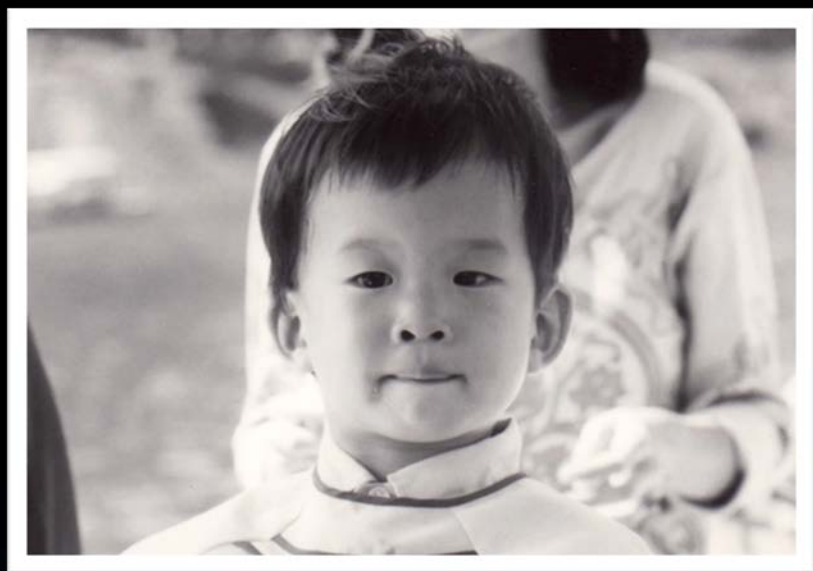


A composite space image featuring a large, cratered Moon in the foreground, a reddish-orange Mars in the background to the right, and the blue and white horizon of Earth at the bottom. The NASA logo is in the top right corner.

Dynamics and Flow: From Ames Intern to Center Director

Dr. Eugene Tu, Director, NASA Ames Research Center







Cheung, S., Foloudi, K., Haglund, G. and Tu, E. L., "Sonic Boom Softening of the Boeing B-747 Configuration," NASA HSRP Sonic Boom Workshop, Hampton, VA, Sept. 12-13, 1987.

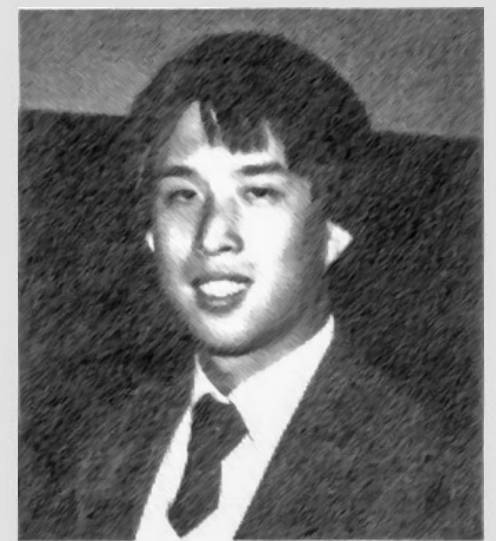


Coops

The Cooperative Education program at Ames is a standing program at Ames where students work at least two summers or one semester during their college years. Many of our young engineers come to us through the Coops program. Linda Farnham of the Technology Top Row: Carl Decker, Iverson, Mark Chambes, Eugene L. Tu.

Middle Row: Chuck Perry, Smith, Richard Turietta, Craig Chapman, Richard Pratt.

Bottom Row: Linda Farnham (Program Coordinator), Josie Valdez, Jane Chao, Vickie Volta; Todd J. Rich.



