



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Canon City, Colorado	Accident Number:	CEN17LA236
Date & Time:	June 18, 2017, 07:15 Local	Registration:	N999WX
Aircraft:	WELLS JOHN L JR STOL CH 701	Aircraft Damage:	Substantial
Defining Event:	Fuel starvation	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Flight test		

Analysis

The commercial pilot reported that, during initial climb after takeoff, the amateur-built airplane's engine experienced a partial loss of power. As he attempted to return to the airport, the engine lost total power. He subsequently conducted a forced landing on rough terrain, during which the right wing and fuselage sustained damage.

Postaccident examination of the engine revealed that the fuel hose from the left wing tank had deteriorated from the inside, which would have restricted the flow of fuel to the engine and led to fuel starvation and the subsequent loss of engine power.

Probable Cause and Findings

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

Fuel starvation due to the deterioration of a fuel hose.

Findings

Aircraft	Fuel distribution - Damaged/degraded
Aircraft	Fuel - Fluid level
Environmental issues	Rough terrain - Contributed to outcome

Factual Information

History of Flight

Initial climb	Fuel starvation (Defining event)
Initial climb	Loss of engine power (total)
Emergency descent	Off-field or emergency landing
Landing	Collision with terr/obj (non-CFIT)

On June 18, 2017, about 715 mountain daylight time, an amateur-built Wells STOL CH701 airplane, N999WX, sustained substantial damage to the fuselage and firewall during a forced landing to a field near Canon City, Colorado, after the airplane's engine lost power during initial climb after takeoff from the Fremont County Airport (1V6), Canon City, Colorado. The pilot received minor injuries. The airplane was registered to and operated by the pilot under the provisions of 14 *Code of Federal Regulations* Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, which was not operated on a flight plan. The flight was originating from 1V6 when the accident occurred.

The pilot reported that the airplane experienced a partial loss of engine power during initial climb about 6,500 feet msl. As he attempted to return to 1V6, the engine suddenly lost complete power. A forced landing was completed to rough terrain. The airplane incurred damage to the right wing and fuselage during the landing attempt. The pilot reported that after the accident he found that the fuel hose from the left fuel tank had deteriorated from the inside causing an obstruction to the normal flow of fuel.

Pilot Information

Certificate:	Airline transport; Commercial	Age:	74, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	WELLS JOHN L JR	Registration:	N999WX
Model/Series:	STOL CH 701 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	2014	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	7-6078
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	November 21, 2016 Condition	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:		Rated Power:	
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:	FCS, 5874 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	12:58 Local	Direction from Accident Site:	225°
Lowest Cloud Condition:		Visibility	9 miles
Lowest Ceiling:	Overcast / 4600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	15°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Canon City, CO (1V6)	Type of Flight Plan Filed:	None
Destination:	Canon City, CO (1V6)	Type of Clearance:	None
Departure Time:	07:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	FREMONT COUNTY 1V6	Runway Surface Type:	
Airport Elevation:	5442 ft msl	Runway Surface Condition:	Rough;Vegetation
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	38.428611,-105.106941

Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	Bill Mahaffey; FAA _ Denver FSDO; Denver, CO
Original Publish Date:	January 25, 2018
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=95397

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).