

Boeing Wakes Up from A 20-Month Nightmare!

737 MAX is Set to Return to the Skies



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Finally, some good news after months! The U.S. Federal Aviation Administration (FAA) has lifted the longest jet flight ban ever in commercial aviation history and approved the 737 MAX's return to the skies.

The 737 MAX jets, which crashed twice, once in Indonesia and in Ethiopia within a period of 5 months and led to a tragic loss of 346 people, had

been grounded for 20 months since March 2019. Following the updates on the jet to increase flight safety, new training protocols for pilots and the successful completion of comprehensive safety tests, the FAA announced that they rescinded the order that grounded the aircraft and published an Airworthiness Directive (AD) 2020-24-02 on November 20, 2020.

MAX jet has become the most reviewed aircraft in aviation history. "We've done everything humanly possible to make sure these types of crashes do not happen again," said FAA Administrator Dickson and who also piloted a MAX jet on a test flight.

What needs to be done before 737 MAX will be able to fly again?

With its Airworthiness Directive AD 2020-24-02, the FAA also detailed what needs to be done before 737 MAX's return to the skies.

Accordingly, the implementation of the procedures for the aircraft returning to service which have been storage for an extended period of time as per Aircraft Maintenance Manual Chapter 10, performance of scheduled maintenance operations, adaptation of the changed MMEL (Master Minimum Equipment List) to company's MEL (Minimum Equipment List), completion

of software installations of the MCAS system that caused both crashes, and the latest versions of the documents are to be used in all operations and the application of other ADs that have not previously been applied to the aircraft other than AD 2020-24-02 are to be completed.

It was emphasized that after changing the installation instruction of the horizontal stabilizer trim wire and performing the AOA-angle of attack sensor system test followed by a final test flight, the aircraft can return to commercial operations if everything goes smoothly. Before the test flight, a 280-man-hour process has to be completed on each aircraft. In addition, the training procedures of

the 737 MAX pilots have been changed, making it compulsory to provide 5 hours of extra training to each pilot. 2 hours of this training will be given in the simulator.

War room is to be established

When commercial flights resume, Boeing will run a war room desk, monitoring all MAX flights 24 hours a day. From stuck landing gear to health emergencies, even the slightest problem on the aircraft will be monitored closely by this war room team.

The EASA takes more cautious approach

Airlines in the U.S. are free to relaunch commercial flights with the 737 MAX after meeting the requirements of the FAA. However, other civil aviation authorities around the world have not approved the MAX's return to service yet.

The reaction of the European Union Aviation Safety Agency (EASA) was eagerly awaited by the aviation industry after the FAA's announcement; the EASA made a written statement, declaring that it has decided not to adopt AD 2020-24-02, which describes the procedures to be done in order for 737 MAX to fly again. The EASA, which finds the precautions taken by the FAA insufficient under certain matters, announced that the necessary assessments would continue.

The EASA has announced its own AD draft (PAD) on the subject. The PAD will remain open to comments for twenty-eight days and anyone interested in the subject will be able to submit comments and opinions during this period. The EASA AD, which will allow 737 MAX aircraft to fly in European airspace, is expected to be published in January 2021 at the end of such period.

In the AD proposed by the EASA, unlike the FAA, the Boeing Service Bulletin (SB) is requested to be applied on the aircraft, which will enable the "Stall Warning" system (stick shaker) to be deactivated if requested, once it has been erroneously activated by the system and causing workload increase and panic in the cockpit. In the relevant SB, it is suggested that the Stall Warning system circuit breaker buttons can be used to deactivate the Stall Warning system by placing on them colored caps.

In the PAD of the EASA, the RNP-AR, which allows precise approach to aircraft using GPS technology, is proposed to be banned on 737 MAX aircraft. The justification for this ban is explained as the risk of AOA failure during this operation would cause irreparable results. The public mood is that if

this proposal of the EASA is accepted and put into practice, it opens up an opportunity for the Airbus A320 family, the biggest competitor of the 737 MAX.

The EASA's draft AD also brings additional flight training to pilots. For the training to be given in the flight simulator, the relevant simulators will also need to be modified to meet the requirements of such training.

The civil aviation authorities of Brazil, Canada and India announced that they would continue their assessments, and the aircraft would continue to be grounded during this period, and that they wanted to conclude such reviews soon. It is also unclear whether the Chinese civil aviation authority, which led the way for grounding the jets around the world, will lift the flight ban on MAXs.





When will the first commercial MAX flight be conducted?

Despite the removal of some barriers and positive developments for MAXs to return to service, Boeing still has a hard battle ahead.

There are currently 390 737 MAXs in the fleets of airlines around the world. The U.S. manufacturer has almost 450 already-built 737 MAXs waiting to be delivered to customers. The FAA requirements for these aircraft have to be met by Boeing. This is thought to have caused further delays in deliveries, but airlines are, on the other hand, looking for ways to delay their deliveries for all aircraft types due to the negative effects of the pandemic.

On the other hand, Boeing's key customers announced that they will not place new orders for the 737 MAX until the conditions change positively. Ryanair, one of Boeing's biggest customers in Europe, announced that they did not consider placing new orders for the 737 MAX. Southwest Airlines of the

U.S., known as Boeing's largest customer, worldwide, announced that they might delay the delivery of the new 737 MAXs they had ordered and planned to lower the number of aircraft in their fleet. Moreover, Southwest management also announced that they did not plan to fly the previously received 34 737 MAXs until 2021 Q3 and Q4.

