

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: 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

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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)		

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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 Medicalno 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:	0-360-A4J
Registered Owner:	Brad L. Handy	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None

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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

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Administrative Information

Investigator In Charge (IIC): Scott, Arnold

Additional Participating Persons:

Original Publish Date: August 26, 2003

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=56463

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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