



Aviation Investigation Final Report

Location:	Oshkosh, Wisconsin	Accident Number:	CEN13CA187
Date & Time:	February 2, 2013, 15:30 Local	Registration:	N9691S
Aircraft:	Champion 7GCAA	Aircraft Damage:	Substantial
Defining Event:	Landing gear collapse	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After performing three touch-and-go landings on a frozen lake, the pilot set up for a full stop landing on the plowed surface of the frozen lake. After a smooth landing, and while taxiing to park, the left wheel strut collapsed. The airplane tipped over onto its left side, resulting in substantial damage to the left wing spar. Examination of the airplane after the accident revealed evidence of fatigue cracking on the failed portion of the left wheel strut mount. The airplane had been flown about 50-75 hours after its last annual inspection with no problems noted by the owner. The pilot stated that he lands on frozen lakes frequently and that the collapse of the landing gear was unexpected.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Fatigue cracking and failure of the left wheel strut mount resulting in collapse of the left main landing gear during taxi.

Findings

Aircraft

Main landing gear attach sec - Fatigue/wear/corrosion

Factual Information

History of Flight

Taxi-from runway

Landing gear collapse (Defining event)

Pilot Information

Certificate:	Private	Age:	55,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
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 With waivers/limitations	Last FAA Medical Exam:	February 24, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 20, 2011
Flight Time:	394 hours (Total, all aircraft), 334 hours (Total, this make and model), 394 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Champion	Registration:	N9691S
Model/Series:	7GCAA	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	115
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	May 8, 2012 Annual	Certified Max Gross Wt.:	1640 lbs
Time Since Last Inspection:	60 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6542 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	0-320 SERIES
Registered Owner:	Keith Mustain	Rated Power:	180 Horsepower
Operator:	Keith Mustain	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
conditions at Accident Site.		Condition of Light.	Day
Observation Facility, Elevation:	OSH,808 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	15:30 Local	Direction from Accident Site:	210°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Oshkosh, WI (OSH)	Type of Flight Plan Filed:	VFR
Destination:	Oshkosh, WI (OSH)	Type of Clearance:	None
Departure Time:	15:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	Oshkosh OSH	Runway Surface Type:	
Airport Elevation:	210 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

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:	43.984443,-88.556663(est)

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	Rex White; FAA FSDO Milwaukee; Milwaukee, WI
Original Publish Date:	July 29, 2013
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=86371

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 <u>here</u>.