



# Aviation Investigation Final Report

<b>Location:</b>	COLUMBIA, Missouri	<b>Accident Number:</b>	CHI97LA022
<b>Date &amp; Time:</b>	November 3, 1996, 17:00 Local	<b>Registration:</b>	N5347S
<b>Aircraft:</b>	Galaxy AX8	<b>Aircraft Damage:</b>	None
<b>Defining Event:</b>		<b>Injuries:</b>	2 Serious, 3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

The balloon pilot selected an open field with two to three foot high weeds for landing. He stated that the landing was 'somewhat hard but within normal limits.' Also, he stated the basket tipped and was dragging across the field, when it contacted a three foot deep ditch. The basket came to a sudden stop after contacting the ditch, and two of the four passengers received broken arms.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's selection of unsuitable terrain for landing. Factors relating to the accident were: the ditch, which was encountered during the landing; and high vegetation, which covered the ditch making it not visible to the pilot.

## Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING

### Findings

1. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND
2. (F) TERRAIN CONDITION - HIGH VEGETATION
3. (F) TERRAIN CONDITION - DITCH
4. (F) VISUAL/AURAL DETECTION - PILOT IN COMMAND



## Factual Information

On November 3, 1996, at 1700 central standard time, a Galaxy AX8 hot air balloon, N5347S, operated by Balloon Stormers, Inc., collided with a ditch while landing in a field in Columbia, Missouri. The pilot was not injured. Two passengers on board received broken arms. The remaining two passengers were not injured. The balloon was not damaged. The 14 CFR Part 91 local flight departed from Columbia, Missouri, at 1615 cst.

The pilot reported that the local winds were approximately 10 miles per hour (mph) when the balloon was launched. He stated 45 minutes later, when they were landing, the winds had decreased to approximately 8 mph. He stated the field he selected for the landing was covered with two to three foot high weeds. He stated the balloon touched down on the edge of the field and that the landing was "somewhat hard but well within the normal limits." He reported the basket "tipped slightly" and began to drag through the weeds. He stated he was continuing to deflate the balloon when the basket contacted a three foot deep "wash-out" ditch that was not visible due to the weeds. The basket dropped into the ditch and struck the "downwind" side of the ditch which created a "very hard impact" and resulted in the basket coming to a stop. Both injured passengers received their broken bones as a result of the basket contacting the ditch.

The accident location was inspected by an Inspector from the Kansas City Flight Standards District Office. This inspector noted that along the flight path, the weed covered field was preceded by a level, short grass covered field. He stated that the field in which the landing was actually made was rough, weed covered and downsloping.

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	46, Male
<b>Airplane Rating(s):</b>	None	<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 Unknown	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1400 hours (Total, all aircraft), 37 hours (Total, this make and model), 1400 hours (Pilot In Command, all aircraft), 36 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Galaxy	<b>Registration:</b>	N5347S
<b>Model/Series:</b>	AX8 AX8	<b>Aircraft Category:</b>	Balloon
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	GLX-1038
<b>Landing Gear Type:</b>		<b>Seats:</b>	0
<b>Date/Type of Last Inspection:</b>	May 12, 1996 Annual	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>	74 Hrs	<b>Engines:</b>	Unknown
<b>Airframe Total Time:</b>	112 Hrs	<b>Engine Manufacturer:</b>	
<b>ELT:</b>		<b>Engine Model/Series:</b>	
<b>Registered Owner:</b>	BALLOON STORMERS	<b>Rated Power:</b>	
<b>Operator:</b>		<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>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	15 miles
<b>Lowest Ceiling:</b>	Overcast / 4500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	315°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	16°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>	16:15 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>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	None
<b>Passenger Injuries:</b>	2 Serious, 2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Serious, 3 None	<b>Latitude, Longitude:</b>	39.020267,-92.299453(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Sullivan, Pamela
<b>Additional Participating Persons:</b>	STEVE DAVIS; KANSAS CITY , MO
<b>Original Publish Date:</b>	April 15, 1998
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=10489">https://data.ntsb.gov/Docket?ProjectID=10489</a>

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