



# **Aviation Investigation Final Report**

Location: FORT BENTON, Montana Accident Number: GAA16CA023

Date & Time: October 20, 2015, 17:50 Local Registration: N76001

Aircraft: Cessna 140 Aircraft Damage: Substantial

**Defining Event:** Hard landing **Injuries:** 1 Serious

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot of the tailwheel-equipped airplane reported that he landed with a 5 to 8 knot tailwind and landed hard. The pilot lost directional control of the airplane and side loaded the landing gear which caused the left main landing gear to collapse and the left wing impacted the runway. The airplane sustained substantial damage to the left wing spar.

The pilot reported no preimpact mechanical failures or malfunctions with the airframe or engine 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: A hard landing which resulted in a loss of directional control, main landing gear collapse, and damage to the left wing spar.

#### **Findings**

Aircraft Descent rate - Not attained/maintained

Personnel issues Aircraft control - Pilot

Aircraft Directional control - Not attained/maintained

**Environmental issues** Tailwind - Effect on operation

Page 2 of 6 GAA16CA023

# **Factual Information**

# **History of Flight**

Landing-flare/touchdown	Hard landing (Defining event)	
Landing-landing roll	Loss of control on ground	
Landing-landing roll	Landing gear collapse	
Landing-landing roll	Part(s) separation from AC	

### **Pilot Information**

Certificate:	Private	Age:	79,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	January 14, 2003
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 1538 hours (Total, all ai (Pilot In Command, all aircraft)	rcraft), 1538 hours (Total, this make a	and model), 1538 hours

Page 3 of 6 GAA16CA023

# **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N76001
Model/Series:	140	Aircraft Category:	Airplane
Year of Manufacture:	1946	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	10395
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	July 22, 2008 Annual	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1556 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, not activated	Engine Model/Series:	0-290-D
Registered Owner:	On file	Rated Power:	125 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:	KGFA,3472 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	23:58 Local	Direction from Accident Site:	228°
<b>Lowest Cloud Condition:</b>	Few / 6000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 8000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.79 inches Hg	Temperature/Dew Point:	13°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	FORT BENTON, MT (79S)	Type of Flight Plan Filed:	None
Destination:	FORT BENTON, MT (79S)	Type of Clearance:	None
Departure Time:	17:00 Local	Type of Airspace:	Class G

Page 4 of 6 GAA16CA023

# **Airport Information**

Airport:	FORT BENTON 79S	Runway Surface Type:	Asphalt
Airport Elevation:	2869 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	23	IFR Approach:	None
Runway Length/Width:	4300 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

# Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	47.846111,-110.634162(est)

Page 5 of 6 GAA16CA023

#### **Administrative Information**

Investigator In Charge (IIC):	Bigelow, Bradley
Additional Participating Persons:	TROY MESKIMEN; FEDERAL AVIATION ADMINISTRATION; HELENA, MT
Original Publish Date:	February 8, 2016
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=92210

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 here.

Page 6 of 6 GAA16CA023