

Boeing Max cleared for takeoff, 2 years after deadly crashes

November 18 2020, by David Koenig and Tom Krisher



In this Sept. 30, 2020, file photo, a Boeing 737 Max jet, piloted by Federal Aviation Administration Chief Steve Dickson, prepares to land at Boeing Field following a test flight in Seattle. The FAA is poised to clear the Boeing 737 Max to fly again after grounding the jets for nearly two years due to a pair of disastrous crashes that killed 346 people. (AP Photo/Elaine Thompson, File)

After nearly two years and a pair of deadly crashes, the U.S. Federal Aviation Administration has cleared Boeing's 737 Max for flight.

The nation's air safety agency announced the move early Wednesday, saying it was done after a "comprehensive and methodical" 20-month review process.

Regulators around the world grounded the Max in March 2019, after the crash of an Ethiopian Airlines jet. That happened less than five months after another Max flown by Indonesia's Lion Air plunged into the Java Sea. A total of 346 passengers and crew members on both planes were killed.

Federal Aviation Administration chief Stephen Dickson signed an order Wednesday rescinding the grounding. U.S. airlines will fly the Max once Boeing updates critical software and computers and pilots receive training in flight simulators.

The FAA says the order was made in cooperation with air safety regulators worldwide.

The move follows exhaustive congressional hearings on the crashes that led to criticism of the FAA for lax oversight and Boeing for rushing to implement a new software system that put profits over safety and ultimately led to the firing of its CEO.

Investigators focused on anti-stall software that Boeing had devised to counter the plane's tendency to tilt nose-up because of the size and placement of the engines. That software pushed the nose down repeatedly on both planes that crashed, overcoming the pilots' struggles to regain control. In each case, a single faulty sensor triggered the nose-down pitch.



A Boeing 737 Max 9 built for Aeromexico flies after taking off from Renton Municipal Airport, Wednesday, Nov. 18, 2020, in Renton, Wash. After nearly two years and a pair of deadly crashes, the U.S. Federal Aviation Administration announced Wednesday that the 737 Max has been cleared for flight after regulators around the world grounded the Max in March 2019, after the crash of an Ethiopian Airlines jet. (AP Photo/Ted S. Warren)

The new software now requires inputs from two sensors to activate the software, which Boeing says does not override pilot controls like it did in the past.

The company changed the software so it doesn't repeatedly point the nose of the plane down to counteract possible aerodynamic stalling.

On a conference call with reporters, Dickson said the Max is now the most scrutinized transport aircraft in history, with over 40 FAA employees working tens of thousands of hours on the plane.

"The design changes we have overseen make it impossible for these accident scenarios to reoccur," he said.

He said that if FAA knew after Lion Air what it learned during this review of the plane, it should have grounded the plane after the first crash.

"These events and the lessons we have learned as a result have reshaped our company and further focused our attention on our core values of safety, quality and integrity," Boeing CEO David Calhoun said in a statement.



In this Wednesday, Sept. 30, 2020, file photo, a Boeing 737 Max jet, piloted by Federal Aviation Administration Chief Steve Dickson, prepares to land at Boeing Field following a test flight in Seattle. The FAA is poised to clear the Boeing 737 Max to fly again after grounding the jets for nearly two years due to a pair of disastrous crashes that killed 346 people. (AP Photo/Elaine Thompson, File)

The aircraft maker's redemption comes in the middle of a pandemic that has scared away passengers and decimated the aviation industry, limiting its ability to make a comeback. Air travel in the U.S. alone is down about 65% from a year ago.

Boeing sales of new planes have plunged because of the Max and the coronavirus pandemic. Orders for more than 1,000 Max jets have been canceled or removed from Boeing's backlog this year. Each plane has a sticker price of \$99 million to \$135 million, although airlines routinely pay less.

Boeing shares fell 2.1% to \$205.55 in trading Wednesday afternoon. That's about half of the all-time high of \$440.62 reached on March 1, 2019, just days before the Ethiopian crash, but well above the \$95 trough in March, when the pandemic caused massive disruptions to travel and the global economy.

John Hansman, an aeronautics professor at MIT, said people typically avoid airplanes for a few months after there are problems. But the Max case is unusual, and were it not for the novel coronavirus, Hansman said he would feel safe flying on a Max.



Workers stand near a Boeing 737 Max airplane parked at Renton Municipal Airport, Wednesday, Nov. 18, 2020, next to the Boeing assembly facility in Renton, Wash. where 737 Max airplanes are made. After nearly two years and a pair of deadly crashes, the U.S. Federal Aviation Administration announced Wednesday that the 737 Max has been cleared for flight after regulators around the world grounded the Max in March 2019, after the crash of an Ethiopian Airlines jet. (AP Photo/Ted S. Warren)

"It's probably the safest airplane to be on," he said.

