

Fuselage of new Boeing 777X ruptured in pressure tests

November 27 2019, by Luc Olinga



Boeing doit, après la crise du 737 MAX, rassurer ses clients sur le long courrier 777X

The fuselage of one of Boeing's new 777X aircraft completely ruptured in pressure tests in September, a previously unreported major setback



that could delay the arrival of the long-haul jet to global skies, AFP has learned from informed sources.

Already deeply mired in the crisis surrounding its 737 MAX, the premier US aircraft manufacturer now faces fresh difficulties bringing its new line of long-haul jets to market due to the unexpected weakness in the 777X airframe.

It was known that a passenger door to the aircraft blew out when Boeing put the aircraft body through pressure tests in September, deliberately taking it to extremes beyond normal operating conditions to ensure the strength of the construction materials.

But several sources, who insisted on anonymity, said that the body structure supporting the door also ruptured during the tests.

"There was a structure around the exit door that also blew off during the tests, which means there was a structure failure," said one of the sources, adding that one of the aircraft's wings was also damaged in the <u>test</u>.

"There was a depressurization of the aft fuselage; the structure that supports the door blew off," said a second person.

"It was not just the door; it's very serious."

FAA investigating

The US Federal Aviation Administration, whose officials oversaw the test, has opened an investigation to determine why the fuselage failed, a regulatory source said.

But it was not clear how the incident will impact the certification of the 777X, which is already months behind schedule for introduction into



service.

Last month Boeing said the pressure test result will not impact the schedule for flight tests for the 777X, required for the aircraft's certification.

"What we've seen to date reinforces our prior assessment that this will not have a significant impact on the design or on the preparations for first flight," the company said on October 23.

Manufacturing robots caused problem?

The reason the fuselage failed in the test has yet to be determined.

But aerospace industry sources point to Boeing's use of robots for assembling the fuselage at its Everett, Washington plant.

In mid-November, Boeing announced that it will put humans back in charge of the job.

"The door is unlikely to fail unless something else failed around it," a third anonymous source told AFP.

"They need to review the design of the aircraft and make some changes."

A person aware of Boeing's plans said they will make design changes.

"Boeing does know what they need to do," a person aware of Boeing's plans said, adding that a fix involves reinforcing that section of the aircraft body.

More delays expected



The disastrous pressure test results represent a significant new blow for Boeing, which had already delayed 777X deliveries due to problems with its new General Electric GE9X engine.

While the approval process benefits from the 777X being viewed by the FAA as a "derivative" of the 777, meaning some systems are already certified, there have also been problems with the new aircraft's wing design and its electronics, according to industry sources.

The body modifications could set back the calendar for delivery of the first 777X by six months, the sources said.

First deliveries had been planned for 2020, but in October Boeing changed the date to the start of 2021.

That could now slip to mid-2021, the sources said.

The 777X was supposed to bolster Boeing's dominance over Airbus in the long-haul aircraft business, weakened by the US-China trade war which has dried up Chinese orders for 787 Dreamliners.

Boeing has already booked orders for 340 of the plane, which will carry between 384 and 426 passengers with a range of up to 8,730 miles (16,170 kilometers).

Emirates, Lufthansa, Cathay Pacific, Singapore Airlines and Qatar Airways are among the first buyers awaiting the aircraft.

However, Emirates, tired of delays, decided last week to cancel orders for 30 777X to replace current Boeing 787s. That could cost Boeing some \$3.5 billion in sales, based on catalog prices for the <u>aircraft</u>.

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