



# Aviation Investigation Final Report

<b>Location:</b>	CRESTVIEW, Florida	<b>Accident Number:</b>	MIA89LA045
<b>Date &amp; Time:</b>	November 28, 1988, 04:00 Local	<b>Registration:</b>	N8226P
<b>Aircraft:</b>	PIPER PA-24-250	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

WHILE IN CRUISE FLT NEAR AN ARPT, THE PROP SEPARATED. PLT WAS GIVEN VECTORS TO ARPT & ENTERED PATTERN FOR LNDG. DOWNWIND LEG WAS EXTENDED DUE TO STRONG TAILWIND. STRONG HEADWIND ON FINAL CAUSED ACFT TO LAND SHORT. DURING LANDING ROLL ACFT COLLIDED WITH TWO FENCES. EXAMINATION OF ACFT REVEALED 6 PROP MOUNT BOLTS FAILED DUE TO FATIGUE AS A RESULT OF IMPROPER PLACEMENT OF PROP MOUNTING SHIM BETWEEN ENGINE CRANKSHAFT FLANGE AND STARTER GEAR FLANGE. ACFT MANUAL STATED PROP MOUNT BOLTS MAY FAIL DUE TO RELATIVE MOVEMENT BETWEEN THE TWO FLANGES IF SHIM IS NOT INSTALLED. CORRECT PLACEMENT OF THE SHIM IS BETWEEN THE PROP FLANGE & THE STARTER GEAR FLANGE. SUDDEN ENG STOPPAGE APROX 45 HRS EARLIER RESULTED IN PROP REMOVAL, OVERHAUL, & REINSTALLATION.

## 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: CRUISE - NORMAL

Findings

1. (C) PROPELLER SYSTEM/ACCESSORIES - FATIGUE
2. (C) PROPELLER SYSTEM/ACCESSORIES - SEPARATION
3. (C) MAINTENANCE, INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL

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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

Findings

4. (F) LIGHT CONDITION - DARK NIGHT

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Occurrence #3: UNDERSHOOT  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. (F) WEATHER CONDITION - UNFAVORABLE WIND
6. (F) WEATHER EVALUATION - INADEQUATE - PILOT IN COMMAND

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Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: LANDING - ROLL

Findings

7. OBJECT - FENCE POST
8. OBJECT - FENCE

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	37, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	April 11, 1988
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1980 hours (Total, all aircraft), 719 hours (Total, this make and model), 1816 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N8226P
<b>Model/Series:</b>	PA-24-250 PA-24-250	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	24-3479
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	October 20, 1988 Annual	<b>Certified Max Gross Wt.:</b>	2800 lbs
<b>Time Since Last Inspection:</b>	45 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4019 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	O-540-A1D5
<b>Registered Owner:</b>	NIMS ASSOCIATES, INC	<b>Rated Power:</b>	250 Horsepower
<b>Operator:</b>	NIMS ASSOCIATES, INC.	<b>Operating Certificate(s) Held:</b>	None
<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>	Night/dark
<b>Observation Facility, Elevation:</b>	VPS ,85 ft msl	<b>Distance from Accident Site:</b>	18 Nautical Miles
<b>Observation Time:</b>	03:55 Local	<b>Direction from Accident Site:</b>	179°
<b>Lowest Cloud Condition:</b>	Scattered / 1500 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 8000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots / 17 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	330°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	12°C / 5°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	PERRY (40J)	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	DALLAS (DAL)	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	02:30 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	BOB SIKES CEW	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	215 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	35	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	8000 ft / 150 ft	<b>VFR Approach/Landing:</b>	Forced landing;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	30.749101,-86.570022(est)

## Administrative Information

**Investigator In Charge (IIC):** Monville, Timothy

**Additional Participating Persons:**

**Original Publish Date:** November 24, 1989

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=32367>

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