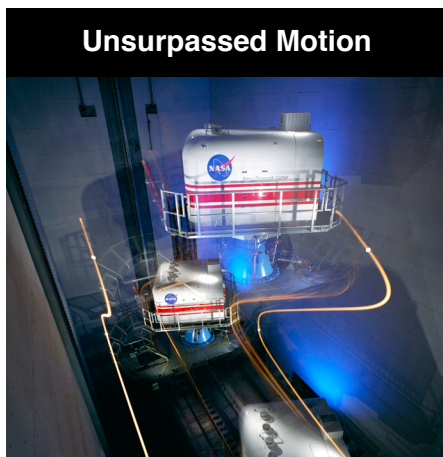


SimLabs: Where Ideas Take Flight

NASA Ames Research Center - Simulation Fact Sheet

From concept to test to final design, our facilities can simulate it all - be it as focused as flight deck integration or as expansive as interplanetary vehicle operations. Develop your ideas and test the system as an integrated whole with human-in-the-loop capability at every stage. The innovative environment at NASA Ames SimLabs is risk-free and economical.

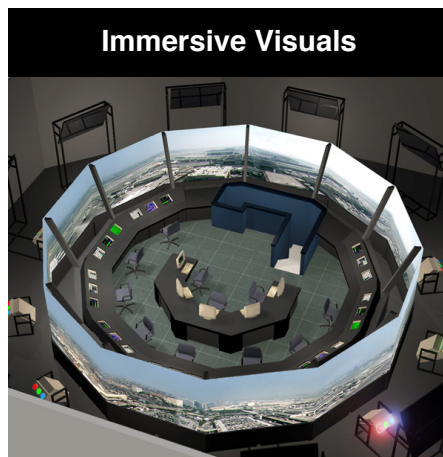
Three Facilities with Unique Capabilities



Unsurpassed Motion

Vertical Motion Simulator (VMS)

- Six independent degrees of freedom
- Largest vertical displacement available
- Five fully customizable cabs
- Can simulate any vehicle - conceptual or actual



Immersive Visuals

FutureFlight Central (FFC)

- Supports airport redesign, new technology implementation, and procedural changes
- 360-degree immersive visuals
- Usable for remote observation applications
- Customizable, modular layout



Realistic Pilot Interface

Crew-Vehicle Systems Research Facility (CVSRF)

- Full-mission capability supports human factors and aerospace operations research
- 747-400 Full-Flight Simulator
- Fully customizable Advanced Concepts Flight Simulator
- Air Traffic Control simulator

Connect through High Level Architecture

The VMS, FFC, and CVSRF are connected with each other and can connect with you through HLA.

Take your ideas to new heights. Visit www.simlabs.arc.nasa.gov for more information.

www.nasa.gov

NASA Ames SimLabs

We Take Your Ideas to New Heights

SimLabs supports a wide range of research in aerospace systems and operations, human factors, and aviation safety. Our state-of-the-art simulation facilities are available to develop your future concepts and technologies. We will customize simulations to fulfill your requirements.

Our Capabilities



Research Air Traffic Concepts

Research and develop current and futuristic (NextGen) air traffic management concepts for improving capacity and safety in controlled, but high-fidelity simulation.

CVSRF Example: The Air Traffic Control System at the CVSRF enabled simulation testing of the Efficient Descent Advisor for Continuous Descent Approaches, a Green Aviation concept to reduce fuel burn, noise, and emissions.



Analyze Vehicle Design

Explore, define, and solve issues in both aircraft and spacecraft design. Optimize vehicle performance and controllability.

VMS Example: The high fidelity motion simulation capabilities of the VMS are being used to test and refine NASA's Large Civil Tilt-Rotor concept.



Evaluate Complex Systems

Research and evaluate large-scale distributed and integrated systems with human operators in the loop.

FFC Example: The FFC immersive visualization tower provided the perfect test environment for the Chicago O'Hare Airport modernization plan, featuring new runway configurations and increased traffic loads.

SimLabs' Domains

Test your future today. Visit www.simlabs.arc.nasa.gov to connect with us now.