



National Transportation Safety Board Aviation Accident Final Report

Location:	RUSSELLVILLE, AL	Accident Number:	ATL97LA066
Date & Time:	05/01/1997, 1100 CDT	Registration:	N5778Z
Aircraft:	Piper PA-22-180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

Approximately 4 hours into the flight, while on a long descent to the destination airport, the pilot experienced a reduction in engine power. The power reduction continued over a period of eight minutes and resulted in a complete loss of engine power. Following the loss of power, the pilot's attempts to restore full engine power, which included the application of carburetor heat, failed. The pilot selected a nearby paved road for an emergency landing. During the landing roll out, the right wing collided with a road sign, and the airplane swerved into an adjacent ditch and nosed over. Examination of the airplane failed to disclose a mechanical problem. Fuel was recovered from the fuel system. During the functional test of the engine, the engine operated normally through all power ranges. A review of current weather information revealed that weather conditions were favorable for the formation of carburetor icing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undetermined reasons. A factor was conditions were favorable for the formation of carburetor ice.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: DESCENT

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED
2. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Occurrence #4: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

On May 1, 1997, at 1100 central daylight time, a Piper PA-28-180, N5778Z, collided with a road sign during an emergency landing roll, and nosed over into a ditch five miles west of Russellville, Alabama. The personal flight operated under the provisions of Title 14 CFR Part 91 with a 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 Quincy, Louisiana, at 0700.

According to the pilot, approximately four hours into the flight, while on a long descent to Muscle Shoals, Alabama, he experienced a reduction in engine power. The power reduction continued over a period of eight minutes and resulted in a complete loss of engine power. Following the loss of power, the pilot's attempts to restore full engine power, which included the application of carburetor heat, failed. The pilot selected a nearby paved road for an emergency landing. During the landing roll out, the right wing collided with a road sign, and the airplane swerved into an adjacent ditch and nosed over.

During the examination of the airplane approximately twelve gallons of fuel were recovered from the fuel system. During the functional test of the engine, the engine operated normally through all power ranges. A review of current weather information revealed that weather conditions were favorable for the formation of carburetor icing.

Pilot Information

Certificate:	Private	Age:	43, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/05/1996
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	140 hours (Total, all aircraft), 45 hours (Total, this make and model), 7 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N5778Z
Model/Series:	PA-22-180 PA-22-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Utility	Serial Number:	22-9623
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2065 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-235-C1B
Registered Owner:	RICHARD S. ROBARGE	Rated Power:	108 hp
Operator:	RICHARD S. ROBARGE	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MSL, 550 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1053 CDT	Direction from Accident Site:	45°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	16° C / 6° C
Precipitation and Obscuration:			
Departure Point:	QUINCY, LA (5R8)	Type of Flight Plan Filed:	VFR
Destination:	MUSCLE SHOALS, AL (MSL)	Type of Clearance:	None
Departure Time:	0700 EST	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): PHILLIP POWELL Report Date: 01/07/1998

Additional Participating Persons: DAVID FAIR

Publish Date:

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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