



Aviation Investigation Final Report

Location:	Canandaigua, New York	Accident Number:	CEN23LA293
Date & Time:	July 8, 2023, 19:30 Local	Registration:	N9184D
Aircraft:	AEROSTAR INTERNATIONAL INC RX 8	Aircraft Damage:	None
Defining Event:	Hard landing	Injuries:	1 Serious, 2 None
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Analysis

Following an uneventful flight, the pilot descended the balloon at a steep angle into a field lined with trees. The pilot had briefed the passengers on the proper brace position before the flight and then again just before the landing. The basket touched down firmly, slid about 15 ft, and stopped upright. The passenger reported that the hard landing pushed her knee into the gas tank that she was standing next to. The passenger stated that after the first hard landing the balloon bounced again and then tipped over. Following the landing the passenger experienced pain in her leg. It was later determined the passenger had a broken left tibia. The pilot stated that there were no mechanical malfunctions with the balloon that would have precluded normal operations.

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 the proper descent rate during the balloon's approach to landing, which resulted in a hard landing, the passenger's leg hitting the gas tank, and serious injury.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Descent rate - Not attained/maintained

Factual Information

History of Flight

Approach	Miscellaneous/other
Landing-flare/touchdown	Hard landing (Defining event)

Pilot Information

Certificate:	Commercial	Age:	61,Male
Airplane Rating(s):	None	Seat Occupied:	None
Other Aircraft Rating(s):	Balloon	Restraint Used:	None
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	December 3, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 28, 2023
Flight Time:	(Estimated) 1189 hours (Total, all aircraft), 400 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	AEROSTAR INTERNATIONAL INC	Registration:	N9184D
Model/Series:	RX 8	Aircraft Category:	Balloon
Year of Manufacture:	1994	Amateur Built:	
Airworthiness Certificate:	Balloon	Serial Number:	RX8-3196
Landing Gear Type:	None	Seats:	1
Date/Type of Last Inspection:	April 24, 2023 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	0
Airframe Total Time:	406.5 Hrs as of last inspection	Engine Manufacturer:	
ELT:		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 (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KPEO, 877 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	18:53 Local	Direction from Accident Site:	139°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.85 inches Hg	Temperature/Dew Point:	25°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Canandaigua, NY (KIUA)	Type of Flight Plan Filed:	None
Destination:	Canandaigua, NY (KIUA)	Type of Clearance:	None
Departure Time:	18:15 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	None
Passenger Injuries:	1 Serious, 1 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Serious, 2 None	Latitude, Longitude:	42.843611,-77.343333

Administrative Information

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	William J. Abbott; FAA FSDO; Rocheste, NY
Original Publish Date:	November 9, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=192589

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](#).