



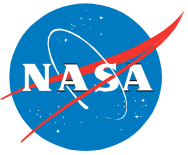
EXPLORE FLIGHT

WE'RE WITH YOU WHEN YOU FLY

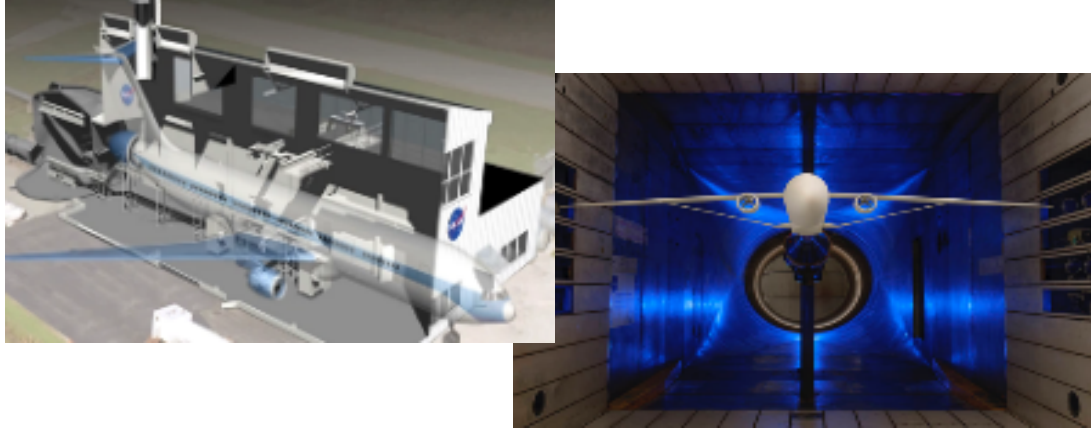
Advanced Air Vehicles Program

June 2020

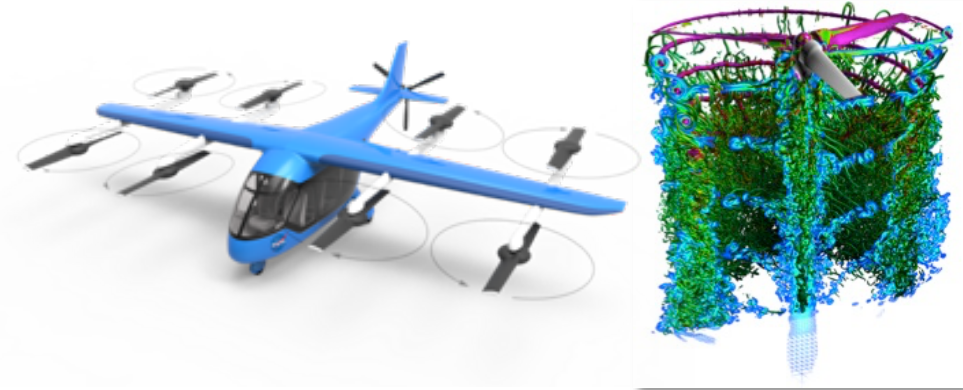
Advanced Air Vehicles Program



Cutting-edge research that will generate innovative concepts, technologies, capabilities & knowledge to enable revolutionary advances for a wide range of air vehicles



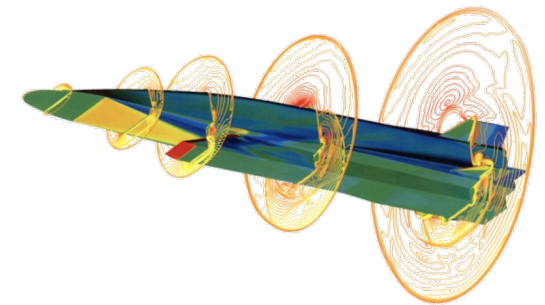
Advanced Air Transport Technology Project



