



National Transportation Safety Board Aviation Accident Final Report

Location:	Point Roberts, WA	Accident Number:	SEA07CA032
Date & Time:	12/01/2006, 1415 PST	Registration:	N119N
Aircraft:	Riley D-16A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

According to the pilot, during the takeoff roll at about rotation speed, he felt the nose landing gear of the airplane "give way" and the airplane began to drift to the left. As he applied right rudder to correct the yaw, he felt "a continued collapse" of the nose landing gear and elected to abort the takeoff. The airplane's nose and both propellers struck the ground. Examination of photos provided by an insurance adjustor revealed that both engines were displaced down and to the right. The right engine firewall was torn from the engine nacelle, and the left engine firewall was buckled and distorted. Additionally, the photos revealed that the nose landing gear fork had broken into two pieces, which allowed the nose wheel to separate from the airplane, resulting in collapse of the nose landing gear. The pilot reported that "an aircraft structural engineer made the observation that my nose gear fork had an old hidden crack that could have contributed to the failure."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pre-existing crack in the nose wheel fork, which allowed separation of the nose wheel during the takeoff roll, resulting in collapse of the nose landing gear.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) LANDING GEAR,NOSE GEAR - CRACKED
2. (C) LANDING GEAR,WHEEL - SEPARATION

Occurrence #2: NOSE GEAR COLLAPSED
Phase of Operation: TAKEOFF - ROLL/RUN

Factual Information

Pilot Information

Certificate:	Foreign; Private	Age:	39, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:	Class 3	Last Medical Exam:	08/01/2006
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	947 hours (Total, all aircraft), 79 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Riley	Registration:	N119N
Model/Series:	D-16A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	TTN-51
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:	Lycoming
ELT:	Not installed	Engine Model/Series:	O-340
Registered Owner:	Jesse H. Lofquist	Rated Power:	
Operator:	Jesse H. Lofquist	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:		Observation Time:	
Distance from Accident Site:		Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:		Temperature/Dew Point:	
Lowest Ceiling:		Visibility:	
Wind Speed/Gusts, Direction:		Visibility (RVR):	
Altimeter Setting:		Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Point Roberts, WA (1RL)	Type of Flight Plan Filed:	None
Destination:	(1RL)	Type of Clearance:	None
Departure Time:	PST	Type of Airspace:	

Airport Information

Airport:	Point Roberts Airpark (1RL)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	16	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 None		

Administrative Information

Investigator In Charge (IIC):	Georgia R Struhsaker	Adopted Date:	03/26/2007
Additional Participating Persons:			
Publish Date:			
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	NTSB accident and incident docket 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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