



## InnoTesting – The Future of Simulation and Testing

Feb 23 – 24, 2012, Wildau

**Dear participants, dear guests of the InnoTesting conference,**

the capital region of Berlin – Brandenburg has established itself as an important business location for the international aerospace industry leading to economic strength and high quality jobs. For me it is an especially gratifying aspect that this development resulted in impressive growth not only for some large-scale facilities but also for a good number of specialized small and medium enterprises. New key technologies with a broad scope of applications in other industry fields can easily evolve in this fertile environment.

Simulation and testing are a typical cross-sectional technology – here aerospace has traditionally fulfilled a pioneering function due to the severe requirements regarding safety and sustainability. For many years Wildau has been a symbol for the successful cooperation of academia and business. It will be a powerful magnet for new business set-ups in the vicinity of the new airport Berlin Brandenburg Willy Brandt opening in June 2012. Thus Wildau is the ideal place for the discussion of innovative simulation and testing procedures at the InnoTesting 2012 conference.

I wish for a fruitful exchange of knowledge, insights and experiences and that you have a beautiful time here with us in Brandenburg – we are open for innovators!



Matthias Platzeck  
State Prime Minister of Brandenburg

# InnoTesting – The Future of Simulation and Testing

Day One: Thursday, Feb 23, 2012

**08.30 Registration of Participants**

**09.30 Opening – Dr. Michael Born, Chairman InnoTesting Program Committee**

**Future Whole Engine Model Simulation and Validation Requirements**

Dr. Norbert Arndt  
Rolls-Royce Plc

**Testing of Aircraft Structures**

Prof. Dr.-Ing. Wilhelm Hanel, Prof. Dr.-Ing. Thomas Fleischer, Dr. Roald Best  
IMA Dresden

**Automation in Airworthiness Compliance Demonstration**

Volker Wieseler, Eurocopter Deutschland GmbH  
Olivier Engelkes, Avionic Design Service GmbH

**11.00 Coffee Break** ☕

**11.30 Workshop Presentations**

## Workshop I

**Analysis of Micro-vibration by High Resolution Force Sensing Measurement to Reduce Mechanical Noise**

F. Liebold, S. Wiegand, R. Käso  
Astro- und Feinwerktechnik Adlershof GmbH

**BreTeCe – Distributed System Testing**

Kishore Duganapalli  
ExxpertSystems GmbH

**YAVE – Test Systems with Optimised Verification Processes**

Johannes Kremp, Andreas van Hove  
FTI Engineering Network GmbH

## Workshop II

**Challenges of Quality: Agile Testing of Embedded Systems**







Roman Sorokiewicz, MSc., Konrad Häusler  
The ICT Association SIBB e.V.

**CFRP in Aircraft: Compromise between low weight, costs and industrial maturity**

Dr. Udo Berthold  
Managing Director, COTESA

**Brandprüfungen zum Nachweis der Brandschutzanforderungen an Werkstoffe und Komponenten nach pr EN 45545-2 am Beispiel Fahrgastsitz**

(Fire tests for the proof of the fire protection requirements for materials and components in accordance with pr EN 45545-2 using the example of passenger seat) – German Language  
Gert Schmidt  
RST Rail System Testing GmbH

- 13.00**      **Lunch Break** 
- 14.00**      **Trains, Planes and Immersive Simulators – a New Direction in the Testing of Safety Critical Transport Systems**  
Chris Pibworth, Sokuntheary En  
The ICT Association SIBB e.V.
- Simulation for Safety – Technical, Human and Organisational Factors**  
Prof. Dr. Thomas Biermann  
WIT - Wildau Institute of Technology / Wildau TUAS
- MTOC - the new Rolls-Royce Mechanical Test Operations Centre**  
Dr. Michael Born,  
Managing Director Rolls-Royce Mechanical Test Operations Centre GmbH
- 15.30**      **Coffee Break** 
- 16.00**      **Transfer to Rolls-Royce** 
- 16.30**      **Rolls-Royce MTOC Facilities**  
(Please take along your passport / ID-Card as it is required for security reasons)
- 17.30**      **Transfer to Conference Site / Hotel / Evening Event** 
- 19.00**      **Visiting Historic Koenigs Wusterhausen Castle**  
  
(This medieval castle became famous as the hunting lodge of Prussian king Frederick William I and his tobacco collegium in the early 18<sup>th</sup> century)
- 19.30**      **Conference Dinner at Koenigs Wusterhausen Castle Restaurant** 
- 22.00**      **Transfer to Conference Site / Hotel** 
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## Day Two: Friday, Feb 24, 2012

- 08.30**      **Welcome Coffee** 
- 09.00**      **Opening of Day 2 - Main Insights of Day 1**
- 09.30**      **Workshop Presentations**

### Workshop III

#### **Model Based Testing for Scenarios in which only a Subset of Test Cases is Used to Verify a System under Test**

Marco Franke, Carl Hans and Klaus-Dieter Thoben  
BIBA - Bremer Institut für Produktion und Logistik GmbH, University Bremen

#### **Simulation of Wind Speed Distributions using ANN Modeling Comparing with Data from Long-Term Measurement – Case Study for the Mugla Region / Western Turkey**

B. Çelik, B. Kurtuluş, Dr. L. Giese, F. Kurtuluş, A. Eltez, Prof. Dr. S. Rolle, M. Jergovic  
Wildau TUAS

### Workshop IV

#### **High Cycle Fatigue Testing by Means of Chopped Air Excitation – The Development of an Innovative Excitation System**

E. Wendenburg, E. Pugliesi  
GEVA mbH

#### **Zerstörungsfreie Prüfung von Serienschäden auf Grundlage einer Schadensanalyse nach VDI 3822**

(Non-destructive testing of serial damages based on a failure analysis according to VDI 3822) – German Language  
Ulrike Mosler  
RST Rail System Testing GmbH

- 10.30**      **Coffee Break** ☕
- 11.00**      **Simulation of Passenger and Vehicle Movements at BER Airport**  
 Tobias Pötter  
 ARC Aachen
- Simulation of Fire Prevention Measures at BER Airport**  
 Dr. Christoph Klinzmann  
 hhpberlin – Ingenieure für Brandschutz GmbH
- Testing Challenges in Aircraft Engines and Gas Turbines**  
 Dr. Edmund Ahlers  
 Managing Director AneCom Aero Test
- 12.30**      **Plenary Round Table – End of Conference**
- 13.00**      **Business Lunch and Farewell Cocktail** 🍷
- 14.30**      **Visit to AneCom Aero Test Facilities (Optional)** 🚌  
 (Please take along your passport / ID-Card as it is required for security reasons)
- 16.00**      **End of Optional Visit**
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Conference documentation: all participants will get the presentations in electronic form on a USB memory stick on Friday.

**InnoTesting 2012 is organized by:**



**in cooperation with:**



Verband der  
Software-, Informations- und  
Kommunikations-Industrie  
in Berlin und Brandenburg e.V.



**under the patronage of:**



Matthias Platzeck - State Prime Minister of  
 Brandenburg