



The Space Force Aims High: New Mission for the X-37B

Published on 29/07/2025

The U.S. Space Force is preparing to launch its eighth flight of the orbital vehicle [X-37B](#), scheduled for next month from the Kennedy Space Center in Florida. The goal? To test new technologies for space laser communications and quantum navigation — two crucial areas for the future of orbital security.

"It's a matter of connectivity, resilience, and operational readiness" - stated Gen. Chance Saltzman, Chief of Space Operations. - "This is how the Space Force protects American interests in space and from Earth to space."

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General Chance Saltzman, Chief of Space Operations of the United States Space Force - Copyright SPACEFORCE.MIL

The vehicle, developed by Boeing, is a non-operational orbital laboratory, used since 2010 for classified tests and advanced concepts. After the success of the previous mission — lasting a full 434 days — the X-37B returns to push the limits of space technology.

Communication and Navigation of the Future

Among the most anticipated experiments:

- Laser Communications: collaboration with commercial satellite networks to transmit data faster and more securely.
- Quantum Sensing: testing the most advanced quantum inertial sensor ever taken into orbit, capable of navigating without GPS — a breakthrough for exploration in cis-lunar space.

These technologies are designed to increase the resilience of American space systems, avoiding single points of failure and ensuring operations in environments denied to GPS signals.

The Space Force emphasizes how these innovations pave the way for a more flexible and secure future for long-range space missions.

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The X-37B is equipped with cutting-edge technologies that ensure exceptional performance, contributing to the future of space exploration - Copyright BOEING.COM

Beyond Orbit — Strategic Implications

The new mission represents a fundamental piece for:

- Strengthening the technological autonomy of the United States in space.
- Accelerating research in realistic operational environments — as hoped by the Defense Innovation Unit for drone tests in scenarios similar to those in Ukraine.
- Promoting a joint strategy between civil, military, and commercial sectors.

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In summary, the X-37B mission fits into a broader strategic vision, where space becomes a crucial ground for innovation, deterrence, and intersectoral cooperation on a global level.

News link: <https://www.defensenews.com/space/2025/07/28/space-force-to-launch-eighth-x-37b-spaceplane-flight-next-month/>