NASA announcing commercial crew winners (Update)

September 16 2014, by Marcia Dunn

In this undated image provided by NASA, astronaut Randy Bresnik prepares to enter The Boeing Company's CST-100 spacecraft for a fit check evaluation at the company's Houston Product Support Center. On Tuesday, Sept. 16, 2014, NASA will announce which one or two private companies wins the right to transport astronauts to the International Space Station. The deal will end NASA's expensive reliance on Russian crew transport. The contenders include SpaceX, Sierra Nevada Corp., and Boeing. (AP Photo/NASA)

NASA is one giant step closer to launching Americans again from U.S. soil.

On Tuesday, the space agency planned to announce which one or two private companies wins the right to transport astronauts to the International Space Station. The deal will end NASA's expensive reliance on Russian crew transport.

NASA Administrator Charles Bolden will make the long-awaited announcement at Kennedy Space Center, next door to where the launches should occur in a few years.

The major contenders include SpaceX of California, already delivering space station cargo; Sierra Nevada Corp., which is developing a mini-shuttle in Colorado; and Boeing, the veteran of the group that would assemble its crew capsules at Kennedy.

U.S. astronauts have been riding Russian rockets ever since NASA's space shuttles retired in 2011. The latest pricetag is $71 million per seat; NASA has at least four of its own astronauts flying up on a Russian Soyuz, to the space station, every year.

NASA has set a goal of 2017 for the first crewed launch under the program.

The commercial crew program follows the successful cargo delivery effort underway for the past two years, also under NASA contract. The objective, for years, has been for NASA to hand space station flights to private companies and focus on getting astronauts into true outer space, with destinations such as asteroids and Mars. NASA is prepping its first-ever Orion space exploration capsule for a test flight in December.

Billionaire Elon Musk's Space Exploration Technologies Corp.—SpaceX

for short—became the first private company to launch a spacecraft into orbit and retrieve it in 2010. The SpaceX Dragon capsule made its first space station trip, with astronaut supplies, in 2012.

In this Aug. 22, 2013 photo made available by NASA, the Sierra Nevada Corporation's Dream Chaser spacecraft is carried by a helicopter during a test in Sparks, Nev. On Tuesday, Sept. 16, 2014, NASA will announce which one or two private companies wins the right to transport astronauts to the International Space Station. The deal will end NASA's expensive reliance on Russian crew transport. The contenders include SpaceX, Sierra Nevada Corp., and Boeing. (AP Photo/NASA, Carla Thomas)

The Dragon cargo carrier has been enhanced to carry as many as seven astronauts. It's known as Dragon v2—version two.

While SpaceX is proud of its cargo deliveries, "the company was not

founded to bring T-shirts and food and water up to space, it was founded to bring people into space," program manager Garrett Reisman, a former space station astronaut, told an industry conference late last month.

Orbital Sciences Corp. of Virginia, which also makes unmanned space station shipments, did not vie for crew-carrying privileges.

Boeing's entry was also a capsule, called CST-100. The letters stand for Crew Space Transportation, and the number refers to 100 kilometers or 62 miles, the official start of space.

In this May 29, 2014 photo, Elon Musk, CEO and CTO of SpaceX, introduces the SpaceX Dragon V2 spaceship at the SpaceX headquarters in Hawthorne, Calif. On Tuesday, Sept. 16, 2014, NASA will announce which one or two private companies wins the right to transport astronauts to the International Space Station. The deal will end NASA's expensive reliance on Russian crew transport. The contenders include SpaceX, Sierra Nevada Corp., and Boeing.

(AP Photo/Jae C. Hong, file)

Sierra Nevada had the most novel entry, a winged, lifting body vehicle strongly reminiscent of NASA's space shuttle. Its name: Dream Chaser.

Both the CST-100 and Dream Chaser called for flying atop an Atlas V rocket. The manned SpaceX capsule would use the company's own Falcon 9 rocket. Cape Canaveral will be the sole launch site.

NASA paid each of these three major contenders hundreds of millions of dollars in recent years to spur development. The new contracts are worth billions.

Amazon.com founder Jeff Bezos' Blue Origin company in Washington state received NASA funding in the early rounds of competition, then said it would continue working on its own, unfunded by the government. The company has given sparse details about its progress and intent.

More information: NASA: www.nasa.gov/exploration/commercial/crew/

SpaceX: www.spacex.com/

Sierra Nevada: tinyurl.com/mqv9md9

Boeing: tinyurl.com/qjx5p9u

Blue Origin: www.blueorigin.com/