

CALL FOR PAPERS



**ROYAL
AERONAUTICAL
SOCIETY**

Structures & Materials Group Conference

3RD AIRCRAFT STRUCTURAL DESIGN CONFERENCE

DELFT UNIVERSITY, THE NETHERLANDS / 9-11 OCTOBER 2012

The Conference seeks contributions covering current research and thinking focused on the design and manufacture of future and civil military air-vehicle structures, both manned and uninhabited. The scope includes consideration of innovative forms and design scenarios required to sustain a growing industrial sector in a world increasingly concerned with the threat of climate change.

The conference will cover the challenges resulting from consideration of the complete aircraft life cycle from initial concept to final disposal. This broad range includes design with manufacturing/cost constraints, high volume/low cost manufacture and easy re-use/disposal considerations.

These challenges need complex and innovative design solutions that often require the use of interdisciplinary and dynamically interactive design methods. In addition, today's design teams are multinational, being distributed across continents or the globe, and the computational methods must be able to support a distributed work environment. The control of such complexity in the designs and the design process is a major issue that the conference wishes to address.

Contributions are sought covering the advanced and innovative structural concepts together with the design methodologies and computational techniques required to support the design of current and future aircraft.

A special session in the conference will be devoted to the role of structural mechanics in aircraft design to commemorate the revival of the Koiter Institute at the Delft University of Technology. The Institute was formed in honor of Professor Warner T Koiter who is known for his pioneering work on the theory of thin-walled structures. Authors are encouraged to submit papers specifically for the session which they believe follow the research paths initiated by Professor Koiter.

INSTRUCTIONS TO AUTHORS

The International Organising Committee invites prospective authors to submit abstracts of original work for presentation at the conference.

Abstracts should be written in English and contain between 200-500 words, preferably in electronic format or typed double spaced on A4 or 8 x 12 inch paper. Authors should submit their abstracts in electronic format only by Monday 26 March 2012. 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 Monday 4 September 2012.

All written papers will be included in the conference proceedings and made available to delegates on a CD Rom or through the Society's web pages. Accepted papers may also be considered for inclusion in the Royal Aeronautical Society's Aeronautical Journal, subject to the refereeing process.

It is important to note that all papers should not have been published previously and should avoid inappropriate sales and or marketing content.

The submission address for prospective papers to be included in the conference is victoria.white@aerosociety.com

Technical enquiries should be sent to the Chairman of the Organising Committee via the RAeS Conference & Events Department.
Email: victoria.white@aerosociety.com
Phone: +44(0)20 7670 4345

KEY DATES AND DEADLINES

- Abstracts submitted by: 26 March 2012
- Authors notified by: 20 April 2012
- Programme Circulation: June 2012
- Presentations / papers submitted: 10 Sept 2012
- Conference: 9-11 October 2012

CONFERENCE AND EVENTS DEPARTMENT

Royal Aeronautical Society
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www.aerosociety.com/events

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RAeS Structures & Materials Committee

3RD AIRCRAFT STRUCTURAL DESIGN CONFERENCE

CONFERENCE TOPICS

DELFT UNIVERSITY, THE NETHERLANDS/ 9-11 OCTOBER 2012

Structural designs for the next generation of aircraft

- To meet the environmental challenges
- To meet high volume traffic requirements
- To meet high volume manufacturing requirements
- To meet cost and requirement constraints
- To meet emerging requirements for improved safety and crash worthiness
- To reduce time to market

Design with novel or advanced materials

- Innovative use of CRFP including aeroelastic tailoring
- Re-cycling and re-use of CRFP
- CRFP structural design for maintenance and repair
- Role of GLARE and other fibre-metal laminates (Centra1, TiGrE, etc)
- Role for advanced metal alloys
- Novel materials
- Manufacturing with novel materials
- Certification of novel materials

For further information please visit www.aerosociety.com/events

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