

### **Honda Conducts Successful Launch and Landing Test of Experimental Reusable Rocket**

TOKYO, Japan, June 17, 2025 – Honda R&D Co., Ltd., a research and development subsidiary of Honda Motor Co., Ltd., today conducted a launch and landing test of an experimental reusable rocket\*<sup>1</sup> (6.3 m in length, 85 cm in diameter, 900 kg dry weight/1,312 kg wet weight) developed independently by Honda. The test was completed successfully, the first time Honda landed a rocket after reaching an altitude of nearly 300 meters.

This test marked the first launch and landing test conducted by Honda with an aim to demonstrate key technologies essential for rocket reusability, such as flight stability during ascent and descent, as well as landing capability. Through this successful test, Honda achieved its intended rocket behaviors for the launch and landing (reaching an altitude of 271.4 m, and landing within 37cm of the target touchdown point, with a flight duration of 56.6 sec), while obtaining data during the ascent and descent.

#### **<Overview of launch and landing test of a Honda reusable rocket>**

- Purpose: Establishment of key technologies necessary for a reusable rocket
- Location: Honda facility in Taiki Town\*<sup>2</sup>, Hiroo District, Hokkaido Prefecture, Japan
- Date/Time: June 17, 2025. Launch time: 16:15



Test being conducted in Taiki Town  
in Hokkaido, Japan(Photo taken in May, 2025)



Launch and landing test

\*1 A reusable rocket, also known as a reusable launch vehicle (RLV), is a type of rocket that, unlike a conventional expendable launch vehicle (ELV), can be used repeatedly in a short period of time. A reusable rocket is launched in a vertical position, reaches an altitude of around 100 kilometers, and then lands back on earth while maintaining a vertical position.

\*2 Taiki Town, located in southeastern Hokkaido, Japan, has been developing itself as a “space town” through the joint efforts of public and private sectors, and various aviation/space related tests are being conducted by a wide range of organizations including JAXA (Japan Aerospace Exploration Agency), businesses and universities.

## <Safety measures for Honda rocket testing>

Since 2024, Honda has been safely conducting engine combustion tests and hovering tests for its reusable rockets in Taiki Town in Hiroo District, Hokkaido, Japan. As with all previous tests, Honda conducted this launch and landing test while placing the highest priority on safety and with the understanding and cooperation of local authorities and residents.

### ■ Specific safety measures taken for this test

- A restricted area with a 1-kilometer radius was established. During the test, access to the area was restricted through the installation of signs and gates, as well as the deployment of security personnel.
- The restricted area was defined by calculating the potential area where the rocket could fall to earth in the event of a thrust cut-off and by adding a sufficient buffer zone (safe distance calculated based on the guidelines set forth by the Cabinet Office of the Government of Japan) that would cover the potential area where a blast wave, debris dispersion, or fireballs could impact in the event of an explosion within the potential fall area.
- The experimental rocket was equipped with a safety system to prevent deviation from a pre-defined flight corridor, speed and attitude conditions, ensuring no impact beyond the restricted area.

## <Honda initiatives in the areas of rocket research>

As announced in 2021, Honda has been pursuing research and development in the field of space technologies while viewing it as a place to take on challenges to realize the “dreams” and “potential” of people worldwide while leveraging its core technologies. Honda has the aim to enable people to transcend the constraints of time, place or ability and make people’s daily lives more enjoyable. Examples of Honda initiatives toward creating new value in the ultimate environment of outer space include research into a circulative renewable energy system, key robotic technologies for use in outer space and reusable rockets.

Inspired by the dream of young Honda engineers who wanted to build rockets by utilizing core technologies amassed by Honda through the development of various products, such as combustion and control technologies, Honda started rocket research based on the belief that it has the potential to contribute more to people’s daily lives by launching satellites with its own rockets, that could lead to various services<sup>\*3</sup> that are also compatible with other Honda business.

In today’s world, vast amounts of data are consumed, with the growing expectation for greater utilization of a data system in outer space through expanded use of satellites. In light of this trend, the need for satellite launch rockets is also expected to increase in the coming years.

In this market environment, Honda has chosen to take on the technological challenge of developing reusable rockets by utilizing Honda technologies amassed in the development of various products and automated driving systems, based on a belief that reusable rockets will contribute to achieving sustainable transportation.

Although Honda rocket research is still in the fundamental research phase, and no decisions have been made regarding commercialization of these rocket technologies, Honda will continue making progress in the fundamental research with a technology development goal of realizing technological capability to enable a suborbital launch by 2029.

### ■ Comments by Toshihiro Mibe, Global CEO of Honda

“We are pleased that Honda has made another step forward in our research on reusable rockets with this successful completion of a launch and landing test. We believe that rocket research is a meaningful endeavor that leverages Honda’s technological strengths. Honda will continue to take on new challenges—not only to offer our customers various services and value through our products, while addressing environmental and safety issues, but also to continue creating new value which will make people’s time and place more enjoyable.”

<sup>\*3</sup> Examples include remote sensing to monitor Earth conditions such as global warming and extreme weather, as well as satellite constellations that enable wide-area communication, which is an essential component for connected features of mobility products.