

NEXTOR
(National Center of Excellence for Aviation Operations Research)
Research Symposium

Friday, January 15, 2010

*FAA Auditorium
FAA Headquarters, 800 Independence Ave. SW, Washington DC*

PROGRAM

8:30 – 9:00:

Welcome: *Michael O. Ball, University of Maryland and John Pipes, Senior Vice President, Strategy and Performance Business Unit, FAA Air Traffic Organization*

Opening Remarks: *Hank Krakowski, Chief Operating Officer, FAA Air Traffic Organization*

9:00 – 10:15:

US – European Benchmarking Project

Chair: Mark Hansen, UC Berkeley

David Knorr, FAA & Philippe Enaud, Eurocontrol: A Comparison of US and European Delay Drivers

Michael Ball, U of Maryland: Structural Differences in the US and European Systems and Their Impact on Airline Scheduling Practices

10:15 – 10:30: Break

10:30 – 11:45:

Amedeo Odoni, MIT: Impact of Declared Capacities and ATC Operating Procedures on Capacity and Delays: US vs Europe

Frank Berardino, GRA, Inc.: Departure Queueing: U.S. vs. Europe

11:45 – 1:00: Lunch

1:00 – 2:30:

Total Delay Impact Study

Chair: Michael Ball, U of Maryland

Mark Hansen, UC Berkeley: Cost of Flight Delays to Airlines

Kevin Neels, The Brattle Group: Effects of Schedule Unreliability on Departure Time Choice

2:30 – 2:45: Break

2:45 – 4:15:

Safety Research

Chair: Lance Sherry, George Mason

Arnie Barnett, MIT: Better Trend Analysis in Aviation Safety

John Hansman/Alexander Donaldson, MIT: Identification of Wake Issues in NextGen

John Shortle, George Mason, Antonio Trani, Virginia Tech: Wake Turbulence Modeling

4:15 – 4:30:

Closing Remarks: *David Chin, NEXTOR Program Director, FAA Air Traffic Organization*

Contact Information: Aimee Fite, 202-385-7158, or aimee.fite@faa.gov

NEXTOR Background

NEXTOR, the National Center of Excellence for Aviation Operations Research, is a Government-Academic-Industry alliance dedicated to the advancement of aviation research and technology. NEXTOR was founded in 1996 through the Federal Aviation Administration (FAA) centers of excellence program. Since its founding it has participated in a variety of research projects sponsored by the FAA, NASA, airport operators as well as private industry.

In collaboration with the FAA and its industry partners, NEXTOR looks to develop an understanding of how the National Airspace System (NAS) service providers and users will respond to alternative system architectures, operational concepts, investment strategies and finance mechanisms. The knowledge and capabilities gained from this government-sponsored research program provides critical information to executives and senior government officials on a host of issues ranging from near-term investment choices to long-term strategies. NEXTOR research also addresses the development of new system architectures and operational concepts and related decision support models and tools. Some of its research results have been incorporated into FAA systems and have led to improved NAS performance.

Through its knowledge exchange program, NEXTOR researchers, industry members, and government agents present state-of-the art research to the aviation community. The program offers two to three conferences and seminars per year on such subjects as NAS Infrastructure Management, Performance Metrics and the Economic and Social Value of Air Transportation.

In addition, the partnership seeks to increase the breath of aviation operations research knowledge through its education programs. More than 130 graduate students have participated in NEXTOR's research programs since the organization's birth in 1996. Short courses are taught by faculty members and are open to any FAA, federal government, or industry affiliate employee interested in air transportation systems analysis.

For more information go to www.nextor.org.