Exhibit. Participate. **www.airtec.aero**

AIRTEC
10th INTERNATIONAL AEROSPACE SUPPLY FAIR

The 10th **AIRTEC 2015 International Congress**

Preliminary Congress Program

As of August 6th, 2015

Image of Airplane by **Boeing**

November 3 – 5, 2015
Munich, Germany

The Global Aerospace Supply Chain

Design
Engineering
Testing
Simulation

Materials
Production
Tools

Components

Systems

Lifecycle
Support

Ideal Partner

bavAIRia

The 10th **AIRTEC 2015 International Congress**

AIRTEC is based on the three founding pillars: trade exhibition, B2B-meetings, and a high-calibre international aerospace congress. 600 exhibitors from 30 nations, nearly 15,000 B2B-meetings, 230 lectures, and about 900 congress participants are expected at AIRTEC 2015.
Join us in Munich and meet aerospace industry experts from all over the world.
AIRTEC provides you with the ideal platform to connect technology and business and thereby becomes the most effective way for the entire aerospace supply chain to create new opportunities.

Inauguration

The 10th AIRTEC 2015 will be inaugurated on November 3rd by Ilse Aigner, Bavarian State Minister of Economic Affairs and Media, Energy and Technology, Deputy Minister-President of Bavaria.

Keynote

The opening keynote will be held by Dr. Wolfgang Scheremet, Head of Department Industry Policy, Federal Ministry for Economic Affairs and Energy.

The new venue of AIRTEC

AIRTEC has followed Bavaria's call and is now held at the Exhibition Center Munich. The move to Munich has given another boost to this high dynamic and growing international business and technology event and will push AIRTEC into a thriving future. Bavaria is one of the strongest aerospace regions in Germany and Europe and Munich is conveniently accessible from anywhere around the globe.

1. One of Europe's leading aerospace hubs
2. One of the top five aerospace locations worldwide
3. High diversity of technological competence
4. International top location, conveniently accessible from anywhere around the world
5. Premium infrastructure for reliable transport
6. Excellent range of hotels in every price category
7. Cultural and gastronomic highlights
8. Unique flair and charm of Munich

Contents

Symposium AERONAUTICS — Page 3

Symposium SPACE — Page 7

Symposium AVIONICS SENSORS TESTING — Page 8

Symposium HELI — Page 10

Symposium UAV — Page 11

Symposium
AERONAUTICS

NOV 3, 2015

Opening Ceremony

Diana Schnabel
(CEO / President, airtec GmbH & Co. KG, Germany)

Ilse Aigner
(Bavarian State Minister of Economic Affairs and Media, Energy and Technology, Deputy Minister-President of Bavaria Deputy Minister-President of Bavaria, Germany)

Dr Wolfgang Scheremet
(Federal Ministry for Economic Affairs and Energy, Germany)

Horst Steinberg
(bavAIRia e.V., Germany)

Jochen Nägele
(Premium AEROTEC, Germany)

NOV 3, 2015

R&D Summit Composites

Dr. Leslie Jay Cohen
(HITCO Carbon Composites, USA)

Dave Furdek
(The Boeing Company, USA)

John Vickers
(NASA, USA)

Dr. James Nokes
(Aerospace Corporation, USA)

Bright Zhao
(Fesher Aviation Component, China)

Todd Szally
(Northrop Grumman Corporation, USA)

Avner Ben-Bassat
(Plataine Inc.)

Larrell B Walters
(University of Dayton Research Institute, USA)

Paul Marks
(Argosy International)

Global Supply Chain Summit

Josef Gropper
(Liebherr-Aerospace & Transportation SAS, Germany)

Shigeru Yamanobe
(Kawasaki Heavy Industries, Japan)

Gerald Pfeiler
(ViscoTec America Inc., USA)

Thomas Tschirner
(Rolls Royce Deutschland Ltd & Co KG, Germany)

Dr Christof May
(Airbus Group, Germany)

Paul Marks
(Argosy International)

Metals

Nanolaminated ternary carbides preforms for metal-ceramic interpenetrating composites
Anna Chmielarz
(Rzeszów University of Technology, Poland)

Qualitative research on AZ31 magnesium alloy aircraft brackets with a triangular rib produced by a new forging method
Anna Dziubińska
(Lublin University of Technology, Poland)

Extrusion of aluminum alloys sections in aircraft construction
Dr. Beata Pawłowska
(Rzeszów University of Technology, Poland)

The role of a chip breaker in high performance cutting of aluminum alloys
Dr. Marcin Plodzien
(Rzeszów University of Technology, Poland)

Effect of grinding conditions and hydrogenation of titanium alloys on the residual stress in plunge grinding process
Dr. Paweł Lajmert
(Technical University of Lodz, Poland)

Analysis of the quality indicators of the finish turning of gamma titanium alloy TiAl(γ)
Dr. Witold Habrat
(Rzeszów University of Technology, Poland)

Friction Stir Welding (FSW) as One of the Free Fasteners Joining Aero-structures Technology - Analysis of possibilities of combining thin-walled aircraft structures
Gałaczyński Tomasz
(Rzeszów University of Technology, Poland)

Dry Milling of Magnesium Alloys AZ31 and AZ91HP by a PCD end mill
Ireneusz Zagórski
(Lublin University of Technology, Poland)

