02:00 – 02:30 pm	Advanced Ground Surveillance for Remote Tower	Dieter Eier, Frequentis USA, Inc.; Hartmut Huber and Wolfgang Kampichler, Frequentis AG
02:30 – 03:00 pm	Terminal Multifunction Phased Array Radar	Mark Weber, Steven Campbell, John Cho and Jeff Herd, MIT Lincoln Laboratory
03:00 – 03:30 pm	**BREAK**	
03:30 – 04:00 pm	Virtual Radar - Emulating Long Range ARSRs with ADS-B	Dave Whitman, Sunhillo Corporation
04:00 – 04:30 pm	Multilateration Systems at the Italian Airports	Massimiliano DeAngelis, Selex-Sistemi Integrati
04:30 – 05:00 pm	Qualifying I/P Surveillance Data for Use in an En Route ARTCC	Bob Lincoln, Sunhillo Corporation
05:00 – 05:30 pm	ACES Surveillance Modeling – Design Implementation and Capabilities	Greg Kubat, Analex Corporation; Steve Bretmersky, Cleveland State University; Thanh Nguyen, Analex Corporation and Rafael Apaza, Federal Aviation Administration
06:30 – 09:00 pm	**Dinner at Hotel with Guest Speaker Donna McLean, Chairman of the Board of Amtrak and former CFO of DOT and FAA. "The Case of Bimodal Air-Rail Transportation Policy for Congested Corridors"**	
Session C – SWIM and Net Centric Air Transportation Session Chair: James Dieudonne, The MITRE Corporation		
01:00 – 01:30 pm	SOA Best Practices for the FAA SWIM Program: Industry Recommendations	Steve Prescott, Oracle Corporation
01:30 – 02:00 pm	Mobile Object Technology in Net-Centric, Service-Oriented Architectures	Michael McGrady, Topia Technology
02:00 – 02:30 pm	Discussion of FAA SWIM Program Segment 2 Definition	Michael Hritz, Federal Aviation Administration
02:30 – 03:00 pm	Network Enabled Operations Enhances Aviation Efficiency	Mary Ellen Miller and Robert Stamm, Raytheon Company
03:00 – 03:30 pm	**BREAK**	
03:30 – 04:00 pm	Implementing Geospatially Enabled Aviation Web Services	Samet Ayhan, Paul Comitz and Ron LaMarche, The Boeing Company
04:00 – 04:30 pm	Federated Identity Management in Service Oriented Architectures	Kelly Traw, Sherry Yang and Paul Comitz, Boeing Air Traffic Management
04:30 – 05:00 pm	SWIM-SUIT: Laying the Technological Foundation for SWIM	Giuliano d'Auria, Selex-Sistemi Integrati
05:00 – 05:30 pm	Enabling Technologies for Next-Generation Air Transportation Systems	Angelo Corsaro, PrismTech Corporation
06:30 – 09:00 pm	**Dinner at Hotel with Guest Speaker Donna McLean, Chairman of the Board of Amtrak and former CFO of DOT and FAA. "The Case of Bimodal Air-Rail Transportation Policy for Congested Corridors"**	

Monday, May 5, 2008		
Session D – Navigation Systems Session Chair: Brent Phillips, Federal Aviation Administration		
01:00 – 01:30 pm	FAA Civil Aviation Satellite Navigation Update WAAS/LAAS	Leo Eldredge, Federal Aviation Administration
01:30 – 02:00 pm	Modeling and Analysis of MEMS Inertial Measurement Unit Errors	R. Ramalingam, Avionics; G. Anitha, MIT-Anna University and J. Shanmugam, Tagore Engineering College
02:00 – 02:30 pm	Tightly Coupled GPS/IRS Navigation for ADS-B	Mark Manfred and Tom Ryno, Honeywell International
02:30 – 03:00 pm	ATC Interfacing GNSS: A European Perspective	Massimiliano DeAngelis, Selex-Sistemi Integrati
03:00 – 03:30 pm	**BREAK**	
03:30 – 04:00 pm	Navigation Services and the U.S. National Airspace System	Leo Eldredge, Federal Aviation Administration
