



National Transportation Safety Board Aviation Accident Final Report

Location:	Gordon, NE	Accident Number:	CHI03LA121
Date & Time:	05/04/2003, 1430 MDT	Registration:	N9682P
Aircraft:	Piper PA-18-150	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane sustained substantial damage when it stalled on takeoff and impacted terrain. The pilot reported observing approaching weather which he described as a squall line approximately two miles west of his location. He also noted that a light rain had started and was accompanied by pea-size hail. Weather conditions reported by the Pine Ridge Airport (IEN) automated surface observing system, at 1530, were winds from 340 degrees at 14 knots, gusting to 21 knots, 10 miles visibility, and few clouds at 3,300 feet above ground level. The weather report included a notation of thunderstorms in the vicinity and lightening in the distance to the west and southwest. The pilot recalled taking off to the south and had begun his initial climb. He reported that the aircraft started to buffet and he "knew a stall was coming." In his statement the pilot noted the "aircraft stalled on takeoff, not enough altitude for recovery." The aircraft bounced and the right wing and main landing gear impacted the terrain. The aircraft then nosed over.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilots failure to maintain adequate airspeed which resulted in a stall. Contributing factors to this accident were the rain, hail, and wind gusts.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND
2. STALL/MUSH - INADVERTENT - PILOT IN COMMAND
3. (F) WEATHER CONDITION - HAIL
4. (F) WEATHER CONDITION - GUSTS
5. (F) WEATHER CONDITION - RAIN

Occurrence #2: NOSE OVER
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Factual Information

On May 4, 2003, approximately 1430 mountain daylight time, a Piper PA-18-150, N9682P, owned and piloted by a commercial pilot, was substantially damaged when it impacted terrain immediately after takeoff from a pasture four miles south of Gordon, Nebraska. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being operated under the provisions of 14 CFR Part 91 flight and was not on a flight plan. The pilot reported no injuries. The intended destination was the pilot's private airstrip in Wounded Knee, South Dakota.

The pilot reported observing weather coming in from the west. He described the approaching weather was a squall line approximately two miles west of his location. He noted that a light rain had started and was accompanied by pea-sized hail and intermittent wind gusts.

The pilot reported taking off to the south and had begun his initial climb. He reported the aircraft started to buffet and he "knew a stall was coming." The pilot recalled thinking he would not be able to clear a rise that was ahead. In his written statement the pilot noted the "aircraft stalled on takeoff, not enough altitude for recovery." The aircraft bounced and the right wing and main landing gear impacted the terrain. The aircraft then nosed over.

The pilot reported weather conditions at the scene as overcast clouds at 2,000 feet above ground level (agl), south winds at 10 knots, gusting to 25 knots. He also noted light rain and hail.

Weather conditions reported by the Pine Ridge Airport (IEN) automated surface observing system, at 1530, were winds from 340 degrees at 14 knots, gusting to 21 knots, 10 miles visibility, and few clouds at 3,300 feet agl. The report included a notation of thunderstorms in the vicinity and lightening in the distance to the west and southwest.

The pilot reported no malfunctions with the aircraft or engine prior to the accident.

The pilot stated that the accident could have been prevented by waiting for the frontal system to pass.

Pilot Information

Certificate:	Commercial	Age:	50, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	01/13/2002
Occupational Pilot:		Last Flight Review or Equivalent:	02/10/2002
Flight Time:	6500 hours (Total, all aircraft), 3500 hours (Total, this make and model), 6200 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N9682P
Model/Series:	PA-18-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	18-7509024
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	10/02/2002, Annual	Certified Max Gross Wt.:	1751 lbs
Time Since Last Inspection:	76.3 Hours	Engines:	1 Reciprocating
Airframe Total Time:	441 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	O-320-A2B
Registered Owner:	On file	Rated Power:	150 hp
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	IEN, 3331 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1430 MST	Direction from Accident Site:	130°
Lowest Cloud Condition:	Few / 3300 ft agl	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 21 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.43 inches Hg	Temperature/Dew Point:	14° C / 8° C
Precipitation and Obscuration:			
Departure Point:	Gordon, NE (PVT)	Type of Flight Plan Filed:	None
Destination:	Wounded Knee, SD (PVT)	Type of Clearance:	Unknown
Departure Time:	1430 MDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.733333, -102.208333

Administrative Information

Investigator In Charge (IIC):	Tim Sorensen	Report Date:	11/25/2003
Additional Participating Persons:	Richard E Johnson; Lincoln FSDO; Lincoln, NE		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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