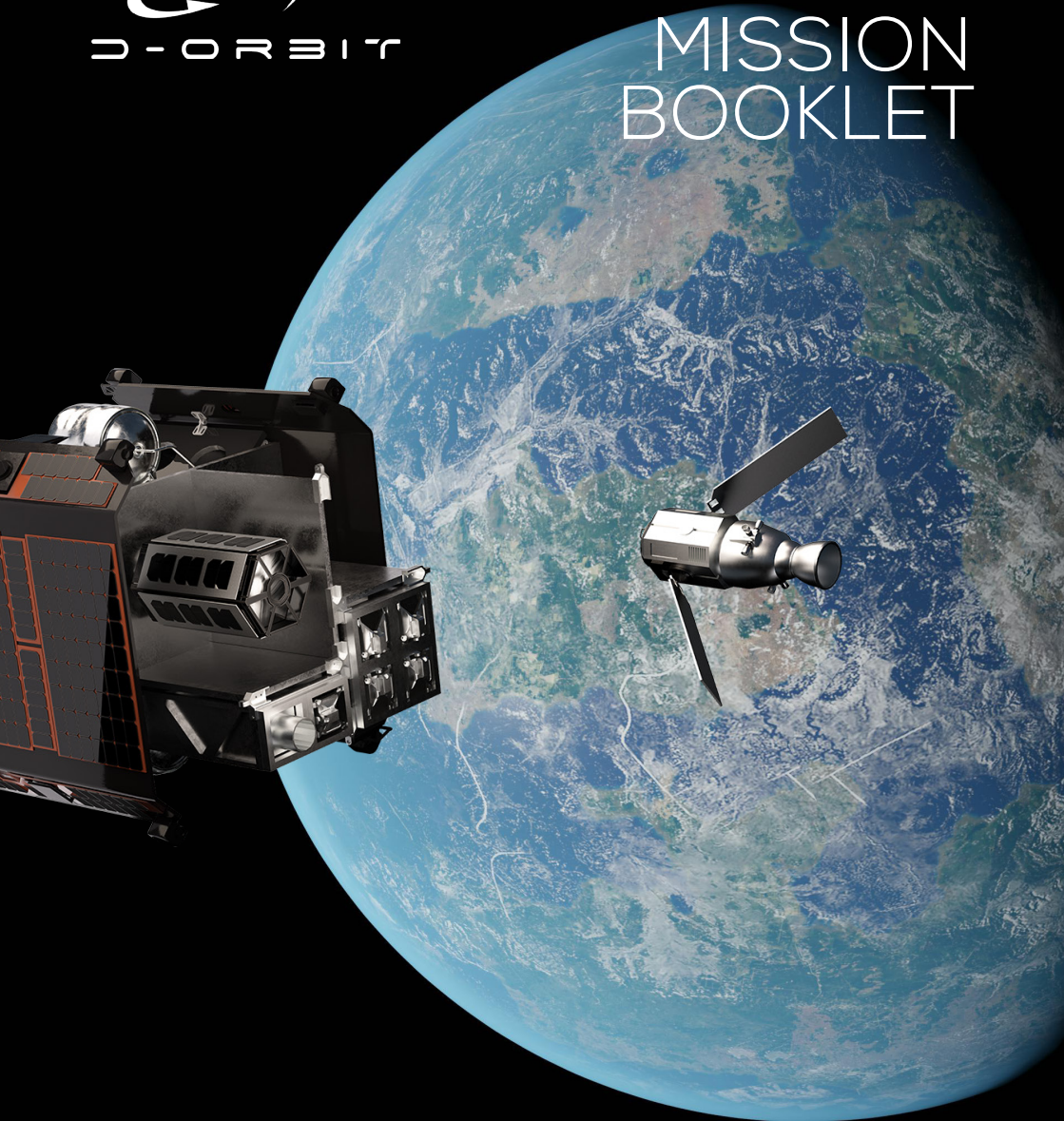




D-ORBIT

ENDLESS SKY

MISSION BOOKLET



Mission name: Endless Sky
Carrier name: ION SCV Amazing Antonius

Fino Mornasco, Italy, January 15, 2025 — On January 14th, 2025, D-Orbit, a leader in space logistics and orbital transportation, successfully launched Endless Sky and Ascend, the 15th and 16th commercial missions of its cutting-edge Orbital Transfer Vehicle (OTV), **ION Satellite Carrier (ION)**.

The two OTVs were launched aboard SpaceX's Transporter-12 mission at **11:09 a.m. PT (07:09 PM UTC)** from **Space Launch Complex 4 (SLC-4E) at Vandenberg Space Force Base in California**. 1h 07m 47 sec after liftoff, the first ION vehicle, SCV Amazing Antonius, was deployed into a 510-km Sun Synchronous Orbit, followed by SCV Eminent Emmanuel four minutes later.

