Branson’s Virgin Galactic flies its first commercial mission

Enlarge / A camera aboard Virgin Galactic’s VSS Unity rocket plane captured this view from the edge of space Thursday.

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Virgin Galactic launched three Italian researchers and three company employees on the suborbital operator’s first commercial flight to the edge of space Thursday.

The six-man crew rocketed to an altitude of more than 279,000 feet, higher than the 50-mile height recognized as the boundary of space by NASA and the Federal Aviation Administration, according to Virgin Galactic, the space tourism firm founded in 2004 by Richard Branson.

The company’s large carrier jet, called VMS Eve, took off from a runway at Spaceport America in New Mexico and climbed to an altitude of about 45,000 feet, where it released the VSS Unity rocket plane at 11:28 am EDT (1528 UTC) to ignite its motor and start the climb to suborbital space.

The rocket motor fired for about a minute, propelling VSS Unity out of the thick atmosphere on a trajectory that gave the ship’s passengers expansive views of the southwestern United States sprawling under the blackness of space. More importantly, at least for the researchers on Thursday’s flight, the crew in the passenger cabin were able to unstrap

from their seats and float in microgravity for several minutes, enough time to accomplish a few research tasks.

Italian Air Force Col. Walter Villadei, Lt. Col. Angelo Landolfi, and Pantaleone Carlucci, representing the National Research Council of Italy, flew to space seated behind the pilots in the pressurized cabin of VSS Unity. Colin Bennett, a Virgin Galactic astronaut instructor, also flew on Thursday's mission, which the company called Galactic 01.

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The passengers then returned to their seats as the VSS Unity rocket plane reconfigured for descent back into the atmosphere. The vehicle rotated its dual tail booms toward its fuselage to help slow its reentry, and Virgin Galactic pilots Mike Masucci and Nicola Pecile—on their fourth and first spaceflights, respectively—steered the vehicle for landing back at the 12,000-foot-long concrete runway (3.7-kilometer) runway at Spaceport America.

The flight lasted 14 minutes from the time VSS Unity ignited its rocket motor until it returned to Earth.

Michael Colglazier, CEO of Virgin Galactic, hailed the flight Thursday as the start of a "new era of repeatable and reliable access to space for private passengers and researchers."

But it hasn't been easy road for Virgin Galactic to reach this point, and the company is still facing headwinds.

Virgin Galactic and Scaled Composites, led by legendary aircraft designer Burt Rutan, began atmospheric test flights of the "SpaceShipTwo" series of rocket planes in 2010.

In 2014, a fatal crash on a test flight of one of Virgin's rocket planes killed a pilot employed by Scaled, which designed the vehicle and initially managed the test program. Virgin and Scaled built a suborbital vehicle called VSS Unity to replace the one lost in the crash and started flying it on

test missions in 2016.

Branson and a team of Virgin employees soared to an altitude of 53 miles (86 kilometers) on the VSS Unity rocket plane on a highly publicized flight in 2021. Then Virgin Galactic halted its test program for nearly two years for upgrades to the company’s carrier aircraft before one more test flight in May to set the stage for Thursday’s commercial launch. Another commercial flight by Virgin Galactic is planned in August, followed by monthly revenue-earning suborbital missions.

A sister company called Virgin Orbit, which was initially part of Virgin Galactic, folded earlier this year due to financial difficulties. Virgin Orbit focused on launching small satellites.

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