Revolutionary Vertical Lift Technology Project



Commercial Supersonics Technology Project

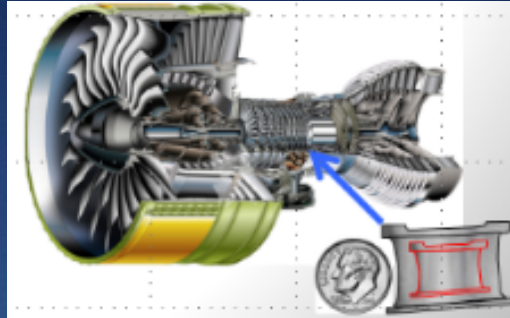


Hypersonic Technology Project

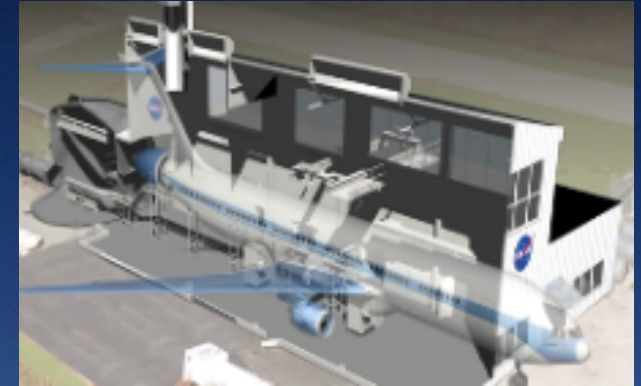
Advanced Air Transport Technology



Create new “S” curve for the next 50 years of subsonic transports



Small Core Gas Turbine
5%-10% fuel burn benefit



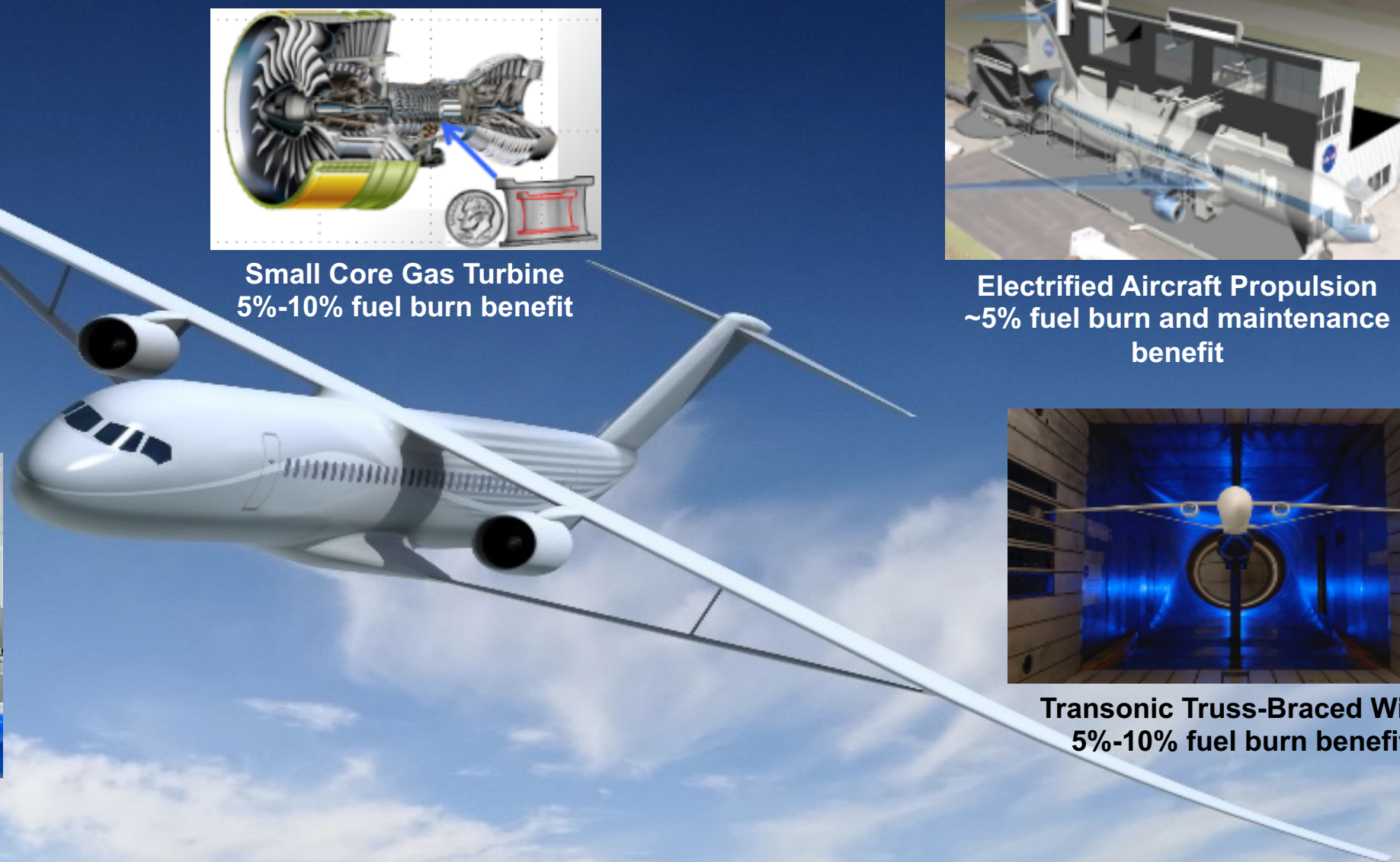
Electrified Aircraft Propulsion
~5% fuel burn and maintenance benefit



