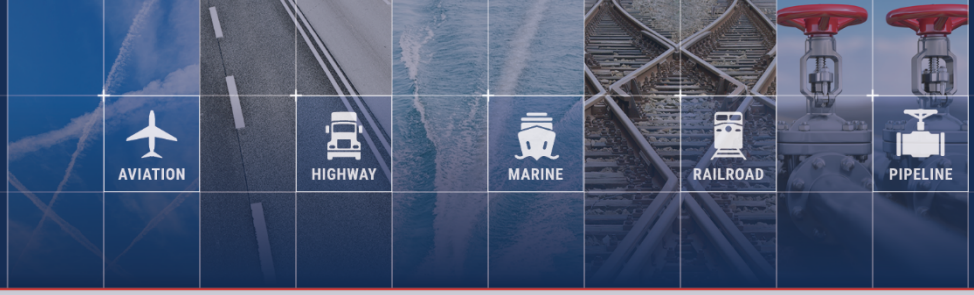

Aviation Investigation Final Report

Location:	Ontario, Oregon	**Accident Number:**	SEA02LA010
Date & Time:	November 2, 2001, 14:00 Local	**Registration:**	N26WF
Aircraft:	Fetherolf Hatz CB-1	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The experimental-category amateur-built airplane suffered a broken weld in the right main landing gear during landing, resulting in a separation of the right main gear tire. The pilot reported that he landed to the north (runway 32) on a 4,529- by 100-foot hard-surface runway. He reported that he touched down with a light bounce. He stated that while rolling, there was suddenly a violent pull to the right after hearing a "crunch." The pilot reported that he applied left brake but that the plane left the runway to the right, went into the dirt and up onto its nose and upper left wingtip. He reported that the aircraft, including the failed part, had 17.4 hours total time. The pilot, who had built the aircraft, listed "better construction [technique] by builder" as an owner/operator safety recommendation on his NTSB accident report.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: An improper weld in the landing gear, resulting in separation of the right main landing gear wheel during a normal landing.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING

Findings
1. (C) LANDING GEAR - IMPROPER/POOR WELD
2. LANDING GEAR,WHEEL - SEPARATION

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING

Occurrence #3: NOSE DOWN
Phase of Operation: LANDING

Factual Information

On November 2, 2001, approximately 1400 mountain standard time, a Fetherolf Hatz CB-1 experimental-category amateur-built airplane, N26WF, suffered a broken weld in the right main landing gear during landing at Ontario, Oregon, resulting in a separation of the right main gear tire. The airplane subsequently departed the side of the landing runway and nosed down, receiving substantial damage. The private pilot-in-command of the aircraft, who owned and had built the airplane and was its sole occupant, was not injured in the accident. Visual meteorological conditions with light and variable winds prevailed and no flight plan had been filed for the 14 CFR 91 personal flight from Nampa, Idaho.

The pilot reported that he landed to the north (runway 32) on a 4,529- by 100-foot hard-surface runway. He reported that he touched down with a light bounce. He stated that while rolling, there was suddenly a violent pull to the right after hearing a "crunch." The pilot reported that he applied left brake but that the plane left the runway to the right, went into the dirt and up onto its nose and upper left wingtip. He reported that the airplane, including the part that suffered the broken weld, had 17.4 hours total time. The pilot listed "better construction [technique] by builder" as an owner/operator safety recommendation on his NTSB accident report.

The pilot, who also held a repairman/experimental aircraft builder certificate for the accident aircraft, indicated on his NTSB accident report that the aircraft's last inspection was a continuous airworthiness inspection performed on August 3, 1995, 17.4 flight hours before the accident. A copy of the aircraft's engine log furnished by the pilot contained an entry dated September 15, 2001, for a "conditional inspection" signed by the pilot. The pilot did not furnish a copy of the aircraft log. According to the FAA aircraft registry, the accident aircraft received an experimental/amateur-built airworthiness certificate on April 22, 1999.

Pilot Information

Certificate:	Private	**Age:**	60,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Rear
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 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	February 22, 2000
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	September 5, 2000
Flight Time:	132 hours (Total, all aircraft), 20 hours (Total, this make and model), 132 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Fetherolf	**Registration:**	N26WF
Model/Series:	Hatz CB-1	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	CB-1 222
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	1600 lbs
Time Since Last Inspection:	17.4 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	17.4 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-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:	ONO,2193 ft msl	**Distance from Accident Site:**	
Observation Time:	13:53 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.19 inches Hg	**Temperature/Dew Point:**	17°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Nampa, ID (S67)	**Type of Flight Plan Filed:**	None
Destination:	Ontario, OR (ONO)	**Type of Clearance:**	None
Departure Time:	12:54 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Ontario Muni ONO	**Runway Surface Type:**	Asphalt
Airport Elevation:	2193 ft msl	**Runway Surface Condition:**	Unknown
Runway Used:	32	**IFR Approach:**	None
Runway Length/Width:	4529 ft / 100 ft	**VFR Approach/Landing:**	Full stop;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:**	44.079162,-117.010757(est)

Administrative Information

Investigator In Charge (IIC):	Nesemeier, Gregg
Additional Participating Persons:	Lewis Sanders; FAA - Boise FSDO; Boise, ID
Original Publish Date:	June 18, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=53716