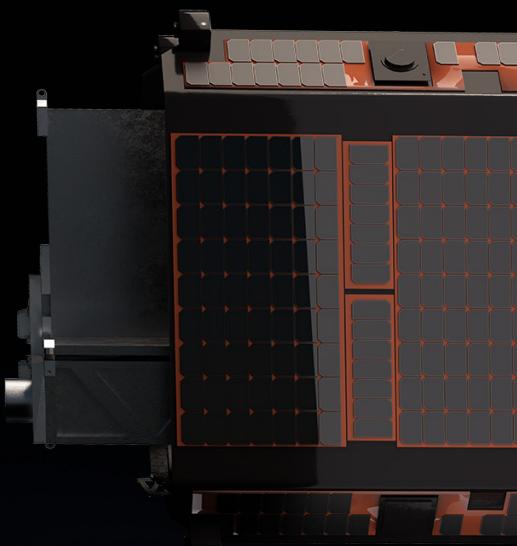




RIDE
WITH ME
MISSION
BOOKLET



Mission name: Ride With Me
Carrier name: ION SCV Galactic Georgius

Fino Mornasco, Italy, December 1, 2025 – On November 28, 2025, D-Orbit, a global leader in space logistics and orbital transportation, launched **We Need More Space** and **Ride With Me**, the **20th and 21st commercial missions** of its orbital transfer vehicle (OTV), **ION Satellite Carrier (ION)**, aboard **SpaceX's Transporter-15 mission**.

The two ION vehicles were launched from **Space Launch Complex 4E (SLC-4E)** at **Vandenberg Space Force Base** in California at **10:44 a.m. PT (19:44 UTC)**. Following liftoff, the OTVs, **ION SCV Stellar Stephanus** and **ION SCV Galactic Georgius**, were released into a Sun-synchronous Orbit at an altitude of approximately 510 km.

ION Satellite Carrier is a versatile space vehicle capable of **transporting and releasing satellites into distinct orbital slots**. It can also accommodate third-party payloads, including innovative technologies, research experiments, and instruments requiring **in-orbit testing**. Additionally, ION can support **edge computing and space cloud services**, providing satellite operators with advanced storage and computational capabilities in orbit.

D-Orbit's mission control team is now conducting the **Launch and Early Orbit Phase (LEOP)**, setting the stage for the upcoming operational phase.



1

A note about the name of the satellite carrier

The name of the satellite carrier is "ION Galactic Georgius", a combination of the acronym "ION", which stands for "InOrbit NOW", and the satellite's first name. This format follows the naming conventions of naval vessels used in navies around the World. The name "Georgius" was drawn at random from a bowl containing the names of all D-Orbit's employees. The company will continue to follow this procedure in the future to honor the skills, energy, passion, and commitment to its people.



2



Name of payload: LEMUR-2-HOTSPUR-TOM

Form factor: 3U

POC: Sarah Freeman
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These satellites are part of Spire's replenishment program, sustaining and enhancing the company's fully deployed multipurpose constellation. The satellite carry advanced Radio Occultation (RO) and Automatic Identification System (AIS) payloads to deliver high-quality atmospheric and radio frequency data that support global weather monitoring and commercial intelligence. Together, they provide critical insights to better understand and respond to changes in Earth's environment.

COMPANY PROFILE Website: www.spire.com

Spire (NYSE: SPIR) is a global provider of space-based data, analytics and space services, offering unique datasets and powerful insights about Earth so that organizations can make decisions with confidence in a rapidly changing world. Spire builds, owns, and operates a fully deployed satellite constellation that observes the Earth in real time using radio frequency technology. The data acquired by Spire's satellites provides global weather intelligence, ship and plane movements, and spoofing and jamming detection to better predict how their patterns impact economies, global security, business operations and the environment. Spire also offers Space as a Service solutions that empower customers to leverage its established infrastructure to put their business in space. Spire has offices across the U.S., Canada, UK, Luxembourg and Germany.

Photo credit: Spire



Name of payload: Lacuna-5 and Lacuna-6

Form factor: 2x 4U

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Lacuna-5 and Lacuna-6 combine a Spire-built platform with Lacuna's latest-generation IoT payloads, expanding Lacuna Space's constellation designed to deliver low-cost, reliable global connections to sensors and mobile equipment in remote locations. The constellation supports IoT services across agriculture, logistics, energy, environmental monitoring, and the blue economy—enabling applications from improving crop yields to tracking critical assets worldwide.