04:00 – 04:30 pm	Aircraft Navigation and Spacecraft Coordination via Wireless Local Positioning Systems	Seyed (Reza) Zekavat, Ossama Abdelkhalik, Michigan Tech University and Hui Tong, Alcatel-Lucent Shanghai Bell
04:30 – 05:00 pm	Analysis of Observed Aircraft-to-Aircraft Separations	Stephen Szurgyi, Sanjiv Shresta, Dejan Neskovic, James DeArmon and Scott Williams, The MITRE Corporation
05:00 – 05:30 pm	Improving Low Visibility Operations	Brennan Haltli, Coby Johnson, Craig Johnson, Sean McCourt, Julian Sanchez and Sean Stapleton, The MITRE Corporation
06:30 – 09:00 pm	**Dinner at Hotel with Guest Speaker Donna McLean, Chairman of the Board of Amtrak and former CFO of DOT and FAA. "The Case of Bimodal Air-Rail Transportation Policy for Congested Corridors"**	

Tuesday, May 6, 2008		
07:30 – 08:30 am	**Registration/Continental Breakfast**	
08:30 – 08:45 am	Welcome/Overview	Chip Meserole, ICNS Conference Chair, The Boeing Company
Plenary Session – User Challenges Session Chair: Michael Lewis, ATM Business Development, The Boeing Company		
08:45 – 09:00 am	Panel Introductions	
09:00 – 09:20 am	NextGen Operations Trials	Barry Scott, Federal Aviation Administration, Air Traffic Operations - Planning
09:20 – 09:40 am	Experience with Tailored Arrivals	Rob Mead, Advanced Air Traffic Management, The Boeing Company
09:40 – 10:00 am	Flight Operations with Light Jets	Bruce Holmes, NetJets
10:00 – 10:30 am	**BREAK**	
10:30 – 10:50 am	Key Research for Flight Safety	Amy Pritchett, Director, NASA Aviation Safety Program
10:50 – 11:10 am	How to Increase Capacity in New York	Paul McGraw, Air Transport Association
11:10 – 11:30 am	Realizing Operational Benefits with ADS-B	Paul Railsback, Air Transport Association
11:30 – 11:50 am	Achieving NextGen Benefits for Private Aircraft	Randy Kenagy, Aircraft Owners and Pilots Association
11:50 – 12:00 pm	Questions & Answers	All
12:00 – 01:00 pm	**LUNCH**	
Session E – CNS Safety and Secure Systems Session Chair: Dana Hall, Sensis Corporation		
01:00 – 01:30 pm	The Role of No Radio (NORDO) Events in Airspace Security	Paul Ostwald, The MITRE Corporation
01:30 – 02:00 pm	An Airborne Communications Roadmap for the U.S. Federal Air Marshal Service: Overview and Status	James Griner, NASA Glenn Research Center
02:00 – 02:30 pm	Shared Situational Awareness to Meet Future Airspace Security Mission Needs	Catherine Bolczak and Chih-Chia Vanessa Fong, The MITRE Corporation
02:30 – 03:00 pm	Conformance Monitoring Immediate Application of ADS-B Without Burdening Automation	Michael Harrison, Aviation Management Associates, Inc.
03:00 – 03:30 pm	**BREAK**	
03:30 – 04:00 pm	Enhancing the Distribution of Radar Surveillance Data	Steve Bliesner, Avaliant LLC; Paul Comitz, The Boeing Company; and David Sweet, YourEncore
04:00 – 04:30 pm	Applying the Final Approach Runway Occupancy Signal (FAROS) Concept to the High-Density Airport Environment	Jaime Figueroa, Kelvin Kercado, Federal Aviation Administration and Kirk Swanson, Architecture Technology Corporation
04:30 – 05:00 pm	GMPLS Network Security: Gap Analysis	Vikram Ramakrishnan, Chris Wargo and Ravi Kumar, Computer Networks & Software, Inc.

