



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Hillsboro, Oregon	<b>Accident Number:</b>	WPR23LA328
<b>Date &amp; Time:</b>	August 26, 2023, 17:10 Local	<b>Registration:</b>	N28841
<b>Aircraft:</b>	Luscombe 8A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The student pilot of the tailwheel-equipped airplane reported that, during the landing roll after the initial touch down, the airplane veered to the right. He applied excessive left rudder input to correct it, causing the airplane to oscillate left and right. The flight instructor attempted to regain the directional control, but his foot became caught. As the airplane decelerated and the oscillation increased, the airplane ground looped to the left, resulting in substantial damage to the right wing and aileron. The student pilot reported that there were no preaccident mechanical failures or malfunctions 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 student pilot's failure to maintain airplane control during the landing roll and the flight instructor's delayed remedial action, which resulted in a ground loop.

## Findings

<b>Personnel issues</b>	Initial instruct/training - Student/instructed pilot
<b>Personnel issues</b>	Use of equip/system - Student/instructed pilot
<b>Aircraft</b>	Directional control - Not attained/maintained
<b>Personnel issues</b>	Total experience w/ equipment - Student/instructed pilot
<b>Personnel issues</b>	Delayed action - Instructor/check pilot

## Factual Information

### History of Flight

<b>Landing-landing roll</b>	Loss of control on ground (Defining event)
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### Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	44,Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	July 12, 2023
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	36 hours (Total, all aircraft), 5 hours (Total, this make and model), 7 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

### Flight instructor Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	74,Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	March 29, 2023
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	April 22, 2022
<b>Flight Time:</b>	8420 hours (Total, all aircraft), 45 hours (Total, this make and model), 7646 hours (Pilot In Command, all aircraft), 130 hours (Last 90 days, all aircraft), 74 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Luscombe	<b>Registration:</b>	N28841
<b>Model/Series:</b>	8A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1940	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1583
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	1260 lbs
<b>Time Since Last Inspection:</b>	10 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	A&C65 SERIES
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	65 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KHIO, 196 ft msl	<b>Distance from Accident Site:</b>	7 Nautical Miles
<b>Observation Time:</b>	16:53 Local	<b>Direction from Accident Site:</b>	355°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	29.9 inches Hg	<b>Temperature/Dew Point:</b>	33°C / 13°C
<b>Precipitation and Obscuration:</b>	Light - None - Smoke		
<b>Departure Point:</b>	Hillsboro, OR	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Hillsboro, OR	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Stark's Twin Oaks Airport 7S3	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	170 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	02	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2465 ft / 48 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	45.42845,-122.94215(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Rho, Paul
<b>Additional Participating Persons:</b>	Jon Ellingson; Federal Aviation Administration; Portland, OR
<b>Original Publish Date:</b>	April 19, 2024
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=192969">https://data.ntsb.gov/Docket?ProjectID=192969</a>

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](#).