

ADAM P. HARRIS

Fuel Systems Test Specialist

Airbus UK, EYUIA, Fuel Systems Test Group

EDUCATION

BSc Hons in Materials Science (1999)

University of Coventry

Currently reading for a PhD in Chemical Sensor Sciences at the Faculty of Applied Science, University of the West of England

CAREER PROGRESSION

Mr. Harris has over 13 years of experience working within Aerospace and Automotive industries, focusing principally on materials development, environmental testing and fluid system development. Through industrial sponsorship, he studied the behavior of lightweight transparent materials under high strain rate impact, for development of anti-ballistic and aerospace windshield systems. He has lead environmental and mechanical qualification test programmes on windshield systems for Boeing Apache AH64D, Airbus A320 and Saab 2000 aircraft. As part of a small engineering team at the Motor Industry Research Association Mr. Harris lead investigations into the survivability and performance characteristics of air-fuel charge assemblies subjected to thermo-mechanical stresses. He was instrumental in the development of automotive fuel system testing facilities such that research on gasoline pumping, injection and vapour containment could be conducted.

On behalf of Airbus UK he has lead a number of fuel system development test programmes, most notably, the testing campaign conducted on the A380 Engine Fuel Feed system. He has coordinated experimental research to assist vent area sizing strategies for fuel vapour deflagration scenarios in fuel system test tanks. He was responsible for the successful introduction of non-invasive fluid flow measurement technologies for performance characterization in pressure critical areas of the fuel system. Mr. Harris was a member of the design team who worked in collaboration with external contractors to specify, design and integrate fluid systems within the new Fuel Systems Test Facility at Airbus UK. He was the project leader for the first hot TS-1 refuel of an A380 flight test aircraft. He is presently the Fuel Systems Test Specialist at Airbus UK, Filton, Bristol, responsible for the delivery and technical integrity of fuel system test programmes on all Airbus aircraft.

Through sponsorship from Airbus UK Mr. Harris is currently reading for a PhD at the Faculty of Applied Sciences, University of the West of England. His field of research is in air release from aviation fuels under simulated conditions of aircraft flight. Of principal focus within his research is the use of photochromic techniques to quantify the rate of O₂ release from kerosene under dynamic and quasi-static conditions. Valuable output of the research will be the development and validation of mathematical models to describe and predict O₂ release rate.

