



# National Transportation Safety Board Aviation Accident Data Summary

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<b>Location:</b>	LOCUST GROVE, GA	<b>Accident Number:</b>	ATL97FA095
<b>Date &amp; Time:</b>	07/02/1997, 0935 EDT	<b>Registration:</b>	N450GC
<b>Aircraft:</b>	Boeing Stearman B75N1	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

After takeoff, a witness observed a puff of black smoke coming from the engine. Shortly thereafter, the airplane nosed down and descended rapidly. During the on-site examination of the engine, it was observed that the #6 cylinder head was separated from the engine. Metallurgical testing on the cylinder head revealed that the fracture was indicative of high temperature separation or overstress.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:  
The inadvertent stall encountered by the pilot after experiencing an in-flight cylinder head separation.

## Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) ENGINE ASSEMBLY,CYLINDER - FAILURE,TOTAL
2. ENGINE ASSEMBLY,CYLINDER - SEPARATION

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

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Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

3. (C) STALL - INADVERTENT - PILOT IN COMMAND

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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	57
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	1270 hours (Total, all aircraft), 80 hours (Total, this make and model), 1140 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Boeing Stearman	<b>Registration:</b>	N450GC
<b>Model/Series:</b>	B75N1 B-75N1	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	JOHN K. REED	<b>Engine Manufacturer:</b>	P&W
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	R-985
<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>	ATL, 1026 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	None / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	9 knots / , 320°
<b>Temperature:</b>	28°C	<b>Visibility</b>	9 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	(GA04)	<b>Destination:</b>	

## Airport Information

<b>Airport:</b>	MALLARDS LANDING (GA04)	<b>Runway Surface Type:</b>	Grass/turf
<b>Runway Used:</b>	25	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	2800 ft / 150 ft		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	On-Ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

Investigator In Charge (IIC): PRESTON E HICKS

Adopted Date: 04/24/1998

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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The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.