



FLIGHT OPPORTUNITIES



ISSUE 90 — APRIL 2026

New NASA TechLeap Prize coming soon | May 7 deadline for lunar payloads |
Webinar on flight testing heat shields | Send us your technology transitions |
Challenges and solicitations | LSIC spring meeting

NASA'S NEXT TECHLEAP PRIZE COMING SOON

Robotically Manipulated Payload Challenge

**NASA expects to open its next
TechLeap Prize in May 2026!**

To advance persistent infrastructure for ISAM (in-space servicing, assembly, and manufacturing), applicants will be invited to conceptualize payloads that can interact with, manipulate, or be reconfigured by a robotic arm in low Earth orbit. In Fall 2026, up to three teams will win up to \$500,000 each to design and build flight-ready payloads for possible delivery in 2027. Potential applications range from robotic inspection and diagnostics to modular systems that can be modified, structural assembly, sensor deployment, and material processing.

NASA's TechLeap Prize is open to qualified commercial businesses, academic institutions, entrepreneurs, and other innovators. Watch for a special announcement mailing coming soon, and encourage your colleagues to [subscribe to the Flight Opportunities newsletter](#) to ensure they receive the notice.



NASA
TechLeap
PRIZE

NASA Seeks Flight-Ready and Other Payloads for Lunar Missions

RFI #: [NNH26ZDA008L](#)

Deadline: This Thursday, May 7 at 11:59 pm ET

Submit via [NSPIRES](#)

More information via [SAM.gov](#)

To inform its approach to allocating payloads for the near-monthly Commercial Lunar Payload Services (CLPS) deliveries slated to begin in 2027, NASA has issued a Request for Information (RFI) that seeks science instruments, technology demonstrations, and infrastructure components that support NASA's goals.

Payloads of greatest interest include existing hardware that:

- Requires little to no payload development, enabling “ready-to-fly” payloads
- Focuses any engineering efforts on accommodating flight on specific CLPS-contractor landing craft
- Ties to the [NASA Moon to Mars Objectives](#), supports progress on the [Moon to Mars technology gaps and data gaps](#), or helps with [NASA's civil space shortfalls](#)

NASA is particularly interested in payload teams that:

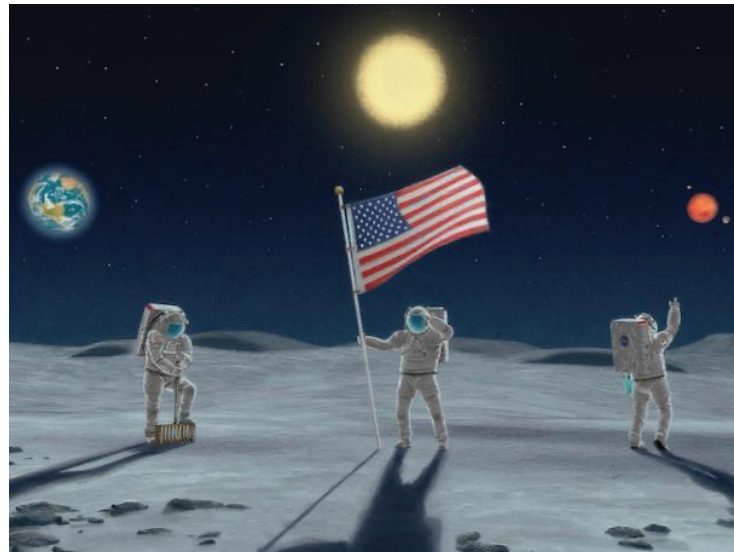
- Are self-funded
- Can deliver their completed flight units to CLPS
- Have the capabilities to perform their own operations while the payload is on the lunar surface

Eligibility

The “Lunar Science and Technology Payloads for Expanded Lunar Landing Opportunities” RFI is open to responses from industry, universities, non-profit organizations, and individuals, including international entities. It is also open to researchers at NASA centers; Federally Funded Research and Development Centers (FFRDCs); and other U.S. federal, state, local, and tribal government agencies.

Submit via [NSPIRES](#) by Thursday, May 7.

Questions? Email HQ-RFILunarPayloads@mail.nasa.gov



Heat Shield Flight Testing and Space Industry Growth: NASA Successes

Wednesday, May 6 • 1–2 p.m. ET

When venturing to other planets or returning to Earth, safe atmospheric entry is a top priority. NASA has decades of experience in creating thermal protection systems (TPS) that help spacecraft withstand the intense heat generated when entering an atmosphere. [Join our May 6 webinar](#) to hear how TPS technologies advanced through the Flight Opportunities program are building commercial space capabilities, illustrating what's possible through NASA and industry collaboration.

In a discussion moderated by Flight Opportunities representatives, speakers from NASA's Ames Research Center and Varda Space Industries will discuss the flight testing of a powerful and lightweight protective material called C-PICA (Conformal Phenolic Impregnated Carbon Ablator) as well as commercial use of other NASA TPS technologies. Panelists will also explore how partnerships between industry and government accelerate transformative technologies and foster the growth of America's orbital economy.

