
NASA
LANGLEY RESEARCH CENTER
ESTABLISHED 1917
14- by 22-Foot
Subsonic Tunnel


What if?

Langley Today

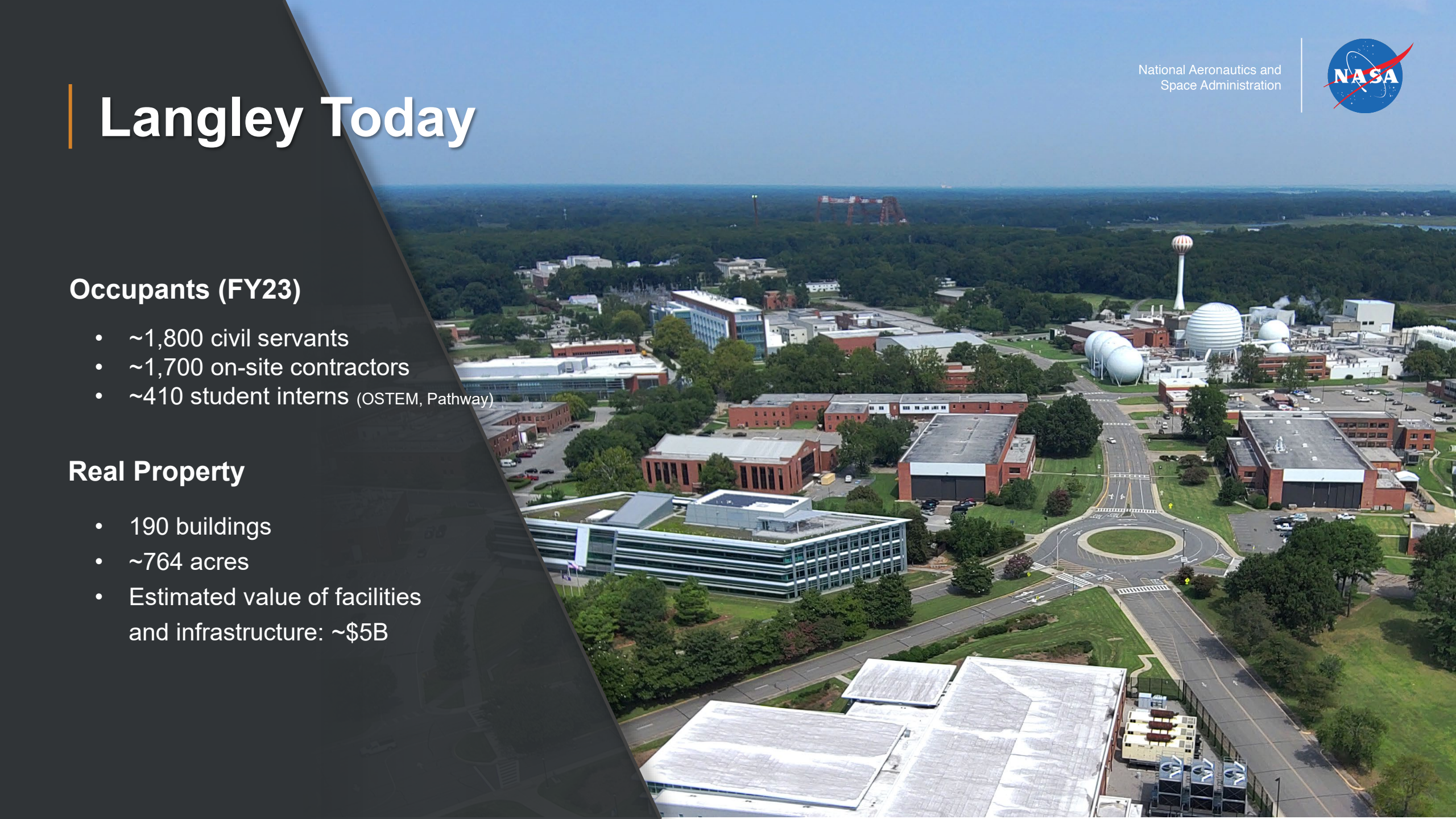
National Aeronautics and Space Administration

Occupants (FY23)

- ~1,800 civil servants
- ~1,700 on-site contractors
- ~410 student interns (OSTEM, Pathway)

Real Property

- 190 buildings
- ~764 acres
- Estimated value of facilities and infrastructure: ~$5B



