Fifth Community Aeronautical Days 2006 Sustainable Solutions for New Horizons

Overview of the Programme
Venue: Vienna Congress Center / Austria
Date: 19th - 21st June 2006

Day 1 Monday, 19th June 2006

Status: 16.06.06

09h00 *Registration and Welcome Coffee*
11h00 – 13h00 Opening Ceremony and Plenary Session

Chairpersons: Knut Consemüller, Chairman of Austrian Council for Research and Technology Development

Welcome Addresses
- Hubert Gorbach, Chairman of the European Transport Council, Vice-Chancellor and Austrian Minister for Transport, Innovation and Technology
- Janez Potocnik, European Commissioner for Science and Research
- Jorgo Chatzimarkakis, Member of the European Parliament
- Paul Rübig, Member of the European Parliament

Keynote Addresses
- Charles Edelstenne, Chairman Elect of AeroSpace and Defence Industries Association of Europe
- Joachim Szodruch, ACARE-Co-chairman, EREA vice-chairman, President of DGLR
- Victor Aguado, General Director, Eurocontrol
- Fernando Pinto, Past Chairman of Association of European Airlines and CEO of TAP Air Portugal

**) invited*

13h00 – 13h15 Exhibition opening
13h15 – 14h30 *Lunch*
14h30 – 15h00 Plenary Session 1

Chairperson: Fred Abbink, NLR
- The Airbus A380 - Towards a New Future for Air Transport Dieter Schmitt, Airbus S.A.S.

* blue = invited Authors - but haven´t confirmed yet

15h05 - 16h25 Parallel Session 1

The Greening of Air Transport	*Improving Cost Efficiency*	*Ensuring Customer Satisfaction, Safety and Security*	*Increasing Time Efficiency*	*Pioneering the Air Transport of the Future*	*European Research Area*	*European Research Area*
Session A.1 Investigation of Climate Effects Chairperson: Roger Gardner, Department of Transport, UK - Aviation and climate change: options for mitigation *Ulrich Schumann, DLR* - AERONET: Aircraft Emission and Reduction Technologies *Alf Junior, DLR* - AERO2k Aviation Global Emissions Inventory – 2002 & 2025 *Chris Eyers, Qinetiq* - QUANTIFY: Quantifying the Climate Impact of Global and European Transport Systems *Veronika Eyring, DLR*	Session B.1 Integrated Design & Validation Chairperson: Philippe Homsi, Airbus-SAS - Value Improvement through a Virtual Aeronautical Collaborative Enterprise (VIVACE) *Jean-Claude Dunyach, Airbus SAS* - VIVACE integrated technical results *Yves Baudier, EADS CRC-F* - Installed Performance of Antennas on AeroStructures (IPAS) *Thereza Macnamara, BAE Systems* - SYNAMEC – Synthesis Tool for Aeronautical Mechanisms Design *Alain Remouchamps, SAMTECH*	Session C.1 Cabin Environment Chairperson: David Zammit Mangion, University of Malta - Vision for Improved Passenger Services *Reiner Rückwald, Airbus-DE* - Friendly Aircraft Cabin