

# **Aviation Investigation Final Report**

| Location:               | Ridgeway, Colorado                   | Accident Number:     | DEN04CA072                    |
|-------------------------|--------------------------------------|----------------------|-------------------------------|
| Date & Time:            | May 22, 2004, 08:00 Local            | <b>Registration:</b> | N60181                        |
| Aircraft:               | Lindstrand Balloons 180A             | Aircraft Damage:     | Minor                         |
| Defining Event:         |                                      | Injuries:            | 1 Serious, 2 Minor, 4<br>None |
| Flight Conducted Under: | Part 91: General aviation - Personal |                      |                               |

### Analysis

The pilot reported that while landing the wind changed directions taking his balloon up a slight draw between houses. The pilot said he elected to land on a hillside and wait for his crew. The pilot said they had been there for about a minute when a sudden gust of wind came up the draw and pushed the balloon in the air. The pilot said the balloon headed east toward a house at a rapid rate. He said the basket struck a boat, a ladder rack on a truck, and the edge of the roof of the house. The balloon then returned to the ground and was drug up a hill to its crest. At the crest of the hill the balloon again became airborne. The balloon again came down, this time on a road. The pilot said he ripped out the top to deflate the balloon. The balloon then bounced down the hillside before dragging the basket on its side for a short distance. The pilot said the balloon then came to rest and deflated. The pilot said the seriously injured passenger, on getting down in the basket, sat down hard. The pilot said the bottom of the basket sustained minor damage. The balloon envelope experienced some ripped panels. At 0752, the reported wind conditions at Montrose, Colorado, 25 miles north of the accident site were 210 degrees at 17 knots gusting to 20 knots.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the sudden wind gusts and the pilot's failure to maintain control of the balloon resulting in the balloon's basket impacting two vehicles and a house, and subsequently impacting the terrain. Factors relating to the accident were the two vehicles, the house, and the pilot's delay in taking remedial action to stop the balloon.

#### **Findings**

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER Phase of Operation: LANDING

Findings 1. (C) WEATHER CONDITION - GUSTS

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: LANDING

Findings 2. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND 3. (F) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND 4. (F) OBJECT - VEHICLE 5. (F) OBJECT - RESIDENCE

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: LANDING

Findings 6. TERRAIN CONDITION - GROUND

### **Factual Information**

On May 22, 2004, at 0800 mountain daylight time, a Lindstrand 180A hot air balloon, N60181, operated by the Bighorn Balloon Company, LLC, encountered gusting wind conditions during landing near Ridgeway, Colorado. The balloon was dragged and subsequently struck vehicles and a house before coming to rest at the bottom of a hill. One of the six passengers on board sustained a serious back injury. Two passengers sustained minor injuries. The commercial pilot and three other passengers on board the balloon were not injured. The sight-seeing flight was operating under the provisions of Title 14 CFR Part 91. Visual meteorological conditions prevailed at the time of the accident. The local flight departed at 0700.

In his written statement, the pilot reported that while landing the wind changed directions taking his balloon up a slight draw between houses. The pilot said he elected to land on a hillside and wait for his crew. The pilot said they had been there for about a minute when a sudden gust of wind came up the draw and pushed the balloon in the air. The pilot said the balloon headed east toward a house at a rapid rate. He said the basket struck a boat, a ladder rack on a truck, and the edge of the roof of the house. The balloon then returned to the ground and was drug up a hill to its crest. At the crest of the hill the balloon again became airborne. The balloon again came down, this time on a road. The balloon then bounced down the hillside before dragging the basket on its side for a short distance. The pilot said the balloon then came to rest and deflated.

In an interview statement, the pilot said that when the balloon crested the hill, it then "caught a rotor on the backside" and dropped into a bowl. The pilot said he ripped out the top. The balloon struck the ground at the bottom of the hill and stopped. The pilot said the seriously injured passenger, on getting down in the basket, sat down hard. The pilot said the bottom of the basket sustained minor damage. The balloon envelope experienced some ripped panels.

A local Marshall said that the balloon was part of festival that was going on at Ridgeway. He said the balloon was one of 12 balloons that took off about 0700. He said the balloons drifted north over the town at approximately 300 feet above the ground. The Marshall said the winds were calm when the balloons took off. He said the winds picked up significantly as the hour passed.

