

Investigation of WB 205
Report No. 2009-1
Interim Report No. 1

On 12 November 2009, about 1315 hours local time, flight WB 205, a Bombardier CL 600-2B19 (CRJ-100), registration 5Y-JLD, after returning to land at the airport of departure due to a technical problem and taxiing to the ramp, it collided with a building at Kigali International Airport (KGL), Rwanda. Flight WB 205 was operating as a scheduled international passenger flight from Kigali International Airport (KGL) to Entebbe (EBB), Uganda. Of the two cabin crewmembers and 11 passengers¹, one passenger was fatally injured. The two pilots received serious injuries. There was no fire. The airplane was destroyed.

The airplane was operated by Jetlink Express on behalf of RwandAir under the provisions of Kenya Civil Aviation Regulations: i.e. it was on wet-lease to RwandAir.

Shortly after takeoff, the pilot reported he was unable to readjust the left engine thrust lever to the desired climb power setting. The condition resulted in the left engine operating near takeoff power. Flightcrew, along with a company technician summoned from the cabin to assist, was unable to resolve the malfunction. According to the captain, when he returned his first approach was too high so he circled and landed during the second approach. The left engine power remained unchanged throughout the landing and taxiing sequence. The captain reported he applied more brakes than usual during the landing and noticed later while taxiing to the ramp that the brake temperature was rising. The airplane was stopped in the normal parking bay, the parking brakes applied and the right engine was shut down; however, the left engine continued to operate at high power setting. The captain noticed the brake temperature had continued to rise and eventually received an indication on the Engine Indication and Crew Alert System (EICAS) that the brakes had overheated. He therefore felt that tire deflation was imminent. Shortly thereafter an uncommanded movement of the airplane occurred and it gained momentum. According to the captain, he was able to avoid colliding with other parked airplanes, but was unable to stop the airplane.

All other passengers were evacuated from the airplane using the right over wing exit with the assistance of the cabin crew apart from one remaining passenger, who was described as semiconscious and in "bad shape" was rescued from the airplane. Later the passenger succumbed to her injuries. The first officer remained trapped in her seat by the collapsed instrument panel and was eventually extricated about 3 hours later by rescue personnel.

¹ One of the passengers was a non-revenue company engineer.

Examination of the accident site revealed the airplane had travelled about 220 meters, and turned 80 degrees to the right, before it struck the building. There were skid marks from the right main gear tire and evidence that the left main gear wheel rim was in contact with the tarmac throughout the movement of the airplane. Inspection of the airplane disclosed the left main gear tires were deflated; the right main tires remained inflated.

Visual inspection of the left engine revealed evidence the upper core cowl support strut had unlatched from the stowing mechanism and came in contact with the engine throttle control mechanism, consequently restricting operation of the throttle. Further examination of the upper core cowl strut latching mechanism did not disclose physical evidence of the malfunction of the safety features of the component. Continuity was established between the left engine thrust lever and fuel control unit.

The Flightcrew did not refer to the quick reference handbook (QRH) for the malfunction or consider performing the engine shut down procedure during the flight. A review of manufacture operational guidance information disclosed a procedure in the abnormal operation section for a "thrust lever jammed" (TLJ) condition. However, based on post accident interviews, neither of the flight crewmembers was familiar with the procedure nor had encountered such a scenario in their training. The procedure, in part, includes the shutdown of the affected engine by pushing the "Engine Fire Push" switchlight, which controls the fuel shutoff valves and stops the flow of fuel. The thrust lever jammed procedure was contained in the quick reference handbook, airplane flight manual, flight crew operations manual, all of which were recovered from the flight compartment of the accident airplane. The flight crew further stated that they were trained to use the EICAS indication to direct their attention to the appropriate section of the quick reference handbook. However, during this event since there were no EICAS indications related to the malfunction, they did not refer to the QRH.

The airplane had completed a 3500-hr/500-hr/24-mo/16,000-cycle scheduled routine maintenance on 10 November 2009. Investigations have determined that the left engine core cowl door had not been opened since the last above-mentioned inspections based on interviews and review of maintenance records. The airplane subsequently completed six flights, and 5.2 flight hours before the accident flight.

The investigation revealed there were eight service bulletins, all of which were for discretionary compliance, issued by the airplane manufacturer, including revisions, from August 2000 to January 2009. The service bulletins pertained to aspects of securing of the upper core cowl support strut, including modification of the latching mechanism.

According to service difficulty reports provided by the State of Manufacture/Design, there were seven similar incidents involving a jammed thrust lever for the left engine. During each one of the incidents, the flightcrew executed the TLJ procedure and the flights landed without further incident.

According to the pilot logbook and company records, the captain held airline transport license and had about 11,478 hours of total flight time of which at least 1,110 hours were on type. He had been employed with the company for about 2.5 years and upgraded to commander pilot in March 2009. The first officer held a commercial pilot license and had about 1588 hours of total flight time, of which 608 hours were on type. She had been employed with the company for about a year and assigned as a first officer in February 2009. According to the company chief training pilot, the TLJ procedure was not one of the subjects covered in the ground/simulator training sessions since the company first started operating the CRJ 100/200 aircraft in 2007.

Jetlink Express has since issued operational and maintenance notices raising awareness among its pertinent personnel. Future investigative activities will include compliance of pertinent service bulletins, crash survival aspects, readout of the flight recorders, and evaluation of the airport emergency response procedures.

The Investigation is under the jurisdiction of Ministry of Infrastructure.
