

Aviation Investigation Preliminary Report

Location:	Moab, UT	Accident Number:	DCA26LA012
Date & Time:	October 16, 2025, 06:43 Local	Registration:	N17327
Aircraft:	Boeing 737	Injuries:	1 Minor, 111 None
Flight Conducted Under:		Part 121: Air carrier - Scheduled	

On October 16, 2025, at 0643 mountain daylight time (MDT), United Airlines (UAL) flight 1093, a Boeing 737-8, N17327, was involved in a midair collision with an object while in cruise flight near Moab, Utah. Although the captain sustained minor injuries, none of the other 111 occupants onboard the airplane were injured. The scheduled domestic passenger flight was operating under the provisions of Title 14 Code of Federal Regulations (CFR) Part 121 from Denver International Airport (DEN), Denver, Colorado to Los Angeles International Airport (LAX), Los Angeles, California. Following the incident, the flight diverted to Salt Lake City International Airport (SLC), Salt Lake City, Utah.

According to the captain, while established in cruise flight at flight level 360 (36,000 ft pressure altitude), he noticed an object distant on the horizon. Before he could mention the object to the first officer (FO), there was a significant impact to the FO's forward windshield along with a loud bang. The impact resulted in both pilots being showered with pieces of glass. The captain sustained multiple superficial lacerations to his right arm; the FO was uninjured.



Figure 1. Photos of the first officer's forward windshield. (Source: United Airlines)

Following the event, the flight crew coordinated with air traffic control and initiated a descent. The cabin pressurization remained stable, with no fluctuations throughout the flight. The captain transferred control of the airplane to the FO while he conducted associated checklists and communicated with dispatch and the flight attendants (FAs). During this time, the FO's window overheat light illuminated and the crew addressed it per the applicable checklist.

After coordination with dispatch, the crew selected SLC as the most suitable diversion airport. The captain notified the passengers of the diversion and FAs were briefed to prepare the cabin for landing. The captain then initiated self-care to clean, sterilize, and bandage his wounds on his arm.

The captain subsequently resumed pilot flying duties for descent and landing. The flight was vectored for an ILS approach to runway 16L at SLC. The approach and landing were uneventful. The aircraft taxied to the gate under its own power, escorted by airport rescue and firefighting vehicles. Upon arrival at the gate, emergency medical personnel provided the captain with first aid. There were no other reported injuries.

After the event was reported, data was requested for the position of weather balloons, any other aircraft, and for any known reentry objects that were large enough to have significant portions survive that might have been in the area of the collision. WindBorne Systems Inc. reported that they lost contact with one of their global sounding balloons (GSBs) that was in the vicinity of the airplane at the time of the accident. The GSB was launched from Spokane, Washington at 1129 MDT on October 15, 2025. The balloon traveled south from Washington, down through Oregon and Nevada before turning northeast, and was crossing through Utah at the time of the accident.

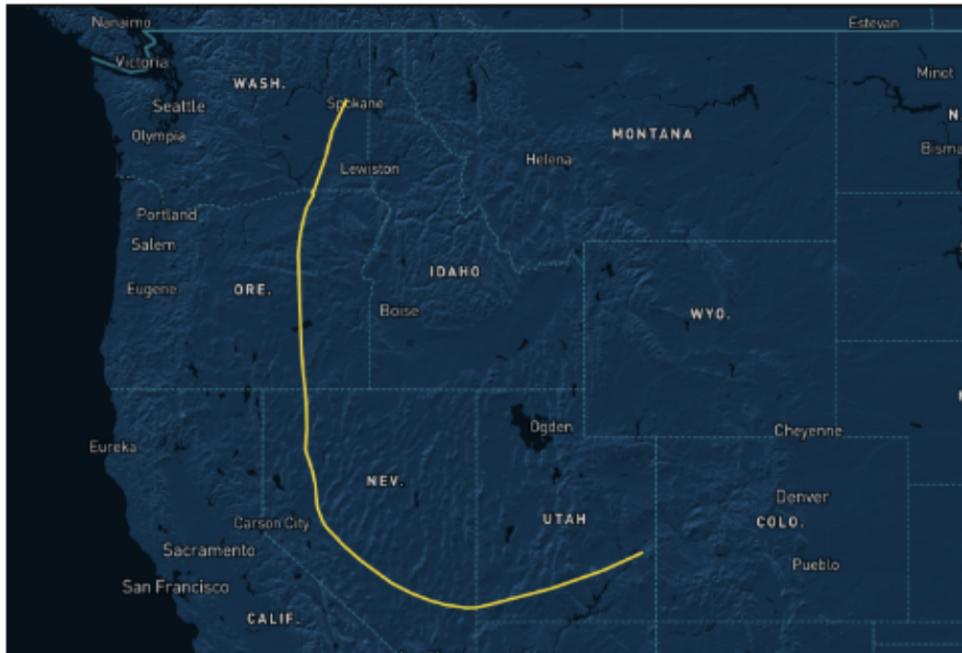


Figure 2. Flight path of the GSB. (Source: WindBorne)

There was a Notice to Airman, GEG 10/068, issued at 816 MDT for the balloon launch operations at Spokane that expired at 1700 MDT the same day, October 15, 2025. The GSB stopped communicating with the ground on October 16, 2025, between 0636:16 and 0643:36 MDT. The last communication from the GSB reported that the pressure altitude was 35,936 ft (which had been oscillating between 35,800 and 36,200 ft over the preceding hour). The GSB self-reported location was latitude 38.53142N and longitude 109.41600W and the wind was 73 knots from the southwest.

