



FLIGHT OPPORTUNITIES



ISSUE 92 — JULY 2026

Register by this Wed. for TechLeap Prize | Student projects take flight | SPEED completes flight test | Interlune validating tool for future lunar missions | Open solicitations | Upcoming events

TECHLEAP PRIZE REMINDERS

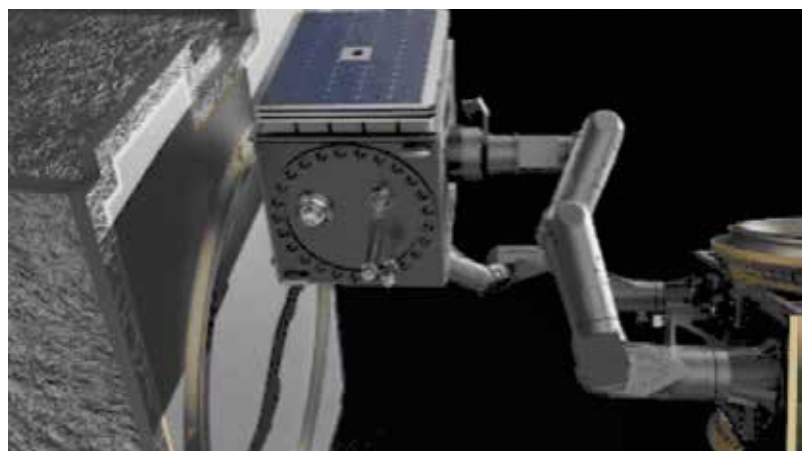
Register by July 29 for the Robotically Manipulated Payload Challenge

The registration deadline for the Robotically Manipulated Payload Challenge is this Wednesday | Application deadline is Aug. 12.

NASA's latest [TechLeap Prize](#) — the [Robotically Manipulated Payload Challenge](#) — is underway.

[Register by July 29](#) to submit your idea for a solution that advances persistent infrastructure for in-space servicing, assembly, and manufacturing (ISAM).

Once registered, you'll be able to propose payloads that can interact with, be manipulated by, or be reconfigured by a robotic arm in low Earth orbit.



Eligibility reminder

Participation is limited to U.S. citizens and permanent residents and to organizations incorporated in and maintaining a primary place of business in the United States. All members of a team must individually meet these requirements, and foreign nationals are not eligible to participate.

Learn more:

- Find the full, updated requirements on the [Rules, terms, and conditions](#) and [Frequently asked questions](#) pages.
- Watch our [two on-demand webinars](#) for details on applying for this challenge.

[Learn about this challenge](#)

[Send questions to hello@nasatechleap.org](mailto:hello@nasatechleap.org)

RECENT FLIGHTS

TechRise Challenge: Projects from the Next Generation Take Flight in 2026

On July 1, students from 25 middle and high schools watched their experiments launch aboard a high-altitude balloon operated by World View Enterprises of Tucson, Arizona.

Student projects flew for approximately 3 ½ hours at over 70,000 feet with exposure to Earth's upper atmosphere, radiation, and perspective views of Earth. At that altitude — about 13 miles above Earth — payloads experienced the stratosphere's unique thermal and atmospheric environment, providing conditions that ground-based testing cannot replicate. This nationwide contest engages 6-12 graders in technology, science, and space exploration, with each team receiving:

The remaining 35 student experiments for the 2025-2026 TechRise will fly on a Suborbital-Spaceship operated by Virgin Galactic of Orange County, California.



*Twenty-five TechRise Student Challenge payloads are integrated into the gondola (far right) attached to the World View high-altitude balloon launching from Page, Arizona on July 1, 2026.
Credits: Future Engineers/Deanne Bell*

Next TechRise Student Challenge Set to Open in September

NASA expects to open the next TechRise challenge in Sept. 2026; [pre-register here](#) to be notified when it opens. This nationwide contest engages 6-12 graders in technology, science, and space exploration, with each team receiving:

- \$1,500 to build their experiment
- A flight box in which to house it
- Technical support
- An assigned spot for their experiment on a Flight Opportunities-supported flight test aboard a high-altitude balloon operated by Aerostar of Sioux Falls, South Dakota.

[Read about the winning teams and their experiments](#)

SPEED Payload Flight Tested on High-Altitude Balloon



The SPEED payload launched on a high-altitude balloon operated by World View Enterprises on July 13 from Artesia, New Mexico. Credits: NASA / Wyatt Humphreys

The Stratospheric Projectile Experiment of Entry Dynamics (SPEED) payload developed at NASA's Ames Research Center in Silicon Valley, California flew on a high-altitude balloon operated by World View Enterprises on Monday, July 13. The balloon launched from Artesia, New Mexico at 7:15 am MDT and carried the SPEED payload for more than three hours, marking the first flight test of the integrated system.