Analysis of deburring effectiveness and surface layer properties around the edges of workpieces made of 7075 aluminum alloy
Jakub Matuszak
(Lublin University of Technology, Poland)

Microstructure And Functional Properties Of Ceramic Foam-Polymer Composites
Joanna Ligoda-Chmiel
(Rzeszów University of Technology, Poland)

The Influence of Grinding Fluid Effectiveness on Creep Feed Grinding of Inconel alloy
Łukasz Żyłka
(Rzeszów University of Technology, Poland)

General Aviation

Human Factors Training in Aerospace Projects
Nico von Falkenhayn
(von Falkenhayn Trainings, Germany)

Aircraft Fleet Composition Decision of Airlines: Process and Principles
Oluwaferanmi Oguntona
(Munich Aerospace e.V., Germany)

Aerodynamics / Aeroelasticity

Considerations on beam-wise structural models used for aeroelastic analysis of slender wings
Prof. Giacomo Frulla
(Polytecnico Torino, Italy)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

Symposium AERONAUTICS

NOV 4, 2015

R&D Summit Future of Aviation

Massimo Cavaliere
(CIRA, Italy)

Prof. Markus Rapp
(German Aerospace Center (DLR e.V.), Germany)

Luciana Ribeiro Monteiro
(Embraer, Brazil)

Guy Gallic
(Airbus)

Miguel Castillo
(Aernnova, Spain)

Franck Gallerneau
(ONERA, France)

Dr. Christian Weimer
(Airbus, Germany)

Reinald Pfau
(Premium Aerotec, Germany)

Oliver Pape
(German Aerospace Center DLR, Germany)

Joachim Zettler
(Airbus APWORKS GmbH, Germany)

Alfonso Apicella
(Alenia Aermacchi, Italy)

Metals

The influence of wiper blade geometry in PCD face milling cutters on aerospace aluminum alloys surface roughness after high speed milling.
Marek Zwolak
(Rzeszów University of Technology, Poland)

Five-axis milling of sculptured surfaces of the turbine blade made of Inconel 718 alloy using toroidal cutter
Michal Gdula
(Rzeszów University of Technology, Poland)

Experimental and numerical simulation stability analysis of aluminum alloy milling
Piotr Andrzej Bąk
(Warsaw University of Technology, Poland)

Thermal insulations made of ceramic foams for aerospace applications
Prof. Marek Potoczek
(Rzeszów University of Technology, Poland)

Low cyclic fatigue strength of clinched joints
Tadeusz Balawender
(Rzeszów University of Technology, Poland)

Analysis of effective machining and grinding of titanium alloy Ti6Al4V used in aerospace industry in terms of surface integrity
Witold Habrat
(Rzeszów University of Technology, Germany)

Manufacturing / Production

Friction Stir Welding with a Versatile Machine Concept
Andreas Grimm
(Fraunhofer IWS, Germany)

Intelligent supervisory control of cylindrical plunge grinding process.
Dr. Paweł Lajmert
(Technical University of Lodz, Poland)

Manufacturing Process Improvement Through Active And Monitoring Systems
Gesine Kümper-Grütz
(Wölfel Beratende Ingenieure GmbH & Co. KG, Germany)

The family of flying research and didactic laboratories – assumptions, structures
Grzegorz Kopecki
(Rzeszów University of Technology, Poland)

Automated lay-up of auxiliary materials for vacuum bagging in vacuum infusion processes
Jan Faber
(German Aerospace Center (DLR e.V.), Germany)

Composites

Intelligent Automation: the Internet of Things (IoT) with RFID sensors on the production floor pushes the productivity envelope, improves quality control, and reduces manufacturing costs
Avner Ben-Bassat
(Plataine Inc., Israrel)

Challenges of integration in the context of supply network formation
Claudio Santos
(INESC TEC, Portugal)

Structural integrity assessment of a commercial aircraft composite spoiler with delamination under compressive and shear loads
Dimitrios Stamatelos
(AEROTRON RESEARCH, Greece)

Automated OOA Process of High Performance Thermoplastic Composites for Aerospace Structures
Dr. Dirk Heider
(University of Deleware, USA)

Production-Induced Defects in Automated Carbon Fiber Reinforced Thermoplastic Technology
Frederic Fischer
(German Aerospace Center (DLR e.V.), Germany)

The efficiency of the blades forming inserts with diamond composites for high performance machining tools for aerospace parts from aluminum alloy 7075.
Ostrowski Robert
(Politechnika Rzeszówska, Poland)

Detection of in-service damage at man-holes in composite structures
Prof. Alfredo Güemes
(University Polytechnic of Madrid (UPM), Spain)

Complementary initiatives for sustainability in UK defence sector supply chains.
Prof. Hefin Rowlands
(University of South Wales, United Kingom)

Enabling lightweight composite structure through heat technology treatment
Reiner Wiesehöfer
(Vötsch Industrietechnik GmbH, Germany)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

Symposium AERONAUTICS

NOV 5, 2015

Additive Manufacturing

America Makes – Mapping the Accelerated Insertion of Additive Manufacturing
Ralph Resnick
(National Center for Defense Manufacturing & Machining (NCDMM), National Additive Manufacturing Innovation Institute (America Makes))

3D Printing for Innovative Mould Making Combined with Simulation
Kevin Smith
(Voxeljet AG)

