



# Aviation Investigation Final Report

<b>Location:</b>	MADISON, Wisconsin	<b>Accident Number:</b>	CHI93LA006
<b>Date &amp; Time:</b>	October 8, 1992, 11:52 Local	<b>Registration:</b>	N228R
<b>Aircraft:</b>	PIPER PA-34-220T	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE AIRPLANE SETTLED TO THE RUNWAY FROM AN ALTITUDE OF ABOUT 3 FEET DURING THE LANDING FLARE. THE AIRPLANE BOUNCED, CONTACTED THE RUNWAY WITH THE NOSE GEAR FIRST, AND PORPOISED 3 OR 4 TIMES PRIOR TO THE PILOT REGAINING CONTROL. SUBSTANTIAL DAMAGE TO THE WINGS AND FUSELAGE RESULTED FROM THE HARD LANDING. REPORTED WINDS AT THE TIME OF THE ACCIDENT WERE FROM 130 DEGREES AT 15 KNOTS GUSTING TO 21 KNOTS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: WAS THE PILOT'S INADEQUATE COMPENSATION FOR WIND CONDITIONS WHICH RESULTED IN AN IMPROPER FLARE. A FACTOR RELATED WAS THE GUSTY WIND CONDITION.

## Findings

Occurrence #1: HARD LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

1. (F) WEATHER CONDITION - GUSTS
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. (C) FLARE - IMPROPER - PILOT IN COMMAND



## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	65, 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>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	July 13, 1992
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1400 hours (Total, all aircraft), 320 hours (Total, this make and model), 1040 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N228R
<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>	348233145
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	September 5, 1992 Annual	<b>Certified Max Gross Wt.:</b>	4570 lbs
<b>Time Since Last Inspection:</b>	20 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	1320 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	TSIO-360-KB
<b>Registered Owner:</b>	JOSEPH T. STEUER	<b>Rated Power:</b>	220 Horsepower
<b>Operator:</b>	JOSEPH T. STEUER	<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>	Instrument (IMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MSN ,870 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	11:52 Local	<b>Direction from Accident Site:</b>	90°
<b>Lowest Cloud Condition:</b>	Unknown / 900 ft AGL	<b>Visibility</b>	4 miles
<b>Lowest Ceiling:</b>	Overcast / 900 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	15 knots / 21 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	130°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	14°C / 12°C
<b>Precipitation and Obscuration:</b>	N/A - None - Fog		
<b>Departure Point:</b>	MILWAUKEE , WI (MKE )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>		<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	11:00 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	DANE COUNTY REGIONAL MSN	<b>Runway Surface Type:</b>	Concrete
<b>Airport Elevation:</b>	870 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	13	<b>IFR Approach:</b>	VOR
<b>Runway Length/Width:</b>	5846 ft / 150 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>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	43.140777,-89.350891(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Sullivan, Pamela
<b>Additional Participating Persons:</b>	ROBERT BRANT; MILWAUKEE , WI
<b>Original Publish Date:</b>	August 31, 1993
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=15603">https://data.nts.gov/Docket?ProjectID=15603</a>

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