



# Aviation Investigation Final Report

<b>Location:</b>	MONTGOMERY, Alabama	<b>Incident Number:</b>	ATL82IA281
<b>Date &amp; Time:</b>	September 15, 1982, 09:20 Local	<b>Registration:</b>	N220HB
<b>Aircraft:</b>	PIPER PA-34-220T	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

THE PILOT STATED THAT A NORMAL RUNUP WAS COMPLETED BEFORE TAKEOFF. DURING THE TAKEOFF ROLL, THE AIRCRAFT ACCELERATED THROUGH 75 KNOTS WHEN A LOUD BANG WAS HEARD FROM THE LEFT SIDE. THE TAKEOFF WAS ABORTED AND A ROLLOUT ACCOMPLISHED. EXAMINATION OF THE LEFT ENGINE REVEALED THAT ONE OF THREE LEFT PROPELLER COUNTERWEIGHTS WERE MISSING. EACH COUNTERWEIGHT IS SECURED BY A SINGLE BOLT AND LOCKING NUT. EXAMINATION OF THE BOLT TUB REVEALED EVIDENCE OF PRE-LOAD STRESS. A SERVICE BULLETIN WAS ISSUED ON MARCH 03 1982, STATING THAT TO REDUCE PRE-LOAD STRESS ON THE COUNTERWEIGHT BOLT, THE TORQUE SPECIFICATION HAS BEEN REDUCED FROM 105-100 FOOT POUNDS TO 65-60 TORQUE POUNDS.

## Probable Cause and Findings

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

### Findings

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

#### Findings

1. (C) PROPELLER SYSTEM/ACCESSORIES,COUNTERWEIGHT - OVERTORQUE

2. (C) PROPELLER SYSTEM/ACCESSORIES,COUNTERWEIGHT - SEPARATION
3. (C) PROCEDURES/DIRECTIVES - NOT CORRECTED - MANUFACTURER

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	65, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Unknown
<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>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	16000 hours (Total, all aircraft), 100 hours (Total, this make and model), 14 hours (Pilot In Command, all aircraft), 54 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N220HB
<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>		<b>Serial Number:</b>	34-8133270
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	7
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	4750 lbs
<b>Time Since Last Inspection:</b>	28 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	289 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	TSIO-360-KB
<b>Registered Owner:</b>	MONTGOMERY AVIATION CORP.	<b>Rated Power:</b>	220 Horsepower
<b>Operator:</b>	MONTGOMERY AVIATION CORP.	<b>Operating Certificate(s) Held:</b>	
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	15 miles
<b>Lowest Ceiling:</b>	Unknown	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	MONTGOMERY , AL	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	MONTGOMERY , AL	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	DANNELLY FIELD	<b>Runway Surface Type:</b>	Concrete
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	9000 ft / 0 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	

## Administrative Information

**Investigator In Charge (IIC):**

**Additional Participating Persons:**

**Original Publish Date:** September 15, 1983

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=71756>

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