



High Speed Aerodynamics

Aerodynamic Heating

- Increased temps = decreased metal strengths
- As we near Hypersonic speeds the temps are so high that normal materials will melt
- Research today is in this area with ceramics and composite materials

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- Compressibility Effects
- Importance of the Speed of Sound
- Realms of Flight
- Supersonic Flow Patterns
- High Speed Airfoils
- Critical Mach Number
- Aerodynamic Heating