[Learn about our May 6 webinar](#)



The Varda Space Industries W-5 capsule returned to Earth in Koonibba in South Australia, on Jan. 29, 2026, with the protection of a heat shield made of C-PICA, a cutting-edge material licensed from NASA and manufactured by Varda. Credits: Varda Space Industries

ON-DEMAND WEBINARS

Watch our past webinars on demand!

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.

Our April 1, 2026, webinar is now available: [Advancing Space Power Capabilities Through Flight Tests](#)

[Watch our on-demand webinars](#)



Share Your Technology Journeys: Call for technology transitions and success stories

Attention Flight Opportunities community!

Have you tested a technology through the Flight Opportunities program that has now transitioned to new activities or been infused into missions? Let us know!

We're looking for technologies you flight tested through our program that have:

- Received additional **funding from a new source**
- Entered into a **commercial agreement**
- Executed **additional testing** or demonstrations
- Been infused into a **mission**
- Put into a **new/creative application** or published article



Four astronauts launched on NASA's Artemis II test flight on April 1, 2026. Credits: NASA

Watch Astrobotic's flight test of their hazard detection lidar system, which the company will be using in its [Griffin Mission One](#) to the lunar surface.

[Watch the flight test](#)



With support from NASA's Flight Opportunities program, Astrobotic tested an engineering model of its hazard detection lidar sensor over the company's simulated lunar terrain on November 14, 2024. Credits: Astrobotic

If you've had one of these kinds of successes (or others) as a result of your Flight Opportunities experience, [send us an email](#) to tell us about it! Feel free to include any information that could help us understand your technology's transition (e.g., press releases, slide decks, web pages, etc.). Not only does this help us track our program's impact, but you might wind up on our [Technology Transitions webpage](#).

[Contact us with your technology transition](#)

IMPORTANT: Please include the relevant program-assigned T#(s) in your email.

CHALLENGES AND SOLICITATIONS



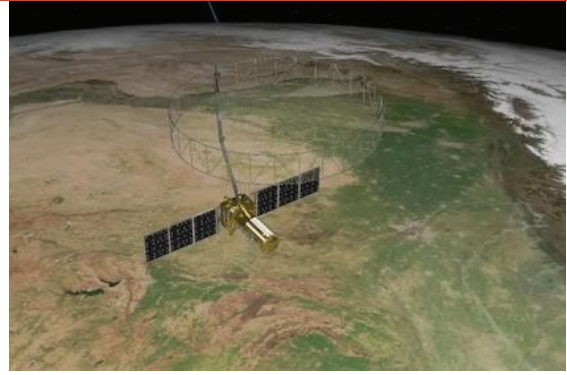
Mars to Table Food Challenge

NASA's newest Deep Space Food Challenge seeks concepts for food systems that could be used on the surface of Mars as well as on the Moon

Register by July 31, 2026

Total Prizes: \$750,000

[Learn about the food challenge](#)



NASA Space to Soil Challenge

Small satellite technologies for regenerative agriculture, sustainable forestry, and land resilience

Submit by May 4, 2026

Total Prizes: \$400,000

[Learn about the soil challenge](#)

SBIR Broad Agency Announcement

NASA's SBIR/STTR program is taking a new approach to its solicitation cycle. Rather than releasing a single list of Phase I subtopics, the program has issued a **Broad Agency Announcement (BAA)** that allows for Phase I subtopics for SBIR, STTR, and SBIR Ignite to be released over multiple appendices throughout the year.

The BAA approach allows the NASA SBIR/STTR program to be more flexible and responsive, soliciting proposals for known and emergent technology needs to adapt to changes in mission priorities and developments in the commercial marketplace. In addition, the phased release schedule creates more opportunities for small businesses to propose and participate throughout the year.

Read more about the shift to BAA at NASA's **Program Year 2026 Information Hub** and **subscribe here** to receive updates about an upcoming release of appendices.

NOTE: Researchers with active SBIR/STTR awards may be eligible for flight test and payload development support through Flight Opportunities.

SBIR = Small Business Innovation Research

STTR = Small Business Technology Transfer

[Learn more about the BAA here](#)

Attending any of these upcoming meetings? Let us know!

Lunar Surface Innovation Consortium (LSIC) Spring Meeting

- **April 28-30** | Washington, DC and Laurel, Maryland (Johns Hopkins University Bloomberg Center and Applied Physics Laboratory)
- **Note:** In-person registration is closed, but you can still attend virtually. Register by this Friday, April 24.
- **Flight Opportunities Program Manager Greg Peters** will participate in the “Power Up the Dialogue” panel on Thursday, April 30 at 3:00 p.m.

NASA Flight Opportunities Program

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

Visit nasa.gov/stmd-flight-opportunities

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