Aviation Investigation Final Report

Location:	Durango, Colorado	**Accident Number:**	CEN09CA213
Date & Time:	March 11, 2009, 19:06 Local	**Registration:**	N8245H
Aircraft:	Beech 58	**Aircraft Damage:**	Substantial
Defining Event:	Hard landing	**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

Shortly after takeoff in the twin-engine airplane, the flight instructor announced a simulated engine failure and expected the student pilot to land on the remaining runway. The student pilot responded by reducing both engines to idle power, but did not pitch the airplane's nose down enough to maintain sufficient airspeed. The flight instructor responded by lowering the airplane's nose to the proper attitude before releasing the controls. Moments later the flight instructor realized that the student pilot was not arresting the rate of descent and was unable to react in time to prevent a hard landing. The airplane's fuselage and right wing sustained structural damage during the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's improper landing flare and the flight instructor's delayed remedial action.

Findings

Personnel issues	Delayed action - Instructor/check pilot
Aircraft	Landing flare - Incorrect use/operation
Personnel issues	Aircraft control - Student/instructed pilot

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)

Flight instructor Information

Certificate:	Airline transport; Flight instructor	**Age:**	41,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	August 31, 2007
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	August 22, 2008
Flight Time:	2750 hours (Total, all aircraft), 80 hours (Total, this make and model), 2400 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Commercial	**Age:**	35,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 1 Without waivers/limitations	**Last FAA Medical Exam:**	June 19, 2007
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	February 27, 2009
Flight Time:	226 hours (Total, all aircraft), 5 hours (Total, this make and model), 159 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N8245H
Model/Series:	58	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	TH-1635
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	November 21, 2008 Continuous airworthiness	**Certified Max Gross Wt.:**	5500 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:	14224 Hrs at time of accident	**Engine Manufacturer:**	CONT MOTOR
ELT:	Installed, not activated	**Engine Model/Series:**	IO-550 SERIES
Registered Owner:	SAN JUAN PILOT TRAINING INC	**Rated Power:**	300 Horsepower
Operator:	SAN JUAN PILOT TRAINING INC	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Scattered / 9500 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Broken / 9500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	160°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.03 inches Hg	**Temperature/Dew Point:**	10°C / -9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Durango, CO (DRO)	**Type of Flight Plan Filed:**	None
Destination:	Durango, CO (DRO)	**Type of Clearance:**	None
Departure Time:	19:04 Local	**Type of Airspace:**	

Airport Information

Airport:	Durango-La Plata County DRO	**Runway Surface Type:**	Asphalt
Airport Elevation:	6685 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	21	**IFR Approach:**	None
Runway Length/Width:	9201 ft / 150 ft	**VFR Approach/Landing:**	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	37.150833,-107.75222(est)

Administrative Information

Investigator In Charge (IIC):	LeBaron, Timothy
Additional Participating Persons:	Eric McRae; Federal Aviation Administration; Salt Lake City, UT
Original Publish Date:	June 11, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=73498