Environment (FACE) *Antonio Paonessa, Alenia Aeronautica* - Improving Air Quality in Aircraft Cabins Using 'Measurements in the Sky' and Innovative Designs and Technologies (CABINAIR) *David Ross, Building Research Establishment* - ICE: Ideal cabin environment for health in passenger-carrying commercial aircraft – especially in long-haul flights *David Ross, Building Research Establishment* - Influence of cabin and cockpit environment on wellbeing and performance of flight and cabin crew – results from the HEACE project *Volker Mellert, University of Oldenburg*	Session D.1 Air Traffic Management Chairperson: Luigi Iodice, SELEX - 6th Framework Aeronautics: Input into the European ATM Medium Term Concept of Operations - Cooperative ATM *Andy Barff, EUROCONTROL Experimental Centre* - Cooperative Approach to ATS (CAATS) *Marcial Valmorisco, ISDEFE* - Airborne New and Advanced Satellite techniques & Technologies in a System Intgrated Approach (ANASTASIA) *Jean-Yves Catros, Thales-Avionics* - Broadband VHF Aeronautical Communications System Based on MC-CDMA (B-VHF) *Christoph Rihacek, Frequentis* - Gate-to-Gate *Dominique Egron, Thales ATM*	Session E.1 New Aircraft Concepts Chairperson: Zdobyslav Goraj, Warsaw Univ. of Technology - Challenges and potential of BWB configurations (Results of the project VELA – Very Large Aircraft) *Nikolai Kresse, Airbus DE* - New Aircraft Concepts Research (NACRE) *Pierre Emmanuel Gall, Airbus S.A.S.* - HTP & HTP Remote Control System with Elevator – Rear Fuselage Gap Sealing System Design for REMFI Programme *Jesús de Pablo Pérez, Airbus Spain & B. Hildebrand, ETW & M Schultz, ETW* - Environmentally Friendly High Speed Aircraft (HISAC) *Patrick Parnis, Dassault Aviation*	Session F.1 European Strategy Chairperson: Elisabeth Huchler, Austrian Federal Ministry for Transport, Innovation and Technology, BMVIT - ACARE: The Observation Platform of the Strategic Research Agenda *Luigi Botasso, ASTERA/ ASD* - GARTEUR overview on current activities *Bas Oskam, National Laboratory NLR* - AirTN - The ERA-Net in Aeronautics *Walter Riha, DLR* - Research on Fault Tolerant Controls within GARTEUR *Hafid Smaili*	Session G.1 Round Table Session: Aerospace Clusters Contributing to the Aeronautics Supply Chain *Chairperson:* Thilo Schönfeld, CNRT-AE *Participants:* *- François Jouaillec, Aerospace Valley Midi–Pyrénées-Aquitaine (Moderator)* *- Ute Sachau Böhmert, Aerospace Cluster Hamburg,* *- José Juez, HEGAN Aerospace Cluster Basque Country* *- Philippe Schleicher, Walloon Aeronautical Cluster (EWA)* *- Pierre-Manuel Jacob, Walloon Aeronautical Cluster (EWA)* *- Andrzej Rybka, Aviation Valley Southeast Poland* *- Paola Chiarini, AeroSME/ ASD*

