

Aviation Investigation Final Report

Location: Walden, Colorado Accident Number: DEN07CA046

Date & Time: January 1, 2007, 15:30 Local Registration: N821GS

Aircraft: Piper PA-34-200T Aircraft Damage: Substantial

Defining Event: 4 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The airplane was in cruise flight at 12,500 feet. The pilot told his wife that he was disengaging the autopilot to maneuver over the mountains. He then pressed the trim-disengage button on the control yoke. Shortly after, the airplane began rolling uncontrollably to the left and right. The pilot steadied the airplane with the rudder. He then began a 1/2 standard rate left turn. When he went to roll the airplane right, he said that the flight controls were difficult to manipulate. He attempted additional turns and found the problem continued. The pilot changed airspeed and found the problem increased with reduced airspeed. After that, he declared an emergency with air traffic control, began a descent, and proceeded to the nearest airport. The pilot said he was unable to locate the airport so he elected to perform a wheels up landing on a snow-covered field. During the landing, the airplane sustained substantial damage to the inboard left wing and the bottom left side of the forward fuselage. An examination of the airplane revealed no anomalies that could explain the stiff controls.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot experiencing lateral flight control stiffness for undetermined reasons and the pilot's intentional wheels up landing. Factors were the snow covered and rough/uneven terrain.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: CRUISE

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: WHEELS UP LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

2. (C) WHEELS UP LANDING - INTENTIONAL - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

3. (F) TERRAIN CONDITION - ROUGH/UNEVEN

4. (F) TERRAIN CONDITION - SNOW COVERED

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Factual Information

The airplane was in cruise flight at 12,500 feet. The pilot disengaged the autopilot to maneuver over the mountains. He then pressed the trim-disengage button on the control yoke and shortly afterward, the airplane began rolling to the left and right. The pilot steadied the airplane with the rudder. He then began a 1/2 standard rate left turn. When he went to roll the airplane right, he said that the flight controls were difficult to manipulate. He attempted additional turns and found the that problem continued. The pilot changed airspeed and found the problem increased with reduced airspeed. After that, he declared an emergency with air traffic control, began a descent, and proceeded to the nearest airport. The pilot said he was unable to locate the airport so he elected to perform a wheels up landing on a snow-covered field. During the landing, the airplane sustained substantial damage to the inboard left wing and the bottom left side of the forward fuselage. An examination of the airplane revealed no anomalies that could explain the stiff controls.

Information

Certificate:	Private	Age:	Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	October 1, 2006
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	100 hours (Total, all aircraft), 50 hou	urs (Total, this make and model)	

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Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N821GS
Model/Series:	PA-34-200T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34-7770419
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	TSIO-360
Registered Owner:	Teton Leasing, LLC	Rated Power:	
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	Av Center, Inc.	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LAR	Distance from Accident Site:	
Observation Time:	15:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	-10°C / -14°C
Precipitation and Obscuration:			
Departure Point:	Greeley, CO (GXY)	Type of Flight Plan Filed:	VFR
Destination:	Rock Springs, WY (RKS)	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	

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Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	4 None	Latitude, Longitude:	40.75,-106.271385

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Administrative Information

Investigator In Charge (IIC):	Bowling, David
Additional Participating Persons:	Jeff Graves; Denver, Colorado FSDO
Original Publish Date:	March 26, 2007
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=65122

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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