

Investigation into why a panel blew off a Boeing Max 9 jet focuses on missing bolts

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In this photo released by the National Transportation Safety Board, NTSB Investigator-in-Charge John Lovell examines the fuselage plug area of Alaska Airlines Flight 1282 on Sunday, Jan. 7, 2024, in Portland, Ore. A panel used to plug an area reserved for an exit door on the Boeing 737 Max 9 jetliner blew out Friday night shortly after the flight took off from Portland, forcing the plane to return to Portland International Airport. Credit: National Transportation Safety Board via AP

The extended grounding of some Boeing 737 Max jetliners is adding to pressure on Boeing and the subcontractor that made the fuselage and installed a panel that blew out leaving a gaping hole in an Alaska Airlines plane last week.

Investigators know the sequence of events that led to the blowout Friday night, but they don't know the cause. A key question is whether bolts used to help secure the panel, called a door plug, were installed. A National Transportation Safety Board investigator says the bolts have not been recovered and the agency won't know [if they were even in place](#) until the door plug is examined in a laboratory.

Adding to Boeing's problems, Alaska Airlines and United Airlines—the two U.S. carriers that fly the Max 9—reported finding loose bolts and other hardware in other panels, suggesting quality issues with the door plugs are not limited to one plane.

The plugs are installed in Max 9 fuselages by subcontractor Spirit AeroSystems, which was spun off by Boeing in 2005. Spirit has a history of manufacturing problems, many uncovered in a U.S. House probe of two fatal crashes involving Boeing 737 Max 8 planes.

"The focus needs to turn to Spirit," said former congressman Peter DeFazio, who chaired the investigating committee. "Boeing has been happy with the crappy stuff from Spirit because it's cheap."

The company said in a statement Monday that "quality and product integrity" are a priority. "Spirit is a committed partner with Boeing on the 737 program, and we continue to work together with them on this matter," it said.

The process of inspecting Max 9s and returning them to service has been slower than Alaska and United had hoped. The Federal Aviation

Administration [grounded all Max 9s](#) in the United States on Saturday until they could be inspected, but Boeing didn't provide inspection instructions until Monday.

On Tuesday, the FAA said those instructions were being revised "because of feedback," and it extended the grounding of the planes.



This photo released by the National Transportation Safety Board shows a gaping hole where the paneled-over door had been at the fuselage plug area of Alaska Airlines Flight 1282 on Sunday, Jan. 7, 2024, in Portland, Ore. A panel used to plug an area reserved for an exit door on the Boeing 737 Max 9 jetliner blew out Jan. 5, shortly after the flight took off from Portland, forcing the plane to return to Portland International Airport. Credit: National Transportation Safety Board via AP

"The safety of the flying public, not speed, will determine the timeline for returning the Boeing 737-9 Max to service," the FAA said in a statement.

However, the inspection delays threw airline schedules into turmoil.

United said it canceled another 170 flights Tuesday because of the grounding. Alaska said it scrubbed 109 flights because it couldn't fly Max 9s.

The part that failed on the Alaska flight is installed on some Boeing jets when airlines don't have enough seats to require more emergency exits. The plugs are lighter than an aircraft door, reducing the plane's weight and saving fuel. They are common on cargo planes that have been converted from passenger use.

During a briefing late Monday, NTSB officials described how the plug on Alaska flight 1282 rolled upward and flew off the jet. Four bolts and 12 connecting points between the plug and the door frame are supposed to prevent that from happening.

"We have not yet recovered the four bolts that restrain (the plug) from its vertical movement, and we have not yet determined if they existed there," said NTSB aerospace engineer Clint Crookshanks. "That will be determined when we take the plug to our lab in Washington, D.C."

It is not clear whether Spirit AeroSystems or Boeing technicians last worked on the door plug, which can be opened for maintenance. Steven Wallace, former head of accident investigations for the FAA, said it was unlikely that Alaska crews worked on the plug because the plane was only delivered to the airline in October.

That means the investigation will likely focus on manufacturing,

assembly and quality control, Wallace said.



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This could put more pressure on Boeing CEO David Calhoun, who was brought in to help the company get past the crisis created by the Max crashes. During his tenure, Boeing has lost \$23 billion and struggled with

manufacturing flaws that have at times held up deliveries of 737s and larger Boeing 787s.

Calhoun called an all-employees meeting Tuesday, hosted at the company's 737 factory in Renton, Washington.

"We're going to approach this, number one, acknowledging our mistake," Calhoun said, according to comments provided by Boeing. Reporters were not allowed to attend. The CEO said he trusts the NTSB to find the cause of the accident, and trusts the FAA to take all necessary steps "to ensure every next airplane that moves into the sky is in fact safe, and that this event can never happen again."

No one was seriously hurt Friday aboard the affected Alaska jetliner, but Ed Pierson, a former senior manager at Boeing's 737 factory, said the door plug issue is a wake-up call for Boeing and regulators to act before something worse happens.

Pierson, now the executive director of The Foundation for Aviation Safety, said Boeing assembly line workers are pressured to rush, and that the company has cut back on quality control inspections. That, he said, can lead to mistakes.

"The pressure is 'Move the plane down the line,' It's not, 'Stop, let's fix it, let's do it right,'" he said.

Other former Boeing employees and outsiders who have examined the company say its safety culture degraded after a 1997 merger that left many McDonnell Douglas leaders in charge.

"They rejected the Boeing culture, where the engineers had the final say on everything, in order to chase the [stock price](#) and their executive options," DeFazio said. "They need to go back to being what they were

and could be, which is the greatest engineering aerospace company in the world."



This image provided by Kelly Bartlett shows passengers with oxygen masks on an Alaska Airlines Boeing 737 Max 9, Flight 1282, which was forced to return to Portland International Airport on Friday, Jan. 5, 2024. Credit: Kelly Bartlett via AP

Spirit AeroSystems' record is also likely to come under more scrutiny.

In a federal securities lawsuit filed last May in Manhattan, an investor charged that Spirit concealed widespread quality failures including defects in fuselage fittings, improperly drilled holes in bulkheads that keep planes pressurized, and missing fasteners.

The lawsuit includes an unidentified manufacturing team leader's email that said a manager told workers to falsify reports on the number of defects found on planes. The lawsuit was reported early Tuesday by The Lever, an investigative-journalism website. Spirit declined Tuesday to comment on the lawsuit.

Sen. Richard Blumenthal, D-Conn., said the NTSB must determine "whether additional inspection and maintenance should have been done before the aircraft carried passengers anywhere." He asked new FAA Administrator Michael Whitaker what the regulatory agency is doing to protect air traveler safety.

A focus on how the door plugs were installed could be the best outcome for Boeing, said John Goglia, a former member of the NTSB. He said a finding of sloppy installation work would eliminate the need for more costly, time consuming door [plug](#) redesign.

"Installation errors happen all the time," said Goglia, who started his career as an aircraft mechanic. Faulting the installation in Boeing planes

"impeaches their quality system, but it doesn't impeach their design."

Shares of The Boeing Co. fell 1% Tuesday, a day after they plunged 8%. Spirit AeroSystems was nearly unchanged Tuesday but lost 11% Monday.

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