Metal Additive Manufacturing: A certification approach for Aerospace Market
Luis Portolés
(AIMME)

Additive Manufacturing in Aerospace - The Route to Production
Patrik Ohldi
(Arcam AB)

Additive Manufacturing In Aerospace & Defence – Qualification & Certification
Carmine Scafa
(Meth Engineering & Consulting SRL)

Additive Manufacturing of High-Performance Ceramics
Michael Glaser
(Lithoz GmbH)

Manufacturing / Production

Speeding up curing processes of Composites and adhesives with TeQua®Cure
Marc-Philipp Graf von Bethusy-Huc
(Marcotodo GmbH)

Optimization procedure for cutting conditions on elements made of Ti-6Al-4V alloy
Mariusz Mucha
(Rzeszów University of Technology, Poland)

Reduction of production costs of thermoplastic CFRP-parts by optimization of automation processes
Matthias Beyrle
(German Aerospace Center DLR, Germany)

High Precision Robotic Finishing: Blade Blending & Profiling
Michael Muldoon
(AV&R Aerospace, Canada)

Cryo-Head Using CO_2
Nadia Alberti
(Alberti Umberto Srl, Italy)

Rapid prototyping methods for aircraft gear transmission system elements of increased rigidity
Prof. Grzegorz Budzik
(Rzeszów University of Technology, Poland)

A control system for the CFG grinding process
Robert Babiarz
(Rzeszów University of Technology, Poland)

Managing AM Production During Its Transition from Proof-of-Concept to Series Manufacturing
Wannes Schuermann
(Materialise)

The future of Automated composite production in Aerospace
Wouter Schaap
(Autonational Composites BV, The Netherlands)

Series Production of Thermoplastic Composites
Laurens de la Ossa
(xperion, Germany)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

Chairman

Prof. Dr Richard Degenhardt,
DLR (German Aerospace Center), Braunschweig, Germany and PFH Göttingen, Germany

Vice Chairman

Dr Leslie Cohen,
Senior Vice President, Hitco, USA

Committee Members

Dr Igor Bashkirov,
TsAGI, Russia

Dr Mircea Calomfirescu,
Airbus Defence and Space, Manching, Germany

Ilke Dikici,
Technical Consultant in Aerospace

Prof. Dr Laurent Dala,
R&D Manager and President of the Aeronautical Society, CSIR DPSS Aeronautics Systems, South Africa

Dr Lars Fiedler,
Senior Manager, R&T Fuselage Structure, Airbus SAS, Germany

Prof. Dr Giacomo Frulla,
Turin Polytechnic University, Italy

Prof. Dr Harald Funke,
Aachen University of Applied Sciences, Germany

Gila Ghilai,
Director of Airframe Design & Analysis, Israel Aerospace Industry, Israel

Prof. Dr Alfredo Güemes,
Polytechnic University of Madrid, Spain

Dr Gregorio Kawiecki,
Boeing, Spain

Dr Tomas Ireman,
Senior Manager, Head of Loads, Stress and Dynamics, SAAB, Sweden

Dr Josef Kallo,
Head of Group Fuel Cell and Battery Systems, DLR Stuttgart, Germany

Dr Gregorio Kawiecki,
Boeing, Spain

Dr Douglas McCarville,
Boeing, USA

Francois Kubica,
A380 Chief Engineer, Airbus SAS, France

Dr Matthias Meyer,
BA Composites GmbH, Germany

Prof. Dr Janusz Narkiewicz,
Warsaw University of Technology, Poland

Reinald Pfau,
Premium Aerotec, Germany

Prof. Murray L. Scott,
Managing Director, Advanced Composite Structures Australia, Melbourne, Australia

Prof. Dr Romana Ewa Sliwa,
Rzeszów University of Technology, Poland

Prof. Dr Bernd Steckemetz,
University of Applied Sciences Bremen, Germany

Dr Jens Telgkamp,
Head of Fuselage and Generic Structure Design - ESDSR, Airbus SAS, Germany

Prof. Alin Albu-Schäffer*
(Institute of Robotics and Mechatronics (DLR), Germany)

Dr. Matthias Baron*
(Head of Integrated Services Business Unit, GAF AG, Germany)

Thorsten Rudolph*
(CEO, Anwendungszentrum GmbH Oberpfaffenhofen, Germany)

*Date not yet fixed

Symposium SPACE

NOV 3, 2015

KEYNOTE

From Drones to Satellites: How aerospace research supports the EU policy agenda
Dr Stephan Lechner
(Director European Commission, Joint Research Centre, Institute for the Protection and the Security of the Citizen, Italy)

KEYNOTE

Risk and innovation
Dr Hans Koenigsmann
(VP Mission Assurance, SpaceX, USA)

KEYNOTE

Space Debris – a Key Aspect of Space Situational Awareness
Prof. Heiner Klinkrad
(former head of ESA's Space Debris Office at ESA / ESOC Darmstadt / Germany, TU Braunschweig, Germany)

KEYNOTE

Clean Space: Space Debris Removal
Luisa Innocenti
(ESA - European Space Agency)

New Approaches for On-Orbit Servicing and Active Space Debris Removal
Dr Peter Hofmann
(OHB-System AG, Germany)

Space Weather
Juha-Pekka Luntama
(ESA - European Space Agency)

