

Aviation Investigation Final Report

Location:	HANNIBAL, Misso	ouri	Accident Number:	CHI00LA022
Date & Time:	November 5, 1999), 10:15 Local	Registration:	N3073V
Aircraft:	Piper	PA-34-200T	Aircraft Damage:	Substantial
Defining Event:			Injuries:	3 None
Flight Conducted Under:	Part 91: General a	viation - Personal		

Analysis

The pilot stated he encountered a 40-degree crosswind at 12 to 14 knots during the landing on runway 17 and said the wind caused the plane to go to the left side of the runway. He applied full right rudder and right brake. The airplane exited the left side of the runway and impacted a tree. The airplane's bottom fuselage buckled and the landing gear collapsed. The pilot said the airplane did not have any anomalies prior to the accident. In the pilot's written statement, he stated he 'suspected failure of right nose gear steering' and that '...trees are within 40 to 50 feet of runway.' An examination of the airplane revealed control continuity to all flight control surfaces and that the nose gear rotated within an estimated 60-degree steering arc when the rudder pedals were moved. The Type Certificate Data Sheet, A7SO, specified the nose gear rotation to be (+/- 1 degree) left 27 degrees and (+/- 1 degree) right 27 degrees.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot not maintaining directional of the airplane. Factors were the crosswinds and gusts.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER Phase of Operation: LANDING - ROLL

Findings 1. (F) WEATHER CONDITION - CROSSWIND 2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND 3. (F) WEATHER CONDITION - GUSTS

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: LANDING - ROLL

Findings 4. (F) OBJECT - TREE(S)

Factual Information

On November 5, 1999, at 1015 central standard time, a Piper, PA-34-200T, N3073V, piloted by a private pilot, sustained substantial damage on impact with trees and vegetation during a landing on runway 17 (3,899 feet X 74 feet, dry/asphalt) at Hannibal Municipal Airport, near Hannibal, Missouri. The 14 CFR Part 91 personal flight was operating in visual meteorological conditions. The pilot cancelled his IFR flight plan approximately 5 miles north of Hannibal. There were no reported injuries. The flight originated from Rochester International Airport, near Rochester, Minnesota at 0825.

In a telephone interview, the pilot stated that he encountered a crosswind as he performed his landing on runway 17. He reported the wind to be a 40-degree crosswind at 12 to 14 knots. He said that the wind caused the plane to go to the left side of the runway. He stated that he applied full right rudder and right brake. The pilot said that the airplane exited the left side of the runway and impacted a tree. He stated that the airplane's bottom fuselage buckled and the landing gear collapsed. He said that the airplane did not have any anomalies prior to the accident.

At 0950, the Quincy Municipal, Baldwin Field Airport weather was: Wind 240 degrees at 15 knots gusting to 21 knots; visibility 15 statute miles; sky condition few 22,000 feet; temperature 18 degrees C; dew point 9 degrees C; altimeter 30.19 inches of mercury.

In the pilot's written statement, he stated that he "suspected failure of right nose gear steering." The pilot further reported that "...trees are within 40 to 50 feet of runway."

On November 19, 1999, a Federal Aviation Administration (FAA) investigator examined the accident airplane. The examination revealed that there was control continuity to all flight control surfaces. The examination further revealed that the nose gear rotated within an estimated 60-degree steering arc when the rudder pedals were moved. The Type Certificate Data Sheet, A7SO, specified the nose gear rotation to be (+/- 1 degree) left 27 degrees and (+/- 1 degree) right 27 degrees.

Pilot Information

Certificate:	Private	Age:	74,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	July 1, 1998
Occupational Pilot:	No Last Flight Review or Equivalent:		
Flight Time:	7838 hours (Total, all aircraft), 2094 hours (Total, this make and model), 7724 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N3073V
Model/Series:	PA-34-200T PA-34-200T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34-7970170
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	January 1, 1999 Annual	Certified Max Gross Wt.:	4570 lbs
Time Since Last Inspection:	65 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	3380 Hrs	Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	TSIO-360-EB1B
Registered Owner:	INDEPENDENTS SERVICE COMPANY	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

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Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	UIN ,769 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	09:50 Local	Direction from Accident Site:	39°
Lowest Cloud Condition:	Unknown	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 21 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	18°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ROCHESTER , MN (RST)	Type of Flight Plan Filed:	IFR
Destination:	(HAE)	Type of Clearance:	None
Departure Time:	08:25 Local	Type of Airspace:	Class G

Airport Information

Airport:	HANNIBAL MUNI AIRPORT HAE	Runway Surface Type:	Asphalt
Airport Elevation:	772 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	3899 ft / 74 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	39.699913,-91.379676(est)

Administrative Information

Investigator In Charge (IIC):	Malinowski, Edward		
Additional Participating Persons:	STEVEN LONG; SAINT ANN , MO		
Original Publish Date:	November 30, 2000		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=47717		

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.