



# Aviation Investigation Final Report

<b>Location:</b>	STERLING, Colorado	<b>Accident Number:</b>	DEN01LA099
<b>Date &amp; Time:</b>	May 15, 2001, 07:45 Local	<b>Registration:</b>	N4031A
<b>Aircraft:</b>	Aerostar RX-8	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

At the completion of a local area passenger flight, the balloon encountered a temperature inversion during approach. The pilot did not adequately adjust for the increased rate of descent and a hard landing occurred. The pilot was thrown from the balloon and one of the passengers jumped. The balloon then ascended and the balloon crew chief talked the remaining passenger through a successful landing. The pilot received serious injuries and her two passengers minor injuries.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure by the pilot to control descent rate during approach to land. A factor was a temperature inversion.

## Findings

Occurrence #1: HARD LANDING  
Phase of Operation: LANDING

### Findings

1. (F) WEATHER CONDITION - TEMPERATURE INVERSION
2. (C) PROPER DESCENT RATE - NOT MAINTAINED - PILOT IN COMMAND

## Factual Information

On May 15, 2001, at 0745 mountain daylight time, an Aerostar RX-8 balloon, N4031A sustained minor damage during a hard landing at Sterling, Colorado. The private pilot received serious injuries, and her passengers minor injuries. Visual meteorological conditions prevailed for this local area flight being conducted under Title 14 CFR Part 91. No flight plan was filed. The flight departed at 0700.

According to the pilot, during approach for landing in a flat farm field, the balloon descended faster than planned due to a temperature change and increased winds. When the basket struck the ground, the pilot was thrown partially out and after a bounce the basket struck the ground again causing the pilot to be thrown completely out. The pilot said that one passenger then jumped out of the basket and she (the pilot) held on to the vent line. Due to the decrease in weight, the balloon ascended and the pilot let go of the vent line. The balloon continued to fly with one passenger (not a pilot) aboard. The crew chief talked the passenger through the process and the balloon was landed by the passenger.

The balloon sustained pyrometer cable damage during the event.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	62,Female
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	
<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>	UNK	<b>Last Flight Review or Equivalent:</b>	July 4, 2000
<b>Flight Time:</b>	344 hours (Total, all aircraft), 153 hours (Total, this make and model), 312 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Aerostar	<b>Registration:</b>	N4031A
<b>Model/Series:</b>	RX-8	<b>Aircraft Category:</b>	Balloon
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	RX8-3288
<b>Landing Gear Type:</b>		<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	May 11, 2000 Annual	<b>Certified Max Gross Wt.:</b>	1650 lbs
<b>Time Since Last Inspection:</b>	1 Hrs	<b>Engines:</b>	0
<b>Airframe Total Time:</b>	162 Hrs as of last inspection	<b>Engine Manufacturer:</b>	
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	
<b>Registered Owner:</b>	GINGER & THOMAS C. DELANEY	<b>Rated Power:</b>	
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## 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>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	10°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	13°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	STERLING, CO	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	07:00 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	2 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 2 Minor	<b>Latitude, Longitude:</b>	40.619861,-103.190368(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Wiemeyer, Norman
<b>Additional Participating Persons:</b>	DALE SHUEL; FAA FSDO; DENVER, CO
<b>Original Publish Date:</b>	November 1, 2001
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	The NTSB traveled to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=52270">https://data.ntsb.gov/Docket?ProjectID=52270</a>

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