

Flight Opportunities

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- Space Symposium: April 4-7, 2022
- Space Tech Expo: May 23-25, 2022
- SBIR/STTR Spring Innovation Conference: June 13-15, 2022

Enjoy!

The Flight Opportunities team

Recent Flights

Flight Opportunities-Supported Technologies Put to the Test on Parabolic Flights

In December, more than a dozen program-supported innovations were tested on parabolic flights provided by Zero Gravity Corporation. Launching from Fort Lauderdale, Florida, the series of seven flights from Dec. 7 - 15 provided testing for space-based medical care, additive manufacturing, CubeSat innovations, regolith investigations, and more. Teams included NASA investigators, university researchers, and technologists from industry and non-profit research institutes. Featuring brief periods of microgravity, the flights enabled research teams to assess their payloads' performance and gather data vital to advancing their development. View photos and information about some of the innovations aboard in our recent [thread on Twitter](#), and be sure to give [@NASA_Technology](#) a follow while you're there!



Flight Opportunities-supported innovations continued undergoing testing on [@ZEROGResearch](#) parabolic flights in Dec. Research teams leveraged periods of [#microgravity](#) to test tech for space-based first aid, 3D printing, robotics & more. (📷 credits: [@ZEROGResearch](#) / Steve Boxall)



9:16 AM · Feb 17, 2022 · Sprinkl

Opportunities

ICYMI: NASA Seeks Nighttime Precision Landing Technologies in New Challenge

As part of the [NASA TechLeap Prize](#), the Nighttime Precision Landing Challenge No. 1 invites applicants to submit proposals for sensing systems that can detect hazards from an altitude of 250 meters or higher and process the data in real time to help spacecraft land safely in the dark. Up to three winners may receive awards of up to \$650,000 each to build their payloads, as well as the opportunity to test their technology on a suborbital flight at no additional cost. Read the full [NASA announcement](#) to learn more.

Applications due: May 19, 2022

To apply, visit the [Challenge webpage](#).

Plan to attend the Q&A session: April 12, 2022



NASA
TechLeap
PRIZE

Coming Soon: TechFlights 2022

Tech Flights offers funding opportunities to researchers from U.S.-based industry, academia, and private research institutions to rapidly test promising technologies on commercial suborbital vehicles. Awardees receive a grant or cooperative agreement allowing them to purchase flights directly from any eligible **U.S. commercial flight provider** that best suits their technology demonstration.

TechFlights 2022 is expected to be released in the coming months. The Flight Opportunities program encourages broad participation and urges interested researchers to keep in mind that topics, relevant technologies, and other details do change from year to year.

Now Open: Research Opportunities in Space and Earth Sciences – 2022

The NASA Research Announcement (NRA), **Research Opportunities in Space and Earth Sciences (ROSES)–2022**, solicits basic and applied research in support of **NASA's Science Mission Directorate (SMD)**. Through this **ROSES NRA**, NASA encourages the participation of the space and Earth science communities in SMD's research and technology programs. These programs form the foundation of both the basic and applied research that allows NASA's space and Earth science programs to be properly planned and carried through to the successful interpretation of data and its application to the needs of end users.

[View all due dates](#) (organized by solicited research program)

Learn More:

- [View the ROSES 2022 solicitation on NSPIRES](#)
 - [Read the Summary of Solicitation \(PDF\)](#)
 - [Read the FAQ](#), which includes information about changes from previous ROSES solicitations
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Closing Soon: Established Program to Stimulate Competitive Research (EPSCoR) Suborbital Flight Opportunity

Proposals due: April 15, 2022

[Read the full solicitation and start your proposal.](#)

NASA Shares Insights into Commercial Access to Low-Earth Orbit

In a talk at the [2022 Human Research Program Investigators' Workshop](#), Phil McAlister, Director of the Commercial Space Division of NASA's Space Operations Mission Directorate, shared insights into NASA's vision of commercial low-Earth orbit (LEO) access. [Watch the video replay](#) to hear his comments, which start approximately six minutes into the session.



HRP IWS Commercial Plenary Session

"NASA Vision and Direction of Commercial Engagement for Future Space Exploration in LEO and Beyond"

Phil McAlister, NASA Headquarters, February 2022

Community of Practice

Mark Your Calendar For the March Webinar

Testing Lunar Landing and Surface Sampling Technologies Suborbitally

Wednesday, March 2, 2022

10:00 a.m. - 11:00 a.m. PST

Speakers:

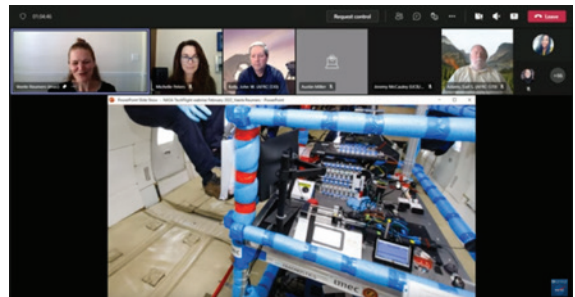
- Kris Zacny, Ph.D., Vice President of Exploration Systems, Honeybee Robotics
- Luke Sanasarian, Engineering Lead, Honeybee Robotics
- Reuben Garcia, Director of Technical Operations, Masten Space Systems

Testing on vertical takeoff vertical landing (VTVL) rocket systems like Masten's Xodiac can help validate technologies for lunar landings, as well as surface sampling innovations and other tools needed for planetary surfaces. Join Dr. Kris Zacny and Luke Sanasarian of Honeybee Robotics to hear their experience testing the company's lunar sampling technology PlanetVac on this unique platform. Masten's Reuben Garcia will highlight best practices that researchers should keep in mind when planning for tests on Masten's VTVL vehicles and when approaching suborbital flight testing in general. This webinar will be of particular interest to researchers applying to the NASA TechLeap Prize.

Missed our February Webinar? Watch the Recording Online!

A replay of our February webinar as well as accompanying slides are now available for viewing:

Designing a Flight Test-Ready Payload



Lessons From the Launchpad



Make Sure the Experts Are on Hand

After weeks or months of payload design, pre-testing, and flight preparation, you want to set yourself up for the best chance of a fully successful suborbital flight test. To do so, consider the following recommendations for planning personnel attendance.

Plan ahead to make sure the principal investigator (PI) can attend payload integration and flight. Be sure to accommodate time for the flight on the PI's schedule well in advance and maintain communication with your flight provider to coordinate schedule changes if needed to maximize the possibility for the PI to be in attendance.

Identify knowledgeable alternate personnel to be on site for the flight in cases where it is simply not possible for the PI to be present. Backup attendees should have a thorough understanding of the payload and be qualified to make last-minute decisions.

Make sure all team members are familiar with the payload, including hardware, software, and other systems, as well as pre-flight testing and in-flight operation. Doing so will ensure someone from the team is prepared to step in for the PI if needed.

Events

Space Symposium

April 4-7, 2022

Colorado Springs, Colorado

Space Tech Expo

May 23-25, 2022

Long Beach, California

SBIR/STTR Spring Innovation Conference

June 13-15, 2022

Washington, DC

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Have ideas or feedback for the Flight Opportunities newsletter?

Drop us a line at:

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STAY CONNECTED:



NASA Flight Opportunities Program

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