Boeing unveils fix to flight system after deadly crashes

March 27 2019, by Luc Olinga

Boeing employees work on a 737 MAX jet at the company's factory in Renton, Washington—the aviation giant has unveiled a fix to the software system of the jet, which has suffered two deadly crashes in recent months

Embattled aviation giant Boeing pledged Wednesday to do all it can to

prevent crashes like the two that killed nearly 350 people in recent months, as it unveiled a fix to the flight software of its grounded 737 MAX aircraft.

Boeing gathered hundreds of pilots and reporters to unveil the changes to the MCAS stall prevention system, which has been implicated in the tragedies in Ethiopia and Indonesia, as part of a charm offensive to restore the company's reputation.

"We are going to do everything to make sure that accidents like this don't happen again," Mike Sinnett, Boeing's vice president of product strategy, told reporters at a factory in Washington state.

Meanwhile, across the country in the nation's capital, the head of the US air safety agency faced harsh questions from senators over its relationship with and oversight of Boeing.

Dan Elwell, the acting head of the Federal Aviation Administration, defended his agency but acknowledged that as systems become more complex, the FAA's "oversight approach needs to evolve."

Transportation Secretary Elaine Chao and other top officials were also on the hot seat on Capitol Hill.

Boeing chief Dennis Muilenburg was not called to the Senate hearing, but is expected to testify at a later date.

Boeing's vice president of product strategy, Mike Sinnett, presented the flight software fix for the company's embattled 737 MAX passenger jet

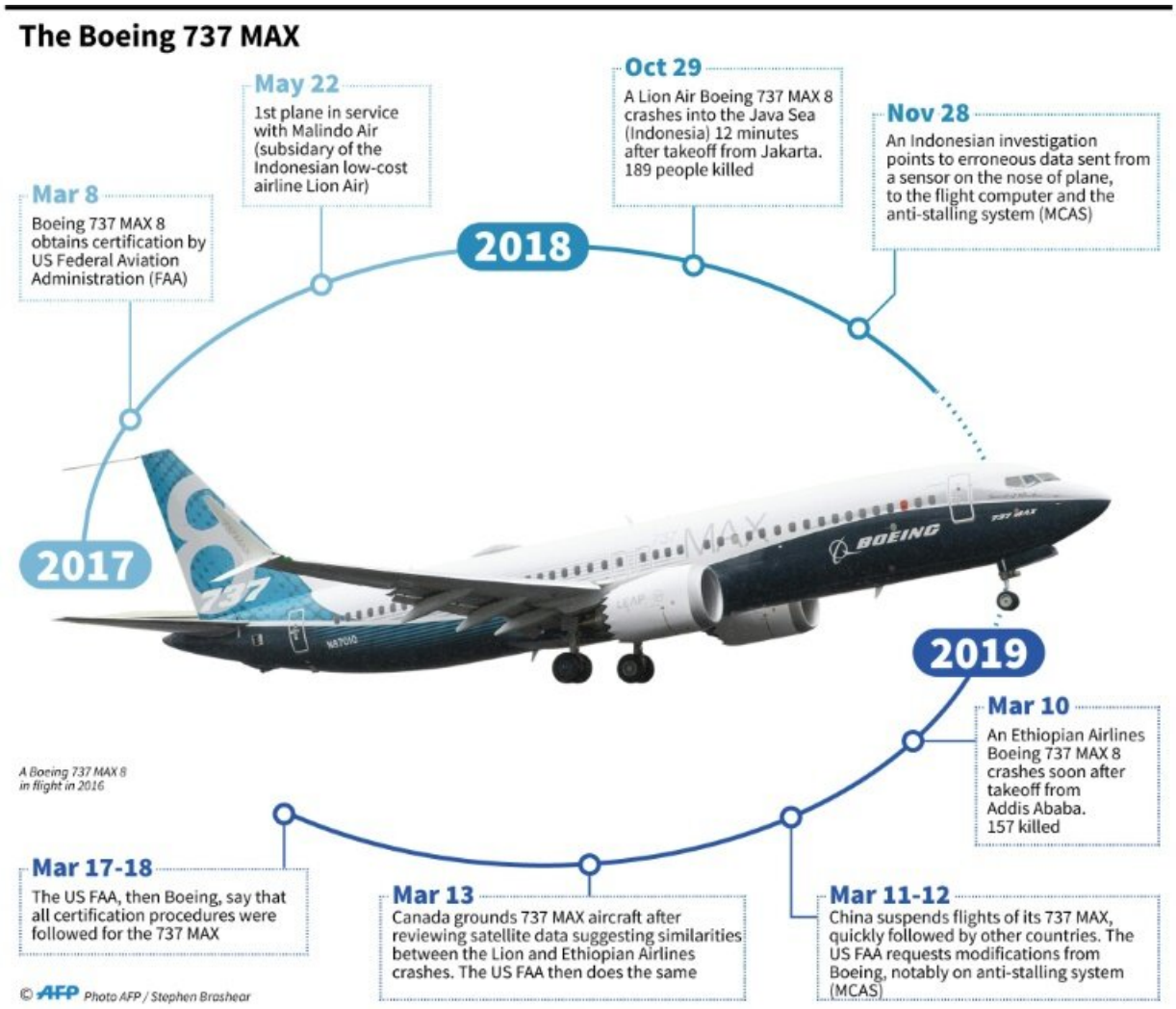
Ahead of the tough questioning, the company launched a campaign to convince the flying public that it is addressing the issues with the 737 MAX, including a fix to the Maneuvering Characteristics Augmentation System (MCAS) implicated in the deadly crashes.

