STELLARXPRESS
OFFICIAL NEWSLETTER OF STELLARXPLORERS

Happenings in this world and beyond…

JANUARY 2026

NATIONAL SPACE DESIGN COMPETITION

Teams prepare for Round 3 Practice and Qualification Rounds

William P. Knight Composite Squadron - Echo Knights

The upcoming StellarXplorers rounds mark the final practice (Jan. 8-11) and qualification (Jan. 29 – Feb. 1) events ahead of the semifinals. With orbit planning and satellite design scores already locked in, teams have only their launch operations mission scores remaining. These rounds are the last opportunities to refine strategies and demonstrate readiness before eliminations begin. While the calendar may have turned to a new year, the competition continues as part of the same StellarXplorers season.

Team performances this month will determine who advances to the Semifinal Round in February.

STELLARCAMPS

The StellarCamps curriculum is available yearround for purchase (one-time purchase for $99). Whether you're looking to spark interest in aerospace or build foundational skills for competition success, StellarCamps provide the perfect launchpad. Depending on your needs, the StellarCamp curriculum can be used in a group setting or as a self-paced course for individuals.

Learn more or get started today at www.stellarxplorers.org/stellarcamps.

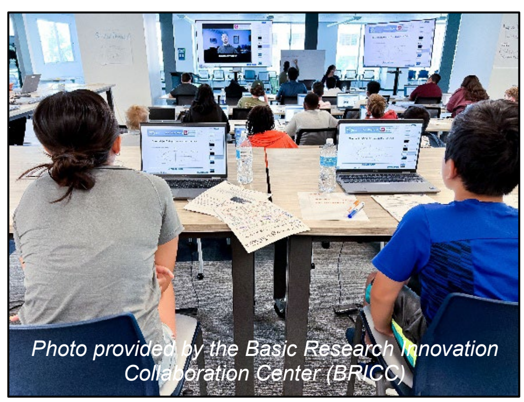


Photo provided by the Basic Research Innovation Collaboration Center (BRICC)

SPONSOR NEWS

Aerojet Rocketdyne's RL-10 rocket engines.
Credit: L3Harris Technologies

L3Harris' to sell majority stake in space propulsion unit to AE IndustrialL3Harris Technologies said Jan. 5 it will sell a majority stake in its space propulsion business to private equity firm AE Industrial Partners, marking the first major restructuring of its space portfolio since acquiring Aerojet Rocketdyne in 2023.

AE Industrial agreed to acquire a 60% interest in L3Harris' Space Propulsion and Power Systems business, a stake valued at $845 million. L3Harris will retain a 40% ownership stake in the business, with the transaction expected to close in the second half of 2026.

The Space Propulsion and Power Systems unit develops advanced rocket engines, in-space propulsion systems and space power technologies. Its portfolio includes the RL-10 upper-stage engine, in-space electric thrusters and power systems used on spacecraft and exploration missions, as well as work on next-generation capabilities such as nuclear surface and in-space power concepts. The business supplies hardware for missions ranging from Mars rovers to NASA's lunar Gateway.

The deal excludes the RS-25 rocket engine program, which will remain fully owned and operated by L3Harris. The RS-25 engine powers NASA's Space Launch System for Artemis lunar missions and carries long-term contractual and mission commitments. By retaining the program, L3Harris preserves its role as the prime supplier and maintains continuity for NASA. *Read more at https://spacenews.com/l3harris*

United Launch Alliance (ULA) Enables Expansion of Amazon Leo Constellation through Fourth Successful Launch

