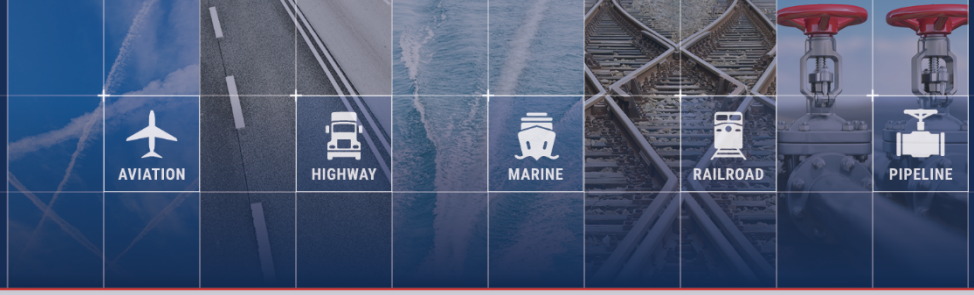

Aviation Investigation Final Report

Location:	St. Louis, Missouri	**Accident Number:**	CEN21LA312
Date & Time:	June 24, 2021, 13:17 Local	**Registration:**	N110ST
Aircraft:	Piper PA 46-350P	**Aircraft Damage:**	Substantial
Defining Event:	Loss of control on ground	**Injuries:**	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that while landing on a wet runway and as he applied brakes during the landing roll, the airplane began to hydroplane, and the nose landing gear collapsed. The airplane veered left and exited the side of the runway coming to a stop in the grass. The airplane sustained substantial damage to the engine mount. The pilot reported there were no preimpact mechanical failures or malfunctions with the airframe and engine that would have precluded normal operation. A review of the airplane's maintenance records revealed that Piper Aircraft Service Bulletin (SB) 1103F (a recurring inspection of the engine mount for cracks every 100 hours) was complied with only once in the airplane's service history, which was about 437 hours before the accident occurred. Based on the available information, it was undetermined if any preexisting defects in the engine mount contributed to nose landing gear collapse. The pilot reported the accident could have been prevented by "not applying brakes" and allowing a "continued roll out."

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 with hydroplaning conditions.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Braking capability - Attain/maintain not possible
Environmental issues	Wet surface - Contributed to outcome
Environmental issues	Wet surface - Ability to respond/compensate

Factual Information

History of Flight

Landing-landing roll	Abnormal runway contact
Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion
Landing-landing roll	Landing gear collapse

Pilot Information

Certificate:	Private	**Age:**	68,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane single-engine	**Toxicology Performed:**	
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	February 16, 2021
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	February 11, 2020
Flight Time:	(Estimated) 6057 hours (Total, all aircraft), 1346 hours (Total, this make and model), 6000 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N110ST
Model/Series:	PA 46-350P	**Aircraft Category:**	Airplane
Year of Manufacture:	2005	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	4636373
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	October 16, 2020 Annual	**Certified Max Gross Wt.:**	4340 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	1814 Hrs as of last inspection	**Engine Manufacturer:**	Lycoming Engines
ELT:	C126 installed, not activated	**Engine Model/Series:**	TIO-540-AE2A
Registered Owner:	On file	**Rated Power:**	350 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None
Operator Does Business As:	On file	**Operator Designator Code:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KSTL,531 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	13:25 Local	**Direction from Accident Site:**	295°
Lowest Cloud Condition:	Few / 5000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Broken / 13000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	12 knots /	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:	240°	**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30.01 inches Hg	**Temperature/Dew Point:**	27°C / 21°C
Precipitation and Obscuration:			
Departure Point:	Blountville, TN (TRI)	**Type of Flight Plan Filed:**	IFR
Destination:	St. Louis, MO	**Type of Clearance:**	IFR
Departure Time:	12:00 Local	**Type of Airspace:**	Class B

Airport Information

Airport:	ST LOUIS LAMBERT INTL STL	**Runway Surface Type:**	Asphalt;Concrete
Airport Elevation:	618 ft msl	**Runway Surface Condition:**	Wet
Runway Used:	12L/30R	**IFR Approach:**	None
Runway Length/Width:	9003 ft / 150 ft	**VFR Approach/Landing:**	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	2 None	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	3 None	**Latitude, Longitude:**	38.745331,-90.353213(est)

Administrative Information

Investigator In Charge (IIC):	Hodges, Michael
Additional Participating Persons:	Louie Bettis; FAA St. Louis FSDO; St. Ann, MO
Original Publish Date:	September 29, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=103447