



Aviation Investigation Final Report

Location:	Longview, Texas	Accident Number:	CEN15LA314
Date & Time:	July 22, 2015, 08:30 Local	Registration:	N76627
Aircraft:	ARBC INC 69X	Aircraft Damage:	None
Defining Event:	Hard landing	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Air race/show		

Analysis

The pilot reported that, as the balloon descended, the wind speed increased. He aborted the first landing to avoid power lines and chose to land in an adjacent field. During the landing, the balloon encountered a downdraft after the pilot turned off the burners and pulled the parachute top to release hot air. The balloon impacted the ground hard, dragged the basket a short distance, and then stopped. The balloon was not damaged, but the pilot's left hip and ankle were broken during the hard landing. An examination of the balloon and its systems revealed no anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The balloon's hard landing due to a high surface wind and downdraft, which resulted in the pilot sustaining a serious leg injury.

Findings

Environmental issues	High wind - Effect on operation
Environmental issues	High wind - Ability to respond/compensate
Aircraft	(general) - Capability exceeded
Aircraft	(general) - Attain/maintain not possible
Environmental issues	Downdraft - Effect on operation
Environmental issues	Downdraft - Ability to respond/compensate

Factual Information

History of Flight

Landing-flare/touchdown	Other weather encounter
Landing	Hard landing (Defining event)

On July 22, 2015, about 00830 central daylight time, an ARBC Inc. 69X balloon, N76627, tipped over while landing near Longview, Texas. The pilot, the sole occupant, sustained serious injuries. The balloon was not damaged. The balloon was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a competition flight. Visual meteorological conditions prevailed for the flight, which operated without a flight plan. The local flight departed about 0710.

The pilot reported that after completing all three competition tasks he started to look for a place to land. As he descended the wind speed increased and the first few fields were too small to land in with windy conditions. The pilot aborted the first landing to avoid powerlines and elected to land in an adjacent field.

The pilot reported that he encountered a downdraft after turning off his burners and pulling the parachute top to release hot air. He stated that the impact with the ground was hard and the balloon tipped over and stopped after dragging the basket a short distance. The balloon was not damaged but the pilot had serious injuries to his left leg during the hard landing.

The pilot stated that there were no mechanical anomalies with the balloon that would have precluded normal operations.

Pilot Information

Certificate:	Commercial	Age:	59
Airplane Rating(s):	None	Seat Occupied:	None
Other Aircraft Rating(s):	Balloon	Restraint Used:	None
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 3, 2015
Flight Time:	1306 hours (Total, all aircraft), 72 hours (Total, this make and model), 1270 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 14.1 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ARBC INC	Registration:	N76627
Model/Series:	69X	Aircraft Category:	Balloon
Year of Manufacture:	2012	Amateur Built:	
Airworthiness Certificate:	Balloon; Normal	Serial Number:	5500
Landing Gear Type:	None	Seats:	
Date/Type of Last Inspection:	May 4, 2015	Certified Max Gross Wt.:	1275 lbs
Time Since Last Inspection:		Engines:	
Airframe Total Time:	72 Hrs at time of accident	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	On file	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KGGG,365 ft msl	Distance from Accident Site:	
Observation Time:	08:33 Local	Direction from Accident Site:	
Lowest Cloud Condition:	1000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 1000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	28°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Kilgore, TX	Type of Flight Plan Filed:	None
Destination:	Longview, TX	Type of Clearance:	None
Departure Time:	07:10 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	None
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	32.691112,-94.705558(est)

Administrative Information

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	Morris E McAllister; FAA FSDO; Dallas, TX
Original Publish Date:	November 30, 2015
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=91617

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