



National Transportation Safety Board Aviation Accident Final Report

Location:	Plymouth, NC	Accident Number:	ERA09LA033A
Date & Time:	11/01/2008, 0935 EDT	Registration:	N3568W
Aircraft:	PIPER PA-32-260	Aircraft Damage:	Substantial
Defining Event:	Midair collision	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot of a Piper Cherokee (PA-32-260) was practicing a global-positioning-system (GPS) instrument approach in visual meteorological conditions without a safety observer onboard. Another pilot, in a Piper Dakota (PA-28-236), was also navigating inbound to the airport via GPS. Both pilots stated that they made inbound radio calls, during which they didn't hear each other, but heard a response from an airplane on the ground. The Dakota subsequently overtook the Cherokee and impacted its right side, peeling back the roof. The Dakota then descended, coming to rest inverted in trees, while the Cherokee entered a spin until a low-level recovery, followed by a descent into a river.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The Piper Dakota (PA-28-236) pilot's failure to see and avoid the Piper Cherokee (PA-32-260).

Findings

Personnel issues	Monitoring other aircraft - Pilot (Cause)
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Factual Information

On November 1, 2008, about 0935 eastern standard time, a Piper PA-32-260 (Cherokee Six), N3568W, and a Piper PA-28-236 (Dakota), N2139N, were substantially damaged when they collided in mid-air about 5 nautical miles north of Plymouth Municipal Airport (PMZ), Plymouth, North Carolina. The certificated private pilot onboard the Cherokee and the certificated private pilot onboard the Dakota incurred minor injuries. Neither pilot had filed a flight plan, and both airplanes were operating in visual meteorological conditions. The Cherokee had departed Plymouth on a local flight, and the Dakota had departed Warren Field (OCW), Washington, North Carolina, with Plymouth as the destination. The personal flights were conducted under the provisions of 14 Code of Federal Regulations Part 91.

According to the pilot of the Cherokee, he was practicing the global positioning system (GPS) runway 21 wide area augmentation system (WAAS) approach, utilizing the autopilot. He proceeded to BERTI intersection, and subsequently, 10 miles from the airport, he announced his position on the airport common traffic advisory frequency. When he reached 7 miles, the pilot of an airplane back-taxiing to runway 21 announced his intention to depart to the southeast. The Cherokee pilot restated his position, and advised him that he should not be a factor. The Cherokee pilot subsequently descended the airplane, and maintained 1,600 feet until reaching the final approach fix, ZUHAX intersection. At that point, the autopilot intercepted the glideslope, and the airplane began to descend. The pilot of the Cherokee made another call to ensure the runway was clear, and "almost instantly," there was a loud bang on the right side of the airplane. The windshield and part of the cabin roof separated from the airplane, and the airplane entered a right spin, "going straight down." The pilot recovered from the spin about 150 feet above a river, and with trees on his right side, all he could do was pull the yoke back and land in the river. After landing, the pilot put on his life preserver, and went out on the left wing. The airplane subsequently sank, and the pilot was recovered by two fishermen.

The pilot also noted that he was initially unaware that another airplane was involved, and further noted that he never heard the other pilot on the frequency or saw the other airplane.

According to the pilot of the Dakota, he was inbound to Plymouth and navigating by GPS. About 7 miles from the airport, and 2,000 feet, he announced his position. Another pilot responded that he was performing an engine run-up on runway 21. The Dakota pilot then advised the pilot on the ground that his airplane wouldn't be a problem, and that he was 4 miles from the airport. Shortly thereafter, the pilot heard a "Bamm," and the airplane began a descent. The pilot made an emergency call on the radio and applied maximum power; however, the airplane descended into a tree, spun around, and came to rest in another tree, inverted, about 8 feet off the ground.

The pilot also noted that he did not initially know there was another airplane involved; he thought he had hit a bird.

According to a witness on the ground, it appeared that the airplane that landed in the tree was "chasing" the other airplane. He remarked to his brother that he thought they would collide, which they did. After the collision, one airplane veered off to the left, and the other veered off to the right.

A third pilot was in his airplane at Plymouth, back taxiing down runway 21. As he was doing so,

he heard a pilot report his approach to the airport. After the third pilot stated his intentions, the airborne pilot advised him that the third pilot's airplane would not be a factor. After the accident, and upon further recollection, the third pilot thought he may have heard two inbound calls, but was unsure, and both were made from a distance. After departing Plymouth, the third pilot heard another pilot report that he had hit a bird.

The Cherokee pilot, age 68, held a private pilot certificate with airplane single-engine land and instrument airplane ratings. The pilot reported 1,050 hours of total flight time, and his latest Federal Aviation Administration (FAA) third class medical certificate was issued in December 2007. The Dakota pilot, age 71, held a private pilot certificate with airplane single-engine land, airplane multiengine land, and instrument airplane ratings. The pilot reported 1,049 hours of total flight time, and his latest FAA third class medical certificate was issued in November 2007.

Photographs of the Cherokee being recovered from the river revealed impact marks and missing cabin roof skin, beginning in the vicinity of the right side, cabin door.

Weather, recorded at an airport 14 nautical miles to the northeast, at 1142, included clear skies and visibility 10 statute miles.

According to Federal Aviation Regulation Part 91.109 (b), "No person may operate a civil aircraft in simulated instrument flight unless...the other control seat is occupied by a safety pilot who possesses at least a private pilot certificate with category and class ratings appropriate to the aircraft being flown."

History of Flight

Approach	Midair collision (Defining event)
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Pilot Information

Certificate:	Private	Age:	68, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3	Last Medical Exam:	12/30/2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	10/28/2007
Flight Time:	1050 hours (Total, all aircraft), 950 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N3568W
Model/Series:	PA-32-260	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	32-459
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	01/19/2008, Annual	Certified Max Gross Wt.:	3400 lbs
Time Since Last Inspection:	35 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3142 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-540 SERIES
Registered Owner:	THOMPSON BILLY T	Rated Power:	250 hp
Operator:	THOMPSON BILLY T	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	EDE, 39 ft msl	Observation Time:	1142 EST
Distance from Accident Site:	14 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	40°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	20° C / 2° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	6 knots, 230°	Visibility (RVR):	
Altimeter Setting:	30.33 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Plymouth, NC (PMZ)	Type of Flight Plan Filed:	None
Destination:	Plymouth, NC (PMZ)	Type of Clearance:	None
Departure Time:	EDT	Type of Airspace:	Class G

Airport Information

Airport:	Plymouth Municipal (PMZ)	Runway Surface Type:	
Airport Elevation:	39 ft	Runway Surface Condition:	
Runway Used:	N/A	IFR Approach:	Global Positioning System; Practice
Runway Length/Width:		VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor		

Administrative Information

Investigator In Charge (IIC):	Paul R Cox	Adopted Date:	11/09/2009
Additional Participating Persons:	Douglas Nielson; FAA/FSDO; Greensboro, NC		
Publish Date:	09/10/2015		
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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