Aviation Investigation Final Report

Location:	Renton, Washington	**Accident Number:**	WPR16LA187
Date & Time:	September 18, 2016, 15:00 Local	**Registration:**	N57TJ
Aircraft:	JURCAN Seawind 3000	**Aircraft Damage:**	Substantial
Defining Event:	Landing gear not configured	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot was conducting a cross-country personal flight. He reported that, after arriving at his destination and trying to ensure that the airplane was configured for the water landing, he observed that the right main landing gear (MLG) indicator light was off and that the hydraulic pressure read 0. The pilot then attempted to retract the right MLG several times to no avail. He chose to fly to a nearby airport with a paved runway, where the tower controller confirmed that the right MLG was extended but that the left MLG and nose landing gears were retracted. The pilot attempted to use the backup manual hydraulic pump and abrupt maneuvers to extend the remaining landing gear to no avail. The pilot chose to land on the runway with the landing gear partially retracted. The airplane touched down on the runway with the right MLG first. The pilot held the left wing off the runway as long as possible, but then the wing touched the runway, and the airplane veered off the runway surface. The airplane slid along the grass, impacted an airport sign and light, spun 180°, and then came to a rest.

Postaccident examination of the airplane revealed that a hydraulic leak had originated from a cracked flare in a hydraulic line fitting, which caused the hydraulic fluid to leak, decreased the hydraulic pressure to 0, and prevented the landing gear system from fully extending or retracting.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The failure of the landing gear system to either fully retract or extend due to a cracked hydraulic fitting flare, which resulted in the loss of hydraulic pressure.

Findings

Aircraft	Gear extension and retract sys - Fatigue/wear/corrosion
Aircraft	Hydraulic, main system - Failure
Environmental issues	Runway/taxi/approach light - Contributed to outcome
Environmental issues	Sign/marker - Contributed to outcome

Factual Information

History of Flight

Landing	Landing gear not configured (Defining event)
Landing	Abnormal runway contact
Landing	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

On September 18, 2016, about 1500 Pacific daylight time, a Jurcan Seawind 3000 airplane, N57TJ, impacted a runway sign after landing with a landing gear malfunction at the Renton Municipal Airport (RNT), Renton, Washington. The pilot and one passenger were not injured, and the airplane sustained substantial damage to the left wing. The airplane was registered to, and operated by, the pilot as a personal flight under 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed at the time of the accident, and no flight plan was filed. The airplane departed from Lampson Field Airport (1O2) Lakeport, California at 1040 and was originally destined for Lake Sammamish, Issaquah, Washington.

The pilot reported that after arriving at Lake Sammamish, they observed that the right main landing gear indicator light was off and the hydraulic pressure read zero. The pilot attempted to retract the right landing gear several times, but to no avail. He elected to fly to a nearby airport, where the control tower confirmed that the right main landing gear was extended, while the left main and nose landing gears remained retracted. The pilot attempted to use the back-up manual hydraulic pump as well as abrupt maneuvers to lower the remaining landing gears, however, to no avail. The pilot elected to land onto the runway with the abnormal landing gear configuration. The airplane touched down onto the runway right landing gear first. The pilot held the left wing off the runway as long as possible, but when the wing touched the runway, the airplane veered off the runway surface. It slid along the grass and impacted an airport sign and light, before spinning 180 degrees and coming to a rest.

Postaccident examination of the airplane revealed a hydraulic leak that originated at a cracked flare in a hydraulic line fitting. This fitting was located on the bulkhead between the cabin and nose compartment that leads directly into the nose gear actuator.

Pilot Information

Certificate:	Private	**Age:**	73,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	July 19, 2016
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	January 14, 2015
Flight Time:	1984 hours (Total, all aircraft), 130 hours (Total, this make and model), 1984 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	JURCAN	**Registration:**	N57TJ
Model/Series:	Seawind 3000	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Normal; Experimental (Special)	**Serial Number:**	52
Landing Gear Type:	Tricycle; Amphibian; Hull	**Seats:**	
Date/Type of Last Inspection:	October 15, 2015 Annual	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:	70 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	132 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	AEIO540-L1B5
Registered Owner:	On file	**Rated Power:**	300 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	RNT,32 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	14:53 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	30.05 inches Hg	**Temperature/Dew Point:**	19°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lakeport, CA (1O2)	**Type of Flight Plan Filed:**	None
Destination:	Renton, WA (RNT)	**Type of Clearance:**	VFR flight following
Departure Time:	11:00 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	Renton Municipal Airport RNT	**Runway Surface Type:**	Asphalt
Airport Elevation:	32 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	16	**IFR Approach:**	None
Runway Length/Width:	5382 ft / 200 ft	**VFR Approach/Landing:**	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	47.489166,-122.209442(est)

Administrative Information

Investigator In Charge (IIC):	Link, Samantha
Additional Participating Persons:	Gaddie Orcullo; Federal Aviation Administration; Renton, WA
Original Publish Date:	June 14, 2017
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=94091