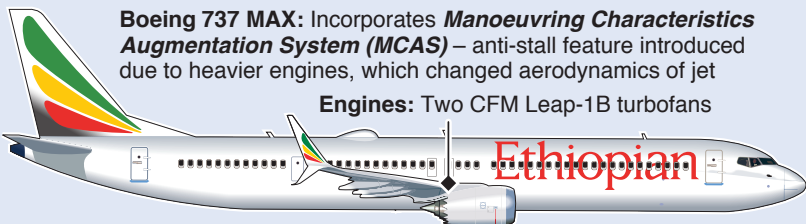


Ethiopia flight had unstable vertical speed

An Ethiopian Airlines Boeing 737 MAX 8 flight to Nairobi that crashed with 151 passengers and eight crew members aboard had unstable vertical speed, according to flight tracking site Flightradar24

Boeing 737 MAX: Incorporates *Manoeuvring Characteristics Augmentation System (MCAS)* – anti-stall feature introduced due to heavier engines, which changed aerodynamics of jet

Engines: Two CFM Leap-1B turbofans



HOW MCAS WORKS

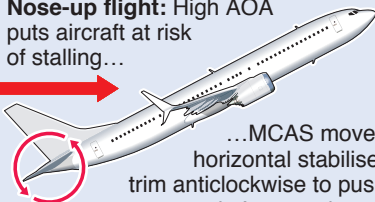
Level flight: Normal angle of attack (AOA) – angle at which airflow hits aircraft

Nose-up flight: High AOA puts aircraft at risk of stalling...

Aircraft trajectory



Air flow

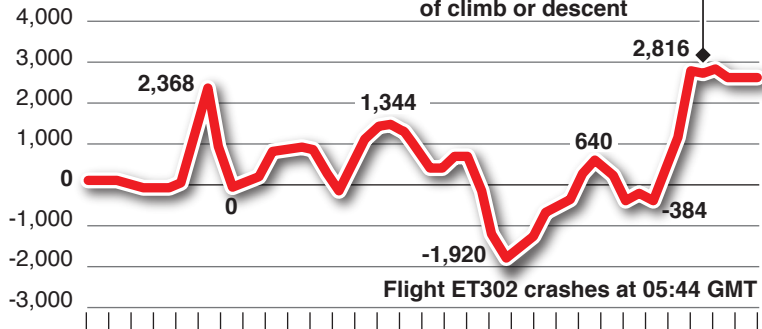


...MCAS moves horizontal stabiliser trim anticlockwise to push jet's nose down

System activates only when plane is being flown manually

Vertical speed (feet per minute)

Vertical speed shows rate of climb or descent



Flight ET302 crashes at 05:44 GMT

05:37:55

Time (GMT)

05:41:02

Sources: Associated Press, Flightradar24

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