



Press Release

January 15, 2025
ispace, inc.

ispace Completes Success 3 of Mission 2 Milestones

Mission Control Center Establishes Communication with RESILIENCE Lander

TOKYO –January 15, 2025 – ispace, inc. (ispace) ([TOKYO: 9348](#)), a global lunar exploration company, announced today that mission operations specialists in the HAKUTO-R Mission Control Center in Nihonbashi, Tokyo have established a communication link with the RESILIENCE lunar lander and confirmed a stable attitude as well as stable generation of electrical power in orbit.

RESILIENCE was launched on a SpaceX Falcon 9 rocket at 6:11 UTC, Wednesday, Jan. 15, 2025 (U.S. Eastern Time) and was successfully deployed at 7:44:24 UTC.



An image of the HAKUTO-R Mission Control Center located in Nihonbashi, Tokyo, Japan.

“We have established communication with the RESILIENCE lander, and have stabilized its attitude and power supply,” said Takeshi Hakamada, Founder & CEO of ispace. “We will make full use of the knowledge and experience gained in Mission 1 to prepare for the first orbit control maneuver scheduled in the near future. While the lander carries 6 payloads including the TENACIOUS micro rover, no deficiencies in the lander’s core system have been identified.”



A SpaceX Falcon 9 rocket launches from Launchpad 39A carrying the RESILIENCE lunar lander & TENACIOUS micro rover.

The establishment of a communication link and stable attitude completes Success 3 of the Mission 2 Milestones.

Mission 2 Milestones

Ipspace 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.

Mission 2 Milestones

We have set 10 milestones, which we aim to achieve during Mission 2. Each milestone has separate success criteria.

i space

- Success 1** [L+2-3 days] **Completion of Launch Preparations**
 - Complete all development processes of the RESILIENCE lunar lander before flight operations
 - Contract and prepare launch vehicle, and complete integration of lunar lander into the launch vehicle
 - Prove ability to flexibly manufacture and assemble landers in various geographic locations of the world
- Success 2** [L+1 hour] **Completion of Launch and Deployment**
 - Complete successful separation of the lunar lander from the launch vehicle
 - Reaffirm that iSpace's lander design and structure is capable of withstanding the harsh conditions during launch on its second mission, offering valuable information towards future development and missions
- Success 3** [Several hours] **Establishment of a Steady Operation State**
 - 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
- Success 4** [L+1-2 days] **Completion of first Orbital Control Maneuver**
 - Complete the first orbital control maneuver, setting the lander on a course towards the Moon
- Success 5** [L+1 month] **Completion of Lunar Flyby**
 - Complete a lunar flyby approximately one month after launch
 - Begin Deep Space Flight operations
- Success 6** [L+3-3.5 months] **Completion of all Deep-Space Orbital Control Maneuvers before LOI**
 - Complete all planned deep space orbital control maneuvers by utilizing gravity assist effects and successfully target the first lunar orbit insertion maneuver
 - Reaffirm the deep-space survivability of iSpace's lander designs, as well as the viability of iSpace's orbital planning
- Success 7** [L+4 months] **Enter Lunar Orbit**
 - Complete the first lunar orbit insertion maneuver and confirm the lander is in a lunar orbit
 - Reaffirm the ability of iSpace to deliver spacecraft and payloads into stable lunar orbits
- Success 8** [L+4.5 months] **Completion of all Orbital Control Maneuvers in Lunar Orbit**
 - Complete all planned lunar orbital control maneuvers before the landing sequence
 - Confirm the lander is ready to start the landing sequence
- Success 9** [L+4.5 months] **Completion of Lunar Landing Sequence**
 - Complete the landing sequence, verifying key landing abilities for future missions
- Success 10** [L+4.5 months] **Establish Steady System State after Landing**
 - Establish a steady telecommunication and power supply for the lander on the lunar surface after landing

*Timeline and contents subject to change

| | | Milestone | Milestone Success Criteria |
|------------|----------|---|--|
| Success 1 | Complete | Completion of Launch Preparations | <ul style="list-style-type: none"> Complete all development processes of the RESILIENCE lunar lander before flight operations Contract and prepare launch vehicle, and complete integration of lunar lander into the launch vehicle Prove ability to flexibly manufacture and assemble landers in various geographic locations of the world |
| Success 2 | Complete | Completion of Launch and Deployment | <ul style="list-style-type: none"> Complete successful separation of the lunar lander from the launch vehicle Reaffirm that iSpace's lander design and structure is capable of withstanding the harsh conditions during launch on its second mission, offering valuable information towards future development and missions |
| Success 3 | Complete | Establishment of Steady Operation State | <ul style="list-style-type: none"> 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 |
| Success 4 | | Completion of first Orbital Control Maneuver | <ul style="list-style-type: none"> Complete the first orbital control maneuver, setting the lander on a course towards the Moon |
| Success 5 | | Completion of Lunar Flyby | <ul style="list-style-type: none"> Complete a lunar flyby approximately one month after launch Begin Deep Space Flight operations |
| Success 6 | | Completion of all Deep-Space Orbital Control Maneuvers before LOI | <ul style="list-style-type: none"> Complete all planned deep space orbit control maneuvers by utilizing gravity assist effects and successfully target the first lunar orbit insertion maneuver. Reaffirm the deep-space survivability of iSpace's lander designs, as well as the viability of iSpace's lunar planning. |
| Success 7 | | Enter Lunar Orbit | <ul style="list-style-type: none"> 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 style="list-style-type: none"> Complete all planned lunar orbital control maneuvers before the landing sequence Confirm the lander is ready to start the landing sequence |
| Success 9 | | Completion of Lunar Landing Sequence | <ul style="list-style-type: none"> Complete the landing sequence, verifying key landing abilities for future missions |
| Success 10 | | Establish Steady System after Landing | <ul style="list-style-type: none"> Establish a steady telecommunication and power supply on the lunar surface after landing |

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 January 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. Mission 6, which will utilize the Series 3 lander, currently being designed in Japan, is scheduled to be launched by 2027.

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

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 high-frequency, 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](https://twitter.com/ispace_inc).