



Internal Memorandum

Date: 05/20/2017

To: Captain Chris Frederick | Director & Chief Pilot – Atlanta
From: Captain Te Lee
Subject: II17-093 NTSB - TAIL STRIKE: DAL2534 20-MAY-17 ATL-RDU B-757-232 N633DL (633) CAP: LEE, T.H.; FO: BLEIL, J.J.

This statement is provided at the request of the Chief Pilot's Office.

I was the captain on this flight to RDU. We were a about couple of hours late getting to RDU due to a maintenance issue at ATL. We arrived at RDU approximately 9pm and was a conducting visual to 5L with RNAV backup. ILS to 5L was out of service at that time. Arrival and approach were normal. Crossing the threshold, as the F/O was flying at that time, it appeared the F/O flared a bit high but he corrected by lowering the nose towards the runway. At this point, if he had continued descent to the runway, we would have had a satisfactory landing. Not a picture perfect roll on, but very acceptable. Just prior to touchdown, the F/O abruptly pulled back on the yoke. My guess would be maybe he felt we were approaching the runway too rapidly. It was a classic "swapping ends" just prior to touchdown. I tried to grab the yoke and push nose down but it was too late. The aircraft touched down almost simultaneously on main landing gear and tail. Roll out and taxi to gate were uneventful. Tower reported that another flight saw our tailstrike and reported it. For reference, the F/O was a new hire just out of training, about 73 hours in type. It was our first trip and his first landing with me.

I acknowledge release of this statement to Delta Flight Safety and the National Transportation Safety Board (NTSB).

Regards,

Captain Te Lee
Employee [REDACTED]
(signature on file)



Internal Memorandum

Date: 5/24/2017

To: Captain Chris Frederick | Director & Chief Pilot – Atlanta

From: First Officer John Bleil

Subject: II17-093 NTSB - TAIL STRIKE: DAL2534 20-MAY-17 ATL-RDU B-757-232 N633DL (633) CAP: LEE, T.H.; FO: BLEIL, J.J.

This statement is provided at the request of the Chief Pilot's Office.

I was the First Officer on Flight 2534 and the pilot flying the aircraft during the incident. Previous legs were uneventful. I performed pilot monitoring for previous legs based on the division of the legs. Good rest the night before. On day 2 of a 4-day trip, this was the second leg. First leg of the day departed from the West coast after an 11 hour layover. Flight began late due to weather and late arriving aircraft. We pushed about 1 hour late due to loading of bags and coordination for an air cart due to an inoperative APU. After pushback we had minor maintenance, which resulted in a return to the gate for maintenance actions (MEL and rerelease). This delay resulted in about two hour late departure. Takeoff, departure, and arrival to RDU were uneventful. There were slight weather deviations and vectors off SID (nothing dramatic). We were cleared for the visual to 5L at RDU. This had been the planned runway all along and we chose the RNAV (GPS) Y as the planned approach to follow (ILS was out of service). This was briefed prior to descent. Approach was uneventful. I was delayed in slowing the aircraft (vectors to final off SID) that required gear and airbrakes to slow the aircraft to be stable by 1000 feet. From 1000' the aircraft was on speed configured for landing (flaps 25 landing). The autopilot was disengaged around 800' and the autothrottles were disengaged around 400'. During short final I was slightly high according to the PAPIs (3 white) and fixed this early. Crossing the threshold I was on speed (129 knots flaps 25 speed) at 134, maybe 1-2 knots fast. There was a slight crosswind from the right. I recall beginning the flare around 30 feet and reducing power at 20 feet. I believe the power pull was late and resulted in being slightly fast and a high flare. I pushed the nose slightly to continue a descent to the runway. I determined that I had pushed too far and attempted to recover with backstick pressure. At this point the noticeable feeling of the tail strike occurred along with a firm touchdown of the main trucks. I flew the nose wheel to the ground and activated idle thrust reversers. I used above idle reversers during the rollout. During the landing the Captain was providing minor inputs to airspeed and aimpoint. Normal calls. I do not recall anything being said during the flare as it occurred too quickly for intervention. I over-flared at the worst time and this resulted in the tail strike. Had I maintained the landing attitude after the initial flare the aircraft would have landed in a proper attitude. Taxi to gate and shutdown were uneventful.

I acknowledge release of this statement to Delta Flight Safety and the National Transportation Safety Board (NTSB).

