

Flight Opportunities

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Enjoy!

The Flight Opportunities team

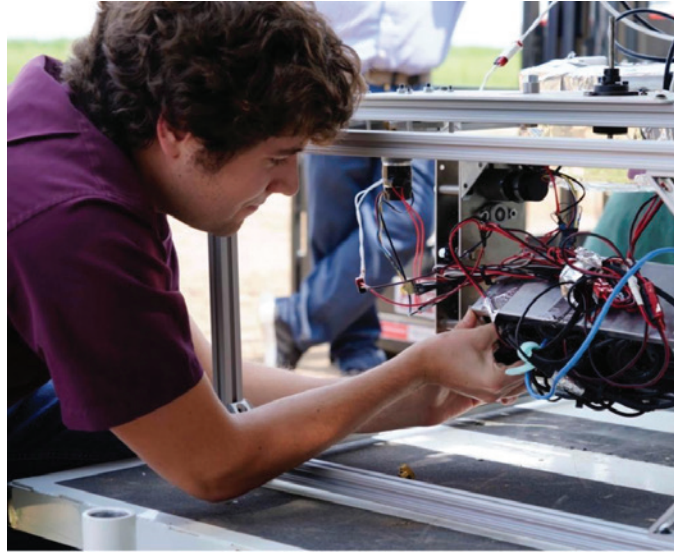
NASA Prize Offers Fly-Fix-Fly Testing for SmallSat Planetary Observation

After a 12-day stratospheric flight, winners of **NASA's first TechLeap Prize** are now analyzing data from technologies that may improve autonomous observation capabilities for small spacecraft flying over Earth, the Moon, or other worlds. Their payloads were selected through the TechLeap **Autonomous Observation Challenge No. 1**, which asked teams to develop technologies to autonomously detect, locate, track, and collect data on short-lived events, such as wildfires, unique aerosol dispersions like dust and steam plumes, or events on other planetary bodies such as geysers on the icy moons of Saturn and Jupiter.

NASA's **Flight Opportunities program**

enabled three research teams to fly, fix issues, and fly again less than a year after their first individual flight tests. This second high-altitude balloon flight with all three payloads aboard cost-efficiently gave the teams a longer sensing and data collection opportunity. Those teams were the SEAK (Systems Engineering, Architecture, and Knowledge) Lab at Texas A&M University in College Station; Bronco Space at Cal Poly Pomona in California; and Orion Labs, a small applied robotic research institution in Nunn, Colorado.

[Read the full NASA feature.](#)



*Researcher Ben Gorr of the SEAK Lab at Texas A&M University prepares the SNAP technology payload for high-altitude balloon flight testing in May 2023.
Credits: Aerostar*

“We have worked hard to correct the issues we discovered during the original flight and are thankful to Flight Opportunities for making this second flight possible. Our hope is that this payload will pave the way for improved monitoring of aerosol plumes on a much finer spatial scale than was previously possible.”

— Ben Gorr, team member and Texas A&M graduate student

Closing Soon: Advanced Materials Research Opportunities for ISS National Lab Utilization

NASA has announced an opportunity to conduct advanced materials research on the International Space Station (ISS). A Research Announcement for Cycle 2023-2 In Space Production Applications (InSPA) Phase 1 concepts in the area of Advanced Materials and Manufacturing requests the submission of white papers followed by proposals (by invitation only) that focus on applications that use space to serve markets on Earth. Proposals should demonstrate the potential of space to produce superior materials and products over what can be achieved on Earth for important terrestrial applications.

[Read the research announcement.](#)

White papers due: June 23, 2023

Now Open: ROSES-23 Artemis III Deployed Instruments Program Solicitation

The biological and physical sciences research community has the opportunity to accomplish unique research on the lunar surface. NASA's Artemis III Deployed Instruments Program call is soliciting proposals for standalone instruments and instrument suites for high-priority science investigations conducted by human deployment of payloads on the lunar surface during Artemis III. Proposals must include information detailing why crew are needed for deployment, how the instrument is deployed, any special deployment requirements, an estimate of the crew time needed for deployment, and an overview of the real-time ground-based support needed for deployment during extra vehicular activities.

NASA encourages the development of instruments that can address more than one measurement need and/or science investigation.

[Access the solicitation.](#)

Step-1 Proposals Due: June 30, 2023

Step-2 Proposals Due: August 31, 2023

Now Open: Research Announcement for Technology Advancement and Applied Research Leveraging ISS National Lab

NASA has announced an opportunity to submit proposals focused on flight investigations within applied research and development, translational medicine, technology readiness level maturation, and technology demonstration to be performed on the International Space Station (ISS). NASA and the Center for the Advancement of Science in Space (CASIS) have identified multiple strategic priorities and programmatic focus areas aimed at enabling a robust and scalable market in the low Earth orbit.

Proposals should focus on use of the unique ISS environment to develop, test, or mature products and processes that have a demonstrated potential to produce near-term and positive direct or indirect economic impact.

[Access the research announcement.](#)

Concept Summaries due: August 7, 2023

Full Proposals (by invitation only) due: October 9, 2023

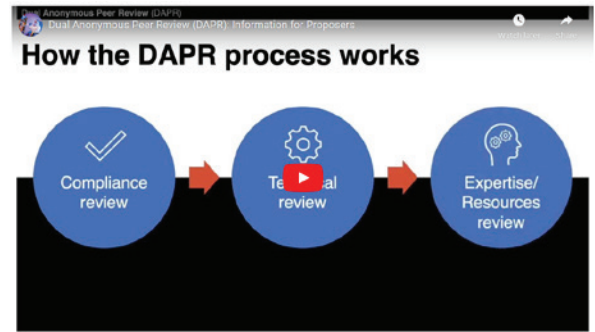
Dual-Anonymous Peer Review (DAPR) Video Now Available

The **Flight Opportunities** and **Small Spacecraft Technology** programs use **dual-anonymous peer review (DAPR)** to evaluate proposals. The goal is to ensure equitable reviews, reduce the influence of unconscious biases, and level the playing field for everyone. Research shows that using DAPR to evaluate proposals improves the overall quality of the review process and expands the demographics of awardees.

Flight Opportunities has produced a 5-minute video that explains:

- What DAPR is and why it is important
- How the DAPR process works
- How to prepare the anonymous portion of a proposal

[View the DAPR informational video.](#)



Events

12th Annual International Space Station Research and Development Conference (ISSRDC)

July 31-August 3
Seattle, Washington



ISSRDC connects scientists who are advancing their R&D goals with space community leaders in academia, industry, and government agencies. Technical sessions, panel discussions, and lightning talks will highlight space station research involving materials testing, pharmaceutical development, fundamental science, in-space manufacturing, and more. Registration is now open. Members of the Flight Opportunities team will attend and speak to how the program leverages commercial providers to offer low-cost, iterative testing to validate technology performance ahead of an International Space Station mission.

37th Annual Small Satellite Conference

August 5-10, 2023
Logan, Utah

Attendees at this annual conference will explore future missions and delve into key technology drivers, operational constructs, and activities that inform and secure the success of small satellite missions at scale. Members of the Flight Opportunities and Small Spacecraft Technology program teams will be presenting on current opportunities and resources, so stay tuned for information on how to connect with them.

Annual Meeting of the American Society for Gravitational and Space Research (ASGSR)

November 14-18, 2023

Washington, D.C.

The ASGSR annual meeting brings together the biological and physical space sciences community to share research, build collaborations, and discuss emerging issues in the field. ASGSR welcomes scientists and engineers from all career stages. The Flight Opportunities team will have a session at the meeting. Stay tuned for details.

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NASA Flight Opportunities Program

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