

Aviation Investigation Final Report

Location: LEXINGTON, Kentucky Accident Number: ATL90LA104

Date & Time: April 22, 1990, 19:30 Local Registration: N1512T

Aircraft: BALLOON WORKS 7B Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

N1512T BECAME TRAPPED IN A DUST DEVIL AT CRUISE FLIGHT WHILE PARTICIPATING IN A BALLOON RALLY IN LEXINGTON, KENTUCKY. THE BALLOON STARTED A 900 FPM TWISTING CLIMB UNTIL IT REACHED 4000 FEET. AT THE TOP OF THE DUST DEVIL, THE BALLOON STARTED A RAPID DESCENT, WHICH THE PILOT COULD NOT CONTROL. THE BURNER ASSEMBLY WAS DAMAGED DURING THE CLIMB AND WOULD ONLY PRODUCE PARTIAL POWER. THE PILOT'S ATTEMPT TO CONTROL THE RATE OF DESCENT FAILED. ABOUT 50 FEET ABOVE THE GROUND, THE PILOT CLOSED OFF THE BURNER PILOT. THE BALLOON CRASH LANDED BETWEEN TWO HOMES. EXAMINATION DISCLOSED SEVERAL TORN PANELS, BROKEN JUMPER CORDS, A BROKEN CENTER CORD, AND SEVERAL FRAYED CENTER CORDS. SUBSEQUENT TENSILE TESTS PROVED THAT THE CORDS WERE WITHIN SPECIFICATION AND THEY FAILED IN OVERLOAD. DUST DEVIL ACTIVITY NORMALLY CAN NOT BE FORECASTED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE OVERLOAD FAILURE OF SEVERAL JUMPER CORDS. FACTOR(S) WERE INADVERTENT ENCOUNTER WITH UNFAVORABLE WIND (DUST DEVIL). SUBSEQUENTLY, THE PILOT WAS UNABLE TO CONTROL THE RATE OF DESCENT.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: CRUISE - NORMAL

Findings

1. (C) WEATHER CONDITION - UNFAVORABLE WIND

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: OTHER

Findings

2. (C) BALLOON EQUIPMENT, SUSPENSION SYSTEM/CABLES - OVERLOAD

Occurrence #3: LOSS OF CONTROL - IN FLIGHT Phase of Operation: DESCENT - UNCONTROLLED

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - GROUND

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Factual Information

Pilot Information

Certificate:	Commercial	Age:	24.Male
		3	,
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):		Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	190 hours (Total, all aircraft), 190 hours (Total, this make and model), 160 hours (Pilot In Command, all aircraft), 19 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

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Aircraft Make:	BALLOON WORKS	Registration:	N1512T
Model/Series:	7B 7B	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	F7B-033
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:	0 Hrs	Engines:	Unknown
Airframe Total Time:		Engine Manufacturer:	UNKNOWN
ELT:	Not installed	Engine Model/Series:	UNKNOWN
Registered Owner:		Rated Power:	
Operator:	SEAN R. ASKREN	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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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:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	19:00 Local	Type of Airspace:	

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

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Administrative Information

Investigator In Charge (IIC):	Phillip, Powell
Additional Participating Persons:	
Original Publish Date:	December 8, 1992
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=8235

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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