

Aviation Investigation Preliminary Report

Location:	Houston, TX	Accident Number:	DCA24FA179
Date & Time:	May 3, 2024, 18:00 Local	Registration:	N942JX
Aircraft:	Embraer EMB-145LR	Injuries:	1 Minor, 23 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

On May 3, 2024, about 1800 central daylight time (CDT), Delux Public Charter, doing business as JSX flight 284, an Embraer EMB-145LR experienced a left main landing gear (LMLG) collapse during landing at Houston Hobby International Airport (HOU), Houston, Texas. Of the 3 crew and 21 passengers onboard, one crew member sustained minor injuries. The aircraft was substantially damaged. The flight was a public charter sold by JSX, as the charter operator (subject to provisions of Title 14 *Code of Federal Regulations (CFR)* Part 380) and operated by Delux Public Charter, LLC as the direct air carrier (operating under the provisions of Title 14 *CFR* Part 135) as a nonscheduled passenger flight from Dallas Love Field airport (DAL), Dallas, Texas to HOU.

The flight crew described an uneventful takeoff, climb, cruise, and descent. The flight data indicated the airspeed, vertical speed, and glide path were stabilized during the majority of the final approach. Surface winds during the approach at HOU were reported from 130 degrees at 16 knots, gusting to 24 knots. As the aircraft flew over the threshold of runway 4 at HOU, the flight crew described a feeling that there was something wrong, and the captain, who was the pilot flying, called for a go-around. The aircraft landed hard shortly thereafter.

While the crew did not recall initiating the go-around, flight data showed an increase in throttle lever angle consistent with commanding go-around thrust that began shortly before impact. Flight data indicated that the vertical load factor during the touchdown was 3.9 gravitational constants (g). As the aircraft continued down the runway, the LMLG collapsed and punctured through the left-wing upper skin.

The aircraft came to a stop on the left side of the runway about 567 ft from the end. Emergency personnel responded to the accident and assisted the passengers as they deplaned through the main cabin door (L1). The first officer was transported to a local hospital for minor injuries. Visual inspection of the LMLG showed structural damage and deformation, in addition to hydraulic fluid leakage. The left wing spar III, a principal structural element, was bent and fractured through at 2 locations and partially fractured at 3 additional locations.

While there was damage to some of the left wing's structural components, the fuel tank was not compromised during the event. Most of the structural damage to the inboard section of the wing was consistent with a strong upward force from the LMLG. Damage to the outboard section of the wing was consistent with the wing scraping the runway surface and impacting runway lights.



Figure 1. Photograph of the accident aircraft showing the collapsed left landing gear. (Source: FAA)

The following NTSB specialists were assigned to investigate the accident: Airworthiness, Operations, Human Performance, Cockpit Voice Recorder (CVR), and Flight Data Recorder (FDR). The Federal Aviation Administration (FAA) and Delux Public Charter are parties to the investigation. The airplane was designed and manufactured in Brazil, and pursuant to International Civil Aviation Organization Annex 13, Centro de Investigação e Prevenção de Acidentes Aeronáuticos (CENIPA) assigned an Accredited Representative to the investigation and designated Embraer as a technical advisor.

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The CVR and FDR were removed from the aircraft by NTSB investigators and were shipped to NTSB headquarters in Washington, DC where they were successfully downloaded. The aircraft wreckage was documented during the on-scene portion of the investigation and flight crew interviews were conducted via video conference on May 5, 2024.

The investigation continues.

Aircraft and Owner/Operator Information

Aircraft Make:	Embraer	Registration:	N942JX	
Model/Series:	EMB-145LR	Aircraft Category:	Airplane	
Amateur Built:				
Operator:	XZL	Operating Certificate(s) Held:	Commuter air carrier (135)	
Operator Designator Code:				
Meteorological Information and Flight Plan				
Conditions at Accident Site	:	Condition of Light:		
Observation Facility, Elevat	tion:	Observation Time:		
Distance from Accident Site	e:	Temperature/Dew Point	:	
Lowest Cloud Condition:		Wind Speed/Gusts, Direc	ction:	
Lowest Ceiling:		Visibility:		
Altimeter Setting:		Type of Flight Plan Filed	:	
		Destinations	Lisuates TV	
Departure Point:	Dallas, TX	Destination:	Houston, TX	

Wreckage and Impact Information

Crew Injuries:	1 Minor, 2 None	Aircraft Damage:	Substantial
Passenger Injuries:	21 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Minor, 23 None	Latitude, Longitude:	29.6459,-95.2769

Administrative Information

Investigator In Charge (IIC):	Silva, Sathya
Additional Participating Persons:	Charles Olvis; Federal Aviation Administration Joey Roehrich; Delux Public Charter Diego Bandeira da Costa; CENIPA Brazil (Accredited Representative) Embraer (Technical Advisor)
Investigation Class:	Class 3
Note:	