At 0752, the reported wind conditions at Montrose, Colorado, 25 miles north of the accident site were 210 degrees at 17 knots gusting to 20 knots.

### **Pilot Information**

| Certificate:              | Commercial  | Age:                              | 47,Male |
|---------------------------|---|-----------------------------------|---------|
| Airplane Rating(s):       | None  | Seat Occupied:                    |         |
| Other Aircraft Rating(s): | Balloon   | Restraint Used:                   |         |
| Instrument Rating(s):     | None  | Second Pilot Present:             |         |
| Instructor Rating(s):     | None  | Toxicology Performed:             | No      |
| Medical Certification:    | None  | Last FAA Medical Exam:            |         |
| Occupational Pilot:       |   | Last Flight Review or Equivalent: |         |
| Flight Time:              | 1386 hours (Total, all aircraft), 3 hours (Total, this make and model), 4 hours (Last 90 days, all<br>aircraft), 2 hours (Last 30 days, all aircraft) |                                   |         |

# Aircraft and Owner/Operator Information

| Lindstrand Balloons          | Registration:  | N60181  |
|------------------------------|--|---|
| 180A                         | Aircraft Category:                                     | Balloon   |
|                              | Amateur Built:   |   |
| Normal                       | Serial Number:   | 5135  |
| Skid                         | Seats:   |   |
|                              | Certified Max Gross Wt.:                               | 3586 lbs  |
|                              | Engines:   | 0   |
|                              | Engine Manufacturer:                                   |   |
|                              | Engine Model/Series:                                   |   |
| Bighorn Balloon Company, LLC | Rated Power:   |   |
|                              | Operating Certificate(s)<br>Held:                      | None  |
| Bighorn Balloons             | Operator Designator Code:                              |   |
|                              | 180A<br>Normal<br>Skid<br>Bighorn Balloon Company, LLC | 180AAircraft Category:180AAmateur Built:NormalSerial Number:SkidSeats:Certified Max Gross Wt.:Engines:Image: Seats:Engine Manufacturer:Image: Seats:Engine Model/Series:Bighorn Balloon Company.LLCRated Power:Sigher: Seats:Seats:Image: Seats:Seats: |

### Meteorological Information and Flight Plan

| Conditions at Accident Site:            | Visual (VMC) | Condition of Light:                     | Day     |
|---|--------------|---|---------|
| <b>Observation Facility, Elevation:</b> |              | Distance from Accident Site:            |         |
| Observation Time:                       |              | Direction from Accident Site:           |         |
| Lowest Cloud Condition:                 |              | Visibility                              |         |
| Lowest Ceiling:                         |              | Visibility (RVR):                       |         |
| Wind Speed/Gusts:                       | /            | Turbulence Type<br>Forecast/Actual:     | /       |
| Wind Direction:                         |              | Turbulence Severity<br>Forecast/Actual: | /       |
| Altimeter Setting:                      |              | Temperature/Dew Point:                  |         |
| Precipitation and Obscuration:          |              |   |         |
| Departure Point:                        | Ridgeway, CO | Type of Flight Plan Filed:              | None    |
| Destination:                            |              | Type of Clearance:                      | None    |
| Departure Time:                         | 07:00 Local  | Type of Airspace:                       | Class G |
|   |              |   |         |

# Wreckage and Impact Information

| Crew Injuries:         | 1 None                     | Aircraft Damage:        | Minor                 |
|------------------------|----------------------------|-------------------------|-----------------------|
| Passenger<br>Injuries: | 1 Serious, 2 Minor, 3 None | Aircraft Fire:          | None                  |
| Ground Injuries:       | N/A                        | Aircraft Explosion:     |                       |
| Total Injuries:        | 1 Serious, 2 Minor, 4 None | Latitude,<br>Longitude: | 38.166667,-107.783332 |

### **Administrative Information**

| Investigator In Charge (IIC):        | Bowling, David  |
|--------------------------------------|---|
| Additional Participating<br>Persons: |   |
| Original Publish Date:               | September 1, 2004   |
| Last Revision Date:                  |   |
| Investigation Class:                 | <u>Class</u>  |
| Note:                                | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=59274  |

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