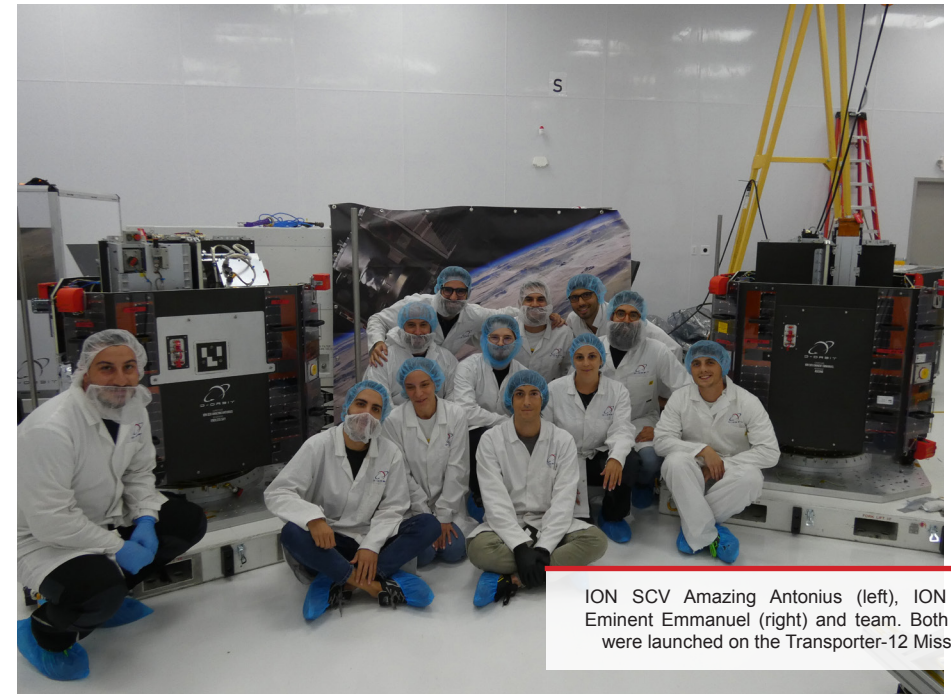
ION Satellite Carrier is a versatile space vehicle capable of transporting and releasing satellites into distinct orbital slots. It can also accommodate third-party payloads, including innovative technologies, research experiments, and instruments requiring in-orbit testing. Additionally, ION can support 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.



A note about the name of the satellite carrier

The name of the satellite carrier is "ION Amazing Antonius", 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 "Antonius" 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.





Name of payload: LOGSATS-2 (Lora Gateway Service and Aircraft Tracking Satellite)

Form factor: 3U

POC: Mr. Teerawat Boontanachai
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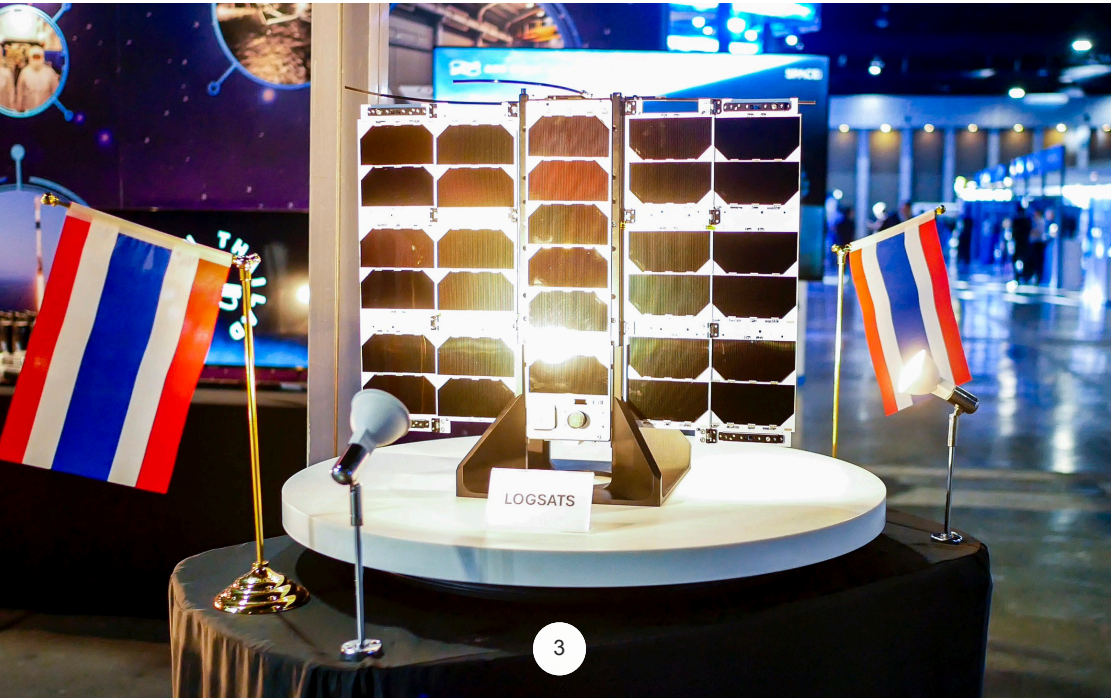
Mr. Passawish Kulchol
passawish@eosorbit.com

