



# NASA Town Hall

## August 5, 2024

2024 Small Satellite Conference 3-8 August 2024 Utah State University

Bruce D. Yost Director, Small Spacecraft Systems Virtual Institute www.nasa.gov/smallsat-institute

www.nasa.gov

# 2024 NASA Town Hall Agenda



### 10:00-10:05AM - Welcome

Bruce Yost, Director, Small Spacecraft Systems Virtual Institute

### 10:05-10:15AM – Opening Remarks

Peg Luce, Deputy Associate Administrator for Programs (Acting) NASA Science Mission Directorate

### 10:15-10:20AM – Small Spacecraft Coordination Group

Florence Tan, Chair, Small Spacecraft Coordination Group Deputy Chief Technologist, NASA Science Mission Directorate

### **Science Mission Directorate**

**10:20-10:25AM – Earth Science Technology Office** Sachidananda R. Babu, Program Manager, In-Space Validation of Earth Science Technologies Program

**10:25-10:30AM – Astrophysics Division** Rosa Avalos-Warren, Program Executive

**10:30-10:35AM – Heliophysics Division** David Cheney, Program Executive

**10:35-10:40AM – Conjunction Assessment** Lauri Newman, Conjunction Assessment Program Officer

### Space Technology Mission Directorate

**10:40-10:45AM – Space Technology Mission Directorate** Christopher Baker, Program Executive, Small Spacecraft Technology Program and Flight Opportunities Program

10:45-10:50AM – Small Spacecraft Technology (SST) Program Roger Hunter, Program Manager

**10:50-10:55AM – Flight Opportunities Program** Danielle McCulloch, Program Manager

10:55-11:00AM – SmallSat Technology Development Opportunities: The Small Business Innovation Research Program and University Smallsat Technology Partnerships Samson Phan, Project Manager, SST

**Space Operations Mission Directorate** 

11:00-11:05AM – CubeSat Launch Initiative Liam Cheney / Creg Raffington, CSLI Mission Managers, Launch Services Program

11:05-11:10AM – Trajectory Operations and Planning Office Ellery Bohrmann, ISS Flight Controller

11:10-11:45AM – Question & Answer Session

National Aeronautics and Space Administration



# Small Spacecraft Systems Virtual Institute (S3VI)

**Community of Practive Webinar Series** 



#### Small Spacecraft Reliability Initiative Knowledge Base

#### Explore > Interactive Tree

pand its children	Hover over or click a section node to experimental experimenta experimental experimental experimental expe	
topic and click to open	O Hover over a topic node to preview the	
INTEGRATION ()		
DAY-IN-THE-LIFE TESTING ()	CONCEPTUAL DESIGN	
EMI/EMC TESTING O	PLANNING AND MANAGEMENT	
ACCELERATED LIFE TESTING ()	DETAILED DESIGN AND ANALYSIS	
ELECTRONICS FUNCTIONAL TESTING	MANUFACTURING	
BAKE OUT O	INTEGRATION AND TEST	
PADIATION TESTING	LAUNCH	
LAUNCH ENVIRONMENT TESTING	OPERATIONS	

### Small Spacecraft Information Search



# **Building Community through:**

### Sharing Knowledge

- SmallSat LEARN Forum
- Community of Practice
- **Mission Accomplished Webinar Series**
- Access to Space Announcements
- S3VI Quarterly Newsletter
- Guidebook

S3VI Web Portal

- SmallSat/CubeSat Fleet Missions Database
- Adapting Mission Assurance

**Identifying Emerging Technology Opportunities** 



### S3VI Newsletter



**Building Tools** 

- Small Spacecraft Reliability Initiative Knowledge Base Tool
- Small Spacecraft Information Search
- · State of the Art Report

  - Anomaly Alert Reporting System

### **Connecting People and Ideas**

- University Nanosatellite Program Participation (AFRL)
- University SmallSat Technology Partnerships
- Cross-Agency Collaboration
- Interagency Collaboration
- Space Mission Design Tools Collection 
  United Nations Office for Outer Space Affairs (UNOOSA) Systems Engineering Webinar Series



**Promoting Innovative Concepts** 

#### Small Spacecraft Technology State of the Art Report



#### SmallSat / CubeSat Fleet Chart



#### NASA SmallSat LEARN Forum



LaunchPortal: Potential Rideshare Opportunities

	Mission Name	Launch Date (NET)	Primary Orbit	Apogee (km)	Perigee (km)	Inclination (deg)	Insertion	Rideshare Adapt
	JP55-2	11/1/22	S30, Polar	810	619		1325 LTAN	None: UEA C-Adapti surrounding LOFTIC secondary payload. Rideshare opportunities available)
	IMP		u			28	C3 max <= -0.5	ESPA Grande (no Rideshare opportunities available)
	SPHEREX	2/28/25	\$\$0	650	650		6em MLTAN	Full SPA (no addition RS opportunities available)
	JP55-3	2025-2027	\$50				13:30 MUTAN	TBO
	COSI	2025/09	LEO	550	550	5		TRO
	SENTINEL 68	2025/11	LEO	1336	1336	66	TED	TRO
	NEO SURVEYOR	2026/05	LI				C3 (tbd)	TBO
	MUSE	2027/04	\$\$0	620	620	97.9	form MITAN	TRO
	VERITAS	2028-2030	Venus				C2=17	TRO
	000	2028/05	160	400			0.550.55	100

