



Aviation Investigation Final Report

Location: Hillsboro, Oregon Accident Number: GAA18CA181

Date & Time: March 10, 2018, 14:20 Local Registration: N50KF

Aircraft: Piper PA22 Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The student pilot of the tailwheel-equipped airplane reported that, during landing, the airplane ground looped, and the right main landing gear collapsed. He added that he believes he became complacent during the flight.

The airplane sustained substantial damage to the fuselage.

The student pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

A review of recorded data from the automated weather observation station located on the airport reported that, about 27 minutes before the accident, the wind was from 070° at 8 knots. The airplane landed on runway 31L.

Probable Cause and Findings

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

The pilot's failure to maintain directional control during the landing roll in tailwind conditions.

Findings

Aircraft Directional control - Not attained/maintained

Personnel issues Aircraft control - Student/instructed pilot

Personnel issues Complacency - Student/instructed pilot

Environmental issues Crosswind - Effect on operation
Environmental issues Tailwind - Effect on operation

Page 2 of 5 GAA18CA181

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)	
Landing-landing roll	Landing gear collapse	

Student pilot Information

Certificate:	Student	Age:	32,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
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:	August 22, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 128.6 hours (Total, all aircraft), 53.9 hours (Total, this make and model), 14.6 hours (Pilot In Command, all aircraft), 13.8 hours (Last 90 days, all aircraft), 2.2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N50KF
Model/Series:	PA22 150	Aircraft Category:	Airplane
Year of Manufacture:	1956	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-4274
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	March 5, 2018 100 hour	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3484.9 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320 SERIES
Registered Owner:	On file	Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Page 3 of 5 GAA18CA181

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KHIO,204 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	21:53 Local	Direction from Accident Site:	335°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.96 inches Hg	Temperature/Dew Point:	16°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SCAPPOOSE, OR (SPB)	Type of Flight Plan Filed:	None
Destination:	SCAPPOOSE, OR (SPB)	Type of Clearance:	VFR
Departure Time:	14:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	PORTLAND-HILLSBORO HIO	Runway Surface Type:	Asphalt
Airport Elevation:	208 ft msl	Runway Surface Condition:	Dry
Runway Used:	31L	IFR Approach:	None
Runway Length/Width:	6600 ft / 150 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:	45.537498,-122.946662(est)

Page 4 of 5 GAA18CA181

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Kevin Marpert; FAA; Portland, OR
Original Publish Date:	July 5, 2018
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=96938

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 5 of 5 GAA18CA181