

# New operating system for space: High-tech tycoons

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In this artist's rendering provided by Stratolaunch Systems, a planned plane that would launch cargo and astronauts into space is seen. Microsoft co-founder Paul Allen and aerospace pioneer Burt Rutan are building the plane, in the latest of several ventures fueled by technology tycoons clamoring to write America's next chapter in spaceflight. Their plans, unveiled Tuesday, Dec. 13, 2011, in Seattle, call for a twin-fuselage aircraft with wings longer than a football field to carry a rocket high into the atmosphere and drop it, avoiding the need for a launch pad and the expense of additional rocket fuel. Allen, who teamed up with Rutan in 2004 to send the first privately financed, manned spacecraft into space, said his new project would "keep America at the forefront of space exploration" and give a new generation of children something to dream about. (AP Photo/Strautolaunch Systems)

The tycoons of cyberspace are looking to bankroll America's resurgence in outer space, reviving "Star Trek" dreams that first interested them in science.

Microsoft co-founder Paul Allen [made the latest step Tuesday](#), unveiling plans for a new commercial spaceship that, instead of blasting off a [launch pad](#), would be carried high into the atmosphere by the widest plane ever built before it fires its rockets.

He joins [Silicon Valley](#) powerhouses Elon Musk of [PayPal](#) and Jeff Bezos of Amazon.com Inc. in a new private space race that attempts to fill the gap left when the U.S. government ended the [space shuttle program](#).

Musk, whose Space Exploration Technologies will send its Dragon capsule to dock with the International Space Station in February, will provide the capsule and [booster rocket](#) for Allen's venture, which is called Stratolaunch. Bezos is building a rival private spaceship.

Allen is working with aerospace pioneer Burt Rutan, who collaborated with the tycoon in 2004 to win a \$10 million prize for the first flight of a private spaceship that went into space but not orbit.

Allen says his enormous airplane and spaceship system will go to "the next big step: a private orbital space platform business."

The new system is "a radical change" in how people can get to space, and it will "keep America at the forefront of space exploration," Allen said.

Their plane will have a 380-foot wingspan - longer than a football field and wider than the biggest aircraft ever, Howard Hughes' Spruce Goose.

It will launch a [space capsule](#) equipped with a booster rocket, which will send the spacecraft into orbit. This method saves money by not using [rocket fuel](#) to get off the ground. The spaceship may hold as many as six people.

"When I was growing up, America's space program was the symbol of aspiration," said Allen, who mentioned his love of science fiction and early human spaceflights. "For me, the fascination with space never ended. I never stopped dreaming what might be possible."

For those attracted to difficult technical challenges, space is the ultimate challenge, Allen said.

"It's also the ultimate adventure. We all grew up devouring science fiction and watching Mercury and Gemini, Apollo and the space shuttle. And now we are able to be involved in moving things to the next level," he said, adding that he admires people like Simonyi who have gone into space to experience it.

Allen is not alone in having such dreams, and the money to gamble on making them come true.

Bezos set up the secretive private space company Blue Origin, which has received \$3.7 million in NASA start-up funds to develop a rocket to carry astronauts. Its August flight test ended in failure.

"Space was the inspiration that got people into high-tech ... at least individuals in their 40s and 50s," said Peter Diamandis, who created the space prize Allen won earlier and is a high-tech mogul-turned space business leader himself. "Now they're coming full circle."

Diamandis helped found a company that sends tourists to space for at least \$25 million a ride, and seven of the eight rides involved high-tech executives living out their space dreams. One is a former Microsoft colleague of Allen's, Charles Simonyi, who paid at least \$20 million apiece for two rides into orbit and attended Allen's Tuesday news conference, saying he wouldn't mind a third flight.

"Space has a draw for humanity," not just high-tech billionaires, Simonyi said, but he acknowledged that most people don't have the cash to take that trip.

Space experts welcome the burst of high-tech interest in a technology that 50 years ago spurred the development of computers.

"Space travel the way we used to do it has a '50s and '60s ring to it," said retired George Washington University space policy professor John Logsdon. "These guys have a vision of revitalizing a sector that makes it 21st century."

But Logsdon said the size of the capsule and rocket going to space seemed kind of small to him, only carrying 13,000 pounds. It didn't seem like a game-changer, he said.

Stratolaunch's air-launch method is already used by an older rocket company, Orbital Sciences Corp., to launch satellites. It's also the same method used by the first plane to break the sound barrier more than 50 years ago.

Stratolaunch, to be based in Huntsville, Ala., bills its method of getting to space as "any orbit, any time." Rutan will build the carrier aircraft, which will use six 747 engines. The first unmanned test flight is tentatively scheduled for 2016.

NASA, in a statement, welcomed Allen to the space business, saying his plan "has the potential to make future access to low-Earth orbit more competitive, timely, and less expensive."

Unlike its competitors, Allen's company isn't relying on start-up money from NASA, which is encouraging private companies to take the load of hauling cargo and astronauts to low Earth orbit and the [International](#)

[Space Station](#). The space agency, which retired the space shuttle fleet earlier this year, plans to leave that more routine work to private companies and concentrate on deep space human exploration of an asteroid, the moon and even Mars.

Allen said his interest comes not just because of the end of the shuttle program or changes in government funding for space, but he does see an incredible opportunity right now for the private sector to move the needle on space travel.

Allen's company is looking at making money from tourists and launching small communications satellites, as well as from NASA and the Defense Department, said former NASA Administrator Michael Griffin, a Stratolaunch board member who spoke at a Tuesday news conference.

Just three months ago, Griffin was testifying before Congress that he thought the Obama administration's reliance on private companies for space travel "does not withstand a conventional business case analysis."

This is different because it's private money, with no help or dependence on government dollars, said Griffin, who served under President George W. Bush.

Allen and Rutan collaborated on 2004's SpaceShipOne, which was also launched in the air from a special aircraft in back-to-back flights. Sir Richard Branson's Virgin Galactic licensed the technology and is developing SpaceShipTwo to carry tourists to [space](#). But Allen's first efforts were more a hobby, while this would be more a business, Logsdon said.

SpaceShipOne cost \$28 million, but this will cost much more, officials said.

Allen left Microsoft Corp. in 1983, and has pursued many varied interests since then. He's the owner of the Seattle Seahawks football team as well as the NBA's Portland Trailblazers. He also founded a Seattle museum that emphasizes science fiction.

Allen said this venture fits with his technology bent.

"I'm a huge fan of anything to push the boundaries of science," Allen said.

**More information:** Stratolaunch Systems:

<http://www.stratolaunch.com>

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