16h25 - 16h55 *Coffee Break*

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16h55 - 18h15 Parallel Session 2

The Greening of Air Transport	*Improving Cost Efficiency*	*Ensuring Customer Satisfaction , Safety and Security*	*Increasing Time Efficiency*	*Pioneering the Air Transport of the Future*	*European Research Area*	*European Research Area*
Session A.2 Aero-engine Combustor Technologies Chairperson: Valérie Guénon, SAFRAN - Integrated Lean Low Emission Combustor Design Methodology (INTELLECT DM) *Ralf von der Bank, Rolls-Royce* - MUSCLES - Modelling of UnSteady Combustion in Low Emission Systems *Helen Brocklehurst, Rolls-Royce* - Towards Lean Combustion (TLC) *Thomas Noel, SNECMA* - The Low-Pollutant Combustor Technology Programme LOPOCOTEP *Olivier Penanhoat, SNECMA, Thomas Noel, SNECMA*	Session B.2 Improving aircraft Performance Chairperson: Zdobyslaw Goraj, Warsaw Univ. of Tech. - The European R&T Platform AWIATOR: Bringing New Aircraft Technologies Into The Air *Jens König, Airbus DE* - The role of the European Research Establishments in AWIATOR on examples from flight test measurements technologies *Eric Coustols, ONERA* - European High Lift Programme (EUROLIFT) *Ralf Rudnik, DLR* - NEFA Project-Assessment and comparison of new empennage concepts for transport aircraft *Jean-Jacques Mirat , Airbus SAS*	Session C.2 External Hazard and Accident Survivability Chairperson: Thereza Macnamara, BAE Systems - Airborne Integrated Systems for Safety Improvement, Flight Hazard Protection and All Weather Operations (FLYSAFE) *Joseph Huysseune, Thales Avionics* - SIRENA: an Efficient 3D Approach for External EMC Simulation in the Close Environment of the Airport *Nicolas Douchin, Oktal* - SANTANA – Smart Antenna for Broadband Mobile Satellite Communications at Ka-Band *Achim Dreher, DLR* - Crashworthiness of Aircraft for High Velocity Impact (CRAHVI) *Timothy Brown, BAE Systems*	Session D.2 Airports and ATM Chairperson: Christian Pusch, Eurocontrol - Supporting Platform for Airport Decision-Making and Efficiency Analysis (SPADE) *Michel van Eenige, NLR* - Optimized Procedures and Techniques for Improvement of Approach and Landing (OPTIMAL) *Yohann Roux, Airbus SAS* - 4D Virtual Airspace, from present to future ATC (AD4) *Luigi Mazzucchelli, Next – Ingegneria dei Sistemi* - European Airport Movement Management by A-SMGCS (EMMA) *Michael Roeder, DLR*	Session E.2 Breakthrough Technologies Chairperson: Bruno Stouflet, Dassault Aviation - LAPCAT: Vehicle and Propulsion Aspects for Sustained Supersonic Flight *Johan Steelant, European Space Agency* - Fuel Cell Application in a New Configured Aircraft (CELINA) *Christine Schilo, Airbus DE* - Fundamentals of actively controlled flows with trapped vortices (VORTEXCELL 2050) *Sergei I. Chernyshenko, University of Southampton* - Aircraft Reliability Through Intelligent Materials Application (ARTIMA) *Gregorio Kawiecki, Gamesa*	Session F.2 National Aeronautics RTD Highlights Chairperson: Wolf Günther, BMWi - Aeronautical Research Efforts towards Green Technologies in France and Europe *Jean-Luc Tinland, DPAC* - The UK National Aerospace Technology Strategy *Ray C. Kingcombe, UK Department of Trade & Industry* - Integration of aeronautics RTD on European, national and regional level *Franz-Josef Mathy, Germany* - ACARE-Italia and the Italien National Programme for Aeronautics *Marciello Amato, CIRA/ Italy*	Session G.2 Future Air Transport - User Aspects Chairperson: Johann Zemsky, COO / Austro Control - Designing the Aircraft of Tomorrow *Karl Echtermeyer, Deutsche Lufthansa AG* - Sustainability of Airport Development *Herbert Kaufmann, Vienna International Airport* - Commercial Aircraft Developments in Israel Aircraft Industry *Arnold Nathan, Israel Aircraft Industry*

