



# Aviation Investigation Final Report

<b>Location:</b>	FLINT, Michigan	<b>Accident Number:</b>	CHI91LA218
<b>Date &amp; Time:</b>	July 14, 1991, 13:47 Local	<b>Registration:</b>	N8803P
<b>Aircraft:</b>	PIPER PA-24-260	<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

THE PILOT SAID THAT WHILE BEING VECTORED ON FINAL APPROACH ABOUT 5 MILES OUT, THE AIRCRAFT DEVELOPED A SEVERE VIBRATION. AN EMERGENCY WAS DECLARED AND A LANDING WAS ATTEMPTED ON THE AIRPORT. THE AIRCRAFT LANDED SHORT OF THE RUNWAY WHICH RESULTED IN SUBSTANTIAL DAMAGE. POST ACCIDENT INVESTIGATION REVEALED FAILURE OF THE PITCH CHANGE KNOBS ON ONE PROPELLER BLADE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PROPELLER PITCH CHANGE MECHANISM SHEARED. FACTORS RELATED TO THE ACCIDENT WERE POWERPLANT VIBRATION AND PROPER TOUCHDOWN POINT NOT POSSIBLE.

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: APPROACH

### Findings

1. (C) PROPELLER SYSTEM/ACCESSORIES,PITCH CHANGE MECH - SHEARED
2. (F) POWERPLANT - VIBRATION

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

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

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	48, Male
<b>Airplane Rating(s):</b>	Single-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>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	December 5, 1989
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	342 hours (Total, all aircraft), 87 hours (Total, this make and model), 224 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N8803P
<b>Model/Series:</b>	PA-24-260 PA-24-260	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	24-4286
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	October 5, 1990 Annual	<b>Certified Max Gross Wt.:</b>	2900 lbs
<b>Time Since Last Inspection:</b>	90 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	IO-540-D4A5
<b>Registered Owner:</b>		<b>Rated Power:</b>	260 Horsepower
<b>Operator:</b>	VERNON C. SLATER	<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>	Day
<b>Observation Facility, Elevation:</b>	FNT ,782 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	17:32 Local	<b>Direction from Accident Site:</b>	1°
<b>Lowest Cloud Condition:</b>	Scattered / 5000 ft AGL	<b>Visibility</b>	12 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	9 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<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>	ALPENA , MI (APN )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:40 Local	<b>Type of Airspace:</b>	Class D;Class E

## Airport Information

<b>Airport:</b>	BISHOP INT. FNT	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	782 ft msl	<b>Runway Surface Condition:</b>	Rough
<b>Runway Used:</b>	9	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	7199 ft / 150 ft	<b>VFR Approach/Landing:</b>	Forced landing

## 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>	

## Administrative Information

**Investigator In Charge (IIC):** Hruban, John

**Additional Participating Persons:** JUAN THOMPSON;  
ROGER STALLKAMP;  
JAMES FULTON;

**Original Publish Date:** July 13, 1993

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=15120>

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