

Branson's rocketry goal is long-distance travel

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The Virgin Galactic spaceship destroyed in a fatal accident high over the Mojave Desert was only designed to take tourists on a fleeting thrill ride into the lower reaches of space.

Yet even as company founder Richard Branson vowed to find out what happened and reiterated how "incredibly hard" [space](#) programs can be, the billionaire reminded reporters Saturday that he has always intended to build a system to take people on actual journeys.

"This is the start of a long program," he said. "I have spoken before of once we got this program off the ground of offering point-to-point travel. In the early days of aviation, there were incidents, and then aviation became very safe. In the early days of [commercial space travel](#), there have been incidents. We hope that one day the test pilots will enable people to be able to go to space safely."

Here are answers to questions about the difference between the space-tourism plan and future point-to-point travel.

WHAT IS VIRGIN GALACTIC OFFERING?

The company's spacecraft, dubbed SpaceShipTwo as a follow-up to the Ansari X-Prize-winning SpaceShipOne, is designed to be carried high into the sky by a jet-powered mothership and then released for rocket-powered flight to an altitude of 62 miles or higher, providing six passengers a stunning view of the Earth below and a brief period of

weightlessness. It would then descend back into the thickening atmosphere and fly as an unpowered glider back to the airport where the flight began.

WHAT DOES BRANSON MEAN BY POINT-TO-POINT?

Point-to-point travel would link distant points on the Earth's surface with flights that leave the atmosphere and enter space, then re-enter the atmosphere to land. The advantage over regular air travel would be a significant reduction in time, making the trip from, for example, London to Sydney, Australia, take only a few hours or a trip from New York to London take less than an hour.

WHAT WOULD IT TAKE TO ACHIEVE POINT-TO-POINT TRAVEL?

In 2004, SpaceShipOne demonstrated that a rocket pilot could manually fly the suborbital flight profile for the type of quick hop up and down that is the immediate goal for space tourism flights. However, suborbital flights between continents would require sophisticated guidance. In addition, the rocket motor would have to be powerful enough to give the spaceship enough range to cross continents or oceans, especially as upgrades or additions to equipment such as life support increase weight.

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