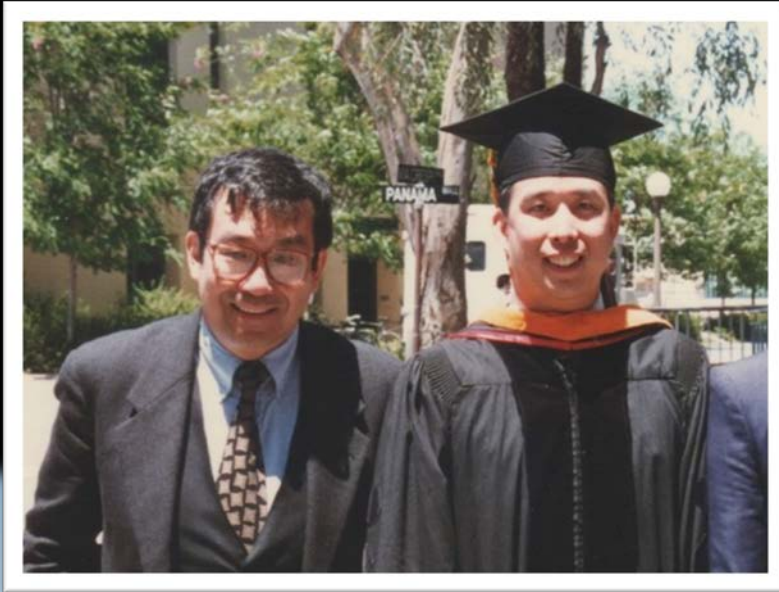
Co-op Student —
Eugene L. Tu

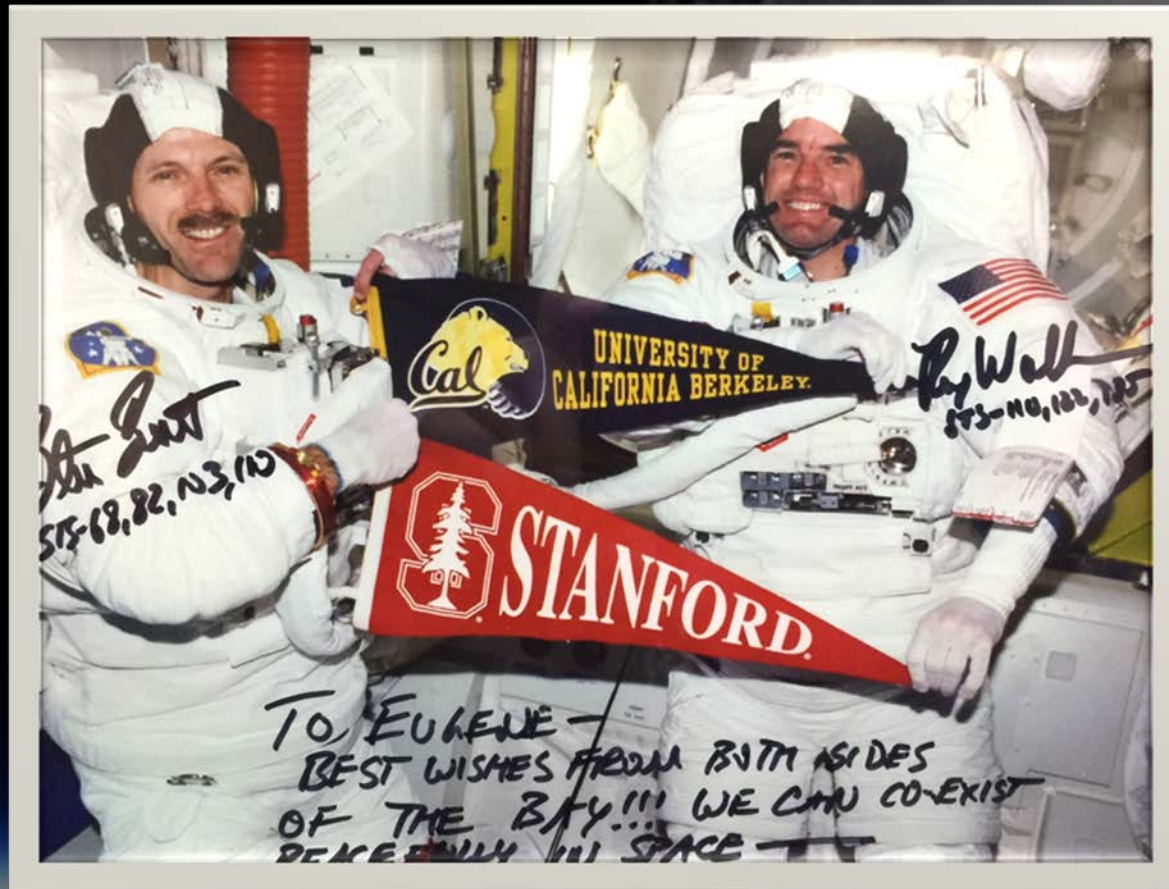
1987 Ames Honor Awards Ceremony

Pictured below are Ames-Moffett employees who received 1987 Ames Honor Awards on July 24. A similar ceremony was held at Ames-Dryden on July 23 for honorees at that site, and photos have appeared in the X-PRESS.

