



Day 1 – Monday – June 27, 2005

7:00 a.m. - 8:30 a.m. Breakfast (Atrium /Harborview)

8:00 a.m. Registration – Constellation Rooms D, E, F

9:00 a.m. Plenary - Welcome
Sabrina Saunders-Hodge – FAA (USA Chair)
Christian Pusch – EEC (Europe Chair)
Joan Bauerlein – FAA (Director, ATO-P R&D)
Pierre Andribet – EEC (Deputy Director, EEC)

9:30 a.m. Break (Atrium)

10:00 a.m. Tracks Begin – See attached Track Descriptions & Locations

11:45 a.m. Lunch (Atrium/Harborview)

1:15 p.m. Tracks Continue

2:45 p.m. Break (Atrium)

5:30 p.m. Adjourn

7:00 p.m. - 9:00 p.m. Reception – Hyatt Hotel – Pisces Lounge
Access to Pisces Lounge via Elevators 3 & 4 – Elevators accommodate 10 people at one time.
Please wear your badge.

Track 1 – Metrics and Performance Management (Room- Constellation D)

Metrics Rapporteur: Wim Post – Eurocontrol HQ

Session Chair: Jean-Marc Pomeret – CENA

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| 10:15 a.m. | Economic Contribution and Productivity of ATM | Paula Leal de Matos – Eurocontrol DAS |
| 11:00 a.m. | Extent and Impact of Future NAS Capacity Shortfalls in the United States: A Socio-Economic Demand Study | Shahab Hasan - LMI
David Ballard – GRA, Inc. |

Session Chair: Ann Tedford - FAA

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| 1:15 p.m. | Flight Efficiency Studies in Europe and the United States | Tarja Kettunen – ISA Software
Dave Knorr – FAA |
| 2:00 p.m. | A Preliminary Analysis of the Impact of Mile-In-Trail Restrictions on NAS Flight Operations | Tim Myers – Metron Aviation, Inc. |

Session Chair: Mark Hansen – University of California at Berkeley

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| 3:15 p.m. | Modeling Delays and Cancellation Probabilities to Support Strategic Simulations | David Lovell - University of Maryland |
| 4:00 p.m. | Estimation of Arrival Capacity and Utilization at Major Airports | Husni Idris – Titan Corp.
Antony Evans – Titan Corp. |
| 4:45 p.m. | The Feasibility of Measuring Capacity in a Real-Time ATM Simulation Independent of Subjective Controller Workload Measurement | Mick van Gool - Eurocontrol/
Kevin Corker - San Jose State Univ. |

Track 2 – Airspace Management/Decision Support (Room - Constellation E)

Airspace Management Rapporteur: Vojin Tosic – University of Belgrade

Session Chair: Mark Hansen – University of California at Berkeley

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| 10:15 a.m. | An Efficient Method for Airspace Analysis and Partitioning Based on Equalized Traffic Mass | Alexander Klein - George Mason University |
| 11:00 a.m. | Assessment of the 3D-Separation of Air Traffic Flows | David Gianazza - CENA/LOG |
| 1:15 p.m. | Emergence and Impact of Secondary Airports in the United States | Philippe Bonnefoy - MIT |

(Monday Continued)

2:00 p.m. Analysis of Excess Flying Time in the National Airspace System George Solomos - MITRE Corp.

3:15 p.m. The factors affecting airspace capacity in Europe: A Framework Methodology based on Cross Sectional Time-Series Analysis using Simulated Controller Workload Data Arnab Majumdar – Imperial College London

Decision Support Rapporteur: Lluís Vinagre – ISDEFE
Session Chair: Eric Hoffman – Eurocontrol EEC

4:00 p.m. Improvement on the Acceptance of a Conflict Resolution System by Air Traffic Controllers Rainer Flicker - Technical University Berlin

4:45 p.m. Impact of Factors, Conditions and Metrics on Trajectory Prediction Accuracy Stephane Mondoloni – CSSI, Inc.

