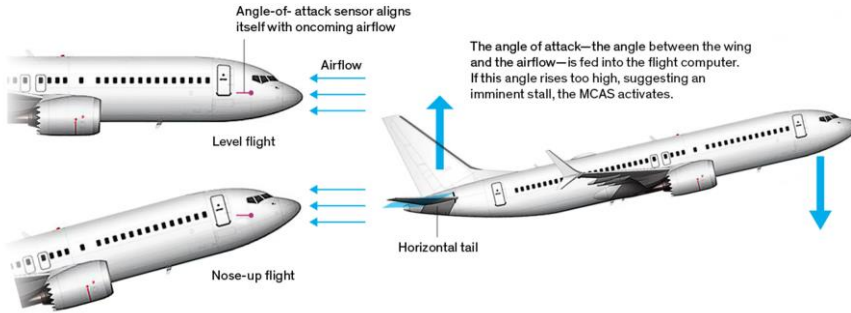


Sensor Failure – bad data to control system – No backup sensor.

<https://spectrum.ieee.org/how-the-boeing-737-max-disaster-looks-to-a-software-developer>

**How the new Max flight-control system (MCAS) operates to prevent a stall**



[https://www.faa.gov/foia/electronic\\_reading\\_room/boeing\\_reading\\_room/media/737\\_RTS\\_Summary.pdf](https://www.faa.gov/foia/electronic_reading_room/boeing_reading_room/media/737_RTS_Summary.pdf)

| Identified Issue  | FAA Determination of Issues That Must Be Addressed   | Corrective Action*   |
|---|--|--|
| <p>Safety Item #1: USE OF SINGLE ANGLE OF ATTACK (AOA) SENSOR: Erroneous data from a single AOA sensor activated MCAS and subsequently caused airplane nose-down trim of the horizontal stabilizer.</p> | <p>Ensure that an erroneous signal from a failed single AOA sensor meets all FAA requirements, does not prevent continued safe flight and landing, and specifically that it does not generate erroneous MCAS activation.</p> | <p>Boeing updated the Flight Control Computer (FCC) software to eliminate MCAS reliance on a single AOA sensor signal by using both AOA sensor inputs and changing flight control laws to safeguard against MCAS activation due to a failed or erroneous AOA sensor.</p> |