

The LSAS Tec Aerospace Tools and Data Workshop

Date: November 6th, 2024

Location: Trajectory Event Center - 13665 Dulles Technology Drive, Suite 150, Herndon, VA

Event Summary:

Join LSAS Tec and Ansys on November 6th to hear directly from our experts and commercial partners and learn how today's aerospace modeling and simulation tools are enabling engineering teams to achieve unmatched fidelity across satellite mission planning, design, and test. Learn more about the latest Ansys STK and ODTK features and how to apply these tools to complex space mission design and sub system analysis such as advanced RF communications payloads, synthetic sensor systems, and flight dynamics solutions critical to achieving successful on-orbit space operations.

Our industry partners from [Cesium](#), [Keysight](#), and [SEE](#) will highlight how their tools and solutions strengthen the end-to-end engineering design workflow when combined with Ansys Digital Mission Engineering tools and Ansys multi-physics simulation tools.

Don't miss this opportunity to network with like-minded professionals and gain invaluable insights that will propel your aerospace engineering expertise to new heights.

Registration: <https://calendly.com/meet-lsas-tec/lsas-2024-roadshow-d-c-area>

Agenda:

- 8:00 – 9:00 AM: Registration, Breakfast, and Networking

- 9:00 – 9:15 AM: Event Kick-Off and Welcome Address
 - Speaker: Matt Halferty – LSAS Tec
 - Topic: Introduction to the event, agenda overview, and welcoming attendees.

- 9:15 – 9:45 AM: New Advancements in STK and ODTK
 - Speaker: Alex Ridgeway – LSAS Tec

- Topic: Examine the latest advancements in STK and ODTK, revolutionizing digital mission engineering with enhanced capabilities for constellation management, environmental modeling, AI automation, and multidisciplinary collaboration.
- 9:45 – 10:15 AM: The Value of Storytelling in Aerospace
 - Speaker: Josh Poley – LSAS Tec
 - Topic: Explore the transformative power of storytelling in the aerospace industry and learn how it can fuel innovation, foster collaboration, and create a shared vision for the future.
- 10:15 – 10:30 AM: Coffee Break
- 10:30 – 11:00 AM: Satellite Operations with STK and ODTK
 - Speaker: Alex Ridgeway - LSAS Tec
 - Topic: Discover the power of combining STK and ODTK for satellite operations, empowering you to optimize performance, reduce risks, and ensure mission success in the competitive aerospace landscape.
- 11:00 – 11:45 PM: Flight Dynamics Training with AstroFDS
 - Speaker: Craig Nickel – Space Exploration Engineering
 - Topic: Master the intricacies of flight dynamics using AstroFDS, a cloud-based system designed to enhance mission planning and execution through advanced modeling, automation, and seamless integration with STK and ODTK.
- 11:45 – 12:00 PM: Space Force Association
 - Speaker: TBD – Space Force Association
- 12:00 – 1:00 PM: Lunch and Networking
- 1:00 – 1:30 PM: Simulating High-Fidelity Communications and Synthetic Sensor System Performance
 - Speakers: Nate McBee - LSAS Tec | John Ploschnitznig “JP” - Ansys
 - Topic: Explore how Ansys mission and system simulation tools are applied to model and analyze high-fidelity communication and synthetic sensor systems, addressing the complex challenges designers face when simulating and testing RF systems by incorporating accurate digital operational environments and advanced simulation techniques.

- 1:30 – 2:15 PM: Modeling Network Communications with EXata and STK
 - Speaker: Jeremy Smith & Vamsi Rachapudi - Keysight
 - Topic: Investigate the benefits of integrating EXata and STK for modeling network communications, enabling efficient evaluation, visualization, and analysis of your aerospace network performance.

- 2:15 – 2:45 PM: Coffee Break

- 2:45 – 3:15 PM: Leveraging Cesium's 3D Data Processing and Streaming Solutions Across Ansys Digital Mission Engineering Tools
 - Speakers: Nate McBee – LSAS Tec | Danny Williams - Cesium
 - Topic: Discover how Cesium's 3D tiling technology can revolutionize your digital systems simulations. With direct integrations between Cesium and Ansys STK, engineers can easily incorporate high-fidelity geospatial data that is critical to evaluating system performance and incorporating unmatched realism to mission simulations.

- 3:15 – 3:45 PM: Interconnected Applications with Terminal
 - Speaker: Alex Ridgeway - LSAS Tec
 - Topic: LSAS Tec will demonstrate the value of interconnected applications and automation in Terminal to expand the potential of STK and ODTK for aerospace use cases.

- 3:45 – 4:00 PM: Event Wrap-Up
 - Speaker: Matt Halferty – LSAS Tec
 - Topic: Closing remarks, key takeaways, and thanks to attendees and participants.

- 4:30 – 6:30 PM: Happy Hour and Networking
 - Location: TBD