



Aviation Investigation Final Report

Location:	Brodhead, Wisconsin	Accident Number:	CHI05CA241
Date & Time:	August 20, 2005, 08:40 Local	Registration:	N2373P
Aircraft:	Piper PA-22-150	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane contacted a vehicle while on final approach to land. The pilot stated that while on base leg in the traffic pattern, he appeared to be a "bit high" so he reduced the power slightly. The airplane started to "settle quickly" after he turned onto final approach, so he reapplied power and adjusted his flight controls to maintain airspeed. The pilot reported that his focus at this point was the runway and the corn field which was below him. He stated that the portion of the road that he could see and runway both appeared clear. The pilot reported everything appeared "normal" until he approached the edge of the corn field at which time he sensed he was low, so he added power. The pilot continued to report, "The crest of the road at the approach course was obscured by my own aircraft as I saw the terrain rising toward me. Interpreting it as sink despite my power, I did not realize it was actually the elevation rising. ... Seeing the road approach beneath my wheels all I can then recall was my bewilderment when the airplane lurched." The Chevy Blazer was traveling southbound on a road which borders the east side of the airport. The right main landing gear struck the frame above the left rear passenger window, and the nose gear contacted the left side of the windshield and the driver's door window frame. The airplane traveled about 46 feet after striking the vehicle, coming rest in the grass area approximately 443 feet prior to the approach end of runway 21. Neither the pilot nor the driver of the vehicle saw each other prior to the impact.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudged distance/altitude which resulted in an undershoot. A related factor was the vehicle the airplane contacted.

Findings

Occurrence #1: UNDERSHOOT

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) DISTANCE/ALTITUDE - MISJUDGED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

2. (F) OBJECT - VEHICLE

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - GROUND

Factual Information

On August 20, 2005, at 0840 central daylight time, a Piper PA-22-150, N2373P, collided with a vehicle while landing on runway 21 (1,480 feet by 100 feet, grass) at the Brodhead Airport (C37), Brodhead, Wisconsin. The pilot received minor injuries and the driver of vehicle was not injured. The Title 14 Code of Federal Regulations Part 91 flight was operating in visual meteorological conditions without a flight plan. The flight originated from Brooklyn, Wisconsin, at 0815.

The pilot stated that while on base leg in the traffic pattern, he appeared to be a "bit high" so he reduced the power slightly. He stated the airplane started to "settle quickly" after he turned onto final approach, so he reapplied power and adjusted his flight controls to maintain airspeed. The pilot reported that his focus at this point was the runway and the corn field which was below him. He stated that the portion of the road that he could see and runway both appeared clear.

The pilot reported everything appeared "normal" until he approached the edge of the corn field at which time he sensed he was low, so he added power. The pilot continued to report, "The crest of the road at the approach course was obscured by my own aircraft as I saw the terrain rising toward me. Interpreting it as sink despite my power, I did not realize it was actually the elevation rising. ... Seeing the road approach beneath my wheels all I can then recall was my bewilderment when the airplane lurched."

According to the Green County Sheriff's Office the Chevy Blazer was traveling southbound on Brodhead Airport Road. This road borders the east side of the airport. The airplane contacted the drivers side of the Blazer. The sheriff's office reported that appears as if the right main landing gear struck the frame above the left rear passenger window, and the nose gear contacted the left side of the windshield and the driver's door window frame. The airplane traveled about 46 feet after striking the vehicle, coming rest in the grass area approximately 443 feet prior to the approach end of runway 21. Neither the pilot nor the driver of the vehicle saw each other prior to the impact.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	54, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	August 1, 2005
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1490 hours (Total, all aircraft), 113 hours (Total, this make and model), 1308 hours (Pilot In Command, all aircraft), 37 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N2373P
Model/Series:	PA-22-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-2764
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	O-320
Registered Owner:	Robin J. Bosley	Rated Power:	150
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	JVL	Distance from Accident Site:	
Observation Time:	09:45 Local	Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 1200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	25°C / 23°C
Precipitation and Obscuration:			
Departure Point:	Brooklyn, WI (7WI5)	Type of Flight Plan Filed:	None
Destination:	Brodhead, WI (C37)	Type of Clearance:	None
Departure Time:	08:15 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 Minor	Latitude, Longitude:	42.591667,-89.375274

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	Karen Krueger, Milwaukee, WI FSDO
Original Publish Date:	December 20, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=62416

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).