



Aviation Investigation Final Report

Location:	Bennettsville, South Carolina	Accident Number:	ATL06CA011
Date & Time:	October 29, 2005, 17:45 Local	Registration:	N3029Z
Aircraft:	Piper PA-22-160	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, after returning from a short uneventful cross-country flight from Camden, South Carolina to Bennettsville, South Carolina, during the landing roll on runway 24, the airplane began to veer to the right. The pilot attempted to steer the airplane with the tail wheel but was unsuccessful. The airplane exited runway 24 and ground looped, and the left wing collided with the ground. The pilot stated that the left brake master cylinder was low on fluid, and the left brake did not engage.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The malfunction of the wheel brake assembly due to low fluid level that resulted in a loss of control during the landing roll.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - FAILURE
2. MAINTENANCE,SERVICE OF AIRCRAFT/EQUIPMENT - NOT MAINTAINED - PILOT IN COMMAND
3. (C) FLUID,HYDRAULIC - LOW LEVEL

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

4. (F) TERRAIN CONDITION - GROUND

Factual Information

On October 29, 2005, at 1745 eastern daylight time, a Piper PA-22-160, N3029Z, register to and operated by Flyers Incorporated collided with the ground at Bennettsville Airport, Bennettsville, South Carolina. The personal flight was operated under the provision of Title 14 Part 91 with no flight plan filed. The airplane sustained substantial damage. The pilot, and two passengers were not injured. The flight departed Camden, South Carolina at 1715.

According to the pilot, after returning from a short uneventful cross-country flight from Camden, South Carolina to Bennettsville, South Carolina, during the landing roll out on runway 24 the airplane began to veer to the right. The pilot attempted to steer the airplane with the tail wheel but was unsuccessful. The airplane exited runway 24 and ground looped, and the left wing collided with the ground. The pilot stated that the left brake master cylinder was low on fluid, and the left brake did not engage.

Pilot Information

Certificate:	Private	Age:	69, Male
Airplane Rating(s):	Single-engine sea	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 1, 2003
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1525 hours (Total, all aircraft), 1525 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N3029Z
Model/Series:	PA-22-160	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-6983
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	December 1, 2004 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	35 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1957 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	Flyers Inc.	Rated Power:	160 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KFLO, 147 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	17:53 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.31 inches Hg	Temperature/Dew Point:	14°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CAMDEN, SC (CDN)	Type of Flight Plan Filed:	None
Destination:	BENNETTSVILLE, SC (BBP)	Type of Clearance:	None
Departure Time:	17:15 Local	Type of Airspace:	

Airport Information

Airport:	MARLBORO COUNTY BBP	Runway Surface Type:	Asphalt
Airport Elevation:	147 ft msl	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	Visual
Runway Length/Width:	5000 ft / 75 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:	34.61972,-79.738334

Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Larin Kassa; Columbia FSDO; columbia, SC
Original Publish Date:	June 28, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=62782

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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](#).