Crashed Boeing planes were missing safety features that would have cost airlines extra

The two crashed Boeing airplanes may have lacked safety features that were only available as expensive add-ons, according to *The New York Times*. Airlines like Indonesia's Lion Air skimped on the upgrades, hampering crew members who were trying to pull the plane out of its fatal nose dive.

Last October, Lion Air Flight 610 crashed in Indonesia, killing all 189 passengers and crew members on board. Five months later, on March 10th, Ethiopian Airlines Flight 302 crashed minutes after taking off from Addis Ababa, and all 157 people on the plane were killed. Both plane crashes involved the Boeing 737 Max 8 jetliner, a popular airplane that has since been grounded by airline regulators pending further investigation.

Safety features that cost extra
It's still not known what led the two planes to crash, but preliminary reports indicate that the Lion Air 610 may have crashed due to a faulty sensor that gave the impression that the plane was stalling. The plane's anti-stall feature then pointed the plane's nose downward to counteract the supposed stall, leading the aircraft into a deadly dive.

One of the safety features that could have helped the crew members struggling with keeping the planes in the air was a warning light, called a disagree light, that would go on if the plane's angle of attack sensors were misaligned.

The angle of the sensors was off by 20 degrees, and the plane also lacked a guardrail, as first pointed out by Jon Ostrower on the aviation site *The Air Current*. The other safety feature was an angle of attack indicator that could display the readings of the two sensors.

Following the crashes, Boeing will now stop charging for the warning light feature and make it standard in all new 737 Max planes, an anonymous source told the *Times.* But airlines will still need to purchase the other feature, the angle of attack indicator. A spokesperson for Boeing did not immediately respond to a request for comment.

https://www.theverge.com/2019/3/21/18275928/boeing-plane-crashes-missing-safety-features-add-ons-extra-charge