



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

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

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:		Rated Power:	150 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:	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)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Kevin Marpert; FAA; Portland, OR
Original Publish Date:	July 5, 2018
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=96938

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](#).