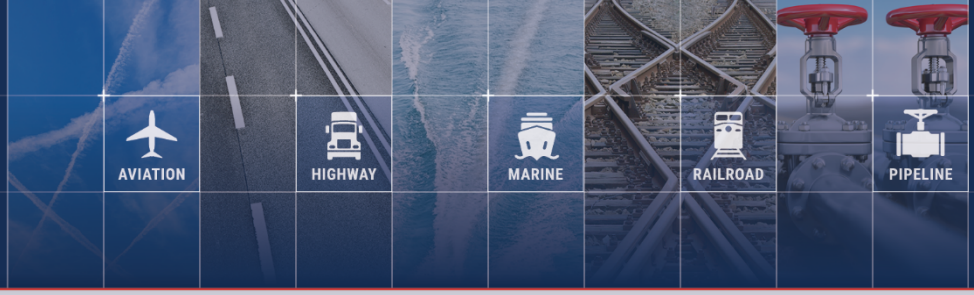

Aviation Investigation Final Report

Location:	Albuquerque, New Mexico	**Accident Number:**	CEN12LA659
Date & Time:	September 22, 2012, 07:54 Local	**Registration:**	N608RR
Aircraft:	LINDSTRAND BALLOONS 210S	**Aircraft Damage:**	Minor
Defining Event:	Loss of control in flight	**Injuries:**	1 Serious, 8 None
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

Before the flight, the pilot had difficulty getting the balloon envelope parachute vent to seat properly. Once the passengers were loaded, the vent seated, likely due to the weight of the occupants. During the flight, the pilot momentarily opened the parachute vent to allow the balloon to descend to a more desirable altitude. The pilot stated that the vent once again did not seat properly, leaving a 12- to 20-inch gap between the vent and the balloon envelope. He added heat to the envelope in an attempt to reseat the vent, but it did not reseat. The balloon continued to descend and contacted the terrain, seriously injuring one of the eight passengers. A postaccident examination and testing of the vent system did not reveal any reason why the parachute vent would not have operated normally during the flight.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the balloon envelope parachute vent to properly seat, which resulted in the uncontrolled descent of the balloon. The reason the vent did not properly seat during the accident flight could not be determined because the vent operated properly during examination and testing.

Findings

Aircraft	(general) - Malfunction
Not determined	(general) - Unknown/Not determined
Aircraft	Climb capability - Attain/maintain not possible

Factual Information

History of Flight

Enroute-cruise	Sys/Comp malf/fail (non-power)
Enroute-cruise	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On September 22, 2012, about 0754 mountain daylight time, a Lindstrand Balloons 210S, N608RR, collided with the terrain during a local flight in Albuquerque, New Mexico. The pilot and seven passengers were not injured. One passenger suffered a serious injury. The balloon, which was operated by Rainbow Ryders, sustained minor damage. The revenue sightseeing flight was operating under 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no flight plan was filed. The flight originated in Albuquerque, New Mexico, at 0742.

The pilot reported that the accident flight was the first time he had flown this particular balloon for the operator. He stated he did a thorough passenger briefing and preflight, and everything seemed functional. After the balloon was inflated, he set the parachute vent and the RDS (smart vent). He stated that it took two attempts to seat the parachute vent as it was off center. He stated that he loaded the passengers and the parachute vent seated properly and worked to his satisfaction.

The pilot reported that while at 500 feet above ground level, he allowed the balloon to cool as they approached the Rio Grande River. He stated he then noticed they were drifting too far east, so he gave a “small 2 second” pull on the parachute vent line in order to descend into a more desirable wind direction. The pilot stated that because of the initial trouble with seating the parachute vent, he looked up to make sure the parachute vent seated and noticed that there was a 12- to 20-inch gap between the vent and the balloon envelope. He applied a double burner, 6-second burn, in an attempt to re-center the vent, without success. The pilot stated he locked both burners in the on position; however, the balloon descended at a rate of 500 to 600 feet per minute. The pilot stated he turned off both quick shut off valves prior to the basket contacting a sand bar in the Rio Grande River.

The pilot stated that five of the eight passengers assumed the emergency landing position. The remaining three passengers went down into the basket. One of the passengers in the bottom of the basket suffered a broken ankle. The balloon envelope sustained most of the minor damage as it was being removed from the sandbar.

The balloon was taken to a certified repair station where the envelope was repaired and inspected, and an inflation test was conducted. The deflation and parachute vent systems on the balloon were also inspected. The tests and inspections failed to reveal any malfunction of

the vent and deflation systems.

Pilot Information

Certificate:	Commercial	**Age:**	Male
Airplane Rating(s):	None	**Seat Occupied:**	
Other Aircraft Rating(s):	Balloon	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:		**Last FAA Medical Exam:**	
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	May 28, 2011
Flight Time:	5565 hours (Total, all aircraft), 1200 hours (Total, this make and model), 12 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	LINDSTRAND BALLOONS	**Registration:**	N608RR
Model/Series:	210S	**Aircraft Category:**	Balloon
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	5414
Landing Gear Type:	None	**Seats:**	1
Date/Type of Last Inspection:	June 15, 2012 Annual	**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	0
Airframe Total Time:	425.5 Hrs as of last inspection	**Engine Manufacturer:**	
ELT:		**Engine Model/Series:**	
Registered Owner:	RAINBOW RYDERS INC	**Rated Power:**	
Operator:	RAINBOW RYDERS INC	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	ABQ	**Distance from Accident Site:**	
Observation Time:	07:52 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Few / 14000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	360°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.28 inches Hg	**Temperature/Dew Point:**	15°C / -4°C
Precipitation and Obscuration:			
Departure Point:	Albuquerque, NM	**Type of Flight Plan Filed:**	None
Destination:	Albuquerque, NM	**Type of Clearance:**	None
Departure Time:	07:42 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Minor
Passenger Injuries:	1 Serious, 7 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	
Total Injuries:	1 Serious, 8 None	**Latitude, Longitude:**	35.169445,-106.656112(est)

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	Kenneth Hand; FAA-ABQ-FSDO; Albuquerque, NM J. D Huss; FAA-ABQ-FSDO; Albuquerque, NM
Original Publish Date:	January 31, 2013
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=85159