Tuesday, May 6, 2008		
Session F – Communications Systems and Networks Session Chair: David Matolak, Ohio University		
01:00 – 01:30 pm	Enhanced Off-Board Communication for Commercial Aircraft	Timothy Mitchell, The Boeing Company
01:30 – 02:00 pm	Functional Building Blocks for an Integrated Aeronautical IP-Network	Frank Schreckenbach, German Aerospace Center; K. Leconte, C. Baudoin, Thales Alenia Space; C. Kissling, C. Bauer and S. Ayaz, German Aerospace Center
02:00 – 02:30 pm	Future Communications Study Final Conclusions and Recommendations	Jacky Pouzet, Eurocontrol
02:30 – 03:00 pm	B-AMC - Broadband Aeronautical Multi-Carrier Communications	Michael Schnell, S. Brandes, S. Gligorevic, German Aerospace Center; C.-H. Rokitansky, M. Ehammer, Th. Gräupl, University of Salzburg; C. Rihacek and M. Sajatovic, Frequentis AG
03:00 – 03:30 pm	**BREAK**	
03:30 – 04:00 pm	Future Communication Study Technology Investigation Conclusions and Recommendations	Tricia Gilbert, Jenny Jin, Jason Berger, Stephen Henriksen, ITT Corporation and James Budinger, NASA Glenn Research Center
04:00 – 04:30 pm	Self-Healing Adaptive Network Technologies for IVHM	Joseph Ishac, NASA Glenn Research Center
04:30 – 05:00 pm	Onboard Communications Requirements for Commercial Transport Aircraft	James Griner, NASA Glenn Research Center
Session G – Performance-Based CNS/ATM Session Chair: Gary Church, Aviation Management Associates, Inc.		
01:00 – 01:30 pm	Stream Management for Successful Merging and Spacing Using ADS-B	Leslie Crane and Ganghuai Wang, The MITRE Corporation
01:30 – 02:00 pm	Dynamic FPAs: A New Method for Dynamic Airspace Configuration	Alexander Klein, Air Traffic Analysis; Mark Rodgers and Hong Kaing, CSSI, Inc.
02:00 – 02:30 pm	Encounter Modeling for Sense and Avoid Development	Mykel Kochenderfer, Leo Espindle, Daniel Griffith and James Kuchar, MIT Lincoln Laboratory
02:30 – 03:00 pm	Impact of Ground Delay Program Rationing Rules on Passenger and Airline Equity	Bengi Manley and Lance Sherry, George Mason University
03:00 – 03:30 pm	**BREAK**	
03:30 – 04:00 pm	A Concept for Pairing Departures from Parallel Runways for Wake Avoidance	Clark Lunsford, The MITRE Corporation
04:00 – 04:30 pm	Tower Information Display System (TIDS): The System Architecture	Sharon Woods, Computer Sciences Corporation; Mike Francis, EG&G and Jonathan Lee, U.S. Department of Transportation, Volpe National Transportation Systems Center
04:30 – 05:00 pm	Tower Information Display System (TIDS): Human-in-the-Loop Simulation and Evaluation	Daniel Hannon, Jonathan Lee, Thomas Sheridan and Caroline Donohoe, U.S. Department of Transportation, Volpe National Transportation Systems Center
05:00 – 05:30 pm	Evaluation of Aircraft Separations Observed in Radar Data of Terminal Operations	Edward Walsh and Ralf Mayer, The MITRE Corporation

Tuesday, May 6, 2008		
Session H – 4-D Trajectory Operations and Automation Session Co-Chairs: Suzanne Porter and Elly Smith, The MITRE Corporation		
01:00 – 01:30 pm	A Mid-Term Terminal Concept of Operations: Evaluation and Evolution Analysis	Craig Johnson and Elida Smith, The MITRE Corporation
01:30 – 02:00 pm	Local Data Exchange for Airport Surface Trajectory-Based Operations	Chris Brinton and Stephen Atkins, Mosaic ATM
02:00 – 02:30 pm	A 4D Trajectory Negotiation Protocol for Arrival and Approach Sequencing	José Miguel Canino Rodríguez, Luis Gómez Déniz, Universidad de Las Palmas de Gran Canaria; Jesús García Herrero, Universidad Carlos III; Juan Besada Portas and José Ramón Casar Corredera, Universidad Politécnica de Madrid
02:30 – 03:00 pm	Automated Tool for Task Analysis of NextGen Automation	Lance Sherry and Maricel Medina, George Mason University and Michael Feary, NASA Ames Research Center
03:00 – 03:30 pm	**BREAK**	
03:30 – 04:00 pm	A Wake Vortex Safety Threshold and the Effect of Reducing Separation Variance on the Runway Landing Capacity	Babak Jeddi, John Shortle and George Donohue, George Mason University
04:00 – 04:30 pm	Decision Support Tool for Predicting Aircraft Arrival Rates from Weather Forecasts	David Smith and Lance Sherry, George Mason University
04:30 – 05:00 pm	Improved Airspace Efficiency Using a Total Airport Management Tool	Frank Koehne and Rich Challen, Barco, Inc.

