



Aviation Investigation Final Report

Location:	BROOKHAVEN, New York	Accident Number:	NYC98LA199
Date & Time:	August 15, 1998, 18:30 Local	Registration:	N3141C
Aircraft:	Balloon Works AX-9	Aircraft Damage:	None
Defining Event:		Injuries:	1 Serious, 6 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

The hot air balloon was on a local flight with a pilot and six passengers. The passengers were instructed on how to flex their knees at landing. The pilot reported that prior to landing, he instructed a passenger to either hang onto the balloon structure or him. The passenger remembered the pilot saying it would be a hard landing and to hang onto him, which she did. Upon touchdown, she lost her grip, and sat or fell to the bottom of the basket. As she was going down, her right foot was pressed against a fuel tank and did not move. She fractured some bones in her right ankle. The pilot reported that he flexed his knees at touchdown as was his standard practice, and remained standing along with the other five passengers. The pilot described the landing as soft, and another balloon pilot who watched the landing said it did not appear to be hard. The injured passenger and another passenger onboard the balloon described the landing as hard, with a bounce. The winds were described as 5 to 6 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the passenger to comply with the pilot briefing, and properly brace herself for landing.

Findings

Occurrence #1: MISCELLANEOUS/OTHER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) PASSENGER BRIEFING - NOT COMPLIED WITH - PASSENGER

Factual Information

On August 15, 1998, about 1830 eastern daylight time, a passenger was seriously injured when a Firefly AX-9 hot air balloon, N3141C, landed in Brookhaven, New York. The certificated commercial pilot and five other passengers were not injured. The balloon was not damaged. Visual meteorological conditions prevailed for the local sightseeing flight. No flight plan had been filed for the flight conducted under 14 CFR Part 91.

The pilot reported the winds were from the south and light. He departed on a short flight, which was reported as uneventful. He performed a "standup" landing in an open field. He reported that he had instructed the passengers to flex their knees during the landing to absorb any shock of touchdown. During the approach to landing, he instructed one passenger to hang onto the structure in the basket, or to him, during the landing. The passenger elected to hang on to the pilot and upon touchdown, lost her grip and sat down on the bottom of the basket. The pilot reported that during the landing, he flexed his knees as was normal with him. When he realized a passenger was injured, he called for an ambulance.

The injured passenger reported the balloon flight was nice until the "crash landing." She reported the pilot told the passengers that, "he had to get down in a hurry", and instructed her to put her arms around him and, "hang on because they were going to hit hard." After touchdown, which she described as hard, she sat down on the bottom of the basket. At the same time, her right foot, which was against the fuel tanks, did not change from that position and she heard the bones in her ankle crunch. There was no apology from the balloon pilot after the landing. Prior to leaving the balloon, she had some champagne, and then was transported via ambulance to a local hospital.

The injured passenger reported that she was the only one who fell down, but added that some of the other passengers were bruised. She said her foot was against a canister in the basket and she could not move back. She did not remember it being windy when the accident occurred.

Another passenger in the balloon reported the, "balloon ride was wonderful until it became a disaster." She said the balloon, "came down real hard, bounced, [and] came down hard again." She said the injured passenger fell down upon landing, and her foot got caught on a fuel tank. The injured passenger did not have anything to hang onto, as the basket was crowded. She hung onto the pilot's waist, and after she fell, she was in pain. The passenger did not remember the pilot saying anything prior to the landing, and was surprised that the balloon bounced after it touched down.

Another balloon pilot reported he was above and to the side of the accident balloon when it landed. It looked like a short field landing to an open field. The landing looked normal

and not hard. The winds were 5 to 6 knots.

According to medical records of the injured passenger:

"Examination shows a fracture, dislocation of the ankle with fracture seen through the lateral and posterior malleoli with dislocation of the foot seen posteriorly along with posterior displacement of the fracture fragments. Remainder of bones and joints are intact."

The pilot reported that the basket was certificated for 10 occupants.

The accident was reported to the Safety Board by the injured passenger's attorney on November 1, 1999.

Pilot Information

Certificate:	Commercial	Age:	67,Male
Airplane Rating(s):	None	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	May 13, 1999
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2000 hours (Total, all aircraft), 2000 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Balloon Works	Registration:	N3141C
Model/Series:	FIREFLY AX-9 FIREFLY AX	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	F9-065
Landing Gear Type:	Hull	Seats:	0
Date/Type of Last Inspection:	May 7, 1998 Annual	Certified Max Gross Wt.:	3285 lbs
Time Since Last Inspection:	20 Hrs	Engines:	Unknown
Airframe Total Time:	87 Hrs	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	DONALD S. CAPLAN	Rated Power:	
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	BALLOONPORT	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ISP ,99 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	18:53 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	Scattered / 10000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(HWV)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	Vegetation
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	None
Passenger Injuries:	1 Serious, 5 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 6 None	Latitude, Longitude:	40.77946,-72.909149(est)

Administrative Information

Investigator In Charge (IIC): Hancock, Robert

Additional Participating Persons: JOSEPH MARERO; FARMINGDALE , NY

Original Publish Date: August 3, 2000

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=47772>

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](#).