



COMPANY OVERVIEW



ABOUT VIRGIN GALACTIC

Virgin Galactic is the first commercial spaceline for Earth, pioneering human spaceflight for private individuals, researchers and professional astronauts, with its advanced air and space vehicles. The Company's proprietary spaceflight system is designed to connect the world to the love, wonder and awe created by space travel and to offer customers a transformative experience.

Virgin Galactic's entire offering — from the elegant and distinctive flight system which takes off and lands on a runway, to the iconic week-long astronaut experience at the purpose-built Spaceport — has been designed to enrich and enhance the life-changing experience of space.

The Company is making the dream of space travel a reality, by delivering repeatable, regular, and reliable spaceflights with our existing vehicles. With experienced manufacturers already at work on the next generation motherships and spaceships, Virgin Galactic has what it needs to scale the business as a global spaceline over the long term.

What We Offer:

- Flying passengers to space as tourists
- Professional astronaut training
- Flying autonomous scientific payloads
- Flying researchers to space to conduct experiments for scientific and educational purposes

Fast Facts:

- Fewer than 700 humans have traveled above the Earth's atmosphere into space, and Virgin Galactic already has approx. 800 people in its Future Astronaut community.
- Galactic 02 is Virgin Galactic's 7th spaceflight, 3rd flight this year, second commercial spaceflight, and first private astronaut flight.
- Our experienced team of pilots has 236 years of collective flight experience, and includes former test pilots for NASA, the Royal Air Force, the Royal Canadian Air Force, the U.S. Air Force, the Italian Air Force, and the U.S. Marine Corps.
- Virgin Galactic is headquartered in Tustin, Calif., with facilities in Mojave, CA, Spaceport America, New Mexico, London, UK and, opening in Q4 of 2023, Phoenix, AZ.
- As of December 31, 2022, the Company had 1,166 employees across the globe.

OUR HISTORY

Founded: 2004, by Sir Richard Branson

Publicly Traded: October 28, 2019

'SPCE' became the first publicly traded spaceflight company through a SPAC merger listing.

Previous & Upcoming Spaceflights

First Spaceflight December 13, 2018	VSS Unity reached space for the first time from Mojave Air and Space Port in California.
Second Spaceflight February 22, 2019	Virgin Galactic's first spaceflight with a crew member onboard in addition to two pilots, Unity 16 carried research payloads from the NASA Flight Opportunities program.
'Unity 21' May 22, 2021	The first-ever spaceflight from Spaceport America in New Mexico, Unity 21 continued to test Virgin Galactic's full spaceflight system.
'Unity 22' July 11, 2021	Virgin Galactic's first fully crewed spaceflight, Unity 22 carried three company employees and founder Sir Richard Branson to test the astronaut and research experience.
'Unity 25' May 25, 2023	The final assessment of the full spaceflight system and astronaut experience before commercial service began, Unity 25 carried four Virgin Galactic employees.
'Galactic 01' July 29, 2023	Virgin Galactic's first commercial spaceflight with paying passengers, Galactic 01 carried 13 research payloads and three crew members from the Italian Air Force and the National Research Council of Italy, demonstrating the company's unique microgravity research offering.
'Galactic 02' flight window opens August 10, 2023	Virgin Galactic's second commercial spaceflight and its first with private passengers, Galactic 02 will carry Jon Goodwin, the first Olympian and second person with Parkinson's disease to go to space, and Keisha Schahaff and Anastatia Mayers, the first mother-daughter duo to go to space and first astronauts from the Caribbean.

OUR VEHICLES



VMS Eve

Length: 77.7 feet

Wingspan: 140 feet.

- Wing is cantilevered, pitching up in the center, adding strength and adding height for Unity to have adequate ground clearance.

Power: Four Pratt & Whitney turbo-fan engines.

