



# FLIGHT OPPORTUNITIES

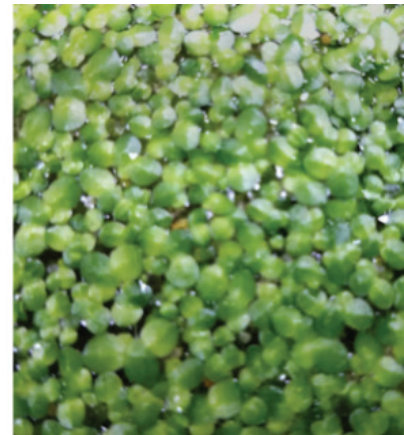


ISSUE 85 — AUGUST 2025

Upcoming Flight Test | Hosted Orbital Webinar | NASA's Announcement of Collaboration Opportunity | New TechRise Student Challenge | Upcoming Events

## UPCOMING FLIGHT

### Suborbital Test of NASA-Supported Payloads, Student Experiments



*(left) Blue Origin's New Shepard suborbital rocket system prepares for launch on Feb. 4, 2025. (center) Dr. Solange Massa works on her payload prior to a Flight Opportunities-supported flight test aboard Blue Origin's New Shepard in 2023. (right) Duckweed (also known as water lentils) is part of a plant cultivation system to be tested on the upcoming flight. Credits: (left) Blue Origin (center), Ecoatoms, Inc. (right), Space Lab Technologies*

Fifteen researcher payloads and 24 TechRise student payloads are to be tested in microgravity on an upcoming flight aboard Blue Origin's New Shepard reusable suborbital rocket system. The flight is helping researchers from NASA, universities, and private companies advance solutions that will

help inform the agency's lunar exploration through missions like Artemis as well as future Mars missions. NASA's TechRise Student Challenge provides middle and high school students a hands-on opportunity to gain critical skills in engineering, computing, electronics, and more. The next TechRise challenge is expected to open Sept. 4, 2025 — see the story below to learn more about the upcoming student challenge.

[Learn more about the payloads manifested on this flight](#)

## COMMUNITY OF PRACTICE WEBINAR

### September Webinar: Exploring Hosted Orbital Capabilities with NASA's Flight Opportunities Program

Wed. September 3 • 10-11am PT

NASA's Flight Opportunities program — which has long served the agency by providing access to suborbital flight testing with commercial providers — added a new capability in its most recent [flight services contracts award](#): hosting payloads in orbit.

On hosted orbital tests, the flight provider manages integration, launch, and mission operations, allowing researchers to focus on developing their payload (i.e., their technology, experiment, or instrument). Hosted orbital flights offer researchers an important capability within the flight test continuum, serving as an alternative to flights aboard the International Space Station and eliminating the need to build/procure their own spacecraft.

During this webinar, Flight Opportunities personnel will explore the benefits of commercial hosted orbital flights. For example, the flight cadence of hosted opportunities could decrease time to flight, as some providers offer multi-customer hosted missions at a regular cadence as a core part of their business model. As demand grows, providers intend to increase the number of regularly scheduled hosted missions. Additionally, researchers can leverage commercial best practices and capabilities. Presenters will share their expertise in preparing payloads for hosted orbital flight tests.

Have questions or topic suggestions for the discussion? Email us at: [NASA-FlightOpportunities@mail.nasa.gov](mailto:NASA-FlightOpportunities@mail.nasa.gov).



*Sunlight reflects off the Indian Ocean in this view of Earth from orbit in late July 1985.*

**LEARN ABOUT OUR  
SEPT. 3 WEBINAR**

## Attention COSMIC Members!

### Attend a webinar on accessing flight tests, jointly presented by Flight Opportunities and the Space Test Program

The Consortium for Space Mobility and ISAM Capabilities (COSMIC) is a nationwide coalition working to accelerate adoption of domestic in-space servicing, assembly, and manufacturing (ISAM) capabilities.

At this [COSMIC Community Brief](#), NASA's Flight Opportunities program and the Department of Defense's Space Test Program (STP) will each provide a program overview focusing on how to access flight tests. There will be a question-and-answer period at the end of each session.

**Webinar Date: September 4, 2025**

- **Space Test Program:** 11:00am – 11:30 am PT
- **Flight Opportunities Program:** 11:30 am – 12 pm PT

**IMPORTANT:** This webinar is open to COSMIC members only. Not a member yet? [Join COSMIC here.](#)

[Access the Sept. 4 COSMIC webinar](#)

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## Going to HELIOTECH?

Attend our “Access to Commercial Flight” panel on Sept. 10

Held Sept. 8-12 at JHU APL (Johns Hopkins University Applied Physics Laboratory), this joint meeting of NASA's annual HELIOTECH Heliophysics Technology Symposium and the Suborbital Symposium will foster collaboration between technologists, researchers, and suborbital platforms.

If you're registered to attend in person, don't miss the “Access to Commercial Flight” panel with Flight Opportunities program executive, **Danielle McCulloch**, and representatives of commercial flight providers with suborbital and hosted orbital capabilities. The panel is on **Wed., Sept. 10 at 10:15 am ET.**

We look forward to seeing you there!