Our Legacy

National Aeronautics and Space Administration

Our Missions

National Aeronautics and Space Administration

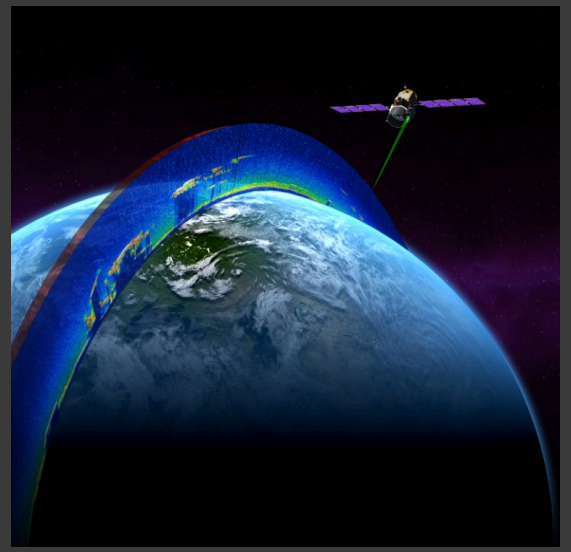
AERONAUTICS

Make air transport cleaner, faster, safer

EXPLORATION

Create building blocks for deep space missions

SCIENCE



Science here and on other worlds

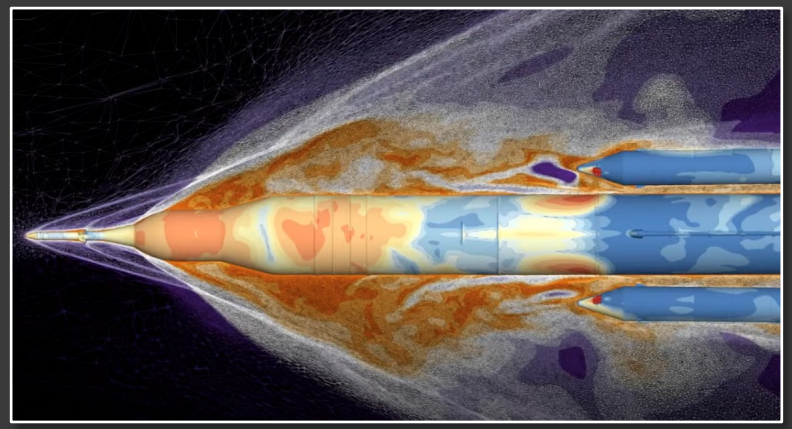
STEM

Expand ideas of what's possible

Core Competencies

National Aeronautics and Space Administration

Aerosciences



Structures & Materials

Intelligent Flight Systems

Systems Analysis & Concepts

Entry, Descent & Landing (EDL)

Atmospheric Characterization

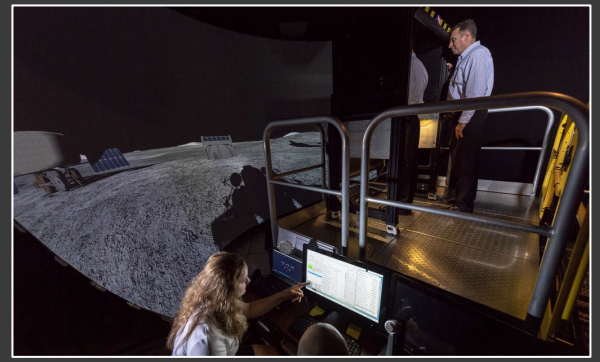
Langley Research Facilities

National Aeronautics and Space Administration

LABORATORIES

WIND TUNNELS

SIMULATORS



FLIGHT


Together, We Discover


Our Wonder Changes the World

NASA Aerosciences - Major Capabilities

National Aeronautics and Space Administration

Specialty Tunnels	Subsonic	Transonic	Supersonic	Hypersonic

Icing Research Tunnel
Aircraft Icing Condition Simulation

9x15-Ft Low-Speed Wind Tunnel
Propulsion systems performance & acoustics

Unitary Plan Wind Tunnels
11-Ft Transonic & 9x7-Ft Supersonic Tunnels

8x6-Ft Supersonic Wind Tunnel
Propulsion systems performance

10x10-Ft Supersonic Wind Tunnel
Large-scale Supersonics & Propulsion

8-Ft High Temperature Tunnel**
Large-scale Hypersonics & Propulsion

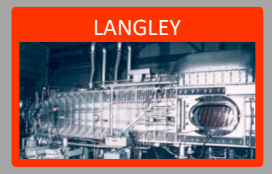
Propulsion Simulation Laboratory
Engine and Icing Simulation

14x22-Ft Subsonic Tunnel
Takeoff, Landing, Ground Wind Loads & Aeroacoustics

Transonic Dynamics Tunnel***
Aeroelasticity & Flutter

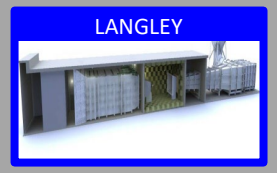
National Transonic Facility**
High Reynolds Number

4-Ft Supersonic Wind Tunnel
Supersonic Vehicles



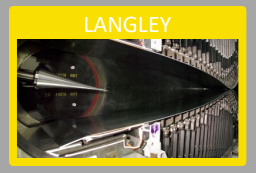
Aerothermodynamic Laboratory Complex*
Hypersonic Aerothermal

Flight Dynamics Research Facility
Spin and Forced Oscillation
-Under Construction-



Low-Speed Aeroacoustic Wind Tunnel
Simulation of Jet Exhaust

0.3-m Transonic Cryogenic Tunnel
High Reynolds Number Flows



20-In Supersonic Wind Tunnel
Supersonic Flows

SCRAMJET Complex
Hypersonic Propulsion

* NASA Unique, ** Nationally Unique, *** World Unique