

**Press Release** 

April 24, 2025 ispace, inc.

## ispace Completes Success 6 of Mission 2 Milestones

All Mission 2 Deep Space Orbital Maneuvers Completed

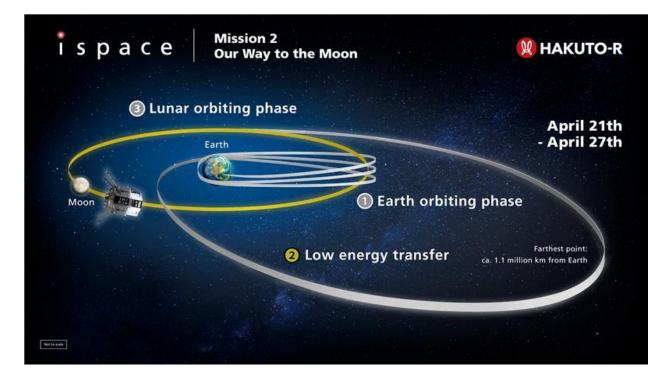
TOKYO–April 24, 2025–ispace, inc. (ispace) (<u>TOKYO: 9348</u>), a global lunar exploration company, announced today that its RESILIENCE lunar lander successfully completed all deep space orbital maneuvers on April 24, 2025, at 10:00 UTC (7:00 pm JST) in advance of a planned lunar orbit insertion. This marks the completion of Success 6 milestone of Mission 2 "SMBC x HAKUTO-R Venture Moon."

ispace engineers performed the final orbit maneuver from the Mission Control Center in Nihonbashi, Tokyo, Japan in accordance with the mission operation plan. In total, the RESILIENCE lunar lander has completed 8 orbit control maneuvers. RESILIENCE is now maintaining a stable attitude in its planned orbit and mission operations specialists are now preparing for the Mission 2 milestone Success 7, "Entering Lunar Orbit." The RESILIENCE lander is expected to enter lunar orbit on May 7, 2025.

"After successfully completing a lunar flyby and spending approximately two months smoothly navigating through space along with low-energy transfer orbit as we planned, the RESILIENCE lander has now completed all scheduled orbital control maneuvers," said Takeshi Hakamada, Founder & CEO of ispace. "We are fully prepared to begin its final approach to the Moon. Over the next month and a half leading up to the landing, we will remain focused and dedicated to meeting the expectations of all those supporting us."

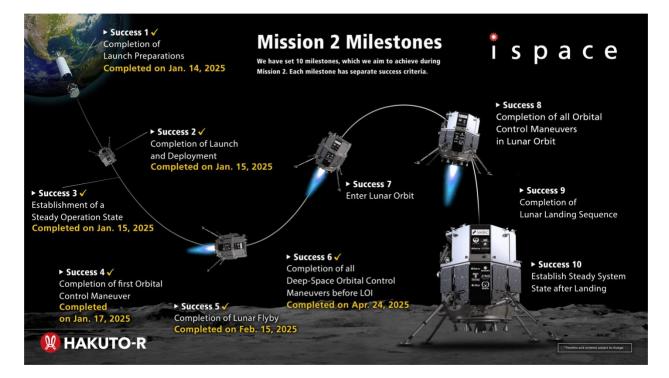
Previously, RESILIENCE completed an orbital maneuver at 19:40:18 UTC, Jan. 16, 2025, at 250,000 kilometers from Earth, setting the lander on a course towards the Moon in order to complete the flyby and verifying operation of the main propulsion system, as well as the related guidance, control, and navigation system. The orbital maneuver required a main thruster burn lasting 16 seconds. Following this, the lander continued its deep space journey, spending approximately two months in a low-energy transfer orbit before reaching a distance of approximately 1.1 million kilometers from Earth, the farthest point from Earth.

RESILIENCE was launched on a SpaceX Falcon 9 rocket at 6:11:39 UTC, Jan. 15, 2025, and was successfully deployed from the rocket at 7:44:24 UTC. The RESILIENCE lander has completed the Earth orbit (1) phase below) as well as the lunar flyby, known as Success 5. It now completing its low energy transfer orbit (2) phase below) with completion of all deep space maneuvers. RESILIENCE will enter its next phase once it completes the lunar orbit insertion.



## **Mission 2 Milestones**

ispace has released a transparent set of criteria known as Mission 2 Milestones between launch and landing and aims to achieve the success criteria established for each of these milestones. The results from this mission as part of the HAKUTO-R lunar exploration program, will be weighed and evaluated against the criteria and lessons learned will be incorporated into future missions already in development.



