

Boeing's Starliner capsule makes launch debut, but hits snag (Update)

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A United Launch Alliance Atlas V rocket carrying the Boeing Starliner crew capsule on an Orbital Flight Test to the International Space Station lifts off from Space Launch Complex 41 at Cape Canaveral Air Force station, Friday, Dec. 20, 2019, in Cape Canaveral, Fla. (AP Photo/Terry Renna)



Boeing's new Starliner capsule ran into trouble in orbit Friday minutes after blasting off on its first test flight, a crucial dress rehearsal for next year's inaugural launch with astronauts.

Everything went flawlessly as the Atlas V rocket soared with the Starliner just before sunrise. But a half-hour into the flight, Boeing reported that the capsule's insertion into orbit was not normal.

Officials said flight controllers were looking into all their options and stressed that the capsule was in a stable orbit, at least for now.

The Starliner was supposed to reach the International Space Station on Saturday, but that now appeared to be in jeopardy.

THIS IS A BREAKING NEWS UPDATE. AP's earlier story follows below:

Boeing's new Starliner capsule rocketed toward the International Space Station on its first test flight Friday, a crucial dress rehearsal for next year's inaugural launch with astronauts.

The Starliner carried Christmas treats and presents for the six space station residents, hundreds of tree seeds similar to those that flew to the moon on Apollo 14, the original air travel ID card belonging to Boeing's founder and a mannequin named Rosie in the commander's seat.

The test dummy—named after the bicep-flexing riveter of World War II—wore a red polka dot hair bandanna just like the original Rosie and Boeing's custom royal blue spacesuit.





A United Launch Alliance Atlas V rocket carrying the Boeing Starliner crew



capsule on an Orbital Flight Test to the International Space Station lifts off from Space Launch Complex 41 at Cape Canaveral Air Force station, Friday, Dec. 20, 2019, in Cape Canaveral, Fla. (AP Photo/Terry Renna)

"She's pretty tough. She's going to take the hit for us," said NASA's Mike Fincke, one of three astronauts who will fly on the next Starliner and, as test pilots, take the hit for future crews.

As the astronauts watched from nearby control centers, a United Launch Alliance Atlas V rocket carrying the capsule blasted off just before sunrise from Cape Canaveral Air Force Station. The rocket was visible for at least five minutes, its white contrail a brilliant contrast against the dark sky. Thousands of spectators jammed the area, eager to witness Starliner's premiere flight.

It was a one-day trip to the orbiting lab, putting the spacecraft on track for a docking Saturday morning.

This was Boeing's chance to catch up with SpaceX, NASA's other commercial crew provider that completed a similar demonstration last March. SpaceX has one last hurdle—a launch abort test—before carrying two NASA astronauts in its Dragon capsule, possibly by spring.

The U.S. needs competition like this, NASA Administrator Jim Bridenstine said Thursday, to drive down launch costs, boost innovation and open space up to more people.

"We're moving into a new era," he said.





A time exposure of the United Launch Alliance Atlas V rocket carrying the Boeing Starliner crew capsule on an Orbital Flight Test to the International Space Station lifts off from Space Launch Complex 41 at Cape Canaveral Air Force station, Friday, Dec. 20, 2019, in Cape Canaveral, Fla. (AP Photo/Terry Renna)

The space agency handed over station deliveries to private businesses, first cargo and then crews, in order to focus on getting astronauts back to the moon and on to Mars.

Commercial cargo ships took flight in 2012, starting with SpaceX. Crew capsules were more complicated to design and build, and parachute and other technical problems pushed the first launches from 2017 to now next year.



It's been nearly nine years since NASA astronauts have launched from the U.S. The last time was July 8, 2011, when Atlantis—now on display at Kennedy Space Center—made the final space shuttle flight.

Since then, NASA astronauts have traveled to and from the space station via Kazakhstan, courtesy of the Russian Space Agency. The Soyuz rides have cost NASA up to \$86 million apiece.

"We're back with a vengeance now," Florida Gov. Ron DeSantis said from Kennedy, where crowds gathered well before dawn.

Chris Ferguson commanded that last shuttle mission. Now a test pilot astronaut for Boeing and one of the Starliner's key developers, he's assigned to the first Starliner crew with Fincke and NASA astronaut Nicole Mann. A successful Starliner demo could see them launching by summer.





NASA astronaut Nicole Mann, left, Boeing astronaut Chris Ferguson, center, and NASA astronaut Mike Fincke stand in front of the countdown clock during a press conference at the Kennedy Space Center, in Cape Canaveral, Fla., Thursday, Dec. 19, 2019. They will be the first crew to fly on the Starliner spacecraft some time next year. (AP Photo/Terry Renna)

"This is an incredibly unique opportunity," Ferguson said on the eve of launch.

Mann juggled a mix of emotions: excitement, pride, stress and amazement.

"Really overwhelmed, but in a good way and really the best of ways," she



said.

Built to accommodate seven, the white capsule with black and blue trim will typically carry four or five people. It's 16.5 feet (5 meters) tall with its attached service module and 15 feet (4.5 meters) in diameter.

Every Starliner system will be tested during the eight-day mission, from the vibrations and stresses of liftoff to the Dec. 28 touchdown at the Army's White Sands Missile Range in New Mexico. Parachutes and air bags will soften the capsule's landing. Even the test dummy is packed with sensors.

Bridenstine said he's "very comfortable" with Boeing, despite the prolonged grounding of the company's 737 Max jets. The spacecraft and aircraft sides of the company are different, he noted. Boeing has long been involved in NASA's human spacecraft program, from Project Mercury to the shuttle and station programs.





NASA astronaut Nicole Mann speaks as Boeing astronaut Chris Ferguson, left, and NASA astronaut Mike Fincke listen during a press conference at the Kennedy Space Center, in Cape Canaveral, Fla., Thursday, Dec. 19, 2019. They will be the first crew to fly on the Starliner spacecraft some time next year. (AP Photo/Terry Renna)

Boeing began preliminary work on the Starliner in 2010, a year before Atlantis soared for the last time.

In 2014, Boeing and SpaceX made the final cut. Boeing got more than \$4 billion to develop and fly the Starliner, while SpaceX got \$2.6 billion for a crew-version of its Dragon cargo ship.



NASA wants to make sure every reasonable precaution is taken with the capsules, designed to be safer than NASA's old shuttles.

"We're talking about human spaceflight," Bridenstine cautioned. "It's not for the faint of heart. It never has been, and it's never going to be."

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