Track 3 – Safety (Room - Constellation F)

Safety Rapporteur: George Donohue – George Mason University
Session Chair: Jan Terlouw – NLR

10:15 a.m. Preliminary Results from a European Safety R&D Program Barry Kirwan – Eurocontrol EEC

11:00 a.m. The Link between Operational Performance and Operational Errors in the National Airspace System Mark Hansen - University of California at Berkeley

Session Chair: Lance Sherry – George Mason University

1:15 p.m. Safety Analysis for Advanced Separation Concepts John Andrews - MIT Lincoln Laboratory

2:00 p.m. Safety Analysis Methodology for Unmanned Aerial Vehicle (UAV) Collision Avoidance Systems James Kuchar - MIT Lincoln Laboratory

Session Chair: George Donohue – George Mason University

3:15 p.m. Applying Qualitative Hazard Analysis to Support Quantitative Safety Analysis for Proposed Reduced Wake Separation Concepts John Shortle - George Mason University

4:00 p.m. Quantitatively Estimating Wake Vortex Safety Using P2P Model Yue Xie – George Mason University

4:45 p.m. A Method for Rating the Severity of Runway Incursions Kim Cardosi – DOT/Volpe Center

Day 2 – Tuesday – June 28, 2005

7:30 a.m. - 9:00 a.m Breakfast (Atrium / Harborview)

9:00 a.m. Tracks Begin – See Track Description and Locations

10:30 a.m. Break (Atrium)

12:30 p.m. Lunch (Atrium/Harborview)

2:00 p.m. Tracks Continue

3:30 p.m. Break (Atrium)

5:30 p.m. Adjourn

Track 1 – Airport Management (Room Constellation D)

**Airport Management Rapporteur: Christoph Meier – DLR
Session Chair: Sandy Lozito – NASA Ames Research Center**

9:00 a.m.	An Analysis of Potential Capacity Enhancements Through Wind Dependent Wake Turbulence Procedures	Jeff Tittsworth – MITRE Corp.
9:45 am.	Improving Flight Efficiency Through Terminal Area RNAV	Kevin Sprong - MITRE Corp.
11:00 a.m.	Verification and Validation Results from the Operational A-SMGCS Field Trials of the Project BETA	Joern Jakobi-DLR
11:45 a.m.	Airline Operational Benefits of Surface Surveillance	Dan Howell-MCR, LLC
2:00 p.m.	Outbound Punctuality Sequencing by Collaborative Departure Planning	Eugene Tuinstra-NLR
2:45 p.m.	Tactical Departure Management with the Eurocontrol / DLR DMAN	Dietmar Bohme-DLR
4:00 p.m.	Linking Existing on Ground, Arrival and Departure Operations	Maria Mas-Isdef Patricia Pina-AENA
4:45 p.m.	Benefits Obtained from the Estimation and Distribution of Realistic Taxi Times	Jose Miguel de Pablo Guerra-AENA Patricia Pina-AENA

Track 2 – Decision Support / Environmental Impacts and Mitigation (Room - Constellation E)

Decision Support Rapporteur: Lluís Vinagre – ISDEFE

Session Chair: Gene Wilhelm – MITRE CAASD

**9:00 a.m. Air Ground Communications Miami Controller Pilot
Data Link Communications Summary and Assessment John Gonda-MITRE-CAASD
William Saumsiegle-MITRE**

**9:45 a.m. Integration of Downlink Aircraft Parameters in a French
En Route ATC HMI Vincent Kapp-DSNA**

Session Chair: Dres Zellweger – JPDO

**11:00 a.m. Managing Sector Congestion Using Airspace Restriction
Planner Parimal Kopardekar - NASA
Ames Research Center**

**11:45 a.m. Quantifying Convective Delay Reduction Benefits for
Weather/ATM Systems James Evans-MIT Lincoln
Laboratory**

Environmental Impacts and Mitigation Rapporteur: Lourdes Maurice – FAA

Session Chair: Cesare Bernabei – CEC DG TREN

**2:00 p.m. SOURDINE II Assessment Aspects of Noise Abatement
Procedures Ruud den Boer-NLR**

**2:45 p.m. Human Factors Implications of Continuous Descent
Approach Procedures for Noise Abatement in Air
Traffic Control Hayley Davison Reynolds-
MIT**

**4:00 p.m. Variability of Contrail Formation Conditions and the
Implications for Policies to Reduce the Climate Impacts
of Aviation Victoria Williams-Imperial
College London**

4:45 p.m. Environmental Tradeoffs Assessment Around Airports Kenny Martin-ISA Software

