



NTSB Advisory

National Transportation Safety Board
Washington, DC 20594
September 25, 2006

UPDATE ON NTSB INVESTIGATION INTO THE CRASH OF COMAIR FLIGHT 5191

On August 27, 2006, about 6:07 a.m., Comair flight 5191, a Bombardier CRJ-100, (N431CA) crashed upon takeoff from Blue Grass Airport in Lexington, Kentucky. Of the 47 passengers and 3 crewmembers onboard, 49 were fatally injured and one (the first officer) survived in critical condition. The following is an update of factual information developed during the Safety Board's investigation.

Washington, DC --The Safety Board has completed the on-scene portion of the investigation. All of the investigative groups will be completing factual reports, which will be released to the public when the public docket is opened in the next several months.

Accident Sequence

Flight 5191, from Lexington, Kentucky to Atlanta, Georgia, was the third of three airplanes scheduled to take off in the early morning. The previous two departures took off without incident from runway 22. Flight 5191 was also cleared to taxi to runway 22 and subsequently cleared for takeoff; however, the airplane attempted to take off from runway 26. According to recorded information, the aircraft began its takeoff roll, accelerated to a maximum of about 137 knots, ran off the end of the runway through the airport perimeter fence, and impacted trees on an adjacent horse farm. The entire sequence took about 36 seconds. The airplane was destroyed by impact forces and a post-crash fire.

Aircraft Wreckage

Witness marks on scene indicate that all three landing gear were on the ground as the airplane exited the runway. The main wreckage was located approximately 1,800 feet from the end of the runway. Both engines were examined at the accident site and no evidence of pre-impact failure was noted and the thrust reversers were stowed. The flaps were found in the takeoff position and no problems were noted with any other airplane system or structure. The wreckage from flight 5191 has been moved to a storage facility in Georgia.

Recorders

The flight data recorder (FDR) and the cockpit voice recorder (CVR) were recovered immediately and have provided valuable information. Investigators are continuing to extract data from the flight recorders, the air traffic control tape recordings and airport video surveillance cameras. FDR data indicate that the airplane stopped near the end of runway 26 for about 45 seconds before the flight was cleared for takeoff. The airplane was cleared for takeoff and 6 seconds later started to taxi onto runway 26. It took about 36 seconds for the airplane to taxi onto runway 26 and complete the turn before power was increased to initiate the takeoff. FDR vertical accelerometer data indicate that the airplane departed the end of the runway about 32 seconds after the takeoff was initiated. The FDR recording ended about 4 seconds later. Time correlation of those data continues.

Operations/Human Performance

Operations/Human Performance group has completed initial follow-up interviews at Comair headquarters in Covington, KY. The group conducted airport observations under day and night conditions; a simulator observation of Comair taxi and takeoff procedures; and interviews with multiple persons including: ramp personnel, flight instructors, check airmen, and several pilots who had flown with the accident flight crew. These interviews provided investigators with information about procedures and techniques used by pilots for taxi and takeoff runway identification and information about the accident flightcrew. Additionally, the Director of Corporate Safety for Comair and FAA personnel responsible for oversight of the Comair certificate were interviewed. The group gathered relevant documents pertaining to the accident flight, flight crew training and evaluation, operations of the CRJ100, and oversight of the airline. Investigators are now reviewing interview summaries and documentation to identify areas for further investigation and evaluation. The group continues to evaluate the pilot actions that led to the attempted takeoff on runway 26.

Airport Information/Survival Factors

Runway 22 is 7003 feet long, 150 feet wide, and is lighted for nighttime use. Runway 26 is 3500 feet long, 150 feet wide but marked to 75 feet wide, and is not lighted and is restricted to daytime use only. In order to take off from runway 22 it is necessary to taxi across the end of runway 26. An airport construction project, begun in 2004, was still underway at LEX at the time of the accident. The project was intended to mill and repave runway 4-22 and upgrade the safety areas at both ends of runway 4-22, the main runway. This project necessitated changes to some of the taxiways and signage. The group continues to evaluate the airport taxiway and runway markings, lighting and signage as well as additional information that was available to pilots. The Airport/Survival Factors Group will also be documenting the factors that may have contributed to the loss of lives in this accident.

Air Traffic Control

At the time of the accident, there was one air traffic controller in the tower. After handling several aircraft at the beginning of his shift, there were several hours without aircraft movements. In the 20 minutes leading up to the accident, there were three departures, including Comair 5191, from LEX under his control. The ATC group has interviewed several Lexington control tower personnel and FAA air traffic personnel. The controller on duty at the time of the accident relayed the following information to investigators: he cleared the accident flight crew to take off (from runway 22) and to fly runway heading (220 degrees); after providing takeoff clearance for flight 5191, he turned away from the window to perform an administrative task (traffic count); he did not witness the accident, but heard the crash, turned around and saw fire, and immediately activated the emergency response. As in all investigations, the group will review the controller's workload and duty schedule and the tower staffing level.

Toxicological Test

Toxicology testing performed on specimens from both pilots did not detect any illicit substances or alcohol. An over the counter decongestant, pseudoephedrine, was detected at a low level in the first officer's blood.

Post Accident FAA Action

On September 1, 2006, the FAA issued a Safety Alert for Operators (SAFO), titled, "Flight Crew Techniques and Procedures that Enhance Pre-takeoff and Takeoff Safety." This alert highlights existing FAA aircraft ground operation guidance and reminds flightcrews that maximum attention should be placed upon maintaining situational awareness during taxi operations.

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