Delta Wings," AGARD Fluid Dynamics Panel 67th Symposium on Vortex Flow Aerodynamics, Netherlands, October 1987. Tu, E. L., "Transonic Aeroelasticity of Fighter Wings with Active Control Surfaces," Engineering Note, *Journal of Aircraft*, Vol. 23, Number 8, August 1986. Guruswamy, G. P. and Tu, E. L., "Sonic Boom Softening of the Boeing B-747 Configuration," *Journal of Aircraft*, Vol. 23, Number 8, August 1986. Tu, E. L., "Sonic Boom Softening of the Boeing B-747 Configuration," *Journal of Aircraft*, Vol. 23, Number 8, August 1986. Tu, E. L., "Sonic Boom Softening of the Boeing B-747 Configuration," *Journal of Aircraft*, Vol. 23, Number 8, August 1986.

















EARTH RIGHT NOW

MARS

STEM Engagement

<https://www.nasa.gov/stem>



INSPIRE - ENGAGE - EDUCATE - EMPLOY
The Next Generation of Explorers



Let NASA bring the
universe into your home



Be a Scientist



E-Books



For Kids & Families



Podcasts



Videos



Virtual Tours & Apps



STUDENT CHALLENGES

EVERY MISSION STARTS SOMEWHERE

Human Exploration Rover Challenge – Artemis Student Challenges

- Open to high school and college students **worldwide**.
- Requires a mentor age 21 or older.



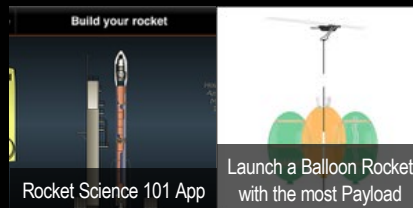
STEM @ Home For Students Grades 9-12

<https://www.nasa.gov/stem-at-home-for-students-9-12.html>

INSPIRE - ENGAGE - EDUCATE - EMPLOY
The Next Generation of Explorers



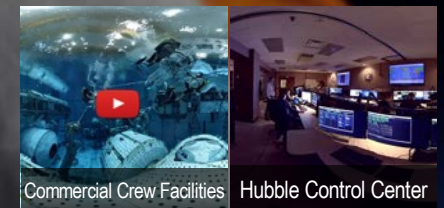
Think Like a Rocket Scientist!



Build Model Spacecraft and More!



Take a Virtual Trip!



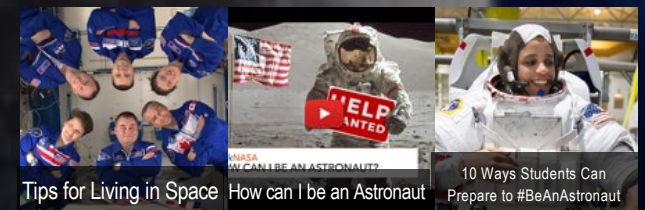
Get Ready to #LaunchAmerica Crew-1



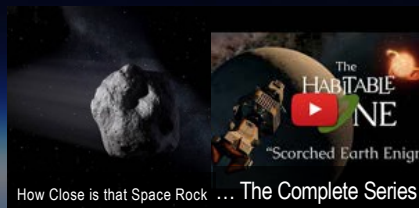
Screens Off! Hands-on Activities



Be an Astronaut!



Learn Something New!



Games, Apps and Simulations!



Download and Print Spacey Wall Art!



Watch This!