At the company's massive factory in Renton, Washington, Boeing unveiled the software changes and offered reassurances.

Sinnett said it will take only about an hour to install the updates and they can begin as soon as regulators authorize the changes, which were developed "after months of testing and hundreds of hours."

Authorization pending

The MCAS, which makes the aircraft dive in order to regain speed if it detects a stall or loss of airspeed, was developed specifically for the 737 MAX, which has a heavier engine than its predecessor, the 737 NG.



Among the changes, the MCAS will no longer repeatedly make corrections when the pilot tries to regain control, and will be automatically disconnected in the event of disagreements between the two "angle of attack" (AOA) sensors, the company said.

This is a major change because until the Ethiopian Airlines tragedy earlier this month, the MCAS was set to react to information from a single sensor and would repeatedly override pilot corrections.

The initial investigation into the Lion Air crash in Indonesia in October found that one of the AOA sensors failed but continued to transmit erroneous information to the MCAS.

Boeing also will install a warning feature—at no cost —- called a "disagree light" to indicate to the pilot when the left and right AOA sensors are out of sync.

The company also is revising pilot training, including for those already certified on the 737, to provide "enhanced understanding of the 737 MAX" flight system and crew procedures.

Southwest is one of the airlines that flies the now grounded 737 MAX aircraft

US pilots complained after the Lion Air crash that they had not been fully briefed on the system.

'Directly involved'

In Washington, US aviation regulators faced questions about how certification for the MAX was handled.

Lawmakers also want to know why officials did not immediately ground the aircraft after an Ethiopian Airlines 737 MAX 8 crashed shortly after takeoff near Addis Ababa on March 10, killing all 157 people onboard.

The delay has given rise to suspicions of a too-cozy relationship between regulators and the American plane maker, especially since Chinese and European authorities moved quickly to ban the planes as soon as similarities with the Lion Air crash were raised.

Workers stand under the wing of a Boeing 737 MAX airplane at the company's factory in Renton, Washington

The FAA—which delegates some certification procedures to Boeing, including for parts of the MAX—was "directly involved" in the safety review of the MCAS, Elwell said.

