

Internet moguls Musk, Bezos shake up US space race

September 20 2014, by Kerry Sheridan



Elon Musk unveiling SpaceX's new seven-seat Dragon V2 spacecraft, in Hawthorne, California, May 29, 2014

The space race to end America's reliance on Russia escalated this week with a multibillion dollar NASA award for SpaceX's Elon Musk and an unexpected joint venture for Blue Origin's Jeff Bezos.

At stake for both Internet tycoons, besides money, are the bragging

rights of restoring US access to low-Earth orbit, a path that was lost when the US space shuttle retired in 2011 after three decades.

Both men are long-time space enthusiasts, but while Musk is outspoken about his vision to colonize Mars someday, Bezos prefers privacy and rarely divulges his plans or his process.

Their young companies—SpaceX was founded in 2002 and Blue Origin in 2000—are building vehicles to carry astronauts, as well as engines that propel the rockets. Musk's California-based SpaceX is making the rockets, too.

The 43-year-old native of South Africa—who co-founded PayPal and also heads Tesla Motors—is seen as the emerging leader of the modern commercial space industry, after becoming first to send a private cargo carrier to the International Space Station in 2010.

Musk championed yet another round in the battle of the tech entrepreneurs when SpaceX was awarded a \$2.6 billion contract from NASA on Tuesday for SpaceX's Dragon V2 crew vehicle.

The cash was part of a multi-year US space agency effort to help companies build America's newest space taxi and to encourage competition among the best.

Boeing won the biggest contract from NASA on Tuesday, with \$4.2 billion toward sending its CST-100 crew vehicle to the International Space Station by 2017.

But while NASA and some lawmakers were hailing yet another step toward ending US dependence on Russia—currently costing \$70 million per seat for a ride to the International Space Station—there was a hitch.

Boeing's CST-100 is designed to launch atop the Atlas V rocket, which is powered by a Russian-made engine called the RD-180.



Elon Musk unveils SpaceX's new seven-seat Dragon V2 spacecraft, in Hawthorne, California, May 29, 2014

"It is a huge dilemma that you will very soon start to see more focus on," said space analyst Marco Caceras of the Teal Group.

On Wednesday, Bezos, who heads Amazon.com and owns the Washington Post, unveiled plans for Blue Origin to build a new US-made engine rocket engine, called the BE-4, with United Launch Alliance, a joint venture of Boeing and Lockheed Martin.

No details on the money involved were revealed when Bezos, 50, made a

rare appearance before the Washington press corps.

"Our goal is to make the engine so operable, so low cost and so reliable that ULA would be crazy to use anything else," Bezos said.

The BE-4 does not aim to be a one-for-one replacement of the Russian-made first-stage engine that powers ULA's Atlas V rocket. But perhaps two BE-4s could be used to power it, he said.

Still, it is not easy to replace a rocket's engine, especially one with such a successful track record as the Atlas V, and ULA hinted there may be a new rocket in the works that would be best suited for the BE-4.

"We are currently in the middle of our studies on exactly what the vehicle configuration would be that uses this new propulsion technology," said ULA CEO Tory Bruno, saying more details could come later this year.

In announcing the deal with ULA, Bezos stepped into new terrain, vying for a piece of the rocket engine market, which SpaceX has openly criticized for being too dependent on Russian products.



Jeff Bezos pictured in Santa Monica, California, September 6, 2012

Musk, whose net worth is estimated at \$9.3 billion according to Forbes magazine, has also filed legal action against the US Air Force, over its process of awarding lucrative national security satellite launches to companies that use Russian-built engines, saying his US-made Falcon rockets could do it cheaper.

Blue Origin has lost to SpaceX before. SpaceX last year beat out Blue Origin for access to a storied NASA launchpad at Cape Canaveral, Florida.

SpaceX has also surged ahead of the commercial crew pack with its Dragon cargo and Dragon V2 crew vehicles.

Blue Origin's New Shepard—a reusable spacecraft designed for suborbital tourism—is not expected to be ready for tests for years to

come.

Bezos, valued at \$30.3 billion, may be quieter about his space plans, but he is willing to invest his own money, and that speaks volumes, said space policy analyst John Logsdon.

"To have someone with that level of success see space launch as a profitable market, I think is very significant," he said.

Though Musk and Bezos are staunch competitors, "they combine a strong liking for space, a good business sense and a fair amount of resources," he added.

"And this is changing the [space](#) business."

© 2014 AFP

Citation: Internet moguls Musk, Bezos shake up US space race (2014, September 20) retrieved 24 April 2024 from <https://phys.org/news/2014-09-internet-moguls-musk-bezos-space.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--