20h00 *Reception at the Kunsthistorisches Museum*

Day 2: Tuesday, 20th June 2006

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8h30 - 9h30 Plenary Session 2

Chairperson: Klaus Pseiner, Austrian Research Promotion Agency FFG

- SESAR and other Initiatives — Ben van Houtte, Head of Air Transport, European Commission (DG TREN)
- NGATS Initiative (USA) — Peggy Gervasi, Joint Planing and Development Office, Federal Aviation Administration

09h35 - 10h55 Parallel Session 3

The Greening of Air Transport	*Improving Cost Efficiency*	*Ensuring Customer Satisfaction and Safety*	*Increasing Time Efficiency*	*Pioneering the Air Transport of the Future*	*European Research Area*	*European Research Area*	*The "SESAR" Forum*
Session A.3 External Noise Reduction Chairperson: Dominique Collin, SNECMA - Aircraft External Noise Network (X-NOISE) *Dominique Collin, SNECMA* - Significantly Lower Community Exposure to Aircraft Noise (SILENCE(R)) *Eugene Kors, SNECMA* - Turbo machinery Noise Radiation through the Engine Exhaust (TURNEX) *Brian J. Tester, Southampton University* - SOURDINE (I &) II - Study of Optimisation Procedures for Decreasing the Impact of Noise around Airports II, *Collin Beers , NLR* - Aircraft Noise Modelling with Imagine: meeting the requirements of the European Noise Directive *Peter Hullah, EUROCONTROL*	Session B.3 Composite Structures Chairperson: Spiros Pantelakis, University of Patras - Findings of the FUBACOMP Project and Links to new Developments in the ALCAS Project *Philippe Vautey, Dassault Aviation* - Improved Material Exploitation at Safe design of Composite Airframe Structures by Accurate Simulation of Collapse (COCOMAT) *Richard Degenhardt, DLR* * Failure, Performance and Processing Prediction for Enhanced Design with Non-Crimp Fabric Composites (FALCOM) *Charlotte Meeks, QinetiQ* - Hierarchical Modelling of Composite Aircraft Components *Dieter Pahr, TU Wien*	Session C.3 Wake Vortex Investigations Chairperson: Volker Heil, DFS *- The European Wake Vortex Activities (Wake-Net 2– Europe)* *Bram Elsenaar, NLR retired* - Fundamental Research on Aircraft Wake Phenomena (Far-Wake) *Thomas Leweke, CNRS Marseille* - ATC-Wake - Integrated Air Traffic Control Wake Vortex Safety and Capaycity System *Lennaert Speijker, NLR* - Wake Vortex Research in the US (Wake-Net USA) *Steve Lang, FAA & Wayne Bryant, NASA* - FIDELIO – the next generation on-board wake vortex detection system *Dan Slasky, ELOP Industries*	Session D.3 Point to Point Air Transport Chairperson: Guiseppe Pagnano, AGUSTA - Active Control Technologies for Tilt rotor, major step towards Civil Tilt-Rotor transport (ACT-TILT) *Philippe Rollet, Eurocopter France* - Design Advance rotor for Tilt Rotor, Major step towards Civil Tilt-Rotor Transport (DART) *Christophe Serr, Eurocopter* - Tilt-rotor Interactional Aerodynamics (TILTAERO) *Antonio Saporiti, Agusta* - Validation of Tilt Rotor technology (NICE-TRIP) *Antonio Saporiti, Agusta*	Session E.3 Towards a Fully Automatic ATS Chairperson: Vu Duong, EUROCONTROL - Civil and Commercial UAV Thematic Network *Mark Okrent, Israel Aircraft Industries* - Innovative Future Air Transport System (IFATS) *Claude Le Tallec, ONERA* - UAV Safety Issues for Civil Operations (USICO) *Reimund Kueke, AIROBOTICS* - Civil UAV Application and Economic Effectiveness of Potential Configuration Solutions (CAPECON) *Akiva Peled, Israel Aircraft Industries*	Session F.3 Integrated Research Infrastructures Chairperson: Erich Gornik, Austrian Research Centers - EREA Capabilities in European Aeronautics R&D *F.J. Abbink, NLR* - European Wind Tunnel Association: two years activity *Jean-Marc Bousquet, ONERA* - ECATS – European Network of Excellence for an Environmental Compatible Air Transport System *Sigrun Matthes, DLR* - Centres of Excellence in Aeronautics RTD in Poland *Janusz Narkiewicz, Warsaw Univ. of Technology*	Session G.3 Aeronautics RTD in Commonwealth of Independent States Chairperson: Sergey Chernyshev, TsAGI - Aeronautics RTD in Russia an Overview *Sergey Lyapunov, TsAGI, Russia* - Russian SME in the area of Aeronautics *Sergey Trofimov, Monitor Soft Ltd. & Nikolay Testoyedov, NPO PM Razvitie, Russia* - The Basic Aviation Scientific Researh in Azerbaijan Ramiz A. Sadiqov, *Azerbaijan National Aviation Academy, Baku* - Aviation of Ukraine. Its formation and development *Volodymyr Kryvtsov, University of Ukraine, Kharkiv*	Session H.3 The Joint European Concept in Air Traffic Management Chairperson: Ben Van Houtte, EC DG TREN - General Overview of SESAR Structure *Patrick Ky, European Commission (DG TREN)* - ATM R&D: vision of the furture *Jan Van Doorn, Eurocontrol* - New ATM challenges for the Industry *Jean-Claude Richard, Air Traffic Alliance* - Users expectations for new generations ATM *Fritz Feitl, Single European Sky Industries Consultation Body*

