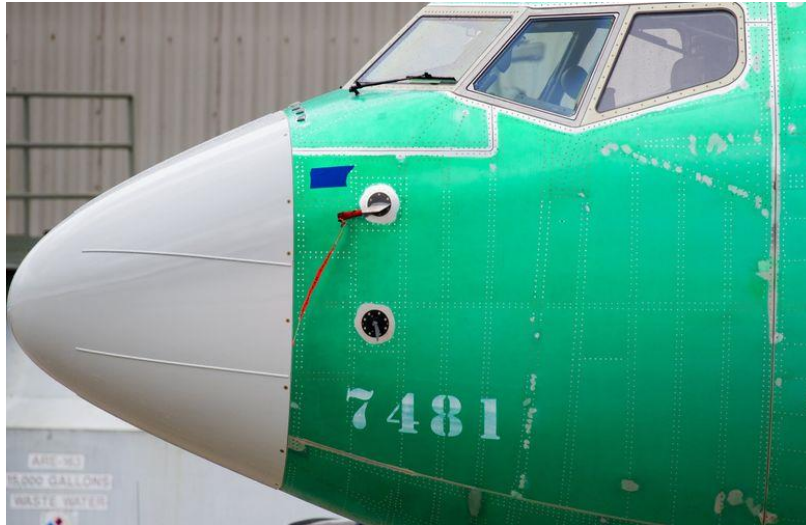


By

[Dominic Gates](#)

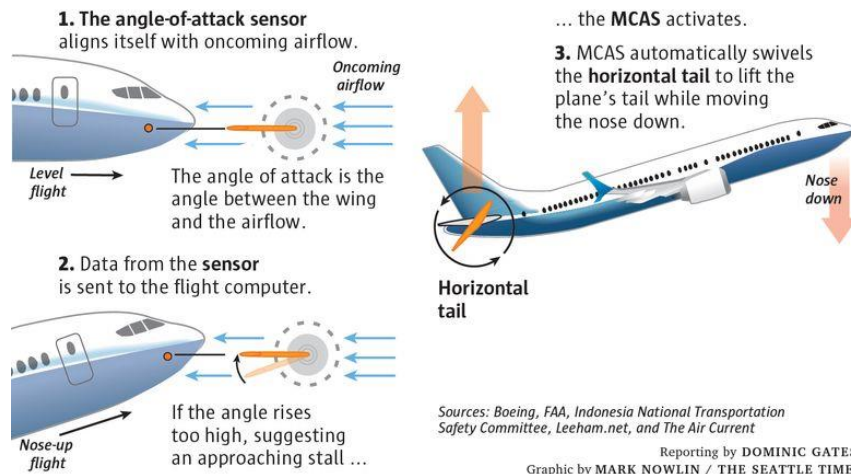
Seattle Times aerospace reporter

FAA cautions airlines on maintenance of sensors that were key to 737 MAX crashes



The angle of attack is the angle between an airplane's wing and the oncoming air flow. If the angle gets too high, above about 14 degrees, the air stream that has been flowing around the contours of the wing will suddenly detach from the wing surface. When this happens, the plane will lose lift and begin to fall – a condition known as stalling.

How the MCAS (Maneuvering Characteristics Augmentation System) works on the 737 MAX



The tragic sequence of events on both flights began when a false reading from an AOA sensor activated a new flight-control system on the MAX — a piece of software called [the Maneuvering Characteristics Augmentation System \(MCAS\)](#) — that was designed, if the angle of attack got too high, to automatically push the jet's nose down uncommanded by the pilot.

ONE POINT OF FAILURE

Although every 737 has two exterior AOA sensors, one on each side of the cockpit, Boeing designed MCAS to take a signal **from only one of them** on any given flight, switching to the other sensor on the next flight.