



Aviation Investigation Final Report

Location:	CUSTER, South Dakota	Accident Number:	CHI00LA295
Date & Time:	September 12, 2000, 08:15 Local	Registration:	N9174Z
Aircraft:	Aerostar S-81A	Aircraft Damage:	Minor
Defining Event:		Injuries:	1 Serious, 11 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

A passenger fractured her leg while exiting the balloon. The passenger reported, "The basket bounced 3 or 4 times hard - one bounce approx 5'. The pilot ordered people to get out - one at a time. Passengers and ground crew were trying to hold the basket down. Everybody got off except me. Then a gust of wind took the balloon and tilted it over and I got out. It was at that point it broke my leg." The pilot reported that the passenger fractured her leg when she tripped after having exited the basket. He reported that after all the passengers were out of the basket, a small gust of wind carried the balloon about 100 feet into some power lines where it received several small holes.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The ground crew's failure to maintain control of the balloon until all passengers were disembarked. A factor related to the accident was the gust of wind.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: STANDING

Findings

1. (F) WEATHER CONDITION - GUSTS
2. (C) AIRCRAFT HANDLING - INADEQUATE - GROUND PERSONNEL

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: OTHER

Findings

3. OBJECT - WIRE,STATIC

Factual Information

On September 12, 2000, at 0815 mountain daylight time, N9174Z, an Aerostar S-81A hot air balloon, received minor damage during a landing in Custer, South Dakota. One passenger received a fractured leg while exiting the basket. The pilot and 10 other passengers were not injured. The 14 CFR Part 91 business flight was operating in visual meteorological conditions. The flight originated in Custer, South Dakota, at 0715 mountain daylight time.

The pilot reported that at the conclusion of the flight, 10 of the 11 passengers on board exited the basket. He reported that the 11th passenger tripped and cracked one of her leg bones after she exited the balloon. The pilot reported that after all the passengers were out of the basket, a small gust of wind carried the balloon about 100 feet into some power lines where it received several small holes.

The injured passenger reported that during the landing, "The basket bounced 3 or 4 times hard - one bounce approx 5'. The pilot ordered people to get out - one at a time. Passengers and ground crew were trying to hold the basket down. Everybody got off except me. Then a gust of wind took the balloon and tilted it over and I got out. It was at that point it broke my leg."

Pilot Information

Certificate:	Commercial	Age:	47, Male
Airplane Rating(s):	None	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Unknown Unknown	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	2170 hours (Total, all aircraft), 400 hours (Total, this make and model), 2170 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aerostar	Registration:	N9174Z
Model/Series:	S-81A S-81A	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	581A-3001
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:	October 1, 1999 Annual	Certified Max Gross Wt.:	0 lbs
Time Since Last Inspection:	81 Hrs	Engines:	Unknown
Airframe Total Time:	601 Hrs	Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:	BOX CANYON LLC	Rated Power:	
Operator:	BLACKHILL BALLOONS	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	CUT ,5602 ft msl	Distance from Accident Site:	
Observation Time:	08:15 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	64°C / 37°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	07:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Grass/turf
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Minor
Passenger Injuries:	1 Serious, 10 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 11 None	Latitude, Longitude:	43.760089,-103.599754(est)

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	DAN MCKINNEY; RAPID CITY , SD
Original Publish Date:	October 17, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=50247

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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](#).