



# Aviation Investigation Preliminary Report

<b>Location:</b>	Houston, TX	<b>Accident Number:</b>	DCA23LA384
<b>Date &amp; Time:</b>	July 29, 2023, 10:34 Local	<b>Registration:</b>	N641UA
<b>Aircraft:</b>	Boeing 767-322	<b>Injuries:</b>	202 None
<b>Flight Conducted Under:</b>	Part 121: Air carrier - Scheduled		

On July 29, 2023, about 1034 central daylight time (CDT), United Airlines flight 702, a Boeing 767-322(ER), N641UA, sustained substantial damage when it was involved in an accident while landing at George Bush Intercontinental Airport (IAH), Houston, Texas. The 202 passengers and crew onboard were uninjured. The flight was operating as a 14 *Code of Federal Regulations* Part 121 scheduled domestic passenger flight from Newark Liberty International Airport (EWR), New Jersey, to IAH.

The flight crew reported that the first officer (FO) was the pilot flying and the captain was the pilot monitoring. The departure from EWR and the cruise segment of the flight were uneventful. Upon arrival at IAH, they were cleared for the DOOB12 arrival and the ILS 26L approach. According to the flight crew, the airplane was fully configured for landing, on speed and in compliance with the company's stable approach criteria and the initial touchdown on the main wheels was normal. The FO stated that after the main landing gear touched down, he held aft pressure on the control yoke to keep the nose wheel from hitting the runway; however, the nose wheel made contact with abnormal force. The airplane appeared to bounce, and he reacted by pulling aft on the control yoke, in an effort to keep the nose wheel from impacting the runway a second time. Subsequently, the speed brakes deployed, and the auto brakes engaged which resulted in a second bounce of the nose wheel. He deployed the thrust reversers, and the airplane began to decelerate. The captain assumed control of the airplane and the remainder of the landing rollout was normal with no risk of runway overrun or excursion.

A preliminary review of the flight data recorder (FDR) revealed that after the initial touchdown on both main wheels, the airplane rolled to the left and right main gear lifted off the runway's surface. Subsequently, the nose wheel touched down with a gravitational force equivalent (g) of about 1.4 g and bounced. The speed brakes deployed, and the nose wheel impacted the runway a second time with a force of about 1.6 g followed by another bounce. The right thrust

reverser (TR) deployed, and the nose wheel impacted the runway again with a force of about 1.6 g followed by the deployment of the left TR.

A postaccident examination of the airplane revealed substantial damage to the crown of the upper fuselage, see figure 1.



**Figure 1.** Close up view of damage to the airplane (source: United Airlines).

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Boeing	<b>Registration:</b>	N641UA
<b>Model/Series:</b>	767-322	<b>Aircraft Category:</b>	Airplane
<b>Amateur Built:</b>			
<b>Operator:</b>	UNITED AIRLINES INC	<b>Operating Certificate(s) Held:</b>	Flag carrier (121)
<b>Operator Designator Code:</b>			

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>		<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KIAH,90 ft msl	<b>Observation Time:</b>	09:53 Local
<b>Distance from Accident Site:</b>	1 Nautical Miles	<b>Temperature/Dew Point:</b>	30°C /23°C
<b>Lowest Cloud Condition:</b>	Scattered / 2500 ft AGL	<b>Wind Speed/Gusts, Direction:</b>	5 knots / , 220°
<b>Lowest Ceiling:</b>	Broken / 25000 ft AGL	<b>Visibility:</b>	10 miles
<b>Altimeter Setting:</b>	30.14 inches Hg	<b>Type of Flight Plan Filed:</b>	IFR
<b>Departure Point:</b>	Newark , NJ	<b>Destination:</b>	Houston, TX

## Wreckage and Impact Information

<b>Crew Injuries:</b>	9 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	193 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	202 None	<b>Latitude, Longitude:</b>	29.989605,-95.344154

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Banning, David
<b>Additional Participating Persons:</b>	Ryan Hurling; United Airlines Steve Demko; ALPA John Miller; Boeing Todd Gentry; FAA
<b>Investigation Class:</b>	<a href="#">Class 3</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.