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Enjoy! The Flight Opportunities team

# News

## NASA Seeks Proposals for Space Technology Flight Test Services

NASA's Armstrong Flight Research Center has released a **final request for proposal** (RFP) for Suborbital/Hosted Orbital Flight and Payload Integration Services 4.

The new solicitation is designed to replace contracts for existing flight test services and seeks to add new capabilities, including hosting payloads in orbit and flying NASA researchers on suborbital flights. It aims to increase available testing options for researchers to advance their technologies and expand opportunities for a wider range of commercial companies to support suborbital and orbital flight testing for NASA.

This contract will be managed by NASA's **Flight Opportunities program**, in cooperation with the agency's **Small Spacecraft Technology program**. Flights and other services solicited will be available for NASA internal use across the agency as well as for use by other government agencies.

#### Key dates and deadlines:

- Industry day (virtual): August 1, 2023 (Time and registration link will be posted at SAM.gov at a later date)
- Questions due: 12:00 pm Pacific on August 7, 2023
- Proposals due: 12:00 pm Pacific on August 28, 2023

Visit **full proposal** page. Read the **NASA announcement**.

## **Small Steps, Giant Leaps Podcasts**

NASA's **"Small Steps, Giant Leaps"** podcast celebrates program and project managers, engineers, scientists, and thought leaders working to advance aeronautics and space exploration.

Add these episodes to your summer listening list!

# Flight Opportunities – Rapid Demonstration of Space Technologies

Flight Opportunities Program Manager Danielle McCulloch describes how the program rapidly demonstrates technologies for space exploration, discovery, and the expansion of space commerce through suborbital testing with industry flight providers. Listeners learn about:

- Upcoming Flight Opportunities test flights
- Available mechanisms for innovators to flight test technologies
- Technology gaps NASA is addressing through Flight Opportunities

# small steps GIANT LEAPS

#### > Listen to the episode.

#### TechLeap Nighttime Precision Landing Challenge

NASA TechLeap Nighttime Precision Landing Challenge Manager Greg Peters discusses the goals of the lunar landing challenge, the difficulties the challenge winners must address in their technology solutions, the timeline and development speed that is central to the challenge, and more.

> Listen to the episode.

# **Recent Flights**

## NASA TechRise Student Teams Take Flight

Students from 20 middle and high schools watched as their experiments launched aboard an Aerostar high-altitude balloon on June 14 as part of NASA's TechRise Student Challenge. The flight is part of **a** series of suborbital flight tests for TechRise that will continue through the summer.

Led by NASA's **Flight Opportunities program** and administered by **Future Engineers**, TechRise gives student teams a chance to design and build science and technology experiments for flight.

"Flight test is a critical milestone along the path of technology development and scientific discovery, and is essential for tackling some of the most pressing challenges NASA faces." said Danielle McCulloch, Program Manager for Flight Opportunities at Armstrong Flight Research Center in Edwards, California. "These student payloads address important questions about space and our home planet, and they represent months of skill-building, cooperation, challenges, and accomplishments."

Two additional flight tests are expected this month, each with experiments from 30 middle and high schools. Stay tuned for more details on upcoming flight tests and read on for information about how students can get involved in a future NASA TechRise Student Challenge.

#### Read the full NASA feature.



# **Opportunities**

# Coming Soon: NASA TechRise 2023-24

The next **NASA TechRise Student Challenge** will launch in August! The Challenge invites student teams in grades six to 12 to develop, build, and launch science and technology experiments. In the 2022-23 challenge, 60



winning teams received \$1,500 to build their experiment and an assigned spot on a NASA-sponsored high-altitude balloon flight operated by a commercial provider.

Watch your inbox for more information and share information with your networks to help spread the word to students and educators.

#### Register for Challenge updates and volunteer to judge entries.

# **Community of Practice**

## Practicing Fly-Fix-Fly: Re-flight Opportunity Through NASA TechLeap Prize

#### Wednesday, August 2 10:00 a.m.-11:00 a.m. PDT

Principal investigator Ben Gorr from the SEAK (Systems Engineering, Architecture, and Knowledge) Lab at Texas A&M University will speak to his experience as a winner of NASA's first TechLeap Prize, **Autonomous Observation Challenge No. 1**, as well as his team's **recent opportunity** to re-fly their technology on a stationkeeping high-altitude balloon flight. Joined by Flight Opportunities team members, presenters will explore



Aerostar crew inflate a high-altitude balloon in preparation for flight testing three TechLeap Autonomous Observation Challenge technologies on May 24, 2023. Credits: Aerostar

the "fly-fix-fly" ethos of the Flight Opportunities program and highlight best practices for quickly advancing space technologies while responding to unexpected challenges and collaborating with fellow innovators.

Microsoft Teams meeting Join on your computer or mobile app Click here to join the meeting **Or call in (audio only)** + 1 256-715-9946 Phone Conference ID: 161 583 405#

#### See all Community of Practice webinars

Do you have ideas or suggestions for a future Community of Practice topic? We'd love to hear your thoughts. Email us at NASA-FlightOpportunities@mail.nasa.gov to tell us what you'd like to see.

# **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 lightening talks will highlight space station research involving materials testing, pharmaceutical development, fundamental science, in-space manufacturing, and more. Don't miss the Flight Opportunities presentation during the Technology Development and Demonstration session on Wednesday, August 2!

#### **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 visit the NASA booth and watch the conference schedule to connect with them.

#### NASA Innovative Advanced Concepts (NIAC) 2023 Symposium September 19-21, 2023 Houston, Texas

NASA's NIAC Program seeks innovative, technically credible advanced concepts that could one day change the possible in aeronautics and space. The portfolio addresses diverse research areas including: Revolutionary Exploration Systems; Novel Propulsion, Human Systems & Architectures for Extreme Environments; Sensors, and Imaging. This year's symposium will feature progress presentations from currently funded Phase I-III fellows and keynote addresses from government officials, scientists, and visionary thinkers.

#### ASCEND October 23-25

Las Vegas, Nevada

ASCEND connects the civil, commercial, and national security space sectors, along with adjacent industries, to embrace the opportunities and address the challenges that come with increased activity in space. The conference enables technical exchanges, debates, and collaboration to help forge a sustainable off-world future. Members of the Flight Opportunities and Small Spacecraft Technology program teams will lead a discussion on the complementary role that suborbital flight testing and orbital platforms hosting payloads play in the rapid testing of space technologies.

#### 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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