



National Transportation Safety Board Aviation Accident Data Summary

Location:	Miami, FL	Accident Number:	MIA07LA055
Date & Time:	03/02/2007, 1835 EST	Registration:	N682RA
Aircraft:	Cessna 150G	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The certified flight instructor (CFI) stated that the engine began to run rough while performing airwork during an instructional flight. He elected to divert to a nearby airport where he performed an uneventful precautionary landing. While on the ground he performed an engine run-up and noticed a discrepancy with the left magneto. He operated the engine to a high rpm setting with the fuel/air ratio leaned in an effort to clear what he thought was lead fouled spark plugs, and reported that the left magneto drop was within limits (150 rpm). The CFI did not contact the operator to get assistance related to the precautionary landing, and elected to return to the original departure airport. During climbout, when the flight was 6-7 miles from the destination airport, the engine vibrations began and the rpm fluctuated 200 rpm, decreased to 2,000 rpm, then further decreased and remained at 300-400 rpm. He maneuvered the airplane towards a grass airstrip that he knew about, but because of the low light and visibility restriction, he flew past the airstrip. Due to the low altitude, he elected to land in a field perpendicular to the airstrip. While approaching the field, the airplane collided with powerlines then the ground, and nosed over. Postaccident examination of the engine revealed no evidence of a failure or malfunction of the power section. Examination of the fuel system revealed no evidence of preimpact failure or malfunction. Examination of the spark plugs were satisfactory but were wet with oil consistent with an inverted engine. The left magneto operated intermittently during postaccident bench testing. Disassembly of the left magneto revealed the point cam was worn, and the points exhibited erosion. Additionally, the coil tested out of limits; the condenser tested within specification.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's (CFI) continued operation of the airplane with known deficiencies (rough running engine). A factor in the accident was no suitable terrain for a forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CLIMB

Findings

1. IGNITION SYSTEM,IGNITION COIL - FAILURE,TOTAL
2. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - CONTINUED - PILOT IN COMMAND(CFI)

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

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

- 3. (F) TERRAIN CONDITION - NONE SUITABLE
- 4. OBJECT - WIRE, TRANSMISSION

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

- 5. TERRAIN CONDITION - GROUND

Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	25
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Single-engine; Instrument Airplane
Flight Time:	1100 hours (Total, all aircraft), 66 hours (Total, this make and model), 1000 hours (Pilot In Command, all aircraft), 128 hours (Last 90 days, all aircraft), 38 hours (Last 30 days, all aircraft)		

Student Pilot Information

Certificate:	None	Age:	27
Airplane Rating(s):	None	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N682RA
Model/Series:	150G	Engines:	1 Reciprocating
Operator:	Dean International, Inc.	Engine Manufacturer:	Continental
Operating Certificate(s) Held:	None	Engine Model/Series:	O-200-A
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	KTMB, 8 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None	Wind Speed/Gusts, Direction:	6 knots / , 160°
Temperature:	26 °C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Homestead, FL (X51)	Destination:	(KTMB)

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	25.621111, -80.485833		

Administrative Information

Investigator In Charge (IIC):	Timothy W Monville	Adopted Date:	03/31/2008
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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