



# **Aviation Investigation Final Report**

Location: LAURENS, South Carolina Accident Number: ATL88LA223

Date & Time: August 1, 1988, 18:00 Local Registration: N8191J

Aircraft: PIPER PA-34-200T Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

THE PLT RPRTD THAT WHEN HE LANDED, EVERYTHING SEEMED NORMAL UNTIL HE WAS LOWERING THE NOSE TO THE RWY DRG THE LANDING ROLL. AT THAT TIME, THE LEFT WING BEGAN TO SETTLE. AT FIRST, HE THOUGHT THE LEFT TIRE WAS GOING FLAT, BUT THE SETTLING CONTINUED. SUBSEQUENTLY, THE ACFT WENT OFF THE LEFT SIDE OF THE RWY & DAMAGED 2 RWY LIGHTS BEFORE SKIDDING TO A STOP. AN EXAM REVEALED THE LEFT MAIN GEAR STRUT HOUSING/TRUNNION HAD FAILED. A METALLURGICAL EXAM REVEALED THE PRESENCE OF FATIGUE IN THE STRUT BARREL.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

#### **Findings**

Occurrence #1: MAIN GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR, MAIN GEAR STRUT - FATIGUE

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Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings
2. DIRECTIONAL CONTROL - NOT POSSIBLE

3. GROUND LOOP/SWERVE - UNCONTROLLED

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING

#### Findings

4. OBJECT - RUNWAY LIGHT

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## **Factual Information**

#### **Pilot Information**

Certificate:	Airline transport; Flight instructor	Age:	33,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	August 7, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4207 hours (Total, all aircraft), 254 hours (Total, this make and model), 4176 hours (Pilot In Command, all aircraft), 108 hours (Last 90 days, all aircraft)		

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## **Aircraft and Owner/Operator Information**

Aircraft Make:	PIPER	Desistration	N8191J
Aircraft Make.	PIPER	Registration:	INOTALO
Model/Series:	PA-34-200T PA-34-200T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34-8070191
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	May 6, 1988 Annual	Certified Max Gross Wt.:	4570 lbs
Time Since Last Inspection:	97 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	1818 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	LTSIO-360-E
Registered Owner:	JULIAN G. HUNT	Rated Power:	200 Horsepower
Operator:	CABEZA, ANTHONY R.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	GSP,972 ft msl	Distance from Accident Site:	26 Nautical Miles
Observation Time:	17:51 Local	Direction from Accident Site:	330°
<b>Lowest Cloud Condition:</b>	Scattered / 5500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	36°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ition	
Departure Point:	GREENVILLE , SC (GMU )	Type of Flight Plan Filed:	None
Destination:	N. MYRTLE BEACH, SC (CRE)	Type of Clearance:	None
Departure Time:	15:45 Local	Type of Airspace:	Class G

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## **Airport Information**

Airport:	LAURENS COUNTY 34A	Runway Surface Type:	Asphalt
Airport Elevation:	698 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	7	IFR Approach:	None
Runway Length/Width:	3200 ft / 60 ft	VFR Approach/Landing:	Full stop;Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	34.499687,-82.019531(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Stiner, Walter

Additional Participating Persons:

Original Publish Date: December 3, 1989

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=7794

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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