Opportunities

<https://intern.nasa.gov/>



INSPIRE - ENGAGE - EDUCATE - EMPLOY
The Next Generation of Explorers



Intern



Pathway



Fellow

We're proud to be named to Forbe's 2020 list of America's best employers for Women

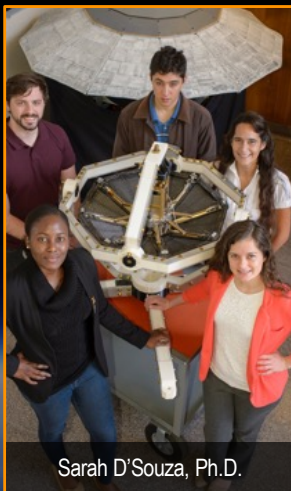
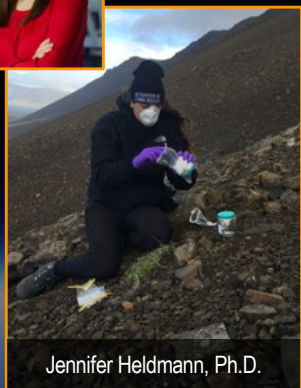
<https://www.nasa.gov/women>



Marybeth Wilmeim, Ph.D.



Jennifer Heldmann, Ph.D.



Sarah D'Souza, Ph.D.



Sharmila Bhattacharya, Ph.D.



Wendy A. Okolo, Ph.D.



Nettie Roozeboom, Ph.D.





