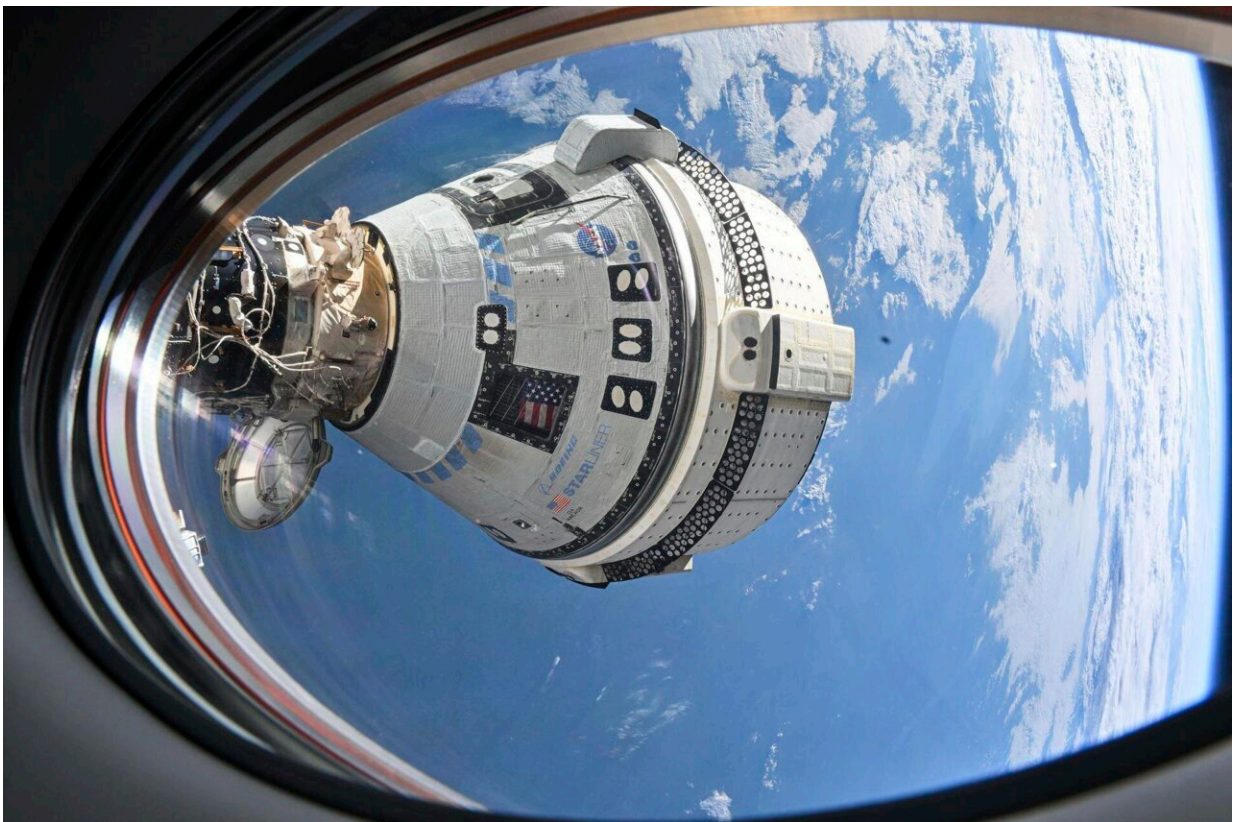


NASA decides to keep 2 astronauts in space until February, nixes return on troubled Boeing capsule

August 25 2024, by Marcia Dunn



This photo provided by NASA shows Boeing's Starliner spacecraft which launched astronauts Butch Wilmore and Suni Williams to the International Space Station docked to the Harmony module's forward port on July 3, 2024, seen from a window on the SpaceX Dragon Endeavour spacecraft docked to the adjacent port. Credit: NASA via AP

NASA decided Saturday it's too risky to bring two astronauts back to Earth in Boeing's troubled new capsule, and they'll have to wait until next year for a ride home with SpaceX. What should have been a [weeklong test flight](#) for the pair will now last more than eight months.

The seasoned pilots have been stuck at the International Space Station since the beginning of June. A cascade of vexing thruster [failures and helium leaks](#) in the new capsule marred their trip to the space station, and they ended up in a holding pattern as engineers [conducted tests and debated](#) what to do about the flight back.

After almost three months, the decision finally came down from NASA's highest ranks on Saturday. Butch Wilmore and Suni Williams will come back in a SpaceX capsule in February. Their empty Starliner capsule will undock in early September and attempt to return on autopilot with a touchdown in the New Mexico desert.

As Starliner's test pilots, the pair should have overseen this critical last leg of the journey.

"A test flight by nature is neither safe nor routine," said NASA Administrator Bill Nelson. The decision "is a result of a commitment to safety."

Nelson said lessons learned from NASA's two space shuttle accidents played a role. This time, he noted, open dialogue was encouraged rather than crushed.



NASA Administrator Bill Nelson takes part in news conference as NASA decided it's too risky to bring two astronauts back to Earth in Boeing's troubled new capsule, at Johnson Space Center in Houston, on Saturday, Aug. 24, 2024. Credit: NASA via AP

"This has not been an easy decision, but it is absolutely the right one," added Jim Free, NASA's associate administrator.

It was a blow to Boeing, adding to the safety concerns plaguing the company on its airplane side. Boeing had counted on Starliner's first crew trip to revive the troubled spacecraft program after years of delays and ballooning costs. The company had insisted Starliner was safe based on all the recent thruster tests both in space and on the ground.

