



Aviation Investigation Final Report

Location: Security, Colorado Accident Number: CEN14CA215

Date & Time: April 19, 2014, 08:15 Local Registration: N15095

Aircraft: FIREFLY 8B-15 Aircraft Damage: None

Defining Event: Hard landing **Injuries:** 1 Serious, 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported the wind was from the north-northwest at 6 knots when they departed and the balloon traveled to the southeast as expected. In they descended to land the wind velocity increased to 20 plus knots and the wind changed 90 degrees in direction moving them to the west. The pilot attempted to land twice and aborted both landings due to the wind and terrain conditions. The pilot briefed the passenger, who was very familiar with balloon operations, that they were going to make a high wind landing. The passenger stated he crouched down in the basket for the landing and as the triangular basket touched down and turned to its flat side, he felt his ankle roll. The basket lay down and once the balloon stopped they crawled out of the basket. The passenger stated he knew he injured his ankle and a couple days later he was diagnosed with a fractured tibia.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: An unexpected increase in wind velocity which resulted in a hard landing and the subsequent passenger injury.

Findings

Environmental issues High wind - Effect on operation

Environmental issues Sudden wind shift - Effect on operation

Page 2 of 5 CEN14CA215

Factual Information

History of Flight

Enroute	Other weather encounter
Landing-flare/touchdown	Hard landing (Defining event)

Pilot Information

Certificate:	Private	Age:	64
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:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 22, 2012
Flight Time:	412 hours (Total, all aircraft), 412 hours (Total, this make and model), 412 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	FIREFLY	Registration:	N15095
Model/Series:	8B-15	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	F8B-2027
Landing Gear Type:	None	Seats:	0
Date/Type of Last Inspection:		Certified Max Gross Wt.:	1900 lbs
Time Since Last Inspection:		Engines:	0
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:	HOWES SKIP	Rated Power:	
Operator:	HOWES SKIP	Operating Certificate(s) Held:	None

Page 3 of 5 CEN14CA215

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	COS,6187 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	08:54 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 7000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 8500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	15°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Colorado Spring, CO	Type of Flight Plan Filed:	None
Destination:	Colorado Spring, CO	Type of Clearance:	None
Departure Time:	07:10 Local	Type of Airspace:	Class C

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	None
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 None	Latitude, Longitude:	38.75111,-104.711387

Page 4 of 5 CEN14CA215

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	Phillip Potter; FAA - FSDO; Denver, CO
Original Publish Date:	May 21, 2014
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=89109

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.

Page 5 of 5 CEN14CA215