Wednesday, May 7, 2008		
07:30 – 08:30 am	**Registration/Continental Breakfast**	
08:30 – 08:45 am	Welcome/Overview	Chip Meserole, ICNS Conference Chair, The Boeing Company
Plenary Session – Getting Connected Session Chair: David Rhodes, Director, Advanced Air Traffic Management Solutions, Computer Sciences Corporation		
08:45 – 09:00 am	Panel Introductions	
09:00 – 09:15 am	Combining CNS Capabilities: A Key Step Toward NextGen	David Hamrick, Director for Safety and Performance-Based Services, The MITRE Corporation
09:15 – 09:30 am	Balancing Air Traffic Modernization and Aircraft Capabilities to Optimize Operations	Ronald Stroup, Chief Systems Engineer for Airborne and Ground System Integration, Federal Aviation Administration
09:30 – 09:45 am	Satcom and Aviation – Pushing the Frontier	John Campbell, Executive V.P. for Government Programs, Iridium LLC
09:45 – 10:00 am	Panel Discussion and Questions & Answers	All
10:00 – 10:30 am	**BREAK**	
10:30 – 10:45 am	Data Communications Services – What's Next	Sandra Anderson, Data Communications Program Manager, Federal Aviation Administration
10:45 – 11:00 am	SWIM – FAA Plans	Ahmad Usmani, SWIM Program Manager, Federal Aviation Administration
11:00 – 11:15 am	SWIM – Industry Potential	Diane DeSua, Director, Air Traffic Management Strategy, Lockheed Martin Corporation
11:15 – 11:30 am	Tying it Together – The Enterprise Architecture	James Williams, Director, Systems Engineering and Safety, Federal Aviation Administration
11:30 – 12:00 pm	Panel Discussion and Questions & Answers	All
12:00 – 01:00 pm	**LUNCH**	

Wednesday, May 7, 2008		
Session I – Aviation Weather Session Chair: Massimiliano DeAngelis, Selex-Sistemi Integrati		
01:00 – 01:30 pm	Consolidated Storm Prediction for Aviation (CoSPA)	Marilyn Wolfson and William Dupree, MIT Lincoln Laboratory; Roy Rasmussen and Matthias Steiner, National Center for Atmospheric Research; Stanley Benjamin and Steven Weygandt, NOAA Earth System Research Laboratory
01:30 – 02:00 pm	Distributing Net-Enabled Federal Aviation Administration (FAA) Weather Data	Mark Simons, The MITRE Corporation
02:00 – 02:30 pm	Forecasting Convective Weather Impacts on Aviation System Capacity	James Evans, Richard DeLaura, Brian Martin and Michael Robinson, MIT Lincoln Laboratory
02:30 – 03:00 pm	**BREAK**	
03:00 – 03:30 pm	Airspace Capacity Estimation Using Flows and Weather-Impacted Traffic Index	Alexander Klein, Air Traffic Analysis, Inc.; Lara Cook and Bryan Wood, Mosaic ATM and David Simenauer, AvMet Applications International
03:30 – 04:00 pm	Sensitivity of the National Airspace System Performance to Weather Forecast Accuracy	George Hunter, Fred Wieland and Kris Ramamoorthy, Sensis Corporation
04:00 – 04:30 pm	Weather Data Processing: Display of Aviation Weather	Carl Dunn, Lockheed Martin Corporation
Session J – Aviation Spectrum Session Chair: Frank Box, The MITRE Corporation		
01:00 – 01:30 pm	Outcome of the 2007 World Radiocommunication Conference (WRC-07)	Michael Biggs, Federal Aviation Administration
01:30 – 02:00 pm	Spectrum Demand for Air/Ground Air Traffic Management Communications	Robert Morgenstern, The MITRE Corporation
02:00 – 02:30 pm	RF Propagation in Enclosed Metallic Structures	Carl Mueller, Qinetiq North America; Thomas Wallett and James Griner, NASA Glenn Research Center
02:30 – 03:00 pm	**BREAK**	
3:00 – 03:30 pm	Potential RF Interference to Control Links of Small Unmanned Aircraft	Frank Box, Leo Globus, Yan-Shek Hoh, Richard Snow, The MITRE Corporation and Jim Chadwick, Spectrum Analysis and Frequency Engineering, Inc.
