

One Giant Leap for Space Tourism

Foster and Partners unveils plans for the world's first tourist spaceport, home to Richard Branson's Virgin Galactic fleet

The Spaceport, designed by British architecture firm, Foster and Partners, is intended to mimic the dimensions of a spacecraft.

The Spaceport is located in New Mexico. The organic form of the terminal is intended to emerge from the landscape, while local materials will be used in its construction.

As NASA prepares to retire the space shuttle by the end of the decade, just in time for completion of the International Space Station, the tourism industry is planning to take its own giant leap into the void. Conceptual plans for the world's first tourist spaceport, designed by Foster + Partners, were unveiled today.

Known as Spaceport America, the terminal and hangar facility in Upham, New Mexico, will be home to Richard Branson's Virgin Galactic enterprise. It will operate a fleet of two transport airplanes and five spaceships designed by Burt Rutan. To ferry tourists into space and back, a transport plane, called a White Knight, carries a spaceship to an altitude of 49,000 feet, at which point the spacecraft launch into suborbital space and reach a height of 84 miles before returning to Earth. A roundtrip journey lasts 2.5 hours. Virgin expects to begin regular flights as early as 2009 and is currently accepting deposits on \$200,000 "space tickets."

The design for Spaceport America includes a hangar for the White Knights and the spaceships, pre- and post-flight training facilities, mission control, viewing galleries, and passenger lounges. Foster designed the low-slung, 100,000-square-foot structure to be viewed from the ground and from above; it is capped

by a rolling, concrete roof whose shape resembles a manta ray. The terminal hall features 50-foot ceilings and large windows facing the main runway at Spaceport's eastern edge.

"It is an extraordinary location with the views of the mountains and the rolling plains," says Grant Brooker, executive director and architect in charge of the project at Foster. "We became very concerned about how the building would be seen in this setting. The building is grown up out of the ground to make it a more organic part of the landscape."

Spaceport's design addresses more earthly concerns, too. Sustainable features include electricity-generating photovoltaic panels and a system to store and reuse water. URS Corp., known for its work on the Denver International Airport and the National Aeronautics and Space Administration's Marshall Space Flight Center, is working with Foster on the project.

The New Mexico Space Authority, a state agency created to develop commercial space travel, will provide funding for the \$31 million project. It expects to put the facility out for construction bids in the first half of 2008 and to break ground that same year.

Virgin Galactic is not alone in offering cosmic holidays. A Barcelona-based firm called the Galactic Suite Project announced plans this summer for a hotel that will orbit the planet. The spacecraft will feature three guest rooms that measure 22-by-13 feet apiece. Its modular design is "based on the natural growth of a grapevine," explains Xavier Claramunt, director of the Galactic Suite Project.

The hotel will be launched from the project's training facility and tourist resort in the Caribbean—which will also be the departure point for guests—and will orbit the Earth at an altitude of 300 miles.

Galactic Suite employs a team of aerospace professionals, architects, and industrial engineers from Spain and the United States. It has yet to secure financing to build the project, Claramunt says, but the \$4 million tickets for travel in 2012 are scheduled to go on sale next year.