Aviation Investigation Final Report

Location:	Pagosa Springs, Colorado	**Accident Number:**	DEN03LA042
Date & Time:	February 8, 2003, 11:45 Local	**Registration:**	N6555R
Aircraft:	Beech C23	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

After the airplane took off and climbed about 60 feet, the instructor simulated a power loss by reducing the power to idle. The student made a "hard landing" and the airplane began drifting to the left. The instructor assumed control of the airplane but was unable to realign it with the runway. The airplane went off the left side of the runway and the left wheel broke off. It crossed a small ditch, shearing off the landing gear.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to maintain directional control and the instructor's inadequate supervision of the flight. Contributing factors were the student pilot's improper flare, the instructor's inadequate remedial actions, and terrain conditions.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
2. THROTTLE/POWER CONTROL - REDUCED - PILOT IN COMMAND(CFI)

Occurrence #2: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
3. (F) FLARE - PREMATURE - DUAL STUDENT
4. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

Occurrence #3: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING

Findings
5. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - DUAL STUDENT
6. REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND(CFI)

Occurrence #4: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings
7. (F) TERRAIN CONDITION - DITCH
8. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

On February 8, 2003, approximately 1145 mountain standard time, a Beech C23, N6555R, registered to and operated by the flight instructor, was substantially damaged when it collided with terrain following a hard landing at Pagosa Springs, Colorado. The flight instructor and student pilot were not injured. Visual meteorological conditions prevailed, and no flight plan had been filed for the local instructional flight being conducted under Title 14 CFR Part 91. The flight originated at Pagosa Springs approximately 0930.

According to the flight instructor, after practicing stalls, steep turns, and simulated engine failures, they flew to Durango, Colorado, landed and refueled. They departed and returned to Pagosa Springs to practice traffic pattern emergencies. Runway 19 was the active runway. To simulate a power loss, the instructor reduced power to idle when the airplane was on the downwind leg, and the student pilot landed without incident. After practicing several other emergencies, they took off again. When the airplane had climbed about 60 feet, the instructor reduced power to idle to simulated a power loss on takeoff. The student made a "hard landing" and the airplane began drifting to the left. The instructor assumed control of the airplane but was unable to realign it with the runway. The airplane went off the left side of the runway and the left wheel broke off. It crossed a small ditch, sheared off the landing gear. The airplane collapsed, damaged both flaps, buckled the firewall, and bent the right rear horizontal stabilizer.

Flight instructor Information

Certificate:	Commercial; Flight instructor	**Age:**	33,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
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 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	September 24, 2002
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	February 23, 2002
Flight Time:	547 hours (Total, all aircraft), 89 hours (Total, this make and model), 503 hours (Pilot In Command, all aircraft), 101 hours (Last 90 days, all aircraft), 54 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	**Age:**	40,Male
Airplane Rating(s):	None	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	January 27, 2003
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	14 hours (Total, all aircraft), 14 hours (Total, this make and model), 14 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N6555R
Model/Series:	C23	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal; Utility	**Serial Number:**	M-1592
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	July 10, 2002 Annual	**Certified Max Gross Wt.:**	2450 lbs
Time Since Last Inspection:	100 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3933 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-360-A4J
Registered Owner:	Brad L. Handy	**Rated Power:**	180 Horsepower
Operator:		**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:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.3 inches Hg	**Temperature/Dew Point:**	2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pagosa Springs, CO (2V1)	**Type of Flight Plan Filed:**	None
Destination:	Pagosa Springs, CO (2V1)	**Type of Clearance:**	None
Departure Time:	09:30 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Stevens Field 2V1	**Runway Surface Type:**	Asphalt
Airport Elevation:	7700 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	19	**IFR Approach:**	Unknown
Runway Length/Width:	8500 ft / 75 ft	**VFR Approach/Landing:**	Simulated forced landing

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:**	37.2775,-107.055831

Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	James S Finn; FAA Flight Standards District Office; Denver, CO
Original Publish Date:	August 26, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=56463