10h55 - 11h25 *Coffee Break*

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11h25 - 12h50 Parallel Session 4

The Greening of Air Transport	*Improving Cost Efficiency*	*Ensuring Customer Satisfaction, Safety and Security*	*Increasing Time Efficiency*	*Improving Cost Efficiency*	*European Research Area*	*European Research Area*
Session A.4 Propulsion Systems and Emission Reduction Chairperson: Franz Heitmeir, TU Graz - Overview speech: New Aero-engine Concepts *Günter Wilfert, MTU Aero Engines* - ANTEL– An Integration of European and National research programmes to the benefit of the European aero-engine supply chain *Nick Peacock, Rolls-Royce* - CLEAN - Validation of a High Efficient Low NOx core, a GTF High Speed Turbine and an Integration of a Recuperator in an Environmentally Friendly Engine Concept *Günter Wilfert, MTU Aero Engines* - Environmentally Friendly Aero Engine (VITAL) *Jean-Jacques Korsia, SNECMA*	Session B.4 Technology for Metallic Structures Chairperson: Heinz Voggenreiter, DLR - Leading the way with advanced aluminium solutions for aerospace structures *Frank Eberl, ALCAN* - Development of Short Distance Welding Concepts for Airframes (WEL-AIR) *Delphine Alléhaux, EADS Corporate Research Centre* - Recent Developments for Improve and Assess Repair Capability of Aircraft Structures (IARCAS) *George Lampeas, University of Patras* - New Tools and Processes for Improving Machining of Heat Resistant Alloys Used in Aerospace Application (MACHERENA) *Paco Alonso, GEYCA* - Innovative Fatigue and Damage Tolerance Methods for the Application of New Structural Concepts - DaToN *Peter Horst, TU Braunschweig*	Session C.4 Maintenance Methods Chairperson: Ernst Semerad, Austrian Research Centers - Automated Repair and Overhaul System for Aero Turbine Engine Components (AROSATEC) *Claus Bremer, BCT GmbH* - TATEM (Technologies and Techniques for New Maintenance Concepts) - Operational Needs and Requirements *Jon Dunsdon, Smith Aerospace* - The TATEM Health Management Solution *Jon Dunsdon, Smith Aerospace* - Innovative NDT Concepts for Aerospace Industry - The INCA Project *Sönke Seebacher, Airbus DE*	Session D.4 Technologies for Future ATS Chairperson: Jan van Doorn, EUROCONTROL - Airborne Separation Assistance System Thematic Network 2 (ASAS-TN2): ASAS Applications Maturity Assessment *Chris Shaw, Eurocontrol Experimental Centre* - Advanced Safe Separation Technologies and Algorithms (ASSTAR) *Chris Rossiter, BAE SYSTEMS* - En Route Air Traffic Soft Management Ultimate System (ERASMUS) *Marc Brochard, Eurocontrol Experimental Centre* - Operationally Driven Airspace Traffic Structure based on Dynamic Airspace and Multi-Layered Planning (SUPER HIGHWAY) *Nicolas Suarez, ISDEFE*	Session E.4 Rotorcraft of the Future Chairperson: Yves Favennec, Eurocopter - The Passenger and Environmentally Friendly Helicopter (FRIENDCOPTER) *Valentin Kloeppel, Eurocopter-DE* - Helicopter Noise and Vibration (HELINOVI) *Jürgen Langer, DLR* - Tilt-rotor Integrated Drive System Development (TRISYD) *Federico Montagna, Agusta* - Improving Occupant protection in case of helicopter crash (HeliSafeTA) *Edgar Uhl, Autoflug*	Session F.4 University Networks & Students Research Chairperson: Dieter Schmitt, Airbus S.A.S - EASN – European Aeronautics Science Network *Spiros Pantelakis, University of Patras* - The PEGASUS Network: an Example of Cooperation in Higher Education in Aerospace Engineering in Europe *Gianfranco Chiocchia, Politecnico di Torino* - Best of the Student Poster Competition (presentations to be continued in the afternoon Gate 9)	Session G.4 General Aviation RTD highlights-Europe on the move Chairperson: Milan Holl, VZLU - General Aviation – Czech Republic on the move *Jaroslav Ruzicka, Evektor* - Advanced Technologies for the Piaggio Aircraft *Aniello Cozzolino, Piaggio Aircraft* - The Swiss Aeronautics Industry *Albert Gaide, SAIG & Jürg Wildi , RUAG* * Technologies for Future Business Aircraft *N.N. Dassault Aviation*

