



National Transportation Safety Board Aviation Accident Factual Report

Location:	Kendall, KS	Accident Number:	DEN06LA016
Date & Time:	10/02/2005, 1619 MST	Registration:	N96YD
Aircraft:	Abruzzo Grom-1	Aircraft Damage:	Minor
Defining Event:		Injuries:	1 Serious, 1 None

Flight Conducted Under: Part 91: General Aviation - Air Race/Show

On October 2, 2005, at 1619 mountain standard time, an Abruzzo Grom-1 balloon, N96YD, registered to Peak Express Balloon, Inc., and piloted by a commercial pilot, sustained minor damage when it struck power lines near Kendall, Kansas. Visual meteorological conditions prevailed at the time of the accident. The personal cross-country flight was being conducted under Title 14 CFR Part 91. The pilot was seriously injured. The copilot was not injured. The flight originated at Albuquerque, New Mexico, on October 1, 2005, approximately 1846. The balloon pilots were participating (and were the defending champions) in the (49th annual) 2005 Coupe Aeronautique Gordon Bennett International Gas Balloon Race.

The balloon, USA-1, was one of 26 balloons that took off from Albuquerque's Balloon Fiesta Park: 14 balloons were in the Gordon Bennett race, 12 balloons were in the America's Challenge gas balloon race. The balloon that traveled the greatest distance was the winner of the race. USA-1 had been aloft for 22 hours, and had traversed some 350 to 400 miles when the accident occurred.

The pilot stated that the balloon was cruising about 35 mph in "smooth air" at 7,000 feet mean sea level (msl) when it encountered "mid-afternoon dry thermals" and a "sudden and unexpected downdraft." The dry thermals forced the balloon into an uncontrolled descent. The crew attempted to arrest the balloon's descent rate by throwing ballast overboard. The pilot said that the uncontrolled descent was "extreme" and that the variometer was "pegged" at 1,500 feet per minute descent rate. His attempt to arrest the descent was unsuccessful and the balloon collided with the "upper most wire of a set of power lines" along the south side of a farm road near Lakin, Kansas. The entangled gondola severed the power lines and the balloon ascended rapidly. As the balloon ascended, the gondola "pitched violently as much as 60 degrees" and the pilot fell out of the gondola. He hit the ground after falling from a height approximately 30 to 40 feet.

The balloon ascended with the copilot still on board. Using a satellite telephone, the copilot notified the chase crew and gave them the location of the accident. The balloon ascended to 14,000 feet msl before she was able to "[execute] a controlled descent." The balloon hit the ground hard approximately 8 miles from the accident site, near Lakin, Kansas. About the same

time, power monitors for the Pioneer Electric Company detected a fault and a crew was dispatched. Along with fire and rescue crews, they located the pilot about 300 feet east of the intersection of Roads 35 and Y in Hamilton County, near U.S. Highway 50. He had been unconscious for about 1 hour, 30 minutes, and was found walking towards a farmhouse.

The pilot said, "Collectively, we have flown dozens of cross-country gas-balloon flights, and the sudden onset and severity of this weather phenomenon was unprecedented in our collective experience." He suffered a fractured pelvis, displaced ribs, and a shattered forearm and wrist.

Pilot Information

Certificate:	Commercial	Age:	42, Male
Airplane Rating(s):	None	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	Powered-Lift	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last FAA Medical Exam:	07/01/2005
Occupational Pilot:		Last Flight Review or Equivalent:	05/01/2004
Flight Time:	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

Certificate:	Commercial	Age:	60, Female
Airplane Rating(s):	None	Seat Occupied:	
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 None	Last FAA Medical Exam:	12/01/1984
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:			

Co-Pilot Information

Certificate:	Commercial	Age:	60, Female
Airplane Rating(s):	None	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	Powered-Lift	Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	03/01/2004
Flight Time:	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

Aircraft Make:	Abruzzo	Registration:	N96YD
Model/Series:	Grom-1	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	798
Landing Gear Type:	None	Seats:	2
Date/Type of Last Inspection:	08/01/2005, Condition	Certified Max Gross Wt.:	2438 lbs
Time Since Last Inspection:	109.32 Hours	Engines:	0
Airframe Total Time:	711.1 Hours	Engine Manufacturer:	
ELT:	Installed, not activated	Engine Model/Series:	Gas Balloon
Registered Owner:	Peak Express Balloon, INC.	Rated Power:	
Operator:	Richard Abruzzo	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	GCK, 2890 ft msl	Distance from Accident Site:	49 Nautical Miles
Observation Time:	1654 CST	Direction from Accident Site:	75°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	25 knots / 29 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.83 inches Hg	Temperature/Dew Point:	34° C / 9° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Albuquerque, NM	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	Unknown
Departure Time:	1846 MST	Type of Airspace:	

Airport Information

Airport:	Ulysses Airport (ULS)	Runway Surface Type:	
Airport Elevation:	3207 ft	Runway Surface Condition:	
Runway Used:	NA	IFR Approach:	Unknown
Runway Length/Width:		VFR Approach/Landing:	Unknown

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Arnold W Scott
Additional Participating Persons:	John Parsons; FAA Flight Standards District Office; Wichita, KS J.D. Huss; FAA Flight Standards District Office; Albuquerque, NM
Investigation Docket:	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 pubin@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .