



National Transportation Safety Board Aviation Accident Factual Report

Location:	JEFFERSON, GA	Accident Number:	ATL95LA058
Date & Time:	03/03/1995, 1735 EST	Registration:	N1321Q
Aircraft:	CESSNA 150L	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Personal

On March 3, 1995, about 1735 eastern standard time, a Cessna 150L, N1321Q, collided with trees during an emergency descent. The pilot reported that there was a loss of engine power while conducting a non-precision, instrument approach into the Jackson County Airport, runway 34, Jefferson, Georgia. The airplane was operated by the pilot under the provisions of 14 CFR Part 91, and instrument flight rules (IFR). An IFR flight plan was filed for the personal flight. There were no injuries to the instrument rated private pilot, and the airplane was substantially damaged. Origination of the flight was Dayton, Ohio, about 1255, on the same day.

According to the pilot, during the approach, the engine began running roughly. After passing the final approach fix, inbound, the engine RPMs dropped to 1400. Carburetor heat was applied without effect, and the engine quit. Atlanta Air Traffic Control Center records indicated, at 1735, the pilot notified air traffic control (ATC) that he had lost his engine. A restart was accomplished, and the pilot notified ATC that he would complete the approach. The pilot stated that the engine ran at full power for a few seconds before it began running roughly, again, and quit. The pilot attempted a forced landing in a field 4 miles southwest of the airport. The airplane collided with trees approximately 50 yards before reaching the field. ATC notified local authorities that contact with the aircraft had been lost. Jefferson County Sheriff's Office personnel located the aircraft wreckage, and the pilot suffered no injuries.

The pilot stated that he had last purchased fuel in Dayton, Ohio, where the aircraft was topped off with automotive gasoline. He also indicated that he regularly used automotive gasoline to fuel the airplane. According to the engine manufacturer, the use of automotive fuels in any of their aircraft engines is not recommended or authorized. Teledyne Continental Motors (TCM) authorizes only the use of fuels recommended in the engine operating manuals. The minimum fuel grade approved for use in the O-200 model engine is 80 octane. According to TCM, all Continental aircraft engines are to be operated only on aviation fuel. The continuous use of automotive fuel can lead to sticking or corroded valves due to the absence of lead in the fuel. Lead is used to lubricate the valve in the valve guide in normal operation. Lead also cushions the valves as they are closed on the valve seat by the valve springs. Insufficient lubrication can lead to scuffing and scoring of engine valves.

According to the pilot, he had experienced similar engine problems on a previous flight from Jackson County Airport, on February 26, 1995, to Dayton, Ohio. The pilot recalled that after climbing to 8200 feet, the engine began to lose power. The engine RPMs dropped from 2500 to 1500. The pilot applied carburetor heat, and the engine began to increase RPMs and run normal. The pilot stated that he believed he had corrected the problem, and that he was able to complete the remainder of the flight without any further problems.

An examination of the engine showed evidence of severe scoring and scratching on all engine valves. The exhaust valves also showed coking on the stem that operated in the valve guide. The examination concluded that the loss of power was due to stuck valves while in flight.

The Pilot/Operator Aircraft Accident Report, NTSB Form 6120.4, filled out by the pilot was never received. He declined to fill out a second report.

Pilot Information

Certificate:	Private	Age:	47, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	09/20/1994
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	786 hours (Total, all aircraft), 700 hours (Total, this make and model), 704 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N1321Q
Model/Series:	150L 150L	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	15072621
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	08/06/1994, Annual	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	O-200-A
Registered Owner:	WILL, CLIFFORD S.	Rated Power:	100 hp
Operator:	WILL, CLIFFORD S.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AHN, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1750 EST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Partial Obscuration / 0 ft agl	Visibility	1 Miles
Lowest Ceiling:	Overcast / 500 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	9° C / 8° C
Precipitation and Obscuration:			
Departure Point:	DAYTON, OH (MGY)	Type of Flight Plan Filed:	IFR
Destination:	(19A)	Type of Clearance:	IFR
Departure Time:	1255 EST	Type of Airspace:	Class E

Airport Information

Airport:	JACKSON COUNTY AIRPORT (19A)	Runway Surface Type:	
Airport Elevation:	951 ft	Runway Surface Condition:	
Runway Used:	34	IFR Approach:	ADF/NDB
Runway Length/Width:	4108 ft / 75 ft	VFR Approach/Landing:	Forced Landing

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):	PRESTON E HICKS,
Additional Participating Persons:	ROBERT E BRUCE
Investigation Docket:	NTSB accident and incident docket 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/ .