

Autumn 2010 Flight Simulation Conference

The Challenges for Flight Simulation – The Next Steps

Wednesday 17 - Thursday 18 November 2010

No.4 Hamilton Place, London W1J 7BQ, UK



CALL FOR PAPERS

Synopsis

Has Flight Simulation technology reached a plateau? Are there still challenges to be resolved?

The Royal Aeronautical Society Flight Simulation Group believes there are many challenges in Flight Simulation, and has organised this Conference to identify them and some possible solutions. One major challenge is to rationalise the variety of Flight Simulation Training Devices (FSTD) used in pilot training based on training need. Results will be presented from the International Working Group organised by the RAeS, known as the IWG-H, which has addressed the definition of FSTDs for helicopters. The results take the form of guidance material to be published as ICAO 9625. This will be the first time that FSTDs for rotary wing aircraft have been addressed in this way.

Two sessions of the Conference will be dedicated to the detailed reporting of both the Technical and Training sub-groups of IWG-H. The sessions will address the approach taken to analysis the training requirement and develop the rationale for a suitable range of FSTDs that can deliver training in all of the phases of helicopter piloting skills development.

Those not engaged in the IWG-H process are also encouraged to submit additional relevant material in response to this Call for Papers. Additional topics might include the modelling of rotary wing flight performance and the access to and use of data, particularly when addressing lower order FSTDs.

In its second main theme, the Conference will address some of the further challenges that face the flight simulation industry as advances in technology offer increased capability.

Beyond simulation technology we have new directions for aviation itself that includes the proliferation of the Unmanned Aircraft System (UAS). The range of tasks that are addressed by a UAS extends daily, as does the desire to operate them alongside other forms of aviation, both civil and military. What capability does flight simulation need to offer to research and train for this challenge?

Instructions to Authors

The Organising Committee invites prospective authors to submit abstracts of original work for presentation at the Conference. Abstracts of 200 - 500 words should be submitted in electronic format only **by Friday 30 April 2010**. Selection will be made on the abstract content and applicability to the final published programme requirement.

Accepted scripts and presentations, fully cleared for publication and presentation should be submitted **by Friday 5 November 2010**.

All written papers will be included in the CD Conference Proceedings and made available to delegates. Accepted papers may also be considered for inclusion in the Royal Aeronautical Society's Aeronautical Journal, subject to the refereeing process.

This Royal Aeronautical Society Flight Simulation Conference will seek to identify how the challenges of flight simulation are being addressed by simulation technology and the application of innovative solutions to;

- Image Generation and Display and Image Correlation
- Database Generation and Maintenance
- Interoperability and the integration of Live, Virtual and Constructive simulations
- Instructor Qualification and Accreditation
- Instructor Operating Stations and Lesson Management
- Simulation Latency in an FSTD or between networked devices
- Motion Cueing and Cue Integration
- Simulation and Simulator Testing and Validation
- Maintaining Concurrency with the simulated aircraft type
- Air Traffic Simulation and automated voice dialogues
- Airborne Embedded Simulation and its integration with other elements of flying and operational training systems
- UAS simulation and its integration with other training, research and experimental simulations
- The Simulation of Military Communications, including Data Exchange, in Flight Simulation and Synthetic Environments

Key Dates & Deadlines

Abstracts submitted by:	30 April 2010
Authors notified by:	May 2010
Programme Circulation	June 2010
Presentations / papers submitted	5 Nov 2010
Conference	17 – 18 Nov 2010

For more information visit

www.aerosociety.com/conference

It is important to note that Papers should not have been published previously and they should avoid marketing or sales content that is not appropriate.

Please send abstracts (quoting ref: 650) by Friday 30 April 2010 to:

emma.brown@aerosociety.com

Organising Committee

This conference is being organised by the Royal Aeronautical Society's Flight Simulation Group. The Conference Committee responsible for planning the programme comprises:

- Steve Adlem – Chairman
- Matt Jennings
- Stefan Sandberg
- Jack Shlien
- Barry Tomlinson

Conference and Events Department

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Take an active part in the aerospace community

The Royal Aeronautical Society's unique ability to stimulate discussion and exchange ideas is becoming ever more relevant with the need to harness the diverse nature of the industry into a cohesive entity.

Why the RAeS?

- The RAeS is globally recognised as the only professional institution dedicated to the entire aerospace community
- As a not-for-profit organisation we are committed to reinvesting back into industry through scholarships, the National Aerospace Library and the only aerospace careers centre in the UK

Corporate Profiling Opportunities & Exhibition Space

Exhibition space will be available for material related to the Conference. For further details on this and other promotional opportunities, such as sponsorship during the Conference, corporate inserts in delegate pack and so forth, please contact the Conference Department at the address below.

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