



# Aviation Investigation Final Report

<b>Location:</b>	PURCELLVILLE, Virginia	<b>Accident Number:</b>	BF088LA066
<b>Date &amp; Time:</b>	July 10, 1988, 19:30 Local	<b>Registration:</b>	N7108
<b>Aircraft:</b>	BALLOON WORKS AX-8	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 1 Minor, 4 None
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

ACCORDING TO THE PLT, A WIND GUST OCCURRED DURING LIFT OFF. A PASSENGER SAID THE BALLOON WENT Laterally ABOUT 50 TO 75 YDS WHERE IT STRUCK SEVERAL OBSTACLES; A FENCE, A UTILITY LINE, AND A TREE. THE PLT SAID HE CONTINUED THE TAKEOFF AND THE BALLOON EVENTUALLY BECAME AIRBORNE. HOWEVER, ACCORDING TO THE PLT, THE WINDS BEGAN INCREASING SO HE DECIDED TO LAND. THE PLT SAID HE LANDED HARD AND THE FORCE EJECTED HIM AND A PAX FROM THE GONDOLA. AFTER THE PLT WAS EJECTED, THE BALLOON LIFTED OFF AGAIN WITH FOUR PASSENGERS ABOARD. THE PASSENGER SAID THE BALLOON LIFTED TO ABOUT 100 FT AGL WHEN HE HEARD THE PLT YELLING TO PULL THE VALVE LINE, WHICH HE DID. THE PASSENGER SAID THE BALLOON DESCENDED RAPIDLY AND LANDED HARD; THE BALLOON COLLAPSED ON THE GONDOLA.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT LANDED THE HOT AIR BALLOON AT AN EXCESSIVE DESCENT RATE WHICH RESULTED IN A HARD LANDING. WIND GUST ARE A CONTRIBUTING FACTOR.

## Findings

Occurrence #1: HARD LANDING  
Phase of Operation: LANDING

#### Findings

1. (F) WEATHER CONDITION - GUSTS
2. (C) WEATHER EVALUATION - INADEQUATE - PILOT IN COMMAND
3. (F) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
4. (C) DESCENT - EXCESSIVE - UNQUALIFIED PERSON

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	43, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	Balloon	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	None None	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	300 hours (Total, all aircraft), 300 hours (Total, this make and model), 3 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BALLOON WORKS	<b>Registration:</b>	N7108
<b>Model/Series:</b>	AX-8 AX-8	<b>Aircraft Category:</b>	Balloon
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	F8-105
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	April 12, 1988 Annual	<b>Certified Max Gross Wt.:</b>	2020 lbs
<b>Time Since Last Inspection:</b>	11 Hrs	<b>Engines:</b>	0 Unknown
<b>Airframe Total Time:</b>	89 Hrs	<b>Engine Manufacturer:</b>	none
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	T-3
<b>Registered Owner:</b>	ROBERT O.G. THOMAS	<b>Rated Power:</b>	
<b>Operator:</b>	BALLON UNLIMITED CORP	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	IAD ,313 ft msl	<b>Distance from Accident Site:</b>	18 Nautical Miles
<b>Observation Time:</b>	18:50 Local	<b>Direction from Accident Site:</b>	145°
<b>Lowest Cloud Condition:</b>	25000 ft AGL	<b>Visibility</b>	7 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	120°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	32°C / 12°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	18:45 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	1 Serious, 1 Minor, 3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 1 Minor, 4 None	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Jones, Dennis
<b>Additional Participating Persons:</b>	DOYAL MILLER; WASHINGTON , DC
<b>Original Publish Date:</b>	June 25, 1990
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=11425">https://data.nts.gov/Docket?ProjectID=11425</a>

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