LOGSATS-2, Thailand's first successful 3U CubeSat to reach space, developed by EOS Orbit Co., Ltd. This pioneering satellite is equipped with a space-based LoRa Gateway Service for IoT communication and an ADS-B receiver for advanced aviation monitoring. Enhanced with a high-resolution imaging camera for Earth observation and a Software-Defined Radio (SDR) for adaptable communications, LOGSATS2 signifies a monumental step in Thailand's space exploration, showcasing the nation's capacity to innovate and deploy cutting-edge satellite technologies.

COMPANY PROFILE Website: www.eosorbit.com

EOS Orbit Co., Ltd. is a trailblazer in satellite technology, dedicated to revolutionizing communication, exploration, and discovery. Through innovative design and advanced engineering, EOS Orbit empowers industries and communities by harnessing the power of space-based solutions.

Photo credit: EOS Orbit



Name of payload: PoSAT-2

Form factor: 3U

POC: General inquiries
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LusoSpace's ambitious plan includes the development and deployment of a 12-satellite constellation, each equipped with cutting-edge VDES (VHF Data Exchange System) payloads. This constellation aims to revolutionize maritime connectivity by providing significantly higher bandwidth than current AIS (Automatic Identification System) applications, enhanced data integrity, and a promising leap forward in maritime communication and safety.

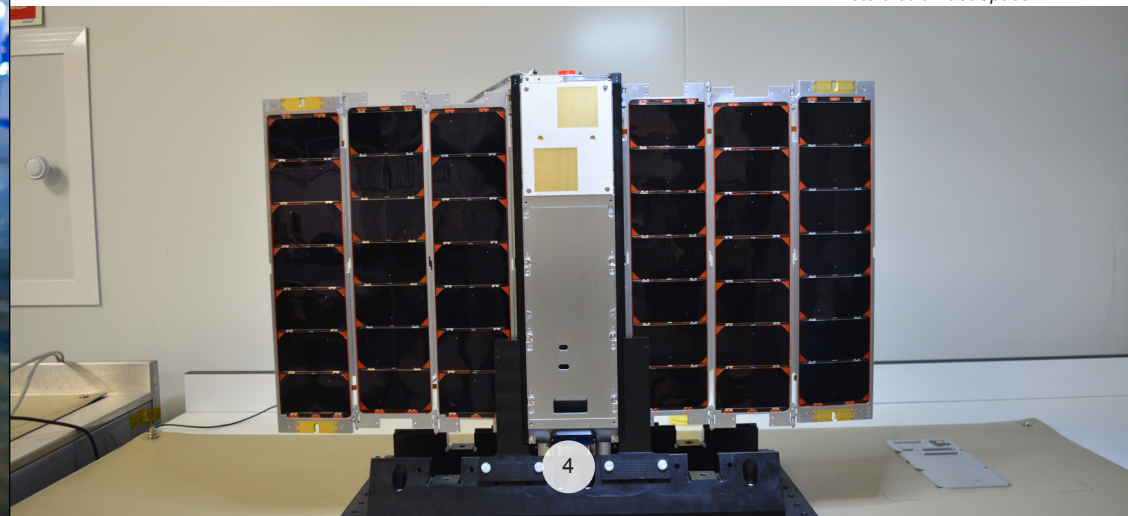
PoSAT-2, the first satellite in this constellation, is a 3U-sized spacecraft built on Clyde Space's proven flight architecture, successfully used in various missions. The satellite's core system manages spacecraft operations, including attitude control, S-band communication for monitoring, and command and control functions throughout its lifetime.

The satellite's payload features a next-generation VHF radio capable of encoding and decoding AIS and VDES messages, complemented by a deployable VHF antenna activated after the LEOP (Launch and Early Orbit Phase). The payload is managed by the spacecraft's onboard computer, which stores data received via the VHF link and transmits it to maritime control centers. Additionally, it enables the transmission of critical information to vessels, such as safety alerts and navigation updates.