12h50 - 14h20 *Lunch*

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14h20 - 15h20 Plenary Session 3

Chairperson: Ingolf Schädler, Austrian Federal Ministry for Transport, Innovation and Technology, BMVIT

- The 7th Framework Programme – Sustainable Solutions for New Horizons — *Jack Metthey, Director Transport European Commission (DG RTD)*
- ACARE, The New Issue of the Second Strategic Research Agenda for Aeronautics — Joachim Szodruch, ACARE Co-Chairman
- The "Clean Sky" Joint Technology Initiative — Alain García, Executive Vice President Engineering, Airbus S.A.S.

15h25 - 16h45 Parallel Session 5

The Greening of Air Transport	*Improving Cost Efficiency*	*Ensuring Customer Satisfaction, Safety and Security*	*Improving Cost Efficiency*	*Improving Cost Efficiency*	*European Research Area*	*European Research Area*	*The "Clean Sky" Forum 1*
Session A.5 Flight Physics and Flow Control Chairperson: Catalin Nae, INCAS - Key Aerodynamic Technologies for Aircraft Performance Improvement (KATnet) *Geza Schrauf, Airbus DE* - Advanced Aerodynamic Flow Control Using MEMS (AEROMEMS II) *Clyde Warsop, BAE Systems* - An European Synergy for the assessment of wall turbulence (WALLTURB) *Michel Stanislas, CNRS Lille* - PivNet 2- An European collaboration on development, quality assessment, and standardisation of Particle Image Velocimetry for industrial applications *Andreas Schröder, DLR*	Session B.5 High Temperature Materials for Aero-engines Chairperson: Xinhua Wu, Univ. Birmingham - Development and validation of a dual strength titanium alloy / dual microstructure BLISK (DUTIFRISK) *Olaf Roder, MTU Aero Engines* - Modified AL and PTAL diffusion coatings with improved oxidation and thermomechanics (ORDICO) *Ernst E. Affelt, MTU Aero Engines* - Abradable technology for aero-engines and simulation of material behaviour *(SEALCOAT)* *Peter Chandler, CA Technology Ltd.* - Ultra High Temperature Based Silicide Materials For Next Generation Turbines (ULTIMAT) *Stefan Drawin, ONERA*	Session C.5 Safety Analysis and Human Factors Chairperson: Holger Friehmelt, DLR - Human Integration into the Life-cycle of Aviation Systems (HILAS) *Nick McDonald, Trinity College Dublin* - Improvement of Safety Activities on Aeronautical Complex Systems (ISAAC) *Antonella Cavallo, Alenia Aeronautica* - Aviation Safety Improvement using Cost Benefit Analysis (ASICBA) *Andrea Raffetti, d'Appolonia (SME)* - How to better disseminate and exploit results from a large project *Jean-Claude Dunyach, Airbus SAS.*	Session D.5 Advanced Onboard Systems Chairperson: Dan Slasky, ELOP - Adaptive Landing Gears for Improved Impact Absorption (ADLAND) *Jan Holnicki, IFTF* - Reliable, tuneable and inexpensive antennas by collective fabrication processes (RETINA) *Volker Ziegler, EADS DE* - AEROFIL: New concept of liquid filters for Aeronautics preserving environment *Pascal Contini, SOFRANCE* - Magnetic Bearing for Aero-engines (MAGFLY) *Karl-Helmut Becker, MTU Aero Engines*	Session E.5 Future Aircraft Structures Chairperson: David Phipps, Airbus SAS. - Techn. Appl. to the Near Term Business Goals and Objectives of the Aerospace Ind. (TANGO) I: Overview and wing II: Specific Fuselage Achievments *Richard Forster, Airbus SAS & Lars Fiedler, Airbus SAS* - Advanced Low Cost Aircraft Structures (ALCAS) *Glenn Watson, BERAL* - Advanced Low Cost Aircraft Structures (ALCAS) – Buiseness Jets *Philippe Vautey, Dassault Aviation*	Session F.5 National Aeronautics RTD Highlights - New Member States Chairperson: Jim Lawler, Enterprise Ireland - Aeronautics Related RTD Activities in Poland *Zbigniew Turek, Inst. of Fundamental Techn. Research Polish Academy of Sciences* - Aerospace Research in the Czech Republic and Cooperation with Europe *Antonin Pistek, Brno University of Technology* - Aeronautics Related RTD Activities in Hungary *János Rácz, Hungarian Aviation Industry Foundation* - Aeronautics related RTD support and activities in the Baltic States *Jonas Stankunas, Vilnius Gediminas´ Technical University*	Session G.5 Aero RTD in the Americas Chairperson: Ralf Rudnik, DLR - Boeing Commercial Airplanes Technologies for Performance Efficiency and Environmental Compatibility *Mark Goldhammer, Boeing Commercial Airplanes* - NASA´s New Aeronautics Research Program *Wayne Braynt, NASA* - Aeronautics RTD Activities of Bombardier *Fassi Kafyeke, Bombardier* - Aeronautics in Brazil *Walter Bartels, Aerospace Industries Association of Brazil*	Session H.5 *The Joint Technology Initiative in Aeronautics* Chairperson: Jean-Pierre Barthélémy, ASD-Eurpoe - General Overview of JTI Structure *Dominique Ollinger, Airbus SAS* - JTI: The Smart Fixed Wing Aircraft Platform *Robert Hinsinger, Airbus SAS* - CLEAN SKY—The Aero Engine contribution *Nick Peacock, Rolls-Royce* - Green Regional Aircraft Platform *Carmelo Latella, Alenia Aeronautica*

16h45 - 17h15 *Coffee Break*

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17h15 - 18h35 Parallel Session 6

