

Captain Statement
UAL Flight 1091 MEX – IAH
March 22, 2023
Dept. MEX 1911Z/1411L
Position: Pilot Monitoring

Departure and enroute portion of flight was unremarkable. Normal arrival and approach to runway 27. Cleared for the visual approach to runway 27 at IAH. Tower cleared us to land and gave the current winds for runway 27 that were within our limits. The aircraft was configured and stable prior to 1,000 feet. At approximately 60 feet the airspeed began to decrease below Vref (3-4 knots with speed trend arrow slightly decreasing). Noticing the decrease, I stated "watch your speed, watch your speed". At that point, the F/O pitched the aircraft nose down. The F/O also added a slight amount of thrust. The aircraft was now approximately 30 feet with a higher than normal rate of descent (approximately 850 FPM). Noticing this, I commanded "Flare, Flare, Flare". The F/O pitched up to arrest the descent. A very firm touchdown and landing resulted from the inability to arrest the increased descent rate. Following the touchdown, I prepared to take the controls in anticipation of a possible bounced landing and potential go around. The aircraft did not bounce but I did feel a slight recoil. When that happened, the nose started to rise, and both the F/O and I pushed forward to counteract the pitch. Normal rollout and taxi to the gate.

The F/O and I debriefed post-flight about how hard the landing was and if it qualified as a "hard landing" for maintenance purposes. During a detailed crew debriefing with the Flight Attendants, they stated that the touchdown didn't seem that extreme or severe. After discussion with the crew, and because the aircraft didn't bounce, a decision was made that it did not meet criteria for a maintenance write up for a 'hard landing,' but rather a very firm landing. There was no indication or discussion in any debriefs to lead me to suspect any tail strike had occurred.

First Officer Statement
UAL Flight 1091 MEX - IAH
March 22, 2023
Departed MEX 1911Z/1411L
Position: Pilot Flying

I was the First Officer on UAL 1091 from MEX to IAH and was the pilot flying on an A-320. The entire route of flight was day VMC. There was a volcanic ash SIGMET that consumed most of the pre-departure brief and dictated our climb profile. The flight originated with a relatively short taxi and uneventful takeoff. The cruise portion was standard. On the descent, the only obvious risk factor was a direct crosswind for the westbound runways. The arrival and landing profiles were well briefed and discussed in detail.

The plan was to fly a visual approach backed up by the ILS. I briefed that I would be fully configured, on speed, and stable on the approach no later than 1,000 feet. I would turn the autopilot and auto throttles off around 700-800 feet, as to be flying fully manually by the 500 foot "stable" call-out. The captain briefed that I should expect a "burbles" coming through approximately 100 feet above the ground due to the winds, so I anticipated a potential disturbance to our flight path.

The approach was flown as briefed. There were no abnormalities or changes to performance prior to shifting to an outside scan. On short final, around 75 feet above the ground, the captain challenged that my airspeed was slowing. I verbally acknowledged his challenge and responded by easing the nose down and adding a small amount of thrust. This led to an increase in our sink rate. The next callout from the captain was to flare. I flared commensurate with the developed sink rate. The aircraft touched down approximately 6-7 degrees nose up and the landing was firm. We did not bounce, but rather traveled through the full range of the landing gear's strut extension. The spoilers deployed nearly simultaneous with the landing gear strut extension, resulting in a nose up attitude. I pitched the nose down and flew it smoothly to the runway. The aircraft was slowed and taxied to the gate in a standard fashion, where we completed the parking sequence with normal procedures.

Once deplaning had begun, we debriefed the event and flight characteristics at length. I attempted to perform a post flight walk-around, however, I was not allowed down to the ramp, as it was an international return flight and U.S. Customs had the plane cordoned off for inspection.