SILICON
VALLEY

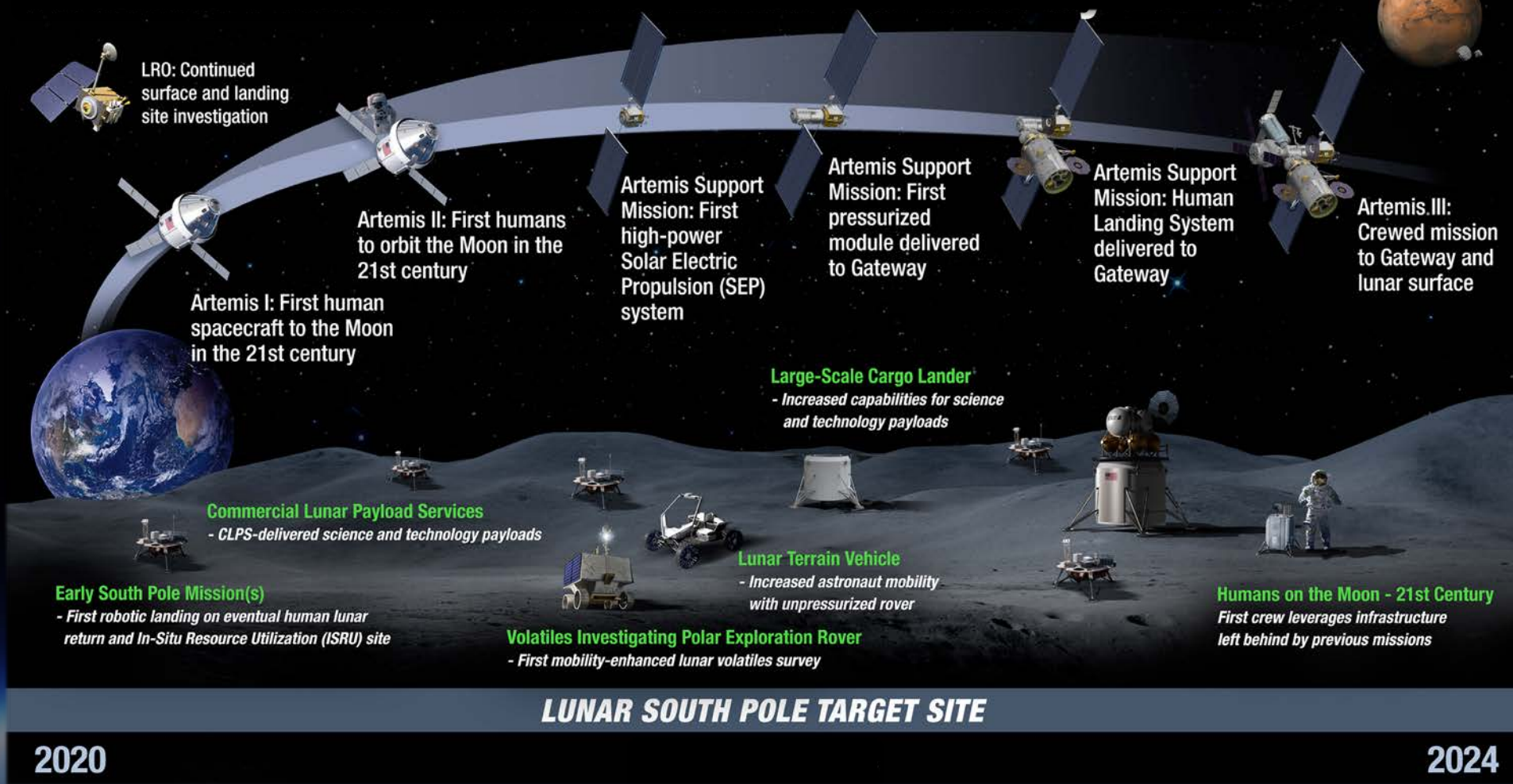
AMES RESEARCH CENTER

www.nasa.gov/ames



You Tube

Artemis Phase 1: Lunar Surface by 2024





Back Up

National Aeronautics and
Space Administration



EXPLORE MOON_{to}MARS



The background of the slide is a composite image of space. It features a large, detailed view of the Moon's cratered surface in the center. To the right, the reddish-orange planet Mars is visible. At the bottom, the blue and white horizon of Earth is seen from space. The NASA logo is in the top right corner.

NASA Ames Research Center

An Overview

Dr. Eugene Tu, Center Director



EXPLORE EARTH

YOUR HOME, OUR MISSION



EXPLORE FLIGHT

WE'RE WITH YOU WHEN YOU FLY



EXPLORE HUMANS in SPACE

FOR ALL HUMANITY



EXPLORE MOON to MARS

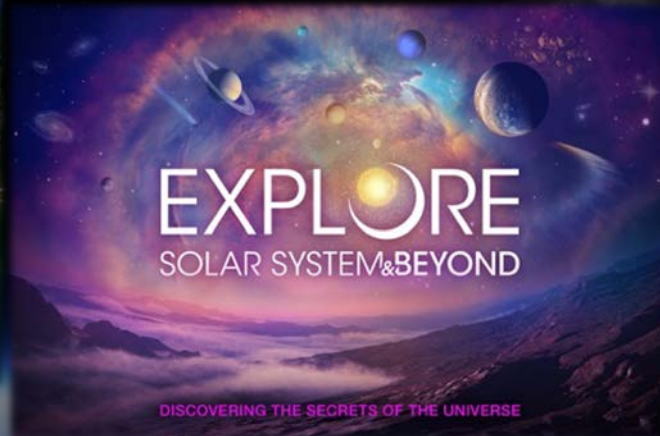
MOON LIGHTS THE WAY



EXPLORE

SOLAR SYSTEM & BEYOND

DISCOVERING THE SECRETS OF THE UNIVERSE



EXPLORE SPACE TECH

TECHNOLOGY DRIVES EXPLORATION



NASA Centers



Ames is One of the Early NACA Laboratories



1915 1917

"Langley Memorial Aeronautical Laboratory"
Langley Research Center (LaRC)

1939

"Ames Aeronautical Laboratory"
Ames Research Center (ARC)

1941

"Aircraft Engine Research Laboratory"
Glenn Research Center (GRC)

1946

"Muroc Flight Test Unit"
Armstrong Flight Research Center (AFRC)