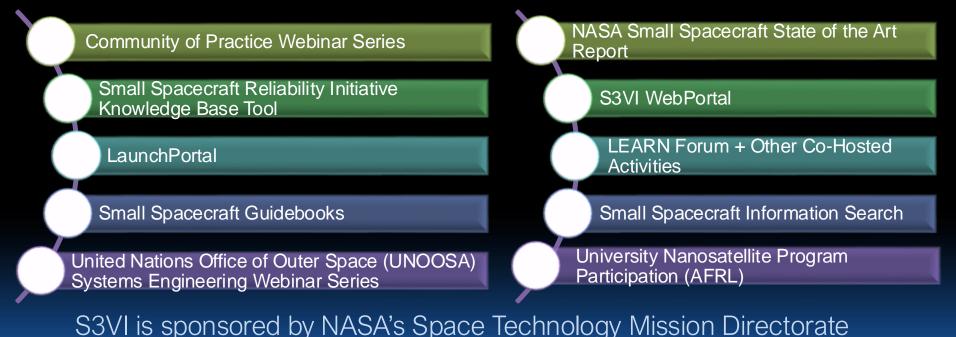
www.nasa.gov

# www.nasa.gov/smallsat-institute

# Small Spacecraft Systems Virtual Institute Products & Activities



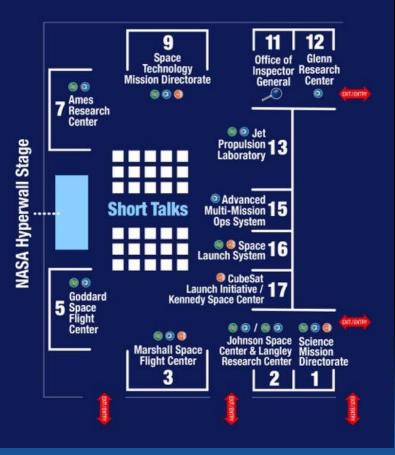
The S3VI provides the SmallSat research community with access to mission enabling information and maintains engagement with small spacecraft stakeholders in industry, government and academia. The S3VI resources listed below are available to all at: https://www.nasa.gov/smallsat-institute/



National Aeronautics and Space Administration

# NASA Exhibit Hall

Taggart Student Center Ballroom



Visit us in our new location in the Taggart Student Center Ballroom



First time NASA exhibitors:

- Glenn Research Center
- Johnson Space Center
- Langley Research Center
- Office of the Inspector General

NASA Hyperwall is co-located in the NASA exhibit area this year and will host:

- NASA Short Talks
- NASA Programming

Visit kiosks located in the NASA exhibit area for exhibit information.

# NASA-Sponsored Activities at SmallSat – At a Glance



Activity	Date	Time (s) MT	Description / Title / Moderator	Location
NASA Town Hall	Aug 5	10AM-11:45AM	NASA mission directorate and program status, announcements	ESLC 130
NASA Exhibits	Aug 5-8	Open hours	NASA mission directorates, centers, and program exhibits	Taggart Student Center (TSC) Ballroom
NASA Short Talks	Aug 6	9:45-10:45AM	Session #1: NASA Leadership Panel – Opportunities for the SmallSat Community <i>Moderator: Florence Tan, NASA</i> HQ	NASA Hyperwall, TSC Ballroom
NASA Short Talks	Aug 6	3:30-4:30PM	Session #2: NASA Collaborations and Partnerships Moderator: Catherine Venturini, The Aerospace Corporation	NASA Hyperwall, TSC Ballroom
NASA Short Talks	Aug 7	9:45-10:45AM	Session #3: Infusion Stories – Utilizing NASA STMD Mechanisms to Develop Technology <i>Moderator: Les</i> Johnson, NASA MSFC	NASA Hyperwall, TSC Ballroom
NASA Short Talks	Aug 7	3:30-4:30PM	Session #4: SmallSat Development Roadmap from Education to Flight Moderator: Anh Nguyen, Bryce / NASA HQ	NASA Hyperwall, TSC Ballroom
NASA Short Talks	Aug 8	9:45-10:45AM	Session #5: University SmallSat Updates Moderator: Anh Nguyen, Bryce / NASA HQ	NASA Hyperwall, TSC Ballroom
NASA Hyperwall	Aug 5-8	Open hours	NASA Short Talks, NASA Programming	Taggart Student Center (TSC) Ballroom

## 2024 Small Satellite Conference – Utah State University Map



