



Aviation Investigation Final Report

Location:	Chama, New Mexico	Accident Number:	DEN05LA004
Date & Time:	October 3, 2004, 11:20 Local	Registration:	DOYES
Aircraft:	Worner Balloon Works NL-1000	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Serious
Flight Conducted Under:	Part 91: General aviation - Air race/show		

Analysis

According to the pilot, while participating in an endurance competition, he heard a "loud" bang and saw a "flash." He then noticed a large "L" shaped tear in the balloon's envelope as the balloon began to descend "rapidly." The balloon impacted mountainous terrain at an elevation of 8,000 feet. The pilot and passenger each sustained a broken ankle.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the lightning strike and subsequent failure of the balloon's envelope, resulting in an uncontrolled descent and impact with terrain.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: CRUISE

Findings

1. (C) WEATHER CONDITION - LIGHTNING STRIKE

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CRUISE

Findings

2. (C) AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - MOUNTAINOUS/HILLY
4. OBJECT - TREE(S)

Factual Information

On October 3, 2004, at approximately 1120 mountain daylight time, a Worner Balloon Works NL-1000 helium-filled gas balloon, German registration DOYES, piloted by a private pilot, was destroyed when it was struck by lightning while in cruise flight at 12,000 feet msl in the vicinity of Chama, New Mexico. Visual meteorological conditions prevailed at the time of the accident. The cross-country flight was being conducted under the provisions of Title 14 CFR Part 91 without a flight plan. The pilot and passenger received serious injuries. The flight originated at the Albuquerque Balloon Fiesta Park, Albuquerque, New Mexico, on October 2, 2004, at approximately 2020.

According to the pilot, they were participating in the 2004 Albuquerque Balloon Fiesta's Endurance Competition. The pilot stated that, while en route over the Chama area, he heard a "loud" bang and saw a "flash." He then noticed a large "L" shaped tear in the balloon's envelope as the balloon began to descend "rapidly." The balloon impacted mountainous terrain at an elevation of 8,000 feet, approximately 1/2 mile east of Chama. The pilot and passenger each sustained a broken ankle. The lightning strike and ground impact forces destroyed the balloon.

The pilot did not provide a Pilot Operator Aircraft Accident Report (NTSB form 6120.1/2) for this accident report.

Pilot Information

Certificate:	Private	Age:	54, Male
Airplane Rating(s):	None	Seat Occupied:	
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	September 12, 2004
Flight Time:	1200 hours (Total, all aircraft), 301 hours (Total, this make and model), 7 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Worner Balloon Works	Registration:	DOYES
Model/Series:	NL-1000	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1064
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	
Airframe Total Time:	250 Hrs	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	Bruce Wade Hale	Rated Power:	
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	KSKX,7091 ft msl	Distance from Accident Site:	47 Nautical Miles
Observation Time:	11:35 Local	Direction from Accident Site:	122°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.4 inches Hg	Temperature/Dew Point:	16°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Albuquerque, NM	Type of Flight Plan Filed:	None
Destination:	Albuquerque, NM	Type of Clearance:	VFR
Departure Time:	20:20 Local	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Serious	Aircraft Fire:	In-flight
Ground Injuries:	N/A	Aircraft Explosion:	In-flight
Total Injuries:	2 Serious	Latitude, Longitude:	36.893611,-106.488334

Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	Brian Iorg; Federal Aviation Administration; Albuquerque , NM
Original Publish Date:	January 31, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=60287

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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](#).