
# Advanced Air Vehicles Program
# Opening New Aviation Markets for U.S. Leadership

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# NASA Aeronautics – Vision for Aviation in the 21st Century


ARMD continues to evolve and execute the Aeronautics Strategy *https://www.nasa.gov/aeroresearch/strategy*

6 Strategic Thrusts

- Safe, Efficient Growth in Global Operations
- Transition to Alternative Propulsion and Energy
- Innovation in Commercial Supersonic Aircraft
- In-Time System-Wide Safety Assurance
- Ultra-Efficient Commercial Transports
- Assured Autonomy for Aviation Transformation

U.S. leadership for a new era of flight

# Research Programs Align with Strategic Thrusts

MISSION PROGRAMS

## Airspace Operations & Safety

**AOSP**

**Safe, Efficient Growth in Global Operations**

**In-Time System-Wide Safety Assurance**

## Advanced Air Vehicles

**AAVP**

**Ultra-Efficient Commercial Vehicles**

**Innovation in Commercial Supersonic Aircraft**

**Transition to Alternative Propulsion and Energy**

## Integrated Aviation Systems

**IASP**

**Flight research-oriented, integrated, system-level R&T that supports all six thrusts**


**X-planes/ test environment**

SEEDLING PROGRAM

## Transformative Aeronautical Concepts

**TACP**

**High-risk, leap-frog ideas that support all six thrusts**

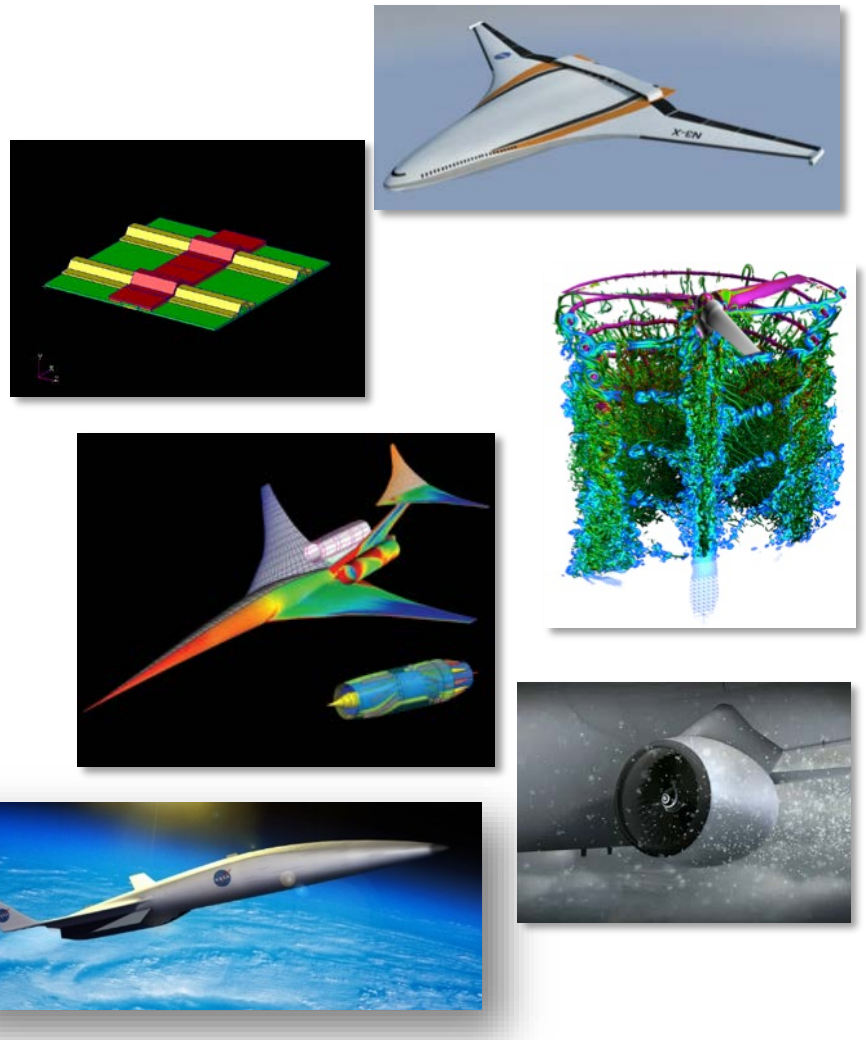

**Critical cross-cutting tool development**

**Assured Autonomy for Aviation Transformation**

# 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 (AATT)*** *Conducts fundamental research to improve aircraft performance & minimize environmental impacts from subsonic air vehicles*
- ***Revolutionary Vertical Lift Technology Project (RVLT)*** *Develops & validates tools, technologies & concepts to overcome key barriers, including noise, efficiency, & safety for vertical lift vehicles*
- ***Advanced Composites Project (AC)*** *Conducts research to reduce the timeline for development & certification of composite structures for aviation [Completing in early FY20]*
- ***Commercial Supersonics Technology Project (CST)*** *Develops tools & explores concepts for potential advanced capabilities & configurations for low boom supersonic aircraft.*
- ***Hypersonic Technology Project (HT)*** *Develops tools & technologies in the area of hypersonic flight*



# 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

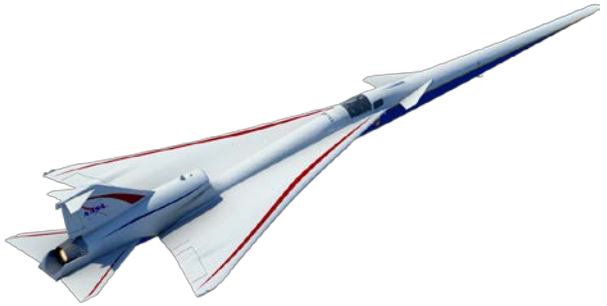
*Making air travel cleaner, quieter, and more affordable (AATT)*

## Urban Air Mobility

*Allowing people to move about more easily (RVLT)*

## Commercial Supersonic Flight

*Making air travel faster (CST)*



# Enabling Technology Advancement