



# National Transportation Safety Board Aviation Accident Data Summary

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<b>Location:</b>	TUSKEGEE, AL	<b>Accident Number:</b>	ATL93LA069
<b>Date &amp; Time:</b>	04/03/1993, 1210 CST	<b>Registration:</b>	N89ST
<b>Aircraft:</b>	JOHN THOMASON LACO 145	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

THE PILOT REPORTED THAT HE WAS PERFORMING A NORMAL LANDING; THE TAIL WHEEL TOUCHED DOWN FIRST, THEN THE MAINS. DURING THE LANDING ROLL, DIRECTIONAL CONTROL WAS LOST, AND THE AIRCRAFT GROUND LOOPED. THE INVESTIGATION REVEALED THAT THE TAIL WHEEL LEAF SPRINGS HAD FAILED. THERE WAS CORROSION ON ONE OF THE FRACTURE SURFACES; HOWEVER, METALLURGICAL EXAMINATION OF THE SPRINGS REVEALED THAT ALL FRACTURES WERE FROM OVERLOAD. THE PILOT REPORTED THAT ALL OF THE LEAF SPRINGS WERE NOT LOCATED; THEREFORE, A COMPLETE METALLURGICAL STUDY WAS NOT POSSIBLE. THE AIRCRAFT TOTAL TIME WAS 26 HOURS; HOWEVER, THE LEAF SPRINGS WERE INSTALLED IN A USED CONDITION, AND THE MAINTENANCE HISTORY OF THE SPRINGS WAS NOT AVAILABLE.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE OVERLOAD FAILURE OF THE TAIL WHEEL LEAF SPRINGS, WHICH RESULTED IN A LOSS OF DIRECTIONAL CONTROL DURING THE LANDING ROLL.

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: LANDING - ROLL

### Findings

1. (C) LANDING GEAR, TAILWHEEL ASSEMBLY - FAILURE, TOTAL
2. LANDING GEAR, TAILWHEEL ASSEMBLY - OVERLOAD

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Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	63
<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>	424 hours (Total, all aircraft), 19 hours (Total, this make and model), 1 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	JOHN THOMASON	<b>Registration:</b>	N89ST
<b>Model/Series:</b>	LACO 145 LACO 145	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	GRIMES, CHARLES J.	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	O-300-C
<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>	AUO, 776 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	None / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	Calm / ,
<b>Temperature:</b>	12° C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	SMITHS, AL (NONE)	<b>Destination:</b>	

## Airport Information

<b>Airport:</b>	TUSKEGEE MUNICIPAL (06A)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	31	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	5000 ft / 100 ft		

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC): RALPH E HICKS

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](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 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.