



Aviation Investigation Final Report

Location:	Spirit Lake, Iowa	Accident Number:	CHI06CA049
Date & Time:	December 21, 2005, 10:00 Local	Registration:	N4680Z
Aircraft:	Piper PA-22-108	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane encountered snow on the runway during landing on a private airstrip and subsequently nosed over. The day prior to the accident the pilot reported that he removed snow from the runway. The pilot stated, "After setting down the left wheel got into the snow on runway edge. Braking and correcting the aircraft caught in the right edge of snow on runway. This pulled the nose wheel into the snow also. At this time the aircraft was slowing down fast. All of a sudden the left wing and nose came over and that was 'all over'."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot using an unsuitable runway and not maintaining directional control during the landing leading to the nose over on impact with snow. A factor was the snow that remained on the runway after plowing.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING

Findings

1. TERRAIN CONDITION - RUNWAY
2. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - USED - PILOT IN COMMAND
3. (F) TERRAIN CONDITION - SNOW COVERED
4. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: NOSE OVER
Phase of Operation: LANDING

Factual Information

The airplane encountered snow on the runway during landing on a private airstrip and subsequently nosed over. The day prior to the accident the pilot reported that he removed snow from the runway. The pilot stated, "After setting down the left wheel got into the snow on runway edge. Braking and correcting the aircraft caught in the right edge of snow on runway. This pulled the nose wheel into the snow also. At this time the aircraft was slowing down fast. All of a sudden the left wing and nose came over and that was 'all over'." The pilot's safety recommendation was, "This accident could have been prevented by doing as in many accident (When in doubt. Don't do.)."

Pilot Information

Certificate:	Private	Age:	57, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 1, 2004
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	347 hours (Total, all aircraft), 300 hours (Total, this make and model), 8 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N4680Z
Model/Series:	PA-22-108	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-8215
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	November 1, 2005 Annual	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2119 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-235-C1B
Registered Owner:	James D. Nygaard	Rated Power:	108 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SPW	Distance from Accident Site:	
Observation Time:	11:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	0 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	-16°C / -17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	JACKSON, MN (MJQ)	Type of Flight Plan Filed:	None
Destination:	Spirit Lake, IA	Type of Clearance:	None
Departure Time:	09:35 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	43.3875,-95.139167

Administrative Information

Investigator In Charge (IIC):	Malinowski, Edward
Additional Participating Persons:	Larry Arenholtz; Des Moines, IA, FSDO
Original Publish Date:	April 25, 2006
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=63121

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