

Aviation Investigation Final Report

Location: Terre Haute, Indiana Accident Number: CEN09CA162

Date & Time: February 8, 2009, 17:30 Local Registration: N7524J

Aircraft: Cameron Balloons V-77 Aircraft Damage: Substantial

Defining Event: Powerplant sys/comp malf/fail **Injuries:** 1 Minor, 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The balloon pilot and passenger departed on a personal flight and flew for 30-40 minutes, during which the pilot performed a simulated "pilot light failure" emergency procedure. The pilot performed the simulation so as to "teach" the passenger the procedure. The pilot light was reportedly not extinguished during or after the simulation. Following the simulation, the pilot began a stair-step climb for the approach to a landing area during which the pilot light extinguished at the last stop of the climb. The pilot said he had three sources of ignition aboard: a flint spark provided by the balloon manufacturer, a grill lighter, and a wind proof grill lighter. He could not relight the pilot light after three attempts, and also attempted to light fuel from the whisper and blast valves. The pilot stated that fuel emanated from these valves during the relight attempts. There was about 25 gallons of fuel remaining at the time of the accident. The pilot then pulled the "red line or deflation line" to deflate the balloon. The balloon descended into 180-foot-high power lines and caught fire, which consumed the basket and envelope. The pilot was uninjured and the passenger received minor injuries. The pilot accumulated a total flight time of 30 hours in lighter-than-air aircraft, of which 15 hours were in the accident make and model. He last performed a "pilot light failure" emergency procedure about 5 months prior to the accident flight.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of the burner pilot light during approach to the landing area and the pilot's failure to relight the burner using alternate sources.

Findings

Aircraft (general) - Inoperative

Environmental issues Wire - Contributed to outcome

Personnel issues Use of equip/system - Pilot

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Factual Information

History of Flight

Enroute-cruise	Simulated/training event	
Approach	Powerplant sys/comp malf/fail (Defining event)	
Approach	Collision with terr/obj (non-CFIT)	
Post-impact	Fire/smoke (post-impact)	

Pilot Information

Certificate:	Commercial; Private	Age:	20
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	January 3, 2008
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	275 hours (Total, all aircraft), 15 hours (Total, this make and model), 195 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Cameron Balloons	Registration:	N7524J
Model/Series:	V-77	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5837
Landing Gear Type:	None	Seats:	
Date/Type of Last Inspection:	August 6, 2008 Annual	Certified Max Gross Wt.:	1540 lbs
Time Since Last Inspection:		Engines:	0
Airframe Total Time:	314 Hrs as of last inspection	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	Pending	Rated Power:	
Operator:	Pilot	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	1
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Terre Haute, IN (HUF)	Type of Flight Plan Filed:	None
Destination:	Terre Haute, IN	Type of Clearance:	None
Departure Time:	17:00 Local	Type of Airspace:	

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Airport Information

Airport:	Terre Haute International Airp HUF	Runway Surface Type:	
Airport Elevation:	160 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	Both in-flight and on-ground
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	39.451389,-87.307502(est)

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Administrative Information

Investigator In Charge (IIC):	Gallo, Mitchell
Additional Participating Persons:	James Martin; Federal Aviation Adminstration; Plainfield, IN
Original Publish Date:	June 11, 2009
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=73343

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.

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