SPEAKER BIOGRAPHIES

General Aviation Conference

ADVANCED DESIGN OF LIGHT AIRCRAFT

CURRENT AND FUTURE DESIGNS

LONDON / 14 NOVEMBER 2016

CHAIRMAN: DAVID STANBRIGE MRAeS, MANAGING DIRECTOR, SWIFT TECHNOLOGY GROUP LTD

Dave graduated from City University, London, with a BSc(Hons) in Aeronautical Engineering. After working in the Oil and Gas industry for a period of 10 years an opportunity presented itself for him to get back to his academic roots and fulfil his passion to change the face of the waning British Aviation industry. He set up Swift Technology Group in 2008 which spans a number of industries, including aviation. The Group acquired Europa Aircraft later in that year and they are still supporting the aircraft and further developing one of the UKs most successful light aircraft, the Europa XS.

Most importantly, Swift Aircraft, the Group’s raison d’etre, is currently in the late stages of developing the Swift VLA - a new two seat trainer after successfully securing a substantial investment.

Dave is a keen pilot, an enthusiastic ambassador for British Aviation, a Member of the RAeS and Chairman of the RAeS General Aviation Group.

(1) JOSHUA MCGOWAN, CFD ENGINEER, SWIFT AIRCRAFT

Joshua joined Swift Technology Group in 2012 after obtaining his BSc in mathematics from the University of East Anglia and his MSc in computational methods for aeronautics from Imperial College London. Joshua is an Aeronautical and CFD engineer who has worked on various fluid dynamics research and design projects. As part of the design team for the Swift VLA, which is due to have its first flight next year, Joshua's main objective has been optimisation of the aircraft’s aerodynamics and performance. By using CFD and other methods he has helped Swift Technology Group design what will be an exciting and high performing multi-functional light aircraft.

(2) DAVID LUNN, TECHNICAL DIRECTOR AND ROSS C CAMPBELL, GRADUATE STRESS ANALYST, FINEUNIT LTD

David graduated from Cranfield in 1987 with an MSC in Aircraft Design. David worked in the future projects office on the Jetstream 41 and then in the Stress office on the BAe Hawk. Fineunit Ltd was set up in 1991 for David to use while contracting at various companies, De Havilland in Sydney and Slingsby Aviation on the T67 Firefly being examples. David then spent two years as Chief Engineer on the OPUS 280 VLA aircraft in Sweden successfully gaining certification to that code in 1995. On David’s return he continued to work as a contract stress engineer at various companies gaining a wide experience in many different types of aircraft and marine structures. Fineunit opened its own office in 2000 and has varied customers performing aircraft modifications, equipment & aerial installations, thrust reversers and light aircraft – most recently with Swift aircraft. David is a Structures CVE and Fineunit Ltd has preferred supplier status with SAFRAN.

Ross graduated with a MEng in Mechanical Engineering with Aeronautics from the University of Glasgow in July 2015. At the request of the British Gliding Association he completed a Life Extension Study of the Venture T2 Motor Glider for his Masters project, for which he was awarded the Institution Best Project by IMechE. Since graduating, he joined Fineunit Ltd. and has primarily been working on the Swift Aircraft project, providing structural analysis of the fuselage using FEA modelling and hand calculations.

(3) DR PAUL ROBERTSON, LECTURER, DEPARTMENT OF ENGINEERING, UNIVERSITY OF CAMBRIDGE

Dr Paul Robertson has been a lecturer in Electrical Engineering for over 20 years – covering a range of topics spanning radio frequency circuits, sensors and instrumentation and hybrid-electric power systems. Prior to that he worked in industry for about 10 years and was previously sponsored through his engineering degree by

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Lucas Aerospace. He has published over 60 technical papers and patents on his research work. He is also a pilot and flies the SkyRanger he built; when time and weather permit. Over the last 10 years he has designed and built several electric and hybrid-electric aircraft in the SSDR category, starting with the twin electric Lazair conversion, in collaboration with Flylight Airsports.

(4) HOWARD TORODE, BRITISH GLIDING ASSOCIATION TECHNICAL OFFICER
Howard Torode is a career aeronautical engineer, having graduated from Imperial College London, and is an engineer graduate of a national test pilot school. During his professional career he worked for both RAE and MoD. He has a long standing commitment to the sport of soaring, including an interest in the design and airworthiness of sailplanes. The has been a member of the British Gliding Association’s Technical Committee since 1973, and is the current Chairman. This body has been responsible for the national certification of all UK sailplanes since its inception in the 1930’s, and continues to operate in a similar role under new European EASA regulation. He also represents UK and European Gliding Union in negotiation of revised rules on certification and airworthiness rules for sailplanes at EASA. He is a member of the RAeS GAG group and served on the negotiation of the Experimental Category rules.