Design and Concept for the Active Space Debris Removal of large objects
Susanne Peters, Prof. Roger Förstner
(University of the Bundeswehr Munich, Germany)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

NOV 4, 2015

KEYNOTE

The Power of Space
Prof. Ulrich Walter
(Head of TUM's Chair of Astronautics and former astronaut, TU Munich, Germany)

KEYNOTE

Commercial Space Science and Exploration
Doug Liddle
(Head of Science and Institutional Business, Surrey Satellite Technology Ltd, United Kingdom)

KEYNOTE

Planetary Exploration and Space Robotics
Vincenzo Giorgio
(VP Institutional Marketing / Sales, Thales Alenia Space, Italy)

Rover technologies developed for exploration of planetary surfaces
Prof. Sabine Klinkner
(University of Stuttgart, Germany)

Additive manufacturing solves key challenges for on orbit servicing: Its out of this world!
Andrew Kwas
(Northrop Grumman Technical Services, USA)
Dr Eric MacDonald
(The University of Texas at El Paso, USA)
Matt Napoli
(Made in Space Inc., USA)

Navigation System Design for an Autonomous Asteroid Prospection Mission
Graciela González Peytaví, Alena Probst, Prof. Roger Förstner, Prof. Bernd Eissfeller
(Bundeswehr University Munich, Germany)

Europe's Exploration of Mars: the ESA ExoMars Programme and Development of the Sample Handling Subsystem
Lutz Richter
(OHB-System AG, Germany)

Selection of Multi-GNSS Satellite Geometry
Yahao Cheng
(Technical University of Munich, Germany)

Space simulation product testing and the choice of the right thermal vacuum chamber
Hervé Salmon
(Weiss Umwelttechnik GmbH, Germany)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

Chairman

Prof. Dr Roger Förstner,
Institute of Space Technology & Space Applications, Universität der Bundeswehr, Munich, Germany

Vice Chairmen

Dr Cornelius Schalinski,
Deputy Head Business Development, OHB System AG, Germany

Dipl.-Math. Bärbel Deisting,
Director Space and Space Applications, bavAIRia e.V., Germany

Symposium SPACE

NOV 5, 2015

KEYNOTE

Dr Gerd Gruppe
(Member of the Executive Board, German Aerospace Center (DLR), Germany)

Enabling Technologies
Prof. Felix Huber
(German Aerospace Center DLR)

Micro Satellites
Prof. Klaus Schilling
(Professor and Chair for Robotics and Telematics, University Würzburg, Germany)

Small academic satellite Flying Laptop - between industrial ambition and acadamic freedom
Prof. Sabine Klinkner
(University of Stuttgart, Germany)

Aerospace and space engine development & high temperature gear box
Luisa Innocenti
Pradeep Dass, Craig Johansen
(Space Engine Systems Inc., Canada)

Power and Signal Transmission via Rotary Joints by means of Twist Capsules using Ultra-long Flexible Printed Circuits
Dr Christoph Lehnberger
(ANDUS ELECTRONIC GmbH, Germany)

Radiation Shielding Characteristics of a Fluid Filled Cellular Composite
Prof. Ashok Kumar Ghosh
(New Mexico Institute of Mining and Technology, USA)
Leroy Garley
(Sandia National Laboratories, Albuquerque NM, USA)

Air-conditioning and cooling systems for ground stations
Jürgen Süsslin
(Weiss Umwelttechnik GmbH, Germany)

Impact of Atmospheric Impairments on Reliable High Throughput Space Communications
Christian Hofmann
(University of the Bundeswehr Munich, Germany)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

Committee Members

Dr Alin Olimpiu Albu-Schäffer,
Director DLR-German Aerospace Centre for Robotics and Mechatronics, Wessling, Germany

Dr. Major Chahal,
Head of Technology Transfer and Standards, UK Space Agency, United Kingdom

Richard Coleman,
President, Space Transportation Association, USA

Giovanni D'Aliesio,
Manager New Business Electronics, MDA, Canada

Hon. Prof. Dr Eveline Gottzein,
Processing & Platform Equipment, Airbus Defence and Space, Germany

Dr Peter Hofmann,
Director Space Research & Technology Consulting, OHB System AG, Germany

Prof. Dr Alexander Nebylov,
Director of IIAAT SUAI, St. Petersburg, Russia

Matthieu Roulet,
Head of Strategy & European Business Development, Airbus Defence and Space, France

Prof. Dr Klaus Schilling,
University of Würzburg, Germany

Dr Martin Sippel,
DLR Bremen, Germany

Frank Slazer,
Vice President, Space Systems, Aerospace Industries Association, USA

Symposium AVIONICS SENSORS TESTING

NOV 3, 2015

AVIONICS

KEYNOTE

Closed-loop Procedure for the Modeling and Tuning of Kalman Filter for FOG INS
Massimo Verola, A. Benini, R. Senatore, A. Pizzarulli, D.N. Orsini, E. Quatraro
(Civitanavi Systems, Italy)

Dynamic Navigation System Integration - High Frequency Interface for Flight Simulations allowing dynamic Integration of Navigation Systems
Bernd Mattner
(TechSAT GmbH, Germany)

Maximizing efficiency in aircraft electrical systems starts from the component level
Gaby Cristian Mindreci
(Positronic, France)

