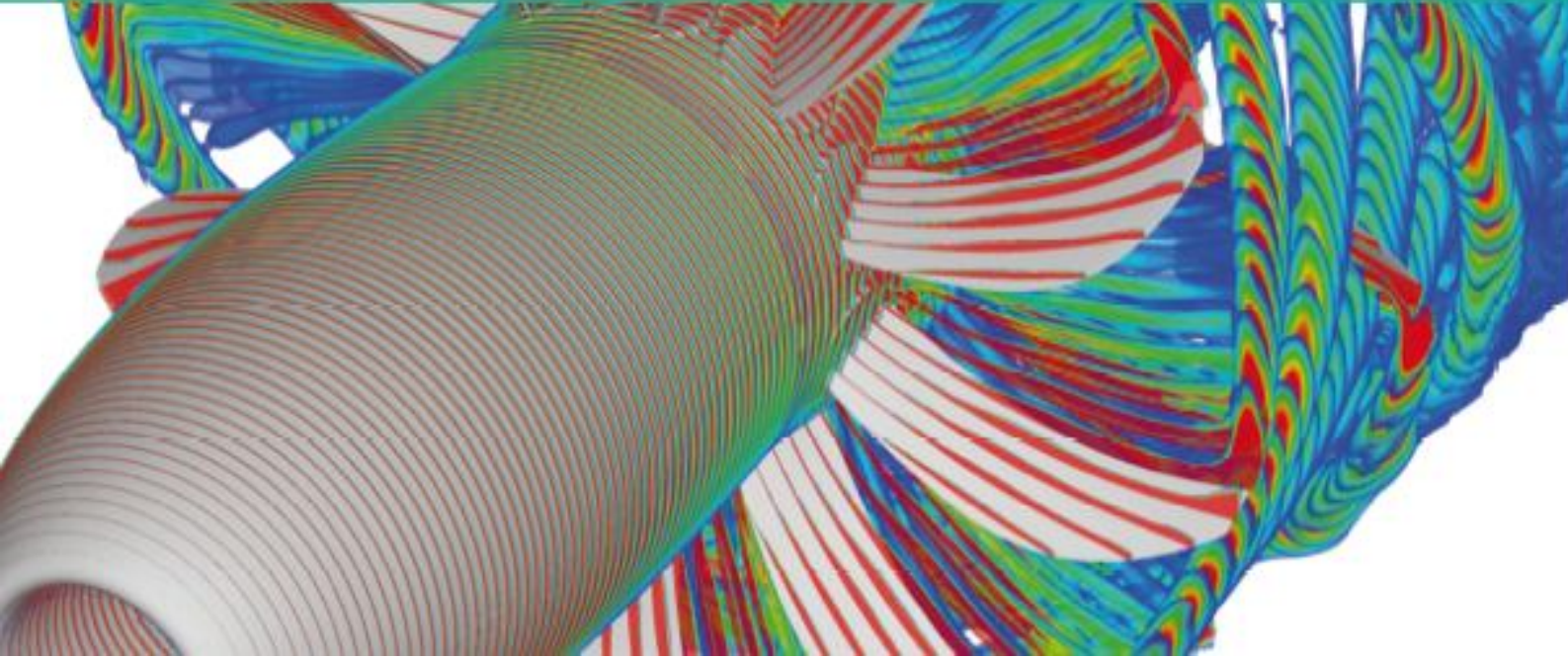


## The Greening of Aircraft Propulsion – Progress and Prospects

Wednesday 20 October 2010

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



**If air travel is to survive and prosper in the medium to long term it is understood that its environmental impact needs to be minimised. A key element in this is clearly the aircraft propulsion system, where the conversion of chemical energy to kinetic energy takes place. The European Commission has part funded a number of Technology Demonstration Programmes aimed at improving the efficiency of aircraft propulsion. The conference will review the VITAL, DREAM and NEWAC programmes from the EC Framework 6 and Framework 7 programmes.**

The conference will also tie-in the broader concerns surrounding the development and use of biofuels. Are they likely to be the effective mitigator of aviation's environmental impacts? What will be the economic and technological drivers for their adoption? Can they be produced sustainably and in the necessary quantities?