1958

80 Years of Innovation



2020



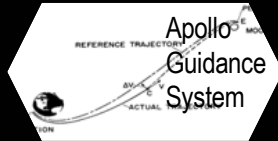
Lunar Prospector



SOFIA



X-36



Apollo Guidance System



Pioneer 10/11



Space Biology



2010

SSERVI



Kepler



Cubesats

2000



Mars Science Lab



Sustainability Base

1990



Human Centered Computing

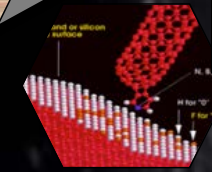


IRIS



Aero Institute

1980



Nanotechnology



NASA Research Park



LCROSS



LADEE

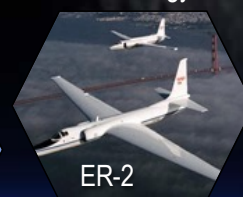
1970



Viking



Air Transportation System



ER-2

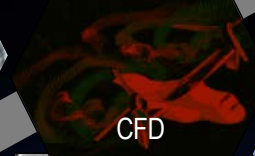


ISS

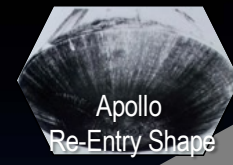


Tiltrotor

1960

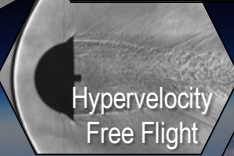


CFD

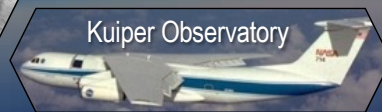


Apollo Re-Entry Shape

1950



Hypervelocity Free Flight

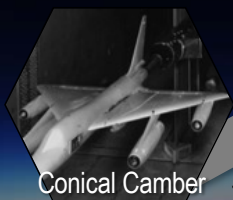


Kuiper Observatory

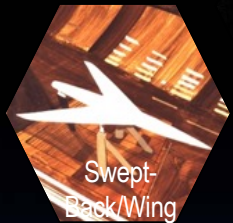


Arcjet Research

1940



Conical Camber



Swept-Back Wing



Transonic Flow



Lifting Body



Flight Research



Flight Simulator



Blunt Body Concept



Tektites

Ames Research Center



- Occupants:
 - ~1200 civil servants; ~1,900 on-site contractors; ~2,500 NRP workforce
 - ~707 summer students in 2019
- FY20 Budget (est.): ~\$1,011M (including reimbursable/EUL)
- ~1,900 acres (400 acres security perimeter); 5M building ft²
- Airfield: ~9,000 and 8,000 ft. runways

