



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	WINTERSET, IA	<b>Accident Number:</b>	CHI98LA077
<b>Date &amp; Time:</b>	01/02/1998, 1500 CST	<b>Registration:</b>	N8350Z
<b>Aircraft:</b>	Piper PA-34-220T	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The pilot said that during a straight-in approach to the airport, he kept the airspeed at 110 knots, because the ride was very rough. The airplane's airspeed crossing the runway threshold was 100 knots. The airplane touched down about 1,000 feet down the runway. The pilot said that when he applied brake pressure, he noticed that he had no pressure on the left brake pedal. The pilot said that he pumped the pedal three times, and then reapplied the brakes. The airplane was now three quarters of the way down the runway. Just before reaching the displaced threshold, the pilot said that the airplane swerved to the right. The pilot swerved the airplane to the left in hopes of turning onto the grass. The airplane slid sideways in the grass crashing into a fence and coming to rest in a ditch. Examination of the runway revealed tire marks beginning a third of the way down from the approach end, and running evenly down the runway until departing the prepared surface. Tire impressions in the grass continued from the end of the runway, veering left, and ending at the spot where the airplane came to rest. Examination of the wreckage revealed no anomalies.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot misjudging his airspeed on final approach, resulting in a long touchdown and insufficient distance to stop on the remaining runway available.

## Findings

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Occurrence #1: OVERRUN

Phase of Operation: LANDING - ROLL

Findings

1. (C) DISTANCE/SPEED - MISJUDGED - PILOT IN COMMAND
2. (C) PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

3. OBJECT - FENCE
4. TERRAIN CONDITION - DITCH

## Factual Information

On January 2, 1998, at 1500 central standard time (cst), a Piper PA-34-220T, N8350Z, operated by a commercial pilot, sustained substantial damage when on landing roll, the airplane departed the end of the runway, rolled through a ditch and impacted into a fence. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under 14 CFR Part 91. No flight plan was on file. There were no injuries reported by the pilot or the two passengers on board. The cross- country flight originated at Harrison, Arkansas, at 1330 cst, and was en route to Winterset, Iowa.

In his written statement, the pilot said that he established the airplane on a 6 and 1/2 mile straight-in approach to the airport. He said that the ride was very rough and that he kept the airspeed at 110 knots. Crossing the approach end of the runway, the pilot said that his airspeed was 100 knots. The pilot said that he "used up about 1,000 feet to negotiate the landing." As the pilot began to apply brake pressure, he noticed that he had no pressure on the left brake pedal. The pilot said that he pumped the pedal three times, and then reapplied the brakes. By this time, the airplane was three quarters of the way down the runway. Just before reaching the displaced threshold, the pilot said that the airplane swerved to the right. The pilot said that he swerved the airplane to the left in hopes of turning onto the grass. The airplane began to slide sideways in the grass crashing into a fence and coming to rest in a ditch.

A Federal Aviation Administration (FAA) inspector, who examined the wreckage at the scene, found the airplane resting upright in a field approximately 75 feet off the departure end of runway 32 at Winterset-Madison County Airport, Iowa. Tire marks were observed beginning approximately a third of the way down from the approach end of the runway, and ran evenly down the runway centerline until departing the prepared surface. Tire impressions in the grass began at the end of the runway and veered to the left, ending at the spot where the airplane came to rest. The outboard four feet of the airplane's right wing, including the right aileron and outboard edge of the right flap, were bent upward almost 90 degrees. The right main landing gear was bent aft and broken. The right propeller showed torsional bending and chordwise scratches. The right stabilator and elevator were bent upward. Flight control continuity was confirmed. No anomalies were found in the brakes, brake lines, master cylinders or brake pedals. No fluid leaks were found in the system. Examination of the engines, engine controls, and other airplane systems revealed no anomalies.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	45, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<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>	10/06/1997
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2908 hours (Total, all aircraft), 407 hours (Total, this make and model), 2871 hours (Pilot In Command, all aircraft), 59 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N8350Z
<b>Model/Series:</b>	PA-34-220T PA-34-220T	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	34-8133034
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	04/11/1997, Annual	<b>Certified Max Gross Wt.:</b>	4570 lbs
<b>Time Since Last Inspection:</b>	69 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	4156 Hours	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	TSIO-360-KB1
<b>Registered Owner:</b>	ROTOR AIR, INC.	<b>Rated Power:</b>	220 hp
<b>Operator:</b>	BENNY MAGNESS	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	DSM, 957 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	1454 CST	Direction from Accident Site:	45°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	9 Miles
Lowest Ceiling:	Overcast / 2600 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	21 knots / 28 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	13° C / 8° C
Precipitation and Obscuration:			
Departure Point:	HARRISON, AR (HRO)	Type of Flight Plan Filed:	None
Destination:	(3Y3)	Type of Clearance:	None
Departure Time:	1330 CST	Type of Airspace:	Class E

## Airport Information

Airport:	WINTERSET-MADISON COUNTY (3Y3)	Runway Surface Type:	Asphalt
Airport Elevation:	1110 ft	Runway Surface Condition:	Dry
Runway Used:	32	IFR Approach:	None
Runway Length/Width:	3000 ft / 50 ft	VFR Approach/Landing:	Full Stop; Straight-in

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	DAVID C BOWLING	Report Date:	05/04/1998
Additional Participating Persons:	LARRY YOUNG; DES MOINES, IA		
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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