

When corporate colossus Boeing met its calamity

[By Mitch Potter, *Toronto Star*, March 15, 2019](#)

The B-52. The F-15. The Jumbo Jet. The Dreamliner. A century-plus of innovation after risk-taking innovation turned the tiny shop founded by William [Boeing](#) in 1916 into the flying colossus we know today. And every one of these signature aircraft, built in America and flown around the planet, sent aloft by a workforce of more than 153,000 men and women, together with some 20,000 suppliers.

America's single-largest exporter suddenly finds itself with half a trillion reasons to worry, [after a second calamitous air crash](#) in five months involving its most in-demand aircraft, the 737 Max, leaves Boeing in crisis.

Self-crashing planes, automated to oblivion, is the deepening suspicion that led aviation authorities around the world to ground this latest incarnation of the 737, history's most heavily used commercial jetliner.

By March 13, as neighbourly Canada joined the ban, a reluctant American president, the U.S. Federal Aviation Authority (FAA) and Boeing itself — historically, the leaders of the aviation world — were forced to follow, days late and dollars short.

As the fallout spreads beyond the primary victims — those who perished in the two crashes, including Sunday's disaster in Ethiopia, which killed all 157 people on board, including 18 Canadians — it's starting to burn Boeing's reputation as the pre-eminent font of American know-how.

Each day on the ground is costing the company dearly, in both cash and confidence, as it scrambles for a faith-restoring fix. The week saw Boeing shed some \$29 billion in market capitalization — but even that pales against a staggering \$600 billion worth of advance orders the company has already booked for the currently air-unworthy 737 Max. And another \$100 million in future orders the company anticipates if and when the Trump administration resolves its continuing trade dispute with China, which accounts for a quarter of Boeing's exports.

Three weeks was the hopeful estimate offered by U.S. officials on March 14 as they outlined Boeing's efforts to rapidly rewrite stall-prevention software suspected in at least one of the two crashes, the [Lion Air 737](#) Max 8 that crashed in October, killing 189 people. But by the next day, Boeing raised hopes higher still, with one company source telling *AFP* news agency the software upgrade will be ready for roll out within ten days. It remains unclear how quickly the promised fix will translate into regulatory approval for the resumption of regular service.

The crisis has awakened deeper questions about the threat posed by the sheer ubiquity of automation in modern-era cockpits, many of which now are capable of flight without any human hands in the equation.

As science journalist and private pilot Jeff Wise wrote on March 14 in the *New York Times*, flight emergencies of any sort require a response from pilots sharpened by constant practice. “Ironically, by turning over the mundane stick-and-rudder aspects of flying to computer automation, pilots are deprived of the opportunity to continually practice. This leaves them without the mental automation that might save them in a crisis,” Wise wrote.

One piece of crucial context: thanks in part to automation, air travel today is statistically ten times safer than it was in the 1970s, when aircraft like the accident-prone DC-10 bore the brunt of public fears.

Aviation experts point to other examples, like the dramatic declassified footage from 2016 of an unconscious U.S. air force pilot [flying an F-16](#) to his presumed doom – only to be saved from certain death by the aircraft’s Automatic Ground Collision Avoidance System.

Perhaps it will happen as quickly as Boeing promises. Betting against the company, history shows, has rarely if ever been profitable. But regardless of how and when the company emerges from the crisis, both Boeing and its regulatory counterparts at the FAA now are expected to face questions in Congress about the nature of the relationship, which many regard as too cozy. Leading the charge will be the House Transportation and Infrastructure Committee.

Adding a layer of convolution to Boeing’s substantial woes was President Donald Trump, who publicly praised and defended the company — only to then privately disparage the 737 Max — before taking it upon himself to announce the grounding.

What was unique about the sequence of events that ended with Trump’s order was the role of the FAA. From the go-to regulator, the first and most important voice in air safety, the agency now was last to act, after every other global regulator had spoken.

Though there was no apparent choice, Trump insisted, in announcing the grounding, “We didn’t have to make this decision today. We could have delayed it. We maybe didn’t have to make it at all. But I felt it was important, both psychologically and in a lot of other ways.”