



Prof Andrew Rae graduated from Imperial College in 1987 and joined the High-Lift Section of the Aerodynamics Department at the Royal Aircraft Establishment (later DRA, DERA and QinetiQ), Farnborough. His activities there concentrated on the physics of multi-element aerofoils, largely but not exclusively for civil aircraft, including Reynolds-number effects and wake vorticity. Based at the 5m Pressurised Wind Tunnel at Farnborough he was involved in the development and application of wind tunnel corrections and test techniques for low-speed wing design. He has managed tests at over 30 other major facilities in seven countries and worked on projects for Airbus, Boeing and many Formula 1 teams. He was Deputy Chairman of the Technical & Scientific Board of the European Wind Tunnel Association (EWA) and within this framework was the focus for wind tunnel correction and advanced simulation methodologies.

He was a QinetiQ Approved Technical Authority and, as such, the signatory for the aerodynamics clearance of flight test aircraft modified to accommodate trials or upgrade equipment, and became a QinetiQ Technical Fellow in 2008 for his contribution to applied and experimental aerodynamics. He was a member of the Steering Committee of the Smart Fixed-Wing Aircraft element of the European Clean Sky programme aimed at the flight testing of flow and loads control technologies. He has worked on many non-aeronautical applications including road and rail transport, wind engineering and sport.

His first role in academia was as a Royal Academy of Engineering Visiting Professor of Engineering Design at Surrey University. He is currently Professor of Engineering responsible for engineering research and strategy across the University's partners, and holds a personal Chair as Professor of Experimental and Applied Aerodynamics. He is the Chair of the Royal Aeronautical Society's Aerodynamics Specialist Group and is a Visiting Professor at Zhengzhou University of Aeronautics and at Changsha University of Science of Technology, both in China. He continues his aircraft and racing-car design activities, including the 'Phoenix' ultra-long endurance, variable-buoyancy UAV, membership of several Advanced Vehicle Technology panels for NATO, and is currently supervising research in the renewable-energy and bio-fuels sectors.