



National Transportation Safety Board Aviation Accident Final Report

Location:	TUSKEGEE, AL	Accident Number:	ATL93LA069
Date & Time:	04/03/1993, 1210 CST	Registration:	N89ST
Aircraft:	JOHN THOMASON LACO 145	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Personal

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 and Findings

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

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

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

Factual Information

Pilot Information

Certificate:	Private	Age:	63, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	03/24/1993
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	424 hours (Total, all aircraft), 19 hours (Total, this make and model), 1 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	JOHN THOMASON	Registration:	N89ST
Model/Series:	LACO 145 LACO 145	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	JT-1
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	06/20/1992, Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:	22 Hours	Engines:	1 Reciprocating
Airframe Total Time:	26 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	O-300-C
Registered Owner:	THOMASON, JOHN	Rated Power:	145 hp
Operator:	GRIMES, CHARLES J.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AUO, 776 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	1155 CST	Direction from Accident Site:	50°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	12° C / -2° C
Precipitation and Obscuration:			
Departure Point:	SMITHS, AL (NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1140 CST	Type of Airspace:	Class G

Airport Information

Airport:	TUSKEGEE MUNICIPAL (06A)	Runway Surface Type:	Asphalt
Airport Elevation:	264 ft	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	RALPH E HICKS	Report Date:	11/03/1993
Additional Participating Persons:	JERRY M YATES; BIRMINGHAM, AL JO E BRADBURY; WASHINGTON, DC		
Publish Date:			
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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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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).