

20 years later, spaceport partners aim to create the next Cape Canaveral

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The VSS Enterprise in the sky over the newly completed runway at Spaceport America in New Mexico. Credit: Courtesy of Spaceport America | Photo by Mark Greenberg

A runway in an otherwise vast, empty stretch of desert in southern New Mexico will soon become the starting point of weekly sightseeing trips to space for anyone who can afford the \$200,000 ticket, and with NASA retiring the Space Shuttle, that might eventually include traditional astronauts as well.

This flat and arid landscape near Upham was named Jornada del Muerto -- or Journey of the Dead Man -- by the Spanish explorers who traveled through the area on horseback north from what is now Mexico.

Journey of the Dead Man is an ominous name to associate with a key

piece of land in humankind's space-faring future. Yet, when Virgin Galactic's VSS Enterprise did a fly-by of the two-mile-long Spaceport America runway at its dedication on Oct. 22, it was more than just a step forward for space tourism. The commemoration signaled that the culmination of a 20 year effort is finally within sight and as NASA is soon to be dependent on Russia for space access, the timing may be ideal for its organizers.

"We are celebrating the world's first spaceway at the world's first purpose-built, commercial spaceport," Governor Bill Richardson said in a press release. "New Mexico is not only helping to launch the commercial spaceflight industry, but we are launching new jobs and opportunities for the people of southern New Mexico. Today marks a significant milestone on our historic and exciting journey."

In the four years since New Mexico announced its \$200 million partnership with Virgin Galactic, other spaceports in places like Oklahoma, Florida, Virginia and Alaska were green-lit as well. Yet many of these projects have either faded away or struggled to gain momentum, making Spaceport America possibly the world's most viable commercial spaceport to date.

At the beginning of the year, *Discover* magazine named Spaceport America's pending completion as one of the top 100 discoveries that will change the world in 2010; the magazine also named the spaceport's groundbreaking last June in its top 100 for 2009. Rocket launches are already taking place, but Virgin Galactic could begin flights as early as next year.

While previous NASA policy shifts have left Spaceport America without a partner, the [space shuttle](#) program's end could force officials to rely on private companies to bring crew and cargo into low earth orbit and is expected to make the site even more important.

On Oct. 22, Virgin Galactic owner Sir Richard Branson announced that the company will seek to provide NASA with crew transport to the International Space Station. The current plans and licensing for the spaceport may only allow for suborbital access, but managers envision a day when both commercial enterprise and government agencies can make routine trips safely from New Mexico to orbit.

New Mexico intends to develop Spaceport America into a space tourism hub.

In 1990, a Stanford University graduate student named Burton Lee was working on a NASA project to find recovery landing sites for a commercial reentry space vehicle called COMET. At the time, his mother was living in the Las Cruces area. "One day I was just driving around and I saw there's obviously a lot of usable space out here," Lee said.

The site's founders alluded to many obstacles along the way including constant change in the commercial space industry, policy shifts from NASA, government regulations, local resistance and in-state political power grabs. Richardson and Branson took much of the hype at the ceremonial runway opening, but it's taken a much larger cast of engineers and advocates to bring the spaceport to this point.

Lee would eventually gather support from engineers and physicists at New Mexico State University's Physical Science Laboratory before proposing a commercial spaceport to be built in the area around White Sands Missile Range in southern New Mexico. When he eventually wrote an earmark for then New Mexico Senator Pete V. Domenici, it was just one sentence in a much larger budget bill, but would snag \$1.4 million to study the area's feasibility as the world's first purpose-built commercial spaceport.

"I was as surprised as everyone else when it actually came through," Lee said. "Up until that point it was just this kid from California and a few other people from New Mexico working on it."

The COMET program died when its first vehicle burned up 46 seconds after launch and [NASA](#) canceled any future missions, but by that time the idea of a commercial spaceport in the area had caught hold with a core group of enthusiastic people at New Mexico State University.

For more than a decade after that, contractor after contractor showed interest in a New Mexico spaceport, but advocates struggled to bring in a major partner. "The biggest thing is the \$200 million," said Spaceport America co-founder Bernie McCune. "Where does that [the money to build the spaceport] come from?"

It wasn't until the Ansari X-Prize that they found their answer. The competition featured a \$10 million award to the first private ship to reach space twice within two weeks.

According to Gutman, as soon as SpaceShipOne -- the original model of the spaceplane now used by Virgin Galactic -- was awarded the prize, the spaceport started pursuing a partnership. McCune was among those tasked with making a presentation to woo Virgin Galactic into choosing New Mexico as its future launch site.

Spaceport America administration set out to determine what Virgin Galactic was looking for and then put together a report based on that, McCune said. "Later we were told that nobody -- meaning Florida or California -- talked to them about airspace control or winds in the upper atmosphere," McCune said. "It was a marketing thing for California and Florida; we treated it as a technical challenge."

The spaceport's founders said taking commercial spaceflight seriously

allowed them to attract the kind of successful private industry partners -- such as [Virgin Galactic](#) and other companies who are already launching rockets -- that other spaceport projects couldn't. This early lead could place Spaceport America in an ideal spot to take advantage of a transitional period for human spaceflight.

"It's New Mexico itself they're interested in, it's not called the 'land of enchantment' for nothing," McCune said. "From 20 miles up I think you're gonna see beauty like nothing else, because there's nothing out here. There's no cities, it's just open."

Source: Inside Science News Service

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