- Power-weight ratio is so high that when Eve is not mated to Unity, it practically leaps off the ground.
- Eve is piloted from the right fuselage allowing the pilot in the left seat to have a clear view of Unity prior to and during release.
- Eve's left fuselage acts to balance the aircraft but does not carry passengers.
- Both fuselages are constructed of composite material and are identical, not just to each other, but to the fuselage of VSS Unity.
- This not only reduces cost in manufacturing and helps unify the aerodynamics during mated flight, but it keeps the environment consistent between the mothership and spaceship.



VSS Unity

Length: 60 feet
Wingspan: 43 feet
Feather System:
<ul style="list-style-type: none">• Wings / booms rotate upward, effectively folding the ship in half, creating a shuttlecock effect.• This increases drag, slowing the ship down during reentry.• The wing system then returns to its flying configuration, allowing Unity to glide to landing.

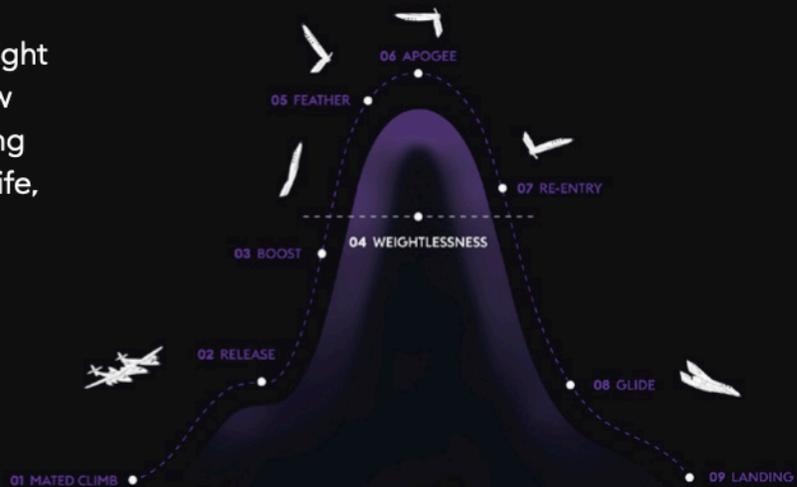


Rocket Motor HRM 2000

Length: 15 feet
Diameter: 32 inches
Fuel: Hybrid. HTPB with nitrous oxide (N2O) as oxidizer
Thrust: 319,000+ newtons (approximately 71,000 pounds)
Trivia: Holds the Guinness Book record for most powerful hybrid rocket used in human flight.

OUR FLIGHT SYSTEM

Our unique and innovative Spaceflight System enables you and your fellow astronauts to enjoy the most thrilling and awe-inspiring journey of your life, in unparalleled comfort and ease.



FLIGHT PATH

01

MATED CLIMB

When together, the mothership and spaceship climb through the thickest parts of the atmosphere.

04

WEIGHTLESSNESS

Once in space, astronauts are free to unbuckle and float about the spacious cabin for several minutes in the effortless freedom of zero gravity.

07

RE-ENTRY

The spaceship's unique feathered configuration lets gravity do the work. We come back belly first, minimizing the build up of heat, controlling stability and reducing speed by aerodynamic drag.

02

RELEASE

Around 50,000 feet, with final safety checks complete, the mothership releases the spaceship. Shortly after, the spaceship's hybrid rocket motor ignites.

05

FEATHER

The spaceship's tailbooms rotate in preparation for re-entry. The pilots orientate the spaceship's seventeen cabin windows for breathtaking views of Earth.

08

GLIDE

Once back in the thickest parts of the Earth's atmosphere, the spaceship effortlessly glides back down to Spaceport America.

03

BOOST

Propelling vertically toward the stars, the spaceship quickly reaches speeds of 3x the speed of sound.

06

APOGEE

At nearly 300,000 feet, astronauts experience the majesty of space: a spectacular view of Earth, a precious blue jewel against the inky black of space.

09

LANDING

The spaceship touches down for a smooth runway landing, the same runway it took off from.

[COMPANY OVERVIEW](#)

Virgin GALACTIC