Towards a silent aircraft

Professor Dame Ann Dowling

7.30 p.m. 4th, March 2015

Ann Dowling is President of the Royal Academy of Engineering and is also Professor of Mechanical Engineering at the University of Cambridge, where she was Head of the Department of Engineering 2009-14 and ran the University Gas Turbine Partnership with Rolls-Royce 2001-14. Professor Dowling's research is on efficient, low emission combustion for aero and industrial gas turbines and low noise vehicles, especially aircraft and cars.
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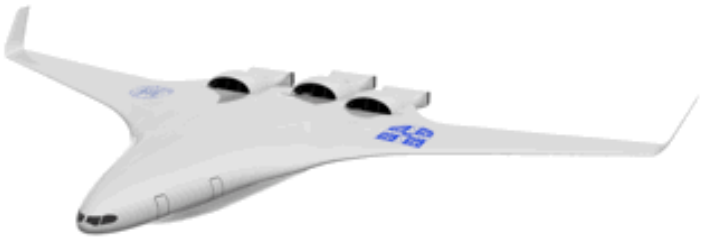
Abstract



Although aircraft noise has reduced considerably since the introduction of high speed jet transport, it is still a major societal concern. In this talk Ann Dowling will discuss what generates noise on modern civil aircraft. For example, on approach the airframe generates as much noise as the engines. Ways in which the noise is being reduced for the next generation of aircraft will be presented, together with techniques to accurately predict the noise and enable design optimisation. In the longer term, a radial re-think of aircraft configuration could bring very substantial noise reductions combined with a reduced fuel burn. In such designs low fuel burn and noise are not achieved by a single design feature but rather through the integration of many technologies into a viable aircraft designed and optimised with a consideration of use.

All lectures take place in Lecture Theatre K3.25, John Anderson Building,
University of Strathclyde, Rottenrow East, Glasgow G4 0NG.

The John Anderson Building is in the pedestrianised area between Rottenrow and Rottenrow East.
Free car parking is available behind the building. From High Street enter Rottenrow East at the Barony.
Refreshments will be served at 9.00pm.

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