[Learn more about this joint symposium](#)

## ON-DEMAND WEBINARS

Watch any of our [past webinars](#) on demand!

These webinars share best practices and important lessons learned from researchers, flight providers, and NASA personnel experienced in using flight tests to advance technologies.

Watch the recorded August 6, 2025, webinar:  
[“In-Space Manufacturing Roundtable: Sharing Lessons Learned and Remembering Curtis Hill”](#)

[Watch our on-demand webinars](#)



## NASA’s Announcement of Collaboration Opportunity (ACO) Deadlines Approaching

### Center Letter of Intent Request due: August 29, 2025

Want to collaborate with NASA experts or access its facilities? The [five-year ACO solicitation](#) allows participants to enter into Unfunded Space Act Agreements for no exchange-of-funds access to NASA’s aeronautics and space resources. Flight tests with commercial providers may be included via NASA’s Flight Opportunities program under a separate agreement. NASA will issue appendices every 6–12 months to meet evolving tech needs. The [2025 ACO Appendix A](#) is open for proposals until Sept. 24. For more information, watch the [recording of this Aug. 6 webinar](#).

#### Important dates for 2025 (Appendix A) proposals:

- **Request center letter of intent by:** August 29, 2025
- **Questions due by:** September 5, 2025 (send to [HQ-STMD-ACO@nasaprs.com](mailto:HQ-STMD-ACO@nasaprs.com))
- **Proposal Deadline:** September 24, 2025

[Details on SAM.gov](#)

## Research Opportunities in Space and Earth Science (ROSES) Funding Open

Funded by NASA’s Science Mission Directorate, the Research Opportunities in Space and Earth Science (ROSES-2025) solicitation is made up of many different calls for proposals, each with its own topics and due date. It was released on July 10, 2025, and remains **open through at least March 31, 2026**.

#### ROSES-2025 Solicited Research Programs

- Program elements are listed in [Table 2](#) and [Table 3](#) of the ROSES-25 solicitation.

#### ROSES Resources

- Read the [ROSES-25 Blog](#)
- Subscribe to the [ROSES-2025 Due Date Calendars](#)
- Sign up for email updates via the [NSPIRES system](#) (Log in and find your “Email Subscriptions.” Check the General Subscription List and relevant division lists.)



*This Hubble Space Telescope image shows a pair of interacting galaxies, known as Arp 273. Credit: NASA / ESA / Hubble Heritage Team*

[Learn more about ROSES](#)

## Encourage Teachers to Pre-Register for the Next TechRise Student Challenge

Do you know a sixth- to 12th-grade teacher or student who would like to launch an experiment on a suborbital flight? If so, let them know to **pre-register now to receive updates for the NASA TechRise Student Challenge**, which NASA expects to open on **Sept. 4**.

This nationwide contest empowers teams of middle and high schoolers attending U.S. public, private, or charter schools to design, build, and launch experiments on NASA-supported flights under the guidance of an educator. TechRise is designed to equip America's future workforce with the skills needed to advance the U.S. aerospace economy, giving students real-world, hands-on experience with the same processes that professional researchers follow.

Winning teams will be awarded:

- \$1,500 to build their experiment
- A flight box in which to build it
- An assigned spot to test their experiment on a NASA-sponsored flight
- Technical support during the experiment build phase from Future Engineers advisors, who will help students learn the skills they need to turn their experiment idea into reality



*A NASA TechRise student team member focuses on soldering a microSD card breakout board component. Credit: Ashley Rowan*

**Pre-register now to receive challenge updates!**

## TECHNOLOGY TRANSITIONS

### Share your transition story



**Have you transitioned technology you tested with Flight Opportunities to a NASA mission or commercial use?**

**Let us know!**

**Share your story!**

### Did you know?

NASA's successful effort to collect a sample from an asteroid and return it to Earth — known as the **OSIRIS-REx mission** — is a testament to the importance of suborbital flight testing. The OSIRIS-REx researchers matured their regolith sampling system in 2012 during parabolic flight testing provided through the Flight Opportunities program. During these flights, they evaluated their design and determined how much simulated asteroid rocks and dust the system could capture in reduced gravity. *Credit: NASA/James Blair*

**Visit our Technology Transitions webpage**

Attending any of these upcoming meetings? [Let us know!](#)

- [NASA's Joint HELIOTECH & Suborbital Symposium](#) | Sept. 8-12 | Laurel, MD (Johns Hopkins University Applied Physics Laboratory) — **Virtual registration closes Sept. 4** — **Attending in person?** Catch the **Sept. 10 “Access to Commercial Flight”** panel with Flight Opportunities
- [Lunar Surface Innovation Consortium \(LSIC\) Fall 2025 Meeting](#) | Nov. 5–6 | Atlanta, GA (Georgia Tech) — **Abstract submissions** due Sept. 26
- [2025 ASGSR \(American Society for Gravitational and Space Research\)](#) | December 3-6 | Phoenix, AZ
- [AGU25 \(American Geophysical Union\)](#) | Dec. 15-19 | New Orleans, LA

### NASA Flight Opportunities Program

Flight Opportunities is part of NASA's Space Technology Mission Directorate.

Visit [nasa.gov/stmd-flight-opportunities](https://nasa.gov/stmd-flight-opportunities)

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