(5) BARRY JONES, MANAGING DIRECTOR, BULLDOG AUTOGYRO
Barry Jones is a former military helicopter pilot and instructor. Whilst rotors are his love, autorotation is his passion. Having served all over the world as an Army Air Corps pilot, Barry found himself serving in Northern Ireland, yet again. This time not in a Bomb Disposal Team, nor as the “Aviation Commander – South Armagh”, not even as a Special Forces pilot, all of which he had done before, this time, he was the Chief Flying & Tactics Instructor.

In his role with 5 ‘manned airborne surveillance’ Regiment, Army Air Corps, he was responsible for providing aerial surveillance through a fleet of helicopters and aeroplanes to all the theatres the Army operated in, during his tenure. It was with this knowledge base that he decided, after 26 years service, to leave the Army and develop what he believes is, aviation’s best kept secret. The Autogyro. Having been introduced to the Autogyro when he was an Electronic Warfare Officer, Barry purchased his own secondhand Autogyro and with team of Royal Electrical & Mechanical Engineers (REME) they rebuilt the aircraft and with its maiden flight he reset the World Autogyro Ranger Record having taken it from his friend the late Wg Cdr Ken Wallis MBE. But it was in the field of aerial surveillance that Barry found the Autogyro’s forte. TSAT BMD technology research on T45, the FireShadow loitering munition, the BAE SYSTEMS Wildcat autonomous vehicle, and TALON the one of the UK’s first commercial ANPR systems.

(6) PHIL SPIERS FRAeS, HEAD OF AMRC LABORATORIES, ADVANCED STRUCTURAL TESTING CENTRE, UNIVERSITY OF SHEFFIELD
Phil Spiers is Head of Structural integrity at the Advanced Manufacturing Research Centre at Sheffield University. After gaining a mechanical engineering degree at the Hatfield Polytechnic, Phil has spent the past 27 years working in product validation and manufacture in the aerospace industry for Rolls Royce, Martin Baker and Messier-Bugatti-Dowty. Since joining the AMRC 6 years ago he has developed the laboratory capability to a certified and accredited structural test facility – the only such university facility to have UKAS accreditation for in house developed methods. Phil is a Chartered Engineer and a Fellow of the Royal Aeronautical Society. He is Chairman of the Sheffield Branch of the Society and a member of the RAeS Structures and Materials group.

(7) DOMINIQUE ROLAND, HEAD OF GENERAL AVIATION AND REMOTELY PILOTED AIRCRAFT SYSTEMS, EASA
Dominique started his career as a chief pilot of the less Alie
du Maine in 1980 and then moved onto working for Avions MURDY until 1996. He then worked for CAP Aviation as Technical Director and subsequently CEO until 2003. In 2005 Dominque joined EASA as a DOA Team Leader and after 8 years moved onto his current position as the Head of the General Aviation Department.

(8) ALEXANDER ELLIN MRAES, SENIOR LECTURER AEROSPACE ENGINEERING, UNIVERSITY OF TEESIDE
Dr Alex Ellin is a Chartered Engineer and Principal Lecturer in Aerospace Engineering at Teesside University. Following more than 20 years in the Royal Navy as an Air Engineering Officer working principally on rotary wing aircraft, he then spent 10 years in industry working on the development and production of high precision measuring equipment. He has a PhD in helicopter interactional aerodynamics and has spent the last 7 years teaching aircraft design and related topics at both undergraduate and postgraduate level.

(9) MARK SHORTMAN, POLICY MANAGER, CIVIL AVIATION AUTHORITY
After a career within the UK Aerospace Sector latterly as a Head of Design at a CAA approved organisation, Mark Shortman joined the CAA in 1997 as a Certification Design Surveyor. In his 19 year career to-date with the CAA, Mark has has worked within the Airworthiness disciplines on projects and company approvals ranging from wide-bodied airliners to microlights, gyroplanes and hot-air balloons and airships and latterly on policy and strategy matters.

He was one of the first staff to join the newly formed General Aviation Unit in 2014 and is now the Manager responsible for Policy and Stakeholder Management.

A self-confessed GA addict and enthusiast, he is a former gliding instructor and has experience of flying Group A aircraft, permit to fly aeroplanes, gyroplanes, hot-air and gas balloons!