According to WindBorne, the GSB is a lightweight, long duration high-altitude weather balloon platform operated under the provisions of Title 14 CFR Part 101.1. It is an unmanned free balloon.



Figure 3. WindBorne GSB in flight. (Source: WindBorne)

The GSB system consists of a balloon envelope filled with lift gas, an avionics package for flight control, communications, and sensing, and a ballast system for altitude control. According to Windborne the GSBs are designed with the intent to minimize harm in the event of an impact during flight or landing. No large metal or high-stiffness structural elements are employed. The balloon envelope and the ballast container are a thin, low tensile strength, plastic film. The silica ballast is relatively low density and low grain-size.

The windshield installed in N17327 was manufactured by PPG Aerospace and was designed to withstand the flight and pressurization loads encountered during flight while providing visibility for the pilots. From outboard to inboard, the windshield consists of a thermally tempered glass pane, a conductive heating film for deice capabilities, a urethane interlayer, a vinyl interlayer, a urethane interlayer, and a thermally tempered glass pane. The windshield is surrounded by a stainless-steel z-bar encased in a moisture seal to attach it to the fuselage. A coating is applied to the outer surface of the outboard pane to improve the ability to shed water in rainy conditions.

Windshields are certified to withstand the impact of a four-pound bird without penetration, to be capable of withstanding the maximum cabin pressurization loads with the failure of a single pane, and the internal pane must be non-splintering. The inboard pane of glass is considered a structural pane, the vinyl interlayer is considered a structural fail-safe pane, and the outboard pane of glass is considered a non-structural pane for this design. The damaged right windshield from the accident airplane, P/N 29-5612-9-9008, S/N 23089H0823, was manufactured on March 30, 2023. The damaged windshield was removed from the airplane and sent to the NTSB Materials Lab in Washington, DC for examination.

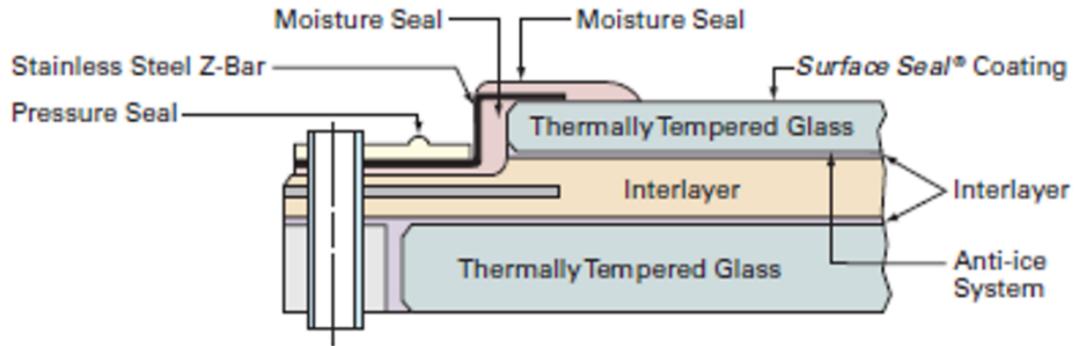


Figure 4. Windshield construct. (Source: PPG Aerospace website)

In addition, the flight data and the cockpit voice recorder were sent to the NTSB Vehicle Recorder Laboratory in Washington, DC. A preliminary review of the data from the cockpit voice and flight data recorders revealed that at the time of the collision, the airplane's track was to the southwest at 233° magnetic (nearly the reciprocal of the balloon track), at a pressure altitude of 36,002 ft, and a groundspeed of 395 knots.



Figure 5. UAL flight 1093 ground track and GSB locations.

As part of the investigative process, the NTSB invited the qualified parties to participate in the investigation. These included the Federal Aviation Administration (FAA), WindBorne, Boeing, and United Airlines. The following NTSB specialists were assigned: Cockpit Voice Recorder,

Flight Data Recorder, Materials Engineering, Meteorology, Aircraft Performance, Operations and Air Traffic Control.

This investigation is ongoing.

Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N17327
Model/Series:	737 8	Aircraft Category:	Airplane
Amateur Built:			
Operator:	United Air Lines	Operating Certificate(s) Held:	Flag carrier (121)
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	KCNY,4551 ft msl	Observation Time:	06:53 Local
Distance from Accident Site:	25 Nautical Miles	Temperature/Dew Point:	6°C /-1°C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	/ None
Lowest Ceiling:	None	Visibility:	10 miles
Altimeter Setting:	29.97 inches Hg	Type of Flight Plan Filed:	IFR
Departure Point:	Denver, CO (KDEN)	Destination:	Los Angeles, CA (KLAX)

Wreckage and Impact Information

Crew Injuries:	1 Minor, 5 None	Aircraft Damage:	Substantial
Passenger Injuries:	106 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 111 None	Latitude, Longitude:	38.595486,-109.25594 (est)

Administrative Information

Investigator In Charge (IIC):	Brazy, Douglass
Additional Participating Persons:	Jacob Zeiger; Boeing Gene Bradley III; WindBorne Systems Todd Gentry; FAA AVP 110 April Larsen; United
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.