

UK Magnetics Society

One day seminar

Electrical Drive Systems for the More Electric Aircraft

Thursday, 14 April 2005

at University of Bristol

Co-sponsored by the Institution of Electrical Engineers

Developments in high performance electric actuation and embedded generation concepts are leading to increasing confidence in the adoption of these technologies on new civil and military aircraft platforms. Electric drive technologies offer significant benefits over established mechanical or hydraulic systems, including improved reliability, lower maintenance and higher energy conversion efficiencies. This one-day seminar will present the current status and explore future developments in aircraft electrical actuation and generation systems through a series of presentations from leading industrial and academic experts. The programme below will be accompanied by additional poster presentations and a set of abstracts of the presented papers will be available on the day.

PROGRAMME

0930 AGM [members only]

from 0900 REGISTRATION/COFFEE

Chairman: Prof Phil Mellor, Dept of Electrical & Electronic Engineering, University of Bristol

1015 WELCOME/INTRODUCTION

1020 *The More Electric Aircraft*, Graham Dodds, Airbus UK Ltd

1050 *Permanent Magnet Modular Machines: New Design Philosophy*, Dr John Cullen, Rolls-Royce plc

1120 *Development and Initial Test Results of the Fan Shaft Driven Generator*, Dr Tadashi Sawata, Goodrich Corporation

1150 *High Temperature Switched Reluctance Starter/Generator for the 'More-Electric' Engine*, Dr David J Powell, University of Sheffield

1220 LUNCH

Chairman: Prof Barrie Mecrow, School of Electrical, Electronic & Computer Engineering, University of Newcastle-upon-Tyne

1400 *HEAT (Helicopter Electromechanical Actuation Technology)*, Westland Helicopter Limited

1430 *The Distributed Electrical Actuation of Aircraft Flaps and Slats*, Graham Mason, BAE Systems/Keith Everndon, FR-HiTemp Ltd/John Bennett, University of Newcastle-upon-Tyne

1500 *A High Power Rudder EMA with an Integrated Machine and Matrix Converter Design*, Dr Keith Bradley, University of Nottingham/Chris Whitley, Smiths Aerospace Mechanical Systems

1530 *Electromagnetic Loss Reduction in Fault Tolerant Machines for Aircraft*, Glynn J Atkinson, University of Newcastle-upon-Tyne/Brian Green, Goodrich Engine Control Systems

1600 *Factors Influencing the Design of Electro-Hydraulic Actuators*, Prof Phil Mellor, University of Bristol/Dr Parminder Sangha, Goodrich Corporation

1630 END/TEA

Note: Those attending the Twentieth Unmanned International Air Vehicle Systems Conference (UAVs) at the University of Bristol, 11-13 April 2005, may attend the above co-sponsored UK Magnetics Society/IEE one-day seminar at the member rate.

The UK Magnetics Society accepts no responsibility or liability in any way whatsoever for any statements made or opinions expressed during this event

PLEASE COMPLETE AND RETURN TO:

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I wish to attend the co-sponsored UK Magnetics Society/IEE one-day seminar *Electrical Drive Systems for the More Electric Aircraft*, Thursday, 14 April 2005, at University of Bristol, and enclose remittance to cover technical sessions, seminar documentation, refreshments and lunch (cheques made payable to 'The UK Magnetics Society' and drawn on a UK bank). Payment may also be made by bank transfer: The UK Magnetics Society, Barclays Bank plc 17 Market Place, Wantage, Oxon OX12 8AG, UK, Account No 50893293, Sort Code No: 20-90-91; please add on £10 to cover bank charges if paying by bank transfer from overseas.

If you wish to be invoiced, please give Purchase Order number, if appropriate. PO Number.....

If you wish to pay by VISA/Mastercard/Delta etc, please complete all sections of the form overleaf.

	Fee	VAT	TOTAL
<input type="checkbox"/> UKMAG/IEE/UAV attendee	£67.37	£11.79	£79.16
<input type="checkbox"/> As above [student member]	£32.89	£5.75	£38.64
<input type="checkbox"/> Non-member	£142.16	£24.88	£167.04
<input type="checkbox"/> Non-member student	£54.10	£9.47	£63.57

I wish to make a poster presentation

Please register by 1 April if possible

Surname.....

First name.....Title (Dr/Mr/Mrs etc).....

Organisation.....

Address.....

Tel.....

Fax.....

Email.....

Web.....