Regards,
First Officer John Bleil
Employee [REDACTED]
(Signature on file)



Internal Memorandum

Date: 5/24/2017

From: Daphne Hickmon

Subject: NTSB Investigation: Flight 2534, 20-May-2017 ATL-RDU B-757-200 N633DL (633)

May 20, 2017 on flight 2534 from ATL-RDU at 9:23pm we experienced an extremely hard landing. The plane hit the ground and bounced back in the air and hit the ground again. I was seated at the 2L door on a 757 and harnessed in my seat, however the impact of the landing caused me to slide down in my seat. There were passengers screaming upon impact as well. The flight leader called all of the flight attendants onboard to make sure we were ok and all of the passengers were ok. While we were deplaning, we had a few passengers complaining of discomfort and neck pain as they stepped off the plane and many of them asked what had occurred. We however were not exactly sure how to address the situation since we were not debriefed on the incident by the pilots. The captain and the first officer both left the aircraft to check on the plane and consult with the maintenance crew. We never got the chance to speak about the incident with the pilots besides a passing comment from the captain asking if we felt the impact of the landing. Unfortunately my back was injured during the incident.

I acknowledge this statement may be released to Delta Flight Safety and the NTSB.

Regards,

Daphne D. Hickmon
Employee [REDACTED]



Internal Memorandum

Date: 5/25/2017

From: Izabelle Schuett

Subject: NTSB Investigation: Flight 2534, 20-May-2017 ATL-RDU B-757-200 N633DL (633)

The flight experienced an extremely rough landing. Although there was turbulence throughout the flight, there was none following the initial decent. There was a hard, alarming landing followed by the aircraft lifting again and then hitting the runway a second time with even more force. The plane then continued to taxi at an accelerated speed for longer than usual before we finally heard the brakes hit and the plane slow down. I was sitting at the 1L door with the FL and with the way things felt, we were starting to expect the possibility of evacuating on command. Fortunately, that did not happen and we resumed normal taxi speed. However, the landing did cause FA Daphne to have immediate back discomfort and several passengers complained of both fear and neck pain upon deplaning. There were no urgent signs of injury requiring immediate attention. I experienced no immediate pain, but felt a tightness and soreness in the upper right side of my back later that night and the following days. When the captain came out he asked the flight attendants if everyone was alright and then proceeded to go outside to check on the plane. None of us received a clear answer as to what caused the landing.

I acknowledge this statement may be released to [Delta Flight Safety](#) and the [NTSB](#).

Regards,

Izabelle Schuett





Internal Memorandum

Date: 6/2/2017

From Reynolds Black

Subject: NTSB Investigation: Flight 2534, 20-May-2017 ATL-RDU B-757-200 N633DL (633)

Aircraft had an extremely hard landing. I was thrown up and down in my seat. Aircraft damaged. I know have a stiff lower back.

I acknowledge this statement may be released to Delta Flight Safety and the NTSB.

Regards,

Reynolds Black





Internal Memorandum

Date: 6/2/2017

From Stephanie Oquin

Subject: NTSB Investigation: Flight 2534, 20-May-2017 ATL-RDU B-757-200 N633DL (633)

On my flight tonight it was very turbulent for the majority of it, but as we got closer to RDU airport the weather smoothed out. It did not appear to be windy or turbulent prior to landing, from initial on. After being in brace position preparing to land we felt the impact hit to the ground that was hard, and then maybe like a bounce, and then another incredibly hard hit to the ground. It almost felt like the sensation of all of the tires bursting upon impact. It was really hard. Isabelle Schuett sitting next to me in the 1Lib seat screamed and I may have done so myself. At this point I don't remember. I know that with the impact I just felt all of my weight crash down into my ankles and feet on the floor and the bottom of my spine/ tail bone. It was very shocking .after we finally slowed down to a normal speed and I felt the rest of our taxi would be okay, prior to making my arrival announcement I called my crew to see if they were okay. They said yes: I didn't hear any announcement from the pilots. I made my announcement and then first class deplaned and I walked up to the 2L/R door to Daphne and she explained that when we hit the ground she felt her back pop. She seemed okay, as in not in agonizing panic however she kept mentioning her back and the feeling it gave her and how she had felt some pain there. Passengers as they deplaned, complained of the issue, explaining about neck and back pain and just "what happened during landing?!" Etc. I didn't have answers. The captain briefly asked if we were okay and how had it was and then stated he was going to check the plane outside and proceeded to go outside. Passengers told us they would be complaining about the flight. Possibly the landing or the flight has a whole. Late arriving aircraft/ turbulence/ mechanical delay/ returning to gate for proper MTC paperwork/ hard landing / etc. when I was able to see Reynolds black, my flight attendant at the 3L door, he said he heard the loud noise and a scraping and felt the impact intensely. He didn't mention at the time whether or not he was feeling any pain. On the drive into the hotel he said he was feeling a little neck pain. That pretty much sums up my experience. We got off the aircraft and following cabin safety check the pilots still weren't saying much. Since landing they looked like they had seen a ghost, they must have had a lot on their mind. Very quiet and somber. We asked the mechanics if our plane was broken from the landing and one simple replied "... yes".

I acknowledge this statement may be released to Delta Flight Safety and the NTSB.

Regards,

Stephanie Oquin