03:30 – 04:00 pm	Aircraft Intra-Vehicular Channel Characterization in the 5 GHz Band	David Matolak and Arvind Chandrasekaran, Ohio University
04:00 – 04:30 pm	Future Trends for IP Services over FAA Telecommunications Infrastructure	Omar Atia, The MITRE Corporation

Wednesday, May 7, 2008		
Session K – Airport Surface Communications Session Chair: Chris Daskalakis, Volpe National Transportation Systems Center		
01:00 – 01:30 pm	Performance Evaluation of OFDMA and Multicarrier CDMA Systems on Airport Surface Area Channels	Jingtao Zhang and David Matolak, Ohio University
01:30 – 02:00 pm	Next Gen Airport Surface Wireless Network - Test & Evaluation Results	Steve DeHart, Sensis Corporation and James Budinger, NASA Glenn Research Center
02:00 – 02:30 pm	Evaluation of Downlink IEEE802.16e Communication at Airports	Jan Erik Håkegård and Tor Andre Myrvoll, SINTEF ICT
02:30 – 03:00 pm	**BREAK**	
03:00 – 03:30 pm	Objective and Automatic Estimation of Excess Taxi-Times	Benjamin Levy and Jeffrey Legge, Sensis Corporation
03:30 – 04:00 pm	Broadband Wireless Networks for Airport Surface Communications	Izabela Gheorghisor and Ka Ho Leung, The MITRE Corporation
04:00 – 04:30 pm	Flight Deck Based Indications and Alerting To Increase Runway Safety	Peter Moertl and James Nickum, The MITRE Corporation
04:30 – 05:00 pm	VDL2 on the Airport Surface - A Simulation Study	Steven Bretmersky, Cleveland State University
Session L – Avionics Integration and Aircraft Systems Session Chair: Thomas Mulkerin, Mulkerin Associates, Inc.		
01:00 – 01:30 pm	An Integrated Maintenance and Asset Management System (IMAMS)	Guruprasad Narayanamurthy and Sameer Arora, Honeywell Technology Solutions
01:30 – 02:00 pm	Start with Standards	Michael Russo, Aeronautical Radio, Inc.
02:00 – 02:30 pm	Standardization and Regulation for Communications, Navigation, Surveillance/Air Traffic Management (CNS/ATM) Avionics	William Hershey, The MITRE Corporation
02:30 – 03:00 pm	**BREAK**	
03:00 – 03:30 pm	Handheld Devices ADS-B, Traffic & Weather Display	Leonard Kirk, University of Alaska Anchorage
03:30 – 04:00 pm	Robust Large-Scale Distributed Wireless Communication for Aircraft Integrated Vehicle Health Management	James Griner, NASA Glenn Research Center
04:00 – 04:30 pm	Energy-Efficient Broadband Data Communications Using White LEDs on Aircraft Powerlines	Mohsen Kavehrad, Z. Hajjarian and A. Enteshari, The Pennsylvania State University