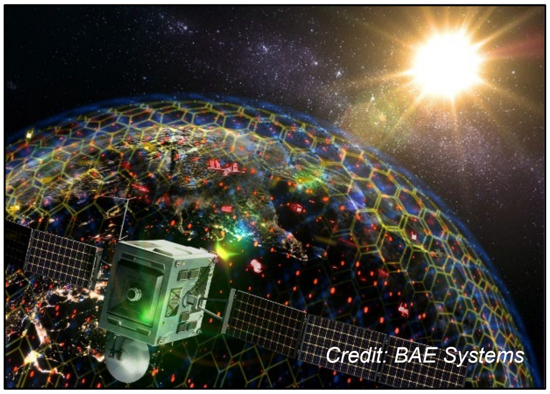
ULA Atlas V rocket carrying the Leo 4 mission for Amazon lifted off on Dec. 16 at 3:28 a.m. EST from Space Launch Complex-41 at Cape Canaveral Space Force Station. This mission demonstrates the strong partnership between ULA and Amazon to accurately and rapidly launch and deliver innovation solutions for global connectivity.

"One of our primary missions at ULA is to be a catalyst in connecting the world," said Gary Wentz, ULA vice president of Atlas and Vulcan programs. "Partnering with Amazon contributes to their mission of bridging the global digital gap. We thank the Amazon Leo team for their continued collaboration."

The Amazon Leo 4 launch deployed another batch of operational satellites into low Earth orbit. There are multiple remaining Amazon Leo missions on the Atlas V rocket, as well as 38 high-cadence, rapid fire launches on the next-generation Vulcan rocket. Through the world's largest commercial launch agreement, ULA will deliver more than half of Amazon's initial constellation 3,000 plus satellites.

Visit the mission website at https://www.ulalaunch.com/missions/next-launch/atlas-v-amazon-leo-4

BAE Systems to advance autonomous space-based surveillance technology for DARPA


Credit: BAE Systems

The U.S. Defense Advanced Research Projects Agency (DARPA) has awarded BAE Systems' FAST Labs™ research, development, and production organization a $16 million Phase 2 contract for the Oversight program. The Oversight program is focused on creating an autonomous system that keeps track, or maintains constant "custody," of a large number of terrestrial assets via new satellite constellations.

The award follows the successful completion of the Phase 1 program. During Phase 1, BAE Systems' software was integrated into a modeling and simulation environment to demonstrate a custody mission on representative satellite and sensor models. In Phase 2, BAE Systems will mature its solution algorithms and demonstrate operation with increasingly larger constellations, more complex scenarios, and higher fidelity modeling and simulation environments. The technology will be physically deployed to both tactical-edge satellites and ground stations.

Work on this program will take place at BAE Systems' facilities in Burlington, Mass. and Merrimack, N.H. It will also include collaboration with subcontractor AIMdyn, Inc.

STEM RESOURCES

Join the StellarXplorers Alumni Network

This is a private group for past and present StellarXplorers participants. You must be at least 16 years of age to join, according to LinkedIn account regulations. All requests to join will be reviewed by StellarXplorers staff to verify participation in the program.

To join, visit: https://www.linkedin.com/groups/12721859/

SPACE NEWS

Curious About What's Happening Overhead?

Check out the Space.com Space Calendar to stay up to date with upcoming planned rocket launches and skywatching-worthy dates. And in case you missed it…

03 JAN 2026 | Live long and loiter: NASA's ESCAPADE probes will wait year in space before going to Mars

02 JAN 2026 | 2026 is the year humanity will finally go back to the moon

01 JAN 2026 | Space Force shows off snowy new Alaska radar post

24 DEC 2025 | 60,000 feet above Earth, NASA is hunting for the minerals that power phones, EVs and clean energy

22 DEC 2025 | NASA's SPHEREx telescope completes its 1st cosmic map of the entire sky

19 DEC 2025 | NASA's Perseverance Mars rover could break the record for miles driven on another planet

12 DEC 2025 | How color-changing, bacteria-infused spacesuits could help keep future astronauts safe from space radiation

06 DEC 2025 | Rocket Lab launches Japanese technology-demonstrating satellite to orbit

Photos from Space:

Wolf Supermoon (Jan. 4th)

