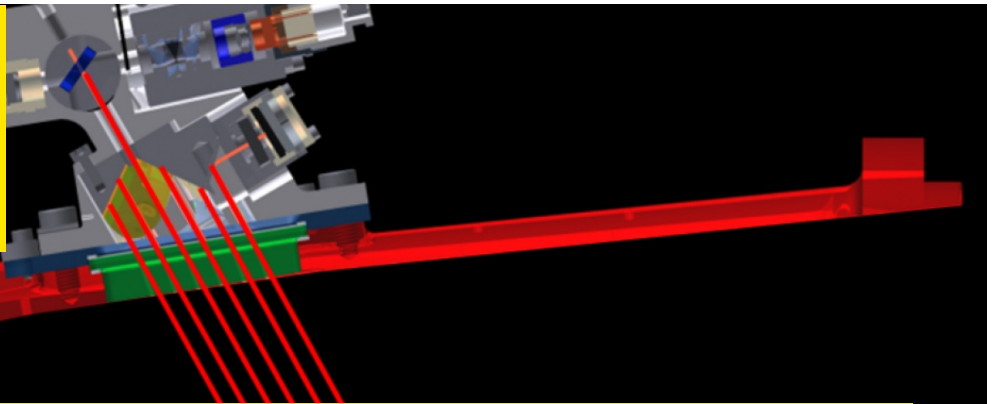




UNSW
SYDNEY



Hypersonic Inlet Sensor

High-speed Mach number and angle of attack sensor for hypersonic vehicles.

Competitive advantage

- Specifically designed for sensing applications in hypersonic flight
- The device is capable of measuring temperature, Mach number, speed and angle of attack for hypersonic vehicles
- Spin-off technology has been patented as an air-speed sensor for subsonic vehicles
- More stealthy and faster response rate than pitot tubes, and able to be used from subsonic to hypersonic flight domains
- Not as susceptible to icing as standard pitot tubes

Impact

- Enhanced control of hypersonic vehicles
- Replacement for pitot tubes in subsonic aircraft and large UAVs

Successful applications

- Flight test associated with the Australian Space Research Program "Scramspace"
- Measured under 20 g acceleration conditions in flight
- Subject to obtaining an export licence, a proposed flight test with the Korean Aerospace Research Organisation KAIST
- Funding from the US Air Force

Capabilities and facilities

- In-house development of all optics, electronics and communications technologies

More Information

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