The Greening of Air Transport	*Improving Cost Efficiency*	*Ensuring Customer Satisfaction, Safety and Security*	*The Greening of Air Transport*	*Improving Cost Efficiency*	*European Research Area*	*European Research Area*	*European Research Area*
Session A.6 Engine Emission Technology Chairperson: Kyriakos Papailiou, National Technical University of Athens - Quantification of Constrained Scenarios on Aviation and Emissions (CONSAVE 2050) *Ralf Berghof, DLR* - European Low Emission Combustion Technology in Aero Engines (ELECT-AE) *Ralf von der Bank, Rolls-Royce* - Remote Sensing Technique for Aero-engine Emission Certification and Monitoring (AEROTEST) *Isabelle Vallet, AUXITROL* - Aggressive Intermediate Duct Aerodynamics for Competitive and Environmentally Friendly Jet Engines (AIDA) *Stéphane Baralon, Volvo Aero*	Session B.6 Manufacturing Simulation Chairperson: Michel Delanaye, CENAERO - Monitoring, Optimisation and Control of Liquid Composite Moulding Processes (COMPROME) *George Maistros, INASCO Hellas* - Detailed Multi-physics Modelling of Friction Steer Welding (DEEPWELD) *Laurent D´Alvise, CENAERO* - Integrated Tool for Simulation of Textile Composites (ITOOL) *Marinus Schouten, EADS-DE – CRC* - From Electric Cabling plans to Simulation Help *(FRESH)* *Jacques Pere-Laperne, Algo Tech Informatique*	Session C.6 Structural Health Monitoring Chairperson: Christian Boller, Sheffield University - Health monitoring of aircraft by Nonlinear Elastic Wave Spectroscopy (FP 6 Project AERONEWS) *Koen Van Den Abeele, Catholic University Leuven, Campus Kortrijk* - Structural Monitoring with Advanced Integrated Sensor Technologies (SMIST) *Clemens Bockenheimer, Airbus-DE* - Progress on Aircraft Integrated Structural Health Assessment (AISHA) *Helge Pfeiffer, Katholic University Leuven*	Session D.6 Drag Reduction Technologies Chairperson: Rolf Henke, RWTH Aachen - Flight Reynolds Number Testing (FLIRET) *Winfried Kühn, Airbus-DE* - Modelling and Design of Advanced Wing Tip Devices (M-DAW) *Alan Mann, Airbus UK* - Contribution to Laminar Flow Wing Development for Future Transport Aircraft: TELFONA *Karl-Heinz Horstmann, DLR* - Supersonic Transition Control *Daniel Arnal, ONERA*	Session E.6 Onboard Systems Chairperson: Pierre Froment, Airbus S.A.S. - Power Optimised Aircraft (POA) – a keystone in European research in More Electric Aircraft Equipment Systems *Lester Faleiro, Liebherr Aerospace* - Third Generation Digital Liquid Management System (SMARTFUEL) *Jörn Unteutsch, Autoflug* - Multifunctional technologies applied to onboard systems (MULFUN) *Jesus Marcos Olaya, INASMET*	Session F.6 National Aeronautics RTD Highlights Chairperson: Adriaan de Graaff, NL - Aeronautics RTD support and activities in Ireland *Michel Murphy, Enterprise Ireland* - Aeronautical research niche areas – opportunities for the small *Antonin Kazda, University of Zilina* - Romanian RTD Potential and Capabilities in Aeronautics *Catalin Nae, National Institute for Aerospace Research - INCAS* - Aeronautics supply chain in Greece. Public - Private partnership. The missing link *Vassilis Kostopoulos, University of Patras*	Session G.6 Aeronautics in Central and Eastern Asia Chairperson: Jacques Périaux, *CIMNE* - Long Term Vision of Aeronautics and the R&T Programs in JAXA *Kimio Sakata, Japan Aerospace Exploration Agency (JAXA), Tokio* - RTD for the Aeronautics Industry of China (AVIC1) *Jingsheng Li, Chinese Aeronautical Establishment (CAE), Beijing* - RTD for the Aeronautics Industry of CHRDI *Liu Zhong, CHRDI* - R&D activities in Aeronautics in the Republic of Kazakhstan *Pavel V. Kozlenko, RSE Kazaeronav. Kazakhstan*	Session H.6 The "Clean Sky" Forum 2—The Joint Technology Initiative in Aeronautics Chairperson: Georg Rayczyk, Liebherr Aerospace - Green Rotorcraft Platform of the Clean Sky JTI *Giuseppe Pagnano, Agusta & Yves Favennec, Eurocopter* - JTI - Systems for Green Operation *Joseph Huysseune, Thales Avionics & Lester Faleiro, Liebherr* - The "Clean Sky" Forum 2 - The Joint Technology Initiative in aeronautics ECO-DESIGN PLATFORM *Bruno Stoufflet, Dassault Aviation* - The Joint Technology Intitiative in Aeronautics Eco-Design Platform *Bruno Stoufflet, Dassault Aviation* - Closing Remarks *Liam Breslin, Head of Aeronautics Unit, European*

20h00 *Conference Banquet offered by the City of Vienna in the town hall*

Day 3: Wednesday, 21st June 2006

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8h30 - 09h30 Plenary Session 4

Chairperson: Herbert Josef Allgeier, ex EC-JRC

- Very Light Jets - A New Dimension in Aeronautics — Christian Dries, CEO Diamond Aircraft Industries
- Aerospace Societies for Europe - A Challenge for the next Generation — Jean Michel Contant, CEAS Vice President for External Relations

