



National Transportation Safety Board Aviation Accident Data Summary

Location:	PETERSBURG, OH	Accident Number:	BFO93LA038
Date & Time:	03/01/1993, 1415 EST	Registration:	N5523L
Aircraft:	CESSNA 152	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

WHILE RETURNING TO THE AIRPORT FROM AN INSTRUCTIONAL FLIGHT, THE ENGINE 'HAD A SUDDEN POWER DROP OF 1300 TO 1400 RPM,' ACCORDING TO THE CFI. THE CFI 'WENT THROUGH THE EMERGENCY CHECKLIST' AND 'COULD NOT HOLD ALTITUDE.' THE ENGINE LOST ALL POWER WHEN THE LEFT MAGNETO WAS SELECTED. THE CFI PERFORMED A FORCED LANDING ON SHORT, SOFT, HILLY TERRAIN, AND THE AIRPLANE NOSED OVER. THE FLAPS WERE FOUND IN THE RETRACTED POSITION, ALTHOUGH THE FLAP SELECTOR SWITCH WAS FOUND IN THE FULLY EXTENDED POSITION. AN EXAMINATION OF THE AIRPLANE DID NOT REVEAL ANY MECHANICAL MALFUNCTIONS. BOTH MAGNETOS WERE FUNCTIONALLY TESTED AND MET MANUFACTURER'S TOLERANCES. THE TEMPERATURE AND DEW POINT WERE 38 AND 20 DEG, RESPECTIVELY. ACCORDING TO CARBURETOR ICING PROBABILITY CHARTS, CONDITIONS WERE CONDUCIVE TO VISIBLE ICING AT GLIDE AND CRUISE POWER; THE CARBURETOR HEAT WAS FOUND IN A MIDWAY POSITION.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
LOSS OF ENGINE POWER DUE TO UNDETERMINED REASONS. A FACTOR RELATED TO THE ACCIDENT WAS THE SHORT, SOFT, HILLY TERRAIN CONDITION IN THE EMERGENCY LANDING AREA.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: DESCENT - NORMAL

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings
2. LOWERING OF FLAPS - NOT ATTAINED - PILOT IN COMMAND

- 3. TERRAIN CONDITION - SOFT
- 4. TERRAIN CONDITION - MOUNTAINOUS/HILLY

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	22
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine
Flight Time:	592 hours (Total, all aircraft), 129 hours (Total, this make and model), 496 hours (Pilot In Command, all aircraft), 185 hours (Last 90 days, all aircraft), 76 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N5523L
Model/Series:	152 152	Engines:	1 Reciprocating
Operator:	STENSIN AVIATION, INC	Engine Manufacturer:	LYCOMING
Operating Certificate(s) Held:	None	Engine Model/Series:	O-235-L2C
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	YNG, 1057 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	17 knots / 23 knots, 240°
Temperature:	3° C	Visibility	15 Miles
Precipitation and Obscuration:			
Departure Point:	BEAVER FALLS, PA	Destination:	

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): Jeffrey B Guzzetti

Adopted Date: 11/03/1993

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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