

OPEN HOUSE PROGRAM SCHEDULE

Pearl Young Theater | Bldg 2102, Tour Stop 14

- 10:00am **Learn about the X59**
David Nils Larson, James L. Less, NASA
- 10:45am **Artemis: How NASA is taking humans back to the Moon**
Dr. Jeremy Pinier, NASA
- 11:30am **Special Guest**
- 12:15pm **VASC Liquid Nitrogen Demo: "Space Freeze"**
Peter Leighton, Virginia Air Space and Science Center
- 1:00pm **Growing up During Apollo & The Moon Trees**
Rosemary Roosa, Moon Tree Foundation
- 1:45pm **Learn about the X59**
David Nils Larson, James L. Less, NASA
- 2:30pm **Color of Space**
- 3:15pm **VASC Liquid Nitrogen Demo: "Space Freeze"**
Peter Leighton, Virginia Air Space and Science Center

Expo Hall Stage | Bldg 2102, Tour Stop 14

- 10:00am **NASA Robotics Alliance Project: Investing in the Next Generation Workforce Thru STEM as a Sport**
Dr. Eric Walker, NASA
- 10:45am **Improving Disaster Response on Earth with Satellites in Space**
Laura Rogers, NASA
- 11:30am **Special Guest**
- 12:15pm **Launching a NASA Career: Student Developmental Programs and Opportunities**
Karen Miller, NAA
- 1:00pm **Closed Loops, Open Minds, and Vehicle Control: From Aircraft Formation Flight to Deployable Spacecraft Entry**
Dr. Wendy Okolo, NASA
- 1:45pm **NASA Robotics Alliance Project: Investing in the Next Generation Workforce Thru STEM as a Sport**
Dr. Eric Walker, NASA
- 2:30pm **Color of Space**
- 3:15pm **Improving Disaster Response on Earth with Satellites in Space**
Laura Rogers, NASA

Entertainment Stage | Entertainment Zone, Tour Stop 6

- 9:00am DJ Music
- 10:00am **Opening Remarks / Kick Off - Emcee Brittny McGraw / Special Guest Moon Tree Foundation**
- 10:30am DJ Music
- 11:00am **Kuntaw Martial Arts Demo**
- 11:15am **Line Dancing, Pink Heals**
- 11:30am **Zumba on Stage, Justine Ford**
- 11:45am **Leya Dupree Show**
- 12:00pm **NASA Band**
- 12:30pm DJ Music
- 1:00pm **Leya Dupree Finale**
- 1:15pm **NASA Band**
- 1:45pm DJ Music



For the most up to date information and tour stop wait times, please visit: openhouse.larc.nasa.gov

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OPEN HOUSE

LANGLEY RESEARCH CENTER

OCTOBER 21, 2023 | 9AM - 4PM

SEE WHAT THE EXCITEMENT IS ALL ABOUT!



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TOUR STOPS

1 The Future of Flight and More Aircraft Hangar Bldg. 1244

The first 'A' in NASA stands for Aeronautics. Visit Langley's aircraft hangar to learn more about the future of flight. You can see our work on unmanned aircraft, intelligent flight systems, our research aircraft like our Boeing 777, and take a pic with a 60% scale image of NASA's quiet supersonic X-plane! This historic hangar also includes the Rendezvous Docking Simulator used during the Gemini and Apollo programs.

2 Improving Autonomous Flight Autonomy Lab for Intelligent Flight Systems Bldg. 1230

Autonomy and robotics will be key to asteroid retrieval, planetary exploration, pollution measurement in inaccessible areas and the integration of unmanned flight into everyday life — like being able to take a self-flying taxi instead of driving through the Hampton Road Bridge Tunnel! Learn how researchers are using the Langley Autonomy Lab for Intelligent Flight Systems to shape the future of this exciting field.

3 Advanced Manufacturing ISAAC — Integrated Structural Assembly of Advanced Composites Bldg. 1232A

Meet ISAAC, a giant robot arm that helps NASA develop lighter yet stronger composite structures and materials for aerospace vehicles. Learn more about the large-scale metal additive manufacturing process which uses an electron beam to melt wire and create — or 3-D print — parts.

4 Crafting Precision Parts Advanced Machining Development Lab Bldg. 1225

Advances in space travel and aeronautics require ingenuity. In this machining lab, learn how engineers and technicians carry out advanced manufacturing and create high-precision parts, and see machines in action.

