

Wake Turbulence Safety in Future Aircraft Operations

Workshop Agenda

Thursday, 08 January 2009 (1st day)

08:30 Registration

09:00 Welcome & Introduction

Andreas REINKE, Coordinator - WakeNet3-Europe, Airbus
Thierry BEAUVAIS, VP Research and Technologies, THALES AIR SYSTEMS
Dietrich KNÖRZER, Scientific Officer, European Commission

09:30 Topic 1 : Wake Vortex Concepts in SESAR and NextGen

Chair: Jean-Luc MARCHAND / EUROCONTROL

09:30 SESAR Overall Framework and Concept

Robert GRAHAM / EUROCONTROL

10:00 Wake Vortex Topics in SESAR

David BOOTH / EUROCONTROL, Andrew HARVEY / EUROCONTROL

10:30 Wake Vortex in the Context of NextGen

Steven LANG / FAA, Jeff TITTSWORTH / FAA

11:00 Standardization Activities for Wake Vortex Data Link Services

Laurence MUTUEL / Thales Avionics, Wayne BRYANT / FAA, Ernie DASH / FAA

11:30 Break

12:00 Topic 2 : Operational Detection and Prediction of Wake Vortices

Chair: Sebastian KAUERTZ / Airbus

12:00 Some reflections on the achievable quality of operational wake vortex prediction using operational met and a/c inputs

Gregoire WINCKELMANS / UCL

12:25 On the maturity of wake vortex observation, prediction, and validation

Frank HOLZÄPFEL / DLR

12:50 Lunch

14:25 Near-field evolution of trailing vortices and initialization of far-field models

Jeffrey CROUCH / Boeing

14:50 Pulsed 1.5 μm LIDAR for aircraft wake vortex detection and monitoring

Agnes DOLFI-BOUTEYRE / ONERA

15:15 Wake vortex X-band radar monitoring: Paris-CDG airport 2008 campaign results & perspectives

Frederic BARBARESCO / Thales Air Systems

15:40 Break

16:10 First approach to wake vortex prediction and detection integrated fusion filters

Shanna SCHOENHALS / TU Braunschweig, Meiko STEEN / TU Braunschweig

16:35 Wake vortex detection using Flight Data Recorder data registered on board aircraft

Henk HAVERDINGS / NLR

17:00 FAR-Wake: Fundamental Research on Aircraft Wake Phenomena

Thomas LEWEKE / IRPHE CNRS

17:25 End of Day 1

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Friday, 09 January 2009 (2nd day)

08:00 **Opening**

08:30 **Topic 3 : Wake Vortex related Safety Cases for Operational Implementation**

Chair: Tim FOWLER / Det Norske Veritas

08:30 **Worst-case analysis of wake vortex risk of 700ft vertical separation**

Gerben VAN BAREN / NLR

08:55 **Wake vortex severity assessment - a core element of the safety case**

Carsten SCHWARZ / DLR, Frank HOLZÄPFEL / DLR, Thomas GERZ / DLR, Klaus-Uwe HAHN / DLR

09:20 **Development of the Safety Case for the CREDOS operation**

Lennaert SPEIJKER / NLR

09:45 **Break**

10:15 **Airbus wake vortex flight test campaigns and general conclusions**

Claude LELAIE / Airbus, Andreas REINKE / Airbus

10:40 **National Rule Change and Follow-on**

Edward JOHNSON / FAA, Steven LANG / FAA, Jeff TITTSWORTH / FAA

11:05 **Wake turbulence safety assessment of the arrival and departure segregated operation in Paris CDG**

Vincent TREVE / EUROCONTROL

11:30 **Developing Local Wake Turbulence Separation Standards (Never Ending Story)**

Isa ALKALAY / Skyguide

11:55 **Lunch**

13:00 **Topic 4 : Wake Advisory & Warning Systems**

Chair: Peter ERIKSEN / EUROCONTROL

13:00 **ATC-Wake: Integrated ATC Wake Vortex Safety and Capacity System**

Lennaert SPEIJKER / NLR

13:25 **Wake Vortex Advisory System**

Jean-Francois MONEUSE / Thales Air Systems

13:50 **Wake Vortex Safety – Russian Approach**

Eduard FALKOV / GosNII AS, Andrey BELOTSEKOVSKIY / RAS, Mikhail KANEVSKIY / GosNII AS

14:15 **Break**

14:35 **Topic 5 : Towards Recategorisation of Wake Turbulence Separations**

Chair: Prof. Robert LUCKNER / Technische Universität Berlin

14:35 **Model-based recategorisation - options and challenges**

Andreas REINKE / Airbus

15:05 **RECAT Phase 1: Towards the Identification of new Static Wake Turbulence Categories along with their Associated Wake Turbulence Separation minima**

Elsa FREVILLE / EUROCONTROL, Steven LANG / FAA, Jeffrey TITTSWORTH / FAA, Catalin Lepadatu / EUROCONTROL

15:35 **Workshop Wrap-up**

Bram ELSENAAR / NLR retired

Andreas REINKE / Airbus

16:00 **End of Workshop**