American Airlines plans to conduct the first commercial flight with the 737 MAX at the end of December. The airline will also activate an application that allows passengers to change their tickets free of charge if they do not want to fly with MAX.

The "MAX" brand will gradually disappear!

Boeing is trying to figure out how to completely remove the 'MAX' brand in the future, whose criminal record has increased significantly. That's why when talking about MAX jets, it uses the names 737-8 and 737-9. Brand Finance, the independent consultancy company, announced that MAX's problems have

caused enormous damage to Boeing's reputation to the tune of US\$ 7.5 billion, according to the study it conducted last year.

When will the 737 MAXs fly in Turkey?

There are currently 3 airlines in Turkey that have 737 MAXs in their fleet. Turkish Airlines received 12 jets before the flight bans. These jets are grounded in Istanbul. Twelve more MAXs were manufactured to be delivered to Turkish Airlines in a 20-month period and are waiting to be sent from Seattle to Istanbul. THY has already placed a total of 75 MAX orders. Corendon was the first airline among Turkish companies to include the 737 MAX in its fleet. SunExpress was also expecting to receive the first 737 MAX in April 2019. This delivery was delayed due to the grounding, but the related 737 MAXs are waiting in Seattle to join the SunExpress fleet. The fleet operators in Turkey are awaiting the EASA's announcement to lift the ban, looking forward to return to the skies.

Reform in the FAA's aircraft certification process

On the day that the FAA ended the 737 MAX's flight ban, the U.S. House unanimously approved legislation that will reform the Federal Aviation Administration's aircraft certification process. This reform intends to ensure a U.S. manufactured aircraft never again crashes due to design issues or regulatory failures. This brings critical changes to the FAA's actions in the certification process of aircraft.

The committee, which took the lead in this radical decision, evaluated the 737 MAX process as a fiasco, explained that the crashes were due to engineering flaws, mismanagement, a severe lack of federal oversight, and heavily criticized Boeing and the FAA for the preventable but not avoided crashes. Dennis Muilenburg, former Boeing CEO, testified before Congress on the plane crashes, and senators accused Boeing of manufacturing "flying coffins". The FAA was believed to have ignored Boeing's mistakes and caused the deaths of people.

Meanwhile, the flight ban lift of on the 737 MAX's has caused a great sense of disappointment and a noted reaction amongst the families of those who lost their lives in the crashes in Ethiopia and Indonesia 🇺🇸

Timeline :

A Brief History of Boeing 737 MAX from Maiden Flight to Grounding

August 30, 2011,
Boeing Introduces 737 MAX With Launch of New Aircraft Family

July 23, 2013,
Boeing completed the firm configuration for the 737 MAX 8

August 13, 2015,
The first 737 MAX fuselage rolled off the factory line

December 8, 2015,
The first plane — a 737 MAX 8 named "Spirit of Renton" — was finished

January 29, 2016,
The MAX made its first test flight

March 8, 2017,
MAX gained certification from the FAA

March 27, 2017,
MAX gained certification from the EASA

April 2017 13,
737 MAX 9 first flight

May 16, 2017,
The first 737 8 MAX delivery was made on to Malindo Air

May 22 2017,
The first passenger flight took off on

March 16, 2018,
737 MAX 7 first flight

March 21, 2018,
737 MAX 9 first delivery to Lion Air

May 2018 —
A year after the first delivery — more than 130 MAX planes were in service with 28 different airlines around the world. The MAX had flown almost 42,000 flights in that time, moving about 6.5 million passengers, according to Boeing stats.

By October 27, 2018,
230 of the 737 MAX planes had been delivered to customers around the world.

On October 29, 2018,
Lion Air crash in Jakarta, Indonesia. Twelve minutes into the flight, the plane crashed into the Java Sea, killing all 189 people on board.

By March 10, 2019,
Boeing had delivered 386 of the 737 MAX jets.

March 10, 2019,
Ethiopian Airlines crash in Addis Ababa, Ethiopia. Six minutes after takeoff, the plane slammed into the ground at 700 miles per hour. All 157 people on board were killed.

March 13, 2019,
737 MAX grounded all over the world

April 2019,
Boeing cut production of the plane by 10 units — from 52 to 42 per month

October 28, 2019,
Boeing CEO Dennis Muilenburg testified in front of Congress

November 11, 2019,
Boeing said it completed the first phase of recertification

November 22, 2019,
Boeing unveiled the first MAX 10

December 23, 2019
Boeing CEO Dennis Muilenburg was suspended from his duty

January 13, 2020,
New CEO David Calhoun started

January 21, 2020,
Production at Boeing's Renton, 737 factory was officially halted

May 27, 2020
Boeing resumes production of 737 MAX

Between June 29 and July 1, 2020,
The FAA and Boeing conducted a series of recertification test flights.

August 19, 2020,
Boeing announced that it had received new orders for the 737 MAX for the first time in 2020 from Poland's Enter Air SA

November 18, 2020,
The FAA announced that the MAX had been cleared to return to service.

