



Aviation Investigation Final Report

Location:	Anderson, South Carolina	Accident Number:	MIA08CA176
Date & Time:	August 31, 2008, 09:00 Local	Registration:	N61ZL
Aircraft:	Cameron ZL-60	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was participating in a balloon competition event. He overflow his second target and climbed to 6,800 feet en-route to the third target. The basket started oscillating from right to left and he became disoriented. The pilot could not focus on the gauges and could not determine if he was climbing or descending. He thought he was descending, but the balloon was climbing. In order to arrest his perceived descent, the pilot continued to operate both burners which further increased his rate of ascent. During the climb he noticed that the parachute at the top of the balloon had shifted to the left and was letting out hot air. He tried to re-seal the parachute by adding more heat with the burners, and realized the balloon was in a rapid climb. The air in the balloon was evacuated and the balloon began to streamer, resulting in a rapid descent. The basket collided with a tree and the pilot was ejected from the basket. Examination of the envelope/balloon revealed the balloon was intact. All damage to the balloon was related to heat damage from the improper use of the burners or from impact damage from the tree. No precrash mechanical anomalies were noted during the inspection.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper use of the balloon burners.

Findings

Aircraft	(general) - Incorrect use/operation
Personnel issues	Use of equip/system - Pilot

Factual Information

History of Flight

Enroute-climb to cruise	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial	Age:	52, 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:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 1, 2007
Flight Time:	680 hours (Total, all aircraft), 72 hours (Total, this make and model), 680 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cameron	Registration:	N61ZL
Model/Series:	ZL-60	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	6495
Landing Gear Type:	None	Seats:	1
Date/Type of Last Inspection:	June 1, 2008 Annual	Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:	27 Hrs	Engines:	
Airframe Total Time:	27 Hrs as of last inspection	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	Charles L. Walz	Rated Power:	
Operator:	Charles L. Walz	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AND,782 ft msl	Distance from Accident Site:	
Observation Time:	08:56 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	27°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anderson, SC (NONE)	Type of Flight Plan Filed:	None
Destination:	Anderson, SC (NONE)	Type of Clearance:	None
Departure Time:	08:00 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	34.494445,-82.709167

Administrative Information

Investigator In Charge (IIC):	Smith, Carrol
Additional Participating Persons:	Wayne F Robinson; Columbia FAA/FSDO; Columbia, SC
Original Publish Date:	January 22, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=68834

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