



## LAPCAT A2 Facts and Figures

### Design mission

Brussels to Sydney (via North Pole and Bering straits to avoid supersonic overflight of Eurasian land mass)

Distance: 18700 km  
Flight time: 4.6 hours (under realistic air traffic control conditions)  
Reserve range: 5000 km @ Mach 0.9

### Payload

300 passengers (plus baggage)

### Vehicle parameters

Gross takeoff mass: 400 tonnes  
Fuel mass: 198 tonnes (liquid hydrogen)  
Fuselage length: 139 m  
Fuselage diameter: 7.5 m  
Wingspan: 41 m  
Wing area: 900 m<sup>2</sup>

### Performance

Mach 0.9 cruise Lift/Drag 11.0 (5.9 km altitude) SFC 96.0 kN/kg/s  
Mach 5.0 cruise Lift/Drag 5.9 (25-28 km altitude) SFC 40.9 kN/kg/s  
Takeoff sideline noise @450m 101.9 dBA

### Costs

Estimated 13 year Development program €22,600 M (2006 prices)  
Vehicle sale price €639 M (assuming production run of 100 vehicles)  
One way ticket price (Brussels – Sydney) €3940

