



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Kendall, KS	<b>Accident Number:</b>	DEN06LA016
<b>Date &amp; Time:</b>	10/02/2005, 1619 MST	<b>Registration:</b>	N96YD
<b>Aircraft:</b>	Abruzzo Grom-1	<b>Injuries:</b>	1 Serious, 1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Air Race/Show		

## Analysis

The balloon, USA-1, was participating in the Gordon Bennett race. It had been aloft for 22 hours and had traveled some 350 to 400 miles. Cruising about 35 mph in "smooth air" at 7,000 feet msl, it encountered "mid-afternoon dry thermals" and a "sudden and unexpected downdraft." The dry thermals forced the balloon into an "extreme" and uncontrolled descent. The variometer "pegged" at 1,500 feet per minute descent. The crew attempted to arrest the descent rate by throwing ballast overboard, but was unsuccessful and the balloon collided with power lines. The entangled gondola severed the power lines and the balloon ascended rapidly. As it ascended, the gondola "pitched violently as much as 60 degrees" and the pilot fell out at a height approximately 30 to 40 feet. The balloon ascended with the copilot still on board. Using a satellite telephone, she notified the chase crew and gave them the location of the accident. The balloon ascended to 14,000 feet msl before the copilot was able to "[execute] a controlled descent." The balloon hit the ground hard approximately 8 miles from the accident site.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the downdraft forcing the balloon into the power lines. A contributing factor was the clear air turbulence and the power lines.

## Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: DESCENT - UNCONTROLLED

### Findings

1. (F) WEATHER CONDITION - TURBULENCE, CLEAR AIR
2. (C) WEATHER CONDITION - DOWNDRAFT
3. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND
4. (F) OBJECT - WIRE, TRANSMISSION

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	42
<b>Airplane Rating(s):</b>	None	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	Balloon	<b>Instructor Rating(s):</b>	Powered-Lift
<b>Flight Time:</b>	1827 hours (Total, all aircraft), 910 hours (Total, this make and model), 1827 hours (Pilot In Command, all aircraft), 39 hours (Last 90 days, all aircraft)		

## Co-Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	60
<b>Airplane Rating(s):</b>	None	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	Balloon	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>			

## Co-Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	60
<b>Airplane Rating(s):</b>	None	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	Balloon	<b>Instructor Rating(s):</b>	Powered-Lift
<b>Flight Time:</b>	1850 hours (Total, all aircraft), 395 hours (Total, this make and model), 1522 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Abruzzo	<b>Registration:</b>	N96YD
<b>Model/Series:</b>	Grom-1	<b>Engines:</b>	0
<b>Operator:</b>	Richard Abruzzo	<b>Engine Manufacturer:</b>	
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	Gas Balloon
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Air Race/Show		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	GCK, 2890 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	None	<b>Wind Speed/Gusts, Direction:</b>	25 knots / 29 knots, 180°
<b>Temperature:</b>	34°C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Albuquerque, NM	<b>Destination:</b>	

## Airport Information

<b>Airport:</b>	Ulysses Airport (ULS)	<b>Runway Surface Type:</b>	
<b>Runway Used:</b>	NA	<b>Runway Surface Condition:</b>	
<b>Runway Length/Width:</b>			

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious, 1 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>	37.606389, -101.378333		

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Arnold W Scott	<b>Adopted Date:</b>	04/25/2006
<b>Investigation Docket:</b>	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

---

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.