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Airplane Crashes and Media Spin: This Just Needs to Stop

Note: This editorial was originally published in 2011.

Just recently there was yet another Russian Tupelov aircraft accident that claimed the lives of 44 people. Although the reports at this moment are very preliminary, credible sources close to the investigation describe an eerily familiar pattern. The Tu-134 crashed in poor visibility because the pilots elected to land when they should have instead conducted a missed approach. In aviation lingo this is referred to as "busting minimums." This is a very dangerous maneuver and it is in fact illegal from a regulatory standpoint. This is pilot error—pure and simple. It is about pilot judgment and decision making. It is not a mechanical problem with the aircraft. Also worth mentioning, because the media like this initial speculation as well, is that the weather did not cause this aircraft to crash and weather typically does not cause an aircraft to crash. It is how the pilots resolve the weather (i.e., decisions and actions) that ultimately determines the outcome. In this case the weather was a contributing factor but not the cause of the crash.

A similar accident involving a Tu-154 (a larger variant of the Tu-134) occurred in April, 2010. That accident claimed the life of Polish president Lech Kaczyński and many other high-level Polish government officials. A total of 96 people were killed. Immediate speculation by the media focused on the age of the aircraft and its maintenance history. However, the official accident investigation concluded that pilot error caused the accident (not the age of the aircraft or

how it was maintained). As in the previous accident the pilots attempted to land in weather that was below landing minimums and crashed short of the runway. As is typically the case this accident was not caused by one single event. It was caused by a concatenation of errors that began at the highest level of the hierarchy (operations) and trickled all the way down to the flightcrew. According to the official accident report:

There were numerous contributing factors such as pressure from the Commander-in-Chief of the Polish Air Force (riding in the cockpit) admonishing the Captain to land "at any means."…A lack of compliance with standard operating procedures, a lack of crew resource management, and a significant gap in bad weather flights by the PIC (he had not flown in weather conditions similar to Smolensk that day in four months)…The Navigator calling out radar altitudes without considering the uneven terrain in the area, utilization of the autopilot and autothrottles much lower than minimum descent altitude which did not comply with the Flight Crew Operations Manual for the TU-154, and the late start of the final descent which caused the crew to maintain a higher than normal vertical speed…Significant shortcomings in the organization of flight operations, flight crew preparation and arrangement of the VIP flight in the special air regiment. (Final Report Tu-154M tail number 101, Republic of Poland). http://www.mak.ru/russian/investigations/2010/files/tu154m_101/finalreport_eng.pdf

In both of the above accidents there was nothing technically wrong with the aircraft. Yet, the cause of these accidents was immediately relegated to the age of the aircraft and/or poor maintenance, according to the media. After all, the Tupelov aircraft (Tu-134 and the Tu-154) are in fact old, not well maintained, and compared to modern Western-built aircraft are indeed antiquated relics. But…mechanical problems are not causing these aircraft to crash. It comes

down to pilot error in almost every case. These same pilots could make these same judgment errors if they were flying brand new Boeing or Airbus aircraft.

These types of accidents are not just occurring in Russia but are widespread among geographical regions such as the Middle East, Asia, Africa, and other areas where safety cultures are not as advanced as in the West. These accidents are not due to a single error committed by the pilots but are instead caused by a manifestation of cultural issues that lead to poor judgment and decision making by pilots. For instance, many of these airline cultures view a missed approach as a punishable offense. This puts the pilots in a very precarious and dangerous situation; do they take the risk and land in conditions that are clearly illegal/unsafe or do they conduct a missed approach and risk sanctions for costing the airline extra money and inconveniencing the passengers?

The bottom line is that almost all aircraft accidents have a human error component. Most aircraft accidents are not caused by an unairworthy aircraft (even if the aircraft is 40 years old) but instead are due to human factors such as poor judgment and decision making. These factors are clearly influenced by not only the airline's culture but the overall aviation safety culture of the region. I think if the media were better educated on aviation safety and human factors issues they would be better able to report and disseminate with more accuracy the factors that lead to aircraft accidents, or at least contain the speculation. It is too easy to initially blame a crash on the aircraft's age, maintenance history, or the weather. Most of the time this is pure speculation which leads to false assumptions and highly inaccurate reporting. This just needs to stop.