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777's Engine Explosion Puts Boeing's Reputation On The Line — Again

By Edward Segal

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Boeing has had a lot of experience dealing with [crisis situations](#) over the past several years.

It was only three months ago that Boeing returned the [737 MAX to service](#). The planes had been [grounded](#) for two years following the crash of two planes that killed 346 people. Then, last Saturday an engine on a United [777](#) exploded over Denver, [raining debris](#) on a neighborhood below.

Airlines in the U.S., Japan, and South Korea [have already grounded](#) dozens of the 777s, and the Federal Aviation Administration [ordered United](#) to increase their inspections of all of those planes.

Boeing's Statement

Yesterday, Boeing posted the following statement [on their website](#): “Boeing is actively monitoring recent events related to United Airlines Flight 328. While the NTSB investigation is ongoing, we recommended suspending operations of the 69 in-service and 59 in-storage 777s powered by Pratt & Whitney 4000-112 engines until the FAA identifies the appropriate inspection protocol.

“Boeing supports the decision yesterday by the [Japan Civil Aviation Bureau](#), and the FAA's action today to suspend operations of 777 aircraft powered by Pratt & Whitney 4000-112 engines. We are working with these regulators as

they take actions while these planes are on the ground and further inspections are conducted by Pratt & Whitney. Updates will be provided as more information becomes available."

Bad Timing

Although there is never a good time to have a crisis, the timing of a crisis can certainly make things worse for companies and organizations.

[Caroline Sapriel](#) is the managing partner of crisis management company [CS&A International](#). She noted that, "This is bad timing for Boeing and inevitably parallels [with past crashes] will be made...[the company's] reputation is on the line."

"At least here they had an immediate response, advised grounding 128 777s powered by that particular engine type, and appeared more in sync with [the] FAA..."

The fact that the engine that fell apart mid-flight was made by a different company could turn out to be a silver lining in the crisis for Boeing.

Quick Action

Speed is essential when responding to any crisis situation, especially when lives may be at stake.

She observed that Boeing's "... early response seems better, but now the real test comes in terms of actively seeking to expedite the appropriate testing and investigation protocols and avoid blaming the engine manufacturer, who is also a long-term partner."

The airlines and aviation authorities, "have been extremely quick in taking action that aims to protect stakeholder trust and Boeing should continue to demonstrate alignment with them to sustain their stakeholder confidence. They will be walking a tight rope and will be under the microscope," Sapriel said.

A Pilot's Perspective

[David Nolletti](#) is a commercial pilot with multiple jet type ratings and more than 3,000 hours of flight time. He is currently a managing director at [Conway MacKenzie](#) and leads the firm's aerospace, defense and government services practice.

By The Numbers

According to Nolletti, the United Airlines Boeing 777 that experienced the in-flight engine failure was powered by [Pratt & Whitney](#) PW4000 engines which entered into service in 1987. "In the subsequent 33+ years of service, Pratt & Whitney has delivered more than 2,500 engines to 70 different operators and accumulated more than 135 million flight hours," he said.

A Safe And Proven Design

"This is a safe and proven engine design," Nolletti observed, "but I think that Boeing responded quickly to ensure the flying public saw them responding with alacrity to a potentially dangerous situation and I think that travelers will be comforted by the speed and decisiveness of the grounding."

Recommendations

Nolletti said Boeing and Pratt & Whitney should:

- Partner to communicate the safety statistics of this program to the public to ensure the consumer know that this is a proven, long serving design, with an excellent safety record. Essentially, that this is an isolated incident, and that the investigation will, in due time, determine why this engine suffered an apparent fan blade failure.
- Highlight the fact that the engine contained the apparent fan blade failure as it is designed to do. By containing the failed blade, the engine cowling prevented more serious damage to the aircraft (e.g. flight controls, hydraulic systems, fuel systems, etc.) or harm to passengers and crew in the aircraft.

Bottom Line

“In short, this could have been a much more dangerous situation, but the robust design of the aircraft and engine coupled with the training of the crew made it relatively uneventful,” Nolletti concluded.

The Importance Of Scenario Training

Practicing responses to various crisis scenarios is an important way to help ensure that companies are prepared for a crisis as much as possible and will react strategically and effectively when a crisis strikes.

The [NTSB's findings](#) on the two deadly 737 MAX accidents, “... highlighted both a technology vulnerability and pilots’ inadequate training on crisis scenarios to mitigate that vulnerability,” recalled [Jayson Kratoville](#), who is the interim director of the [National Center for Security & Preparedness](#) at the University at Albany’s College of [Emergency Preparedness, Homeland Security, and Cybersecurity](#).

