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Enjoy!

The Flight Opportunities team

# NASA Seeks Comment on Draft Solicitation for Commercial Flights for Space Technology

NASA's Armstrong Flight Research Center invites review and comment on the draft of its **Suborbital/ Hosted Orbital Flight and Payload Integration Services 4** solicitation. The new solicitation will replace contracts for existing services and seeks to add new capabilities – including hosting payloads in orbit and flying NASA researchers on suborbital flights – which will expand opportunities for a wider range of commercial companies to participate.

The purpose of this solicitation is to acquire space on commercial flights for space technology payloads, along with payload integration services. The objective is to fly these payloads aboard platforms that fly at high altitudes, offer reduced gravity, or provide other relevant environments required to test the technologies and advance their readiness for use in future space missions. In addition to hosting payloads, contractors may provide space for NASA personnel to fly as researchers aboard those suborbital platforms capable of supporting human flight.

Interested respondents can view the full **draft solicitation** online. Potential offerors are encouraged to comment on all aspects of the draft solicitation, including the requirements, schedules, proposal instructions, and evaluation approaches, as well as any other programmatic elements associated with performance of the work.

### Comments are due no later than 2:00 pm PST on March 11, 2023.

View and respond to the **draft solicitation** online. Read the **NASA announcement** for additional information.



Credit: University of Central Florida

# **Community of Practice**

# Join Flight Opportunities for two in-person conversations!

**Next-Generation Suborbital Researchers Conference (NSRC)** 

March 1, 2023 | Broomfield, Colorado

Transition Paths: Using Commercial Flight Tests to Address Strategic NASA Technology Priorities

Understanding the strategic priorities of funding organizations like NASA helps researchers and industry stakeholders ensure their work has practical applications and increases their chance of successful engagement. On **Tuesday, February 28 at 1:30 pm MST**, this Flight Opportunities panel will provide a variety of perspectives from NASA personnel on how researchers can identify potential focus areas for investigations and technology development. Presenters will also highlight opportunities for infusion of these innovations into NASA and commercial space exploration missions.

### Leveraging the Flight Opportunities Community to Maximize Flight Test Impact

In lieu of our March virtual webinar, Flight Opportunities will host an in-person Community of Practice session at NSRC on **Wednesday, March 1 at 10:30 am MST**. Join this panel of experienced Flight Opportunities—supported researchers to learn best practices for flight testing space technologies and working with commercial providers. Topics covered will include leveraging the experience of fellow researchers, mentorship, flight test rehearsals, managing onsite activities with flight providers, and leveraging flight tests to facilitate infusion of a technology into other missions or projects.

Miss the February webinar? Check out this month's **NASA TechFlights: Best Practices for Proposing**, along with other past Community of Practice webinars, on the **Flight Opportunities website**. Virtual sessions typically occur the first Wednesday of every month at 10 am PST/1 pm EST.

# **Opportunities**

# **Now Open**

ISS National Lab Research Announcement (NLRA)
In-Space Production Applications: Advanced Materials and Manufacturing

The purpose of this NLRA is to solicit proposals for applied research and development seeking to demonstrate space-based manufacturing and production activities in microgravity. Flight projects selected via this research announcement may be awarded funding to support development and mission integration and operations for projects that will be implemented on the International Space Station.

Research concepts are desired for which space-based testing can uniquely enable technical solutions to known science and engineering challenges and the creation of new products and business opportunities. The objective is to use the unique environment of the space station to develop, test, or mature products and processes that have a demonstrated potential to produce near-term, positive direct or indirect economic impact.

Learn more about this opportunity.

Concept Summaries Due (Step 1): April 5, 2023 Full Proposals Due (Step 2 – by invitation): June 19, 2023

# Resources

# NASA Releases State-of-the-Art Small Spacecraft Technology Report

NASA's Small Spacecraft Systems Virtual Institute has released the **2022 State-of-the-Art Small Spacecraft Technology report**. The report contains an overview of current state-of-the-art SmallSat technologies and their development status as discussed in open literature. It is not intended to be an exhaustive representation of all that is available on a particular topic. Commonly used sources for public data include manufacturer datasheets, press releases, conference papers, journal papers, public filings with government agencies, and news articles. Readers are highly encouraged to reach out to companies for further information regarding the performance and maturity of the described technology. **Access the complete report here**.

# Webinar: Dissecting the 2023 Phase I SBIR/STTR Solicitations

NASA's 2023 SBIR and STTR Phase I Solicitations are now open. These programs allow U.S. companies with fewer than 500 employees to pursue their innovative R&D while answering the federal government's interests. NASA experts conducted a webinar on January 17, 2023, where they provided valuable insights on proposal preparation. They explained the organization and structure of the solicitation, highlighted best practices and common pitfalls, and walked through the submission process. You can view the webinar recording here. The application period closes on March 13, 2023.

# **Events**

# **Next-Generation Suborbital Researchers Conference (NSRC)**

February 27-March 1, 2023 Broomfield, Colorado

NSRC gathers the suborbital space research and education communities, including suborbital researchers, educators, flight providers, spaceport operators, and government officials. NSRC 2023 will provide an in-depth forum for attendees to discuss funding, new research, and education missions aboard the many suborbital flight vehicles in operation and under development as well as new results from recent suborbital missions. Flight Opportunities personnel will be in attendance and

will host sessions that highlight best practices for suborbital flight testing. The program encourages all current and prospective suborbital researchers to attend.

We're also setting aside blocks of time to answer questions about Flight Opportunities during the conference. Sign up for a one-on-one appointment with a NASA Flight Opportunities team member. **Schedule an appointment online** or at the booth.

Visit the **NSRC online schedule** and don't miss the Flight Opportunities sessions!



# **Events** (cont)

### **Lunar and Planetary Science Conference (LPSC)**

March 13-17, 2023 The Woodlands, Texas/Virtual

A joint effort between NASA and the Lunar and Planetary Institute, LPSC serves as a focal point for lunar and planetary research science. Planetary scientists and students will present their findings in oral and poster presentations that provide new insights and a better understanding of the solar system. Join Flight Opportunities in the poster session on Tuesday, March 14 from 6:30-8:30 pm CDT to learn how suborbital flight testing advances science and technologies for planetary exploration, the program's role in advancing lunar and planetary research, and how to get started with Flight Opportunities.

#### The Workshop on Semiconductor Manufacturing in the Space Domain

March 27-28, 2023 Stanford, California

The Workshop on Semiconductor Manufacturing in the Space Domain brings together stakeholders from the semiconductor industry, commercial space station entities, U.S. government agencies, and academic communities to roadmap semiconductor manufacturing in low-Earth orbit (LEO) for the new space economy. This workshop aims to identify the benefits and challenges of semiconductor manufacturing in microgravity through a variety of formats such as oral presentations, poster sessions, and panel discussions. The multidisciplinary blend of subject matter experts provides a unique forum to bridge the gaps necessary to advance semiconductor commercial endeavors in LEO.

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