Boeing did not participate in Saturday's news conference by NASA, but released a statement: "Boeing continues to focus, first and foremost, on

the safety of the crew and spacecraft." The company said it is preparing the spacecraft "for a safe and successful return."

Rand Corp.'s Jan Osburg, a senior engineer who specializes in aerospace and defense, said NASA made the right choice. "But the U.S. is still left with egg on its face due to the Starliner design issues that should have been caught earlier."



NASA astronauts Suni Williams, left, and Butch Wilmore stand together for a photo enroute to the launch pad at Space Launch Complex 41 Wednesday, June 5, 2024, in Cape Canaveral, Fla., for their liftoff on the Boeing Starliner capsule to the international space station. Credit: AP Photo/Chris O'Meara, File

Wilmore, 61, and Williams, 58, are both retired Navy captains with previous long-duration spaceflight experience. Before their June 5 launch from Cape Canaveral, Wilmore and Williams said their families bought into the uncertainty and stress of their professional careers decades ago.

During their [lone orbital news conference](#) last month, the astronauts said they had trust in the thruster testing being conducted. They had no complaints, they added, and enjoyed pitching in with space station work.

Wilmore's wife, Deanna, was equally stoic in an interview earlier this month with WVLT-TV in Knoxville, Tennessee, their home state. She was already bracing for a delay: "You just sort of have to roll with it."

Flight operations director Norm Knight said he talked to the astronauts Saturday and they fully support the decision to postpone their return.



In this photo provided by NASA, Boeing Crew Flight Test astronauts Butch Wilmore, left, and Suni Williams pose for a portrait inside the vestibule between the forward port on the International Space Station's Harmony module and Boeing's Starliner spacecraft on June 13, 2024. Credit: NASA via AP, File

There were few options.

The SpaceX capsule currently parked at the space station is reserved for the four residents who have been there since March. They will return in late September, their routine six-month stay extended a month by the Starliner dilemma. NASA said it would be unsafe to squeeze two more into the capsule, except in an emergency.

The docked Russian Soyuz capsule is even tighter, capable of flying only

three — two of them Russians wrapping up a yearlong stint.

So Wilmore and Williams will wait for SpaceX's next taxi flight. It's due to launch in late September with two astronauts instead of the usual four. NASA is yanking two to make room for Wilmore and Williams on the return flight in late February.

NASA said no serious consideration was given to asking SpaceX for a quick stand-alone rescue. Last year, the Russian Space Agency had to rush up a replacement Soyuz capsule for three men whose original craft was damaged by space junk. The switch pushed their six-month mission to just over a year.



In this photo provided by NASA, Boeing Crew Flight Test astronauts Suni Williams and Butch Wilmore, center, pose with Expedition 71 Flight Engineers

Mike Barratt, left, and Tracy Dyson, aboard the International Space Station's Quest airlock on June 24, 2024. Credit: NASA via AP, File

Former Canadian astronaut Chris Hadfield, applauded the decision via X: "Good to err on the side of caution for astronaut lives." Long missions are "what astronauts work their entire career for. I'd take it in a heartbeat!"

Starliner's woes began long before its latest flight.

Bad software fouled the first test flight without a crew in 2019, prompting a do-over in 2022. Then parachute and other issues cropped up, including a helium leak in the capsule's propellant system that nixed a launch attempt in May. The leak eventually was deemed to be isolated and small enough to pose no concern. But more leaks sprouted following liftoff, and five thrusters also failed.

All but one of those small thrusters restarted in flight. But engineers were perplexed by ground testing that showed a thruster seal swelling and obstructing a propellant line. They theorized the seals in orbit may have expanded and then reverted to their normal size. Officials said the results marked the turning point, as their concerns grew.



In this long-exposure photo provided by NASA, Boeing's Starliner spacecraft is docked to the Harmony module of the International Space Station on July 3, 2024. Credit: NASA via AP

With all the uncertainty about how the thrusters might perform, "There was too much risk for the crew," Steve Stich, NASA's commercial crew program manager, told reporters.

These 28 thrusters are vital. Besides needed for [space station](#) rendezvous, they keep the capsule pointed in the right direction at flight's end as bigger engines steer the craft out of orbit. Coming in crooked could result in catastrophe.

With the Columbia disaster still fresh in many minds — the shuttle

broke apart during reentry in 2003, killing all seven aboard — NASA made an extra effort to embrace open debate over Starliner's return capability.

Despite Saturday's decision, NASA isn't giving up on Boeing. Nelson said he is "100%" certain that Starliner will fly again.

NASA went into its commercial crew program a decade ago wanting two competing U.S. companies ferrying astronauts in the post-shuttle era. Boeing won the bigger contract: more than \$4 billion, compared with SpaceX's \$2.6 billion.



In this photo provided by NASA, astronauts Butch Wilmore, left, and Suni Williams inspect safety hardware aboard the International Space Station on Aug. 9, 2024. Credit: NASA via AP



In this photo provided by NASA, Boeing's Starliner spacecraft is docked to the Harmony module of the International Space Station on July 3, 2024, seen from a window on the SpaceX Dragon Endeavour spacecraft docked to an adjacent port. Credit: NASA via AP

With station supply runs already under its belt, SpaceX aced its first of now nine astronaut flights in 2020, while Boeing got bogged down in design flaws that set the company back more than \$1 billion. NASA officials still hold out hope that Starliner's problems can be corrected in time for another crew flight in another year or so.

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