09h35 - 10h55 Parallel Session 7

The Greening of Air Transport	*Improving Cost Efficiency*	*Ensuring Customer Satisfaction, Safety and Security*	*Improving Cost Efficiency*	*Improving Cost Efficiency*	*European Research Area*	*European Research Area*
Session A.7 **Improving Aero-engine Efficiency** Chairperson: Stephan Servaty, MTU - Turbine Aero-Thermal External Flows (TATEF2) *Thomas Coton, SNECMA* - Instability Control of Low-Emission Aero Engine Combustors (ICLEAC) *Lorenzo Hernandez, Turbomeca* - Fluid Flow and Heat Transfer within the Rotating Internal Cooling Air System of Gas Turbines (ICAS-GT2) *Colin Young, Rolls-Royce* - ADVACT: Advanced Actuation in Gas Turbine Applications *Mike Hirst, Rolls-Royce*	Session B.7 **Onboard Electronics and Avionics** Chairperson: Pascale Olivaux, Thales Avionics - Validation Platform for Integration of Standardised Components, Technologies and Tools in an Open, Modular and Improved Aircraft Electronic System (VICTORIA) *Joseph Huysseune, Thales Avionics* - High Stability Altimeter System for Air Data Computers (HASTAC) *André Larsen, Memscap AS* - ATENAA Advanced Technologies for Networking in Aeronautical Applications, a EC funded STREP Project (FP 6) *Massimiliano Amirfeiz, Selex Communications S.p.A.*	Session C.7 **Security** Chairperson: Michel Langer, Diehl - Security of Aircraft in the Future European Environment (SAFEE) *Daniel Gaultier, SAGEM* - PALMA : Protection of airlines against MANPADS attacks *Gilles Fournier, EADS CCR* - Improving Airport Efficiency, Security and Passenger Flow by Enhanced Passenger Monitoring (OpTag) *Bob Lloyd, Innovation Research and Technology* - Security Research, Protection of Air Transportation and Infrastructure PATIN - The Approach for a systematic Integration of a Protection Concept in the Field of Air Transportation and its Critical Infrastructure *Michael Langer, Diehl*	Session D.7 **Manufacturing Processes** Chairperson: André Bertin, SONACA - Economic Advanced Shaping Processes for Integral Structures (ECOSHAPE) *Tobias Hornfeck, EADS-DE* - Optimisation of Spray-Forming of Advanced High-Quality components of Superalloys for Aeronautic Application *Oscar Caballero, ITP, S.A. Industria de Turbo Propulsores* - Development and Innovation for Advanced Manufacturing of Thermoplastics (Achievements of the FP6) *Patrice Lefebure, EADS CCR* - Magnesium Castings for Aircrafts *Shlomo Ramati, Israel Aircraft Industry*	Session E.7 **Numerical Flow and Noise Simulation** Chairperson: Michael Leschziner, Imperial College - DESider – Hybrid RANS- LES methods *Werner Haase, EADS-DE* - Flow Physics Modelling - an Integrated Approach *Thomas Rung, TU Hamburg-Harburg* - The CoJeN Project-Development and validation of tools for predicting coaxial jet noise *Craig Mead, QinetiQ* - Towards significant reduction or aircraft engine noise: Results from the AROMA, MESSIAEN and TURNEX projects *Jean-Louis Migeot, Free Field Technologies*	Session F.7 **National Aeronautics RTD Highlights** Chairperson: Jürgen Wild, ex Director AGARD / RTO - Aeronautics Related R&D Support and Activities in Sweden *Hans Christer Olson, Ministry of Industry* - The Aeronautical Sector in the Netherlands – a national approach in a European framework *H.J. L van Leeuwen, Netherlands Agengy of Aerospace Programmes (NIVR)* - The Austrian contribution to the Europe Research Area in Aeronautics *Andreas Geisler, FFG* - Aeronautics related RTD support and activities in Spain *Juan Carlos Cortes, Center for Technological Industrial Development (CDT)*	Session G.7 **F.P.7 - New opportunities for research** Chairperson: Liam Breslin, EC-DG RTD - Aeronautics research in FP7 *Dietrich Knörzer, Eurpean Commission (DG RTD)* - FP7 Rules for Participation *Eva Valle Lagares, European Commission (DG RTD)* - FP7- Support for Training and international Cooperation *Arnoldas Milukas, European Commission* - Support for Research Infrastructures of European Interest in FP7 *Panayotis Moschopoulos, EC - Research DG*

10h55 - 11h25 *Coffee Break*

Fifth Community Aeronautical Days 2006 Sustainable Solutions for New Horizons

11h25 – 13h00 Closing Session: *Aeronautics 2020 - Implementing the Future*

Chairperson: Ingolf Schädler, Deputy Director General Innovation, Austrian Federal Ministry for Transport, Innovation and Technology

- Eduard Mainoni, Austrian Federal Ministry for Transport, Innovation and Technology (BMVIT), Austria
- Zoran Stančič, Deputy Director General Research, European Commission (DG RTD)
- François Quentin, Co-Chairman of ACARE
- Krzysztof Jan Kurzydlowski, Undersecretary of State, Ministry of Education and Science, Poland
- Alain García, Executive Vice President Engineering, Airbus S.A.S.
- Ric Parker, Director of Research and Technology, Rolls-Royce, plc

**) invited*

13h00 Conference Sessions and Exhibition Closing

Afternoon Conference Excursions (*to be booked together with the conference registration; number of participants limited)*

Excursion 1: Diamond Aircraft Industries - General Aviation Aircraft Manufacturer, www.diamond-air.at, Wiener Neustadt

Excursion 2: Modern Aircraft Maintenance - Austrian Airlines – Aircraft Maintenance Centre, www.austriantechnik.at, Schwechat-Airport, Vienna

Excursion 3: Innovative Avionics Technology for Optimised Aircraft Efficiency, TTTech (www.tttech.com) Vienna

Excursion 4: Aerospace Materials Technology Testhouse & Research Network - Austrian Research Centers, www.arcs.ac..at, Seibersdorf