The conference will also consider how best to incentivise industry to invest in and develop technologies needed to continue - or accelerate - the progress already made in reducing the environmental impact of aircraft propulsion. What is the role of government and regulation?

The conference is jointly organised and promoted by the RAeS Greener by Design group and the RAeS/IMEchE Combined Propulsion Technical Activity Committee.

### **SPONSORSHIP & EXHIBITION SPACE**

Various sponsorship, exhibition and corporate profiling opportunities are available in connection with this Conference. For more information or to discuss these packages, please contact Hinal Patel-Bhuya in the Conference & Events Department on +44 (0)20 7670 4342 or email [Hinal.Patel-Bhuya@aerosociety.com](mailto:Hinal.Patel-Bhuya@aerosociety.com).



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## PROGRAMME

08.30 *Registration / Tea and Coffee*

09.00 **Welcome and Opening Remarks**  
David Couzens, President, Royal Aeronautical Society

### Session 1: **VITAL & DREAM**

09.10 **(1) Title tbc**  
Mr Frank Noppel, Chief Executive Officer, Ambeo PLC

09.40 **(2) Overview of the validation of Radical Engine Architecture systems (DREAM) Programme (EC 7<sup>th</sup> Framework Programme)**  
Andrew Bradley, Chief Design Engineer – Civil Technology Programmes, Rolls-Royce

10.10 **(3) DREAM Sub-Programme 5 – Alternative Fuels**  
Pierre Baude, Research Project Engineer, Turbomeca

10.40 *Coffee and Networking Break*

### Session 2: **BIOFUELS**

11.10 **(4) Environmental Impacts, Fuel by Fuel**  
Dr Ausilio Bauen, Director, E4Tech  
Jeff Gazzard, Aviation Environment Federation

**(5) Economics – Current/Projected Production Costs; When Will a Cost-effective Adoption Point be Reached?**  
Gregory Elders, Director of Research, EQ2

**(6) The Path to the Optimal Biofuel**  
Jonathon Counsell, Head of Environment, British Airways

**(7) Impact on R&T - Will the Prospect of a Biofuel 'Remedy' Divert Manufacturers from Accelerating --- Development of Nextgen Technologies?**  
Dr James Kinder, Technical Fellow, Boeing Commercial Airplanes

11.45 **Discussion moderated by Mark Pilling, Editor, Airline Business**

12.40 *Lunch*

### Session 3: **NEWAC (New Aero Engine Core Concepts)**

13.30 **(8) Overview of the NEWAC Programme (EC 6<sup>th</sup> Framework Programme)**  
Dr Jörg Sieber, Senior Consultant Innovations Management, MTU Aero Engines GmbH

14.00 **(9) NEWAC Sub-Programme 1 – Whole Engine Assessment**  
Andrew Rolt, Senior Systems Specialist, Rolls-Royce

14.30 **(10) NEWAC Sub-Programme 2 – Intercooled Recuperative Engine**  
Dr Stefan Donnerhack, Advanced Product Design, MTU Aero Engines GmbH

15.00 *Coffee and Networking Break*

### Session 4: **INCENTIVISING ACCELERATED DEVELOPMENT OF NEXTGEN TECHNOLOGIES**

15.15 **(11) Anticipated Contribution of Propulsion Technologies to Overall Potential Improvement in Climate Change Impact**  
Dr John Green, Greener by Design Committee, Royal Aeronautical Society

**(12) Attainability of ACARE Targets. What next for ACARE?**  
Dr Ray Kingcombe, Deputy Director Technology, Aerospace & Defence, Department for Business, Innovation & Skills

**(13) What Will it Take: Market Conditions; Regulation; Fiscal/Subsidy Incentives?**  
Gary Crichlow, Senior Aviation Analyst, ASCEND

15.40 **Discussion moderated Prof Ian Poll, Greener by Design, Professor of Aerospace Engineering at Cranfield University and Technical and Business Development Director of Cranfield Aerospace**

17.20 **Close of Conference**

*If you are interested in exhibiting or sponsoring this conference please email [Hinal.Patel-Bhuya@aerosociety.com](mailto:Hinal.Patel-Bhuya@aerosociety.com)*

*Programme is subject to changes*