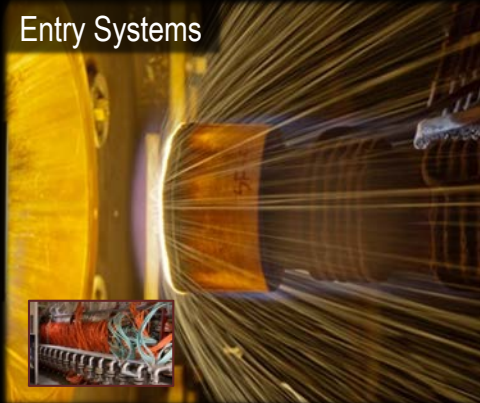


Core Competencies at Ames Today

Air Traffic Management



Entry Systems



Advanced Computing & IT Systems



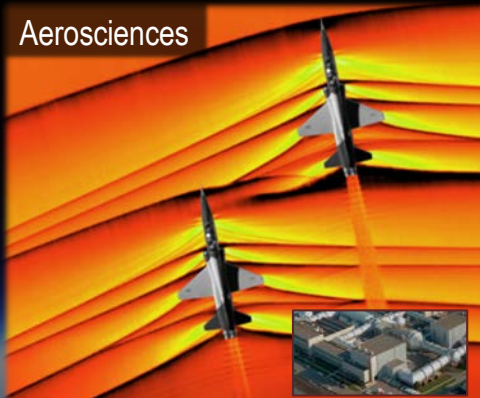
Intelligent/ Adaptive Systems



Cost-Effective Space Missions



Aerosciences



Astrobiology and Life Science



Space and Earth Sciences



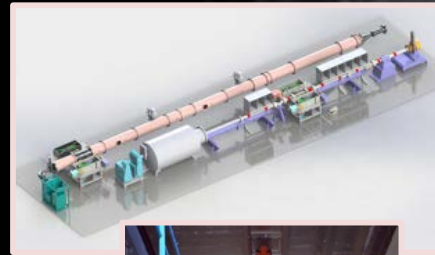
Major Research Facilities



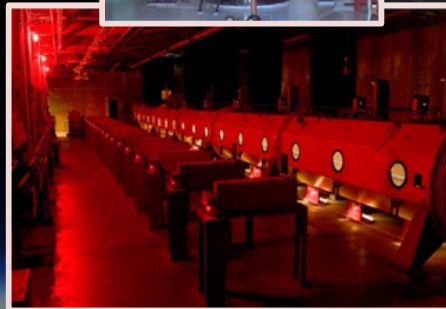
Wind Tunnels



ARC Jet Complex



Range Complex



Simulators



Advanced
Supercomputing

Partnerships

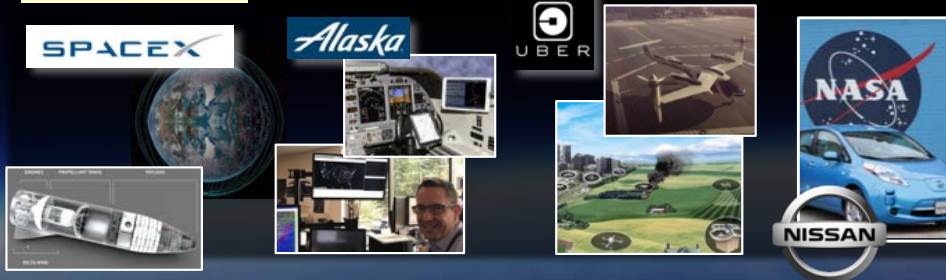
Virtual Institutes



Inter-Agency



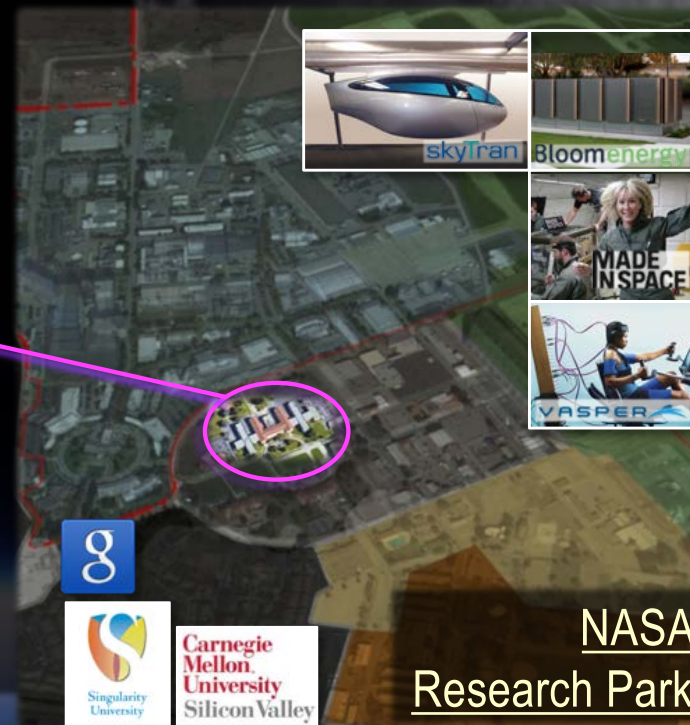
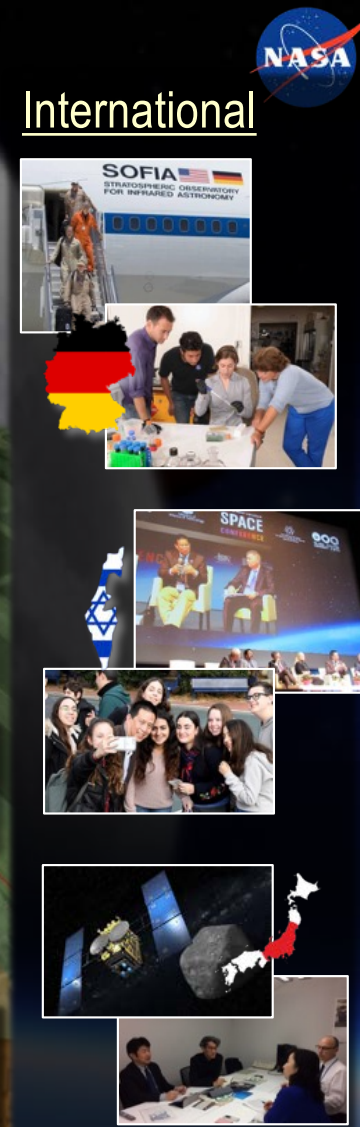
Commercial



Academia



International



Ames for Artemis Phase 1: Lunar Surface by 2024

List of some Enabling Capabilities

- Orion Launch Abort Simulations
- SLS & Orion Wind Tunnel Tests and aero-database generation
- Cross Program Data Systems

Ultra Hi-Fi Lunar Lander Surface Simulator

Lunar science enabled by SSERV

