



# Aviation Investigation Final Report

<b>Location:</b>	Anderson, South Carolina	<b>Accident Number:</b>	ERA23LA391
<b>Date &amp; Time:</b>	September 3, 2023, 09:30 Local	<b>Registration:</b>	N192HH
<b>Aircraft:</b>	Balloon Works Firefly 7	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision with terr/obj (non-CFIT)	<b>Injuries:</b>	1 Minor, 1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot of the balloon reported that before the flight, the reported wind direction called for a favorable path with many available landing areas; however, during the flight the wind shifted and the balloon traveled over congested living areas and neighborhoods. As he was looking for a place to land the wind was light and variable. He attempted an approach to a cul-de-sac; however, spectators were parked there, preventing a landing. He aborted the approach and tried another to a corner field. That approach was also aborted due to powerlines in the vicinity. He attempted another approach to a “small area” and the balloon’s envelope caught tree limbs during the descent. After becoming briefly suspended in the tree branches about 5 to 8 feet above the ground, the branches broke and balloon basket dropped to the ground. The passenger sustained a minor injury, the pilot was not injured. Postaccident examination of the balloon revealed substantial damage to several fabric panels and two suspension cables. The pilot reported that there were no preaccident mechanical malfunctions or failures 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 avoid trees during the descent for landing, resulting in substantial damage to the balloon.

## Findings

<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Aircraft</b>	Descent/approach/glide path - Not attained/maintained
<b>Environmental issues</b>	Tree(s) - Response/compensation

## Factual Information

### History of Flight

<b>Landing</b>	Collision with terr/obj (non-CFIT) (Defining event)
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### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	55, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	None
<b>Other Aircraft Rating(s):</b>	Balloon; Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	April 18, 2023
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	August 10, 2023
<b>Flight Time:</b>	4500 hours (Total, all aircraft), 127 hours (Total, this make and model), 3800 hours (Pilot In Command, all aircraft), 65 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Balloon Works	<b>Registration:</b>	N192HH
<b>Model/Series:</b>	Firefly 7 15	<b>Aircraft Category:</b>	Balloon
<b>Year of Manufacture:</b>	1992	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Balloon	<b>Serial Number:</b>	F7-781
<b>Landing Gear Type:</b>	None	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	May 4, 2023 Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	0
<b>Airframe Total Time:</b>	286 Hrs at time of accident	<b>Engine Manufacturer:</b>	
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KAND,773 ft msl	<b>Distance from Accident Site:</b>	2 Nautical Miles
<b>Observation Time:</b>	09:56 Local	<b>Direction from Accident Site:</b>	240°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.17 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 19°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Anderson, SC	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Anderson, SC	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Minor, 1 None	<b>Latitude, Longitude:</b>	34.51806,-82.67222(est)

## Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	Daryl McMillan; FAA/FSDO; Columbia, SC
Original Publish Date:	January 25, 2024
Last Revision Date:	
Investigation Class:	<a href="#">Class 4</a>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=193306">https://data.nts.gov/Docket?ProjectID=193306</a>

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