



Small Spacecraft Systems Virtual Institute

A Quarterly Brief of NASA's Small Spacecraft Community Resources

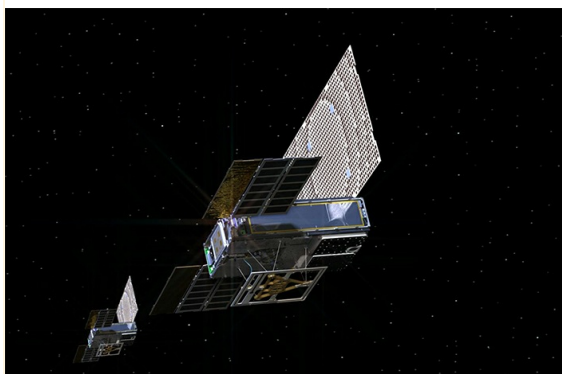
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Upcoming! • [Small Spacecraft Reliability Initiative Knowledge Base Tool Update](#) • [NASA at the 2021 Small Satellite Conference](#) • [Community of Practice Webinar Series Schedule](#) • [New Mission Design Tool](#) • [Around the Agency](#) • [Recent NASA Launches](#)

Upcoming Events & Releases

- August 9: [NASA Town Hall at the 2021 Small Satellite Conference](#)
- August 17: [SSRI Knowledge Base Tool Demonstration and Community Feedback Discussions](#) (abstract to be posted)
- August 18: [Community of Practice Webinar - Integrated Microfluidic Bioanalytical Systems for CubeSats: Growing and Monitoring Microbial Cultures in Outer Space](#)
- September 7: [23rd Annual Small Payload Ride Share Symposium - Session 1](#)
- September 21: [23rd Annual Small Payload Ride Share Symposium - Session 2](#)
- October 5: [23rd Annual Small Payload Ride Share Symposium - Session 3](#)
- October 19: [23rd Annual Small Payload Ride Share Symposium - Session 4](#)
- Early Fall: 2021 NASA Small Spacecraft Technology State of the Art Report release
- Fall: [2021 NASA Small Spacecraft Forum](#) Report release

NASA's SSRI Knowledge Base Tool Adds 24 New Topic Pages and Resources!



[SSRI Knowledge Base Tool](#)

The Small Spacecraft Reliability Initiative (SSRI) Knowledge Base is a comprehensive and searchable online tool that consolidates and organizes resources, best practices, and lessons learned from previous small satellite missions. 24 new topics pages were added in July 2021.

[Read more.](#)

Community Engagement

**NASA at the 2021 Small
Satellite Conference**

NASA Participation Guide

NASA Participation Guide **SmallSat2021**
smallsat.org

This compendium of live and pre-recorded events is limited to those sponsored by and/or have NASA participation. Visit the SmallSat 2021 website for the complete list of conference events and to confirm scheduled times.

LIVE EVENT Side Meetings <https://smallsat.org/conference/side-meetings/>

MONDAY, AUGUST 9
3:00PM MT NASA Town Hall — Small Spacecraft Systems Virtual Institute

Technical Sessions **PRE-RECORDED** On Demand Talks <https://smallsat.org/conference/technical-sessions/> **CORRESPONDING LIVE Session Q&A Webinars**

NEXT ON PAD	HyTi: Thermal Infrared Spectroscopy from a 6U Platform — NASA Jet Propulsion Laboratory	MON., AUG. 9 11:30AM-1:00PM MT
	The NASA Advanced Composite Solar Sail System (ACS3) Flight Demonstration: A Technology Pathfinder for Practical Smallsat Solar Sailing — NASA Langley Research Center	11:30AM-1:00PM MT
SCIENCE/MISSION PAYLOADS	Dynamically Controlling Image Integration Onboard the Star-Planet Activity Research CubeSat (SPARCIS) — NASA Jet Propulsion Laboratory	2:00PM - 3:00PM MT
	The EZIE Way to Measure the Ionospheric Electrojets with a Three-CubeSat Constellation — NASA Jet Propulsion Laboratory	2:00PM - 3:00PM MT
	The Pandora SmallSat: Multiscalelength Characterization of Exoplanets and their Host Stars — NASA Goddard Space Flight Center, NASA Ames Research Center	2:00PM - 3:00PM MT
FUTURE DIRECTIONS	Future Directions — NASA Headquarters	TUES., AUG. 10 9:00AM - 10:00AM MT
COORDINATING SUCCESSFUL EDUCATIONAL PROGRAMS	Online Small-Sat Knowledge Repositories and Modeling Tools for Risk Reduction and Enhanced Mission Success — NASA Goddard Space Flight Center	11:00AM-12:00PM MT
ADVANCED TECHNOLOGIES 1	NASA SpaceCube Edge TPU SmallSat Card for Autonomous Operations and Onboard Science-Data Analysis — NASA Goddard Space Flight Center	12:00PM - 1:00PM MT
PROPULSION	A Comparison of the Technological Maturation of In-Space Propulsion Systems from 2018 to 2020 — NASA Small Spacecraft Systems Virtual Institute	2:00PM - 3:00PM MT

LIST CONTINUED ON PG 2

Don't miss NASA Technical Presentations, Short Talks, Live Events, Posters, Swifties, and Exhibits at the Small Satellite Conference

[Download the Guide](#)

Small Spacecraft Community of Practice Webinar Series

Summer and Early Fall Schedule

Join us for the upcoming Community of Practice webinars including those in our new "Mission Accomplished" Series

[Bookmark the Schedule](#)

Small Spacecraft Systems Virtual Institute (S3VI)

National Aeronautics and Space Administration **NASA**

Small Spacecraft Community of Practice Webinar Series

Wednesday, August 18, 2021
10:00AM-11:00AM Pacific Daylight Time
Integrated Microfluidic Bioanalytical Systems for CubeSats: Growing and Monitoring Microbial Cultures in Outer Space
Speakers: **DIANA LY NASA** - NASA Ames Research Center
MACARENA PARRA - NASA Ames Research Center
TONY RICCO - Stanford University

Wednesday, September 15, 2021
10:00AM-11:00AM Pacific Daylight Time
HaloSat - A CubeSat that Studied the Halo of the Milky Way
Speaker: **PHILIP KAARET** - University of Iowa

Wednesday, October 13, 2021
10:00AM-11:00AM Pacific Daylight Time
NASA Conjunction Risk Analysis Guidance
Speaker: **JOSHUA KRAGE** - NASA Headquarters

For webinar details visit:
<https://www.nasa.gov/smallsat-institute/small-spacecraft-community-of-practice>



New Mission Design Tool Available

The Virtual Constellation Engine (VCE) is a cloud framework to prototype and emulate line-of-sight, latency, and bandwidth of satellite applications. [Read more.](#)

Opportunities to Engage

Around the Agency

Highlights and links to NASA centers engaged in small spacecraft activities

Image Credit: Spaceflight Inc.



Launch Window

NASA Launch Portal

Looking for a ride? NASA's Launch Portal is a resource to provide SmallSat/CubeSat developers an opportunity to find potential secondary launch opportunities on flights that are support upcoming NASA SmallSat/CubeSat missions.

Recent NASA Launches

Wondering what NASA has launched lately? Visit our listing of recently launched and deployed small spacecraft. Each mission highlight offers information on launch date and vehicle, orbit, deployment status and mission description.

A quarterly brief by the Small Spacecraft Systems Virtual Institute

[WEBSITE](#) | [EMAIL](#)