SCARPOD: plug-and-fly ISR
Georg J. DeCock
(Airborne Technologie GmbH, Austria)

Distributed IMA: System Engineering Context and Use Cases
Jacques Gatard
(TTTech, Austria)

Real-Time Signalling for Next Generation IMA
Yuriy Sheynin, Ludmila Koblyakova, Elena Suvorova
(Saint-Petersburg State University of Aerospace Instrumentation, Russia)

Lyapunov-stability-based adaptive control system for fighter aircraft
Jan Vlk, Peter Chudý
(Brno University of Technology, Czech Republic)

Laser Communication Systems for the Commercial Market: Supporting Future Data Transfer Needs
Kevin Shortt
(ViaLight Communications GmbH, Germany)

Optimising the Passenger Experience in a Wireless Aircraft Cabin Network
Markus Gilges
(VT Miltope, United Kingdom)

Parameter identification for aircraft adaptive control
Petr Dittrich, Peter Chudy
(Brno University of Technology, Czech Republic)

Concept of Advanced Aircraft Supervision System
Sebastian Topczewski, Janusz Narkiewicz, Antoni Kopyt, Marcin Żugaj
(Warsaw University of Technology, Poland)

Chairman SENSORS

Prof. Dr Rolf-J. Ahlers,
Managing Director, ProxiVision GmbH, Germany

Vice Chairman SENSORS

Dr Johann Dambeck,
Lecturer ILR TUM, Manager MBDA-D, Germany

Chairman TESTING

Stephen GR Brown,
Director of Research, College of Engineering, Swansea University, United Kingdom

Vice Chairman TESTING

Dr Ute Hörmann,
Account Manager Consumer Testing Services, SGS Institute Fresenius GmbH, Germany

Chairman AVIONICS

Marc Gatti,
Director R&T, Thales Avionics, France

Symposium
AVIONICS
SENSORS
TESTING

NOV 4, 2015

SENSORS

KEYNOTE

Sensor Fusion for Precise and Reliable Positioning
Dr Patrick Henkel
(Advanced Navigation Solutions – ANavS GmbH, Germany)

KEYNOTE

MEMS will take it all
Patrick Gougeon
(SAFRAN Colibrys, Switzerland)

Designing a High Precision W-Band Radar Altimeter – from Research Lab to Certification
Georg Rauch, Fabian Bleyer, Frank Dordowsky
(ESG Elektroniksystem- und Logistik-GmbH, Germany)

Aiding of AHRS with air data and magnetic field measurements
Fedor Baklanov
(TU Munich, Germany)

Introducing an autonomous remote sensing system for small aircrafts
Prof. Jens Bongartz
(University of Koblenz, Germany)

Laser scanners and laser scanner systems for airborne remote 3D data acquisition
Dr Andreas Ullrich
(RIEGL Laser Measurement Systems GmbH, Austria)

Model-Based Design to improve Software Supply Chain
Albert Ramirez Perez
(MathWorks, Germany)

Co-Simulation for Design, Optimization and Analysis of Aircraft HVAC Systems
J. Reichold, T. Wagner, C. Kübler, Dr M. Pfeil, V. Fäßler
(TWT GmbH, Germany)

TESTING

Scanning acoustic microscopy - a powerful tool in failure and damage analysis
Dr Ute Hörmann, Stefan Möllenhoff, Peter Schmidt, Dr Olaf Günnewig
(SGS INSTITUT FRESENIUS GmbH, Germany)

Properties of direct-quenched aircraft forged components made of ultra-high strength steel 300M
Piotr Skubisz
(AGH University of Science and Technology in Cracow, Poland)

Automated Detection of Quality Issues in Aircraft Structures by Production-Integrated Optical Measurement
Prof. Peter Dannenmann
(RheinMain University of Applied Science, Faculty of Engineering)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

NOV 5, 2015

TESTING

KEYNOTE

Automation of the Interpretation of NDT of Large Composite Structures
David Forsyth, John C. Aldrin, John A. Welter, Dr Leslie J. Cohen
(Texas Research Institute Austin, Inc. TRI/Austin, USA)

Comparative analysis of numerical methods for the determination of contact pattern of bevel gears in aviation applications
Dr Adam Marciniec, Dr Jacek Pacana, Dr Jadwiga Pisula, Paweł Fudali
(Rzeszów University of Technology, Poland)

Composite Custom Shielding solutions
Dr Ivano Soliani, Dr Alessandro Soliani Brivio
(SOLIANI EMC SRL, Italy)

Model tests of the aircraft wheel hub
Dr Jacek Bernaczek, Prof. Romana Ewa Śliwa, Grzegorz Budzik, Tomasz Kudasik, Paweł Rokicki
(Rzeszów University of Technology, Poland)

Digital-Functional Mockup – Distributed Development and System Optimization
Dr Markus Pfeil, C. Radermacher, V. Fäßler
(TWT GmbH - Science & Innovation, Germany)

Approximation of continuous surface of a tooth flank generated using milling simulation
Piotr Skawinski
(Warsaw University of Technology, Poland)

Large scale automated measurement validation for aeronautics industry
Thomas Lorrain, Pierre Grivelet, Laurent Vivet
(RMS, France)