Track 3 – Innovative ATM Concepts (Room - Constellation F)

Rapporteur: Hartmut Fricke – Technical University Dresden
Session Chair: Hartmut Fricke – Technical University Dresden

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| 9:00 a.m. | Statistical Performance Evaluation Between Linear and Nonlinear Designs for Aircraft Relative Guidance | Thierry Miquel-DSNA |
| 9:45 a.m. | Estimation of Delay Propagation in the National Aviation System Using Bayesian Networks | Chun-Hung Chen-George Mason University |
| 11:00 a.m. | Route Charging Policy for a Functional Block of Airspace (CEATS) | Lorenzo Castelli-University of Trieste |
| 11:45 a.m. | Analyzing Air Traffic Management Systems Using Agent-Based Modeling and Simulation | Amy Pritchett-George Institute of Technology |

Session Chair: Patrizia Marti – DeepBlue

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| 2:00 p.m. | Interactive and Immersive 3D Visualization for ATC | Matt Cooper-Linkopkings Universitet |
| 2:45 p.m. | Shifting the ATM Paradigm: From the Use of System Resources to the Management of Objectives | Laurent Guichard-Eurocontrol EEC |

Session Chair: Gene Wilhelm – MITRE CAASD

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| 4:00P p.m. | Design for Innovation in ATM | Patrizia Marti-DeepBlue |
| 4:45 p.m. | Co-operative Air Traffic Management: A Technology Enabled Concept for the Next Generation Air Transportation System | Everett Palmer-NASA Ames Research Center |

Day 3 – Wednesday – June 29, 2005

7:30 a.m. - 9:00 a.m Breakfast (Atrium /Harborview)

9:00 a.m. Tracks Begin – See Track Description and Locations

10:30 a.m. Break (Atrium)

12:30 p.m. Lunch (Atrium/Harborview)

2:00 p.m. Tracks Continue

3:30 p.m. Break (Atrium)

5:30 p.m. Adjourn

**7:00 pm. Dinner – James Joyce Restaurant, 616 President Street
(You may walk, taxi or use the water taxi to get to the restaurant)**

Track 1 – Air Ground Cooperation (Room - Constellation D)

Air Ground Cooperation Rapporteur: Steve Bussolari – MIT Lincoln Lab

Session Chair: Tom Edwards – NASA Ames Research Center

09:00 a.m.	Joint NASA Ames/Langley Experimental Evaluation of Integrated Air/Ground Operations for En Route Free Maneuvering	Richard Barhydt-NASA Langley Research Center
09:45 a.m.	Design of an Airborne Spacing Director to Minimize Pilot Speed Actions	Eric Hoffman-Eurocontrol EEC
11:00 a.m.	Pilot Perspective of ASAS Self-Separation in Challenging Environments	Rob Ruigrok-NLR
11:45 a.m.	Cockpit Display of Traffic Information (CDTI) Assisted Visual Separation (CAVS): Pilot Acceptability of a Spacing Task During a Visual Approach	Randall Bone-MITRE Corp.

Session Chair: Billy Josefsson - Luftfartsverket

2:00 p.m.	Air and Ground Simulation of Terminal-Area FMS Arrivals with Airborne Spacing and Merging	Todd Callantine-San Jose State Univ./NASA Ames Research Center
2:45 p.m.	Spacing Instructions in Approach: Benefits and Limits from an Air Traffic Controller Perspective	Eric Hoffman-Eurocontrol EEC

(Wednesday Continued)

4:00 p.m.	Airborne Precision Spacing in Merging Terminal Arrival Routes: A Fast-Time Simulation Study	Karthik Krishnamurthy-Titan Corporation
4:45 p.m.	Ground-Side Perspective on Mixed Operations with Self-Separating and Controller-Managed Aircraft	Paul Lee-San Jose State Univ./NASA Ames Research

Track 2 – Traffic Flow Optimization (Room Constellation E)

Rapporteur: Amy Pritchett – Georgia Institute of Technology
Session Chair: Fred Wieland-AEgis Technologies

