



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Albuquerque, New Mexico	Accident Number:	WPR24LA019
Date & Time:	October 14, 2023, 08:10 Local	Registration:	N315RR
Aircraft:	CAMERON BALLOONS U S A-315	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 Serious, 12 None
Flight Conducted Under:	Part 91: General aviation - Business		

Analysis

The pilot stated that the flight was a balloon sightseeing flight that was departing from a large balloon festival. He received a weather briefing as part of the festival and there was no forecasted adverse conditions. Prior to departure, he briefed all 12 passengers on the proper landing position (knees slightly bent with both hands holding onto the rope). After a normal ascent, the pilot flew for about 40 minutes and prepared to land. During the descent, he noted that the surface winds were faster than earlier in the flight. As they descended to about 75 ft above ground level (agl), the balloon encountered windshear and turbulent air. In response, the balloon descended faster than the pilot anticipated, and he was unable to arrest the descent. The balloon contacted a chain-link fence and touched down in a field. As a result of the landing, a passenger suffered a bone fracture (in the ankle area). The balloon did not sustain damage.

The pilot stated that there were no pre-impact mechanical malfunctions or failures that would have precluded normal operation.

The High-Resolution Rapid Refresh (HRRR) sounding over the landing site indicated a stable atmosphere with no thermals and a defined low-level temperature inversion to about 2,000 ft agl with light and variable winds to the surface. No strong winds were indicated below 10,000 ft mean seal level (msl).

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's inability to maintain control of the balloon during landing due to unforecasted windshear and turbulent air.

Findings

Environmental issues	Windshear - Effect on equipment
Environmental issues	(general) - Contributed to outcome

Factual Information

History of Flight

Landing	Hard landing (Defining event)
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Pilot Information

Certificate:	Commercial	Age:	34, Male
Airplane Rating(s):	None	Seat Occupied:	None
Other Aircraft Rating(s):	Balloon	Restraint Used:	None
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	March 20, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 20, 2023
Flight Time:	2200 hours (Total, all aircraft), 500 hours (Total, this make and model), 2150 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CAMERON BALLOONS U S	Registration:	N315RR
Model/Series:	A-315 6979	Aircraft Category:	Balloon
Year of Manufacture:	2023	Amateur Built:	
Airworthiness Certificate:	Balloon	Serial Number:	6979
Landing Gear Type:	None	Seats:	
Date/Type of Last Inspection:	September 30, 2023 Annual	Certified Max Gross Wt.:	6800 lbs
Time Since Last Inspection:		Engines:	0
Airframe Total Time:	7 Hrs at time of accident	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	Rainbow Ryders Hot Air Balloon Co.	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None
Operator Does Business As:	Rainbow Ryders Hot Air Balloon Co.	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KABQ, 5310 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	07:52 Local	Direction from Accident Site:	188°
Lowest Cloud Condition:	Scattered / 20000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.3 inches Hg	Temperature/Dew Point:	8°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Albuquerque, NM	Type of Flight Plan Filed:	None
Destination:	Albuquerque, NM	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious, 11 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Serious, 12 None	Latitude, Longitude:	35.179931,-106.58996(est)

Administrative Information

Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Gary Medina; FAA; Scottsdale, AZ
Original Publish Date:	December 13, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=193293

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).