Press Release

November 28, 2022
ispace, inc.

ispace completes launch preparations for Mission 1

Scheduled for Launch on November 30, 2022

TOKYO—November 28, 2022— ispace, inc., a global lunar exploration company, announced today that it has completed launch preparations including integration of the HAKUTO-R Mission 1 lunar lander into the SpaceX Falcon 9 rocket.

ispace's M1 lunar lander integrated into the SpaceX Falcon 9 fairing.

The Mission 1 flight model was transported to Cape Canaveral in late October and since engineers have worked to integrate it. Upon completion of the integration, ispace has fulfilled its first success milestone—Success 1 Completion of Launch Preparations.

For Mission 1, ispace has set 10 milestones between launch and landing, and aims to achieve the success criteria established for each of these milestones. Recognizing the possibility of an anomaly during the mission, the results will be weighed and evaluated against the criteria and incorporated into future missions already in development between now and 2025. Mission 2 and Mission3, which also will contribute to NASA's Artemis Program, will further improve the maturity of ispace's technology and business model. Future announcements on progress of milestone achievement are expected to be released once attained.

HAKUTO-R Mission 1 Updated Launch Schedule

Launch date:	Wednesday, November 30, 2022 *
Time:	3:39 a.m., Wednesday, November 30, 2022 (U.S. Eastern Standard Time) 5:39 p.m., Wednesday, November 30, 2022 (Japan Standard Time)
Launch site:	Space Launch Complex 40, Cape Canaveral Space Force Station, Florida, U.S.

*The above dates and times are subject to change depending on weather and other conditions.

"We are pleased to have finished the first phase of the Mission 1 with the final preparations before launch completed," said Takeshi Hakamada, Founder and CEO of ispace. "We have achieved so much in the six short years since we first began conceptualizing this project in 2016. To do this, we utilized a design and development model that balanced reliability and low costs by employing proven technologies and components from around the world. All efforts to acquire customers, raise funds, and build an organization to support this development have culminated in this achievement. I want to once again thank all of our employees and supporters for their efforts to make Mission 1 a reality."

In order to ensure a reliable development in a short period of time in the private sector, we adopted a design and development policy that balances reliability and low cost by employing proven technologies and components from around the world, and all efforts to acquire customers, raise funds, and build an organization to support this development have culminated in the completion of Success1.

Mission 1 Milestones

#	Milestone	Success Criteria per Milestone
1	Completion of Launch Preparations	● Complete all development processes of the Series 1 lunar lander before flight operations. ● Contract and prepare launch vehicle, and complete integration of lunar lander into the launch vehicle.
2	Completion of Launch and Deployment	● Complete successful separation of the lunar lander from the launch vehicle. ● Prove that the lander's structure is capable of withstanding the harsh conditions during launch, validating the design and gathering information towards future developments and missions.
3	Establishment of a Steady Operation State (*Initial Critical Operation Status)	● 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. The completion of this step verifies the integrity of lander core systems and customer payloads.
4	Completion of first orbital control maneuver	● Complete the first orbital control maneuver, setting the lander on a course towards the Moon and verifying operation of the

		main propulsion system, as well as related guidance, control, and navigation system.
5	Completion of stable deep-space flight operations for one month	● Prove that the lander is capable of steady deep-space flight by completing a nominal cruise and orbital control maneuvers over a 1 month period.
6	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 1st lunar orbit insertion maneuver. This stage proves the ability of the lander's deep-space survivability, as well as the viability of ispace's orbital planning.
7	Reaching the lunar gravitational field / lunar orbit	● Complete the first lunar orbit insertion maneuver and confirm the lander is in a lunar orbit, verifying the ability of ispace to deliver spacecraft and payloads into stable lunar orbits.
8	Completion of all orbit 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.
9	Completion of lunar landing	● Complete the landing sequences, verifying key landing abilities for future missions.
10	Establishment of a steady system state after lunar landing	● Establish a steady telecommunication and power supply on the lunar surface after landing to support customer payloads' surface operations.

About ispace, inc.

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 offices in Japan, Luxembourg, and the United States with more than 200 employees worldwide. ispace technologies U.S., inc. is part of a team led by Draper, which was awarded a NASA Commercial Lunar Payload Services (CLPS) Program contract to land on the far side of the Moon by 2025 (as of November 2022). Both ispace, and ispace EUROPE S.A. (ispace EU) were awarded contracts to collect and transfer ownership of lunar regolith to NASA, and ispace EU was selected by ESA to be part of the Science Team for PROSPECT, a program which seeks to extract water on the Moon.

Established in 2010, ispace operated "HAKUTO" which was one of five finalist teams in the Google Lunar XPRIZE race. The company's first mission as part of its HAKUTO-R lunar exploration program is currently planned for as early as November 2022 and is expected to launch from the United States on a SpaceX Falcon 9 rocket. ispace has also launched a lunar data business concept to support new customers as a gateway to conduct business on the Moon.

For more information, visit: www.ispace-inc.com; Follow us on Twitter: @ispace_inc.

# # #

ispace

Mission 1 Milestones

We have set 10 milestones, which we aim to achieve during the Mission 1. Each of the milestones has separate success criteria.

*Timeline and contents subject to change.

▶ Success 1 [L - 2-3 Days]

Completion of Launch Preparations

- Complete all development processes of the Series 1 lunar lander before flight operations.
- Contract and prepare launch vehicle, and complete integration of lunar lander into the launch vehicle.

▶ Success 2 [L + 1 Hour]

Completion of Launch and Deployment

- Complete successful separation of the lunar lander from the launch vehicle.
- Prove that the lander's structure is capable of withstanding the harsh conditions during launch, validating the design and gathering information towards future developments and missions.

▶ Success 3 [L + 1.5 Hours]

Establishment of a Steady Operation State

(*Initial Critical Operation Status)

- 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. The completion of this step verifies the integrity of lander core systems and customer payloads.

▶ 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 and verifying operation of the main propulsion system, as well as related guidance, control, and navigation system.

▶ Success 5 [L + 1 Month]

Completion of stable deep-space flight operations for one month

- Prove that the lander is capable of steady deep-space flight by completing a nominal cruise and orbital control maneuvers over a 1 month period.

▶ 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. This stage proves the ability of the lander's deep-space survivability, as well as the viability of ispace's orbital planning.

LOI = Lunar Orbit Insertion

▶ Success 7 [L + 4 Months]

Reaching the lunar gravitational field / lunar orbit

- Complete the first lunar orbit insertion maneuver and confirm the lander is in a lunar orbit, verifying the ability of ispace to deliver spacecraft and payloads into stable lunar orbits.

▶ Success 8 [L + 4.5 Months]

Completion of all orbit 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, 1 Hour]

Completion of lunar landing

- Complete the landing sequence, verifying key landing abilities for future missions.

▶ Success 10 [L + 4.5 Months, 1.5 Hours]

Establishment of a steady system state after lunar landing

- Establish a steady telecommunication and power supply on the lunar surface after landing to support customer payloads' surface operations.

HAKUTO-R