

Stratolaunch conducts first powered flight of new hypersonic vehicle off California coast

March 10 2024, by John Antczak



Credit: Stratolaunch

U.S. aerospace company [Stratolaunch](#) conducted the first powered test flight of a new unmanned craft for hypersonic research on Saturday and called it a success.

Hypersonic describes flights at speeds of at least Mach 5, or five times the speed of sound.

Chief Executive Officer Zachary Krevor said in a statement that the Talon-A-1 vehicle "reached high [supersonic speeds](#) approaching Mach 5 and collected a great amount of data at an incredible value to our customers."

Krevor said he could not release the specific altitude and speed because of proprietary agreements with customers.

The company's massive six-engine carrier aircraft Roc carried the Talon aloft, attached to the center of its gigantic wing, and released it off the central coast of California.

The Talon, powered by a liquid-fuel rocket engine, ended its flight by descending into the ocean as planned. While this Talon was expendable, a future version will be capable of landing on a runway for reuse.

Stratolaunch said the primary objectives for the flight included a safe air-launch release of the vehicle, engine ignition, acceleration, sustained climb in altitude, and a controlled water landing.

The company called the result a major milestone in the development of the United States' first privately funded, reusable hypersonic test capability.

Stratolaunch conducted two captive-carry flights, in December and February, in which the Talon was taken aloft with live propellant but was not released from the mothership.

Stratolaunch is based at Mojave Air and Space Port in the Mojave Desert north of Los Angeles.

The Roc aircraft, named after an enormous mythological bird, has a wingspan of 385 feet (117 meters) and twin fuselages that give the impression of two big jets flying side by side.

It was developed by Microsoft co-founder Paul G. Allen, who died just months before it flew for the first time in April 2019.

Allen intended to use it as a carrier aircraft for space launches, carrying satellite-laden rockets beneath the center of the wing and releasing them at [high altitude](#).

That [project](#) was canceled, and new owners then repurposed Stratolaunch for launches of reusable hypersonic research vehicles.

Stratolaunch has announced flight contracts with the U.S. Air Force Research Laboratory and the Navy's Multiservice Advanced Capability Test Bed program as a subcontractor to technology [company](#) Leidos of Reston, Virginia.

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