



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Ashland, AL	<b>Accident Number:</b>	ATL05LA001
<b>Date &amp; Time:</b>	10/02/2004, 0900 CDT	<b>Registration:</b>	N40129
<b>Aircraft:</b>	Stinson 108	<b>Injuries:</b>	3 Minor, 1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The pilot stated they were in cruise flight at 2,500 feet with a private pilot flying the airplane. The engine began to run rough and shudder. The pilot stated, "I have the controls" and the private pilot responded, "you have the controls." The pilot looked for a forced landing area and observed a country road and a field. He completed the emergency checklist and entered a downwind to land on the highway. He turned base and observed power poles, but he could not see any power lines running between the poles and decided to land in the field. He made a left 35-degree turn towards a field and propeller struck a tree, yawed to the left colliding with the ground separating the landing gear and bending the engine firewall. Examination of the engine assembly revealed the exhaust valve in the No.4 cylinder had failed. Examination of the exhaust valve revealed fatigue cracks had propagated from opposite sides of the stem adjacent to the beginning of the radius between the stem and the valve head.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A total loss of engine power in cruise flight due to the fatigue failure of the No.4 cylinder exhaust valve.

## Findings

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

### Findings

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - FATIGUE
2. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - EMERGENCY

### Findings

3. OBJECT - TREE(S)
4. TERRAIN CONDITION - NONE SUITABLE
5. TERRAIN CONDITION - GROUND

## Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor; Commercial	<b>Age:</b>	54
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	Glider; Gyroplane; Helicopter	<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Glider; Helicopter; Instrument Airplane
<b>Flight Time:</b>	9387 hours (Total, all aircraft), 55 hours (Total, this make and model), 7833 hours (Pilot In Command, all aircraft), 74 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Stinson	<b>Registration:</b>	N40129
<b>Model/Series:</b>	108	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	James R. Brandt	<b>Engine Manufacturer:</b>	Franklin
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	GA4-150 B3
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	ANB, 612 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	None	<b>Wind Speed/Gusts, Direction:</b>	Calm / ,
<b>Temperature:</b>	23° C	<b>Visibility</b>	7 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Birmingham, AL (BHM)	<b>Destination:</b>	Ashland, AL (26A)

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 Minor, 1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>	33.287500, -85.803889		

## Administrative Information

**Investigator In Charge (IIC):** Carrol A Smith

**Adopted Date:** 06/08/2005

**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](mailto: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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