



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	BACONTON, GA	<b>Accident Number:</b>	ATL82FA092
<b>Date &amp; Time:</b>	04/05/1982, 1615 EST	<b>Registration:</b>	N123CB
<b>Aircraft:</b>	PIPER PA-31-350	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	3 Serious, 2 Minor
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Executive/Corporate		

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## Analysis

AS THE PILOT WAS DESCENDING FROM 7000 TO 5000 FT, HE HEARD A LOUD BANG, FOLLOWED BY A TEMPORARY VIBRATION AND A VIOLENT SWERVE TO THE RIGHT. HE LOOKED OUT THE RIGHT WINDOW AND THOUGHT THE RIGHT ENGINE HAD FALLEN OFF SINCE ALL HE COULD SEE WAS THE TOPS OF THE ENGINE MOUNTS. THE AIRCRAFT WAS CONTROLLABLE ONLY AFTER REDUCING THE LEFT ENGINE POWER TO IDLE. DURING A WHEELS UP/FORCED LANDING, THE PLANE TORE THROUGH A FENCE, SLID ACROSS A PAVED ROAD, WENT OVER AN EMBANKMENT AND BEGAN BURNING AFTER IT CAME TO REST. THE PILOT RECEIVED A BACK INJURY AND HAD DIFFICULTY EGRESSING. AN INVESTIGATION REVEALED THE PROPELLER HUB HAD FAILED FROM FATIGUE WHICH RESULTED IN BLADE SEPARATION AND SUBSEQUENT ENGINE TEARAWAY. THE ENGINE HAD REMAINED ATTACHED TO THE AIRFRAME BY CABLES. METALLURGICAL EXAMINATION OF THE HUB REVEALED THAT THE FATIGUE ORIGINATED AT A THREADED GREASE FITTING. GOUGING WAS VISIBLE ON THE INNER WALL. A SET OF INCORRECT COUNTERWEIGHTS WERE FOUND ON THE PROPELLER. THE COUNTERWEIGHT'S FUNCTION WAS TO REDUCE VIBRATION.

## Probable Cause and Findings

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

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: DESCENT - NORMAL

### Findings

1. (F) PROPELLER SYSTEM/ACCESSORIES,COUNTERWEIGHT - INCORRECT
2. (F) MAINTENANCE,MAJOR REPAIR - IMPROPER - OTHER MAINTENANCE PERSONNEL
3. (F) PROPELLER SYSTEM/ACCESSORIES - VIBRATION
4. (F) PROPELLER SYSTEM/ACCESSORIES,HUB - OTHER
5. (F) MAINTENANCE - IMPROPER - OTHER MAINTENANCE PERSONNEL
6. (C) PROPELLER SYSTEM/ACCESSORIES,HUB - FATIGUE
7. (C) PROPELLER SYSTEM/ACCESSORIES,BLADE - SEPARATION
8. (C) ENGINE ASSEMBLY - SEPARATION

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Occurrence #2: FORCED LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

9. WHEELS UP LANDING - INTENTIONAL - PILOT IN COMMAND

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Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

### Findings

10. (F) OBJECT - FENCE

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Occurrence #5: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

### Findings

11. (F) TERRAIN CONDITION - ROUGH/UNEVEN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor	<b>Age:</b>	43, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-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>	Airplane Multi-engine; Airplane Single-engine	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	02/02/1982
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	5344 hours (Total, all aircraft), 113 hours (Total, this make and model), 5177 hours (Pilot In Command, all aircraft), 146 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N123CB
<b>Model/Series:</b>	PA-31-350 PA-31-350	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	31-7752161
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	8
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	7000 lbs
<b>Time Since Last Inspection:</b>	44 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	1611 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	540-J2BD
<b>Registered Owner:</b>	EXCELSIOR LEASING CORPORATION	<b>Rated Power:</b>	350 hp
<b>Operator:</b>	AIRCRAFT SERVICE CENTER	<b>Operating Certificate(s) Held:</b>	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ABY, 0 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	2155	Direction from Accident Site:	350°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	Broken / 600 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	55° C / 0° C
Precipitation and Obscuration:			
Departure Point:	AUSTIN, TX	Type of Flight Plan Filed:	IFR
Destination:	TIFTON, GA	Type of Clearance:	IFR
Departure Time:	1301	Type of Airspace:	

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Serious, 2 Minor	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	3 Serious, 2 Minor	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	Report Date:	04/05/1983
Additional Participating Persons:		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .	

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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](#).