International Brotherhood of Teamsters Submission
CL-600-2B19, N431CA
Lexington, KY
August 27, 2006
DCA06MA064

History of Flight

On August 27, 2006, at approximately 0607 Eastern Daylight Time, Comair flight 5191, a CL-600-2B19 (CRJ-100), N431CA, crashed during takeoff at Blue Grass Airport (LEX), Lexington, KY. The flight was operating direct to Hartsfield-Jackson Atlanta International Airport (ATL), Atlanta, GA. The aircraft had been cleared for runway 22, taxied onto runway 26 instead and ran off the end of runway 26. Of the 47 passengers and three crewmembers onboard the aircraft, 49 were killed, and 1 received serious injuries. The aircraft was destroyed by impact forces, damage from contact with trees and post-crash fire. The flight was operating under Part 121 Federal Regulations.

Analysis of Flight

The flight was scheduled for a 0600 departure. After having boarded the incorrect aircraft initially, the crew boarded the aircraft at about 0520. The aircraft was pushed back on time. The taxi clearance was to runway 22. At 0600, the sun had not risen and visibility was reported at 8 miles. Floodlights at the terminal building illuminated the ramp area and taxiway lights were illuminated on taxiway A. The runway lights on runway 22 were illuminated and were set at step 3. Runway 26 lights were not illuminated and the runway was NOTEM'd closed except during daytime operations. This information had been on the ATIS system the day prior to the accident but was not on the ATIS the day of the accident. On the day of the accident the ATIS advised the use of caution for construction on the air carrier ramp.

The captain began to taxi the aircraft at about 0602 while the fist officer finished his flight preparations. The aircraft was taxied to a hold short point for runway 26 for about 46 seconds while the first officer completed checklist items. The air traffic controller cleared the flight for takeoff, but neither the controller nor the first officer stated the runway number. The captain taxied onto runway 26 for takeoff and transferred control of the aircraft to the first officer as he was the flying pilot. The aircraft exited the end of the runway while still in contact with the ground. After traveling through a fence and hitting a berm, it was lifted into the air and eventually came into contact with 13 trees and came to rest about 1800 feet west of the departure end of runway 26.

Airworthiness and Structural Factors

A review of the Airworthiness Factuals revealed there were no pre-existing mechanical conditions that contributed to the accident.

Survival Factors

ARFF Response and Fire Fighting

The first responders to the scene arrived in about 8 minutes. An airport public safety officer and a Metro Police Officer rescued the first officer from the cockpit and were able to get him to the hospital within about 15 minutes of their arrival at the scene. The first fire responder placed his vehicle just behind and facing the aircraft's nose. He believes at this point, the aircraft sides and top "were pretty much gone". He applied foam to knock the flames down then continued with a hand line. The responders attempted to locate any other survivors, but could not.

As noted in the Survival Factors factual report, the response time for the first ARFF vehicles was about 8 minutes. The path taken was outside of airport property, causing precious time to be wasted looking for the crash site from the lower road where visibility of the site was impeded.

Evacuation

No evacuation appears to have been attempted from inside the aircraft or by the flight crew, however the intensity of the fire and damage caused left little evidence available.

Conclusion

Findings

1. The Captain and the First Officer were properly certificated, qualified, trained and current under Federal Regulations.
2. The Captain and First Officer had received the off-duty rest time prescribed by Federal Regulations and company requirements.
3. Flight crew fatigue was not a factor in the accident.
4. There were no preexisting conditions with the aircraft's structures, systems, or components that contributed to this accident.
5. The ATC was working alone, though FAA policy required at least two controllers be assigned.
6. Construction at the Blue Grass Airport contributed to labeling of runways to be inconsistent with Jeppesen Airway Manual, and in a state of revision with the FAA, awaiting the completion of construction but causing an ever changing airport layout.

Causes

1. Pilots failed to confirm runway and headings prior to taking the active runway.
2. ATC failed to schedule with adherence to FAA policies by allowing a single controller to attempt to manage both tower and radar approach control services. This caused a lack of visual control over aircraft leaving the airport that day.
3. Runway and taxiway signage and naming had been changed repeatedly during the long construction process at the Blue Grass Airport. The FAA was instrumental in instructing the signage process and contributing to the confusion by its direction of interim signage.

Contributing Factors

1. Industry pressures and corporate hostilities caused distractions to overflow into work time and cockpit space causing pilots to rely on habit and ritual instead of being more intellectually present.
2. Many airports have begun to schedule ATC with as little as 8 hours off the job before having to report for another shift adding to the probability of a narrowed field of awareness and a higher probability of distractions.
3. A lack of consistent clarity in the closure of runway 22.

Recommendations

To the FAA :

1. Develop a more consistent labeling and re-labeling or naming of runways and taxiways during construction along with an improved notification process. Also requirements that Jeppesen temporary charts be issued upon changes to airports.
2. Require pilots and ATC to confirm headings prior to clearing for takeoff.
3. Require each airport that allows service for both tower and radar approach control to have 2 controllers on duty and stagger rest for extra coverage when short resting a controller. This will also serve to insure that while one controller is watching a radar monitor, the other can be observing the field and not be required to be close to the monitor or looking down to it when an aircraft is approaching a construction area.
4. Convene a joint government-industry task force to evaluate the effects of long term pressures and stress on pilots focusing on signs of distraction like missed radio calls, etc-to discover if there are consistencies.
5. Require ATC remain involved in post crash activities to insure response vehicles are not delayed by obstructions and will arrive on the scene in the shortest possible time. This will not only insure all possible lives saved, but will reduce potential damage to the remains of the aircraft and allow a more thorough investigation.