



National Transportation Safety Board Aviation Accident Final Report

Location:	Placitas, NM	Accident Number:	WPR19TA005
Date & Time:	10/10/2018, 0943 MDT	Registration:	N7252H
Aircraft:	Balloon Works FIREFLY 7	Aircraft Damage:	None
Defining Event:	Controlled flight into terr/obj (CFIT)	Injuries:	2 Serious, 1 None
Flight Conducted Under:	Part 91: General Aviation - Air Race/Show		

Analysis

The private pilot reported that, as he descended and maneuvered the balloon to check the wind for landing, the balloon impacted a hill that was higher than what he expected. He reported that the balloon's airspeed was between 15 and 20 mph when the collision occurred. Both passengers sustained a serious injury during the impact with the hill. Following the impact, the pilot initiated a burn to gain altitude, and shortly after, he landed the balloon with the assistance of his ground crew.

The pilot reported no mechanical failures or malfunctions with the balloon that would have precluded normal operation.

Probable Cause and Findings

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

The pilot's failure to properly estimate the height of terrain while descending the balloon, which resulted in the balloon impacting a hill and passengers sustaining serious injuries.

Findings

Personnel issues	Situational awareness - Pilot (Cause) Expectation/assumption - Pilot
Environmental issues	Mountainous/hilly terrain - Effect on operation (Cause)

Factual Information

On October 10, 2018, about 0943 mountain daylight time, a Balloon Works Firefly 7-15 balloon, N7252H, experienced a hard landing in a field about 4 miles west of Placitas, New Mexico. The pilot was not injured and the two passengers sustained serious injuries. The balloon was not damaged. The balloon was registered to and operated by the pilot under the provisions of Title 14 *Code of Federal Regulations* Part 91, as a personal flight. Visual meteorological conditions prevailed, and no flight plan was filed for the flight that departed the Albuquerque Balloon Fiesta, Albuquerque, New Mexico, about 0851. The flight's destination was a landing area that was near the accident site.

According to the pilot, as he descended and maneuvered the balloon to check the wind for landing, he inadvertently collided with a hill that was at a higher elevation than what he expected. He reported that the balloon's airspeed was between 15 to 20 mph during the collision. The balloon impacted the terrain firmly and both passengers sustained a broken ankle. The pilot subsequently landed the balloon uneventfully.

The forecast wind at Albuquerque, located 17 nautical miles from the accident site, was 4 knots, while the wind reported by the pilot was between 6 to 8 knots. The pilot reported no mechanical failure or malfunction with the balloon that would have precluded normal operation.

History of Flight

Approach	Controlled flight into terr/obj (CFIT) (Defining event)
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Pilot Information

Certificate:	Private	Age:	52, Male
Airplane Rating(s):	None	Seat Occupied:	None
Other Aircraft Rating(s):	None	Restraint Used:	
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:	03/19/2017
Flight Time:	(Estimated) 437.8 hours (Total, all aircraft), 437.8 hours (Total, this make and model), 437.8 hours (Pilot In Command, all aircraft), 9.9 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1.4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Balloon Works	Registration:	N7252H
Model/Series:	FIREFLY 7 15	Aircraft Category:	Balloon
Year of Manufacture:	2001	Amateur Built:	No
Airworthiness Certificate:	Balloon	Serial Number:	F7-1103
Landing Gear Type:	None	Seats:	
Date/Type of Last Inspection:	07/30/2018, 100 Hour	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	
Airframe Total Time:	425.3 Hours at time of accident	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	On file	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ABQ, 5355 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	1552 UTC	Direction from Accident Site:	21°
Lowest Cloud Condition:	Few / 5000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	11° C / 2° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Albuquerque, NM	Type of Flight Plan Filed:	None
Destination:	Placitas, NM	Type of Clearance:	None
Departure Time:	0851 MDT	Type of Airspace:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	None
Passenger Injuries:	2 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious, 1 None	Latitude, Longitude:	35.307500, -106.491111 (est)

Administrative Information

Investigator In Charge (IIC):	Albert P Nixon	Report Date:	12/16/2019
Additional Participating Persons:	Ray Romero; Federal Aviation Administration; Albuquerque, NM		
Publish Date:	12/16/2019		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=98448		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).