



About NASA Ames

Ames Research Center Overview

NASA's Ames Research Center is located at Moffett Field, in California's Silicon Valley. The National Advisory Committee for Aeronautics selected Ames to be its second aeronautical research laboratory on Dec. 20, 1939. Ames became part of the National Aeronautics and Space Administration (NASA) when that agency was formed in 1958.

Ames is one of ten NASA field centers. It is located at the core of the research cluster of high-tech companies, start-ups, world-class universities and national laboratories that define the San Francisco/San Jose Bay Area region's character. With over \$3.0 billion in capital equipment, 2,500 researchers, scientists and technology developers, and a \$750-850 million annual operating budget, Ames' economic impact is significant, both regionally and nationally. Ames plays a critical role in virtually all NASA aeronautical and space exploration endeavors, conducting the research and developing the technologies that enable NASA missions, fuel American markets for goods and services and enhance the quality of life on Earth.

As a research center, Ames has a heavy focus on science, and is the host of the [NASA Astrobiology Institute](#) and [NASA Lunar Science Institute](#) virtual organizations. Ames is the lead center for the [Kepler](#) mission's search for Earth-sized planets in the habitable zone outside of our solar system, and the science lead for the [SOFIA](#) airborne infrared telescope. The Ames family includes researchers in biosciences, bioengineering, radiation and space biotechnology, earth science, airborne science, biosphere science, atmosphere science, astrophysics, planetary systems and exobiology. Ames research focuses on topics from the effects of gravity on living things to the nature and distribution of celestial bodies, planets and life in the universe.

Ames is a leader in information technology research with a focus on supercomputing, networking and intelligent systems. The center also has strong expertise and facilities in support of fundamental space biology, biotechnology, aerospace and thermal protection systems, small satellite missions, nanotechnology, simulation and modeling, wind tunnels, air traffic management and human factors research.

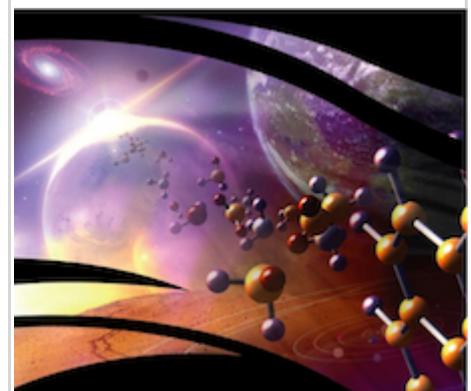
Ames researchers collaborate with the [Federal Aviation Administration](#) to conduct research in air traffic management in order to make safer, cheaper and more efficient air travel a reality. Ames engages in information and education outreach, forms innovative collaborative partnerships, and fosters commercial application of NASA technologies. Ames operates the [NASA Research Park](#), an integrated, dynamic research and education community



An aerial view of NASA's Ames Research Center.



Ames' [Aeronautics Directorate](#) is comprised of aviation systems, flight vehicle research and technology, wind tunnels, advanced aircraft projects, and aeronautics projects divisions.



Space science, Earth science, biological science, astrobiology and lunar science research are conducted in the [Science Directorate](#).

designed to cultivate out-of-the-box thinking and foster mutually beneficial partnerships with academia and industry in support of NASA's mission.

Ames' Mission

Ames Research Center (Silicon Valley) enables exploration through selected development, innovative technologies, and interdisciplinary scientific discovery. Ames provides leadership in:

- astrobiology
- small satellites
- robotic lunar exploration
- technologies for exploration
- the search for habitable planets
- supercomputing
- intelligent/adaptive systems
- advanced thermal protection
- airborne astronomy

Ames develops tools for a safer, more efficient national airspace and unique partnerships benefiting NASA's mission.

For more on NASA's vision and what NASA does, visit:

http://www.nasa.gov/about/highlights/what_does_nasa_do.html

Ames' Core Business

- Science missions and payloads
- Information and exploration technology
- Aerospace and aeronautics
- New ventures and communications
- Small spacecraft and instruments

Ames' Goals

- **Maintain** expertise in information technology, aerospace and aeronautics research and engineering.
- **Conduct** research in space, Earth, lunar and biological sciences.
- **Develop** lead status for NASA in small spacecraft missions.
- **Expand** public and private partnerships.
- **Contribute** innovative, high performance and reliable exploration technologies.

Ames' Objectives

- Establish Ames Research Center as a spaceflight center
- Successfully complete Ames' ongoing science missions
- Maintain and strengthen Ames as the lead center in:
 - Entry, descent and landing systems
 - Information technology and intelligent robotics
 - Air traffic management
 - Biotechnology/Biology
 - Small spacecraft
- Maintain Ames as an aeronautics center of excellence with a particular focus on technologies relevant to the next generation of air space systems, entering planetary flights, fundamental aeronautics design, and human factors



Advanced supercomputing, intelligent systems, human systems integration, entry systems and technology are the divisions in the [Exploration Technology Directorate](#).



For a list of future, current and past Ames missions, visit the [Ames missions page](#).

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research.

- Partner with other NASA centers, universities, government laboratories and private industry. Maintain Ames/Moffett Field on firm long-term footing through Enhanced Use Leases, Space Acts and other agreements.
- Operate Ames within current budget while maintaining essential services. Employee support is to receive high priority. Optimize Ames' infrastructure.

For more, visit the websites of various organizations within Ames: <http://www.nasa.gov/centers/ames/about/organizations.html>

To see a list of Ames missions, visit: <http://www.nasa.gov/centers/ames/missions/index.html>

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<http://www.nasa.gov/centers/ames/about/overview.html>