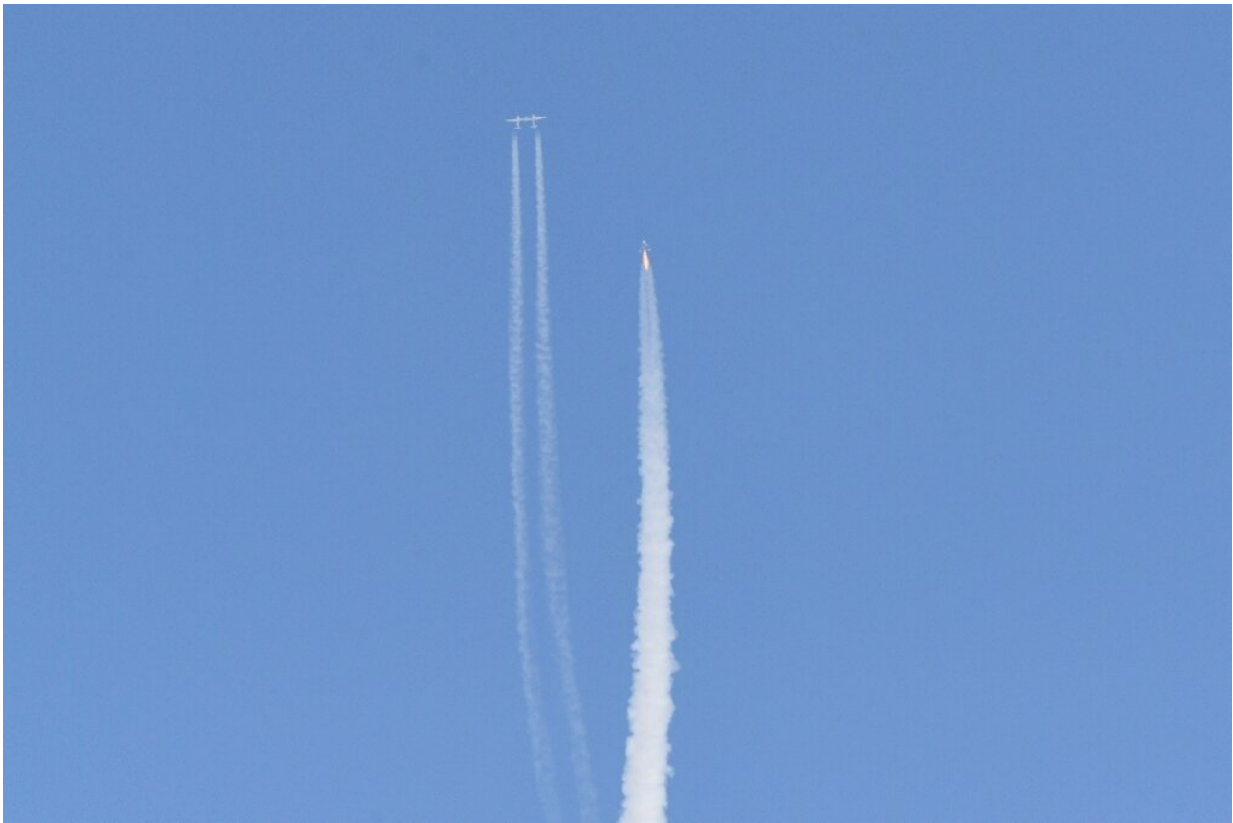


After long wait, Virgin Galactic begins commercial spaceflights

June 29 2023, by Issam AHMED



The Virgin Galactic SpaceShipTwo space plane Unity and mothership separate as they fly way above Spaceport America in New Mexico on July 11, 2021.

Virgin Galactic is set Thursday to finally begin commercial spaceflights, a major milestone for the company founded in 2004 by British

billionaire Richard Branson.

Its first paying customers are a three-member crew from the Italian Air Force and National Research Council of Italy, with a fourth seat occupied by a Virgin Galactic astronaut instructor.

Dubbed Galactic 01, the 90-minute mission will take off from Spaceport America, New Mexico, and includes several suborbital science experiments, the company said in a statement.

A livestream begins at 9:00 am Mountain Time (1500 GMT) on Virgin Galactic's website.

It comes almost two years after Branson soared to the final frontier in a [test flight](#) meant to usher in a new era of lucrative space tourism.

But the company subsequently faced setbacks, including a brief grounding by the Federal Aviation Administration (FAA), which found the Branson flight deviated from its assigned airspace and Virgin Galactic did not communicate the "mishap" as required.

Later, [lab testing](#) revealed certain materials used in its vehicles had fallen below required strength margins, necessitating upgrades to the fleet.

The company ended its spaceflight pause with a successful test in May, paving the way for Thursday's mission.

Virgin Galactic uses a "mothership" aircraft with two pilots that takes off from a runway, gains [high altitude](#), and drops a rocket-powered plane that soars into space at nearly Mach 3 before gliding back to Earth.

Passengers in the space plane's cabin experience a few minutes of weightlessness and catch a glimpse of the planet's curvature from more

than 50 miles (80 kilometers) above sea level.

Thursday's flight includes Colonel Walter Villadei and Lieutenant Colonel Angelo Landolf of the Italian Air Force, Pantaleone Carlucci of the National Research Council of Italy, and Colin Bennett of Virgin Galactic.

There are also two pilots on the spaceplane, and two on the mothership.

The crew will conduct 13 supervised and autonomous experiments, and collect data on their suits and sensors in the cabin.

Experiments include measuring radiation levels in the under-studied mesosphere, and how certain liquids and solids mix in microgravity.

Virgin Galactic has sold around 800 tickets for future commercial flights—600 between 2005 and 2014 for \$200,000 to \$250,000, and 200 since then for \$450,000 each.

Movie stars and celebrities were among the first to snap up seats, but the company's program suffered a disaster in 2014 when a spaceplane on a test flight broke apart midair, killing the copilot and seriously injuring the pilot.

It competes in the "suborbital" space tourism sector with billionaire Jeff Bezos' company, Blue Origin, which has already sent 32 people into space.

But since an accident in September 2022 during an unmanned flight, Blue Origin's rocket has been grounded. The [company](#) promised in March to resume spaceflight soon.

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