5 Keeping NASA Langley Safe NASA Fire Station Bldg. 1248

It is important to protect the innovation happening at NASA Langley as well as the surrounding community. The Fire Station houses emergency equipment, including a 101-foot tower truck, a brush truck capable of pumping while moving, a fully equipped ambulance, and four, pre-packed, ready-to-go emergency trailers.

6 Entertainment Zone

Enjoy fun for all ages including performances, a DJ, food trucks, face painters, and much more! Don't miss the opening ceremonies starting at 10am.

7 Kids Zone Fitness Center Bldg. 1222B

The Kids Zone is where young explorers find inspiration and fun through science, technology, engineering, math activities and crafts — turning playtime into a fun learning experience for the next generation of STEM professionals.

8 Building Better Computer Models Basic Aerodynamics Research Tunnel Bldg. 1214

A subsonic, open-return atmospheric wind tunnel, the Basic Aerodynamic Research Tunnel (BART) measures the fundamental characteristics of complex flow fields and gathers data for developing aerodynamic computer models.

9 Reducing Aircraft Noise Acoustics Research Lab Bldg. 1208

Ever wonder what a sonic boom sounds like? Or heard the loud buzz of a drone overhead? Researchers here are conducting studies to better understand, predict, and control the noise of all types of aircraft. This work could help change the rules for commercial supersonic travel over land and for unmanned flight systems that could one day deliver people and goods all over town!

10 Making Space-Ready Systems Integration and Testing Bldg. 1250

Here you can dress like a scientist and see the clean rooms and equipment used to test spacecraft components and instruments to ensure they can withstand the conditions of space.

11 Aerothermodynamic Testing 31-Inch Mach 10 Tunnel Bldg. 1251

The 31-inch Mach 10 tunnel is NASA's top wind tunnel for assessing spacecraft heating. Learn how researchers provide critical test data to programs including Orion, Apollo, Viking, NASA's space shuttle, Hyper-X and the Mars Science Laboratory.

Unitary Plan Wind Tunnel Bldg. 1251

This supersonic wind tunnel features two test sections capable of speeds up to 4.6 times the speed of sound! Researchers here perform experiments involving jet effects, dynamic stability, heat transfer, and more.

12 Subsonic Wind Tunnel Testing 14-by-22-Foot Subsonic Tunnel Bldg. 1212C

14-by-22-Foot Subsonic Tunnel (Bldg. 1212) As one of NASA's premier low-speed wind tunnels it has tested everything from rockets to fighter jets and even race cars! This historic facility provides a broad range of aerodynamic research for NASA, industry, the Department of Defense and academia. Stop here and you can see the 14.5-foot scale model of the X-59.

13 State of the Art Measuring and Modeling Measurement Systems Laboratory Bldg. 2104

Tour NASA Langley's state-of-the-art Measurement Systems Laboratory for developing, testing, and implementing new sensor and instrument technologies. Learn how the work happening here is advancing NASA's missions in space exploration, science, and aeronautics.

14 Artemis Journey to the Moon, Moon Rock, Guest Speakers, Exhibit Hall and Gift Shop Integrated Engineering Services Building Bldg. 2102

NASA is returning to the Moon! Visit this location to learn more about our key contributions to the Artemis program, take a selfie with a moon rock

15 Structures & Materials for the Future of Space & Aviation James H. Starnes Structures & Materials Laboratory Bldg. 1148

Research in this lab will help people live and work on the Moon and beyond! See how engineers test the strength and stiffness of aerospace structures and materials, develop advanced manufacturing methods, and more. Walk through an inflatable habitat, which could house people during long-term space travel and exploration.

16 Deployable Space Structures Structural Dynamics Test Laboratory Bldg. 1293

As NASA returns to the Moon, there's a greater need than ever for light, self-deploying structures. Learn how researchers in this lab are developing and testing those technologies and get a firsthand look at a full-sized model of a solar sail spacecraft that will be launched into space.

17 Transonic Wind Tunnel Testing National Transonic Facility Bldg. 1236

High speed testing is critical as NASA journeys back to the Moon. The National Transonic Facility (NTF) serves NASA and its partners as the world's largest pressurized cryogenic wind tunnel. Learn how it provided essential testing of the Artemis program's Orion spacecraft, its Launch Abort System, and the Space Launch System.

