



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Orofino, Idaho	Accident Number:	GAA19CA240
Date & Time:	May 3, 2019, 13:30 Local	Registration:	N22052
Aircraft:	Luscombe 8	Aircraft Damage:	Substantial
Defining Event:	Nose over/nose down	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he decided to perform a high-speed taxi after repairs had been made to the tailwheel-equipped airplane "to verify controls and instrumentation," but the airplane became airborne, and he decided that the safest action was to fly one pattern and land. He reported that, during the landing roll, the ground speed decreased to about 3 knots, the brakes locked up, and the airplane then nosed over. The pilot added that the airplane was equipped with heel brakes and that it had been 13 years since he had flown a tailwheel-equipped airplane with heel brakes.

The airplane sustained substantial damage to the vertical stabilizer and the rudder.

The pilot reported that there were no mechanical malfunctions or failures with the airplane 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:

The pilot's improper brake application during the landing roll, which resulted in a nose-over. Contributing to the accident was the pilot's lack of recent experience using heel brakes.

Findings

Personnel issues

Aircraft control - Pilot

Aircraft

Brake - Incorrect use/operation

Factual Information

History of Flight

Landing-landing roll	Nose over/nose down (Defining event)
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Pilot Information

Certificate:	Private	Age:	74,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	May 4, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 7, 2017
Flight Time:	(Estimated) 1027 hours (Total, all aircraft), 229 hours (Total, this make and model), 926 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Luscombe	Registration:	N22052
Model/Series:	8 A	Aircraft Category:	Airplane
Year of Manufacture:	1939	Amateur Built:	
Airworthiness Certificate:	Other	Serial Number:	878
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	1260 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3883 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	C91 installed, activated, did not aid in locating accident	Engine Model/Series:	C75-12F
Registered Owner:		Rated Power:	75 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:	KLWS,1436 ft msl	Distance from Accident Site:	31 Nautical Miles
Observation Time:	06:56 Local	Direction from Accident Site:	257°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	9°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Orofino, ID (S68)	Type of Flight Plan Filed:	None
Destination:	Orofino, ID (S68)	Type of Clearance:	None
Departure Time:	13:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Orofino Muni S68	Runway Surface Type:	Asphalt
Airport Elevation:	1005 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	2500 ft / 60 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:	46.49139,-116.276947(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Colby Barron; FAA; Spokane, WA
Original Publish Date:	March 3, 2020
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99369

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](#).