



Aviation Investigation Final Report

Location:	Rimrock, Washington	Accident Number:	WPR14CA383
Date & Time:	September 20, 2014, 15:30 Local	Registration:	N817DH
Aircraft:	AMERICAN CHAMPION AIRCRAFT 7GCBC	Aircraft Damage:	Substantial
Defining Event:	Abnormal runway contact	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot and pilot-rated passenger of the tailwheel equipped airplane planned to stop at three back country strips before returning to their base airport. The pilot opted not to land at either of the first two planned stops, because she was uncomfortable with the winds at the time of her arrival at each. The third intended destination airport was situated at the shore of a lake. The turf runway was oriented approximately perpendicular to the shoreline, terminated at the shoreline, and was sloped uphill away from the lake. Tall trees and rapidly rising terrain at the other end of the runway resulted in the runway being effectively one way in and one way out, over the lake. The winds were light and variable, and the pilot landed uneventfully at that airstrip. She taxied to the far end, turned around, and began the takeoff roll downhill, towards the lake. She brought the tail up, continued the takeoff roll, and the airplane became prematurely airborne after "rolling over one of the bumpy spots" on the runway. The pilot reported that she tried to fly in ground effect to build airspeed, but lowered the nose too far. The propeller struck the runway, which degraded the airplane performance, and prevented the airplane from successfully climbing. The pilot determined that at that point, she was too far down the runway to safely abort the takeoff on the remaining runway, so she sought a spot straight ahead on the exposed lakebed on which to land the airplane. The pilot steered the airplane towards what appeared to be a dry area that was clear of debris. The airplane struck the dry upslope on the main wheels, and the left main gear impacted a tree stump. The airplane then nosed over to the inverted position. The airplane sustained substantial damage to the wings and fuselage. The pilot reported no preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation.

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 aircraft control during takeoff from a rough runway surface which resulted in an off-airport forced landing just beyond the runway.

Findings

Personnel issues	Aircraft control - Pilot
Environmental issues	(general) - Effect on operation
Environmental issues	Tree(s) - Contributed to outcome
Aircraft	Pitch control - Not attained/maintained

Factual Information

History of Flight

Takeoff	Abnormal runway contact (Defining event)
Takeoff	Attempted remediation/recovery
Initial climb	Miscellaneous/other
Landing	Off-field or emergency landing
Landing-landing roll	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline transport	Age:	39
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	October 30, 2013
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 14, 2014
Flight Time:	3598 hours (Total, all aircraft), 55 hours (Total, this make and model), 3522 hours (Pilot In Command, all aircraft), 204 hours (Last 90 days, all aircraft), 58 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Rear
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	AMERICAN CHAMPION AIRCRAFT	Registration:	N817DH
Model/Series:	7GCBC NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	2003	Amateur Built:	
Airworthiness Certificate:	Aerobatic; Normal	Serial Number:	1341-2003
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 9, 2014 Annual	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:	75 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	365 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	O-360
Registered Owner:	Aileron Aviation	Rated Power:	160 Horsepower
Operator:	Rainier Flight Services	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KYKM	Distance from Accident Site:	24 Nautical Miles
Observation Time:	15:00 Local	Direction from Accident Site:	84°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	18°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Rimrock, WA (4S6)	Type of Flight Plan Filed:	None
Destination:	Renton, WA (KRNT)	Type of Clearance:	None
Departure Time:	15:30 Local	Type of Airspace:	

Airport Information

Airport:	Tieton State 4S6	Runway Surface Type:	Grass/turf
Airport Elevation:	2964 ft msl	Runway Surface Condition:	Dry
Runway Used:	20	IFR Approach:	None
Runway Length/Width:	2509 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	46.6375,-121.123886(est)

Administrative Information

Investigator In Charge (IIC): Huhn, Michael

Additional Participating Persons:

Original Publish Date: November 13, 2014

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=90123>

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