High Rate Composites
6x manufacturing rate increase



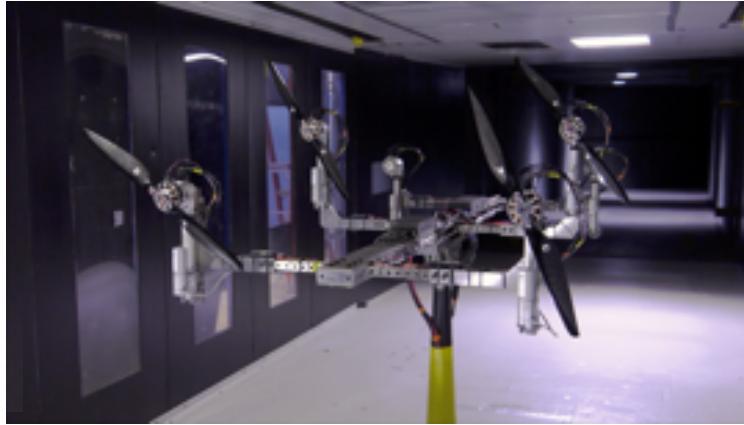
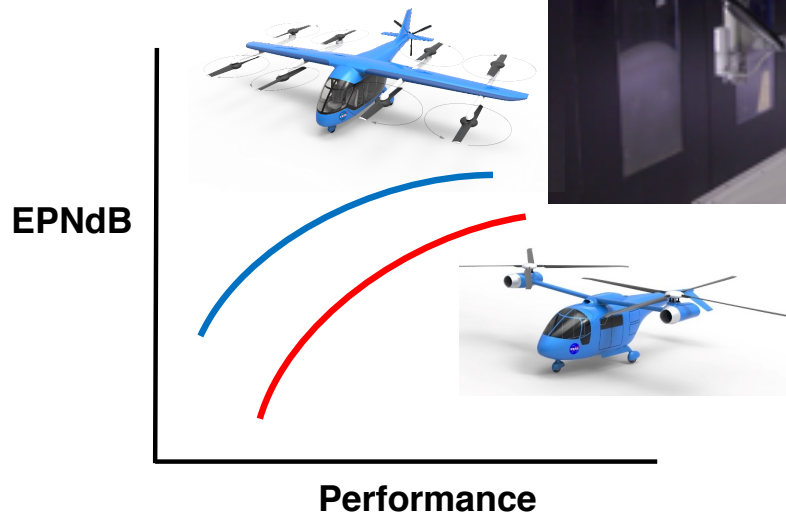
Transonic Truss-Braced Wing
5%-10% fuel burn benefit



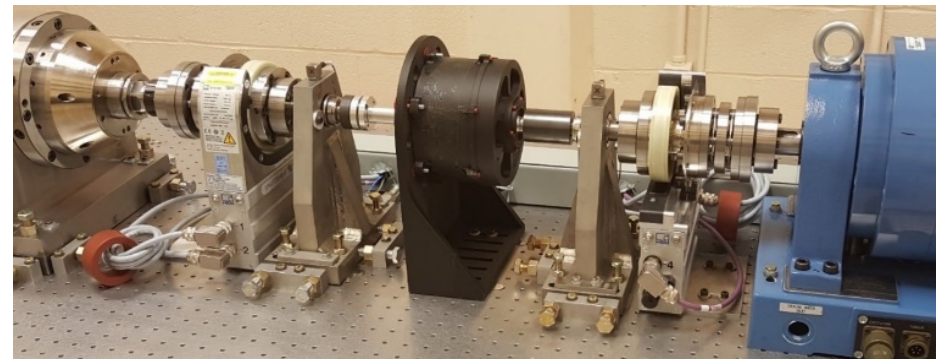
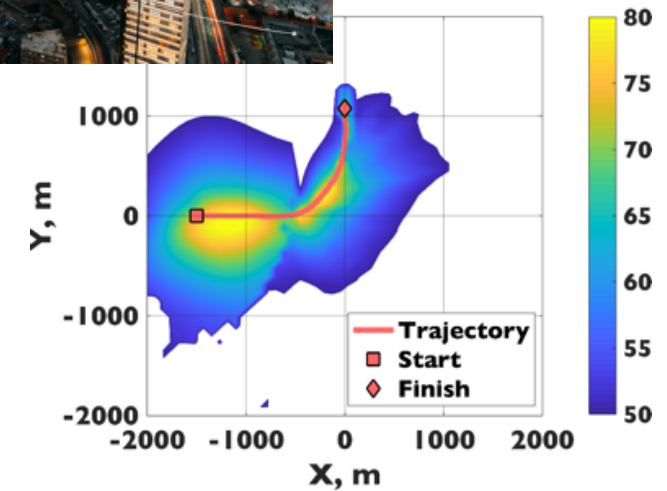
Revolutionary Vertical Lift Technology