SPEED will apply the lessons learned from this flight test to a second Flight Opportunities-supported balloon flight with Aerostar.



[Learn more about the SPEED payload](#)

No Aug. Community of Practice webinar

Watch for details in the next issue of this newsletter and on our [website](#)!

ON-DEMAND WEBINARS

Watch any our past webinars!

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

[Watch our on-demand webinars](#)



TECHNOLOGY TRANSITIONS

Interlune Awarded SBIR Phase III Funding to Advance the Use of Lunar Resources

In an Oct. 2024 parabolic flight test supported by Flight Opportunities, researchers from Interlune measured the performance of their milling system for crushing/processing raw lunar regolith simulant into feedstock for in-situ resource utilization (ISRU). The testing included multiple chambers holding lunar regolith simulant under vacuum, tested in a lunar gravity environment to assess trade-offs in size, weight, and power required for different performance levels.

Building on this testing with Flight Opportunities, NASA recently awarded Interlune \$6.9 million through a Phase III Small Business Innovation Research (SBIR) contract to further advance ISRU technologies. Over the next year and a half, Seattle-based Interlune will pursue validation of critical resource prospecting tools to make future lunar missions more self-sufficient, reducing the need to transport supplies from Earth.



Interlune intern Martin Johnson operates a prototype of a regolith processing device on a parabolic flight on Oct. 31, 2024. Credit: Zero Gravity Corporation

[Read about this technology transition](#)

By July 31: Register for Deep Space Food Challenge: Mars to Table

This global competition asks participants to create a complete meal plan for a crew on Mars, along with concepts for food systems that use a variety of food sources and technologies to meet a crew's nutritional needs.

- **Registration deadline: July 31, 2026**
- **\$750,000 in total prizes**

[Learn more about this challenge](#)



Two Solicitations for Early-Stage Space Technologies

The Space Technology Research Grants program released two solicitations designed to accelerate innovative, early-stage space technology research led by tenured or tenure-track faculty from U.S. institutions of higher education. They include:

1. **The Early Stage Innovations 2026 (ESI26)** solicitation, which focuses on eight topics (see page 8 of [ST-REDDI-2026_Appendix_B2-ESI26](#))
2. **The ESI26 In-Situ Resource Utilization (ESI26-ISRU)** solicitation, which focuses on lunar ISRU water purification

- **Mandatory Preliminary Proposals Due: Aug 13, 2026**
- **Full Proposals (by invitation only) Due: Dec 16, 2026**
- **Anticipated Award Date: June 2027**



Now Open: The Fly Foundational Robots (FFR) Space Roboticist Challenge

NASA is selecting U.S. researchers to run experiments on an operational robotic arm in space

The FFR Mission, launching in late 2027, is putting a 7-degree-of-freedom robotic arm into low Earth orbit. NASA is opening access to that arm to a select group of U.S. researchers — principal investigators, post-doctoral researchers, professors, and highly qualified graduate students — who have a compelling experiment and the capability to execute it.



Selected participants will have the opportunity to run pre-approved experiments on an active robotic system operating in microgravity.

- **Registration Deadline: Sept 23, 2026, 11:59 PM CT**
- **Submission Deadline: Oct 2, 2026, 11:59 PM CT**

[Learn more about this challenge](#)

RESOURCES

Space Logistics Technology Catalog

NASA's Space Logistics Technology Catalog provides accessible information about NASA-funded technologies to improve technology adoption and enhance collaboration. It is a systematically arranged and curated list to offer a snapshot of relevant technologies within the space logistics capability area to serve as a reference tool for stakeholders and customers. Catalogs covering NASA-funded technologies in other capability areas are currently under development.

[Download the 2026 report](#)



Attending any of these upcoming meetings? Let us know!

These events may be of interest to the flight test community and may be attended by Flight Opportunities personnel. Inclusion here does not constitute endorsement.

- [Small Satellite Conference](#), Salt Lake City, UT, Aug. 23-26, 2026
- [NASA's HELIOTECH Heliophysics Technology Symposium](#), with a focus on Orbital Flight, Johns Hopkins Applied Physics Laboratory, Laurel Maryland, Aug. 31-Sept. 4, 2026
- [2026 SPRSA \(Small Payload Ride Share Association\) Symposium](#), NASA's Ames Research Center, Silicon Valley, CA, Sept. 29-Oct. 1

NASA Flight Opportunities Program

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

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