

Japan's first reusable rocket lifts off, lands

Tokyo: Japan's experimental reusable rocket took off and safely landed in its first test flight on Saturday as the country seeks to achieve the technology key to cutting launch costs and competing in the global space market dominated by SpaceX.

The RV-X rocket lifted off, hovered, and moved horizontally before landing during its less-than-one-minute flight at the Japan Aerospace Exploration Agency's Noshiro Testing Centre in northeastern Japan, which the NVS, a group of space fans, livestreamed.

The rocket flew as planned, rising 11 metres (36 feet) and moving horizontally 16 metres (52 feet) while keeping its upright position before landing, Takashi Ito, JAXA's reusable rocket pro-

ject manager, said in an online briefing from the test centre.

Japan seeks to catch up with the technology Elon Musk's SpaceX has been using for several years to cut the launch costs of delivering payloads into space.

Saturday's flight is a step forward for Japan in achieving the technology needed to develop a lower-cost successor to the country's current mainstay, the single-use H3 series.

The flight comes one day after state media in China reported the country achieved its first successful recovery of the first stage of a rocket after a liftoff.

Japan's H3 rocket is designed to be more cost-effective than its predecessor H-2A series, which had a near-perfect

success record, but still needs further cost cuts to compete in the global space market.

The Japanese government says a stable, commercially competitive transport capability is key to the country's space programme and national security.

JAXA and Mitsubishi Heavy Industries have been co-developing the RV-X, which is 5.9 feet in diameter and 23.9 feet long and equipped with an engine with enhanced durability and four shock-absorption landing gear. The "hardworking" engine has so far withstood 165 combustion tests, Ito said.

JAXA, which is jointly developing reusable rockets with France and Germany, plans to send the RV-X rocket to a higher altitude of about 218 feet in future test flights. AP