



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Custer, South Dakota	Accident Number:	CEN23LA302
Date & Time:	July 12, 2023, 06:48 Local	Registration:	N605KD
Aircraft:	ARBC INC DBA LINDSTRAND 260A	Aircraft Damage:	None
Defining Event:	Other weather encounter	Injuries:	1 Serious, 10 None
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Analysis

The pilot of the sightseeing flight stated that after departure, the balloon's speed increased, and its direction of travel became different from preflight wind observations. During the flight, the pilot established radio contact with the pilot of another company balloon, and they decided to land at a park. The other company balloon, which was ahead of the accident balloon, landed in the park without incident. When the accident pilot attempted a similar landing, the balloon encountered wind shear, and he continued the flight and flew about 1.5 miles. The pilot found a long field sheltered by trees and terrain, in which to attempt a landing.

The pilot briefed the passengers to hold on tight and to crouch down in the balloon's basket for the landing. At 100 ft above ground level (agl), the balloon encountered wind shear and slowed to about 5 kts. At 50 ft agl, the approach was "normal," but the balloon's speed increased "very rapidly." The pilot stated that he was committed to the landing due to the amount of heat he had vented from the balloon, which would not allow for a climb. The balloon touched down "fairly smoothly," but its speed increased. The pilot pulled the rapid deflation line, but the balloon lifted off, so he reseated the deflation system to reduce a descent rate that ensued from about 20 ft agl. The pilot then pulled the rapid deflation line again when the balloon was about to touch down. During touchdown, the balloon tipped over onto its side and came to a stop after traveling about 120 ft.

The balloon did not sustain damage. A passenger received serious injuries. The pilot stated there was no mechanical malfunction/failure of the balloon.

Probable Cause and Findings

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

The pilot's weather encounter that resulted in a high speed landing, the balloon tipping over, and serious injury to a passenger.

Findings

Environmental issues	High wind - Not specified
Aircraft	(general) - Not specified

Factual Information

History of Flight

Landing-flare/touchdown	Other weather encounter (Defining event)
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Pilot Information

Certificate:	Commercial	Age:	61, 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 Without waivers/limitations	Last FAA Medical Exam:	June 12, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 29, 2022
Flight Time:	2196 hours (Total, all aircraft), 117 hours (Total, this make and model), 2140 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ARBC INC DBA LINDSTRAND	Registration:	N605KD
Model/Series:	260A	Aircraft Category:	Balloon
Year of Manufacture:	2022	Amateur Built:	
Airworthiness Certificate:	Balloon	Serial Number:	5770
Landing Gear Type:	None	Seats:	13
Date/Type of Last Inspection:	May 1, 2023 Annual	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:		Engines:	0
Airframe Total Time:	90.3 Hrs at time of accident	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	Flying Circus Inc	Rated Power:	
Operator:	Flying Circus Inc	Operating Certificate(s) Held:	None
Operator Does Business As:	Black Hills Balloons	Operator Designator Code:	N/A

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	CUT, 5620 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	298°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	13°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Custer, SD	Type of Flight Plan Filed:	None
Destination:	Custer, SD	Type of Clearance:	None
Departure Time:	05:54 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	None
Passenger Injuries:	1 Serious, 9 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 10 None	Latitude, Longitude:	43.7667,-103.5988

Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	William Howell; Federal Aviation Administration, Rapid City FSDO; Rapid City, SD
Original Publish Date:	October 17, 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=192621

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](#).