Noise & Performance of Multi-Rotor Vehicles

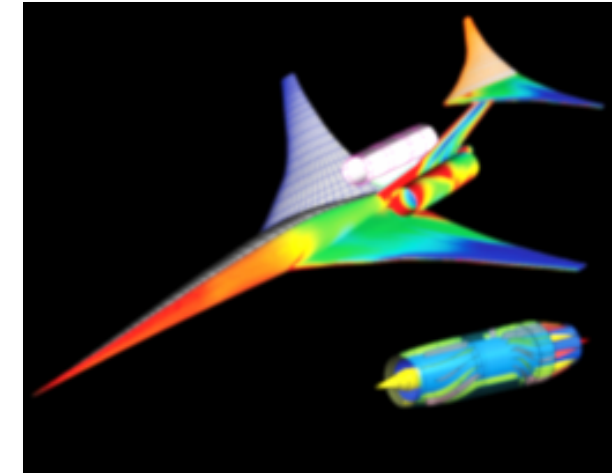
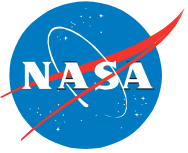


Fleet Noise

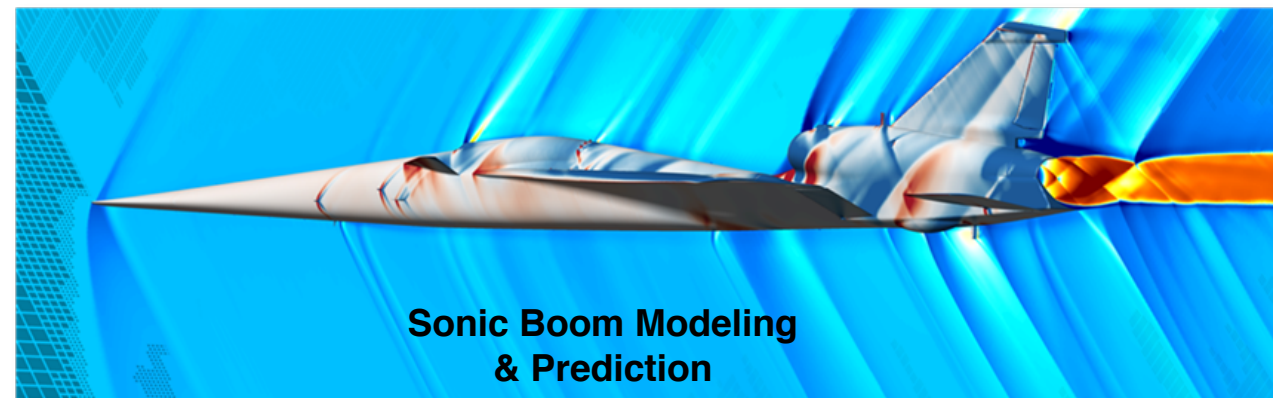


Reliable & Efficient Propulsion Components

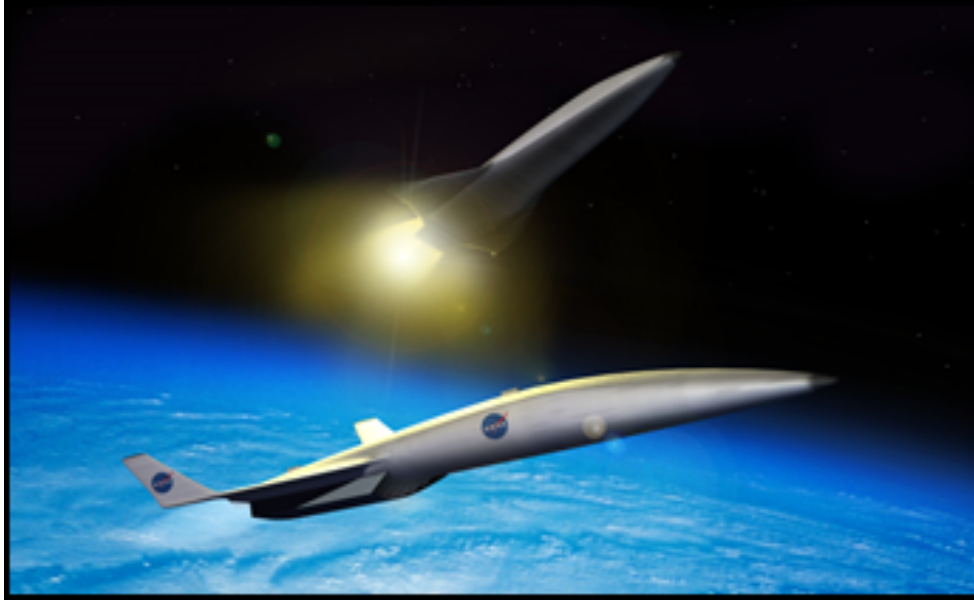
Commercial Supersonic Technology



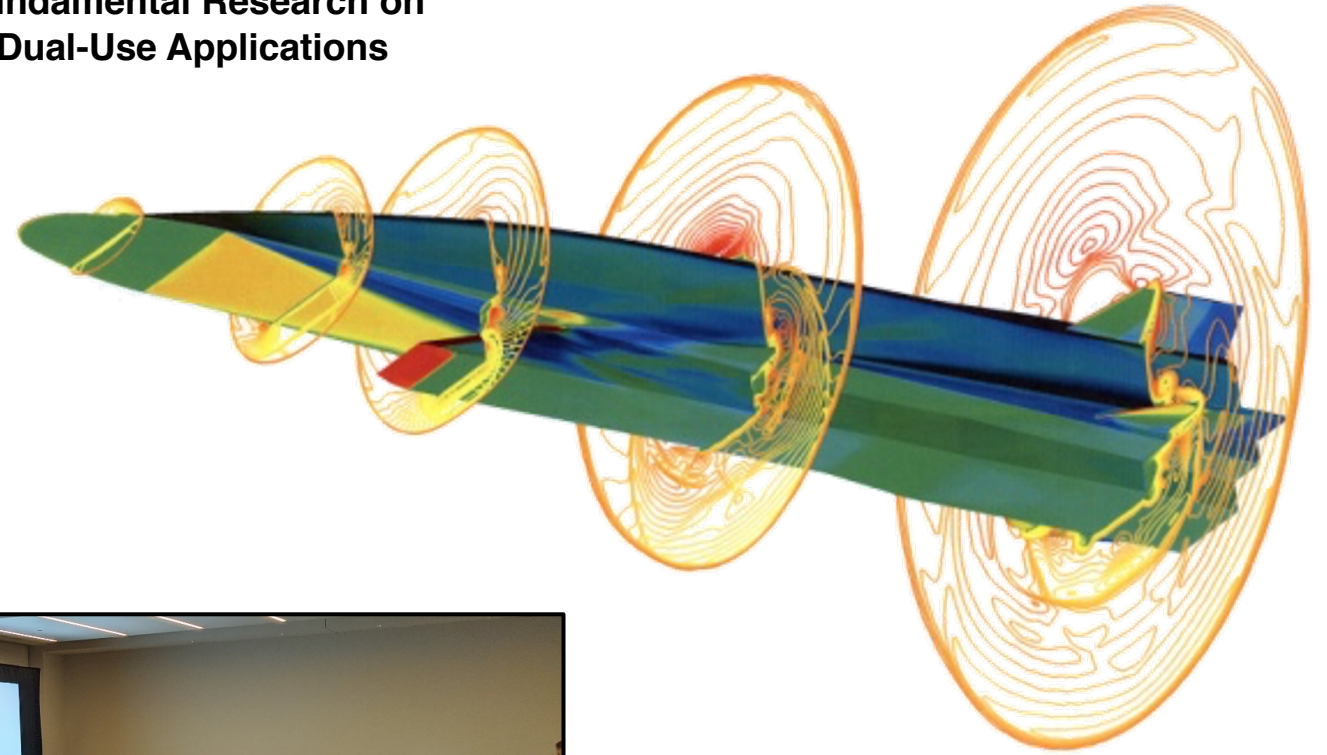
**Supersonic Aircraft &
Engine Modeling**



Hypersonic Technology



**Fundamental Research on
Dual-Use Applications**



**Industry Engagement on Future
Commercial Hypersonic Vision**

Strong DoD Partnership

A New Era of Flight Is Emerging

Breaking down barriers to open new markets, advance U.S. competitiveness, and make air travel better for all Americans and for people around the world

Electrified Aircraft Propulsion

Making air travel cleaner, quieter, and more affordable

Advanced Air Mobility

Allowing people to move about more easily

Commercial Supersonic Flight

Connecting people faster

Hypersonic Flight

Enabling a future vision for hypersonic transport

