

Society of Flight Test Engineers 17th European Chapter Symposium 2006

Innovation in flight test engineering

The 17th SFTE European Chapter Symposium will be held at the National Aerospace Laboratory NLR premises in Amsterdam, The Netherlands, from the 12th to the 14th of June 2006. The Netherlands Association of Aeronautical Engineers NVvL and National Aerospace Laboratory NLR are organizing the Symposium.

The theme of the Symposium is: **Innovation in flight test engineering**

The flight test engineer is confronted and pleased with many aspects of innovation. Innovative Air Platforms and Systems are constantly being developed as are New Tools for the Engineer. In this Symposium special attention will be given to the many different aspects of innovation. For instance,

- Programmes to test innovative platforms
- Powerful data processing realised with (personal) computers and generic or custom made software
- Data acquisition personal computers
- Data busses for flight test data
- Sensors for small and powerful instrumentation
- Flight test instrumentation of unmanned vehicles

Online information: www.sfte-ec.se



Programme



12-14 June 2006
NLR, Amsterdam, The Netherlands

Sunday 11 June

16:30 – 18:00 Registration

Monday 12 June

08:30 – 09:30 Registration

09:30 – 10:00 Opening

10:00 – 10:30

K-1 Keynote address (Royal Netherlands Air Force)

Break

11:00 – 11:45

K-2 Flight Testing the A380
F. Alonso (Vice President Flight Test Division, AIRBUS, FR)

Lunch

13:15 – 15:15 Session A: Novel Methods

- A-1 Innovative Technologies to Support Future Ship-based Flight Testing
D. Carico (NAVAIR Patuxent River, US)
- A-2 Simulation-based Flight Test Data Reduction Method
I. Lebovic (Diamond Aircraft GmbH, AU)
- A-3 Innovations in Forward Centre of Gravity Testing of the Harrier
A. Chatwin (QinetiQ, UK)
- A-4 MV-22B Osprey Heavy Grossweight Short Take Off and Landing
T. Strand, S. Augustin (NAVAIR Patuxent River, US)

Break

15:45 – 17:15 Session B: Instrumentation I

- B-1 Instrumentation Data Acquisition System for the MPUAV
S. Loveland (Lockheed Martin Aeronautics, US)
- B-2 Development of Flight Test Instrumentation: Evolution or Revolution?
J.M. Klijn (National Aerospace Laboratory NLR, NL)
- B-3 Bomber Testing in the Digital World
P. Harmer, R. Salasovich (US Air Force, Edwards AFB, US)

17:30 – 20:00 Reception

Tuesday 13 June

09:00 – 10:30 Session C: Validation and Qualification Testing I

- C-1 F-16 Fighter Aircraft Testing in the Netherlands
P. Koks (National Aerospace Laboratory NLR, NL), J.B. Buijs (Royal Netherlands Air Force, NL)
- C-2 Eurofighter Handling Qualities Official Assessment
L. Prieto Saiz (National Institute for Aerospace Technology INTA, ES)
- C-3 Known Icing Testing and Certification of DA 42 Light Diesel Twin Aircraft
O. Pauls, A. Raab (Diamond Aircraft GmbH, AU)

Break

11:00 – 12:30 Session D: Test Management and Programme Set Up

- D-1 Operation Horned Owl: Lessons in Expeditionary Flight Test
T. Hague, J. Orson (US Air Force, Edwards AFB, US)
- D-2 Innovative Approach to the Definition of Flight Test Requirements through the Application of Integrated Test Evaluation and Acceptance (ITEA) Planning
M. Sneddon (QinetiQ, UK)
- D-3 Nimrod MRA4 Simultaneous Mission System and Air Vehicle Flight Testing
A.D. Gill, I.C. Kirk (BAE Systems, UK)

Lunch

14:00 – 15:30 Session E: Instrumentation II

- E-1 Development of a Flexible Flight Test Instrumentation System
A. Muis, J. Oliveira, K. van Woerkom, J.A. Mulder (Delft University of Technology, NL)
- E-2 Nephelometer: a Flight Test Probe for Cloud Characterisation
S. Roques (AIRBUS, FR)
- E-3 Development of a Dynamic Self Configuring Data Acquisition System in a Distributed Multi Node Aircraft Environment
M. Bastian (National Research Council of Canada NRC, CA)

Break

15:45 – 17:15 Session F: Wake Vortex Testing I - EU Research Programs

- F-1 Wake Vortex Flight Testing: Experience from Wake Vortex related Flight Trials by NLR
A.K. Karwal (National Aerospace Laboratory NLR, NL)
- F-2 Awiator Instrumentation - A Large-scale Application to A340
P. Girard (AIRBUS, FR)
- F-3 Development of a Multi Camera System for Flap Gap Observation in Flight Testing
T. Kirmse, B. Stasicki, J. Kompenhans (German Aerospace Centre DLR, GE)

20:00 – 22:30 Symposium dinner

Wednesday 14 June

09:00 – 10:30 Session G: Validation and Qualification Testing II

- G-1 Using Variable-Stability Aircraft to Demonstrate Autonomous Aerial Refueling
J.L. Minor, B.A. Kish, E.T. Waddell, S.M. Ross (US Air Force, Edwards AFB, US)
- G-2 Combined Systems Integration and EF-18 OFP 06 Validation and Verification Process in the Spanish Air Force
A. Alonso-Menéndez, R. Gómez-Blanco (Centro Logístico de Armamento y Experimentación CLAEX, ES)
- G-3 On-Board Flight Test Facilities for Helicopter-Ship Qualification Testing
P.J.A. Booij, E.J. Smit, A.J. Striegel, J. van der Vorst (National Aerospace Laboratory NLR, NL)

Break

11:00 – 12:30 Session H: Wake Vortex Testing II - Other programs

- H-1 JAS39 Gripen Wake Vortex Penetration Flight Testing
H.-E. Hanson (SAAB AB, SW)
- H-2 Feasibility Study: Helicopter Blade Tip Vortex Positions Measured in Free Flight by Means of Stereoscopic Background Oriented Schlieren Method (BOS)
F. Klinge, M. Hecklau, M. Raffel, J. Kompenhans, U. Göhmann (German Aerospace Centre DLR, GE)
- H-3 Eurofighter Wake Penetration Trials
M. Hinterwaldner, B. Mueller (EADS Military Air Systems, GE)

Lunch

Afternoon – Technical Tour to Stork Aerospace

(Development, design, test and production of large integrated structural sections of aircraft in GLARE as applied on the A 380)