He said, “While we will need to wait for more information on the 777 engine failure to draw any conclusions, it’s likely that good crisis scenario training prevented loss of life. Both are important examples for how manufacturers have a stake in product implementation and worst-case scenario training to mitigate risks.”

The Investigation

[Mark Dombroff](#) is a partner at the [Fox Rothschild](#) law firm, and has more than 30 years of experience in administrative, legislative, regulatory and legal aspects of the national and international aviation industry.

Proactive Approach

He noted that, “The actions Boeing and others have taken relative to 777’s with Pratt & Whitney’s engines demonstrate a pro-active approach to an event that is still under investigation.”

Dombroff observed that, “The [NTSB](#) is charged with investigating the event. Boeing, along with Pratt & Whitney, United, and [the] FAA will be parties to the investigation. Parties to an investigation are not permitted...to conduct their own investigations. The NTSB controls the engine debris and the engine itself and , quite likely, the aircraft itself, at least so long as the engine remains on the wing.”

Early Focus

“At this stage,” he said, “we don’t know whether the engine or something else is the cause of what occurred. What we do know is that the reporting is focusing on the aircraft being a Boeing 777. Coupled with the attention already focused on Boeing due to the MAX, the spotlight on Boeing is made brighter..

“That having been said, there’s a certain amount of unfairness associated with that occurring since the investigation is at a preliminary stage and we don’t know why the fan blades (which reportedly failed) actually failed,” he said

Lessons Learned — Or To Learned

Commercial Aviation

Dombroff noted, “There are always lessons to be learned from any event of this type. It’s too early however, to determine what those lessons may be here or to whom any such lessons may be applicable.”

He said, “Commercial aviation in the United States is a phenomenally safe activity. That never means we have achieved perfection. There is always room to make things safer and better, but it remains to be seen in this instance, not only why what occurred, actually occurred, but also what lessons the industry can take away from it.”

Boeing

[Jane Robbins, PhD](#), is a retired professor of entrepreneurship and organizations specializing in strategy and institutional integrity. She said,“It

seems Boeing has already learned one lesson from the 737MAX debacle: don't wait until you are forced to take action by the government: get ahead of the problem. But that isn't really the right lesson for leaders—that's a reaction, and reacting to a crisis that could have been prevented is never good.

Business Leaders

“Leaders need to learn that every single business decision has consequential ethical content that cannot be dealt with in probabilistic terms; it can only be dealt with organizationally, through an operating philosophy and process designed to ensure institutional integrity, which ‘ solves’ crises before they happen. What’s at stake is reputation or trust, the ultimate form of capital. Once lost, it is extremely difficult to recover, and can bring a company down.

“The organizational basis of disasters is pretty well-known—think [Challenger](#), [BP oil spill](#), etc. This was a near-miss,” she concluded.

All Industries

[Joseph Smith](#) is director of aviation services for investment banking firm [Cassel Salpeter](#). “The lesson for all industries where there is an inherent danger to consumers/end users (both products and services), is that safety has to be the number one priority period, hard stop,” he said.

“Safety precautions [for] your customers and [for] your employees (as we have all witnessed especially during Covid) must be engrained in the fabric and DNA of all decisions made, regardless of the costs, or unpopularity of the moment,” he advised.

“The repercussions could be deadly and or costly, both economically, reputationally, morally, and can bring down organizations,” Smith said.

Advice For Business Leaders

Carla Bevins is an assistant teaching professor of business communications at Carnegie Mellon University's [Tepper School of Business](#). Based on the the

latest crisis to hit Boeing, she had the following advice for companies and organizations.

Prepare Ahead Of Time

- Businesses should have strategic solutions and effective, up-to-date crisis management plans in place to safeguard their reputation before a crisis strikes.
- Create crisis press release templates ahead of time, so you can put them into action quickly when the crisis happens. Don't wait to create your key messages until you're in the middle of the crisis.
- Companies that think in terms of 'when' and not 'if' a crisis will strike are better positioned to emerge intact on the other side.

Speed Is Essential

- Speed is absolutely key in these situations, and the first, well-crafted response must go out within an hour of the crisis going public.
- It can be difficult to bring a situation back under control if online and social media create an alternative narrative to the one you want to share.
- When there is a vacuum of information from the source, others will find information elsewhere and come to their own, often misinterpreted conclusions.

Collaborate

- Strong collaboration between the company's communication and legal team is needed, as company crisis management responses will post on traditional and social media simultaneously.
- Key spokespersons will need to be available for press conferences and media interviews.