Hybrid joints – modern connections of aircrafts structural elements
Tomasz Sadowski, Przemyslaw Golewski, Daniel Pietras, Marek Nowicki
(Lublin University of Technology, Poland)

A cost effective way of conducting EMI-measurements
Sven Böhmer
(STATEX Produktions + Vertriebs GmbH, Germany)

Tooth flank of spiral bevel gears cutting on the 5-axes CNC milling machine
Piotr Skawinski
(Warsaw University of Technology, Poland)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

Committee Members

Dr Orlando da Costa,
Technical Manager UAS, IABG, Germany

Prof. Dr Stefanos Fasoulas,
Deputy Director, Institute of Space Systems, University of Stuttgart, Germany

Prof. Dr Hans-Jörg Fecht,
Director Institute of Micro and Nanomaterials, Ulm University, Germany

Roland Goerke,
Avionic Systems, Airbus Defence and Space, Germany

Dr Mirko Jakovljevic,
Senior Marketing Manager, TTTech Computertechnik AG, Austria

Dr Bernhard Keidel,
R&D Project Manager, EMT, Germany

Thomas Löffler,
Senior Engineer Integrated Navigation Systems, Diehl BGT Defence, Germany

Professor Bernd Mayer,
Managing Director, Fraunhofer IFAM, Germany

Dr Carmine Salzano,
International Aerospace Defense Manager, PCB Aerospace and Defense, USA

Prof. Dr Frank Thielecke,
Institute of Aircraft Systems Engineering, Technical University of Hamburg-Harburg, Germany

Symposium HELI

NOV 4, 2015

KEYNOTE

Innovative Solutions for Helicopter Pilot Assistance
Dr. Klausdieter Pahlke
(German Aerospace Centre DLR, Germany)
Blanche Demaret
(ONERA, France)

KEYNOTE

Verification and Validation in Airplane Doors Strength Analysis
Dr. Alexander Kling
(Airbus Helicopters, Germany)

KEYNOTE

Status and Future of High-Fidelity Prediction Methods for Rotorcraft Aeromechanics
Prof. Ewald Krämer
(University of Stuttgart)

KEYNOTE

Trends and Requirements for Drive Trains of Future Rotorcraft
Prof. Michael Weigand
(Vienna University of Technology)

Performance Considerations of Various Rotorcraft Concepts
Thomas Schreiber
(Airbus Helicopters, Germany)

Real-Time Downwash Simulation for Helicopters and Tiltrotor Aircraft
Ludwig Friedmann
(Technical University Munich)

Helicopter Drag Reduction Based on Shape Optimization and Passive Flow Control
Prof. Christian Breitsamter
(Technical University Munich, Germany)

Properties of the multilayer foam structures, including auxetic layer, for aviation seat cushion
Piotr Reymer, Lisiecki J., Błażejewicz T., Kłysz S., Nowakowski D., Reymer P.
(Air Force Institute of Technology, Poland)

Lithium Battery Technology from a Safety Point of View
Bernhard Manfred
(Airbus Helicopters, Germany)

NOV 5, 2015

Master Minimum Equipment List/Minimum Equipment List
Matthias Hatzak
(Airbus Helicopters, Germany)

Carbon Crew Rest Seat Weight Reduction by 40 %
Dieter Grebner, Johannes Reiter
(PEAK Technology, Austria)

Helicopter Simulation and Emulation – The All-In-One Training Solution
Dr Martin Frühauf, Marcus Zücker
(Telespazio VEGA Deutschland, Germany)

In service experience, repair and evolution of EC135 M/R blade towards the DMC benchmark
Markus Zellhuber
(Airbus Helicopters, Germany)

Airbus Helicopters: Our Committment for Aviation Safety Partnership
Prof.Thomas Gogel, Matthias Klein
(Airbus Helicopters, Germany)

Heliport operations: optimal trajectories to abate acoustic pollution
Francesco Castelluccio, Salvatore Amoroso, Luigi Maritano
(University of Palermo, Italy)

The role of the helicopter in the Civil Defence
Luigi Maritano, Salvatore Amoroso, Francesco Castelluccio
(University of Palermo, Italy)

Fiber Bragg Grating Sensors in Rotorblades – A New Approach for a Health and Usage Monitoring System
Sören Süße
(Technische Universität München - Institute of Helicopter Technology, Germany)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

Chairmen

Dr. Mark D. White,
Flight Simulation Manager, The University of Liverpool, United Kingdom

Dr. Klausdieter Pahlke,
R&D Coordinator Rotary Wing, DLR Braunschweig, Germany

Committee Members

Prof. Dr. Salvatore Amoroso,
Energy Department Section Engineering and Transport, University of Palermo, Italy

Superintendent M.A. D.–H. Bothe, Air Transport Helicopter Pilot, Federal Police, Germany

Konstantin Kampa,
Head of Technical Expertise & Manager General Engineering, Airbus Helicopters, Germany

Il'ya Taratonov,
Center of Innovations and Competence, RUSSIAN HELICOPTERS, Russia

Dr. James Wang,
Vice President R&D, AgustaWestland, Italy

Martin Stucki,
CEO, Marenco Holding AG, Switzerland

Dr. Jim Sutter,
Technical Director Composite Projects, South Carolina Research Authority (SCRA), USA

