

Boeing Promised Pilots a 737 Software Fix Last Year, but They're Still Waiting

A delay in a software update after a Boeing 737 Max 8 like these crashed in Indonesia in October is being scrutinized after the crash of another Max 8 in Ethiopia last weekend. Credit: Nick Oxford for The New York Times



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Weeks after a deadly crash involving a Boeing plane last October, company officials met separately with the pilot unions at Southwest Airlines and American Airlines. The officials said they planned to update the software for their 737 Max jets, the plane involved in the disaster, by around the end of 2018.

It was the last time the Southwest pilots union heard from Boeing, and months later, the carriers are still waiting for a fix. After a second 737 Max crashed, on Sunday in Ethiopia, United States regulators said the software update would be ready by April.

“Boeing was going to have a software fix in the next five to six weeks,” said Michael Michaelis, the top safety official at the American Airlines pilots union and a Boeing 737 captain. “We told them, ‘Yeah, it can’t drag out.’ And well, here we are.”

This delay is now part of the intense scrutiny over Boeing’s response after the first air disaster, a Lion Air accident that killed 189 people in Indonesia. The second crash, involving an Ethiopian Airlines flight that killed 157 people, bore similarities to the first, pointing to potential problems with the automated system that requires the update.

The planned fix was “designed to detect the problem,” said Jon Weak, the president of Southwest’s pilot union, “and keep it from recurring.” Boeing officials told Southwest union leaders that they didn’t believe any extra training was necessary beyond informing the pilots of how the software fix would function.

The potential similarities between the two crashes were central to regulators’ decision to ground the

whole 737 Max line, a family of planes that has been in service for nearly two years. Boeing is now in damage control mode, as carriers cancel flights and try to limit disruptions. Boeing declined to comment for this article.

Along with the grounding, Boeing has been forced to halt deliveries of the jets, one of its best-selling planes. Authorities are trying to determine exactly what went wrong, while a senior Democratic lawmaker is planning to examine Boeing’s communications with its regulators.

The meetings last year between Boeing officials and the unions were cordial but direct. The pilots from Southwest and American who met with Boeing were frustrated that they hadn’t been notified of the newly installed software system in the 737 Max planes before the crash in Indonesia. The so-called maneuvering characteristics augmentation system, or MCAS, is an automated system intended to prevent the plane from stalling.

“It was a very frank discussion,” said the American union’s safety chairman, Mr. Michaelis. “This is to our knowledge the first time pilots were not informed of a major system on an airplane that could affect flight controls.”

The pilots demanded more information about the system. Mr. Michaelis said it had been mentioned once in the appendix of the official aircraft manual, but without any explanation about what it was or did.

In response to the pilots’ request, Mr. Michaelis said, Boeing concurred. The company has since provided the American pilots with basic information about

MCAS, but it hasn't updated the official manual with a full explanation about how it works.

Mr. Michaelis said Boeing had partly attributed the delay to the recent government shutdown, which caused a backlog at the F.A.A. Daniel K. Elwell, the acting administrator of the F.A.A., said on Wednesday that the 35-day partial government shutdown that stretched from December until late January "did not cause any delay in work on the software."

For days after the Ethiopian crash, Boeing and the F.A.A. stood by the safety of the plane. As regulators around the world grounded the plane, the F.A.A. resisted doing the same.

A Boeing 737 Max 8 at Miami International Airport on Thursday. Some of the jets were allowed to fly to be better situated for long-term parking.

Mr. DeFazio said he stepped out of a hearing on Wednesday morning to speak with Mr. Elwell about the plane. Mr. DeFazio said Mr. Elwell assured him there was no cause for alarm.

Within hours, President Trump announced the Max would be grounded.

"One of my staff, her phone went 'bing' and there it was," Mr. DeFazio said.

Mr. Elwell and the F.A.A.'s top safety official, Ali Bahrami, visited Capitol Hill on Thursday to brief members of the House and Senate about the agency's decision-making after the crash in Ethiopia. Mr. Elwell also made the rounds on morning television shows as his agency continued to face questions about its response to the crash as well as the earlier accident in Indonesia.

"We're confident in the safety of the airplane," he said on "CBS This Morning." "What we don't know is if there's a linkage between those two accidents, and now that we have the new evidence to suggest there very well may be, we grounded the airplanes to find the linkage."

Mr. Trump, at the White House on Thursday, said he hoped the Boeing planes would be back in the air soon. "They have to figure it out fast," he said. "They know that. They're under great pressure."

The three American airlines that operate 737 Max aircraft — American and Southwest operate Max 8s and United flies the Max 9 — have scrambled to limit any disruptions caused by the groundings. The airlines have shifted other available aircraft to replace the jets, canceled less popular flights to use those aircraft for busier Max routes, and rebooked some fliers on other airlines. Cancellations will vary by the day based on the availability of other aircraft.

American, which has 24 Max 8 jets, canceled 85 flights out of 6,700 on Thursday, but it was able to limit the disruption by scrapping emptier flights on routes where it could rebook those passengers on later flights. For instance, it canceled flights from Dallas to Sacramento and Tucson, booking those fliers on later planes, and used those aircraft to instead operate busier routes between Miami and New York.

Southwest, which has 34 Max 8 jets, said it was able to shift enough planes around to cancel just 39 out of its 4,000 scheduled flights on Thursday. And United, which has 14 Max 9 jets, was able to avoid any cancellations from the grounding on Thursday because it shifted many planes from its hub in Denver, where a snowstorm was already disrupting flights.

There were still some 737 Max jets flying in American skies on Thursday. The F.A.A. granted the airlines permission to ferry their empty Max jets to new airports for long-term parking. American flew its planes from places like Miami, New York and Tampa, Fla., to places like Tulsa, Orlando, Fla., and Mobile, Ala.

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