



# Aviation Investigation Final Report

<b>Location:</b>	ALTOONA, Iowa	<b>Accident Number:</b>	CHI91LA292
<b>Date &amp; Time:</b>	September 7, 1991, 07:30 Local	<b>Registration:</b>	N4055T
<b>Aircraft:</b>	BALLOON WORKS FIREFLY X-7	<b>Aircraft Damage:</b>	None
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE PILOT SAID THAT WHILE ATTEMPTING A HIGH WIND LANDING, THE GONDOLA HIT THE TERRAIN HARD, AND TIPPED OVER. A PASSENGER SUFFERED A BROKEN ANKLE DURING THE LANDING.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: WEATHER EVALUATION MISJUDGED AND OVERCONFIDENCE IN PERSONAL ABILITY. A FACTOR RELATED TO THE ACCIDENT WAS HIGH WINDS.

## Findings

Occurrence #1: HARD LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

1. (F) WEATHER CONDITION - HIGH WIND
2. (C) WEATHER EVALUATION - MISJUDGED - PILOT IN COMMAND
3. (C) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	44, 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>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	None None	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	247 hours (Total, all aircraft), 200 hours (Total, this make and model), 247 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BALLOON WORKS	<b>Registration:</b>	N4055T
<b>Model/Series:</b>	FIREFLY X-7 FIREFLY X-	<b>Aircraft Category:</b>	Balloon
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	10136
<b>Landing Gear Type:</b>		<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	1600 lbs
<b>Time Since Last Inspection:</b>	0 Hrs	<b>Engines:</b>	Unknown
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	
<b>Registered Owner:</b>		<b>Rated Power:</b>	
<b>Operator:</b>	KING, GARY D.	<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>	DSM ,957 ft msl	<b>Distance from Accident Site:</b>	10 Nautical Miles
<b>Observation Time:</b>	07:00 Local	<b>Direction from Accident Site:</b>	230°
<b>Lowest Cloud Condition:</b>	Scattered / 25000 ft AGL	<b>Visibility</b>	5 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	150°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	-18°C / -18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	ALTOONA , IA	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	07:10 Local	<b>Type of Airspace:</b>	

## 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>	1 Serious, 1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 2 None	<b>Latitude, Longitude:</b>	41.650993,-93.470733(est)

## Administrative Information

**Investigator In Charge (IIC):** Hruban, John

**Additional Participating Persons:** MIKE MCPEAK;

**Original Publish Date:** December 4, 1992

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=15185>

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