



Aviation Investigation Final Report

Location:	COLORADO SPRNGS, Colorado	Accident Number:	FTW98LA128
Date & Time:	February 11, 1998, 12:45 Local	Registration:	N2382L
Aircraft:	Beech 23	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was practicing touch-and-go landings on runway 17R. Winds were reported from 180 degrees at 6 knots. While performing his second landing, he initiated a side slip to compensate for a slight right crosswind. Upon landing, the aircraft porpoised, then exited the left side of the runway, impacting a ditch. The pilot reported he believed the nose wheel had turned to the left due to the left rudder input, causing the aircraft to depart to the left side of the runway. However, according to the Raytheon Aircraft Company, the aircraft manufacturer, the Beech 23 was designed without nose wheel steering. The wheel casters and is moved only by utilization of the breaks and remains in a neutral position during flight, continually aligned with the fuselage.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent porpoise during landing roll. A factor was the ditch.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. (C) PORPOISE/PILOT-INDUCED OSCILLATION - INADVERTENT - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

2. (F) TERRAIN CONDITION - DITCH

Factual Information

On February 11, 1998, at 1245 mountain standard time, a Beech 23, N2382L, was substantially damaged following loss of control during landing roll and subsequent impact with terrain at Colorado Springs Municipal Airport, Colorado Springs, Colorado. The student pilot, the sole occupant onboard, was not injured. The airplane was being operated by the pilot under Title 14 CFR Part 91. Visual meteorological conditions prevailed for the local personal flight which had originated approximately 35 minutes before the accident. No flight plan had been filed.

According to the pilot's accident report, he was practicing touch-and-go landings on runway 17R. Winds were reported from 180 degrees at 6 knots. While performing his second landing, he initiated a side slip to compensate for a slight right crosswind. Upon landing, the aircraft porpoised, then "immediately veered sharply to the left." The aircraft exited runway 17R, impacting a ditch. The aircraft then slid approximately 60 feet to a stop. The pilot reported in a telephone interview following the accident that he believed the nose wheel had turned to the left due to the left rudder input, causing the aircraft to depart to the left when the wheel made contact with the runway.

According to a representative of the aircraft manufacturer, Raytheon Aircraft Company, the Beech 23 was designed without a pushrod to rotate the nose wheel. The wheel casters, and is moved only by utilization of the breaks. The nose wheel remains in a neutral position during flight and is continually aligned with the fuselage.

Postaccident examination of the airplane revealed that the nose gear was separated from the aircraft, the engine mount was bent, the fire wall was damaged, and the left wing was bent.

Pilot Information

Certificate:	Student	Age:	42, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 23, 1996
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	92 hours (Total, all aircraft), 25 hours (Total, this make and model), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N2382L
Model/Series:	23 23	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	M-222
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	November 18, 1997 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	6 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4014 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-D2B
Registered Owner:	KENNETH L. CHIARO	Rated Power:	160 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	COS ,6184 ft msl	Distance from Accident Site:	
Observation Time:	12:36 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 9500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 12000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	4°C / -17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(COS)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:10 Local	Type of Airspace:	Class C

Airport Information

Airport:	COLORADO SPRINGS MUNI COS	Runway Surface Type:	Asphalt
Airport Elevation:	6184 ft msl	Runway Surface Condition:	Dry
Runway Used:	17R	IFR Approach:	None
Runway Length/Width:	13500 ft / 150 ft	VFR Approach/Landing:	Touch and go

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	38.890888,-104.6996(est)

Administrative Information

Investigator In Charge (IIC):	Struhsaker, James
Additional Participating Persons:	DAVID F GONZALES; DENVER , CO
Original Publish Date:	February 15, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=20537

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](#).