Symposium UAV

NOV 3, 2015

Future of the 3D-Battlefield
Brigadier General Jörg Lebert
(Headquarters of the German Air Force, Assistant Chief of Staff Plans, Germany)

Remotely Piloted Aircraft Systems in Contested Environments.
Major Andre Haider
(NATO Joint Air Power Competence Centre, Germany)

NATO Multinational Joint Intelligence, Surveillance and Reconnaissance Unit (MJISRU)
Colonel Bernard Willi, USAF
(NATO Joint Air Power Competence Centre, Germany)

Predator Aircraft Series Status Report: Military & Civilian Missions
Rear Admiral US Navy (ret) Christopher C. Ames
(General Atomics Aeronautical Systems, Inc., USA)

Remotely Piloted Aircraft Systems - Integration into the European Aviation System.
Major Andre Haider
(NATO Joint Air Power Competence Centre, Germany)

KEYNOTE

Afzal Suleman
(University of Victoria UVIC, Canada)

From b-ionic flapping wing to the first additive manufactured plasma flyer
Prof. Christian Breitsamter
(Technical University Munich, Germany)

Robust Model Reference Adaptive Control of a Tailless Aircraft in Coordinated Turn Maneuver
E. Kakavand
(Shahid Beheshti University, Tehran, Iran)

Development and production of a lightweight-construction UAV using additive manufacturing
Prof. Stefan Junk, Prof. Werner Schröder
(University of Applied Sciences Offenburg, Germany)

UAV Blimp for strong wind disturbance
Stojan Stevanovic
(German Aerospace Center DLR, Germany)

Design And Development Of An Autonomous Rotorcraft For Extreme Altitudes
Aaron Barth, Tobias Pflumm
(TU München, Institute of Helicopter Technology, Germany)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

NOV 4, 2015

AIRBEAM: Project Presentation and Main Results
Niklas Goddemeier, Prof. Christian Wietfeld
(Technical University of Dortmund, Germany)

Model Predictive Flightpath Control for an Unmanned Powered Paraglider
Fabian Binz, Philipp Hartmann, Prof. Dieter Moormann
(RWTH Aachen, Institute of Flight System Dynamics, Germany)

Aerial Manipulation Prototype, a Helicopter with Manipulability Capabilities: Analysis and Experiments
Felix Huber, Maximilian Laiacker, Moritz Maier, Prof. Konstantin Kondak
(German Aerospace Center DLR, Germany)

Fault tree Analysis of Landing Gear Control and Warning for LSA 02 Motorized Glider Type Aircraft
Fuad Surastyo Pranoto, Adi Wirawan
(Indonesian National Institute of Aeronautics and Space, Indonesia)

Experimental verification of aircraft model used in the laboratory stand for hardware-software in the loop testing
Grzegorz Kopecki, Paweł Rzucidło, Dariusz Nowak, Damian Kordos, Piotr Grzybowski
(Rzeszów University of Technology, Poland)

Investigating Transient Performance Trade-Offs for Fixed Pitch Propeller VTOL UAV
Guido Wortmann, Sebastian Herbst, Prof. Mirko Hornung
(Munich Aerospace e.V., Germany)

Automatic fuselage shape definition for optimal sensor integration
Jens Feger
(Technical University Munich, Institute of Aircraft Design, Germany)

System Modelling of a Fluidic Flight Control System for Preliminary Design Stages
Korbinian Stadlberger, Prof. Mirko Hornung
(Technical University Munich, Institute of Aircraft Design, Germany)

Transonic flow in valve for pneumatic adaptive shock absorber
Pawel Flaszynski
(The Szewalski Institute of Fluid-Flow Machinery Polish Academy of Sciences - IMP PAN, Poland)

Increase of payload capacity and operational availability for high altitude long endurance UAV
Tin Muskardin
(German Aerospace Center DLR, Germany)

Dynamic Similarity for Tiltwing Aircraft Controller Design
Philipp Hartmann, Marten Schütt, Prof. Dieter Moormann
(RWTH Aachen, Institute of Flight System Dynamics, Germany)

A Test Data System for the Unmanned Mission Avionics Test Helicopter UMAT
Tjorven Gerhard, Tobias Paul
(ESG Elektroniksystem- und Logistik-GmbH, Germany)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

Symposium UAV

NOV 5, 2015

Visual Navigation for Flying Robots
Maximilian Laiacker
(German Aerospace Center DLR, Germany)

Robotic Manipulator System for Rotary-wing UAVs Operating from Ships
Moritz Maier
(German Aerospace Center DLR, Germany)

Development of a Cognitive UAV for Medical Assistance Application: Integration of a Soar Agent in ROS
Shahmi Junoh, Christian Lenk, Annika Strömmer, Martin Heni
(Silver Atena Electronic Systems Engineering GmbH, Germany)

Parachute Design and Wind Tunnel Testing of Class 10 kg LAPAN UAV's Recovery System
Teuku Mohd Ichwanul Hakim, Dana Herdiana, Ardanto Muhammad Pramutadi
(Indonesian Institute of Aeronautics and Space LAPAN, Indonesia)

DLR Hableg – Stratospheric Flight Research
Sven Wlach
(German Aerospace Centre DLR, Germany)

Reasoning to choose C2 link for RPAS integration into civil airspace satisfying ICAO requirements.
Eduard Falkov, Elena Gromova
(State Research Institute of Aviation Systems GosNIIAS, Russia)