		Milestone	Milestone Success Criteria
Success 1	Complete	Completion of Launch Preparations	<ul> <li>Complete all development processes of the RESILIENCE lunar lander before flight operations</li> <li>Contract and prepare launch vehicle, and complete integration of lunar lander into the launch vehicle</li> <li>Prove ability to flexibly manufacture and assemble landers in various geographic locations of the world</li> </ul>
Success 2	Complete	Completion of Launch and Deployment	<ul> <li>Complete successful separation of the lunar lander from the launch vehicle</li> <li>Reaffirm that ispace's lander design and structure is capable of withstanding the harsh conditions during launch on its second mission, offering valuable information torwards future development and missions</li> </ul>
Success 3	Complete	Establishment of Steady Operation State	<ul> <li>Establish communication link between the lander and Mission Control Center, confirm a stable attitude as well as start stable generation of electrical power in orbit</li> </ul>
Success 4	Complete	Completion of first Orbital Control Maneuver	Complete the first orbit control maneuver, setting the lander on a course towards the Moon
Success 5	Complete	Completion of Lunar Flyby	Complete a lunar flyby approximately one month after launch     Begin Deep Space Flight operations
Success 6	Complete	Completion of all Deep- Space Orbital Control Maneuvers before LOI	<ul> <li>Complete all planned deep space orbit control maneuvers by utilizing gravity assist effects and successfully target the first lunar orbit insertion maneuver</li> <li>Reaffirm the deep-space survivability of ispace's lander designs, as well as the viability of space's lunar planning</li> </ul>
Success 7		Enter Lunar Orbit	Complete the first lunar orbit insertion maneuver and confirm that the lander is in a lunar orbit     Reaffirm the ability of ispace to deliver spacecraft and payloads into stable lunar orbits
Success 8		Completion of all Orbital Control Maneuvers in lunar orbit	<ul> <li>Complete all planned lunar orbital control maneuvers before the landing sequence</li> <li>Confirm the lander is ready to start the landing sequence</li> </ul>
Success 9		Completion of Lunar Landing Sequence	Complete the landing sequence, verifying key landing abilities for future missions
Success 10		Establish Steady System after Landing	Establish a steady telecommunication and power supply on the lunar surface after landing

## **Mission 2 Payloads**

On board the RESILIENCE lunar lander will be commercial customer payloads including:

- Water electrolyzer equipment: From Takasago Thermal Engineering Co.
- **Food production experiment**: A self-contained module from Euglena Co.
- **Deep space radiation probe**: Developed by the Department of Space Science and Engineering, National Central University, Taiwan
- **Commemorative alloy plate**: Developed by Bandai Namco Research Institute, Inc. and modeled after "Charter of the Universal Century" from the animation Mobile Suit Gundam UC
- **TENACIOUS micro rover**: Developed by ispace-EUROPE, this rover will explore the landing site, collect lunar regolith, and relay data back to the lander. It will be equipped with a forward-mounted HD camera and a shovel.
- **Moonhouse**: A model house by Swedish artist Mikael Genberg that will be mounted on the rover.

The RESILIENCE lander will serve as a cultural artifact, carrying a UNESCO memory disk that preserves linguistic and cultural diversity.

ispace is leveraging its global presence through its three business units in Japan, the U.S., and Luxembourg, for the simultaneous development of upcoming missions. Mission 2, featuring the RESILIENCE lunar lander, is led by ispace Japan and was launched on Jan. 15, 2025. In this mission, TENACIOUS micro rover developed by ispace Europe SA to be deployed on the lunar surface to conduct technological demonstration of regolith extraction as well as mobility on the lunar surface Mission 3, debuting the APEX 1.0 lunar lander, is led by ispace-U.S. and is expected to launch in 2026. The company's fourth mission, which will utilize the Series 3 lander, currently being designed in Japan, is scheduled to be launched by 2027.

## About ispace, inc. (<u>https://ispace-inc.com</u>)

ispace, a global lunar resource development company with the vision, "Expand our planet. Expand our future.", specializes in designing and building lunar landers and rovers. ispace aims to extend the sphere of human life into space and create a sustainable world by providing highfrequency, low-cost transportation services to the Moon. The company has business entities in Japan, Luxembourg, and the United States with more than 300 employees worldwide. For more information, visit: www.ispace-inc.com and follow us on X: @ispace\_inc.