



# Aviation Investigation Final Report

<b>Location:</b>	Albany, Texas	<b>Accident Number:</b>	CEN24LA093
<b>Date &amp; Time:</b>	January 13, 2024, 09:00 Local	<b>Registration:</b>	N2582U
<b>Aircraft:</b>	Balloon Works Firefly 7-15	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Hard landing	<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that he was unable to arrest the balloon's descent during a high wind landing approach, during which the balloon contacted trees. The balloon sustained substantial damage to the envelope and load tape. The pilot sustained a serious injury when he was ejected from the basket during the hard landing.

The pilot stated that there were no preimpact mechanical malfunctions or failures 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 maintain a proper descent rate during the landing approach in a high wind condition.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Descent rate - Not attained/maintained
<b>Environmental issues</b>	High wind - Effect on operation

## Factual Information

### History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
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### Pilot Information

Certificate:	Private	Age:	31,Male
Airplane Rating(s):	None	Seat Occupied:	None
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	None None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 6, 2023
Flight Time:	(Estimated) 38 hours (Total, all aircraft), 36 hours (Pilot In Command, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Balloon Works	Registration:	N2582U
Model/Series:	Firefly 7-15	Aircraft Category:	Balloon
Year of Manufacture:	1995	Amateur Built:	
Airworthiness Certificate:	Balloon	Serial Number:	7879-3-5
Landing Gear Type:	None	Seats:	3
Date/Type of Last Inspection:	May 1, 2023 Annual	Certified Max Gross Wt.:	1050 lbs
Time Since Last Inspection:		Engines:	0
Airframe Total Time:	119 Hrs 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

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KABI, 1787 ft msl	<b>Distance from Accident Site:</b>	27 Nautical Miles
<b>Observation Time:</b>	08:52 Local	<b>Direction from Accident Site:</b>	215°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	14 knots / 20 knots	<b>Turbulence Type Forecast/Actual:</b>	Unknown / Unknown
<b>Wind Direction:</b>	210°	<b>Turbulence Severity Forecast/Actual:</b>	Unknown / Unknown
<b>Altimeter Setting:</b>	29.9 inches Hg	<b>Temperature/Dew Point:</b>	7°C / -9°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Abilene, TX	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Albany, TX	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	07:42 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious	<b>Latitude, Longitude:</b>	32.78288,-99.365959

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Fox, Andrew
<b>Additional Participating Persons:</b>	John H. Sims; Federal Aviation Administration - Lubbock FSDO ; Lubbock, TX
<b>Original Publish Date:</b>	April 19, 2024
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=193681">https://data.nts.gov/Docket?ProjectID=193681</a>

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](#).