



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	OCHOPEE, FL	<b>Accident Number:</b>	MIA98LA066
<b>Date &amp; Time:</b>	02/01/1998, 1413 EST	<b>Registration:</b>	N94929
<b>Aircraft:</b>	Cessna 152	<b>Injuries:</b>	2 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The pilot reported that at an altitude of about 2,000', the engine lost power & ran rough. He elected to land on a road that was perpendicular to a highway. The airplane was seen touching down on the road, but was heading towards the intersection of the road & highway, where the Sheriff's Department was working a motor vehicle accident. As the airplane approached the activity at the highway intersection, the pilot attempted to take off to avoid hitting vehicles & people. He entered a steep climb to avoid a power line, then the airplane descended nose first into trees. The pilot stated that where the airplane touched down on the road, it was 'slippery' which made it 'hard to stop.' As the airplane moved towards the highway, the pilot noticed that people were still on the road, so he tried to avoid hitting them by taking off & flying over the highway. The pilot said, '...unfortunately since we lost speed in the landing, we didn't have enough power and we stalled into the trees.' The engine was examined & partially torn down. The examination of the engine revealed that the #4 cylinder exhaust valve was broken off at the base of the stem & was found in the combustion chamber. The bottom part of the valve was retrieved from inside the muffler, along with pieces of the valve seat. Damage from the valve was found on the cylinder head & piston top. A hole was found in the top of the piston. Further examination of the broken valve stem revealed that it was pitted & corroded. In addition, the engine showed signs of having been operated at high temperatures for a considerable length of time. An external examination of the engine revealed corrosion on the exterior of the steel cylinder barrels. Paint on the cylinder heads was blistered & peeled. The ignition system harness was found worn & tattered. The engine log books revealed that the engine had been operated about 700 hours past the manufacture's recommended overhaul time.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: partial loss of engine power due to a fractured number 4 exhaust valve, which resulted in a forced landing; and the lack of sufficient airspeed to maneuver over power lines during an attempt to abort (go around from) an emergency landing, which resulted in an inadvertent stall and subsequent impact with trees. Factors relating to the accident were: the owner/operator's failure to perform the engine manufacture's recommended overhaul at the recommended time, and high obstructions in the emergency landing area.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation: CRUISE - NORMAL

### Findings

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - FRACTURED

2. (F) MAINTENANCE, OVERHAUL, MAJOR - NOT PERFORMED - COMPANY MAINTENANCE PERSONNEL  
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Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING  
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Occurrence #3: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: LANDING - ABORTED

Findings

- 3. (F) TERRAIN CONDITION - HIGH OBSTRUCTION(S)
  - 4. EVASIVE MANEUVER - INITIATED - PILOT IN COMMAND
  - 5. (C) AIRSPEED - INADEQUATE
  - 6. (C) STALL - INADVERTENT
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Occurrence #4: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

- 7. OBJECT - TREE(S)

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	24
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	82 hours (Total, all aircraft), 82 hours (Total, this make and model), 32 hours (Pilot In Command, all aircraft), 14 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N94929
<b>Model/Series:</b>	152 152	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	GATEWAY AVIATION INC	<b>Engine Manufacturer:</b>	Lycoming
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	O-235-N2C
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	APF, 9 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	11 knots / 18 knots, 90°
Temperature:	24° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	EVERGLADES CITY, FL (X01)	Destination:	

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	ALAN J YURMAN	Adopted Date:	02/15/2001
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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