



National Transportation Safety Board Aviation Accident Final Report

Location:	Beaver, UT	Accident Number:	DEN02LA049
Date & Time:	06/01/2002, 1420 MDT	Registration:	N171M
Aircraft:	Piper PA-28R-201	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The stall warning was activating 15 knots higher than it was supposed to while the airplane was in a climb. The pilot advised ARTCC that he was experiencing wind shear. He was told there was no reported wind shear in the area and to maintain 13,000 feet. The pilot was unable to maintain 13,000 feet, and descended to 12,000 feet, then to the minimum en route altitude of 11,000 feet. Unable to maintain this altitude, the pilot descended to 10,500 feet, cancelled his IFR flight plan, and descended further to 9,500 feet, at which point radio communications with ARTCC were lost. The airplane was yawing and "the ball (turn coordinator) was in the right side." The pilot held "full right aileron deflection to keep the [air]plane from turning." He attempted to make a precautionary landing at an airport. A left crosswind aided in keeping the airplane on track, but he was "unable to use the rudder to straighten out the [air]plane to land." At 100 feet above the ground, the pilot attempted a go-around. With flaps up, landing gear down, and full power applied, the airplane would not climb but descended slowly instead. The pilot made a forced landing in an open field 1 mile south of the airport. In the ensuing landing, both wings were damaged, the aft portion of the fuselage was wrinkled, and the main gear was torn off. An inspection of the aircraft after the accident disclosed no anomalies with the flight control system or the engine. Flight control continuity was confirmed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's selection of unsuitable terrain on which to make a forced landing. Contributing factors were mountain waves (wind shear) and crosswind.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: CRUISE - NORMAL

Findings

1. (F) WEATHER CONDITION - MOUNTAIN WAVE
2. (F) WEATHER CONDITION - WINDSHEAR

Occurrence #2: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

3. (F) WEATHER CONDITION - CROSSWIND
4. GO-AROUND - ATTEMPTED - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

5. (F) TERRAIN CONDITION - ROUGH/UNEVEN
6. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND

Factual Information

On June 1, 2002, approximately 1420 mountain daylight time, a Piper PA-28R-201, N171M, was substantially damaged when it struck terrain during a precautionary landing at Beaver, Utah. The private pilot received no injuries, but his passenger received minor injuries. Day visual meteorological conditions prevailed, and an IFR flight plan had been filed for the cross-country flight being conducted under Title 14 CFR Part 91. The flight originated in San Diego, California, at 0930 Pacific daylight time, and was en route to Logan, Utah.

In an unsigned statement written in third person and submitted along with the accident report, the writer said the stall warning was activating 15 knots higher than it was supposed to while the airplane was in a climb. The pilot advised Los Angeles Air Route Traffic Control Center (ARTCC) that he was experiencing wind shear. ARTCC said there was no reported wind shear in the area and to maintain 13,000 feet. The pilot was unable to maintain 13,000 feet, and descended to 12,000 feet, then to the minimum en route altitude of 11,000 feet. Unable to maintain this altitude, the pilot descended to 10,500 feet, cancelled his IFR flight plan, and descended further to 9,500 feet, at which point radio communications with ARTCC were lost. A United Air Lines flight relayed communications between N171M and ARTCC.

The writer said the airplane was yawing and "the ball (turn coordinator) was in the right side." The pilot held "full right aileron deflection to keep the [air]plane from turning." He attempted to make a precautionary landing on runway 13 at Beaver Municipal Airport. A left crosswind aided in keeping the airplane on track, but the pilot was "unable to use the rudder to straighten out the [air]plane to land." At 100 feet above the ground, the pilot attempted a go-around. With flaps up, landing gear down, and full power applied, the airplane would not climb but descended slowly instead. The pilot made a forced landing in an open field 1 mile south of the airport. In the ensuing landing, both wings were damaged, the aft portion of the fuselage was wrinkled, and the main gear was torn off.

A statement given to the Beaver County Sheriff's Office was similar to the one submitted with the accident report. An inspection of the aircraft after the accident disclosed no anomalies with the flight control system or the engine. Flight control continuity was confirmed.

Calm winds were recorded at Milford, Utah, located 21 miles west-northwest of the accident site, 26 minutes before the accident.

Pilot Information

Certificate:	Private	Age:	24, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	09/28/2001
Occupational Pilot:		Last Flight Review or Equivalent:	04/09/2002
Flight Time:	327 hours (Total, all aircraft), 239 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N171M
Model/Series:	PA-28R-201	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	28R-7837051
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	05/28/2002, 100 Hour	Certified Max Gross Wt.:	2750 lbs
Time Since Last Inspection:	5 Hours	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-360-C1C6
Registered Owner:	David S. Bowles	Rated Power:	200 hp
Operator:	Simon D. Bowles	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MLF, 5039 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	1354 MDT	Direction from Accident Site:	300°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	24° C / 5° C
Precipitation and Obscuration:			
Departure Point:	San Diego, CA (SEE)	Type of Flight Plan Filed:	IFR
Destination:	Logan, UT (LGU)	Type of Clearance:	IFR
Departure Time:	0900 PDT	Type of Airspace:	Class E

Airport Information

Airport:	Beaver Municipal (U52)	Runway Surface Type:	Unknown
Airport Elevation:	5860 ft	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	Unknown
Runway Length/Width:		VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	38.208333, -112.658333

Administrative Information

Investigator In Charge (IIC):	Arnold W Scott	Report Date:	01/16/2003
Additional Participating Persons:	Douglas R Hanson; FAA Flight Standards District Office; Salt Lake City, UT		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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