



Aviation Investigation Final Report

Location:	WINSTON SALEM, North Carolina	Accident Number:	ATL97LA041
Date & Time:	February 12, 1997, 15:45 Local	Registration:	N15013
Aircraft:	Piper PA-28R-200	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The flight had been cleared for a touch-and-go landing on runway 4, when shortly after touchdown, the airplane veered off the right side of the runway. The pilot reported that during the landing roll, he experienced some difficulty with the brakes, and the airplane veered off the runway into a grassy area. During the uncontrolled movement of the airplane, the right main landing gear collapsed, and the right wing spar was damaged. A review of the weather data disclosed that the prevailing wind was from 320 degrees at 7 knots. An examination of the airplane failed to disclose a mechanical problem with the brake system.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate compensation for wind conditions and failure to maintain directional control of the airplane, which resulted in a ground swerve and collapse of the right main landing gear. The crosswind was a related factor.

Findings

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

Findings

1. (F) WEATHER CONDITION - CROSSWIND
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

- 3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
- 4. GROUND LOOP/SWERVE

Occurrence #2: MAIN GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

- 5. LANDING GEAR,MAIN GEAR - OVERLOAD

Factual Information

On February 12, 1997, at 1545 eastern standard time, a Piper PA-28R-200, N15013, collided with the ground and collapsed the right main landing gear during an attempted landing on runway 04 at the Smith Reynolds Airport in Winston Salem, North Carolina. The personal flight operated under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The airplane sustained substantial damage. The pilot was not injured. The flight departed Winston Salem at 1540.

The flight had been cleared for a touch and go landing when shortly after the touch phase of the procedure the airplane veered off the right side of the runway. The pilot reported that during the landing roll, he experienced some difficulty with the brakes, and the airplane veered off the runway into a grassy area. During the uncontrolled movement of the airplane, the right main landing gear collapsed, and the right wing spar was damaged.

A review of the weather data disclosed that, the prevailing winds were 320 degrees at seven knots when the pilot attempted the landing. An examination of the airplane failed to disclose a mechanical problem with the brake system.

Pilot Information

Certificate:	Private	Age:	38, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	November 5, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	138 hours (Total, all aircraft), 27 hours (Total, this make and model), 27 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N15013
Model/Series:	PA-28R-200 PA-28R-200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28R-7235318
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	February 14, 1996 Annual	Certified Max Gross Wt.:	2900 lbs
Time Since Last Inspection:	100 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1091 Hrs	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	IO-360-C1C
Registered Owner:	MICHAEL D. SHADRICK	Rated Power:	200 Horsepower
Operator:	MARK L. PALMER	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	INT ,970 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	15:47 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Broken / 1800 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	10°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(INT)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:40 Local	Type of Airspace:	Class C

Airport Information

Airport:	SMITH REYNOLDS INT	Runway Surface Type:	Asphalt
Airport Elevation:	970 ft msl	Runway Surface Condition:	Dry
Runway Used:	4	IFR Approach:	
Runway Length/Width:	3930 ft / 75 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36.139602,-80.319335(est)

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip
Additional Participating Persons:	ROGER C FORSHEE; WINSTON SALEM , NC
Original Publish Date:	December 15, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=3823

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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](#).