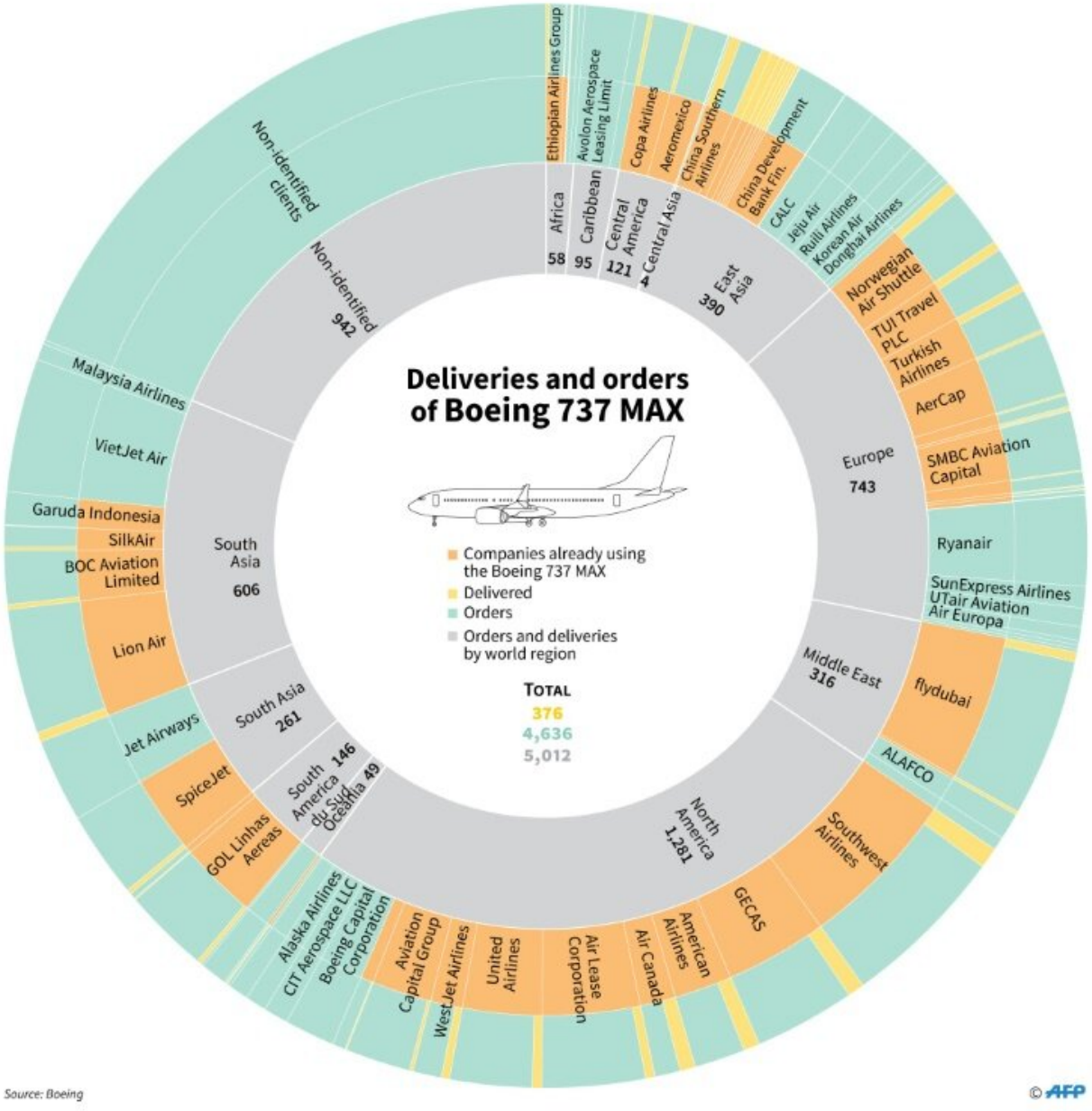
"The certification process was detailed and thorough," but "time yields

more data," he added.

A Boeing official meanwhile said there was no need to revamp a regulatory process that has "continued to lead to safer and safer airplanes."

At a separate hearing, Chao said she was "concerned about any allegations of coziness with any company," but noted that allowing Boeing to handle some of its own safety certifications was necessary because the FAA "can't do it on their own."

She said she has ordered the Transportation Department's inspector general, Calvin Scovel, to investigate the MAX certification, and Scovel in turn noted various concerns with FAA inspectors and procedures.



Boeing 737 MAX deliveries and orders, per region and company

In his prepared testimony, he called on the agency to tighten oversight of companies that self-certify.

But a Boeing official countered that wholesale changes were not needed, saying: "In general, the process has worked and continues to work, and we see no reason to overhaul the process."