



Flight Opportunities

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Enjoy!
The Flight Opportunities team

NASA Awards New Contracts to Commercial Flight Providers

In case you missed it, **NASA recently selected** 15 companies to provide flight and payload integration services for technology payloads aboard vehicles that provide access to high altitudes, reduced gravity, or other relevant environments required to test the technologies and advance their readiness.

Managed by NASA's **Flight Opportunities** program, in collaboration with the **Small Spacecraft Technology program**, these contracts are for use by NASA and other government agencies as well as by external researchers that the government is supporting.

The types of platforms that will be used to test payloads under these new contracts include:

- Suborbital rocket-powered vehicles
- High-altitude balloons
- Orbital platforms that can host payloads

NASA also has a contract for microgravity flight services using aircraft that can achieve brief periods of reduced gravity via parabolic maneuvers.

[Visit the NASA-Contracted Flight Providers webpage to learn more.](#)



Purdue engineering student Stefanie Duessler assists Professor Steven Collicott with the sealing of an experiment containment system. Credits: Purdue University

Community of Practice Webinar

Researcher Roundtable: Best Practices for Camera Use in Flight Test Payloads

Wednesday, April 3, 2024 | 10:00-11:00 a.m. PST

Join the conversation! This month, the Flight Opportunities team will facilitate a discussion for researchers to engage with each other and share their experiences using cameras to gather data on a variety of flight test platforms.

The discussion will encompass an overview of cameras used, environmental issues to consider in camera selection, as well as common pitfalls and lessons learned (e.g., securing memory cards, recording tips, and best practices for lenses).

What sorts of camera topics would you like to see covered during this session? Email us at NASA-FlightOpportunities@mail.nasa.gov.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Or call-in (audio only):

+1 256-715-9946 • Phone Conference ID: 573 645 751#

[See all Community of Practice webinars.](#)

Advice as You Develop Payloads for Flight Testing

During our past [Community of Practice webinars](#), researchers have shared their insights on developing payloads for flight testing. Consider the following:

- **Communicate with your Flight Opportunities campaign manager frequently:** Your campaign manager can help you have the most successful flight possible. They have experience working with many researchers and flight providers. ([Hear more about campaign managers' insights.](#))
- **Keep in touch with your flight provider:** Discuss the specific requirements for your experiment with your flight provider. Leverage their expertise by asking detailed questions to confirm you are meeting all requirements laid out in their documentation. ([Hear more about payload integration packages.](#))
- **Take advantage of the flight vehicle's unique capabilities:** Consider the environment the flight vehicle will experience, and plan to gather as much relevant data as possible to maximize the flight test opportunity. ([Hear more about planning for comprehensive data gathering.](#))



Cal Poly Pomona student Zachary Gaines (center) prepares a payload for flight. Credits: Aerostar

More [tips for payload development](#) are available in our Lessons Learned Library.

[Access and download our entire Lessons Learned Library.](#)

Concept Summaries Due May 2: In-Space Advanced Materials and Manufacturing Research (NLRA 2024-6)

The Center for the Advancement of Science in Space™ (CASIS™), in coordination with NASA, has released a new ISS National Lab Research Announcement (NLRA). **NLRA 2024-6** seeks proposals for applied research and development to demonstrate space-based manufacturing/production of advanced materials or technologies only attainable in microgravity.

Awardees may receive funding to support the development – and mission integration and operations – for projects that will be implemented aboard the International Space Station.

Focusing on research concepts for which space-based testing can uniquely enable solutions to known challenges and the creation of new products and business opportunities, the objective is to use the station's unique environment to develop, test, or mature products and processes that have a demonstrated potential to produce near-term, positive direct or indirect economic impact.

[Learn more about submitting your concept summary by May 2, 2024.](#)



NASA astronaut Megan McArthur works in the Microgravity Science Glovebox on the International Space Station. Credit: NASA

Resources

Small Spacecraft Community of Practice Monthly Webinars

NASA's Small Spacecraft Systems Virtual Institute (**S3VI**) hosts **a monthly public webinar series** to share information on the relevant work of NASA, partner agencies, and other members of the community. (These excellent sessions inspired the **Flight Opportunities program's own webinar series**.)

Speakers at the S3VI webinars present on a wide variety of small spacecraft topics, including all phases of mission design, development, and operations; regulatory and process-oriented requirements; exploration and scientific strategies; and opportunities for the community.

[Learn more and subscribe to receive announcements of S3VI webinars.](#)





Space Symposium

Apr. 8-11, 2024 • Colorado Springs, Colorado

Join the Flight Opportunities program manager, Danielle McCulloch, at this forum to discuss, address, and plan for future achievements in space. With a focus on international, commercial, emergent space, and national security, the Space Symposium delivers networking and engagement opportunities with the global space community. Over 10,000 space professionals attend every year..

Lunar Surface Innovation Consortium Spring Meeting

Apr. 23-24, 2024 • Laurel, Maryland

Join Flight Opportunities team members at LSIC's 2024 Spring Meeting. With a focus on engaging the community on how to return to the Moon together, the meeting will cover NASA's plans and updates, infusion paths, partnerships, and current technology investments. The agenda includes invited speakers, panels, focus area discussions, lightning talks, and posters. Let us know if you're attending!

CubeSat Developers Workshop

Apr. 23-25, 2024 • San Luis Obispo, California

This annual three-day global conference brings together CubeSat developers to share ideas and experiences in developing small spacecraft. Other topics covered at the workshop include the status and availability of launch vehicles, new technology, and community communication. Join members of NASA's Space Technology Mission Directorate – including the Small Spacecraft Technology and Flight Opportunities programs – at this workshop.

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NASA-FlightOpportunities@mail.nasa.gov

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NASA Flight Opportunities Program

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