January's moon — often known as the "Wolf Moon" in reference to the packs of famished carnivores that can be heard howling this time of year — turned full as it sat close to its minimal distance to Earth in its 27-day orbit, giving rise to an enchanting supermoon. Here, an airliner crosses the lunar disk in the skies over Germany.
(Image credit: Kirill KUDRYAVTSEV / AFP via Getty Images)

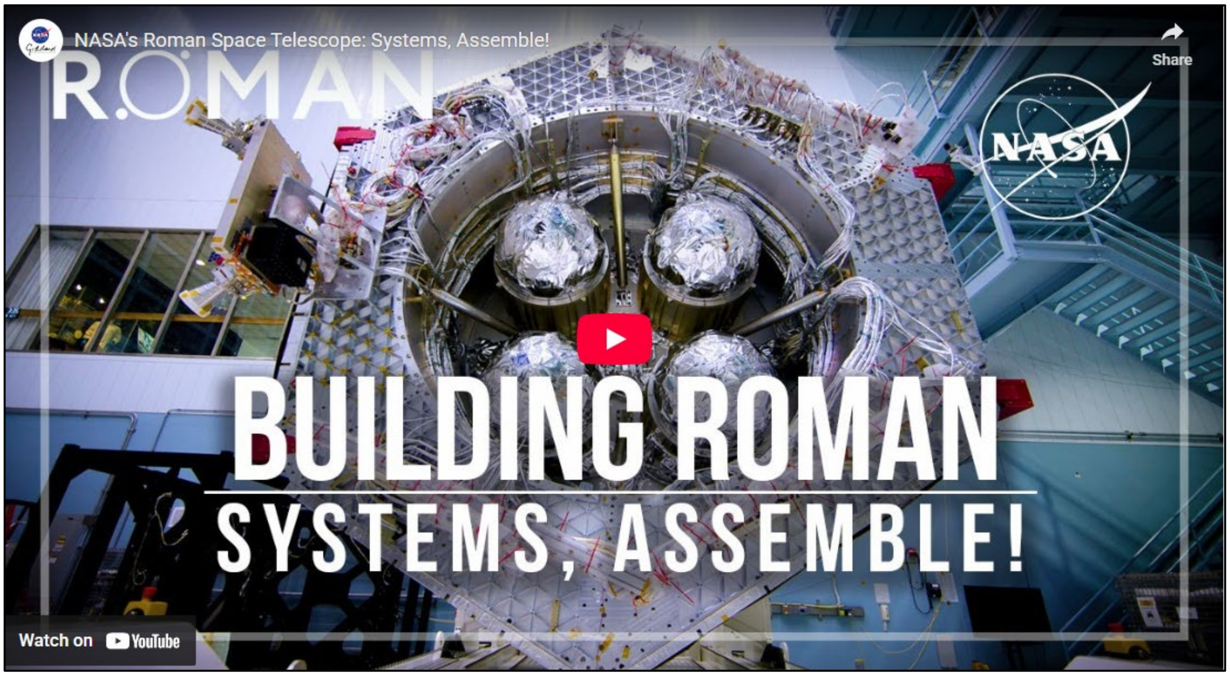
NASA launches science balloon in Antarctica (Dec. 25th)

Antarctica is one of the best places on Earth to fly these missions. NASA's annual Antarctic Long-Duration Balloon campaign operates from a site on the Ross Ice Shelf near the U.S. National Science Foundation's McMurdo Station
(Image credit: NASA/Andy Hamilton)

JUST FOR FUN

The Nancy Grace Roman Space Telescope

Named after NASA's first chief astronomer, the 'mother of the Hubble Space Telescope,' the Nancy Grace Roman Space Telescope will have a field of view at least 100 times larger than Hubble's, potentially measuring light from a billion galaxies in its lifetime. This observatory will also be able to block starlight to directly see exoplanets and planet-forming disks, complete a statistical census of planetary systems in our galaxy, and settle essential questions in the areas of dark energy, exoplanets, and infrared astrophysics.



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We would love to share some stories about your team. Send them our way: info@stellarxplorers.org.

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