9:00 a.m.	Probabilistic Congestion Management	Craig Wanke-MITRE Corp.
9:45 a.m.	Advance Planning Through Schedule Analysis	Michelle Somerday-Metron Aviation, Inc.
11:00 a.m.	On the Feasibility of Traffic Synchronization in Central European Upper Airspace	Lenka Dravecka-CRDS, Budapest
11:45 a.m.	Airline Operations Managers: An Introduction to the Third Leg of the National Air Transportation System	Karen Feigh-Georgia Institute of Technology
2:00 p.m.	Expanding the Use of Time-Based Metering: Multi-Center Traffic Management Advisor	Steve Landry-NASA Ames Research Center
2:45 p.m.	Dynamic Stochastic Optimization Model for Air Traffic Flow Management with En Route and Airport of Capacity Constraint	Mark Hansen-University California at Berkeley
4:00 p.m.	Evaluating En Route Congestion Management Through Interactive Simulation	Michael Brennan-Metron Aviation, Inc.
4:45 p.m.	Response Mechanisms for Dynamic Air Traffic Flow Management	Michael Ball-University of Maryland

Track 3 – Human Factors (Room - Constellation F)

Human Factors Rapporteur: Paul Krois – FAA
Session Chair: Anthony Smoker – IFATCA

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| 9:00 a.m. | As Rapid as Paper Strips? Evaluation of Vertidigi, a New Control Tool for Terminal Sectors | Railane Benhacene-CENA |
| 9:45 a.m. | Controller-Pilot Radio Channel Utilization and Cognitive Issues
Jasenska Rakas – NEXTOR | Jasenska Rakas-NEXTOR |
| 11:00 a.m. | Organizational Issues and Safety Culture in ATM, Part 1: Stability Analysis | Marcus Arvidsson-Lund University |
| 11:45 a.m. | User Request Evaluation Tool (URET) Adoption and Adaptation; Three Center Case Study | Tatjana Bolic-University of California at Berkeley |

Session Chair: Parimal Kopardekar – NASA Ames Research Center

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| 2:00 p.m. | Simulated Free Routing Operations in the Marseille UIR: Results and Issues from a Human Factors Perspective | Thomas Kircher-DSNA |
| 2:45 p.m. | On the Integration of Human Performance and Collision Risk Simulation Models of Runway Operation | Henk Blom-NLP |
| 4:00 p.m. | Conflict Perception by ATCS Admits Doubt But Not Inconsistency | Philippe Averty-CENA |
| 4:45 p.m. | Relationship of the Aircraft Mix Index with Performance and Objective Workload Evaluation Research (Power) Measures and Complexity Ratings | Elaine Pflaiderer-FAA |

Day 4 – Thursday – June 30, 2005
Plenary Session – Constellation Rooms D, E, F

7:30 a.m. - 9:00 a.m. Breakfast (Atrium/Harborview)

9:00 a.m.	Welcome Address / Best Papers	Charlie Keegan-FAA Vice President ATO-P
9:30 a.m.	JPDO Research Needs	Steve Bradford – JPDO Deputy Agile ATS IPT Lead
9:50 a.m.	European Research Needs	Bo Redeborn - Eurocontrol Director ATM Strategies
10:10 a.m.	Q&A	
10:30 a.m.	Break (Atrium)	
11:00 a.m.	Human Factors Rapporteur	Paul Krois - FAA
11:20 a.m.	Safety Rapporteur	George Donohue - George Mason University
11:40 a.m.	Innovative ATM Concepts Rapporteur	Hartmut Fricke - Technical University Dresden
12:00 p.m.	Traffic Flow Optimization Rapporteur	Amy Pritchett – Georgia Institute of Technology
12:20 p.m.	Lunch (Atrium/Harborview)	
1:30 p.m.	Decision Support Rapporteur	Lluis Vinagree - ISDEFE
1:50 p.m.	Airspace Management Rapporteur	Vojin Tosic – University of Belgrade
2:10 p.m.	Environmental Impacts and Mitigation Rapporteur	Lourdes Maurice – FAA
2:30 p.m.	Break (Atrium)	
3:00 p.m.	Metrics and Performance Management Rapporteur	Wim Post - Eurocontrol HQ
3:20 p.m.	Air Ground Cooperation Rapporteur	Steve Bussolari - MIT Lincoln Lab
3:40 p.m.	Airport Management Rapporteur	Christoph Meier – DLR
4:00 p.m.	Wrap-up	
4:30 p.m.	Seminar Adjourn	