



# Aviation Investigation Final Report

<b>Location:</b>	ATLANTA, Georgia	<b>Accident Number:</b>	ATL83FA282
<b>Date &amp; Time:</b>	July 17, 1983, 10:01 Local	<b>Registration:</b>	N8387X
<b>Aircraft:</b>	PIPER PA-34-220T	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	5 None
<b>Flight Conducted Under:</b>	Part 135: Air taxi & commuter - Non-scheduled		

## Analysis

THE ACFT WAS ON A TAKEOFF ROLL WHEN THE LEFT MAIN AND NOSE GEAR RETRACTED. INVESTIGATION REVEALED A FLT SWITCH FOR THE HOBBS METER HAD BEEN INSTALLED TO AUTOMATICALLY RECORD ONLY FLT TIME WHEN THE SWITCH WAS IN THE FLT POSITION. IN THIS POSITION THE HOBBS METER WAS TIED IN TO THE WEIGHT ON THE ACFT WHEELS. THE SWITCH HAD RECENTLY BEEN MODIFIED AND THIS WAS THE FIRST FLT WITH THE SWITCH IN THE FLT POSITION. DURING A TEST AFTER THE ACCIDENT THE GEAR RETRACTED IN THIS POSITION EVEN WITH THE GEAR HANDLE DOWN. NO TEST OF THE GEAR HAD BEEN MADE AFTER THE MODIFICATION PRIOR TO RELEASE FOR FLT.

## Probable Cause and Findings

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

### Findings

Occurrence #1: GEAR COLLAPSED  
Phase of Operation: TAKEOFF - ROLL/RUN

#### Findings

1. (C) ELECTRICAL SYSTEM, ELECTRIC WIRING - INCORRECT
2. (C) MAINTENANCE, INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL

3. (C) LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - IMPROPER
4. (C) GEAR RETRACTION - UNCONTROLLED - PILOT IN COMMAND

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	46, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	March 8, 1983
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	6000 hours (Total, all aircraft), 175 hours (Total, this make and model), 5700 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N8387X
<b>Model/Series:</b>	PA-34-220T PA-34-220T	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	34-8133092
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	March 15, 1983 100 hour	<b>Certified Max Gross Wt.:</b>	4750 lbs
<b>Time Since Last Inspection:</b>	62 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	664 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	TSIO-360-KB
<b>Registered Owner:</b>	WILLIAM C. LLOYD	<b>Rated Power:</b>	220 Horsepower
<b>Operator:</b>	ATLANTIC EXECUTIVE	<b>Operating Certificate(s) Held:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>	AVIATION, INC.	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument (IMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PDK ,1002 ft msl	<b>Distance from Accident Site:</b>	5 Nautical Miles
<b>Observation Time:</b>	10:00 Local	<b>Direction from Accident Site:</b>	360°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	2 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	320°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 21°C
<b>Precipitation and Obscuration:</b>	N/A - None - Haze		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	NEW BERN , NC (EWN )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	10:01 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	DEKALB-PEACHTREE PDK	<b>Runway Surface Type:</b>	Concrete
<b>Airport Elevation:</b>	1002 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	20L	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5001 ft / 100 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	4 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	5 None	<b>Latitude, Longitude:</b>	33.89952,-84.299339(est)

## Administrative Information

**Investigator In Charge (IIC):** Shipman, Richard

**Additional Participating Persons:**

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=5937>

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