COMPANY PROFILE Website: www.lusospace.com

Founded in 2002, LusoSpace was the first space startup in Portugal. His main co-founder Ivo Yves Vieira participated in 1993 in the first Portuguese satellite, PoSAT-1 with the ambition to contribute to space in Portugal. LusoSpace has been growing 20% on average and increased its competencies and capability holding several testing equipment and two clean rooms.

Photo credit: LusoSpace





TRL11

Name of payload: Mission Impossible: 2 (MI:2)

Type of payload: Video Edge Computer

POC: Aneesh Goel
aneesh.goel@trl11.com

MI:2 includes 4 Fovea cameras and SAVER, a powerful video edge computer designed to provide low delay, full-motion video of the vehicle's dynamic space operations.

COMPANY PROFILE Website: www.trl11.com

TRL11 is a venture backed company based in Irvine, CA offering advanced video solutions for the space industry. TRL11 is revolutionizing video capabilities in space applications with their AI/ML powered edge compute processing enabling high quality recording and real-time video streaming of visual information for space applications such as spacecraft health monitoring, space domain awareness, in-space servicing.

Photo credit: TRL11



Name of payload: Hitchhiker 1

Type of payload: Universal Satellite Port

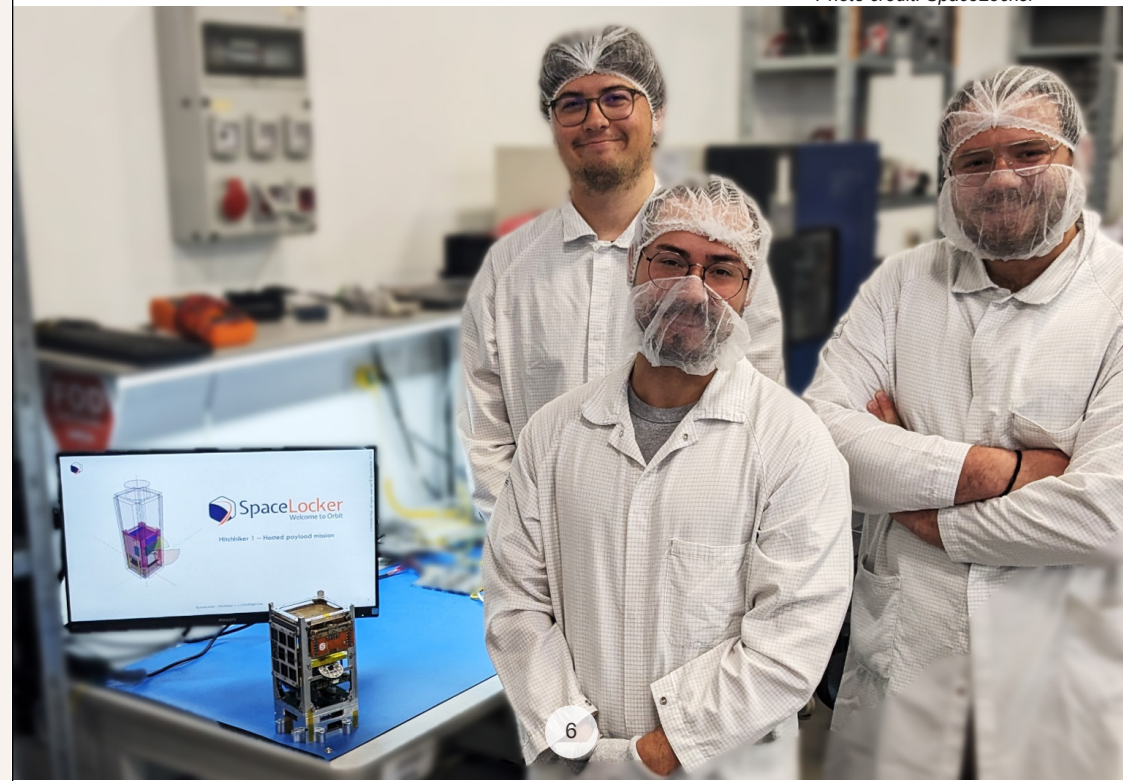
POC: Theophile Lagraulet
contact@spacelocker.fr

Hitchhiker 1 is the first mission of SpaceLocker - a French shared mission operator specialized in simplified payload hosting. Its container and interface technology is a unique solution to make integration and operation of payloads easier. Carrying one container hosted on the deck of ION, Hitchhiker 1 enables a simplified and faster access to space to 3 users from around the world demonstrating innovative technologies in orbit.

