

Aviation Investigation Final Report

Location: Williston, Florida **Accident Number:** ERA20LA230

Date & Time: June 15, 2020, 13:08 Local Registration: N117PR

Aircraft: Piper PA46 Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot received his private pilot certificate about 2 ½ months before the accident. The pilot then transitioned to the accident airplane, receiving training from an instructor who had completed the factory-authorized training. At the time of the accident, the pilot had a total flight experience of 99 hours, of which 54 hours were in the accident airplane; however, the accident flight was the pilot's first flight in the accident airplane without a flight instructor.

While landing at the airport after a cross-country flight, the airplane departed the right side of the runway onto a grassy area, and the nose landing gear collapsed. Immediately after the accident, the pilot reported to an off-duty law enforcement officer that a gust of wind "got him" and also reported to police officers that a "strong gust of wind" caused the airplane to veer off the runway. In his subsequent written statement, he stated that the nosewheel steering system was unresponsive and contained a manufacturing defect.

Although the pilot claimed that there was an issue with the nosewheel steering system, postaccident examination of the airplane did not reveal any preimpact mechanical malfunctions that would have precluded normal operation. Flight control continuity was established for all flight controls, and nosewheel steering continuity was confirmed. The nose landing gear skid marks on the runway traveled left, then right before exiting the runway. The recorded wind at the airport about 7 minutes after the accident was a left quartering headwind at 11 knots. Given the pilot's statements regarding the gust of wind, the postaccident examination, and the pilot's limited experience in the accident airplane, it is likely that the pilot failed to control the airplane while landing in crosswind conditions.

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 while landing with a crosswind, which resulted in a runway excursion and nose landing gear collapse.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained

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Factual Information

History of Flight

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

Landing-landing rollRunway excursionLanding-landing rollLanding gear collapse

On June 15, 2020, about 1308 eastern daylight time, a Piper PA-46-600TP, N117PR, was substantially damaged when it was involved in an accident near Williston, Florida. The pilot and passenger were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to the pilot's written statement received about 1 month after the accident, he departed Abilene, Texas, about 0900 destined for Williston Municipal Airport (X60), Williston, Florida. The airplane approached runway 5 at X60, and the main landing gear touched down slightly left of the runway centerline; the airplane was tracking straight down the runway. However, when the nosewheel touched down, the airplane made an "immediate hard right turn." He stated that he applied left rudder but that the nosewheel steering was unresponsive, and the airplane would not turn to the left. The airplane subsequently departed the right side of the runway onto a grassy area, where the nose landing gear collapsed before the airplane came to a stop. The pilot further reported that the nosewheel steering system contained a manufacturing defect and cited another PA-46-600TP accident that occurred on July 3, 2020 (NTSB Accident Number ERA20LA237).

The airport supervisor at X60 spoke to the pilot after the accident and stated that the pilot reported that the nosewheel was loose during landing, he overcorrected, and the airplane travelled off the side of the runway. The supervisor added that the wind was gusting to 16 knots but that he did not believe it was a factor in the accident.

An off-duty officer, who was also a pilot, from the Levy County Sheriff's Office was at the airport at the time of the accident. The officer did not witness the approach but saw the airplane veer right during rollout and travel off the right side of the runway. He estimated the wind to be about 10 knots at the time. The officer went to the airplane to confirm that the two occupants were not injured and that no fire hazard existed. The pilot reported to the officer that a gust of wind "got him" and that he "gave it a little power at the end." The officer notified the Williston Police Department.

Officers from the Williston Police Department responded to the scene and spoke with the pilot. According to the police report, the pilot stated "...a strong gust of wind hit his craft broadside, on the port side of the craft, which lifted so significantly that it lost its last wheel traction on the pavement, which caused the plane to veer off the runway..."

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The pilot reported a total flight experience of 99 hours, of which 54 hours were in the same make and model as the accident airplane. He obtained his private pilot certificate in a Cessna 172 about 2 ½ months before the accident. According to the pilot's electronic logbook, he received flight instruction in the accident airplane after receiving his private pilot certificate. The accident flight was the pilot's first flight in the airplane without a flight instructor.

According to a representative of the dealership that sold the accident airplane, at the time of purchase, the pilot did not meet the flight experience requirements for the insurance company to provide coverage for the pilot to use the airplane and did not attend factory-authorized training; however, his flight instructor met the requirements and completed the factory-authorized training. The flight instructor then trained the pilot.

Postaccident examination of the airplane revealed that the nose landing gear had separated, and the propeller blades had fractured. Damage was observed to the nose landing gear mounting area and engine mount bracket. Flight control continuity was established for all flight controls, and steering control continuity was established from the rudder pedals to the steering arm. The steering horn remained intact and attached to the separated nose landing gear. The only anomaly noted during the examination was that the front tire psi was 73.5 psi rather than 88 psi.

Skid marks on the runway showed that the nosewheel skid mark initially traveled left, then right, then extreme right (about 30°). The left main wheel and nosewheel skid marks were most prominent on the runway, leading to the right side and into the grass. In addition, GPS data downloaded from the airplane's Garmin G3000 integrated flight deck were consistent with the nose landing gear skid marks initially traveling left, then right, before exiting the runway.

The recorded wind at X60 at 1315 was from 360° at 11 knots.

Pilot Information

Certificate:	Private	Age:	43,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-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:	September 26, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 26, 2020
Flight Time:	99 hours (Total, all aircraft), 54 hours (Total, this make and model), 65 hours (Pilot In Command, all aircraft), 57 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N117PR
Model/Series:	PA46 600TP	Aircraft Category:	Airplane
Year of Manufacture:	2019	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	4698117
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	April 23, 2020 Annual	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:	46 Hrs	Engines:	1 Turbo prop
Airframe Total Time:	55 Hrs as of last inspection	Engine Manufacturer:	P&W Canada
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	PT6A-42A
Registered Owner:	On file	Rated Power:	600 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:	X60,76 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	13:15 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 4800 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.1 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Abiline, TX (ABI)	Type of Flight Plan Filed:	None
Destination:	Williston, FL (X60)	Type of Clearance:	VFR flight following
Departure Time:	09:00 Local	Type of Airspace:	Class G

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Airport Information

Airport:	Williston Municipal Airport X60	Runway Surface Type:	Concrete
Airport Elevation:	75 ft msl	Runway Surface Condition:	Dry
Runway Used:	5	IFR Approach:	None
Runway Length/Width:	6669 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	29.355556,-82.471946(est)

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Administrative Information

Investigator In Charge (IIC):	Gretz, Robert	
Additional Participating Persons:	Rulon Vilcan; FAA/FSDO; Tampa, FL Robert Martellotti; Piper; Vero Beach, FL Kelly Peters; Piper; Vero Beach, FL John O'Neill; Piper; Vero Beach, FL	
Original Publish Date:	July 15, 2021	
Last Revision Date:		
Investigation Class:	Class 3	
Note:	The NTSB did not travel to the scene of this accident.	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=101497	

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.

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