An Aircraft Position Broker Based on Reliable Multilink Communication for Cross Platform Collision Avoidance
Niklas Goddemeier, Sebastian Rohde, Prof. Christian Wietfeld
(Technical University of Dortmund, Germany)

Tactical Video Overlays – An Augmented Reality Technology for Improved Situational Awareness
Dr Holger Gläßel, Dr Michael Beimforde
(ESG Elektroniksystem- und Logistik-GmbH, Germany)

Preliminary Program
Subject to change without notice
As of August 6th, 2015

Chairman

Prof. Dr Florian Holzapfel,
Institute of Flight System Dynamics, Technical University of Munich Germany

Vice Chairman

Prof. Dr Dieter Moormann,
Institute of Flight System Dynamics, RWTH Aachen University, Germany

Committee Members

Dr Alin Olimpiu Albu-Schäffer,
Director DLR-German Aerospace Centre for Robotics and Mechatronics, Wessling, Germany

Christopher C. Ames,
Rear Admiral, US Navy (Ret.), Director, International Strategic Development, General Atomics, Aeronautical Systems, USA

Prof. Dr. David Bird,
Emeritus Professor of Wildlife Biology and Editor of Journal of Unmanned Vehicle Systems Department of Natural Resource Sciences, McGill University, Canada

Prof. Dr Horst Schmidt-Bischoffshausen,
Consulting, Germany

Thomas Gottmann,
Senior Manager Barracuda / Agile UAV NCE, Airbus Defence and Space, Germany

Dr René Knorr, Director UAS Programms, ESG Elektroniksystem- und Logistik GmbH, Germany

Dr Konstantin Kondak,
Head of Flying Robots Group, DLR-German Aerospace Center for Robotics and Mechatronics, Wessling Germany

Peter Loef,
Network Manager, EurA Consult AG and CEO – AIR e.V., Germany

James A. Moseman,
Director Europe and NATO, Northrop Grumman International, Belgium

Francisco A. Navarro,
Chief ATM Scientist UAS Management, Boeing Research & Technology Europe

Brigadier a.D. Hans-Georg Schmidt,
Chairman Military ATM Board Eurocontrol, Belgium

Brigadier a.D. Gerhard Schulz,
bavAIRia Aerospace Cluster, Germany

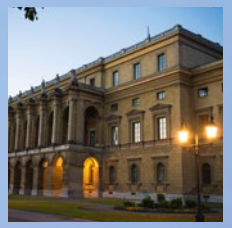
Prof. Dr. Axel Schulte,
Aircraft Dynamics and Flight Guidance of the Universität der Bundeswehr, Munich, Germany

Dr Norbert Tränapp,
ABG Industrieanlagen-Betriebsgesellschaft mbH, Germany

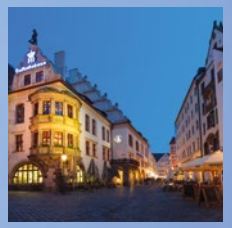
Dr Moshe Zilberman,
Director of Marketing & Sales, Engineering Division, IAI, Israel

Welcome to Munich
The new venue of AIRTEC

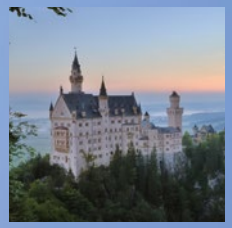
Social Programme



TUE Nov 3, 2015
Bavaria State Reception*
Munich Residenz



WED Nov 4, 2015
Get-together Evening**
Hofbräuhaus Munich



FRI Nov 6, 2015
Choice of excursions**
Neuschwanstein Castle
and others

» 10th Anniversary of AIRTEC and Premiere in Munich. With joint forces and spirit to its success. «

Diana Schnabel, CEO / President of AIRTEC

* = by invitation only
** = additional charges apply

Speakers' Fees

Registration	3 Days	2 Days	1 Day
Speakers	€ 495,–	€ 390,–	€ 345,–
Governmental institutions[1]	€ 199,–	€ 169,–	€ 149,–

Please note: Students' rates do not apply for speakers

Congress Fees

Registration	3 Days	2 Days	1 Day
Early Bird until Sep. 15th	€ 845,–	€ 695,–	€ 495,–
Standard	€ 995,–	€ 845,–	€ 585,–
Governmental institutions[1]	€ 299,–	€ 249,–	€ 199,–
Students	free	free	free
Military Delegation in uniform	free	free	free
Exhibitors/Co-Exhibitors[2]	free	free	free

The congress fee includes admission to the complete congress including all symposia and the exhibition, lunch and refreshments, documentation, proceedings CD. Free of charge participation does not include lunch. Free entry and special conditions for co-sponsoring partner institutions. The list of eligible partner institutions can be found under www.airtec.aero/partner-institutions. All prices include VAT.

1. i.e. Universities, Research Organizations, DLR, Fraunhofer
2. Each exhibitor / co-exhibitor receives one congress pass free of charge.
   Additional passes are subject of a 50% discount.

Entrance free to the get-together evening on November 4th cost € 120.– including food, beverage and entertainment program.

Sponsors

Media Partners

www.airtec.aero

27.15.17.08.15

Organiser: airtec GmbH & Co. KG, P.O. Box 700 164, 60551 Frankfurt, Germany