Photo credit: Spire



Name of payload: LaserCube Compact ISL 1000

Type of payload: Optical Inter Satellite Link

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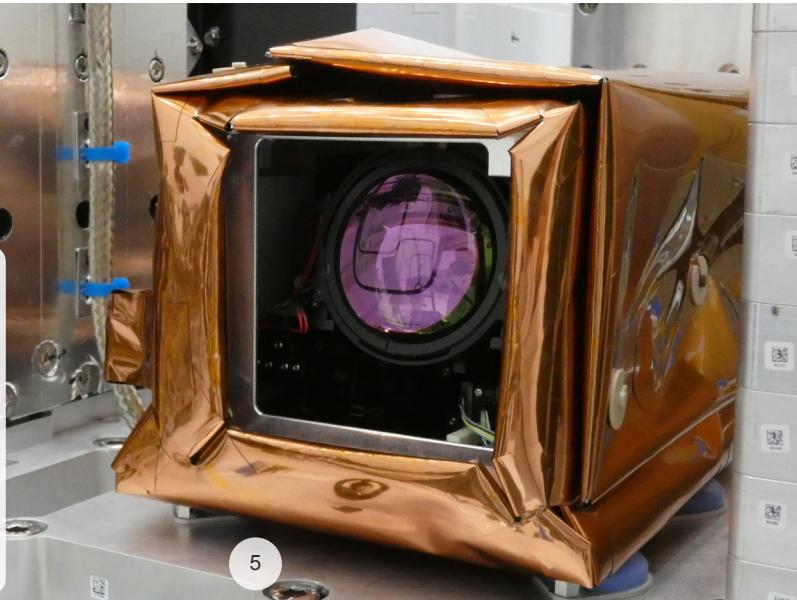
The LaserCube Compact mission is the first Italian Optical Inter-Satellite Link (OISL) mission and will take place within the IRIDE Constellation program, one of Europe's largest space programs for Earth observation, managed by the European Space Agency on behalf of the Italian Government, with the support of Agenzia Spaziale Italiana. As prime contractor for the "Optical Inter Satellite Link In Orbit Verification" section, D-Orbit provides its ION Satellite Carrier to host and test two LaserCube Compact terminals, the smallest laser communication terminals in Stellar Project's production line. The two terminals, integrated on two separate ION satellites, will establish an optical connection in orbit to demonstrate this low-power, high-performance laser communication technology designed to enhance data transfer between satellites and increase the overall responsiveness of future Earth observation and telecommunication constellations.

COMPANY PROFILE Website: www.stellarproject.space

StellarProject is an Italian company that provides bright and light solutions for free space optical communications specifically designed for small satellites. Through its different classes of lasercom terminals, Stellar Project provides reliable connectivity both for Inter Satellite Links (ISL) and User Terminals accessing space optical networks, implementing solid pointing accuracy, increased data rate and enhanced security. In the field of space debris analysis, Stellar Project has developed an Advanced Fragmentation Analyzer, with fragmentation study and forensic analysis (determination of offender size and speed).

Photo credit: D-Orbit

About the IRIDE constellation. The IRIDE constellation is a programme of the European Union – Next GenerationEU funded by the Presidency of the Council of Ministers pursuant to Article 1, paragraph 254, of Law 160/2019, and by the Presidency of the Council of Ministers from the Complementary Fund carried out under an ESA Contract for the purposes of EO PNRR IRIDE PROGRAMME.



Name of payload: MS-1 / Mission Nicoló

Type of payload: Robotic actuator for In-Orbit fuel transfer

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Mission Nicoló is Spaceium's first in-orbit demonstration mission, developed to test a high-precision robotic actuator for in-orbit fuel transfer, a key technology for future space refueling stations. The payload includes two robotic actuators, flight computers, motor drivers, and a thermal control system. Built in just five months, Mission Nicoló exemplifies Spaceium's rapid development, iterative design, and rigorous ground testing approach, demonstrating the company's ability to move from concept to flight readiness at remarkable speed. On Earth, the actuator would be powerful and precise enough to lift the weight of an average human, while in orbit, it achieves an exceptional pointing accuracy of 0.0013 degrees, validating its potential for complex, autonomous refueling operations in space.

COMPANY PROFILE Website: spaceium.com

Spaceium is a US-based, Y Combinator-backed space company building a network of in-orbit refueling stations that extend spacecraft lifetimes and unlock entirely new mission profiles. In space, fuel is the ultimate bottleneck, once a spacecraft runs out, its mission ends and it becomes debris. Just like a service station on Earth, Spaceium's refueling technology enables fuel to be stored in orbit for multiple years and transferred precisely between spacecraft. This capability allows for missions to operate longer, carry more, and reach farther across LEO, GEO, and deep space. Driven by a fast-moving, rapid-iteration culture, Spaceium is redefining how space missions are supported and sustained. From low-Earth orbit to Mars and beyond, Spaceium is fueling the next era of a connected, sustainable space economy.

Photo credit: Spaceium



"In-orbit refueling will unlock mission longevity, spacecraft reuse, and a truly scalable space economy. We built this demonstration in just five months, because the future of orbital servicing demands speed. At Spaceium, we don't wait for the future to arrive; we build it."

Ashi Dissanayake,
CEO



Name of payload: PBI

Type of payload: Electric propulsion system

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Already flown in orbit, the PBI water ion thruster is a miniaturized gridded ion thruster with best-in-class total impulse. The system is designed to operate instantly with rapid startup time, and its fully integrated and propellant-preloaded design eliminates launch-site fueling work. Using water as the propellant simplifies the supply chain, significantly reducing total costs from development through operation. With a mass production system already in place, PBI is now being delivered to partners worldwide.

COMPANY PROFILE Website: pale-blue.co.jp

Pale Blue develops and manufactures propulsion systems for small satellites, serving satellite integrators and operators worldwide. Since its founding in 2020, Pale Blue has successfully achieved in-orbit operations of water-based propulsion systems a number of times, providing highly reliable solutions. While further expanding its product offering through R&D and in-orbit operations, Pale Blue is also strengthening production capabilities to meet the growing demand for propulsion systems. Pale Blue is committed to creating mobility that is core to the space industry, driving the next generation of space development.

Photo credit: Pale Blue