Relatives of people who died in the crashes aren't convinced. They accused Boeing of hiding critical design features from the FAA.

"The flying public should avoid the Max," said Michael Stumo, whose 24-year-old daughter died in the second crash. "Change your flight. This is still a more dangerous aircraft than other modern planes."

American is the only U.S. airline to put the Max in its schedule so far, starting with one round trip daily between New York and Miami beginning Dec. 29. United expects to start using the plane early next year, while Southwest said its Max jets won't fly before the second quarter of 2021.

Some consumer groups urged airlines to fully disclose when Max flights are planned. That's usually on an airline's website, although passengers have to know where to click. Advocates are concerned about airlines using the Max in a last-minute switch.



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Nearly 400 Max jets were in service worldwide when they were grounded, and Boeing has built and stored about 450 more since then. All have to undergo maintenance before they can fly.

Pilots must also undergo simulator training, which was not required when the aircraft was introduced. Hansman said training for qualified 737 pilots shouldn't take long because Boeing has fixed software problems.

Boeing's reputation has taken a beating since the crashes. Its then-CEO, Dennis Muilenburg, initially suggested that the foreign pilots were to blame. However, congressional investigators discovered an FAA analysis—conducted after the first Max crash—that predicted there would be 15 more crashes during the plane's life span if the flight-control software were not fixed.

Boeing was repeatedly wrong about how quickly it could fix the plane. When those predictions continued to be wrong, and Boeing was perceived as putting undue pressure on the FAA, Muilenburg was fired in December 2019.



Workers walk near a Boeing 737 Max 8 built for Southwest Airlines at Renton Municipal Airport, Wednesday, Nov. 18, 2020, in Renton, Wash. After nearly two years and a pair of deadly crashes, the U.S. Federal Aviation Administration announced Wednesday that the 737 Max has been cleared for flight after regulators around the world grounded the Max in March 2019, after the crash of an Ethiopian Airlines jet. (AP Photo/Ted S. Warren)

After an 18-month investigation, the House Transportation Committee heaped blame on Boeing, which was under pressure to develop the Max to compete with a plane from European rival Airbus, and the FAA, which certified the Max and was the last agency in the world to ground it after the crashes. The investigators said Boeing suffered from a "culture of concealment," and pressured engineers to rush the plane to the market.

Among the criticisms was the FAA's use of Boeing employees to inspect and evaluate the Max, with some workers feeling pressured by the company to act in its favor.



Boeing vehicles are parked near a worker at Renton Municipal Airport, Wednesday, Nov. 18, 2020, next to the Boeing assembly facility in Renton, Wash., where 737 Max airplanes are made. After nearly two years and a pair of deadly crashes, the U.S. Federal Aviation Administration announced Wednesday that the 737 Max has been cleared for flight after regulators around the world grounded the Max in March 2019, after the crash of an Ethiopian Airlines jet. (AP Photo/Ted S. Warren)

Dickson said the so-called designee program has changed, with the FAA

handling all evaluations of the Max itself. FAA inspectors will check every new Max before it's cleared for flight, he said.

The designee program will continue on future aircraft, he said, but the agency is "implementing various measures to make sure there's a free flow of communication and data between manufacturers and the FAA."



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Dickson—a former Air Force and Delta Air Lines pilot—flew the Max personally before it was cleared.

Europe's aviation regulator, the European Union Aviation Safety Agency, said it will take public comment on plans to clear the Max for flight and expects to finalize a plan by early next year. Some EU states will have to lift their own grounding notices as well. Regulators in Canada and China are still doing their own reviews.



A worker uses a flashlight to inspect an engine on a Boeing 737 Max 8 built for Southwest Airlines at Renton Municipal Airport, Wednesday, Nov. 18, 2020, in Renton, Wash. After nearly two years and a pair of deadly crashes, the U.S. Federal Aviation Administration announced Wednesday that the 737 Max has been cleared for flight after regulators around the world grounded the Max in March 2019, after the crash of an Ethiopian Airlines jet. (AP Photo/Ted S.

Warren)

Relatives say it's too soon, and they and their lawyers say Boeing and the FAA are withholding documents. Anton Sahadi, who lives in Jakarta, Indonesia, and lost two brothers in the Lion Air crash, said it's too early for the Max to fly again.



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"The cases from the incidents are not 100% finished yet," he said. "I think all the victims' family in Indonesia and Ethiopia will feel the same, so regretful, why it can fly again because we are still in the recovery process for our problems because of the incidents."

Naoise Ryan, an Irish citizen whose husband died in the Ethiopian crash, said the Max is "the same airplane that crashed not once but twice because safety was not a priority for this company."

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