COMPANY PROFILE Website: www.spacelocker.fr

SpaceLocker is a French aerospace company transforming access to space with innovative hosted payload solutions. Founded in 2022, the company simplifies satellite missions through a universal interface designed to support flexible and rapid payload integration. With a focus on sustainability, cost efficiency, and responsiveness, SpaceLocker empowers businesses, researchers, and institutions to achieve their orbital ambitions while contributing to the development of the orbital economy. For more information or to book your flight, visit www.spacelocker.fr.

Photo credit: SpaceLocker





Name of payloads: K2 Space Component Mission

Type of payload: Satellite Bus Platform

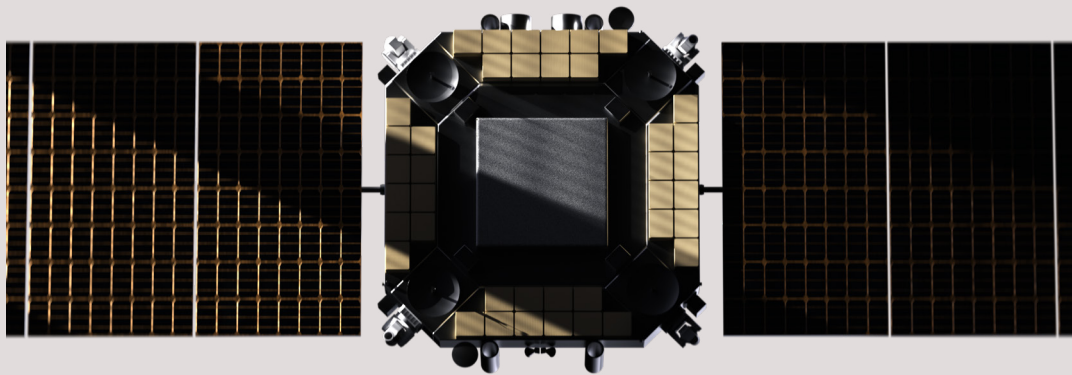
POC: Press Office
press@K2space.com

The K2 Space Component Mission will demonstrate space heritage for K2 Space's in-house designed bus components that will support the unique capabilities for the full K2 Satellite bus. These components include a Flight Computer, Motor Controller, and Reaction Wheel.

COMPANY PROFILE Website: www.k2space.com

K2 Space is developing a high-powered, low-cost satellite bus platform that delivers the capability of exquisite satellites at the price point and speed of small satellites. Redesigned from the reaction wheel up, the K2 bus multi-manifests ten satellites per launch vehicle, is made to handle the harsh environment of MEO and GEO, and has the highest power electric propulsion system ever flown – making it the platform for Proliferated LEO, Proliferated MEO, and Proliferated GEO. K2 Space was started by a team of former SpaceX engineers and has raised \$72M in venture capital to date, with the backing of leading funds like Altimeter Capital and First Round Capital.

Photo credit: K2 Space



Name of payload: AI-eXpress (AIX)

Type of payload: Cloud ecosystem platform

POC: Leonardo Amoruso
amoruso@planetek.it

A project by Planetek Italia with the collaboration of D-Orbit and AIKO, is co-funded by ESA Philab's Incubed programme that uses advanced technologies such as Artificial Intelligence (AI) and Blockchain in Space to enhance satellite capabilities in terms of reactivity, responsiveness and low-latency information delivery. AIX provides a hybrid edge/cloud ecosystem on a Low Earth Orbit (LEO) platform equipped with Earth observation payloads, deployable CubeSats and a software framework that manages sensors and on-board resources. The first mission, launched today and called AI-eXpress 1 Precursor (AIX-1p), is designed to test and validate the core building blocks of fundamental software services (data processing and execution) directly in space. These functionalities form the backbone of the "satellite-as-a-service" model. AIX-1p is the first step toward creating a space "App Store," offering a simpler and more innovative way to access space resources.

COMPANY PROFILE Website: www.planetek.it

Planetek Italia is a Benefit Company founded in 1994 specialized in Geomatics, Earth observation, and software for Space missions. It develops systems and services for processing cartographic and satellite data aimed at creating geo-localised knowledge. It operates in many application fields: environmental and land monitoring, smart cities, defence and security, engineering, energy, utilities, scientific satellite missions and space exploration.

Photo credit: Planetek Italia



The launch of AIX-1p, aptly named 'Caution: Edge Ahead,' represents the most advanced interpretation of Digital Transformation in Earth Observation, setting a new standard for innovation and accessibility in space technology.

Giovanni Sylos Labini,
Planetek Italia CEO

