

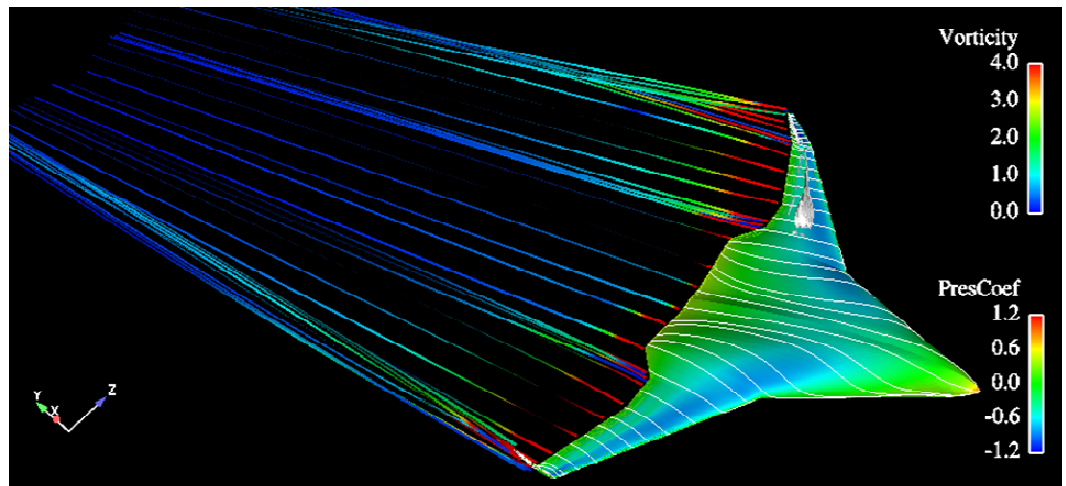
## 27006 Vortex control to reduce drag

### The Technology

Aerodynamics researchers at Sheffield have designed a series of special vortex generating shock control bumps that can substantially reduce the drag on a transport aircraft when cruising at altitude and transonic speed.

The group have previously published papers about the advantages of bumps but recent advances mean that their specially engineered Vortex Generating Shock Control Bumps are tolerant to changes in the angle of attack as experienced by the aircraft as the fuel payload is consumed during long flights.

### *Shock control bump on a blended wing body aircraft at Mach 0.85*



### Intellectual Property

Our patent filing protects the design of specially engineered Vortex Controlled Bumps that are tolerant to changes in aerofoil angle of attack as experienced as the aircraft fuel payload is consumed during long flights.

### The Opportunity

Applications for these engineered bumps could include:

- Substantial reduction in aircraft wing drag
- Improvement in helicopter rotor blade performance
- Improvement to jet engine blade designs to obtain higher engine efficiency

**For commercial enquiries on this technology, please contact Andrew Tingey, quoting reference 27006.**

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